Appendix A:

Master Database

Project Information							Restoration Types Addressed											Programmatic Damage Assessment and Restoration Plan (PDARP) Criteria		Public Notice	Oil Pollution Act (OPA) Criteria (15 CFR 990.54)			Additional Criteria									
Project Name	Proj No./ ID	Submitted By/ Primary Lead	Location	Cost	Project Description	Submitted via	Marine Mammals (Y/N)	Water Quality/ Nonpoint Source Nutrient Reduction (Y/N)	Wetland, Coastal, and Nearshore Habitat (Y / N)	Oyster Reef (Y / N)	Birds (Y / N)	Sea Turtles (Y / N)	Recreational Use (Y/N)	Habitat on Federal Lands (Y/N)	Monitoring, Adaptive Management, and Administrative Oversight to Support Restoration Implementation (Y/N)	Project is consistent with programmatic restoration goals (Y/N)	Project is considerate of strategic frameworks (Y/N/NA)	Project is consistent with criteria identified in the public notice (Y/N)	Project delivers benefits cost-effectively (+ / 0 / -)	Project meets Trustees' goals (+ / 0 / -)	Project has reasonable probability of success (+ / 0 / -)	Project prevents future and collateral injury to natural resources and services (+ / 0 / -)	Project benefits more than one natural resource and/or service (+ / 0 / -)	The effect of the project alternative on public health and safety (+ / 0 / -)	Project is not already required by existing regulations (Y/N)	Project complies with applicable laws and regulations (Y/N)	Project supports existing regional or local conservation plan or restoration effort (Y/N)	Project is not already fully funded (Y/N)	Project is technically feasible (+ / 0 / -)	Project readiness (+ / 0 / -)	Sustainability/Long-term Benefit of project (+ / 0 / -)	Project is time critical (+ / 0 / -)	Project offers opportunities for external funding & collaboration (+ / 0 / -)
Habitat enhancement, restoration, and preservation of beach and dune systems of coastal Alabama	68	Hendrik Snow/ Alabama Coastal Heritage Trust	Fort Morgan	4395000	Objective 1: Fee simple purchase or perpetual conservation easement of critical beach and dune habitat Activity: Critical habitat will be targeted for preservation within Bon Secour NWR and other parcels with habitat connectivity for the Alabama Beach Mouse (ABM), sea turtles, and migratory birds. Many of these parcels have been previously identified and landholder willingness is known. Lands will be held and managed by ACHT and partners pending potential conveyance to Bon Secour NWR or ADCNR. Outcome: 40 acres protected into perpetuity. Objective 2: Enhancement and restoration of beach and dune habitat Activity: • Enhance current successful Dune Plant Restoration Program run by the Baldwin County Soil and Water Conservation District, to further provide native dune plants and sand-trapping fencing to private residents on a cost-share basis following hurricane/storm impacts or other damage to dune systems in order to speed dune recovery and promote resiliency. • Restore ABM habitat on public lands (e.g. Bon Secour NWR and/or Gulf State Park) through plantings, sand-trapping fencing and through control of invasive plant species. • Monitor success of restoration on private lands for ABM populations. This would complement Phase 1, NRDA Early Restoration Projects – Alabama Dune Restoration Cooperative Project that focused on primary dunes by extending restoration efforts to secondary and tertiary dune restoration within the range of the ABM and elsewhere including Gulf State Park. Outcome: 75 acres of habitat restored through invasive plant species removal. 100+ private landholders utilizing Dune Plant Program. Objective 3: Improve quality of sea turtle nesting beach habitat Activity: • On a cost sharing basis, retrofit outdoor lighting and window tinting on private homes to increase sea turtle nesting success. This will expand on the Phase 2 NRDA Early Restoration Project, Restoring the Night Sky, which aimed to reduce artificial lighting impacts to sea turtles on State-owned beaches by including private parcel participation. • Increase the Share the Beach Sea Turtle Volunteer Program to better identify and protect active sea turtle nests, as well as post signage and public information services soliciting the cooperation of the public in protecting such nests. Outcome: 10 miles of private beach-front property retrofitted for lighting and/or window tinting and increase in volunteers for data collection and nest protection.	AL Portal	N	N	Y	N	N	Y	N	N	N																			
Our Road Tract Acquisition	170	Hendrik Snow/ Alabama Coastal	Fort Morgan	7498000	The Alabama Coastal Heritage Trust (ACHT) is a tax exempt charitable organization founded in 1995 for the purpose of restoring, protecting, and preserving beach and dune habitat in coastal Alabama. Working with willing sellers, ACHT purchases habitat important to the survival of our most	AL Portal	N	N	Y	N	Y	Y	Y	N	N																			

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		Heritage Trust			threatened and endangered species such as nesting sea turtles, the Alabama beach mouse, and migratory birds. Objective: To acquire 5.89 acres of property on Our Road, Fort Morgan, AL. Activity: Acquisition of the property, removal of abandoned home and monitoring the Alabama beach mouse. Outcome: Protect 5.89 acres of beach/dune habitat for endangered species (Alabama beach mouse, three species of nesting sea turtles, and migratory birds and shorebirds) and to connect 26.32 acres of BLM-administered land and Bon Secour NWR. There are few properties left on the Fort Morgan peninsula that are available for purchase that provide connectivity to other protected lands on Fort Morgan. The three Our Road Tracts are an opportunity to acquire approximately 5.89 acres of designated critical habitat for the endangered Alabama beach mouse that connect to 26.32 acres of Bureau of Land Management (BLM) property along the Fort Morgan Peninsula. One property owner owns the three tracts. The first tract contains about 0.33 acres and currently has an abandoned house on the property. This is Gulf beachfront habitat that would usually consist of primary and secondary dunes. The second tract of land, adjacent to the first, is 1.26 acres of primary and secondary dunes that has never been developed. Some restoration activities can easily bring back these dunes systems on these tracts. The third tract has never been developed and contains well-developed secondary dunes and scrub dunes. All three tracts are connected by a 66 ft right-of-way held by Baldwin County (0.62 acres); however, the county has no plans to install a road. The acquisition of these 5.89 acres would consolidate 32.21 acres of beach, coastal dunes and scrub into public ownership, benefiting federally listed species, increasing connectivity across these habitats, providing essential access for the beach visitors in a manner that protects coastal dunes, and offering opportunities for public education on the value of coastal scrub and dune habitats.																												
BLM Fort Morgan "Our Road" Acquisition	205	Bruce Dawson	Fort Morgan	7498000	The Department of the Interior's Bureau of Land Management (BLM) is proposing the purchase of one of the few remaining "large" tracts on the Fort Morgan Peninsula. The "Our Road" tracts total 5.89 acres and include 417 feet of beach front, intact coastal dunes and interior upland scrub. The tracts are in close proximity or border 26.32 acres of BLM-administered land in the center of the Fort Morgan Peninsula. Some of these BLM tracts also border Bon Secour National Wildlife Refuge. The BLM's acquisition of these coastal habitats supports three goals of the Restore Comprehensive Plan - Restore, Enhance, and Protect Habitats, Protect and Restore Living Coastal and Marine Resources, and Enhance Community Resilience. The entire "Our Road" parcel and the nearby BLM tracts are designated critical habitat for the endangered Alabama beach mouse. The beach zone provides nesting habitat for threatened loggerhead sea turtles, and more rarely the threatened green, and endangered Kemp's ridley sea turtles, as well as wintering habitat for threatened Piping Plover. The purchase of this property and preservation of these coastal dunes would also provide a buffer zone for nearby homes and businesses during high surge events.	AL Portal	N	N	Y	N	Y	Y	N	Y	N																			

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					The property is owned by a single entity, and is currently on the market. In support of this proposal, the Alabama Coastal Heritage Trust has received a $24,000 matching grant to fund due diligence work associated with the proposed acquisition. The Alabama Coastal Heritage Trust would supply matching funding, for a total of $48,000. A federal appraisal has been requested and would be funded in large part by this grant. BLM's 2009 Alabama and Mississippi Resource Management Plan identified goals for these tracts; to manage vegetation communities to protect, preserve, and enhance federally listed and other special status species and imperiled plant communities. The acquisition of these 5.89 acres would benefit federally listed species, increase habitat connectivity, facilitate public beach access in a manner that protects coastal dunes, and offer opportunities for public education on the value of coastal scrub and dune habitats. BLM would also provide recreational beach access where compatible with the management of these natural resource objectives.																													
Sea Turtle Conservation and Recovery in the Gulf of Mexico through Development of a Sea Turtle Health Surveillance Network	286	Scott Glaberman	Gulf of Mexico	1020000	Sea turtles play a vital role in Alabama's coastal dune and marine ecosystems. They are also a major source of ecotourism for the region. Many marine turtle species that frequent the Alabama coastline are highly endangered due to human impacts on the environment. Following the Deepwater Horizon (DWH) oil spill in 2010, widespread sea turtle mortality was reported on beaches and in the open water. Since 2010, the Sea Turtle Stranding Network (STSSN), coordinated by NOAA, has documented a large number of oiled and stranded turtles on the northern Gulf coast, including in Alabama. During the recent 2016 Southeastern Sea Turtle Annual Meeting (SESTERN) in Mobile, the many participating scientists and regional stakeholders all voiced the same two concerns: (1) that there was insufficient baseline data prior to the spill to determine the magnitude of sea turtle injury; (2) that there is insufficient data to determine the long-term effects of the spill on sea turtle populations. We will address these issues by conducting a multi-year monitoring program on the health and disease status of sea turtles on beaches and in coastal waters of Alabama and nearby states. We will partner with a range of experts in animal health, marine science, and resource policy to design a comprehensive surveillance program to determine the relationship between environmental variables and sea turtle health and survival. A major need is funding to operate the surveillance program and train dedicated long-term personnel to actively monitor sea turtle health. The monitoring program will use the latest "state of the science" methods for evaluating sea turtle health, disease, and population effects. These data will give us a clearer answer about the effects of the DWH spill on sea turtles and serve as an invaluable baseline for evaluating future impacts to turtle populations. Without such a monitoring program, we will be faced with exactly the same questions should another oil spill or other catastrophic event occur in the future. As part of our effort to build a strong and successful sea turtle initiative, we have developed a wide network of support from many stakeholders including conservation organizations, government, and universities. Our surveillance and training	AL Portal	N	N	N	N	N	Y	N	N	Y																			

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					program will coordinate closely with other sea turtle programs in Alabama and other states, including beach nest monitoring and sea turtle stranding, to maximize the outcomes for sea turtle health and conservation.																												
Expansion of the Orange Beach Wildlife Rehabilitation and Education Center	287	Wade Stevens Stevens	Orange Beach	183500	As we stated in Project ID 103, there is a significant need for a permanent, full-time wildlife rehabilitation program and facility in the Baldwin County area. While Orange Beach, Gulf Shores, Foley and Fort Morgan all still have the desire to proceed with the larger project requested in Project ID 103, Orange Beach has taken steps to develop a wildlife program and construct a federally permitted rehabilitation facility (permit pending in Atlanta office as of this date) suitable for the intake of all species. While the facility is small, it is well equipped and positioned well. Regionally speaking Orange Beach and the new facility are located in the heart of the Mississippi Flyway and still catch a fair portion of the Atlantic Flyway migration routes. The annual migration coupled with our coastline's significance to shorebirds, seabirds and waterfowl alike make Orange Beach an ideal location for a rehabilitation and education program. We have been very successful in our partnerships with "Share The Beach" and Dauphin Island Sea Lab (IMMS) as it relates to Sea Turtle and Marine Mammal rescue and conservation efforts. The program is off to an excellent start and receiving a great deal of support so we expect that it will result in a similar success. The proposed project will allow for the expansion of the program facilities. The current facility allows for short to intermediate term rehab of all species but, lacks the current flight/aquatic enclosures necessary to fully rehabilitate certain species. Via agreements and relationships with other permitted facilities such as the Southeastern Raptor Center, Environmental Studies Center, Big Bend Wildlife Sanctuary we utilize their infrastructure. This places a hardship on both our program and the partnering facilities. If funding were awarded it would be utilized to construct the necessary large flight/aquatic enclosures for pre-release conditioning. This would allow our program to fully rehabilitate without the time, funding, manpower and resources dedicated to the transportation and transfer of these animals while also freeing up resources at our partnering facilities. In addition to these rehabilitation facilities we would like to expand the educational component of the program. Education and outreach are the key to reducing many of the injuries and entanglements that we see. We also plan to construct appropriate sized enclosures for permitted educational animals to be utilized in our educational program.	AL Portal	Y	N	N	N	Y	Y	N	N	N																			
Sea Turtle Nesting Habitat Beach Equipment Replacement Program	300	Dan Bond	Gulf Shores/ Orange Beach	1480600	This project will improve sea turtle nesting habitat along the Alabama Gulf Coast by establishing a program to replace beach equipment currently utilized by existing licensed beach service businesses with removable, turtle-friendly beach chair sets. The 45 miles of sandy beaches along the Alabama coast are known nesting habitat for three species of sea turtle: the Loggerhead (Caretta caretta), the Green (Chelonia mydas), and the Kemp's Ridley (Lepidochelys kempii). All three species are federally protected under the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 et seq.). Sea Turtle populations in the Gulf of Mexico were significantly impacted by the	AL Portal	N	N	Y	N	N	Y	Y	N	N																			

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					Deepwater Horizon Oil Spill in 2010. Over 600 sea turtles were found dead during the oil spill response effort. Alabama's Gulf coast is a major U.S. tourist destination, attracting some 5.7 million visitors annually. Historically, licensed beach service providers have been allowed to place solid-construction type, double wooden lounger sets at specific locations for the duration of the tourist season. In 2015, there were five licensed beach services in operation in Baldwin County, with a total of 3365 loungers. The average width of a wooden lounger set is approximately 6 feet, and placed side by side the total linear beach front impacted by loungers is approximately 3.8 miles, or 11.8 percent of the total linear beach frontage of Baldwin County. There were 36 reported incidents of obstruction to nesting turtles along the Alabama Gulf coast from 2012-2015, for an average of 9 per year. Obstructions included wooden loungers, tents and poles, surf boards, smaller chairs, umbrellas, and floats/toys. In 2015, as part of an effort to improve nesting habitat and promote cleaner beaches, the Cities of Gulf Shores and Orange Beach enacted regulations that require the removal of all personal property from the beach daily from sunset to sunrise. This new proposal will further improve nesting habitat by requiring the removal of commercial beach equipment from the beaches daily, while minimizing the economic effects for established businesses. Wooden beach lounger sets will be replaced with collapsible chair sets that can be folded up and removed daily. The program will require the replacement of 3365 double lounger sets with 6730 collapsible beach chairs, at an estimated cost of $1,480,600, and will be administered by the two Cities.																													
Estimating vital rates of loggerheads in the northern Gulf of Mexico using traditional mark-recapture and genetics	341	Margaret Lamont	Gulf of Mexico	1280000	Although critical for population modeling, vital rates are still lacking for many nesting groups. Most vital rates used for population modeling in marine turtles are generated from data collected during mark-recapture studies conducted on nesting beaches (Troeng and Chaloupka 2007; Monk et al. 2010; Phillips et al. 2014). However, gathering these data require long-term, intensive monitoring which can be logistically and financially difficult to accomplish, particularly on low-density nesting beaches, such as those in the northern Gulf of Mexico. Nesting density on some beaches used by loggerheads from the northern Gulf of Mexico (GoM) subpopulation can be as low as 0.6 nests/km, conducting mark/recapture surveys in this region requires a great amount of effort and results in only a few marked animals each season. However, small populations are particularly vulnerable to demographic and environmental fluctuations (Caughley 1994; Frankham 1995; Traill et al. 2010) which may make them more susceptible to extinction (Legendre et al. 1999; Traill et al. 2010). Recent studies have highlighted the challenges to population modeling for this nesting group (Lamont et al. 2014). Hart et al. (2013) used satellite tracking to show that individuals in this subpopulation exhibit relatively low nesting site fidelity and make frequent long-distance movements within the entire region. The low site fidelity exhibited by these nesting females may result in population estimates that do not accurately reflect the biology of these turtles	AL Portal	N	N	N	N	N	Y	N	N	Y																			

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					(Lamont et al. 2014). For example, from 1998-2011, the remigration rate for turtles nesting on the SJP ranged from 2 to 11 years and the inter-nesting interval ranged from 11-39 days. It is unlikely that an individual turtle did not return to nest over an 11 year period; most likely she nested outside of the study site and was not observed. Because of this, the mean estimates for remigration rate and inter-nesting intervals provided by mark-recapture analyses may not be an accurate reflection of turtle behavior in this region. Although challenges exist for saturation tagging in this region, these surveys continue to provide valuable data and access to nesting females. Because of these challenges, we suggest that combining genetic sampling with a shortened saturation tagging season will provide the most accurate estimates of vital rates for this nesting group of loggerheads.																													
Research and monitoring of sea turtles in Alabama waters	342	Margaret Lamont	Gulf of Mexico	2300000	As stated in the Comprehensive Restoration Plan: "Information on sea turtle spatiotemporal distribution, migration patterns, life history parameters, and habitat use is critical for interpreting population trends, improving sea turtle population models, and helping assess progress toward recovery goals. Furthermore, monitoring and scientific support will be important for evaluating the effects of restoration actions on sea turtle recovery from injuries associated with the spill". Little is known about juvenile turtles in the northern Gulf of Mexico although the limited research that has been conducted suggests this area supports a large number of individuals (see Turtle Expert Working Group 2009, NMFS et al. 2011). Marine turtles spend the majority of their lives at sea, yet little is known about their oceanic life compared to the biology of females and hatchlings on coastal nesting beaches. In addition, population modeling has shown that the juvenile life-stage is the most critical to the stability and recovery of sea turtle populations (Crouse et al. 1987). Recovery plans for the three most common species in the northern Gulf of Mexico, loggerheads, Kemp's ridleys and greens, all include monitoring of juveniles at in-water sites as a primary objective for recovery of the species. The Principle Investigators on this proposal are currently partnering with the Bureau of Ocean and Energy Management (BOEM) and the National Park Service (NPS) on complimentary projects in the northern Gulf of Mexico. Leveraging funds from these projects allows us to do more with the limited funds available. The objectives of this project are to initiate a long-term monitoring program for sea turtles in coastal and nearshore waters of Alabama that will describe the: 1. distribution 2. movements and habitat use 3. vital rates 4. health 5. connectivity, and	AL Portal	N	N	N	N	N	Y	N	N	Y																			

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					6. potential impact of anthropogenic activities on turtles using AL waters All activities are currently permitted under NMFS permit 17304. We propose to capture turtles at several sites along the AL coast using several techniques. Samples such as blood, skin and scute will be gathered and all individuals will receive an acoustic transmitter. In addition, acoustic receivers will be deployed along the coast. These receivers will complement those being deployed as part of the NPS project. Together, they will form a regional array that will allow documentation of turtle movements across the northern GoM.																												
Dauphin Island West End Acquisition	348	Casi Callaway Callaway	Dauphin Island	10050000	Acquire approximately 799 acres of vitally important beach/dune habitat at the West End of Dauphin Island. Dauphin Island is among the very last undeveloped beachfront property and the only true barrier island remaining in Alabama. The willing seller is providing an unprecedented opportunity to protect approximately nine miles of Gulf front property on the south and Mississippi Sound to the north. The western end of Dauphin Island encompasses a diversity of marine habitats - sweeping dunes, salt marsh, and beach flats. It is utilized by three species of sea turtles (threatened Loggerhead sea turtle, threatened Green sea turtle, and the endangered Kemp's ridley) for both sustenance and nesting grounds. The surf zone is a feeding habitat for the federally listed threatened Piping plover. The beach and dune area serve as nesting habitat for the endangered Least tern. As a barrier island, Dauphin Island is important not only for its ability to protect Mobile County from flooding and storm impacts, it protects the economically important Bayou La Batre Ship Channel, a containing a growing seafood industry and important oil and gas industry located in the Mississippi Sound and Mobile Bay. Preservation of barrier islands enhances community resilience or all of Coastal Alabama through mainland protection from flooding and reducing impacts from hurricanes, providing an even greater economic benefit to the state. Even with challenges to developing this section of land, it is vitally important to pull it out of private hands and put it into public ownership. The state cannot force a private owner to managed lands in a way that would protect the birds and turtles or completely limit development. Public ownership, however, protects the land for future generations, allows for optimal habitat management and opens the land up to additional funding sources to pay for that management. While the entire nine miles is not easily accessible by car, the area has unparalleled beauty that can provide public access and tourism opportunities for future generations to see Alabama's beautiful beach and dune habitat by boat or foot. Overall, acquiring this parcel would provide several substantial benefits including: habitat protection for ESA-listed and endangered species, increase ecotourism and educational outreach opportunities, and ensure the protection of an important barrier island to valuable inland estuaries and vital economic resources.	AL Portal	N	N	Y	N	Y	Y	N	N	N																		

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Sea turtle genetics: Refining population estimates and assessing stock structure for threatened loggerheads	12865	Kristen Hart & Margaret M. Lamont	coastal AL, FL panhandle	201150	Current estimates of subpopulation size for Northern Gulf of Mexico loggerheads were derived using general information on nest abundance, clutch frequency and breeding intervals often gathered from other subpopulations (Richards et al. 2011). Therefore, the accuracy of current estimates of abundance (N) for this subpopulation is in question. In addition to improved information on reproductive parameters for this nesting group (i.e. clutch size, remigration intervals; Lamont et al. 2012, Lamont et al. 2014) for use in population models, we also have samples from individual nesting females gathered during recent studies (Lamont et al. 2012, Hart et al. 2013) available for immediate genetic analyses. Population modeling coupled with genetic analyses would provide more accurate estimates of both population size (N) and effective population size (Ne) for this small subpopulation. Currently declining nest abundance in the Northern GoM subpopulation (Lamont et al. 2012, 2014) may indicate an overall decline in the number of individuals in this already small subpopulation. Small population sizes can lead to the loss of genetic variation, low Ne inbreeding depression, and ultimately reduced population fitness and adaptive potential. Additionally, diversity is lost and inbreeding is increased during population size fluctuations. Diversity recovers at a much slower rate than the population's census size making estimates of both the number of living individuals and the genetic diversity within a subpopulation critical. Genetic samples from nesting loggerhead females have been collected and archived as part of USGS K. Hart and M. Lamont's long-term mark-recapture projects in Alabama and Northwest Florida. Specifically, loggerhead tissue samples are available for 416 individual females from the Northern GoM (N = 73 from Alabama, N = 343 from Florida). AL NRDA funds would be used towards analysis of all genetic samples collected to date, plus those to be collected in 2016 at bo th study sites. Objectives and specific proposed activities 1. Define effective population size (Ne) for northern GoM loggerheads using archived samples and samples collected during the 2016 nesting season. 2. Define genetic diversity and inbreeding levels in N GoM loggerheads using archived samples and samples collected during the 2016 nesting season. 3. Use updated reproductive parameters for the N GoM subpopulation to conduct population modeling and estimate population abundance (N). Specific proposed activities include extraction of DNA for all samples, with analysis of DNA for mitochondrial and microsatellite DNA variation, effective population size, and inbreeding levels. We will work with colleague Dr. Brian Shamblin at the University of Georgia, with whom USGS has a current CESU agreement. In addition, we will format all capture-mark-recapture data for AL and FL loggerheads (including 2016 data) for analysis of capture probability and apparent survival, as well as population abundance (M. Lamont to conduct analyses). We anticipate that 2 peer-reviewed manuscripts will result from this work.	Trustee Portal	N	N	N	N	N	Y	N	N	Y																			
Research and monitoring of sea turtles using Alabama waters	12862	Margaret M. Lamont & Kristen Hart	coastal AL, FL panhandle	2300000	As stated in the PDARP (pages 5-64 and 5-65): "Information on sea turtle spatiotemporal distribution, migration patterns, life history parameters, and habitat use is critical for interpreting population trends, improving sea turtle population models, and helping assess progress toward recovery goals. Furthermore, monitoring and scientific support will be important for	Trustee Portal	N	N	N	N	N	Y	N	N	Y																			

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					evaluating the effects of restoration actions on sea turtle recovery from injuries associated with the spill". Very little is known about juvenile turtles in the northern Gulf of Mexico although the limited research that has been conducted and stranding numbers suggest this area supports a large number of individuals (see Turtle Expert Working Group 2009, NMFS et al. 2011). Marine turtles spend the majority of their lives at sea, yet little is known about their oceanic life compared to the biology of females and hatchlings on coastal nesting beaches. In addition, population modeling has shown that the juvenile life-stage is the most critical to the stability and recovery of sea turtle populations (Crouse et al. 1987). Recovery plans for the three most common species in the northern Gulf of Mexico, loggerheads (Caretta caretta), Kemp's ridleys (Lepidochelys kempii) and greens (Chelonia mydas), all include monitoring of juveniles at in-water sites as a primary objective for recovery of the species (NMFS and USFWS 1991, NMFS and USFWS 2008, NMFS et al. 2011). The Principle Investigators on this proposal are currently partnering with the Bureau of Ocean and Energy Management (BOEM) and the National Park Service (NPS) on complimentary projects in the northern Gulf of Mexico. The funds from those projects will provide satellite tags, additional acoustic receivers and tags, and resources such as housing. Leveraging funds from these projects allows us to do more with the limited funds available. The objectives of this project are to initiate a long-term monitoring program for sea turtles in coastal and near shore waters of Alabama. The goals of this project are to determine: 1. distribution 2. movements and habitat use 3. vital rates, including survival rates 4. baseline health 5. connectivity 6. potential impact of anthropogenic activities on turtles using AL waters Methods used to address these goals will include: 1. acoustic tracking 2. genetic analyses 3. stable isotope analyses 4. mark-recapture 5. health assessments 6. habitat modeling including anthropogenic activities All turtle captures, sampling and tracking are currently permitted under NMFS permit 17304 issued to K. Hart). We propose to capture turtles at several sites along the AL coast including inshore waters (such as Perdido Bay, Bon Secour Bay and Mississippi Sound) and the nearshore waters of the Gulf of Mexico using several techniques. Morphometric data including size and weight will be gathered from all captured turtles and a visual health assessment will be conducted. Biological samples including blood, skin and scute will be gathered from each individual. In addition, all captured individuals will receive an acoustic transmitter. In addition to turtle captures, acoustic receivers will be deployed along the AL coast. The exact location of receiver placement will be determined in year one. These receivers will complement the receivers being deployed as part of the NPS project in GUIS waters. Together, these receivers will form a regional array that will allow documentation of turtle movements across the northern GoM. This array will also be beneficial to other species being tracked via acoustic tags such as sturgeon, sharks, and rays. Success of this project will be determined by the deployment of the acoustic array, capture of at least 10 turtles per year in Alabama waters, and detection of project turtles on acoustic receivers. We see this project as the start of a long-term monitoring program for turtles in Alabama waters.																												

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Estimating vital rates of loggerheads in the northern Gulf of Mexico using traditional mark-recapture and genetics	12861	Margaret Lamont/ Kristen Hart	coastal AL, FL panhandle	1270970	The Western Atlantic population of loggerhead turtles (Caretta caretta) is one of the world's largest, with nesting activity that ranges from Virginia south to the Gulf Coast of Texas (NMFS and USFWS 2008). Genetic studies have divided this population into 5 Recovery Units (RUs; TEWG 2007) and 10 distinct management units (Shamblin et al. 2012) with varying reproductive output by group (Hart et al. 2010; Tucker 2010; Lamont et al. 2012). Current estimates of abundance for these loggerhead subpopulations (Richards et al. 2011) were derived using nest abundance, clutch frequency and breeding interval; however for nesting groups where these data were not available, such as the northern Gulf of Mexico, estimates from other subpopulations were used. However, recent studies have highlighted differences among these subpopulations (Lamont et al. 2012, Hart et al. 2013, Hart et al. 2014), which suggests that these estimates may not be accurate. Although critical for population modeling and management, vital rates are still lacking for many nesting groups. Recent studies have highlighted the challenges to population modeling for this nesting group (Lamont et al. 2014). Hart et al. (2013) used satellite tracking to show that individuals in this subpopulation exhibit relatively low nesting site fidelity and make frequent long-distance movements within the entire region. Because of the intensity of effort, high costs, and increasingly difficult logistics involved in saturation tagging and due to the low site fidelity expressed by this nesting group, we propose that saturation tagging alone is not the best method to assess vital rates for this subpopulation. Again, nightly tagging of individuals is still necessary; mark-recapture data provide more than vital rates and these projects allow access to biological samples that give us information on health, genetics, and foraging behavior of these individuals (Shamblin et al. 2012, Vander Zanden et al. 2015). However, we suggest th at combining genetic sampling with a shortened tagging season will provide the most accurate estimates of vital rates for this nesting group of loggerheads. Eggs sampled within a day of oviposition yield maternal genomic DNA and permit genetic tagging of individual females through microsatellite genotyping (Shamblin et al. 2011). This method alleviates the need to physically intercept females and makes it possible to sample over large geographical areas that would be logistically impossible to cover with night patrols. Genetic tagging provides reproductive parameter data analogous to flipper tagging, permitting subpopulation wide estimates of nesting female population size, clutch frequency, and nest site fidelity in the short-term. Long-term genetic tagging can address remigration and adult female annual survival with the added bonus of directly assessing recruitment through matching daughters to their mothers. The genetic tagging approach has identified nesting females for ~ 99% of clutches sampled on Northern Recovery Unit beaches since 2010, so it is a robust alternative to physical tagging over large nesting ranges. The objective of this study is to initiate a genetic mark-recapture project for the northern Gulf of Mexico loggerhead nesting group to determine demographics of the subpopulation Proposed activities: 1. Hold a workshop to educate permit holders on sea turtle nesting beaches 2. Permit holders on all nesting beaches will collect one, freshly laid egg from all loggerhead nests deposited on beaches in	Trustee Portal	N	N	N	N	N	Y	N	N	Y																			

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					Northwest Florida, Alabama and Mississippi beaches. 3. Each egg will be placed in a plastic baggie and frozen for storage. 4. Upon completion of the nesting season (September 30), all samples will be gathered by Dr. Shamblin and transported back to his laboratory at the University of Georgia. 5. Genetic analyses will be conducted; microsatellites will be examined to identify samples by individual.																													
Coastal Alabama Sea Turtle Conservation Program Transfer and Expansion Project	12883	Mark Berte	Coastal AL	777500	The central objective of the Coastal Alabama Sea Turtle Conservation Program Transfer and Expansion Project is to strengthen and grow Alabama's sea turtle population. The existing program--Share The Beach--has established itself as a well-respected and effective steward of sea turtle nests, but it cannot thrive without both a shift in administrative leadership and an expansion of protocols, both of which this grant would enable. Currently, Share The Beach (STB) is a program under the Friends of Bon Secour National Wildlife Refuge (FBSNWR). Because FBSNWR is an all-volunteer organization with its own areas of focus,N the FBSNWR has indicated that they are unable to sustain STB at its current funding levels in 2018. The FBSNWR has asked the Alabama Coastal Foundation (ACF) to become the new STB parent organization for the 2018 season because of ACF's scope of work and inclusive environmental stewardship approach. Once the transfer of the program is complete, the next objective of the project is to grow the STB program utilizing best practices and approved protocols. Specifically, STB program employees and volunteers would develop the expertise to review and adapt nest survey protocols in collaboration with the U.S. Fish and Wildlife Service. The intent is to improve the effectiveness and efficiency of collecting nesting data. This would make Alabama's program operate on a similar level with others in the southeastern United States and improve its contribution, as a citizen-science effort, to overall efforts to support sea turtle restoration in the Gulf of Mexico. A second element of program expansion is promoting the program's potential as an eco-tourist attraction and enhancing its outreach in that area. Working together and with the financial support of the Alabama Trustee Implementation Group, the Alabama Coastal Foundation, the Friends of Bon Secour National Wildlife Refuge, and everyone involved with Share The Beach program can successfully achieve those two o bjectives. Properly trained STB staff will organize and direct the expansion of Alabama's important sea turtle conservation program using established policies and protocols.	Trustee Portal	N	N	N	N	N	Y	N	N	Y																			
City of Orange Beach Waterways Enhancement Program (Marine Debris Removal Program)	12868	Phillip West	Perdido Bay	220000	Project Scope: The primary objective of the Orange Beach Waterways Enhancement Program (OBWEP) is to physically remove marine debris from area waterways (including seagrass meadows) and fringe marsh ecosystems. Additionally, OBWEP personnel will manage debris and trash operations on the NOAA-funded GEMS (Gulf Ecological Management Site) Robinson Island, Walker (purchased with National Fish & Wildlife Foundation funds) and Bird Island (State of Alabama), all renown for nesting least terns (Sternula) and various species of wading birds (Ardea, et al). All three islands are publicly owned, and have significant environmental value, but are currently under intense pressure from public use and recreation. In order to accomplish the desired objectives, the OBWEP crew will mobilize via work vessel daily to systematically patrol area waterways, covering the majority of the project	Trustee Portal	Y	Y	Y	N	N	Y	N	N	N																			

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					area weekly to recover marine debris. Trash and debris will be observed by the crew, and either recovered or recorded (for contractor removal, which is out of the scope of this proposal). All debris will be recorded by type, location, and measured, either by weight (e.g., marine construction debris) or length (e.g., rope, fishing line, etc.), with additional notations as appropriate (e.g., marine life in derelict crab trabs, etc.). Additionally, the OBWEP crew will make contact with the public on a frequent basis—as opportunities occur—to inform them of the hazards of marine debris and trash as well as the importance of seagrass beds, tern nesting areas and other critical habitat. Occasionally, the OBWEP will also respond to or report wildlife emergencies on the water, which are generally bird entanglements, until Orange Beach Wildlife Coordinators can respond. Finally, the documented findings of the program with regards to local marine debris will be evaluated to determine if any local programmatic solutions can be applied to mitigate various aspects of marine debris: Example: If significant amounts of marine construction debris (e.g., deck board "cut offs", etc.) are observed, collected and recorded by OBWEP coordinators, then additional permitting safeguards and construction inspection attention MAY be applied to the marine construction permit process via city building codes. Area to Be Improved: The Waterways Enhancement Program is designed to systematically patrol coastal waters adjacent to Orange Beach on a daily basis in an efficient manner. Orange Beach has a very articulated network of bays, bayous, canal and inlets, therefore systematic programming is necessary to cover the entire area effectively. The waterways listed in paragraph 4, above, will be the focus area for the program. Every type of debris "manageable" will be targeted within these areas. For the two year (13 months of active work) period of this proposal, we project the following amounts of debris will be recovered: 1. Construction & Demolition (wood, lumber, tires, etc.): 112 Tons 2. Mixed C&D/Municipal waste (trash, bottles, bagged trash, etc.): 70 Tons The area covered will total approximately 2,823 surface acres. This total does not include six man-made canals throughout the city, which total nearly four miles in length, by an average of 40 feet in width (approx. 19 surface acres). Our experience has shown, however, that these canals do not typically harbor significant amounts of marine debris, and therefore they are only patrolled occasionally, or when a citizen calls regarding a specific problem within a canal.																													
Eliminating Light Pollution on Sea Turtle Nesting Beaches in Alabama	12871	Nicole Woerner	Gulf Shores, Orange Beach	1500000	INTRODUCTION: This project will greatly increase sea turtle hatchling survivorship on Alabama's nesting beaches by correcting problematic lights on properties with a history of sea turtle disorientations. The project targets problem lights along Alabama's Gulf Coast in order to create and improve contiguous stretches of dark beach rather than small pockets of habitat. As coastal development continues, the problem of beachfront lighting continues to hamper sea turtle recovery efforts. Each year nesting loggerhead sea turtle females and hatchlings are negatively impacted by artificial lights, with some never making it back to the gulf to replenish this dwindling population – a population particularly affected by the Gulf oil spill in 2010. While some funds have been allocated to reduce light pollution on public property in Alabama,	Trustee Portal	N	N	Y	N	Y	Y	N	N	N																			

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					no funding has been available to bring privately-owned lights into compliance. Willing property owners will be identified and complete retrofits of beachfront lights that impact the nesting beach. The project involves multiple tasks: (1) Site-specific surveys of existing light sources for each targeted beach; (2) Coordination with owners and/or site managers on development of plans to eliminate, retrofit, or replace existing light fixtures on the property or to otherwise decrease the amount of light reaching the loggerhead sea turtle nesting beach; (3) Retrofitting streetlights and parking lot lights; (4) Lighting and technical expertise workshops with training for city code enforcement and staff; and (5) Increased efforts by local governments to ensure compliance with local lighting ordinances. LIGHTING PROGRAMS IN ALABAMA: Lighting will be managed and retrofitted to enhance sea turtle nesting habitat and decrease sea turtle disorientations. The program will create partnerships and provide supplemental financial assistance to beachfront property owners to retrofit their current lighting with "sea turtle friendly" lighting. In addition to disorienting sea turtles on the beach, research has documented significant reductions in sea turtle nesting activity on beaches illuminated with artificial lights, thereby making otherwise suitable nesting habitat unsuitable. Thus, the increased direct lighting associated with oil clean-up activities conducted during the nesting season during the spill and post-spill years, as well as increased lighting from residential and commercial business sources now visible as a result of profile changes to the beach resulting from clean-up activities, have likely discouraged nesting females from emerging onto the beach to nest. Fewer sea turtle nests were reported from Alabama nesting beaches during 2010 than in previous years. Nesting loggerheads in the Gulf of Mexico belong to the Northern Gulf of Mexico Recovery unit. Maintaining this small and unique nesting subpopulation is critical to the genetic robustness of the entire Northwest Atlantic Ocean Distinct Population Segment and for the species survival over the long term. The U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) clearly recognize the importance of Northern Gulf of Mexico Recovery Unit in the Recovery Plan for the Northwest Atlantic Population of the Loggerhead Sea Turtle (NMFS and USFWS 2008). Improving existing lighting along sea turtle nesting beaches impacted by the spill and clean-up activities will have significant, long term benefits to loggerheads as well as the Kemp's ridleys that nest in Alabama. Consistent light management legislation, enforcement programs, and training could help identify lighting problems and prevent future violations (Witherington and Martin 2000). The program will provide: i. Technical and financial assistance for annual lighting surveys in Alabama. The surveys will include identification of artificial lighting that is directly visible from the nesting beach as well as solutions for retrofitting these lights. ii. This infor mation will be provided to the local counties and municipalities for development and enforcement of lighting ordinances. Gaps in local enforcement will be identified and funding provided to bolster the program as needed. iii. Lighting workshops for residents and multi-family property managers, and training courses will be provided to local code enforcement. iv.																												

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					Training will be provided to local officials on lighting options when reviewing building codes. v. Beachfront single-family and multi-family property owners will be contacted to assist in complying with the existing local lighting ordinance and funding provided to retrofit lights as appropriate. vi. Street and parking lot lighting visible from the beach will be retrofitted. Proposed Budget Narrative i. Annual lighting surveys: $7,000 ii. Code enforcement assistance: $35,000 iii. Lighting workshops and training courses for code enforcers: $7,000 iv. Training and lighting guidance to building code reviewers: $40,000 v. Complete retrofit for single family home & multi-family developments: $1,061,000 vi. Street lighting: $350,000 Total Project Cost Estimate: $1,500,000 Collaboration opportunities The Fish and Wildlife Service will partner with the entities listed below in our efforts to retrofit lighting in order to provide a long term commitment to maintain the retrofitted lights in perpetuity: Alabama Gulf Coast Counties: Mobile and Baldwin in Alabama; Cities of Orange Beach, Gulf Shores, and Town of Dauphin Island in Alabama for ordinance enforcement and retrofit components. This project, in conjunction with on-going sea turtle nest monitoring, disorientation documentation, and law enforcement follow up will a critical important component to restoring and improving habitat for sea turtles.																													
Informing Barrier Island and Dune Habitat Restoration by Quantifying Dune Vegetation and Elevation Linkages and Evolution	12869	P. Soupy Dalyander	coastal AL	1716000	Beaches along the northern Gulf of Mexico incurred significant damage from the Deepwater Horizon oil spill, along with associated impacts on species (birds, beach mice, etc.) that rely on beach and dune habitat. Beach and dune restoration approaches are being considered and implemented throughout the northern Gulf through a variety of funding streams. Robust linkages must be made between short- and long-term habitat response and resiliency. These data and connections are particularly important in the context of functional restoration outcomes, adaptive management, and structured decision making, which requires this information for decision-support. The purpose of this project is to identify and implement appropriate methodologies for acquiring dune vegetation and elevation data, and use that information to establish a correlative and predictive relationship between vegetation and dune evolution in response to storms and long-term drivers. Our results can be used to improve barrier island restoration outcomes across Alabama and Gulf-wide, particularly within the arena of plant-elevation restoration targets and ecosystem development following dune restoration. Project Objectives are to: •Assess the value of existing and new data sources for evaluating dune habitat quality at temporal and spatial scales useful for decision-support. Data sources considered, some of which are available for the entire Gulf of Mexico, include commercial aerial imagery or satellite imagery, or freely-available satellite imagery. •Evaluate and predict the evolution of dune habitat characteristics (vegetation, elevation) in response to drivers (storms, etc.) and potentially correlated system parameters (e.g., beach width, which controls fetch for Aeolian dune building). •Provide results that can be used to inform decision-making on elevation and/or vegetation targets for beach and dune restoration projects. There is an ongoing NFWF-funded effort (USGS collaborating with U.S. Army Corps of Engineers and the Alabama Department of Conservation and Natural Resources) to evaluate	Trustee Portal	N	N	Y	N	Y	Y	N	N	Y																		

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					Dauphin Island's evolution under potential restoration projects, and USGS is also conducting dune growth and ecological research at this site. As a result, the proposed work will provide opportunities for leveraging of resources and effort. The methodology would be portable to other beach and barrier island systems. In Alabama, this effort has the potential to enhance design and evaluation of current and future projects funded under NRDA (e.g., Town of Dauphin Island, Mid-Island Parks) or elsewhere. Project is potentially scalable in multiple ways, including spatial area (from subsection of Dauphin Island to multiple northern Gulf islands), range of data acquired and spatial resolution (increased or total reliance on freely-available satellite data and existing lidar), and temporal scale (less frequent and/or shorter periods of spatial data analyses and/or field data collection). Scalability may be enhanced by leveraging of resources and/or collaborations across USGS centers and other agencies, which can develop efficient distribution of the workload for larger-scale implementation. Cost estimate is for a 3-year, moderately intensive effort, with leveraging of funding in the form of salary of USGS St. Petersburg Coastal and Marine Science Center personnel.																													
Alabama Habitat (seagrasses) mapping, usage and monitoring using GPS tagged manatees and UAS technology.	12857	Stephen Hartley	Mobile Bay, coastal AL	235000	Project Location(s): This effort will initially target the Mobile Bay and surrounding coastal marshes. The methodology would be portable to other sites, and the results could be incorporated into improving restoration efforts Gulf-wide. Project or Program Description: Manatee Surveillance in Mobile Bay and coastal areas – Seagrasses and other submerged aquatic vegetation (SAV) are an important resource both in freshwater and saltwater aquatic habitats for food and shelter of many aquatic organisms. SAV forms the basis of many aquatic ecological communities, including those in the nearshore Gulf of Mexico. Telemetry from Florida manatees has been used successfully to locate SAV beds, with more manatee visits correlated with higher density and diversity of vegetation (Slone et al 2012,2013). We will use manatee telemetry data from a current USGS project to identify SAV target locations. We will use an Unmanned Aircraft System (UAS) to acquire high-resolution images of the identified SAV beds to determine their extent. Recently acquired software (eCognition, http://www.ecognition.com/) will be used to characterize the density of SAV within the identified beds. We will then compare findings with existing SAV maps and sample representative mapped beds to determine differences in extent and density from previous surveys and also to the beds mapped by the manatees. The efficiency and cost savings of this approach compared to traditional wide-scale aerial surveys for SAV discovery and change detection should be significant. Mission flight characteristics would include flying multiple 30 min missions from the shorelines or bridges (or other manmade structures or boats) over small rivers/canals, bays or lakes. . This work is in partnership with USFWS and state agencies. Need(s)/Priority to be Addressed and Targeted DWH Program: This project addresses overarching needs for techniques to discover and monitor seagrass and SAV bed locations, extent growth, and resil iency, which informs the design of projects to restore seagrass habitats. Anticipated Science Needs for Project Development: Processing of location data from tagged manatees, thermal and color infrared cameras for an UAV.	Trustee Portal	Y	N	Y	N	N	Y	N	N	Y																			

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					Collaboration Opportunities: USFWS GCPO LCC, Alabama Department of Conservation and Natural Resources Potential Compliance Issues: FAA flight approval. Approximate Cost of Project: $75K/FY; and the project is scalable. Purchase of thermal and high resolution cameras for the UAS ($10K). Implementation Timeframe: This project is envisioned as a three-year effort. Years 1-3: data collection (new acquisition of high-res imagery by UAS technology), manatee data processing and seagrass mapping. Year 2: continued data collection, analysis and refinement of seagrass mapping. Year 3: finalization of SAV habitat map, reporting of results. References Slone, D.H., J.P. Reid, W.J. Kenworthy, G. diCarlo, and S.M. Butler. 2012. Manatees Mapping Seagrass. Seagrass Watch 46: 8-11. Slone, D.H., J.P. Reid, and W.J. Kenworthy. 2013. Mapping spatial resources with GPS telemetry locations: manatees and seagrass beds in the Ten Thousand Islands, Florida. Marine Ecology Progress Series 476:285-299.																													
Marine Turtle Triage and Treatment	12842	Wade Stevens	Orange Beach	239000	The City of Orange Beach has been working for many years to truly set the bar when it comes to wildlife and habitat preservation. This project builds upon that foundation of work once again. The city currently operates a state and federally permitted wildlife rehabilitation facility that accepts nearly all species of mammal, reptile and birds. Those we do not have the proper facilities to work with on a long term basis still receive triage, initial treatment and are then transferred to an appropriate facility for additional treatment and rehabilitation. The purpose of this project is to provide exactly that same level of response and care to injured or ill marine turtle species. Orange Beach works hand in hand on a daily basis with US Fish and Wildlife Service and the local permit holder for marine turtles, Share the Beach. We have many Share the Beach members on staff here at the city and provide a significant amount of support and resources to this group already. We also work, closely with and assist the Alabama Sea Turtle Stranding and Salvage Network. A large gap exists in both of these programs. When an illness or injury incident occurs with a hatchling, sub-adult or adult sea turtle the closest facility for evaluation and treatment is approximately two hours away on a perfect day with no traffic issues. Combine that time with the coordination of staff, transport ability, after hours access at the receiving as well as many other factors and you are faced with the reality that these listed and/or protected turtles do not have access to an acceptable level of treatment. A large number of the incidents that occur are caused by human impact such as hooking, entanglements, marine debris ingestion and more. Many of those incidents can be handled with minimally invasive procedures/techniques at a properly equipped facility with trained staff which would then allow a larger percentage of turtles to be treated and released faster. Generally speaking shorter perio ds of captivity and minimized handling decrease the stress on the animal and improve outcomes. We propose an expansion to our current facility/program to allow for the initial evaluation, triage, treatment, release and improved transport capability when needed. The project would include the physical expansion of facilities to provide proper evaluation and holding areas; the purchase and installation of the proper diagnostic and treatment equipment; the purchase and installation of video conferencing gear to allow	Trustee Portal	N	N	N	N	N	Y	N	N	N																			

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					remote consultation and observation by receiving facility or program veterinary staff; the purchase of safe and proper transport equipment; the proper training for existing program staff to be able to work safely and effectively; a new staff member to oversee the program.																												
Pelagic Longline Gear and Vessel Transition Program in the Gulf of Mexico	12837	Bobby Nguyen	Gulf of Mexico		The Gulf of Mexico is the primary spawning ground of the western Atlantic bluefin tuna population, a stock depleted to just 55 percent of the 1970 level. The oil spill occurred at the peak of the 2010 spawning season in the bluefin's northeastern Gulf spawning hotspot. Scientists estimate that the spill degraded 10 to 50 percent or more of the bluefin's known Gulf of Mexico habitat and further study has since confirmed that the spill damaged Atlantic bluefin tuna health, particularly among the early life history stages. The Gulf of Mexico pelagic longline fishery results in harmful bycatch of bluefin tuna and approximately 80 other species, including billfish, endangered sea turtles, and depleted sharks. Government catch data from 2007-2009 indicates the fishery killed 43,245 non-target animals, including 6,009 lancetfish, 5,844 dolphinfish, 2,747 escolar, 1,745 sharks and rays, 858 wahoo, 794 billfish (marlin, sailfish, spearfish), 612 bluefin, and 169 bigeye tuna, and interacted with 137 leatherback and 17 loggerhead sea turtles. Actual mortality is much greater as only an average of 22% of the hooks set were observed. Based on their shared habitat preferences with bluefin tuna, it is possible that many of these species also suffered similar interactions with and injury from the spill. A voluntary pelagic longline gear and vessel transition program can help mitigate such impacts to the benefit of Gulf fishermen. The program will provide fishermen with selective alternatives to PLL, including green stick gear and swordfish buoy gear, as well as training and financial assistance to help them learn to fish and optimize application of these gears in the Gulf of Mexico. Fishermen would also have the opportunity to retire their current PLL fishing vessels in favor of smaller, more fuel efficient boats more appropriate for use with the alternative gears. These efforts would be complemented by a strong monitoring program to record catch, effort, and economic data, an d, ultimately, to measure the benefits of this project over time. This concept enjoys broad support from PLL fishermen, recreational anglers, and environmentalists. Project Cost: The cost of the project depends on how many Gulf of Mexico pelagic longline fishermen participate. The cost of a gear transition is undetermined at this time. The estimated cost for a vessel transition is approximately $450,000 to $550,000 per vessel.	Trustee Portal	Y	N	N	N	N	Y	N	N	Y																			
Grommet Island Stlye Beach Park for Physically Disabled Citizens	12084	The Jim Henkel Family	Virginia	3500000	Reference the web site www.GrommetIsland.org In 2010, the citizens of Virginia Beach, VA, USA, constructed and opened the first 100% accessible beach park for the disabled. The beautiful beaches along the Alabama Gulf Coast have near zero facilities usable by physically disabled citizens. This project will provide a unique and long overdue beach recreation experience for citizens and visitors with physical disabilities. Briefly, the Grommet Island Beach Park is an elevated sand and "carpeted" beach with unique "play ground" equipment and features plus shaded "relaxation" areas - all in a wheel chair accesssible environment. This project was completed in Virginia Beach in 2010 for a total cost of just under $1.8M Site selection considerations include: - adjacent parking lot with abundant handicapped	Trustee Portal	Y	N	N	N	Y	Y	N	N	Y																			

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					parking spaces - adjacent accessible bathroom facility (will require utilities - sewer, water, electric) The Virginia Beach Grommet Island has been operational for 3-1/2 years and 4 summers (as of Sept, 2013). It has been a tremendous success with attendance by disabled folks and their families way beyond expectations. Over the past 4 summers, Virginia Beach has become know as a destination vacation for the disabled. The local hotel/motel industry has responded by remodeling scores of rooms with wheel chair accessible bathrooms and facilities to meet the surge in demand for accessible vacation lodging. The large crowds overwhelmed the original "temporary" or "porta-potty" style bathrooms orginally provided at Grommet Island. The City of Virginia Beach (at their expense) constructed replacement "permanent" accessible bathroom facilities. Virginia Beach quickly recognized the large positive economic boost the disabled visitors and their families brought to their city. This whole experience has been so positive for Virginia Beach, the Grommet Island sponsors are now raising funds to build an entire "city park" designed to accommodate disabled folks. On e example - they envision a 4 acre stocked pond to provide fishing opportunities for disabled guests.																													
10-Year enhancement for improving Gulf of Mexico Sea Turtle Stranding Network response and science capacity	11947	Chris Robbins	Gulf of Mexico	1000000	Proposed Restoration Project: The project will augment resources available to the Sea Turtle Stranding and Salvage Network (STSSN) in the Gulf, led by NOAA, and help participating entities respond to and learn from future sea turtle strandings and thus increase the survival of rescued animals and the recovery of populations impacted the Deepwater Horizon (DWH) oil disaster. Link to Injury: Sea turtles were exposed to petroleum hydrocarbons resulting from the Deepwater Horizon oil disaster and likely to chemical dispersants used during DWH response. More than 450 visibly oiled, live sea turtles and 18 visibly oiled, dead sea turtles were recovered during DWH response from April 2010 through February 2011. Another 500+ stranded sea turtles with no visible external signs of oiling were also reported during this period. Animal autopsies revealed that the cause of death for a subset of non-visibly oiled sea turtles was consistent with drowning, but whether and how the DWH disaster contributed to strandings of non-visibly, dead sea turtles remains under investigation. Benefit and Rationale: NOAA leads the STSSN in the Gulf of Mexico, but depends on employees of federal and state agencies, universities, non-governmental organizations to run on-the-ground operations and foot response. In some cases, STSSN participating entities receive limited or inconsistent institutional support and conduct STSSN activities using their own limited time and funding. However, they are often the first to respond to sea turtle strandings, a key function in maximizing the survival of live-stranded animals, and could do more with dedicated funding to help support monitoring and response to strandings. Since April 2010, the number of sea turtle strandings in the northern Gulf has approached 2,000 animals, far exceeding the historical average. Stranded sea turtles would not be located, rescued and rehabilitated were it not for the Network and the participating organizations. Rehabilitat ed animals released back into the wild are given another opportunity to reproduce and thus contribute to the recovery of populations impacted by episodic events like the DWH disaster. Sea turtles, among other species, are the ocean's 'canary in the coal mine,' and stranding	Trustee Portal	N	N	N	N	N	Y	N	N	Y																		

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					networks, through tissue sampling or post-mortem exams, collect valuable information on the condition of animals that can not only help scientists understand the cause of illness or death but detect subtle or significant changes in ecosystem condition or function. The collection of biological information from stranded animals is critical to understanding more clearly the long-term effects of the DWH disaster and other human activities on Gulf sea turtles. Description: This project would increase capacity for sea turtle stranding programs at the state or regional level such that they are in a better position to respond to strandings, maximize survival of recovered animals, and improve the consistency and quality of pathological information collected from tissue samples or post mortems. Specifically, this project would increase capacity across Gulf STSSN programs in the field by making investments in the following operational areas: 1) developing and implementing uniform animal detection and data collection methods; 2) equipment (including vehicles); 3) supplies (including fuel); 4) collection, banking, shipment and analysis of samples (necropsies); 5) data entry, management and synthesis for scientific use and public consumption and 6) rehabilitation facilities (including salary support and other administrative costs such as coordination with other networks and resolving permit problems). In regards to #1, this project would cover the cost of developing uniform animal detection and data collection methods, which are important for understanding how stranded turtles represent the entire population. Hiring experienced researchers and veterinarians from other regions to train local responders in th e activity of collecting information from stranded animals is needed to ensure that information collected from stranded animals is consistent across stranding networks in the Gulf, integrated with other health assessment studies, contributes to a better understanding of the impacts of the DWH disaster on Gulf sea turtles, and informs sea turtle recovery strategies going forward. Note: Specific program needs will vary on a state by state basis and therefore should be determined by in-state coordinators. Note: This proposal was prepared by Ocean Conservancy, with input from stranding network members. Ocean Conservancy is not s seeking funding for this project, nor does it anticipate receiving funds, if approved and adopted in whole or in part, by the Trustees, the Gulf states, the National Fish and Wildlife Foundation, the Restore Council, or any other funding entity.																												
alternate lighting for oil platforms	11851	Judy Wade	Gulf of Mexico		1) I realize this would be a big project involving the oil companies, Coast Guard, State Governments, etc. BUT! What good is reducing the lighting on the shore, when the oil platforms confuse the sea life and the migrating birds? I'm sure this will be a battle. BUT! There has to be lightning that is safety conscience for the workers, ships/boats, planes as well as dim enough to not interfere with nature. My suggestion, would be to experiment with red lights and motion sensor lights. 2) Also, educational programs for kids and adults, given by volunteers would teach the visitors about the light problem. (There's nothing that works better then a nagging 9 year old!) I'm working on a basic turtle program to present next May to "Share the Beach". It will be geared towards 9-12 year old children, but could be modified for younger or older kids. I'm hoping to get volunteers to present at environment offices, shops,	Trustee Portal	N	N	N	N	N	Y	N	N	N																		

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					restaurants, condos, all of the "groups" (Lions/Moose/American Legion, Yacht clubs, etc). Anywhere we can. Thanks for your time, Judy E Wade 316 E Myrtle Ave Foley, AL 36535 lhasaraptors@hotmail.com																												
Development and Distribution of Gear Technology to Improve Fuel Economy and Reduce Bycatch in the Gulf Shrimp Fishery	11678	Judy Jamison	Gulf states	1500000	The offshore shrimp trawl fishery accounts for a significant portion of landings in the Gulf of Mexico. Due to a multitude of events (i.e. hurricanes, oil spill, imports), the fishery has seen a substantial decline in fishing effort while operating costs have continuously risen. With increasing fuel prices, fuel saving technologies are a logical avenue to assist in reducing operating expenses. A paucity of information exists documenting the effect of gear technologies on fuel consumption. Cambered trawl doors are currently being utilized by some fishermen in the southeastern United States. These trawl doors have evolved significantly over the past decades, but until recently have not received much attention in the southern shrimp fishery. Evaluations of these doors have yielded promising potential to reduce fuel consumption in the shrimp fishery. Several door sizes have been evaluated, but cambered trawl doors, 50% smaller than the traditional wood or aluminum doors, are documented to have fuel savings of 25-30% during actual fishing conditions. Additionally, bycatch reduction remains a high priority issue in the southeast. Reducing incidental bycatch has been shown to improve catch quality and reduce fuel consumption. We propose to conduct a series of experiments aimed at documenting the fuel savings achieved by cambered trawl doors and continue to improve the bycatch reduction capability already in use in the fishery. More specifically we aim to: 1) Evaluate cambered door gear technology within the southeastern shrimp trawl fishery; 2) Continue to elicit industry participation in evaluating more complex bycatch reduction devices (BRDs); and 3) Conduct result demonstration and dissemination activities of the newly documented gear (doors & BRDs) to shrimp fishermen throughout the southeast to increase the acceptance and use of these gears. Through years of experience, we have found that informal meetings are an optimal forum for information dissemination; providing less volatility from industry and allowing for an effective one-on-one exchange of ideas. As such, we will convene a series of informal meetings throughout the southeastern US to disseminate the results of this study. By continuing our research and development efforts to reduce bycatch within the shrimp trawl fisheries, commercial fishermen will become actively involved in BRD research and development and will be more accepting of those devices tested.	Trustee Portal	N	N	N	N	N	Y	N	N	N																		
5-Year Increase in Gulf of Mexico Fishery Observer Coverage for Monitoring Marine Mammals, Sea Turtles, and Bluefin Tuna	11523	Chris Robbins	Gulf of Mexico	6500000	Temporary (5-year) increase of vessel coverage for Gulf of Mexico shrimp trawl, shark gillnet and pelagic longline observer programs to quantify the extent to which marine mammal, sea turtle, and bluefin tuna bycatch mortality is a source of stress on injured populations. Going forward, these data will shed light on whether bycatch mortality is limiting recovery from injury related to the BP oil disaster and help managers identify restoration measures that can be implemented to shorten recovery times. A temporary but significant increase in observer coverage in the shrimp trawl, shark gillnet and pelagic longline fisheries is needed to improve estimates of marine mammal, sea turtle, and bluefin tuna bycatch rates and mortality in these fisheries. Additional observer coverage and the resulting observational data	Trustee Portal	Y	N	N	N	N	Y	N	N	N																		

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					will help scientists determine to what extent bycatch is a source of mortality and stress limiting recovery from DWH oil spill injuries. Additional biological samples gathered through observers could reveal lingering sub-lethal injuries resulting from oil exposure and help scientists detect impacts on marine mamma, sea turtle or bluefin tuna populations still recovering from the DWH oil disaster. In fishery observer programs around the country, biological samples (organs, tissue, etc) are collected from marine mammals and sea turtles incidentally taken in commercial fisheries. An increase in observer coverage in the Gulf would likely mean an increase in the number of samples for analysis of hydrocarbon and/or chemical dispersant signatures. These data would help scientists track effects at the genetic and population level and provide valuable information to guide restoration efforts. Together, bycatch and biological data will help inform additional restoration measures needed to help the recovery of affected species. A Gulf of Mexico fisheries observer program already exists, providing the organizational structure for additional monitoring of marine mamm al and sea turtle fishery interactions. Note that the estimated cost of $6.5 million is per year over five years. The estimated cost is based on the amount allocated to the Southeast Regional observer program in FY2009.																													
Coordinated Strategy for Sea Turtle Recovery in the Gulf	11222	Jeff Trandahl	Gulf of Mexico	58600000	NFWF and its partners, including managers from all five Gulf States, USFWS, NOAA, and NPS, as well as NGOs and science institutions, propose to restore Gulf populations of sea turtles through the following 3 strategies. This work builds on $3.8M in previous investments NFWF has made to bolster Gulf sea turtle populations since June 2010. 1) Bycatch Reduction - This two-part strategy is projected to save the reproductive equivalent of a minimum of 3,000 nesting females over five years: a) NFWF will provide free vouchers for 7,000 Turtle Excluder Devices (TEDs) to LA and AL fishermen to cover 100% of this fishery, and work with state managers to offer training and assistance on TED installation, and inspections and usability follow-up testing. b) NFWF will convene state and federal agents to standardize enforcement, data collection and reporting processes to create a Gulf-wide database; invest in the capacity of states to enforce the use of TEDs; and evaluate the results of increased enforcement. 2) Nesting Beach Restoration - This three-part strategy is projected to save the reproductive equivalent of 2,400 nesting females over five years: a) Predator Control: NFWF will establish a fund to invest $100,000 annually in predation reduction efforts on high density nesting beaches in FL and AL to maintain predation levels at or below 30% in perpetuity. b) Light Pollution Reduction: NFWF and the Sea Turtle Conservancy (STC) will minimize light pollution on 600 of the highest priority public and private properties along high density nesting beaches, and train county code enforcement staff to address lighting problems. c) Habitat Protection: NFWF and USFWS will protect 2.5 miles of priority nesting habitat (1,300 nests annually) within Archie Carr and Hobe Sound NWRs. NFWF, STC and U of FL will also pilot a new conservation easement to [strengthen protection of] existing nesting habitat on developed properties. 3) Critical Gaps in Science/Management - NFWF w ill mobilize scientists to address two critical research gaps that impact turtle recovery efforts: a) coordination of a 5-year study to identify	Trustee Portal	N	N	Y	N	N	Y	N	N	N																		

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					priority habitats in the Gulf and to identify overlaying threats; and b) a pilot program to test new methods for turtle-friendly beach nourishment.																												
Deployment of New Turtle Excluder Devices in Shrimp Fisheries	438	John Williams	Gulf of Mexico	10800000	The objective of this project is to provide a complete set of new Turtle Excluder Devices (TEDs) to all shrimp fishing vessels required to use TEDs in the Gulf and South Atlantic including skimmer trawls, if required. The benefits of this project will be to increase the overall effectiveness of public and private sector efforts to protect and restore endangered and threatened species of sea turtles and other species of concern. Endangered and threatened populations of sea turtles that forage and nest throughout the Gulf and South Atlantic region were adversely impacted by the oil spill and by the clean-up activities, including the use of dispersants and controlled burns. These impacts reduced the overall effectiveness of long-standing public and private sector efforts in the US and internationally to protect and restore these sea turtle populations throughout the Atlantic basin. A major component of these efforts is the use of TEDs in the US shrimp fishery. TEDs are highly effective in reducing injury and mortality of sea turtles and other species of concern, including various species of coastal sharks. The effectiveness of TEDs to exclude sea turtles and other species decreases over time with constant use; even with maintenance. The cost of new TEDs and maintenance is high relative to the financial condition of the shrimp fishery, and this serves as a disincentive to replace or maintain old, less effective gear. This can reduce the level of sea turtle protection achieved by the fishery. The full deployment of new TEDs on all shrimp vessels required to use TEDs would reduce sea turtle injury and mortality, increase the effectiveness of public and private efforts to protect and restore threatened and endangered sea turtles, and contribute to the mitigation of the adverse impacts of the spill and clean-up activities on these species. Please see attached project cost estimate analysis.	Trustee Portal	N	N	N	N	N	Y	N	N	N																		
Bird Friendly City Initiative	5106	David	Gulf states		Establish a grant program that would provide funds or awards to towns along the gulf coast that establish bird friendly initiatives. A non-profit could be tasked with defining what qualifies as bird friendly and establish the program. I believe beach towns along the gulf coast would be willing to establish bird friendly measures if there was some funding involved. Such measures could include fencing dunes areas for least tern nesting sites, establish dog leash laws, establishing clear beach access points to beach that avoids dunes and nesting habitat, leaving the wrack alone, etc.	Trustee Portal	N	N	Y	N	Y	Y	Y	N	N																		
Conduct tagging and tracking of large marine vertebrates in the Gulf of Mexico to monitor their status, distribution,	12046	Chris Robbins	Gulf of Mexico	500000	Satellite-based tags or radio transmitters will be used to track the movement, habitat use and status of marine mammals, sea turtles, and marine birds impacted by the Deepwater Horizon (DWH) oil spill. The information would be used for the following: 1) monitor species' exposure to areas of lingering DWH oil; 2) detect important changes in habitat use, distribution, or life history of species/stocks that may be a result of the spill; 3) help determine the rate of recovery since the DWH event; and 4) inform recovery strategies. Link to Injury: Surface oil directly impacted marine mammals, sea turtles and marine birds, as documented through aerial surveys, at-sea observations and animal recovery efforts for the DWH Oil Spill Natural Resource Damage Assessment. Six cetacean species were observed swimming in surface oil in offshore waters	Trustee Portal	Y	N	N	N	Y	Y	N	N	N																		

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and changes in habitat use					and hundreds of bottlenose dolphin strandings have been reported during an Unusual Mortality Event that began in February 2010 in the northern Gulf. More than 450 visibly oiled, live sea turtles and 18 visibly oiled sea turtle carcasses were also recovered during DWH response from April 2010 through February 2011. Another 500+ stranded sea turtles with no visible external signs of oiling were also reported during this period. A number of visibly oiled live and dead marine birds were also recovered during DWH response. Benefit and Rationale: Satellite-linked tags and radio transmitters attached to marine animals can provide a wealth of information on habitat use, foraging behavior, distribution, and exposure to hydrocarbons. These data are transmitted via satellite or radio waves in virtual real time to scientists. Satellite-based tags, in particular, are useful for helping scientists track the movement of marine animals with wide-ranging, offshore distributions. Tags also enable scientists to pinpoint animals for follow-up visual and photographic assessments of health and reproductive success (i.e., calf presence) following e pisodic events like DWH. Between 2010 and 2012, scientists initiated tagging of oceanic marine mammals (e.g., sperm whales) in the Gulf, estuarine and coastal/shelf dolphins, and loggerhead and Kemp's ridley turtles as part of injury assessments conducted for the DWH Oil Spill Natural Resource Damage Assessment (NRDA). Expanded and, in some cases, continued monitoring of cetaceans, sea turtles, and marine birds impacted by the DWH oil spill using satellite or radio transmitters is important for tracking trends in the status, species' rates of recovery of species and the overall health of the Gulf ecosystem. Studying the responses of animals at high trophic levels to ecosystem change like a major oil spill can shed light on the health and stability of the marine food webs that support them. Food webs themselves are challenging to monitor directly. Monitoring populations at high trophic levels, such as femal sperm whale social aggregations, with modest home ranges, could be an effective way of comparing known affected areas with those that are more like "control regions." By tagging and tracking wide-ranging large marine vertebrates and comparing their collective movements to oceanographic conditions over time, scientists are in a much stronger position to learn whether or where ecosystem change is occurring (see www.gtopp.org). For example, pattern changes in the movements of sentinel species derived from satellite tracks could be a sign that the abundance or distribution of prey is shifting, perhaps in response to environmental drivers such as habitat degradation, climate disruption, or other stressors. This information can help resource managers fine-tune recovery strategies. Description: Scientists familiar with the species of marine mammal, sea turtle and marine birds impacted by the DWH oil spill will decide which species are appropriate for tagging, whether for the first-time or as part of on-going studies initiated under NRDA injury studies. The duratio n of the tagging and tracking will be determined by the lead PIs but should continue for 5 to 10 years to account for inter-annual variability and so that sufficient data for animals with long life spans can be obtained. The project is broken down into three phases. During Phase 1, scientists identify priority species (see below) for tagging, define research objectives and sample size, obtain																												

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					required permits, and execute field work (e.g., radio, satellite tagging). During Phase 2, scientists collect geospatial animal tracking data and conduct vessel-based health assessments of tagged animals to include tissue sampling (e.g., remote biopsy, live capture/release) and visual documentation of individuals and offspring when possible. During Phase 3, data from Phase 2 is analyzed, interpreted, reported, synthesized for the public, and published in the scientific literature. One or more of these phases would repeat as necessary if, for example, tags are non-responsive (broken or lost) or additional tagging is needed to maintain an acceptable sample size or time series data for identifying trends. The data from tagging studies will be evaluated against historical and other baseline data, as available, on habitat use, foraging behavior, distribution and abundance. Observed changes from baseline will be used to assess DWH impacts on population status and rate of recovery and inform restoration strategies going forward. Priority species and geographies for tagging and tracking (representing marine species that were either oiled or exposed to oil): Marine mammals: Estuarine populations of bottlenose dolphin in Barataria Bay, Mississippi Sound and Sarasota Bay (control site), coastal/shelf populations of delphinids (with emphasis on bottlenose dolphins), and endangered sperm whales, Bryde's whale and other species of oceanic delphinid that were documented in oiled waters or in the oil spill impact zone. Sea turtles: Nesting female Kemp's ridley along the Texas coast and l oggerhead sea turtles in NW Florida, Peninsular Florida (e.g., Pinellas County) and in SW Florida (e.g., Dry Tortugas). Pelagic sea birds: Gulf of Mexico pelagic populations of northern gannets, Audubon's shearwaters, and royal terns will be tagged at their breeding colonies (i.e., gannets at north Atlantic colonies, shearwaters at Caribbean Island colonies, and terns at island beach colonies in the northeast Gulf of Mexico). Nearshore populations of brown pelicans and black skimmers will be tagged in the northeast Gulf of Mexico. Location of Project: Gulfwide Likely Implementing Entity(ies): The entities listed next to each of the animal groups have experience in tagging and tracking wildlife; many were PIs on studies initiated under the DWH Oil Spill NRDA and are in a position to continue leading such studies. Marine mammals - NOAA National Marine Fisheries Service Office of Protected Resources and Southeast Fisheries Science Center - NOAA National Ocean Service National Centers for Coastal Ocean Science and Hollings Marine Laboratory (Charleston, SC) - Oregon State University (Corvallis, OR) - Sarasota Dolphin Research Program (Sarasota, FL) - Ocean Alliance (Gloucester, MA) Sea Turtles - Kemp's ridley: National Park Service - Loggerhead: U.S. Geological Survey, U.S. Fish and Wildlife Service, National Park Service Marine Birds - U.S. Fish and Wildlife Service - U.S. Geological Survey-Coop Unit - Clemson University - Audubon Society - Memorial University of Newfoundland Cost Estimate: Marine Mammals Approximately $1.5 million per study, which would include a sufficient sample size of animals from one or more species, depending on co-occurrence and ease of tagging multiple species under a single study. Cost includes price of tags, vessel charter costs, fuel, renting of satellite/ARGOS, and data processing and analysis. Sea Turtles $1 million/year over 10 years Marine Birds Below estimates are based on tagging																												

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					50-100 birds per species . DATA COLLECTION, COST PER SPECIES Tags ($3500/tag) $175-350K Data Access ($100/mon per tag, 2 years) $120-240K Airfare (5 at $1K) $5K Vehicle rental and gas ($150/day, 10-20 days) $1.5-3K Food ($200/person, 5 people for 10-20 days) $1-2K Field Salaries ($200/day for 5 people, 10-20 days) $10-20K Shipping and excess baggage $1K Total (per species) $313.5-621K Indirect costs (about 40%) $125-248K TOTAL WITH INDIRECT COSTS (per species) $438.500-869K DATA ANALYSIS FOR 5 SPECIES Analysis planning, reporting, and presentations $7-15K Postdoctorate salaries (2-4 people, 50 K/year, 3 years) $300-600K GIS and analysis software (for 2-3 computers) $5-10K Dedicated computers (2-3, different locations) $3-9K Field materials, computer supplies, etc. $10-20K Total $325-654K Indirect costs (about 40%) $130-262K TOTAL WITH INDIRECT COSTS (5 SPECIES) $455- $916K GRAND TOTAL (for 5-year study) $2.6 to 5.3 million* *Funding is also needed to analyze brown pelican and black skimmer tagging data that was previously collected by Clemson University with NRDA funding. Funding in the amount of $150,000 would support a postdoctoral scientist for two years, as they analyzed those data and produced 2-4 papers.																												
Little Point Clear Unit - land protection	67	Ray Herndon The Conservation Fund	Fort Morgan	6000000	This project will permanently protect lands identified by the U. S. Fish and Wildlife Service (USFWS) as the highest priority for acquisition and long-term management by the Bon Secour National Wildlife Refuge. It will add land, which is currently under agreement for purchase by The Conservation Fund, totaling approximately 251 acres of sensitive coastal lands to the Little Point Clear Unit at this Refuge. These lands include significant frontage along St. Andrews Bay, Bon Secour Bay, salt and freshwater wetlands, as well as numerous tidal sloughs, and adjacent upland areas. This acreage shares property borders with the USFWS, and will immediately be managed for improved coastal habitat.	AL Portal	N	N	Y	N	Y	N	N	Y	N																			
Establishment and evaluation of protected oyster spawning aggregates in Mississippi Sound	70	Phillip Waters/ The Alabama Cooperative Extension System	Portersville Bay/MS Sound	240671	We propose the establishment of protected, dense spawning aggregates of oysters for the purpose of evaluating stocking strategies to yield better options for oyster reef restoration in Mobile Bay and the Mississippi Sound. Historically, shell plantings to capture spat have been the benchmark of restoration activities. This project seeks to determine what protective measures can be implemented to provide improved survival for live oyster broodstock reserves resulting in greater larval generation during natural spawning activities and subsequently greater spat set rates on cultched and natural hard bottom sites. This project builds upon a recently completed NFWF funded project which demonstrated successful plantings, and subsequent spawning of advanced stocker sized oysters in Mobile Bay and Mississippi Sound can be thwarted by aggressive predation from oyster drills. The proposed practice of protecting broodstock is well established for many terrestrial restoration efforts, e.g. nesting sites for numerous bird species. The results of this proposal will lead to direct, statistically validated procedures for planted oyster broodstock which can be used in future restorative efforts for improved long-term success. Located in Portersville Bay (Mississippi Sound), Alabama we hold the riparian lease rights to a 10 acre oyster reserve within which oyster harvest has been reduced to zero. The project will use the reserve, to establish and	AL Portal	N	N	N	Y	N	N	N	N	N																			

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					evaluate protected broodstock and control sites (survival, drill presence) and newly cultched areas (recruitment, drill presence). We will install a replicated matrix of test and controls plots. Oysters grown by the Mobile Bay Oyster Gardening Program (established in 2001) will be stocked within these plots in November of the project's first year. Test and control plots will be evaluated in April, July and October for survival rates of the broodstock and presence of the oyster drill. Any necessary adjustments to the protective elements will be made between year 1 and year 2 allowing for a second and third year evaluation of the protective elements. For years 4 and 5, the most promising protective elements will be continued with scheduled evaluations of broodstock survival. Additionally, areas within the reserve will be cultched in the traditional method, and evaluated simultaneously for evidence of recruitment, survival and any predator activity.																												
Fish River Watershed Restoration Project	73	Cal Markert/ Baldwin Count Commission	Fish River, Weeks Bay, lower Mobile Bay	8500000	This project is intended to restore floodplain wetlands within the Fish River watershed and SAV in Weeks Bay and lower Mobile Bay, and to prevent further degradation of ecological resources through improved storm water management and sediment retention. During design storm events, flood waters would be directed into constructed wetlands at multiple locations where the County has identified high levels of suspended solids and sediment transport in the River and tributaries. Constructed wetlands would expand the floodplain, retain sediments, and moderate flood flows to reestablish the historic hydrologic regime, with slower release to the estuary. This would produce conditions in the lower reaches of the River and Weeks Bay that would protect sensitive and high-quality biological resources in Weeks Bay NERR, Forever Wild tract, and in adjacent Mobile Bay, where shoreline protection efforts are being implemented through $5.6M in NOAA-NRDA and NFWF grants. Removal of suspended solids by constructed wetlands would produce greater water clarity in areas where SAV had occurred in the past; 1955 aerial imagery has shown that SAV beds were extensive on both sides of the entrance to Weeks Bay and northward along the shoreline of Mobile Bay to Point Clear. Reduced sediment loads would enhance benthic habitat in Weeks Bay, producing benefits to commercial and recreational fisheries. Criteria for success include reduction in suspended solids in the River and Weeks Bay, growth and diversity of vegetative cover in constructed wetlands, and reestablishment of SAV in the estuary. Water quality improvements in Fish River and tributaries have the potential to lead to lifting of the 303(d) listings for this watershed, but this is not a major objective of the project. The constructed wetlands would generate primary production and habitat for wildlife. This project would complement Baldwin County's recent enactment of storm water management rules for development in the watershed. Those rules were based on hydrologic analyses/modeling that identified the effects of land use changes on flood flows, erosion, and sediment transport/deposition throughout the watershed. The proposed project would be proactive in avoiding development-related problems that typify other watersheds (eg., D'Olive Creek) in the County, thereby avoiding major costs associated with corrections to land use and environmental restoration.	AL Portal	N	Y	Y	N	N	N	N	N	N																		

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Restoration of the Diamondback Terrapin, a Keystone Species in the Salt Marshes of Alabama	74	Thane Wibbles/ University of Alabama at Birmingham	Heron Bay	421715	The diamondback terrapin (Malaclemys terrapin) is a keystone species in the salt marshes of the northern Gulf of Mexico (NGoM) which were significantly impacted by the DWH Oil Spill. In addition to being critical habitat for the terrapin's survival, the salt marsh ecosystem also serves as a nursery for a variety of species that are important for recreational and commercial fisheries. Terrapins are a slow growing, long-lived, top-of-the-food-chain predator, which makes them an ideal sentinel species for evaluating the long term impact of the DWH Oil Spill on the "health" and resiliency of the salt marsh habitat. Although it was once a plentiful and important economic resource, due to a variety of threats including the DWH Oil Spill, terrapins are now scarce in the NGoM. In Alabama, terrapins are listed as a "Priority One Species of Special Conservation Concern" by the DCNR. The proposed research will facilitate the restoration of the terrapin, thus enhancing the stability and productivity of the salt marsh. A multi-pronged approach will be used to alleviate the major threats to the terrapin. 1) Terrapin nest predation will be significantly decreased in Heron Bay by capturing adult females on the nesting beaches and then incubating their eggs. 2) To avoid the high mortality rate associated with early life stages, several hundred hatchlings per year will be reared for approximately two years. 3) Nesting beach abundance and quality will be assessed and actions for restoring optimal nesting habitat or establishing new nesting habitat will be prioritized and recommended to DCNR. We intend to work with DCNR to develop a strategy (including future funding) for enhancing and creating new nesting habitat. 4) The project will address the major threat of crab trap-induced mortality through the implementation of turtle excluder devices (TEDs) on crab traps. This will be accomplished by working with the Marine Resources Division of DCNR, MS/AL Sea Grant, and the Alabama Cooperative Extension Center to contract individuals in the Heron Bay crab fishery to implement and evaluate TEDs. This will create a partnership with the local crab fishery and will be the first step in showing the local crab fishery that TEDs have no significant impact on crab catch. 5) We will continue our monitoring and evaluation of the survival status and restoration of the diamondback terrapin population in Alabama through multiple survey methods.	AL Portal	N	Y	Y	N	N	N	N	N	N																			
Half-Shell High School: Oyster Restoration in the Mississippi Sound	77	Julian Stewart Alma Bryant High School/South Mobile County Education Foundation	Point aux Pins/ Portersville Bay	478000	The primary objective of Half-Shell High School (HSHS) is to carry out a long-term oyster restoration effort in the Alabama portion of the Mississippi Sound. Alma Bryant High School (ABHS) students, under the guidance of their teachers and area experts, will spawn, set, and grow oysters that ultimately will be deployed in protected breeding sites in the project area. The oysters will be produced using the latest techniques in off-bottom oyster farming (OBOF). This approach will not only provide large numbers of live oysters for repopulating the area oyster reefs, it will also provide new economic/business opportunities for area residents, new education opportunities for high school students, and a sustainable means of continuing the restoration activities for years to come. The overall environmental goal is to restore area oyster reefs to the point where they may once again be commercially harvestable. However, oysters	AL Portal	N	N	N	Y	N	N	N	N	N																			

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					will be grown for both restoration activities and the commercial half-shell oyster market. Funds generated from the sale of the single half-shell oysters will be used to expand and sustain the activities beyond the project termination. Additionally, OBOF provides a new sustainable seafood industry for this area and provides the added environmental benefit of improved water quality due to their filter-feeding activities. Nursery activities will be carried out at an existing OBOF northwest of Point aux Pins. A grow-out site will be developed approximately 500 meters south of the nursery site. The grow-out site will be expanded and developed in phases during the subsequent years. Once the growing oysters reach sufficient size, they will be relocated to the restoration site at Portersville Bay and other area as needed. HSHS will become an integral component of the aquaculture science and marine biology programs at ABHS as well as the newly formed "Coastal Studies Signature Academy". Students will also be responsible for monitoring the survival, growth, reproductive success of the oysters as well as developing predator control measures and water quality effects. The academy is partnered with Dauphin Island Sea Lab (DISL) with the overall goal of increasing the graduation rate, increasing the number of students entering the coastal resources workforce, increasing the number of students pursuing post-secondary activities, and educating the general public in coastal resource management.																												
Lower Perdido Bay Restoration	78	Judy Haner/The Nature Conservancy	Boggy Point, Rabbit Island/ Perdido Bay	1664217	Coastal & submerged resources of Mobile Bay have been significantly impacted by coastal development, stormwater runoff, altered hydrology, erosion, and fisheries operations. More than 50% of seagrass beds in Mobile County & 80% of seagrass beds in Baldwin County have been lost in the last 60 years. In 2009, the Alabama Chapter of The Nature Conservancy worked with federal and state agencies to designate a "No Motor Zone" to help protect seagrass beds from further boat impacts in lower Perdido Bay. We have also worked with Dauphin Island Sea Lab to restore prop scars from boat activities and educate the public on these sensitive habitats in the same area. This project involves restoration, enhancement and protection activities for an estimated 2000 ft. of shoreline, using living shoreline/reef breakwater techniques, as well as protection efforts for 157 acres of seagrass habitat. Almost 1500 linear feet of reef will be deployed at Boggy Point and Rabbit Island to help reduce shoreline erosion and provide for the potential reestablishment of emergent marsh. In addition to potential shoreline benefits, the reefs are anticipated to enhance local water quality and provide fisheries benefits. The project will provide a substrate for oyster larvae and other encrusting organisms to settle and colonize; serve as nursery habitat for commercially and recreationally important finfish and shellfish; dampen wave energy and decrease erosion; and help stabilize sediments and decrease turbidity, providing suitable intertidal areas and associated food sources for shorebird foraging. The current signage to mark the protected seagrass beds	AL Portal	N	N	Y	N	N	N	N	N	N																		

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					has not been effective or durable. Installation of spar navigation buoys delimiting the "No Motor Zone" and seagrass beds will be more effective and safer for boaters. The lands also contain habitats that support diversity of wildlife, including coastal & wading birds, waterfowl, nursery habitat for coastal finfish & shellfish such as speckled seatrout, redfish, Atlantic croaker, shrimp, blue crabs. The area is home to many T&E species, including the West Indian manatee. Several islands support coastal, shore and wading birds roosting and foraging, including tricolor herons, reddish egrets, little blue herons, snowy egrets, white ibis and brown pelicans. Great blue herons, great egrets, clapper rails, willets & woodcock also forage in the marsh. Migratory waterfowl & neotropical migrants also frequent the area.																													
Aloe Bay Harbour Town	79	Jeff Collier/ Town of Dauphin Island	Aloe Bay/ Dauphin Island	14346382	The Town of Dauphin Island has identified a restoration project that if approved for funding by NFWF and/or Alabama Gulf Coast Recovery Council, will serve to remedy harm and reduce the risk of future harm to Gulf Coast natural and commercial resources impacted by the Deep Water Horizon Oil Spill. Aloe Bay is located on the northern shore of the Town where there were a few private docks and commercial business that serve locals, visitors, and commercial population of the Town. The lower east side of Aloe Bay is home to the famous Alabama Deep Sea Fishing Rodeo. The facility has been located here for many years and is a positive economic impact to the Town each year. Aloe Bay serves as a nursery habitat for aquatic and avian wildlife. The bay is lined on the south by commercial sites and boat docks, the east by grass beds, small undeveloped areas, a small shallow cove and another only slightly undeveloped area to the north. North of the project area is the Town's Utility Board's Wastewater Treatment Facility and a small residential area with a Boat Dock. The Town's proposed project (Aloe Bay Harbour Town) has several goals: preserve and increase nature habitat for aquatic and avian wildlife, create a facility for the public to view the wildlife, create a new marina for public and commercial use, fishing pier and commercial buildings. Harbour Town will serve as an attraction destination for tourists, locals and commercial visitors. The project approach is designed to leverage public funds to purchase property, construct nature venues, create new habitat, and create a business district to provide an economic boost to the Town. Phase I Environmental Assessment and Environmental Impact studies. This phase will gather information, define problem areas, identify potential solutions and alternatives, determine the feasibility of the project and it's timeline for implementation. The next step is for the Town to begin the acquisition of the associated properties needed to complete the project. Phase II will develop the design and environmental permitting, establish costs and prepare construction plans and documents. Phase III will facilitate construction of the project and set the stage for the	AL Portal	N	N	N	N	N	N	Y	N	N																			

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					Town to start receiving the benefits. The Harbour Town can be separated into different sub projects having distinct characteristics, but also a unique relationship to make this a destination attraction for the Town.																												
Independent External Peer Review of Dauphin Island's West End Beach Restoration Project	81	Jeff Collier/ Town of Dauphin Island	West End Beach/ Dauphin Island	250000	The Town of Dauphin Island is proposing to have an Independent External Peer Review (IEPR) performed on the study and report that formed the foundation of their previous (and current) request for funding of the West End Beach Restoration Project. In the spirit of the U.S. Corps of Engineers' Civil Works Review Policy, the purpose of this IEPR is to ensure the quality and credibility of the decisions, implementation, operations and maintenance, and work product related the Dauphin Island West End Beach Restoration Project. Technical, scientific, and engineering information that is relied upon to form the basis of the proposed design and cost estimates will be reviewed to ensure technical quality and practical application. The Town of Dauphin proposes to retain a Professional Engineering Firm (Firm) to provide this Peer Review. The firm will be required to select up to three separate Coastal Engineering Professionals to review the proposed project and provide a written report of their opinions related to the proposed project's scientific basis and anticipated performance. In addition, the Firm will evaluate the proposed construction estimates for accuracy. Ultimately, the Firm will provide Dauphin Island with a Summary Report of the independent review(s) and the construction estimate evaluation.	AL Portal	N	N	N	N	N	N	Y	N	N																		
Dauphin Island Audubon Bird Sanctuary Shoreline Restoration and Management	82	Matthew Capps/ Dauphin Island Park & Beach Board	Audubon Bird Sanctuary /Dauphin Island	9525000	Dauphin Island has been named one of the top four locations in North America for viewing fall and spring migrations! The Audubon Bird Sanctuary consists of 164 acres of maritime forests, marshes, and dunes; including a lake, a swamp, and a beach. Recently, the 3 mile trail system within the Sanctuary has been designated as a National Recreational Trail. It is located at the Eastern end of Dauphin Island, a 14 mile-long barrier island situated off the Alabama Gulf Coast. The Sanctuary is of vital importance because it is the largest segment of protected forest on the Island and the first landfall for neo-tropical migrant birds after their long flight across the Gulf of Mexico from Central and South America each spring. The Bird Sanctuary has allowed Dauphin Island to be recognized by the American Bird Conservancy and the National Audubon Society as being "Globally Important" for bird migrations. Dauphin Island's East End consists of the Historic Fort Gaines, the Dauphin Island Sea Lab, the Dauphin Island Campground, and the Audubon Bird Sanctuary. Recently, the Town of Dauphin Island and its partners, the Dauphin Island Sea Lab, the Park & Beach Board, and the U.S. Coast Guard has successfully been awarded a CIAP $8M grant for a shoreline restoration project on the East End of the Island. This area of the Island is under constant	AL Portal	N	N	Y	N	N	N	N	N	N																		

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					assault of shoreline erosion and it is estimated that this area of the island is losing around nine feet per year. To make this project a true success story we feel it is important to find a way to make the shoreline more stable by incorporating dune planting, educational signage, and shoreline monitoring. This project will go a long way to protect and enhance the guest experience while visiting the Audubon Bird Sanctuary and the East End Beach. The project aims at implementing control burns and invasive species management strategies to enhance birding and wildlife habitat. The Park & Beach Board, Dauphin Island Sea Lab, and the Town of Dauphin Island are proposing to leverage our resources of the State of Alabama's Coastal Impact Assistance Program (CIAP) grant for an East End Shoreline Restoration project to make this project a true success story for Dauphin Island, the State of Alabama, and the National Fish & Wildlife Foundation. The Park & Beach Board is seeking to partner with the National Fish & Wildlife Foundation so that together we can restore and properly manage the Sanctuary and the East End Beach.																												
Oyster Restoration in Coastal Alabama	83	Julian Stewart /Alma Bryant High School	Sandy Bay/Point aux Pins	478000	The primary objective is to carry out a long-term oyster restoration effort in lower Mobile Bay and the Alabama portion of the Mississippi Sound. Alma Bryant High School students, under the guidance of their aquaculture and marine biology teachers and area experts, will spawn, set, and grow oysters that ultimately will be deployed in dense spawning aggregates and protected breeding sites in the project area. The oysters will be produced using the latest techniques in off-bottom oyster culture. This approach maximizes survival rates as the growing oysters are protected from predators and supplied with optimum growing conditions. Growing the oysters in baskets at the surface of the water effectively eliminates predators and provides optimum dissolved oxygen levels and increased food levels. In nature, the survival rate for oyster larvae surviving to reproduce is maybe on the order of one in a million as most are eaten before even growing beyond the larval stage. Using today's off-bottom growing techniques, the survival rate increases to thousands or even tens or hundreds of thousands per million. Also deploying the oysters as sub-adults greatly increases the chances of surviving to reproduce. Nursery and grow-out activities will be carried out in Sandy Bay near Point aux Pins. Oyster gardening and oyster culture operations in this area have demonstrated it to be one of the most productive oyster growing areas in the region. The remote area is somewhat isolated from development and pollution sources but is accessible by road. Nursery operations will be conducted at a permitted site in the northern portion of Sandy Bay. A grow-out site will be permitted and developed in water controlled by Dauphin Island Sea Lab approximately 500 meters to the south. This project will become an integral component of the aquaculture science and marine biology programs at Bryant High School as well as the newly formed Coastal Studies Signature Academy. The academy is partnered with Dauphin Island Sea Lab with the overall goal of increasing the graduation rate, increasing the number of students entering the coastal resources workforce,	AL Portal	N	N	N	Y	N	N	N	N	N																			

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					increasing the number of students pursuing post-secondary activities, and educating the general public in coastal resource management.																												
Environmental Restoration of Cotton Bayou and Terry Cove Canals	84	Phillip West/City of Orange Beach	Cotton Bayou/ Perdido Bay	500000	The City of Orange Beach, AL, has identified a restoration project that will serve to remedy harm and reduce the risk of future harm to Gulf Coast natural resources that were impacted by the DWH oil spill. Cotton Bayou and its associated two canals are located in the heart of Orange Beach and are connected to the Gulf of Mexico by Perdido Pass. The canals and other shallow waters of Cotton Bayou historically served as nursery habitat for aquatic and avian wildlife. Over the years of development and re-development the natural canal shoreline has been replaced with seawalls and the canals have accumulated sediments that limit tidal circulation, contribute to long-term degradation in ambient water quality, reduce dissolved oxygen concentrations and support algae blooms. The City's proposed project has the goals of preserving and increasing native habitat for aquatic and avian wildlife, enhancing circulation patterns in the canals, restoring water quality and serving as a model for similarly impacted communities along the Gulf Coast. The project approach is designed to leverage public funds to implement this restoration project and re-establish resources that will serve to restore impacted species from the Macondo oil spill such as shrimp, crab, oysters, sea grasses and blue herons.The project approach was developed with a long term vision composed of three phases utilizing the best available science to ensure maximum success: •Phase I is a proof of concept. During this phase we will gather information, define the problems, identify potential solutions, and determine the feasibility of implementation. This first step will serve to bring the stakeholders together with the City and define the intended goals for the project(s). •Phase II will develop the design and environmental permitting for the selected project(s), establish costs and prepare construction Bid Documents. •Phase III will facilitate construction of the project(s) and set the stage for the community to start receiving the benefits. •Phase IV is the on-going operation and maintenance of the constructed facilities and monitoring of the improvements. Phase I, II and III will each develop documents as deliverables that support the next funding request from NFWF. In this way each installment of funds can be measured against the veracity of the documentation to ensure a cost effective approach is being employed each stage of investment and to ensure maximum environmental benefits are realized.	AL Portal	N	N	Y	N	N	N	N	N	N																			
Cotton Bayou – Perdido Islands Beneficial Use Restoration	86	Jody Thompson/ Alabama Cooperative Extension System	Robinson and Bird Islands/ Perdido Bay/ Cotton Bayou	1247334	Beaches along the Gulf Coast of Alabama are significant to both the area's ecosystem and economy. They provide important habitat for birds and endangered species, including the Alabama beach mouse and species of sea turtles. These beaches also contribute to the area's economy, attracting visitors to Alabama's coast to participate in recreational activities, including birding. These habitats were gravely impacted by the Deepwater Horizon oil spill in April 2010. To ensure Alabama's full ecological and economic recovery from this disaster, it is essential to restore critical coastal ecosystems	AL Portal	N	N	Y	N	Y	N	Y	N	N																			

Project Information							Restoration Types Addressed											Programmatic Damage Assessment and Restoration Plan (PDARP) Criteria		Public Notice	Oil Pollution Act (OPA) Criteria (15 CFR 990.54)			Additional Criteria									
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					including beach habitat. Beach habitat on Robinson and Bird islands in Perdido Bay, AL is used by Neotropical migratory bird species as staging areas as they migrate across the Gulf of Mexico throughout the year. Due to these characteristics, Robinson Island is recognized as a Bird Sanctuary and both islands reside within Lower Perdido Bay, one of Alabama's Gulf Ecological Management Sites. Eroding shorelines on both islands have resulted in a loss of beach habitats, negatively impacting the lucrative ecotourism draw of birding on the islands Our project will address habitat deterioration and associated ecological and economic impacts in Perdido Bay. Our project has two main objects: 1) Restore eroded beach habitat on Robinson and Bird islands and 2) restore Cotton Bayou's channel and basin for commercial boating access. The U.S. Army Corps of Engineers in cooperation with partners will dredge Cotton Bayou to its historic depth and use the dredged material for beneficial use to create roughly 3.3 acres of beach habitat on Robinson and Bird islands. This project will benefit the ecosystem by creating essential beach habitat that is used by animal species impacted by the oil spill. The project will also benefit Alabama's coastal economy, attracting birders to the Gulf Coast, improving the access of charter fishermen to Perdido Bay, increasing the promotion of local tourism and in turn offsetting impacts of the oil spill on this area.																												
Improved Bypassing of Beach Sands Dredged from the Mobile Ship Channel	87	Jeff Collier/ Town of Dauphin Island	Sand Island Lighthouse	2400000	This project will fund the incremental cost of improved sand bypassing at Mobile Pass. Specifically, this is the additional cost of disposing beach quality sand in depths less than 20 feet in appropriate locations around the Sand Island Lighthouse (or the general area of the 1987 "feeder berm" location on the shoals west of the lighthouse) instead of in the areas currently used for disposal. Dauphin Island, Alabama is located northwest of the ebb-tidal delta of Mobile Pass. The ebb tidal shoal system feeds sand naturally by wave action onto the beaches of Dauphin Island. The ebb-tidal delta (the outer bar) is bisected by the southern end of the Mobile Ship Channel. Sediment is periodically dredged from this outer bar to maintain the channel to the economically vital Port of Mobile. Dredged sediments are typically placed in designated disposal areas along the channel in unconfined open-water in depths of over 30 feet. Placing dredged sands in these deep water areas permanently removes large volumes of sand from the littoral system and has led to the degradation of the beaches on Dauphin Island. The Town of Dauphin Island is committed to working hand-in-hand with the Corps of Engineers in the future to place beach quality sands dredged from the ship channel around the Sand Island Lighthouse to address the long-term problem of removing sand from the littoral system. Dauphin Island is important not only for the residents but for the entire coastal system as it is the sand source for the Mississippi/Alabama barrier island chain. Dauphin Island protects south Mobile County from hurricane storm surge and waves as well as defines	AL Portal	N	N	Y	N	N	N	N	N	N																		

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					and protects the extremely productive estuary of the eastern Mississippi Sound.																												
Floodplain conservation easements	88	Ben Raines/ Weeks Bay Foundation	Mobile, Baldwin Counties	5000000	We propose creating a $5 million fund that can be used to cover the costs associated with property owners donating conservation easements in our coastal watersheds. The primary impediment to the establishment of conservation easements are the costs the property owner must bear. We propose creating a conservation easement fund dedicated to covering those costs to encourage the development of new conservation easements. The fund would not be used to buy easements, rather it would be used to pay for the appraisal costs, baseline documentation reports, stewardship and legal fees associated with creating conservation easements. Permanent conservation easements on private property have emerged as one of the most successful options for protecting valuable waterfront habitat from development. The easements would be restricted to the floodplain areas of coastal rivers in Mobile and Baldwin Counties that drain into Mobile Bay, Weeks Bay and Wolf Bay. The goal would be to preserve as much of the natural floodplain of the rivers as possible. If the river shorelines are left in a natural state, rather than armored or developed, flood control is better, erosion is lessened and critical wetland habitat is preserved. The $5 million fund would be set up so that only Alabama land trusts that are accredited with the national Land Trust Alliance could pursue easements. The accredited land trusts would be responsible for monitoring and stewardship, with a portion of the $5 million conservation easement fund set aside for each property, based on standard Stewardship calculations. $5 million would probably be enough to set up easements on every undeveloped piece of shoreline with a willing property owner. There are few investments the state could make that would deliver as much environmental protection per dollar as establishing a conservation easement fund.	AL Portal	N	N	Y	N	N	N	N	N	N																			
Dauphin Island- Aloe Bay Beneficial Use Restoration	89	Jody Thompson/ Alabama Cooperative Extension System	Aloe Bay/ Dauphin Island	2444952	The saltwater marshes along the Gulf Coast of Alabama are significantly productive ecosystems, providing food, shelter, and breeding habitat for important fishing species as well as bird habitat, drawing hundreds of birders to coastal Alabama each year. These habitats were gravely impacted by the Deepwater Horizon oil spill, leading to diminishing productivity of fishable species and ultimately negatively impacting seafood production. Saltwater marsh is an important ecosystem on Dauphin Island, Alabama, providing not only diverse habitat but also providing protection from coastal storm events. Eroding shorelines east of the Dauphin Island Airport have resulted in a loss of saltwater marsh habitat, negatively impacting the lucrative ecotourism draw of birding on the island. At the same time, Aloe Bay, on the north side of the Island, has historically been a thriving working	AL Portal	N	N	Y	N	N	N	Y	N	N																			

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					waterfront, providing docking space and support services to the commercial fishing industry. This is currently too shallow to support commercial fishing uses. Our project has two main objects: 1) Restore eroded saltwater marsh habitat on Dauphin Island, between the Airport and Aloe Bay and 2) restore Aloe Bay's channel and basin for commercial boating access. The U.S. Army Corps of Engineers with its partners will dredge Aloe Bay to its historic depth and use the dredged material for beneficial use to create roughly 12.5 acres of saltwater marsh habitat directly west of the bay. This saltwater marsh will be planted with native marsh grasses. In addition, 2,150 feet of segmented living shoreline breakwaters will be installed north of the restored saltwater marsh to combat future erosion. This project will benefit the ecosystem by creating essential saltwater marsh habitat that is used during all stages of life for the animal species impacted by the oil spill. The project will also benefit Alabama's coastal economy, attracting birders to the Gulf Coast, allowing commercial fishermen waterfront access to the historically vibrant bay, increasing the availability and promotion of local seafood and in turn offsetting impacts of the oil spill on this area.																													
Fill Borrow Pits Dug in 2010 to Protect Against Oil Spill Damage	91	Jeff Collier/ Town of Dauphin Island	Dauphin Island	5600000	This project will fill holes dredged on the northern side of the barrier island of Dauphin Island, Alabama in May 2010 in response to the BP oil spill to build small sand piles and dunes as a defense against the impending surface oil slicks. Following a barrier island overwashing event on May 2, 2010, the Town of Dauphin Island constructed emergency sand barriers along the Gulf facing beaches as the BP spill oil was approaching the island. It should be noted that, to date, this response to the oil spill has been a total success. But, the holes on the island must now be filled or this legacy of the response to the oil spill could lead to a new disaster. Because of the emergency nature of the May 2010 operation, a portion of the sand for these barriers was mined from 20 privately owned lots on the north side of Island's west end. Sand from the 20 lots was dug using backhoes up to within 40 feet of Mississippi Sound, creating "ponds" at those locations. The barrier island could breach at these areas (in the general vicinity of the 2400 block of Bienville Blvd) in the next major hurricane if these holes are not filled. Such a breach will sever the developed portion of the island in two and destroy all of the infrastructure in the area and all the access to the houses west of this location. A quasi-permanent inlet could develop (like "Katrina Cut") at these hole/pond locations. This project will fill the holes dug in 2010 with beach and barrier island compatible sands from an offshore source, an upland source, or a riverine source. The Town of Dauphin Island has identified a source of good quality sand already which could be used for this project. The sand source is a submerged shoal roughly 5 miles south of the eastern end of the island. The Town would like to fill the holes with sand from the designated borrow site (alternative sand sources are upland pits, excess dredged sands from the Alabama Port Authority, and sand along the rivers managed by the USACE for	AL Portal	N	N	Y	N	N	N	N	N	N																			

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					beneficial uses). It is possible that this project could be done in conjunction with construction of a planned beach and barrier island restoration project on the island.																												
West End Beach and Barrier Island Restoration Project	92	Jeff Collier/ Town of Dauphin Island	Dauphin Island	58601000	The Town of Dauphin Island proposes to widen the beach at its natural elevation and install a dune system using an offshore sediment source. The objective of the restoration project is to increase island longevity and reduce overwash by nourishing the beach and dune system. In addition, the project would protect existing infrastructure and habitats that would otherwise be subject to degradation if the current land loss trends continued. The project area extends west from the current pier near monument DI-18 to monument DI-2. Beach fill will be hydraulically dredged from an offshore borrow area located in the Gulf of Mexico about a mile south-southwest of the Sand Island Lighthouse and pumped to the project area. The beach fill extends along approximately 4.25 miles of shoreline and requires approximately 3.59 million cubic yards to construct based on surveys conducted in July 2010. The fill template is designed seaward of the existing houses and infrastructure. Between DI-2 and DI-16, the template has a 25 foot wide dune crest at an elevation of +12.0 feet, NAVD with side slopes of 1V:5H. To protect the dune, a beach berm extends approximately 300 feet seaward at an elevation of +5.5 feet, NAVD. The beach berm has a 1V:12H slope to the seaward construction toe of fill. The construction template will shift the MHW shoreline an average of 427 feet seaward of its existing condition. Between DI-16 and DI-18, the existing beach widens and the fill template is designed on top of the existing profile warranting only the dune portion to be constructed. Transport of excavated material from the borrow area to the project area will occur with a hopper dredge or hydraulic dredge through a series of submerged, floating and shore-supported pipelines. Once deposition of material occurs at the fill site, the contractor will move the sand using heavy equipment to shape the beach to the design cross-sections. Final design volume will be based upon pre-construction surveys. Three levels of projects are proposed: one,a full restoration to historic condition; two a partial restoration to historic conditions; and three, a restoration that will hold existing conditions. The cost of each level of project is estimated at $59, $38, and $21 M respectively.	AL Portal	N	N	Y	N	N	N	N	N	N																			
Bon Secour Wetlands Preservation And Habitat Protection Project	96	Andy Bauer/ City of Gulf Shores	Oyster Bay/ Baldwin County	3017924	Acquire and preserve 500 acres of predominately wetland habitat from private property owners in southwestern Baldwin County within the Mobile Bay Estuary. The property will be used primarily for habitat conservation and will protect/enhance fresh and estuarine water quality. The 500 acres is to be added to 109 acres of wetlands owned by the City of Gulf Shores and another 592 acres of wetlands owned by Baldwin County for a total project; totaling 1,200 contiguous acres of wetlands. The lands involved are primarily wetlands, with isolated upland areas in some tracts. The Natural Wetlands Inventory categorizes most of these as freshwater emergent, estuarine emergent or freshwater forested wetlands. There are large areas of brackish wetlands in the southwest corner of this project area on both sides of County Road 4. These habitat types provide	AL Portal	N	N	Y	N	N	N	N	N	N																			

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					excellent living space for varied wildlife resources such as whitetail deer, raccoons, skunks, turtles, muskrats, numerous song bird species, osprey, various herons, egrets, and other birds that transit through the area during spring and fall migrations. Additionally, these wetlands store nutrients and serve as a breeding ground for both fresh and saltwater marine species. An essential key partner would be Baldwin County. Baldwin County owns 592 acres of wetlands in this area which are being used as a wetland mitigation bank. Cooperative educational opportunities exist with the Baldwin County Board of Education such as outdoor classroom experiences and lifelong learning experiences for winter “snowbirds”. Another important aspect of this project is the restoration of 155 acres of wetlands and delta connected to Oyster Bay. In the past the natural watercourses in this area were altered and never restored. The upstream wetland areas are now inundated which caused widespread loss of vegetation. Much of the privately held wetlands are prime candidates for development. Access points and natural habitat management access trails are provided for habitat maintenance/monitoring and wetland restoration purposes and will provide wildland urban interface zones between the surrounding single family subdivisions. The Bon Secour Wetlands Preservation and Habitat Protection Project are aligned with the goals of the Mobile Bay National Estuary Program Comprehensive Conservation and Management Plan and the Baldwin County Wetlands Conservation Plan.																													
Alabama Artificial Reef Plan - Phase I	97	Tim Gothard/ Alabama Wildlife Federation/ Coastal Conservation Association Alabama/ Alabama Marine Resources Division	Gulf of Mexico	8236000	Prior to the Deep Water Horizon Oil Spill in 2010, Alabama's artificial reef system was shown to have strengthened the ecological and environmental health of the northern Gulf of Mexico by providing habitat for economically viable reef fish, and creating a marine environment which made it possible for fish populations to flourish. The diverse and spatially expansive reef complex significantly increased the carrying capacity of reef fish over the years and yielded an astonishing level of production. In 2011, this man-made reef system was directly responsible for generating over $13 million in state and municipal tax revenues for the State of Alabama, and supporting over 2,460 jobs. However, fishery biologists with decades of experience conducting research offshore of Alabama indicate reef fish populations are limited by a habitat bottleneck due the fact that many of state’s artificial reefs have reached the end of their usable life. In addition, research conducted in the years following the 2010 BP oil spill indicates that the spill may have had a tremendously negative impact on the early life-stage fish populations throughout the northern gulf, effectively reversing the previously recognized growth trends. Fortunately, these problems can be resolved. Alabama’s Artificial Reef Plan represents a comprehensive review of Alabama’s artificial reef infrastructure, and proposes an engineered effort that delivers the necessary enhancement and construction required to ensure the state’s Gulf	AL Portal	N	N	Y	N	N	N	N	N	N																		

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					waters remain productive and ecologically sound for years to come. Investment in this proven resource will allow for better management of the fishery by enhancing inshore, nearshore, and offshore reef sites, and engineering a system that will provide desired habitat for numerous fish species as they migrate throughout their life cycle. Phase I of the Plan proposes to establish bridges between habitats connecting early to adult life stage requirements through the following components: Inshore Deployments - Enhancement of 8 inshore reefs - Deployment of 2 new inshore reefs Nearshore Deployments - Deploy Reef Base for 5 rigs - Deploy 300 6 foot pyramids - Deploy 250 juvenile fish shelters Offshore Depoloyments - Deploy 50 high relief structures - Deploy 10 offshore fish attractant devices - Deploy 1 large ship; Inshore, Nearshore, and Offshore Monitoring and Research																													
Stormwater Quality Rehabilitation Project	98	Jeff Collier/ Town of Dauphin Island	Dauphin Island	500000	The Town of Dauphin Island is proposing a comprehensive stormwater quality rehabilitation project that will serve to remedy harm and reduce the future risk of harm to Gulf Coast Natural Resources that were impacted by the DWH Oil Spill. The overall majority of the stormwater runoff produced by the Town of Dauphin Island discharges directly into the Mississippi Sound carrying pollutants, sediment, litter, etc. damaging the overall water quality of the sound and the surrounding coastal areas. The shallow coastal waters, coastline, saltwater marshes, and associated wetland habitats in and around the Mississippi Sound on the North side of Dauphin Island provide native and nursery habitat for numerous aquatic and avian species. The main goal of this project is to improve the native habitat along the north side of the island and in the sound by restoring the overall water quality in the sound, improving water quality of the stormwater discharge into the sound, reducing sediment and litter transport into the sound, reducing overall stormwater discharge into the sound, and serving as a model for similarly impacted communities along the gulf coast. These objectives will be accomplished by making necessary repairs and improvements to the existing stormwater drainage facilities, including, but not limited to, grading and stabilization measures, updating and improving existing infrastructure, rerouting stormwater to centralized wetland treatment areas, and retention/detention areas. The project approach is designed to leverage public funds to implement this rehabilitation project and re-establish resources and habitat that will benefit the growth and repopulation of impacted species from the DWH Oil Spill such as shrimp, fish, crab, oysters, sea grasses, blue herons, seagulls, etc. The	AL Portal	N	Y	N	N	N	N	N	N	N																			

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					project approach was developed with a long time goal oriented initiative and is divided into four phases to ensure maximum success. See Section F for breakdown of Phases. Phases II, III and IV costs are unknown at this time.																												
Upper Wolf Bay Savanna and Marsh Acquisition for Conservation	99	Dan Dumont/ Alabama Forest Resources Center	Baldwin County/ Upper Wolf Bay	3000000	Acquisition of this tract for subsequent transfer to public or conservation organization ownership would create an opportunity for future maintenance/management and restoration activities to be conducted. Management and restoration costs are not included in this project and would be assumed by the new owner. The tract significantly contributes to the striking viewshed of upper Wolf Bay and has been designated as a Geographic Area of Particular Concern (GAPC) in the Alabama Coastal Area Management Plan (ACAMP), it is recognized as a Gulf Ecological Management Site (Gulf of Mexico Program), and it is recognized as a Gulf Ecological Management Site (Gulf of Mexico Program). In 2007 Wolf Bay was designated as an Outstanding Alabama Water by ADEM and the EPA. The parcel consists of 458 acres of wetlands and 111 acres of uplands. A botanical survey by Troy University in September of 2010 yielded 147 plant species and several state-listed animal species have the potential to occur. As coastal forests are diminished by development, the tract becomes increasingly important to Neotropical migrant birds as a stopover while on migration. Restoration of longleaf pine is possible on 55 acres of agricultural land. Natural communities include East Gulf Coastal Plain Wet Flatwood Bog,Southern Coastal Plain Blackwater River Floodplain Forest, and 2.6 miles of shoreline supporting Black Needle Rush Tidal Herbaceous Alliance. Protection of the mature slash pine savanna and adjacent marsh will enhance water quality in the estuary of Wolf Bay, providing economic benefits to the state. The threat of development is great, however, as the 111 acres of uplands would allow for a large development to occur.	AL Portal	N	N	Y	N	N	N	N	N	N																			
Dauphin Island Sea Lab Research Building	100	John Valentine/ Dauphin Island Sea Lab	Dauphin Island	7000000	Construction of a new 15,000 sq. ft State-of-the-Art Research Facility that can support both resident scientists and visiting scientists from the 22 member institutions of the 40-year old Marine Environmental Sciences Consortium (MESC). Aging research laboratories, built by the Air Force in the 1950's, have prevented the MESC from being as competitive for extramural money nationally and internationally as they could be. Funding for the construction of this facility would also allow the resident scientists at Dauphin Island Sea Lab (administrative home of the MESC) and scientists at MESC-member institutions to form stronger state-wide research collaborations that lead to cutting edge science proposals for the state. Beyond these critical priorities, construction of this facility would lead to the RESTORE Act-funded Center of Excellence to achieve goals far beyond what might be possible. These objectives are directly related to the economic health of lower Alabama where tax revenues are based strongly on the health of the resources found in our coastal waters. Additionally, funding of the construction of this new	AL Portal	N	N	N	N	N	N	N	N	N																			

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					facility would magnify the economic impacts of the DISL via growth of staff and faculty who would live locally.																												
Alabama Cooperative Aquatic Animal Health Network	101	Stephen Bullard/ Auburn University, School of Fisheries, Aquaculture, and Aquatic Sciences	Dauphin Island	3750000	The Alabama Cooperative Aquatic Animal Health Network will recruit and use the best available scientists and science to serve society and stakeholders who value the health of Alabama's aquatic natural resources. We propose the establishment of a service-, science-, and training-oriented aquatic animal disease diagnostics network closely integrated with a Gulf of Mexico sentinel and environmental monitoring program. The disease diagnostics network links cross-discipline cooperative laboratories for aquatic animal health that will serve the Alabama Department of Conservation and Natural Resources (including Marine Resources Division and Wildlife and Freshwater Fisheries Division), stakeholders concerned with the health of marine resources and the high standard of Alabama's seafood, academics conducting ecosystem research in the region, citizens and students eager to learn about the Gulf of Mexico, and the missions of the Gulf of Mexico Research Initiative's consortia of scientists. This project combines the expertise, resources, and experience of a team of established aquatic animal health experts, who will centralize aquatic animal disease diagnostic services, promote deeper understanding of aquatic animal diseases, translate results to citizens, and train a new generation of aquatic animal health experts who operate in the Gulf of Mexico. This network leverages our FDA- and USDA-affiliated disease diagnostics laboratories to provide aquatic animal disease diagnostic capabilities that will serve wildlife agencies and citizens. The Gulf of Mexico sentinel project extends those human and physical resources and expertise to conduct baseline monitoring through systematic collections of biological and environmental chemical data from selected sentinel fishes across 4 ecologically discrete and economically invaluable Gulf of Mexico essential habitats, including those subject to restoration. This will generate new data on the physiology and health status of aquatic species in their respective habitats, shed light on community- and ecosystem-level impacts of environmental change and restoration efforts, and forge baseline data vital to and requisite for comparable assessment studies conducted in the future and in light of restoration efforts for fish and shellfish in the region.	AL Portal	N	N	N	N	N	N	N	N	N																			
Gulf Coast Wildlife Recovery & Interpretive Center: Feasibility, Planning and Preliminary Design Phase (Phase I)	103	Phillip West/City of Orange Beach	Orange Beach	275000	Over 7,000 birds were impacted by the Deepwater Horizon Oil Spill, and while rescue efforts were unprecedented during the oil spill response, these worthwhile efforts have effectively been disbanded for the south Alabama region. There is a great need for a permanent, full-time wildlife rescue and rehabilitation program for the South Baldwin (Orange Beach, Gulf Shores, Gulf State Park, Foley and Fort Morgan) region. Due to our location along the northern Gulf of Mexico coastline, we play a significant role for both seasonal migratory birds and for shorebirds, seabirds and waterfowl. We routinely witness injuries, entanglements, fatigue and illness among these and other species. When coupled with interactions with tourists, these unfortunate situations lead to negative perceptions about the communities in which they occur. Our goal with this project is to create a bona-fide, effective wildlife	AL Portal	N	N	N	N	Y	N	N	N	N																			

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					rescue and rehabilitation facility that will be (partly) open to the public and educational groups. The project would offer meaningful response for wildlife emergencies and rehabilitation, provide significant opportunities for conservation education, and yet offer a worthwhile and unique experience for the regional visitor (i.e., ecotourism). Moreover, the project will prevent negative perceptions for those visitors and residents that encounter sick or injured wildlife, with little or no apparent effort made by any agency to offer assistance or care for the bird or animal. Several of the priorities of the facility and program will be: • Provide staff and personnel to respond to wildlife emergencies • Promote conservation and natural resource education and technical assistance • Reduce human/wildlife conflicts • Coordinate with and work closely with State and Federal resource management agencies in the interest of wildlife conservation and education; There will be no land cost associated with this project, as the facility will either be located on city-owned property. Over time, we believe the project will become largely self-sustaining, with funds becoming available from private donations and endowments, but it is doubtful these would ever cover the full cost of operation, etc. For Phase I of this project, we propose to complete the feasibility study, planning and preliminary design of the facilities and overall program.																													
Habitat Acquisition and Conservation for Neotropical Migratory Birds	104	Walter Ernest/ Pelican Coast Conservancy	Dauphin Island	891217	Dauphin Island has been identified by The National Audubon Society as a Globally Important Birding Area. 348 species have been reported on the island. The objective of this proposed project is to maintain a network of quality stopover habitats, work with government and other agencies to ensure a balance between human land uses and conservation, educate landowners about practices that strengthen the island's unique ecosystem and promote the economic value of ecotourism by attracting more birders to Dauphin Island. This project seeks to establish a land acquisition fund that will be utilized to acquire Neotropical migratory birding habitat on Dauphin Island. The Pelican Coast Conservancy seeks funds from the NFWF Gulf Environmental Benefit fund or other similar sources of funding to permanently protect the remaining lots in the Gorgas Swamp, Tupelo Gum Swamp and island primary dune habitat. The project would only work with willing sellers. This project could also include the placement of a perpetual conservation easement on the conserved sites. The conservation easement could ensure project transparency and third party oversight. In addition to the many permanent species that reside on the Island, a variety of waterfowl, seabirds, and shorebirds are commonly observed in and around the island during the winter season. Federally endangered Piping Plovers and other shorebirds ply the sandy beaches in search of invertebrates buried in the sand, while various species of loons, gulls, terns and waterfowl are often observed in the waters of the Gulf of Mexico and Mississippi Sound.	AL Portal	N	N	Y	N	Y	N	N	N	N																		

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Benton Tract	105	Walter Ernest/ Pelican Coast Conservancy	Baldwin County/ Weeks Bay Reserve	2500000	The 407 Acre Andrew Benton Tract is within the Weeks Bay Coastal Area. This project involves the fee acquisition and placement of a conservation easement on the conserved property. The property would allow the Weeks Bay Reserve to expand its conserved habitat on Bon Secour Bay. This property contains high quality maritime forest, saltwater and freshwater wetland habitat. The Reserve has obtained a 1 million dollar NOAA land acquisition grant. This grant requires a 50 % match. This parcel has been nominated to Forever Wild. The parcel contains 2,750 feet of water frontage on Bon Secour Bay.	AL Portal	N	N	Y	N	N	N	N	N	N																			
Mobile Bay Preservation and Restoration; Lower Fly Creek Reach Project	106	Tim Kant/ City of Fairhope, Alabama	Fairhope	14700000	Fly Ck was spared from the direct impacts from the 2010 DWH oil spill, yet contains similar habitats/species that are similar to other coastal streams that were not so fortunate. Although this area did not fall within the geological nexus of the DWH event, there is an ecological nexus between the harmed natural resources suffered at other Gulf Coastal areas and this project: 1) preservation of riparian areas; 2) gully repair; 3) sediment removal; 4) re-planting of historic SAV; 5) control of federally noxious plants; and 6) culvert overfall repair. The natural resources of Fly Ck provide important intertidal habitat for marine species such as shrimp, blue crabs, oysters, and finfish. The creek contributes freshwater and organic materials that serve to fuel the Mobile Bay ecosystem. The resilience of Fly Ck has enabled this stream to contribute positively to the Mobile Bay ecosystem in spite of continued economic dev., population growth, and sedimentation/turbidity issues. However, if Fly Ck is to continue its contributions to the Bay, certain measures must be applied for the longterm protection of the watershed and Bay. Bird species found on the creek that are indicative of a healthy ecosystem include brown pelican, osprey, belted kingfisher, and great blue heron. Important fish species in lower Fly Ck include speckled trout, flounder, striped mullet, and red fish. Federally protected species known or possibly within or near Fly Ck include Gulf sturgeon, manatee, bald eagle, wood stork, indigo snake, and gopher tortoise. Fairhope did an assessment of the natural resources within the Fly Ck watershed (2013) that identified 15 restoration measures, with the #1 measure being the preservation of a strategic undeveloped tract of 108 acres in the lower portion of the watershed. The land is located NW of the Hwy 98 intersection with Hwy 104 and is adjacent to a significant reach of undeveloped Fly Ck and riparian buffer. It contains a diversity of scarce habitats such as forested wetlands (cypress and gum) and longleaf pine forest. Other features of this project include gully repair within the acquired tract; sediment removal from Fly Ck, replanting of documented SAV, culvert overfall repair, and control of federally noxious listed plants. This project would provide longterm protection from development, adverse stormwater impacts, turbidity, and sedimentation, thus insuring the biological productivity of the creek's intertidal area and adjacent Mobile Bay.	AL Portal	N	Y	Y	N	N	N	N	N	N																			

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Gulf Coast Environment Research Station	107	Joel Hayworth/ Marine Environmental Sciences Consortium (MESC) and Auburn University (MESC Institution)	Orange Beach	9000000	This project will establish the Gulf Coast Environment Research Station (GCERS). The GCERS will be a science and engineering facility where researchers from MESC institutions will focus on restoration and sustainability of the physical, chemical, and economic resources within Alabama's unique coastal environment. The GCERS will advance our knowledge of environmental processes and effects within Alabama's coastal region and their impact on the Gulf marine ecosystem and the economy of Alabama's coastal communities. The Perdido Bay location will provide access to all of the coastal and near-coastal upland areas of Alabama's Gulf Coast. The GCERS will focus on three areas critical to coastal Alabama's environment and economic health: water quality restoration, habitat restoration and protection, and community resilience. The goal of the water quality focus area is to understand the myriad of natural and man-induced factors governing water quality in coastal Alabama ecosystems, and develop and implement science-based methods and engineering strategies for restoring water quality within Alabama's coastal and near-coastal upland systems. The goal of the habitat restoration focus area is science-based restoration and protection of impaired habitat within Alabama's coastal terrestrial, freshwater, estuarine, and marine ecosystems. The community resilience focus area goal is to enhance the ability of Alabama's coastal communities to prepare, react, and recover from natural and human activity-related environmental disruption and their concurrent effects. As part of this focus area, the University of Alabama's Center for Economic Development will create a Coastal Economic Development group within the GCERS. The City of Orange Beach has agreed to donate property for construction of the GCERS, including a primary building with offices, computing facilities, laboratories, and workshops; dockage with fueling for research vessels; and a coastal environment education facility, including an auditorium with modern a/v capabilities, and a museum showcasing unique and important aspects of Alabama's coast environment. The GCERS will provide economic benefits to Alabama's coastal communities through enhanced tourism, workforce creation/diversification, a focus on economic sustainability issues unique to coastal Alabama, restoration of environmentally degraded coastal habitats, and public confidence in the health and sustainability of our coastal environmental resources.	AL Portal	N	N	N	N	N	N	N	N	N																			
Expansion of Auburn University Shellfish Laboratory	108	Bill Walton/ Auburn University School of Fisheries, Aquaculture & Aquatic Sciences	Dauphin Island	3000000	The Auburn University Shellfish Laboratory, on the Dauphin Island Sea Lab campus on the east end of Dauphin Island, Alabama, has provided instruction, research and outreach in the area of shellfish ecology and production to the citizens of Alabama, the region and the nation since it was opened in 2003. It is one component of the Auburn University Marine Extension and Research Center. The hatchery production of shellfish larvae and seed has supported a wide variety of in-house research projects including focus areas of shellfish aquaculture, hatchery practices, shellfish and reef ecology, shellfish diseases, human pathogens associated with shellfish, and shellfish restoration. The AUSL hatchery has also provided shellfish larvae and seed for other agencies and institutions around the Gulf of Mexico on an as needed basis. With the current and projected investment in oyster restoration projects by	AL Portal	N	N	N	Y	N	N	N	N	N																			

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					NGOs and the federal government, oyster stock enhancement by state agencies, and private oyster farms, we anticipate a growing need for both production of oysters (single seed for private farming and spat on shell for enhancement and restoration) and support for these activities (disease monitoring, habitat assessment, growth and recruitment monitoring, etc.). Therefore, we propose to modernize and expand the current Shellfish Laboratory by adding a 14,000 square foot facility adjoining the current facility. This expansion will include 1) an enclosed hatchery with live algal production facilities (7,000 square feet) allowing greater production over a longer period of time each year, 2) additional laboratory, office and meeting space for disease monitoring, meat and shell condition testing, habitat assessment work, etc. (7,000 square feet) 3) additional nursery tanks for both production and applied research, and 4) remote set tanks and support services for work with oyster restoration and stock enhancement. Importantly, the additional space would increase the capacity of AUSL to conduct work and assist the state & industry with other marine invertebrates, such as shrimp and blue crab. This expansion is envisioned as a partnership with both the industry and the state, where AUSL could provide significant additional services to Alabama's coastal marine invertebrate fisheries.																													
Habitat enhancement of marine fisheries off coastal Alabama.	109	Stephen Szedlmayer/School of Fisheries, Aquaculture, and Aquatic Sciences, Auburn University.	Dauphin Island	7592500	It is clear that the 2010 DWH oil spill affected associated fisheries through reduced access (closures) and reduced demand (Gulf seafood was contaminated). The primary objectives of this project will be to mitigate these impacts by (1) increasing access to the reef-fish fisheries by substantially increasing reef habitat through a large artificial reef deployment program, (2) providing a robust assessment of the effectiveness of this habitat enhancement, and (3) providing valid scientific data to confirm that gulf seafood is free from DWH oil spill related contamination. One of the most promising approaches to mitigate the reduction in access to reef fisheries caused by the DWH oil spill event is to increase habitat for major fisheries species through an extensive and effective artificial reef program. Such habitat enhancement may also increase the resilience of these valuable resources to future disturbances. This project will add a large number (504) of large-sized, long-lasting artificial reefs ("super-reefs" = 25 ft. tall pyramid reefs) to the permitted reef zones off the coast of Alabama. Artificial reef placement, particularly distance between reefs can have profound influence on the effectiveness of any given artificial reef program. Therefore the habitat enhancement of this project will be tightly coupled with a robust investigation of the effects of reef spacing on a number of critical metrics including natural and fishing related mortality, condition, growth, abundance, biomass, production, diet, and movement of several important fisheries species (with a focus on red snapper) as well as community characteristics such as species richness, evenness, and diversity. This will be accomplished through application of a wide array of proven methods, each of which have been developed and optimized for this system by our lab over the last 24 years. Methods include standardized hook-and-line and trap sampling, visual	AL Portal	N	N	Y	N	N	N	N	N	Y																		

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					surveys by divers and ROVs, hydroacoustic surveys, fine-scale passive acoustic tracking, stomach content analysis with DNA barcoding, otolith aging techniques, genomic studies, parasitology and microbiology studies. These methods will provide a comprehensive combination of data on population and community characteristics, individual condition and growth, individual movement, and resource use, and will allow an unprecedented assessment of the effectiveness of the artificial reef deployment at different levels of reef spacing.																													
Laguna Cove Little Lagoon Natural Resource Protection	110	Walter Ernest/ Pelican Coast Conservancy	Gulf Shores	3000000	The Acquisition of coastal wetlands is a mechanism that will benefit the natural resources of the Gulf Coast that were impacted by the spill. The fee title acquisition and placement of a conservation easement on these two tracts currently owned by the Erie Meyer Foundation would demonstrate an important effort to protect and enhance natural and living resources with proceeds from the NFWF Gulf Environmental Benefit Fund. These tracts contains a significant amount of waterfront frontage on Little Lagoon. The parcels are also accessible from West Beach Boulevard. The project site is in close proximity to the boundaries of the Bon Secour National Wildlife Refuge. The parcel could become a future City of Gulf Shores public park or be added to the land holdings of the State of Alabama's Gulf State Park. The parcel is one of the largest undeveloped tracts located on Little Lagoon. This site has previously been approved for a subdivision and a large scale marina. The purpose of this project would be to acquire the property from the Erie Meyer Foundation and place a perpetual conservation easement on the acquired property. The Atlantic Coast Conservancy/Pelican Coast Conservancy could serve as the qualified holder of the perpetual conservation easement.	AL Portal	N	N	Y	N	N	N	Y	N	N																			
Spanish Fort Ecological Park	111	Mike McMillan/ City of Spanish Fort	Spanish Fort	21250000	The City of Spanish Fort has identified a tract of land for preservation of wetlands and the construction of an ecological park. This project is situated south of where Bay Minette Creek discharges into the Delta. This project will serve to protect natural resources while creating a destination for locals and visitors to enjoy the cultural, historical and environmental importance of the site. The City of Spanish Fort is an area that is highly susceptible to erosional activities based primarily on the existing topography, soil conditions, and annual precipitation. This region has experienced significant erosion that has contributed to downstream sedimentation and adversely affected water quality in and around Mobile Bay. Preservation of critical wetland habitat is vital in these areas for the sustainability and protection of the flora and fauna native to the area. In addition, the project will include: land acquisition, elevated nature boardwalks along the wetland areas, construction of an interpretive center/lodge (including classrooms), an outdoor amphitheater, boat/canoe/kayak launches, wildlife enhancement areas (osprey platforms, wood duck boxes, educational kiosks/signage, etc), and walking trails. Promoting the diversity of the Mobile-Tensaw Delta through education, eco-tourism, creative outdoor land use and wetland preservation will provide multi-beneficial uses including tourism promotion while protecting valuable natural resources.	AL Portal	N	Y	N	N	N	N	Y	N	N																			

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Identification, Prioritization, and Quantitative Assessment of Ecosystem Benefits of Restoration Actions within the Perdido and Perdido Bay Watersheds	112	Joel Hayworth/ Marine Environmental Sciences Consortium (MESC) and Auburn University (MESC Institution)	Perdido Bay Watershed	2575000	This project establishes a program to identify and prioritize critical ecosystem restoration actions within the Perdido and Perdido Bay watersheds, and provide science-based quantitation of ecosystem benefits of restoration actions. The watersheds cover about 1200 square miles, and are bisected by the Alabama-Florida border. They drain a variety of land use/cover types, including upland forests, wetlands, agricultural areas, and urban development. Water and sediment quality impairment and degradation of biological resources consistent with point and nonpoint source pollution from residential, agricultural, and industrial sources is widespread throughout the area. Evidence of ecological degradation includes imbalances in natural plankton populations, benthic and fish communities, and adverse changes in trophic dynamics and the loss of aquatic habitat. This program will substantially reduce uncertainties and increase effectiveness in identification and prioritization of potential restoration actions, quantify ecosystem benefits from current and future restoration actions, and improve decision-making in adaptive management of restoration actions. These goals will be accomplished by (1) characterizing existing environmental/ecological watershed conditions by establishing a science-based, integrated monitoring network for water and sediment quality, physical/hydrologic characteristics, and benthic invertebrate, planktonic, and fish community structure; (2) creating a dynamic, robust GIS spatiotemporal database of chemical, biochemical, and biological indicators necessary for predicting and quantifying environmental and ecosystem benefits of restoration activities; (3) linking chemical, biochemical, and biological indicators of ecosystem degradation to defined sources of degradation; and (4) developing and implementing data interpretation and modeling protocols, employing the evolving database for prediction, confirmation, and long-term surveillance of restoration activities. This project will provide a science-based means for those funding, regulating, and implementing restoration actions to prioritize future restoration activities, assess ecosystem benefits of ongoing restoration actions, and predict the outcomes of adaptive management decisions for ongoing restoration actions. This will be a collaborative project between Auburn University's Environmental Engineering program, the Dauphin Island Sea Lab, Escambia County, Florida, and Baldwin County, Alabama.	AL Portal	N	N	N	N	N	N	N	N	Y																		
Little Point Clear Unit - Bon Secour National Wildlife Refuge - Three Rivers tract acquisition	113	Ray Herndon/ The Conservation Fund	Fort Morgan	4750000	The project will provide permanent protection to approximately 237 acres which consists of a variety of coastal habitats. The Bon Secour National Wildlife Refuge is home to the endangered Alabama beach mouse, which is associated with the sand dunes and sea oats. Refuge beaches serve as nesting sites for loggerhead, and Kemp's Ridley sea turtles. Habitat types include beaches and sand dunes, scrub forest, fresh and saltwater marshes, fresh water swamps, and uplands. More than 370 species of birds have been identified on the refuge during migratory seasons, with many shorebirds and wetland-dependent species utilizing the habitats present for resting, wintering and nesting needs.	AL Portal	N	N	Y	N	N	N	N	Y	N																		
Fairhope's Coastal Environmental	126	Tim Kant/ City of	Fairhope	49000000	CEEN carries out the City of Fairhope's 2006 Comprehensive Plan to expand coastal environmental education and outreach, promote green infrastructure and outdoor public recreation areas, restore and protect watershed health,	AL Portal	N	Y	N	N	N	N	N	N	N																		

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Education Network (CEEN)		Fairhope, Alabama			mitigate impacts from coastal storms, and increase coastal resiliency. CEEN's grey and green infrastructure functions as an integrated ecological system and connects the 800-acre Auburn University Gulf Coast Research and Extension Center (GCREC) to the planned 108-acre Fly Creek Nature Preserve and existing outdoor public green spaces in Fairhope. CEEN will i) strengthen synergies among local and state governments, conservation groups, and Alabama universities, ii) engage coastal citizens by promoting environmental education, outreach, and research, iii) restore and protect coastal watersheds, iv) mitigate environmental impacts of coastal storm surges, flooding, and natural disasters, v) enhance hurricane shelter and emergency management infrastructure, and vi) ensure long-term coastal resiliency for generations to come. CEEN also showcases landscape horticulture and 21st century sustainable agricultural practices, creates tourism opportunities, and represents a long-lasting community development model in sustainability for coastal Alabama. This project links the 108-acre Fly Creek Nature Preserve to the 800-acre GCREC using natural drainage systems as well as walking, hiking, and biking trails. Infrastructure improvements include: i) extending Volanta Avenue across Highway 98 into GCREC site (to include a traffic signal); ii) construction of a platinum LEED-certified environmental education facility (84,000 sq ft) housing a 400-seat auditorium, flexible indoor exhibit space, multimedia hub classrooms, offices, and laboratories; iii) a dormitory to accommodate school groups, visiting dignitaries, and scholars/instructors; iv) outdoor functional spaces that showcase modern, cutting-edge sustainable landscape horticulture, agriculture, and aquaculture research, innovation, and practices; and v) walking, hiking, and biking trails, including river walks and placard-adorned trails along on-site stretches of Fly Creek and associated wetlands. These connected hubs will complement a Fly Creek Watershed restoration project and include: i) preservation of riparian areas; ii) gully repair; iii) sediment removal; iv) replanting of historic submerged aquatic vegetation; v) control of federally noxious plants; and vi) culvert overfall repair.																												
City of Prichard Land Acquisition Project	127	Melanie Baldwin/ The City of Prichard	Chickasaw	2540000	This project requests Restore Act funds to acquire land for conservation and recreation. There are numerous available parcels for acquisition adjacent to or Chickasabogue Park and Chickasaw Creek. Chickasabogue Park is a 1,100-acre outdoor recreation facility and wildlife refuge. It provides a wide variety of outdoor activities in a natural setting while protecting the environment and preserving the diversity of plants and animals indigenous to the area. This park provides access to Chickasaw for canoeing, kayaking, fishing and boating. Additional parcels can create a network of water-based canoe and kayak trails that will tie into the Bartram Canoe Trail developed by the Alabama Department of Conservation and Natural Resources. The land will be acquired and will be conserved and protected. Eligible land includes undeveloped wetlands and uplands located within the City's municipal boundary.	AL Portal	N	N	N	N	N	N	Y	N	N																		
Development of a sustainable	128	Prabhakar Clement/	Baldwin County	980000	Baldwin County is the largest county in the State of Alabama, and it is also one of the fastest growing counties in our state. Within the past 20 years, population in this county has doubled from about 95,000 residents in 1990 to	AL Portal	N	Y	N	N	N	N	N	N	Y																		

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groundwater management plan to support long-term economic growth in Baldwin County		Auburn University			190,000 residents in 2010. Due to its rapid economic growth, the water demand within this county has also doubled from a net demand of 30 Mgal/day in 1990 to over 60 Mgal/day now. Baldwin County residents are 100 percent dependent on groundwater aquifers for water supply. The water currently extracted from Baldwin County aquifers are assumed to be recharged by rainwater or replenished by water moving from deeper formations. The dynamics of groundwater flow and recharge patterns within the complex aquifer system is not well understood. Therefore, the ability of this fragile aquifer system to meet future water demands, in a sustainable manner, is unclear. Several nearby Alabama communities (e.g., Dothan, Alabama) that rely on groundwater have reported significant declines in groundwater levels. It is highly likely that similar declining trends are also occurring in Baldwin County aquifers, but there are no data available to quantify these effects. Baldwin County residents have noticed several springs running dry (e.g., Magnolia Spring) and streams having reduced base flow, which are indications of reduction in groundwater flow. Contamination events from various natural and anthropogenic sources have threatened the quality of groundwater. Baldwin county residents are beginning to notice their groundwater showing traces of fertilizers which could be signs of groundwater contamination. The county has a major waste site in Perdido, Alabama, with groundwater contaminated by benzene. Also, saltwater intrusion is a major problem in several coastal aquifers. The objective of this proposal is to develop a sustainable water allocation plan for managing groundwater in Baldwin County. This two year project will include field data collection, GIS-based mapping of existing groundwater assets, mapping of contamination sources, and development of a computer model using the MODFLOW code. We will also develop vulnerability assessment maps to delineate the impacts of climate-change induced weather changes and sea level rise on groundwater availability. Groundwater is the lifeline of Baldwin County therefore this study is critical to the long-term economic growth of this region.																												
Harrod Tract Addition to the Weeks Bay Reserve	129	Ben Raines/ Weeks Bay Foundation	Fish River, Weeks Bay, lower Mobile Bay	2700000	The Harrod Tract is one of the largest remaining undeveloped parcels of swamp, marsh and river shoreline in coastal Alabama. It includes 7,600 feet of Fish River shoreline, including frontage along Turkey Branch and Waterhole Branch, two of Fish River's primary tributaries. Multiple smaller bayous are present on the property. The Weeks Bay Foundation and the Weeks Bay National Estuarine Research Reserve along with the State of Alabama have collaborated over the years to protect several thousand acres of wetlands around Weeks Bay, Mobile Bay, and the Fish River watershed. The Project property is adjacent to previously protected wetlands and is the largest privately-owned tract in the lower part of Fish River. The intent is to protect the property through fee simple purchase by the Weeks Bay Foundation or the State of Alabama. Location and Conservation Values: The Project property is located in Baldwin County, Alabama, near where Fish River meets Weeks Bay which joins to	AL Portal	N	N	Y	N	N	N	N	N	N																		

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					Mobile Bay. The northeast side of the 231-acre property is adjacent (bisected by Waterhole Branch) to approximately 171 acres of land conserved by the State of Alabama as part of the Weeks Bay National Estuarine Research Reserve. The Project property has approximately 7,600 feet of undisturbed waterfront on Fish River, Turkey Branch and Waterhole Branch and approximately 110 acres of delineated wetlands comprised of fringing marsh grading into hardwood cypress and gum swamp. The extensive marsh edge provides habitat for a host of estuarine organisms including shrimp, crabs, and fish. Hundreds of species of migratory birds use the habitat annually, while more than a dozen resident species of shore bird are found at the edges and within the property along with the expected array of wetland flora and fauna. As the extensive wetlands are immediately adjacent to higher elevation uplands, the wetlands serve to absorb and clean runoff and preserve water quality in Fish River. The adjacent uplands included in the property provide areas for wetlands to retreat under projected sea level rise. The upland areas are suitable for restoration as pitcher plant bog and pine savanna. The property is listed in the Mobile Bay National Estuary Program "Conserving Alabama's Coastal Habitats: Acquisition and Restoration Priorities of Mobile and Baldwin Counties" and also falls within the Land Acquisition Area indentified by the Weeks Bay National Estuarine Research Reserve Management Plan.																												
Alabama Real-Time Coastal Observing System	130	Michael Dardeau/ Dauphin Island Sea Lab	Gulf of Mexico	2876241	Coastal Alabama is a preeminent example of a large ecosystem lacking a historical database of hydrographic and meteorological conditions. We are unable to accurately define status and trends due to a lack of sustained data collection combined with shifting baselines. Alabama's Real-Time Coastal Observing System (ALRTCOS, www.mymobilebay.com) has reported hydrographic and meteorological data from seven stations on north-south and east-west transects throughout coastal Alabama on hourly, or shorter, time scales for 11 years, sharing data with the National Data Buoy Center, Gulf of Mexico Coastal Ocean Observing System, and the National Coastal Data Development Center. Our data have been utilized in a variety of peer-reviewed publications and by various state and federal agencies to confirm severe weather events and model weather predictions, manage public health and conservation of oyster harvesting, and monitor coastal water quality. The website currently averages 6000+ unique hits per month by fisherman, boaters, scientists, educators, and resource managers accessing current conditions, historical patterns, and archived data. Dauphin Island Sea Lab (DISL) and Mobile Bay National Estuary Program (MBNEP) seek funding to support existing monitoring and infrastructure and maintain the high level of quality controlled data generation and dissemination from coastal Alabama. The high costs of equipment, construction, and development of communications to disseminate data have already been invested and current maintenance of the system is being funded by the MBNEP and DISL. However, without sustained funding these stations cannot be maintained. Proposed	AL Portal	N	N	N	N	N	N	N	N	Y																		

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					funding will expand the parameters to include real-time pH and optical turbidity readings, and monthly chlorophyll, turbidity, and nutrient water grabs in line with the GCOOS build-out plan. ALRTCOS will provide supporting data for monitoring individual restoration projects and continue ecosystem-wide monitoring for ten years, beyond the monitoring lifespan of many individual projects. Additionally, the stations will complement proposed biological monitoring (e.g. avian, fisheries, marine mammals) by providing system-wide physical data on hourly scales. Data will also assist in adaptive management of resources and proposed aquaculture projects where response to rapid changes may be necessary. Continued ecosystem-wide monitoring is necessary for successful restoration and management of this valuable estuary.																												
GulfQuest Galleries (Exhibits and Programs)	134	Tony Zodrow/ GulfQuest (National Maritime Museum of the Gulf of Mexico)	Mobile, AL	6000000	Opening in 2015 on Mobile's downtown waterfront, GulfQuest (National Maritime Museum of the Gulf of Mexico) will be the first maritime museum dedicated to the heritage and culture of the Gulf of Mexico - a $62 million educational tourism attraction that will raise the profile of Alabama and the Gulf Coast through its distinctive exhibits and programs. In addition to its sole focus on the Gulf region, GulfQuest will be unique among maritime museums by featuring interactive, hands-on exhibits, complemented by maritime artifacts. For this project, GulfQuest will establish three new interactive galleries focused on (a.) Gulf of Mexico marine life (2,500 sq. ft.); (b.) the Gulf seafood industry (750 sq. ft.), and (c.)recreational fishing in Gulf waters (750 sq. ft.). While GulfQuest's exhibits address aspects of these topics, the new galleries will focus exclusively on these areas, engaging visitors to explore the environmental aspects of the Gulf of Mexico: marine life including the types of fish, shrimp and oysters that are vital to the Gulf's seafood industry and recreational fishing; Gulf seafood, and how it's harvested, processed and distributed for consumption worldwide; and Gulf fisheries that have made recreational fishing a mainstay for regional tourism. Throughout, emphasis will be placed on the protection of natural resources (fisheries, habitats and wetlands). For each gallery, GulfQuest will develop new educational programs for families, school groups, and educators throughout the region. These programs will utilize the new galleries/exhibits as resources and expand their themes through hands-on experiences in the museum's classrooms. Conducted by GulfQuest educators, programs will be offered for school (K-12) and youth groups; for families on weekends, holidays and summertime; and for educators to incorporate activities in their classrooms. School programs will be linked to the goals and objectives of the curriculums from each Gulf Coast state. With GulfQuest's emergence as a regional cultural attraction, these exhibits and programs will provide entertaining and educational experiences for Gulf Coast residents of all ages and backgrounds, families vacationing in the region, and retirees who visit during the winter months. Over 300,000 visitors to GulfQuest each year will have an opportunity to experience these galleries and be prompted to value their relationship with the Gulf Coast's environment - and protect it for future generations.	AL Portal	N	N	N	N	N	N	Y	N	N																		
GulfQuest Blockbuster Exhibitions	135	Tony Zodrow/ GulfQuest	Mobile, AL	4000000	Opening in 2015 on Mobile's downtown waterfront, GulfQuest (National Maritime Museum of the Gulf of Mexico) will be the first maritime museum dedicated to the heritage and culture of the Gulf of Mexico - a $62 million	AL Portal	N	N	N	N	N	N	Y	N	N																		

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		(National Maritime Museum of the Gulf of Mexico)			educational tourism attraction that will raise the profile of Alabama and the Gulf Coast through its distinctive exhibits and programs. In addition to its sole focus on the Gulf region, GulfQuest will be unique among maritime museums by featuring interactive, hands-on exhibits, complemented by maritime artifacts. In addition, GulfQuest will host "blockbuster exhibitions" (large-scale, temporary exhibitions) that offer entertaining and educational experiences that will attract large audiences from the surrounding region. Beginning in the museum's second year of operation (2016), GulfQuest will host one "blockbuster exhibition" each year. These large-scale exhibitions require significant square footage (up to 6,000 sq. ft.), which GulfQuest can accommodate with its traveling exhibition galleries. For its first blockbuster exhibition, GulfQuest will host "Titanic: The Artifact Exhibition" in the spring/summer of 2016. In addition, GulfQuest is in discussions to host blockbuster exhibitions such as "Real Pirates" from National Geographic (featuring artifacts from the pirate ship Whydah); and "La Belle: The Ship That Changed History" from the Bullock Texas State History Museum (featuring artifacts from the flagship of La Salle). The funding ($4 million) will help GulfQuest underwrite the fees and expenses associated with hosting the blockbuster exhibitions for four years, including the marketing expenses required to promote these exhibitions throughout Alabama and the Gulf Coast region. To saturate the market, all media (outdoor, online, print, television, radio) will be utilized. GulfQuest will supplement the marketing budget for these exhibitions through the museum's corporate sponsorships and media partnerships. With Mobile and Baldwin counties already serving as a regional destination, GulfQuest's blockbuster exhibitions will provide a compelling reason for thousands of additional visitors to travel to Alabama from the Southeastern U.S, including New Orleans, Houston and Atlanta. In addition, the appealing nature of these exhibitions will convince those already visiting to extend their stay. With these exhibitions, GulfQuest will boost tourism and the economy regionally and, in the process, create and support tourism-based jobs.																												
Coastal Industrial Base Analysis and Impact of Jobs Lost	136	Donald Epley/ USA Center for Real Estate & Economic Development	unk	1129000	The industrial base of Southwest Alabama will be determined using North American Industrial Classification System data. The largest 20 industries will be ranked by several indicators to examine the industries driving the economy. The analysis will follow a demonstration project completed earlier in the State of Indiana that concentrated on 23 industries which contained six classifications of manufacturing. This project will add several that are unique to the Coast such as Fishing, Shipping, and Tourism. The second part of the study will concentrate on leakages to the Coastal economy in the form of imports. The economic impact of purchases made outside the region will be interpreted into the number of jobs lost. These jobs could exist on the Coast by creating new firms that produce the products purchased outside the area. This type of analysis is very useful for a detailed examination of new firms and industry potential for the area. One needed product of the analysis will be a cluster analysis which recommends industries that create the most economic impact on the local economy and in need of future funding and policy support.	AL Portal	N	N	N	N	N	N	N	N	N																			

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Enhancing Oyster Restoration Efforts in Coastal Alabama	144	Ernie Anderson/ Organized Seafood Association of Alabama (OSAA)	Portersville Bay/ Sandy Bay/Point aux Pins	2500000	This project is a partnership between the Organized Seafood Association of Alabama (OSAA), Auburn University Shellfish Lab (AUSL), Mississippi-Alabama Sea Grant (MASG), and Alma Bryant High School (ABHS). The primary objective of the project is to carry out a long-term oyster restoration effort in lower Mobile Bay and the Alabama portion of the Mississippi Sound. OSAA commercial oyster farmers and ABHS teachers/ students, under the guidance of area experts (AUSL/MASG), will set and grow oysters that ultimately will be deployed in restoration sites in coastal Alabama. We will contribute significant numbers of live oysters to restoration projects throughout the coastal waters of Alabama, increasing the likelihood of success of restoration efforts, jump-starting oyster populations in these areas, and increasing the return on investment of restoration dollars. While wild oyster set is expected and hoped for, successful oyster set is not guaranteed. Supplemental planting will provide two benefits. It ensures that the site has an initial population of oysters before competing species (e.g.,barnacles, mussels) become established and preempt oyster settlement and decreases the time for oysters to reach sexual maturity. Additionally, supplemental stocking will help oysters become established in areas where larval supply may be limited and will decrease the time to see a return on investment of restoration dollars. The enhancement of natural oyster reef structure and oyster abundance as early as possible will also provide critical 'ecosystem services" through improved water quality, increased biodiversity and creation of more diverse habitat. The oysters will be produced using the latest techniques in off-bottom oyster mariculture (OBOM). This approach maximizes survival rates as the growing oysters are protected from predators and supplied with optimum growing conditions. Growing the oysters in baskets at the surface of the water effectively eliminates predators and provides optimum dissolved oxygen levels and increased food levels. Nursery and grow-out activities will be carried out in Portersville Bay and in Sandy Bay near Point aux Pins. Early nursery operations will be conducted at a permitted OBOM operation in the northern portion of Sandy Bay. Late nursery and grow-out activities will be conducted at a permitted 8-acre site in Portersville Bay. The quantity of oyster larvae needed for this project can be readily produced at AUSL.	AL Portal	N	N	N	Y	N	N	N	N	N																			
Mobile Causeway Hydrologic Restoration Project	145	Casi Callaway/ Mobile Baykeeper	Mobile Bay	42030941	This project proposes to restore historic hydrologic connectivity between the Mobile/Tensaw Delta and Mobile Bay. Reconnecting the tidal exchange will ensure the productivity of the estuary. The exchange will have significant ecological benefits to the water, flora and fauna that live within Alabama's significant estuary, all of which were impacted by the Deepwater Horizon oil disaster. While this project resolves an historic problem, addressing upstream and downstream modifications that have altered ecological productivity can create habitat for brown pelicans and other wildlife significantly impacted by the oil spill. This hydrologic restoration will also create high paying technical	AL Portal	N	Y	Y	N	N	N	N	N	N																			

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					and construction jobs as well as support the habitat needed for a thriving seafood industry.																												
Mobile Bay High Frequency Radar Network	146	Brian Dzwonkowski / University of South Alabama	Mobile Bay	2703298	High frequency radar (HFR) is used to measure surface ocean currents, local wave conditions, and to detect boat traffic. Networks of HFRs are the backbone of coastal surface current measurements around U.S. coastlines. These systems provide information that is critical to rapid and economical responses to marine crises as well as strategic project planning in the marine environment. For example, the CenGOOS HFR system was extensively used during the Deepwater Horizon Oil Spill disaster. We propose building and maintaining an HFR system for Mobile Bay (Fig. 1) to complement and enhance the existing and planned coverage of the CenGOOS HF radar network. The establishment of a five 25 MHz HFR sites around Mobile Bay will provide maps of real time surface current (and potentially wave height) information that can be used for navigational safety, commercial and recreational fishing, drilling and gas/oil operations as well as spill mitigation and search and rescue efforts. The proposed HFR network will generate an extensive footprint from which surface velocity data will be obtained with a spatial resolution of 500 m and a temporal frequency of 1 hr. Several locations will be tested around the Bay to ensure that the site placement will maximize the spatial coverage in Mobile Bay. The proposed project will deliver real time current data as well as additional data products, such as realistic tidal current predictions and frontal positions, to a variety of user groups to improve the safety and efficiency of marine operations, to enhance the ability to make informed public health and safety related decisions, and to augment the mitigation of coastal hazards. The maps of current patterns and frontal locations will aid resource managers and the fishing industry to avoid/target these specific areas for various purposes such as gas/oil rig permitting, disposal dredge materials, or adaptive fishing practices. The improved understanding of the physical environment in Mobile Bay will help determine the transport and fate of suspended sediment, larva, nutrients, oil-derived substances, harmful algal blooms (HABs), etc. We expect many additional scientific and operational projects will be conducted with the HF radar data as a major component. This project will benefit the commercial, recreational, and scientific sectors of the Alabama economy.	AL Portal	N	N	N	N	N	N	N	N	Y																		
Infrastructure advancement for Marine Observations in Coastal Alabama (IMOCA)	147	Brian Dzwonkowski / University of South Alabama	Gulf of Mexico	2652901	Coastal resource management issues require data to support informed policy-making. To this effect, Dauphin Island Sea Lab (DISL) has been maintaining one mooring station, located about 18 km south of Dauphin Island (DI). This mooring is the only source of subsurface hydrographic data in near-shore waters of coastal Alabama. This mooring provides data on water column velocity and hydrographic conditions, which are critical parameters for assessing water quality as well as supporting a range of ongoing and developing fisheries and oceanographic research. Initially started in the fall of 2004, this data stream is nearly a decade in duration, making it the longest time series of its kind in the Mississippi Bight region and consequently, its continued maintenance will allow it to have a critical role in establishing baseline environmental conditions from which impacts of climate change, events and natural oscillations can be assessed. The objective of this project is	AL Portal	N	N	N	N	N	N	N	N	Y																		

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					to upgrade the existing station so the data stream will be readily available to the user community (via real-time data feeds) as well as expand the coastal observational capacity by enhancing the sensor package on the mooring with the latest cutting edge instrumentation technology and installing a second real-time observational buoy offshore of Orange Beach. We propose equipping both stations with telemetry capable of real-time data transfer as well as sensors that will allow for the continued measurement of water column velocity, temperature, and salinity. We propose additional instrumentation that will measure other water quality parameters, including dissolved oxygen and turbidity, and meteorological parameters. Upgrading the existing station will allow the continued collection of the longest subsurface oceanic time series in the region. This data set has a range of uses to different community members. Providing the data in real-time will make it more readily available to regional stakeholder from resource managers to commercial and recreational fishermen to researchers. For example, the meteorological data will enhance marine safety and hazard mitigation as well as support forecast model development and accuracy. In addition, the continued and expanded data collect at two sites represents a unique opportunity to identify long-term trends and variability in the marine environment, which has the potential to significantly impact sectors of the coastal economy, including tourism and fisheries.																												
Repairs to the Fort Morgan Fishing Pier	151	Stephen McNair/ Alabama Historical Commission	Fort Morgan	1000000	The project proposes to make mandatory repairs to the Fort Morgan Fishing Pier, located at Fort Morgan State Historic Site in Baldwin County. The fishing pier is currently closed to disrepair and an unsafe condition of the structural pilings. Alabama Historical Commission staff estimate that at least 50% of the pilings are no longer load bearing, and therefore the pier was closed to the general public. The pier is heavily used (over 5,000 annual visitors) and was previously open to the public 24/7. We can confirm that during the period of the oil spill the pier was closed and the overall visitation at Fort Morgan plummeted. The site was also used as a staging area for the BP cleanup. If the site had not suffered, we estimate that we would have the needed repair funding in hand based on ticket sales for access to the site. We estimate that the required safety upgrades to the pier can be accomplished for $700,000, however preventative measures such as a railing, better lighting, and a roof covering would further increase tourism on the site. All safety upgrades and improvements total $1,000,000.	AL Portal	N	N	N	N	N	N	Y	N	N																			
Promotions for Fort Morgan State Historic Site	152	Stephen McNair/ Alabama Historical Commission	Fort Morgan	200000	We request funding for tourist promotions to increase visitation at Fort Morgan State Historic Site. Annual visitation nearly hit zero after the oil spill and we have been slowly gaining momentum ever since, but we are still in desperate need of promotions to encourage tourist visitation to the site. A local, state, and national campaign would only generate more interest in the history and natural landscape of Baldwin County, encouraging more tourists to visit and spend time in the area.	AL Portal	N	N	N	N	N	N	Y	N	N																			

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					The site was used as a staging area during the BP Oil Spill cleanup operations.																												
Sustainable Gulf Coast Oyster Restoration and Coastal Protection using Central Oyster Hatcheries and Gulf State Remote Setting Sites	154	LaDon Swann/ Mississippi-Alabama Sea Grant Consortium		132000000	In the face of poor spat sets, low harvests and declining oyster populations, a new approach is needed to restore oysters and the communities that depend on them. We propose a comprehensive long-term oyster restoration plan that restores habitat, improves water quality, revitalizes the economy of the Gulf oyster community, replenishes living coastal and marine resources and enhances community resiliency by revitalizing the Gulf oyster industry economy. This will be accomplished by massively expanding regional oyster hatchery production capacity, establishing remote setting bases in each of the five states, working with state resource agencies in oyster restoration and stock enhancement and actively engaging university-based scientists in monitoring and adaptive management. This project will enhance and restore oyster populations throughout the region, providing significant ecosystem services (carbon sequestration, nitrogen removal, habitat for living marine resources and cultural) and encourage community resilience through long-term sustainable economic growth and job creation. The region-wide project will: 1. Use existing oyster hatchery capacity while conducting a rigorous site assessment (6 mos.) for a bio-secure mega-hatchery with the capacity to provide > 50 billion oyster eyed larvae/year, with spawns specific to each state within 18 mos. 2. Build remote setting facilities in each state, capable of producing > 10 billion spat on cultch 3. Enhance up to 180,000 acres over 9 yrs. with 500,000 spat on cultch/acre, deployed by state resource agencies 4. Establish a university-based monitoring program in each state, to guide adaptive management 5. Reduce risk by adding a second bio-secure mega-hatchery in year 4 6. Support update of GSMFC oyster regional plan For this project, siting and construction of the first hatchery and the dockside remote setting facilities will be accomplished within 18 mos. Larval production will be supported for 9 yrs., with monitoring to occur during this time, with 90 billion juvenile oysters added to up to 180,000 acres of public oyster beds through the region. In addition to the potential job creation and economic benefits of the enhancement of oyster populations, this project will also provide critical ecosystem services provided by productive oyster reefs worth up to $200 million to harvesters annually; comparable to the value of the ecosystem services provided by the project.	AL Portal	N	N	N	Y	N	N	N	N	N																		
Sanitary Sewer Construction Project	155	Dane Haygood/ Daphne, City of	Daphne	2000000	The City of Daphne, Alabama is proposing a sanitary sewer construction project that will serve to remedy harm and reduce the future risk of harm to Gulf Coast Natural Resources that were impacted by the DWH Oil Spill. The majority of the residents in the City of Daphne currently have sanitary sewer collection available to them except for six areas within the City limits and are still currently being served by onsite sewage disposal systems (septic tanks).	AL Portal	N	Y	N	N	N	N	N	N	N																		

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					The goal of this project is to completely serve the citizens of Daphne with sanitary sewer collection thus improving the water uality into Mobile Bay which in turn will provide a much improved native and nursery habitat for numerous aquatic and avian species. The objective of this project will be to remove all residential septic systems in the City which are notorious for adding pollutants, fecal coliform, etc. into the area creeks and ultimately to Mobile Bay. The City of Daphne is proceeding with the Engineering Design and Bid Documents for this project and will have this project "shovel ready" for any proposed funding.																												
Characterization and Delineation of Significant Sand Resource Areas Essential for Beach Restoration, Offshore Alabama	156	Stephen Jones/ Geological Survey of Alabama	Gulf of Mexico	922500	Offshore sand resources are essential to the maintenance of amenity beaches and the intertidal and beach habitat they provide. Sand reserves offshore Alabama have not been delineated in a manner to be represented as significant Federal Outer Continental Shelf (OCS) sediment resource areas nor have suitable borrow sources been characterized to maintain engineered beaches long term. Beach restoration targets habitat preservation, vital economic interest from tourism industry, and the buffer effect on existing coastal development and infrastructure. Based on the compilation and interpretation of existing data, areas that may be mined for beach-compatible sand used in restoration in the northern Gulf of Mexico can and should be better defined. The proposed study is to support coastal restoration efforts and promote sand resource identification and dredging feasibility of State water bottom and OCS sand deposits. In order to maintain and improve coastal infrastructure, economy, and coastal habitat resiliency, viable nearshore sand sources suitable for beach placement are essential and the need to identify sand sources through further data assimilation and collection has never been greater. TASK 1: Data Rescue and Geospatial Updates Updating the Offshore Alabama Sand Information System (OASIS) platform is needed because new work has generated several datasets that addressed depleting sand sources; these data are needed to help fill gaps and allow for further delineation of sand-source potential. The GSA will procure data resources and incorporate them into OASIS. Task 1 also includes permitting and LORAN-C correction. TASK 2: Site Investigation and Data Processing Utilizing the OASIS platform, the GSA will collaborate with stakeholders to develop suitable investigation target areas. This is necessary for cost-effective data and field collection interests. The GSA will complete a geophysical survey and geotechnical exploration and analysis. Data processing will include core logging, seismic interpretation, sediment characterization, and geospatial analyses. In that other areas of gulf-fronting beaches outside the limits of engineered beaches in Alabama are likely targets for future beach restoration, further native beach sand characterization is warranted. TASK 3: Outreach The new work will be disseminated through the web-based	AL Portal	N	N	N	N	N	N	N	N	Y																			

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					OASIS platform with data collected in Task 2. Reporting is done through Open-File Report publications and presentations.																												
Development and operation of an apparatus to monitor the fate and transport of volatile organic contaminants in aquatic ecosystems.	157	Christian Oertli/ University of South Alabama, College of Arts and Science, Department of Chemistry	Mobile	135000	The development and operation of an analytic instrument capable of rapid on-site trace analysis of organic constituents in environmental waters is proposed. While traditional analysis involves elaborate sample preparation, this apparatus permits direct analysis of environmental water. The various advantages from real-time data include the opportunity for adaptive project management and strategic project realignment during the progression of a mission. Yet, the current status of the applied technology remained mostly in the research state with few commercially available instruments limited to analysis of dissolved gas. This proposal intends to apply experience gained from an industrial effluent application to the monitoring of environmental water samples. This novel application promises to provide a convenient, cost effective and vital analytic tool for rapid identification and quantification of pollutants in a variety of waters within the Gulf Coast Ecosystem Restoration Programs. The proposal solicits funds of $ 135,000 for the construction of an instrument as follows: In stage I a prototype instrument will be developed for laboratory evaluation and system performance validation as required by the Gulf Coast Ecosystem Restoration Programs. In addition to vital instrument performance data, this phase provides educational and hands-on experience in the field of environmental chemistry for two students. Instrument validation data is expected within six months and completion is expected at twelve months. In stage II the instrument will be modified for on-site testing optimizing the design for field application. Likewise this phase again provides an educational opportunity for students in the USA Chemistry or Engineering Departments. The operating principle is based on a mass spectrometer equipped with an inlet that separates the organic constituent from its water matrix. It has been successfully tested by the applicant to detect trace Epichlorohydrin in effluent from a chemical plant. The general analytic principle is known as the Membrane Inlet Mass Spectrometer and has been used in various applications for over forty years providing scientific data of volatile organic compounds in water. Its expansion into an environmental application as proposed herein is realistic and will provide valuable science based contamination data in support of ecosystem restoration projects.	AL Portal	N	Y	N	N	N	N	N	N	Y																		
Graham Creek Nature Preserve Expansion	158	Leslie Gahagan/ City of Foley	Foley	650000	The City owns Graham Creek Nature Preserve, a 484 acre park that contains head water wetlands, pine savannas, mixed forests and tidal wetlands habitat with recreational and educational opportunities for the community and tourists alike. Graham Creek Preserve is bisected by Graham Creek and is bordered by this requested property acquisition along the northeastern boundary. This property would expand the park with 125 acres of pine savanna along the northern side and tidal wetlands along Graham Creek	AL Portal	N	N	Y	N	N	N	N	N	N																		

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					through the southern interior. With this expansion visitors could access coastal habitats for bird watching, fishing, kayaking, hiking and other recreational opportunities. The existing educational programs would be expanded to incorporate this large area of shoreline. Educational signage would inform visitors of the natural ecosystem and native species. The site contains a variety of species of pitcher plants and rare orchids that would proliferate under proper management techniques such as prescribed burning operations. There are several gopher tortoise colonies that exist on this land as well. Tidal wetlands along the edges of the sinuous stream channel provide excellent protected nursery grounds for fish and shellfish. This property is also a favorite wintering site for Brown Pelicans, Wood Ducks and many other bird species. The City would include the property as part of the nature parks system for management, maintenance, restoration (removal of invasive exotic plant species and prescribed burning operations), water quality monitoring and eco-tourism marketing. The development pressures on this tract of land are great as the property to the north has a planned subdivision and the property to the east is developed as a residential subdivision. This last remaining undeveloped land along Graham Creek will be key in protection of this entire ecologically sensitive habitat.																													
Wolf Creek Park Expansion	159	Leslie Gahagan/ City of Foley	Foley	325000	The City owns Wolf Creek Park, a 25 acre property that contains coastal habitat with recreational and educational opportunities for the community and tourists alike. Wolf Creek Park is the northern boundary of the requested acquisition. This property would expand the park with the remainder of the coastal bird rookery habitat along the creek and interior cove. With this expansion visitors could access coastal habitats for bird watching, fishing and kayaking. Educational signage would inform visitors of the natural ecosystem and native species. The site contains a variety of species of pitcher plants and rare orchids that would proliferate under proper management techniques such as prescribed burning operations. Also there is a natural cypress wetland along the interior side of the shoreline. Tidal wetlands along the cove provide excellent protected nursery grounds for fish and shellfish. Ornithologists have noted the large aquatic bird populations that nest on this property as well. Furthermore, the property can absorb tidal surges to prevent coastal flooding upstream. The City would include the property as part of the nature parks system for management, maintenance, restoration (removal of invasive exotic plant species), water quality monitoring and eco- tourism marketing.	AL Portal	N	N	N	N	N	N	N	N	N																			
Comprehensive weather, water, and sediment-influx monitoring in Mobile and Baldwin County using terrestrial- and riverine-based sensing systems.	161	Sytske Kimball/ University of South Alabama, Department of Earth Sciences/ South Alabama Mesonet	Mobile Bay	2431863	The economic, environmental, aesthetic, and recreational benefits provided by the Mobile Bay area depend on a clean environment. Natural events like hurricanes, storm surge, flash floods, and strong winds directly impact water quality via storm run-off, turbulent mixing, or other processes. Extensive and continuous monitoring of weather and water-quality parameters will establish baselines and assist in long-term science-based planning. Processes and driving forces controlling water quality will be identified. Real-time data allows short-term decision making and immediate disaster response. These are essential steps in maintaining resilient and sustainable coastal communities. The project will build on existing monitoring sites operated by	AL Portal	N	N	N	N	N	N	N	N	Y																			

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					the University of South Alabama, PORTS, DISL/MBNEP, NERRS, and MAWSS. Four new land-based sites will be installed in the same configuration as the existing South Alabama Mesonet stations, which monitor 8 meteorological and 2 soil parameters. New stream-based sites will be installed and existing sites will be upgraded to a standardized sensor suite. Water-based parameters measured continuously will be stream stages/discharges, turbidity/sediment influx, temperature, dissolved oxygen, salinity/conductivity, pH, nitrate, and sediment influx. Automated samplers will store samples of metals, organics, and toxicity during regular intervals or predefined events to be gathered later for lab analysis. Surface-based rain gauge and Mobile Doppler Weather radar (WSR-88D) rainfall data will be integrated. Satellite remote sensing will map water temperature and temporal and spatial resolution of event-sedimentation and phytoplankton (an indicator of water quality). GIS will relate changes to the watersheds over time to changes in water quality and can create predictive models of environmental health. A real-time, web-based data-management and -visualization system will provide information to emergency managers, urban planners, port authorities, residents, and policy makers. End-users in (marine-) biology will assess changes in biodiversity and plant communities as a function of natural and anthropogenic disturbances. Civil engineers will determine how I-10 roadway runoff influences water quality, with direct relevance to future development of regional transportation infrastructure. The project will enhance STEM education at the high school level and train aspiring scientists at undergraduate levels in area colleges and universities.																												
Mobile County Emergency Operations Center	163	Bill Melton/ Mobile County Commission	Mobile County	15000000	Construct a new Emergency Operations Center of approximately 35,000 square feet to serve as the multi-agency response and resource coordination center for Mobile County and its political subdivisions during disasters. The existing facility cannot adequately support the number of personnel required to effectively manage emergency response to incidents with the work space, billeting space, and sanitation facilities needed. Today's homeland security threat environment also requires physical security enhancements for a critical facility such as this. Due to the nature of the current facility, further expansion or enhancements are either not feasible or are not considered cost effective.	AL Portal	N	N	N	N	N	N	N	N	N																			
Mobile County Conservation Acquisition	164	Bill Melton/ Mobile County Commission	Mobile County	4000000	The Mobile County Commission utilized $3M in Coastal Impact Assistance Program (CIAP) funding to establish a local Habitat Conservation Program that includes property acquisition and management activities designed to conserve, protect, restore and enhance diverse habitat types found throughout Mobile County. Initial CIAP activities were focused on acquiring parcels that contain longleaf pine, freshwater wetlands, and river and stream habitat types. Most recently, the County has identified a number of potential acquisition parcels that contain diverse priority habitats including coastal marsh, maritime forest, and pine savanna. The project proposes to build upon the Mobile County Commission's investment in habitat conservation and restoration by using support from the Gulf Coast Restoration Trust Fund to expand the Habitat Conservation Program to target coastal areas along Mobile Bay and Mississippi Sound for	AL Portal	N	N	Y	N	N	N	N	N	Y																			

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					acquisition and restoration. The objectives of the project are to protect, preserve, and restore coastal habitats in Mobile County. Activities to be undertaken include acquisition of prioritized parcels, restoration and management plan development and implementation, as well as monitoring and measuring project performance. The outcome of this project will be the protection of ecosystem services provided by coastal marsh and wetlands, and other habitat types in Mobile County.																													
Yancey Branch Watershed Restoration	165	Ashley Cambell /City of Daphne	Daphne	5484817	Yancey Branch Watershed lies in the heart of Daphne. It begins on the east side of US Hwy 98 and ends at the City of Daphne's Bay Front-Village Point Park, along Mobile Bay. Over the years, the watershed has experienced tremendous commercial and residential growth. The changes in land use in the watershed have resulted in increased stormwater runoff rates. The Yancey Branch Watershed is experiencing severe stream channel erosion, private and public property damage from flooding, water quality impairments, and coastal habitat loss. The City of Daphne would like to use available funds to complete a comprehensive watershed study, including a hydrology component, and a watershed management plan. The plan would be used to guide the restoration of the watershed which will include but may not be limited to; land acquisition, stream and wetland restoration & preservation, and stormwater management. The restoration of Yancey Branch Watershed would complement the goals of the available Alabama Coastal Restoration funds by improving the water quality in Yancey Branch which in turn would improve water quality in Mobile Bay. Mobile Bay and its unique coastal habitats; coastal wetlands, marshes, beaches, and submerged aquatic vegetation will benefit greatly from the implementation of the project.	AL Portal	N	Y	N	N	N	N	N	N	Y																		
Comprehensive Coastal Monitoring and Community Engagement Network (COCO)	166	Renee Collini/ Dauphin Island Sea Lab	Gulf of Mexico	7926889	Environmental monitoring efforts in coastal Alabama, as in many Gulf estuaries, have traditionally focused on individual subunits of the watershed: rivers and streams, bays, and near coastal waters. Within coastal Alabama established networks have worked to fill gaps, optimize effort, and disseminate data for managers, researchers, regulators, and recreational users. We propose combining these efforts (Alabama Project Suggestions 130,147,161) into a comprehensive teorological and water quality watershed monitoring network with a heavy emphasis on generating end-user data products. This network implements monitoring strategies developed by regional organizations (e.g. GOMA, GCOOS, and GOMURC) and will expand existing relationships with MAWSS, ADEM, ADPH, MBNEP, ADCNR, NWS, NCDDC, NDBC, NERRS, PORTS, and NOAA to coordinate and leverage watershed monitoring. Operation and maintenance for existing monitoring, infrastructure for future monitoring expansion, a platform for integrating restoration monitoring into long-term databases, leveraging and coordination of monitoring efforts between agencies across the watershed, and integration into regional and Gulf wide monitoring are all outcomes of consolidation. Combining these data streams facilitates development of data products. To insure stakeholder involvement in data development, we will work with local, regional, and federal organizations already invested in stakeholder needs, data visualization, and outreach. Annual workshops will be held to reassess the needs of the end-users and to ensure data derived products are meeting	AL Portal	N	N	N	N	N	N	N	N	Y																		

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					those needs. Additionally, a workshop will be held the first year with local organizations to develop a water quality report card for the watershed, to be updated and published every year. Transparency in our process, working with organizations that already have critical connections and trust developed with stakeholders, and consistent data production will engender maximum buy-in from all local stakeholders, including managers, researchers, regulators, recreational users, and community planners. Developing reliable, scalable, standardized, integrated, comprehensive monitoring networks is critical to establishing baselines and assessing the cumulative impacts from restoration efforts, climate change, and events. This project will be foundational to establishing a regional monitoring plan to protect the ecosystems that drive local economies.																												
D'Olive Creek Watershed Land Acquisition	167	Ashley Cambell /City of Daphne	Daphne	900000	The D 'Olive Creek watershed drains parts of the cities of Spanish Fort and Daphne. The watershed is in transition from forested, agricultural, and residential land uses to residential and commercial development. This land-use transition and its related urban contaminants and impervious surfaces have profoundly impacted water quality and habitat in the watershed and Mobile Bay. Increasing runoff has accelerated erosion and stream channel degradation, which has led to excessive sediment loads and destruction of habitats and infrastructure to the point that the watershed's principal tributaries: D 'Olive Creek, Tiawasee Creek, Joe's Branch have been listed on ADEM's 303d List; impaired by siltation. The Mobile Bay National Estuary Program (MBNEP) has undertaken a comprehensive restoration of the watershed which involves implementing stormwater management in the headwaters and stream and wetland restoration throughout the watershed. During the restoration efforts, it was determined that implementing a management measure in the area of this proposed land acquisition would greatly reduce the quantity and velocity of the stream flow along D 'Olive Creek which in turn would; reduce stream channel erosion, reduce sediments migrating downstream to riverine and coastal habitat, protect ALDOT drainage structures along I-10 and State Highway 90 and reduce downstream residential flooding claims. The City of Daphne wishes to use the available Alabama Coastal Restoration funds to purchase the 53 acre parcel in the headwater wetlands of D 'Olive Creek to further the MBNEP restoration efforts and to allow the City to pursue the much needed transportation improvement; County Road 13/ I-10 Interchange.	AL Portal	N	Y	Y	N	N	N	N	N	N																		
Three Mile Creek Lower Watershed Land Acquisition and Planning	168	Dianne Irby/ City of Mobile, AL	Mobile	12150000	This project implements recommendations of the Three Mile Creek Watershed Management Plan (WMP) for the Lower Watershed area. Phase 1: Acquisition by the City of Mobile of up to 450 acres in the Lower Watershed for habitat conservation, watershed restoration, environmental education and passive recreation. The Three Mile Creek Watershed drains 30.1 sq. mi. (nearly 20%) of the total City Land Area and is home to a wide array of flora and fauna, including birds, fish, mammals, reptiles , and several rare plant species. The Lower Watershed, where the Toulmins Springs Branch, Three Mile Creek and One Mile Creek converge just west of the Mobile River, is primarily freshwater/forested shrub wetlands, with riverine and freshwater emergent wetlands. Despite the urban locale, the Lower Watershed was	AL Portal	N	Y	N	N	N	N	Y	N	N																		

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					historically and has remained forested wetland due to regular flooding and unsubdivided land. Acquisition by the City will preserve these undivided lands and protect vital wetland resources into perpetuity. The proposed land acquisitions in the Lower Watershed will also further ongoing efforts to improve community access to natural spaces in an under-served part of the City. The WMP indicates that conservation in the project area specifically will have the greatest impact on water quality, marshland/vegetated buffer creation, and nonpoint source pollution reduction, thereby greatly improving water quality entering Mobile Bay. Phase 2: Planning and design to mitigate three significant impairments in the Lower Watershed identified in the WMP: 1) remove the plug where the historic creek stream channel meets the channelized creek bed and restore the historic creek stream channel, to improve water quality and provide access for a "blueway" kayaking trail; 2) remediate the Old Hickory Street Landfill and create a neighborhood park; and 3) employ recommended best management practices (BMPs) to mitigate pollution from storm water outfalls. Phase 3: Implement the mitigation plan developed in Phase 2.																												
Tracking the Ecological and Engineering Performance of Alabama's Early Coastal Restoration Projects: a Centralized, Comprehensive Monitoring Program	169	Bret Webb/ University of South Alabama	Alabama coastal waters	5500000	The purpose of this project is to monitor and assess the performance of nine coastal restoration projects in Alabama's coastal waters. These projects, paid for with public funds, all incorporate some aspect of the "living shoreline" concept to stabilize eroding sandy shorelines and coastal marshes with the goal of regaining lost ecological and economic value. These restoration projects are mostly unique, with methods ranging from intertidal breakwaters made of concrete units to subtidal breakwaters built from oyster shell, as well as commercial products. The projects and their locations are as follows (see attached map): Alabama Port (30.344°N 88.124°W); Bon Secour Bay (30.247°N 87.843°W); Coffee Island (30.332°N 88.252°W); Helen Wood Park (30.571°N 88.085°W); Little Bay (30.383°N 88.284°W); Mon Louis Island (30.442°N 88.106°W); Pelican Point (30.377°N 87.840°W); Point aux Pins (30.387°N 88.296°W); and Swift Tract (30.319°N 87.788°W). While some of these projects have been monitored for a number of years, none has a long-term monitoring plan in place. Existing monitoring plans include a series of physical, hydrological, chemical and ecological metrics indicative of environmental health. The monitoring data that currently exists for these projects is fragmented with numerous gaps due to funding inconsistency. Most monitoring efforts are stalled and only cover a few years. Moreover, the monitoring efforts have been carried out by diverse groups and are not well integrated. Accurate evaluation of project success and recovery of environmental value requires a consistent and unified, long-term monitoring and assessment program. Some of the metrics measured require several years to show statistical difference and most monitoring efforts are simply too short to show much change. Furthermore, we must make an effort to measure in a concerted and uniform fashion a number of important metrics in all projects simultaneously. The goals of this proposed long-term monitoring project are twofold. First we will synthesize all monitoring information for all nine projects to date. Second, after identifying the gaps and coming to an agreement with involved parties as to what the most important core	AL Portal	N	N	Y	N	N	N	N	N	Y																		

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					processes and indicators of success are, we will work with the parties to devise and carry out a long-term, comprehensive monitoring plan that will allow for a robust comparison across all projects, as well as an accurate evaluation of their success.																												
USA Coastal and Environmental Sciences Initiative (USA-CES)	174	Tony Waldrop/ University of South Alabama	Mobile County	45065774	The Deepwater Horizon Oil Spill profoundly impacted the cultural, economic, and environmental resources of coastal Alabama and demonstrated that extraction of natural resources from the Gulf of Mexico comes with substantive risks. Although these risks are often necessary to ensure economic prosperity for the State and Nation, such risks must be balanced by preparation for and response to an oil spill. Key to adequate response, damage assessment, mitigation and restoration activities is the availability of a well-trained scientific workforce and new research and technological developments. Currently no program in Alabama comprehensively addresses these response needs. USA is the established leader in the field of marine and coastal sciences among Alabama Universities with the only Marine Sciences and Environmental Toxicology programs approved by the Alabama Commission on Higher Education. Coupled to these two programs is a broad base of expertise in chemistry, coastal engineering, and socioeconomics across the University. While the current programs have been successful, infrastructure constraints have hampered their growth. We propose an ambitious project to facilitate growth of coastal and environmental sciences at USA. The goal of the project is to establish USA as a leader in coastal and environmental sciences and provide the scientific workforce necessary to respond to environmental threats that could jeopardize the cultural, ecological, and economic resources of the State. The central element of the USA-CES initiative is the construction of a 100,000 square foot building. The building will provide teaching and research space for the Marine Sciences and Environmental Sciences programs. The project also includes funding for critical instrumentation, specialized research labs and technology necessary to understand the fate and effects of environmental contaminants in coastal ecosystems. The building will also provide a venue for faculty in other USA departments whose professional interest lie in the broad field of interdisciplinary Environmental Sciences. Future oil and other contaminant spills can occur anytime and establishing an education and research program focused on training the scientific workforce necessary to respond to future spills would be an important and economically beneficial asset to coastal Alabama.	AL Portal	N	N	N	N	N	N	N	N	N																		
Historic Africatown Welcome Center	175	Nashid Rushdan/ Africatown Community Development Corporation	Mobile	3450000	PURPOSE The primary objective of the project is to construct a Welcome Center that will serve as a tourist information center, provide cultural and historic education about Africatown Community, as well as help to promote the community as part of the City's and State of Alabama's Heritage Trail and tourism asset. Overview: Africatown is geographically bounded by Paper Mill Road on the North, Three Mile Creek on the south, Mobile River on the east and Conception Street Road, Telegraph Road and Bay Bridge Road on the west. It is in a predominantly low-moderate income neighborhood with population that is more than 90% African-American. Historic and Existing Activities: In 1808, the United States Government passed a law forbidding the	AL Portal	N	N	N	N	N	N	N	N	N																		

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					importation of slaves. On the night of July 8, 1860, the slave ship "Clotilde", entered the Mobile Bay (approaching the Mobile Harbor) when the captain, William Foster, heard that the U.S. government has become aware of his illegal plan. He unloaded his cargo unto a riverboat and sent the slaves ashore in what is today called Africatown (see the attached). The City of Mobile is working with the Mobile County Training School Alumni Association based in the neighborhood and the Africatown Mobilization Association, and the Alabama State Historic Preservation Commission to designate the area as a historic neighborhood. The Park Services of the United States Department of Interior has designated this community as a historic significant area (See the letter of designation). Historic and Existing Activities: In 1808, the United States Government passed a law forbidding the importation of slaves. On the night of July 8, 1860, the slave ship "Clotilde", entered the Mobile Bay (approaching the Mobile Harbor) when the captain, William Foster, heard that the U.S. government has become aware of his illegal plan. He unloaded his cargo unto a riverboat and sent the slaves ashore in what is today called Africatown (see the attached). The City of Mobile is working with the Mobile County Training School Alumni Association based in the neighborhood and the Africatown Mobilization Association, and the Alabama State Historic Preservation Commission to designate the area as a historic neighborhood. The Park Services of the United States Department of Interior has designated this community as a historic significant area (See the letter of designation). Objective: The objective of the project is to development of a Welcome Center designed to enhance preservation of the community, provide cultural and historic education to the public; contribute to the gulf coast and state tourism industry and economy; provide job opportunities for the residents of the community; promote the historic attributes and qualities of the community and ultimately preservation of the rare historic significance of an area that is at the brink of extinction. The Welcome Center will be approximately 20,000 square feet and will showcase the historic documents, relics, arts and culture of the Africatown and serve as tourist destination, educational center, and cultural center for festival of arts, children activities, community outreach, tourist destination, heritage trail and related programs.																											
Proposed Meaher Family Home	176	Nashid Rushdan/ Africatown Community Development Corporation	Mobile	4300000	The trans-Atlantic slave trade had been outlawed for more than fifty years when wealthy Mobile businessman Timothy Meaher brought the last known ship filled with captured Africans into the United States. Some say he lost a $100,000 bet that he could do it without being caught. Authorities were already on to Meaher and his co-conspirators by the time the Clotilda arrived in Mobile Bay. Under the cover of darkness, the crew and cargo - including the Africans - were muggled up the Mobile River in smaller boats. They landed on the river's verdant banks, near land owned by the Meaher family, where Africatown sits today. Although Meaher lost his bet and was brought to trial, he was never convicted. After slavery, the newly-freed Africans worked together to build a tight-knit community called Plateau or Africatown, which they designed and governed to feel like their African home. They built houses, cultivated the land, owned businesses and still retain many of their traditions	AL Portal	N	N	N	N	N	N	N	N	N																		

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					and culture. Captain Timothy Meaher bought land and established a homestead three miles north of Mobile in the area that is bounded by Telegraph Road, Edward/Birmingham Street, Sipsey Street and Hedge Avenue. He named his home Yorktown. The Meaher Family, to this day, is one of the largest land holders in the Mobile River Delta. With that historical background, the primary objective of the project is to fund the acquisition of the privately owned land that was the original site of Captain Timothy Meaher's Family Home for reconstruction of the family home for public access to information related to the historic content of the era and the original settlers of Africatown. In a phased approach, once the land is secured, a design of the original Meaher home and its reconstruction would bring to the Africatown community an important part of the history of the community. It would add a significant boost to the local economy, provide preservation support to the environment and surrounding infrastructure for public use and access.																													
Hog Bayou Campground and RV Plaza	177	Nashid Rushdan/ Africatown Community Development Corporation	Mobile	3900000	The primary objective of the project is to use funding to acquire the property known as the Old International Paper Company site, and construct facilities and infrastructure to provide a range of recreational and educational opportunities along with public access options to Hog Bayou while protecting the area from future development pressures. The acquisition of this property along with the construction of campgrounds and other amenities will provide visitors with a convenient area of interest located minutes away from downtown Mobile and minutes from four (4) other Mobile County This project concentrates on the major concern related to the amount of pollutants and chemical exposures to not only Hog Bayou but to the Mobile-River Delta, Mobile Bay and Dog River Water Sheds by the areas zoning and decades of harmful exposure. The undertaking of this economically sound and environmentally critical project Hog Bayou will become the 14th acquisition tract of the Mobile-Tensaw Delta. The proposed Hog Bayou project will create Hog Bayou as the last areas of interest for the wildlife and nature enthusiast before the Mobile-Tensaw River Delta exists Mobile County. This also provides for an environmentally safe travel through the waterway via boat or canoe/kayak. This projects request that the State of Alabama continues its mission of protect and preserve the wildlife and species by including the habitat of Hog Bayou in Mobile County. By providing a tourism and educational center, the City of Mobile will join other cities in Mobile and Baldwin Counties with a Mobile-Tensaw River Delta amenity that provides public information on the Mobile-Tensaw River Delta ecosystems. Water quality monitoring will take place on site and the facility will serve as a launching site for additional monitoring, educational and enrichment projects. The acquisition of the property leading to Hog Bayou is the prime location for facility and infrastructure needs for the proposed Hog Bayou Campgrounds and RV Plaza.	AL Portal	N	Y	N	N	N	N	Y	N	N																			
Conservation, Preservation and Protection	179	Nashid Rushdan/ Africatown Community	Mobile	2150000	The primary objective of the project is to provide for the environmental protection of the area of Mobile County known as Hog Bayou. In a recent report published by the South Alabama Regional Planning Commission on the Mobile-Tensaw River Delta , the National Park Service, Stewardship and	AL Portal	N	N	Y	N	N	N	N	N	N																			

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of Hog Bayou, Mobile County		Development Corporation			Partnership Programs, Atlanta outlined " THREATS TO ECOLOGICAL INTEGRITY: Cumulative impacts from continued agricultural, residential, commercial, and industrial development and expanded oil and gas activities surrounding the site are affecting this landmark. Pollution form point and non-point sources, including transportation, construction, chemical, and industrial activities, may be bounding in the fine sediments. For example, oysters in Mobile Bay are known to contain concentrations of heavy metals". The watershed of the Mobile - Tensaw River Delta encompasses more than 40,000 square miles and drains more than two-thirds of Alabama and of the 300 square miles it occupies the City of Mobile has no wildlife, nature based, fishing, and water or recreation amenities on this watershed. This proposal request environmental studies that will provide the information required to increase and protect this critical habitat that contributes to the health of the tributaries of south Mobile County and Baldwin County. This request pays attention to the well-being of the Alabama Red-Bellied Cooter-Turtle, which studies have proven its distribution is "restricted to the lower Mobile Bay Drainage of Southwestern Alabama and is at a risk of extirpation. Just as the Christopher J. Leary study states as it relates to conservation measures, "the shores of the Tensaw are nesting sites and these areas should be included within designated critical habitat and should be posted and patrolled during critical periods of nesting. Community is the driving force behind environmental outcomes achieved. By conducting these comprehensive studies and surveys we are confident that the information gained will help preserve wildlife and the natural habitat, which supports future conservation projects on and upon this valuable bayou of the Mobile-Tensaw River Delta. It is our expectation that these studies will be conducted by Certified Natural Resources Professionals, Certified Environmental Scientists and Certified Sustainability Initiative Professionals.																													
The Earth Solutions Lab at the University of South Alabama	180	Joe Moore/ Moore Innovations and The University of South Alabama		7426750	The Earth Solutions Lab is a transformative collaboration of academic, government and private business entities designed to clearly and efficiently identify, test, commercialize and implement solutions to coastal environmental protection and infrastructure needs. As the coastal population increases, a balance of environmental protection and economic development must be maintained, focusing on the principles of Coastal Zone Management (CZMP) and "Smart Growth" to: 1. protect critical natural resources 2. optimize the use of coastal lands 3. create coastal resilience to natural hazards 4. reduce vulnerability to development. Primary Objectives: 1. Create an innovative model for educating a new generation of problem solvers who - collaboratively with key parties - find innovative and cost-effective solutions to complex coastal problems; 2. Develop and implement coastal habitat and wetland protection solutions (living shorelines, etc.), stormwater management strategies to encourage low-impact development, coastal infrastructure resiliency strategies to protect the environment & enhance coastal economic development. Activities: 1. Test, optimize & implement viable shoreline protection/habitat protection strategies (living shorelines) in target coastal areas of Alabama; 2. Construct & test low impact stormwater management solutions in coastal Alabama; 3. Identify & address key coastal	AL Portal	N	N	N	N	N	N	N	N	N																			

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					resiliency issues & prioritize strategies of infrastructure protection; 4. Create state-of-the-practice guidance communications (print, DVDs, TV programs, etc.) to efficiently transfer knowledge of solutions for quick implementation; 5. Transform curriculum at USA to focus on solving coastal issues in multi-part collaboration. Outcomes: The Earth Solutions Lab will: 1. Create an STEM educational model which solves complex coastal problems and stimulates economic development through: a. state-of-the-practice teaching & execution, b. cooperation with government, business & industry partners to identify technical/economic solutions, c. inclusion of high school & college students, professors, government agencies, business, and industry in developing solutions to coastal development problems. 2. Implement & monitor new techniques for protecting coastal environments; 3. Communicate acquired knowledge and transfer quickly to other efforts; 4. Bring economically viable & sustainable solutions/methods/devices to market that solve coastal environmental & economic issues.																													
Effects of Disturbance and Habitat Degradation on Community Resilience, Food Web Dynamics, and Ecosystem Integrity in the Mobile-Tensaw Delta	181	Kelly Major/ University of South Alabama	Alabama coastal waters	544476	The Mobile-Tensaw Delta (MTD) is ecologically productive, diverse and economically valuable. The habitat and recreational resources of the MTD are critical to the AL coast. This project will improve resource management and preserve economic interests of the region (e.g., recreational revenue generated by sport fishing and birding) that depend upon water quality for ecosystem health. The MTD is affected by eutrophication, development, industrial pollution (DWH spill), habitat degradation, storms, flooding, and drought. We will relate these disturbances to ecosystem dynamics. We have previously measured changes in local biodiversity in time and space. We plan to link intensity and source of disturbance to ecosystem dynamics and biodiversity of the MTD. We propose 2 questions: 1. What enhances biological diversity in the MTD? 2. How does disturbance affect community resilience and food web dynamics? We will strategically sample the MTD and compare new data to existing data. We have 4 yrs of data on plant and animal communities, spanning the spectrum of disturbances in the MTD. Sixteen sites [9 monitored >10 years] were established along north-south/east-west gradients along the MTD. Samples for baseline PAH levels were collected in 2010. We will sample distribution and abundance of the major plants, invertebrates, fishes, reptiles and amphibians using appropriate methods, and through coarse- and fine-scale sampling of occurrence and abundance, complexity, diversity, and richness will be estimated. Biotic stress and changes in plant productivity will be physiologically measured. We will estimate energy flow through aquatic and terrestrial food webs using stable isotopes. Seasonal and episodic habitat variability will be tracked with environmental data. Working from individual organisms to regional scale characterizes ecological impacts of different disturbances in space and time in the MTD. This project will inform restoration of habitat for ecological community resilience.	AL Portal	N	Y	N	N	N	N	N	N	N																			
Assessment and Protection of the Mobile/ Tensaw Delta and the coastal	182	John McCreadie/ University of South Alabama	Alabama coastal waters	176179	The annual dead zone of coastal Louisiana is a classic example of how freshwater can effect marine habitats. Human-induced changes of Alabama's coastal streams and the waters of the Mobile/Tensaw Delta (MTD) can be expected to have a significant impact on the water quality of surrounding saltwater habitats, especially the all-important estuaries. We have not yet	AL Portal	N	Y	N	N	N	N	N	N	N																			

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streams of Alabama					assessed if the BP oil spill has had a significant impact on either the coastal streams of Alabama or the MTD. Conservation and protection of Alabama's coastal freshwater habitats requires rapid and accurate means of assessing water quality. The Environmental Protection Agency (EPA) uses aquatic macroinvertebrates as their centerpiece in environmental monitoring, restoration, and protection of running water ecosystems. This is because these organisms play a major role in ecosystem processes and are sensitive to environmental changes - they are the "canaries in the coal mine." My laboratory is in a unique position to assess the potential impacts of the BP oil spill on the coastal freshwater habitats of Alabama, having collected considerable quantitative macroinvertebrate data from these areas before the spill. I request funds to re-collect samples from these freshwater (to brackish) habitats and then, by employing EPA's Rapid Bioassessment Protocols (RBP), compare water quality of these habitats both before and after the oil spill. EPA 's RBP is the premier approach for assessing changes in water quality. I propose to employ RBP III, involving the systematic comparison of macroinvertebrates at each site before and after the spill. Hence, changes (or lack thereof) in the invertebrate biota will be used as a yardstick by which the complex relationship between ecosystem health and the BP oil spill will be measured. In addition, data from the project will provide a long-term benchmark by which future insults (e.g., re-suspension of benthic oil after a major weather event) can be detected. Collections would be completed within 6 - 12 months; an additional year is needed for identifications and data analyses. Freshwater sites of coastal Alabama are not only important for recreational fishing and ecotourism, as well as having a direct effect on inshore marine productivity, these habitats are also a 'hot bed' of biodiversity. My preliminary collections from these habitats show that at least 6% of the species collected are new to science. This status alone makes these waters worthy of our attention.																													
Big Creek Lake Reservoir Spill Containment Structure	183	Charles Hyland/ Mobile Area Water and Sewer System (MAWSS)	Mobile County	23000000	The proposed project is to install a permanent spill containment structure to protect the Big Creek Lake Reservoir from spills associated with transportation mishaps and acts of terrorism that could contaminate the major source of Mobile regions drinking water supply. Currently there is no mechanism in place to contain such spills entering the reservoir. This project will be constructed at the intersection of US 98 and Big Creek Lake in western Mobile County.	AL Portal	N	Y	N	N	N	N	N	N	N																		
Alabama Harmful Algal Bloom (ALHAB) Program Initiative	184	Alison Robertson/ University of South Alabama, Marine Sciences Department	Alabama coastal waters	7075937	Harmful algal blooms (HABs) are a major environmental problem across the United States and are frequent in the marine, estuarine, and freshwaters of Alabama. HABs can produce potent toxins and significant impacts including mass mortalities of farmed and wild fish and shellfish, severe human illness from consumption of contaminated seafood or exposure through swimming or inhalation, and illness and death in livestock, pets, and native species. These HAB events represent a real and present threat to the health and viability of our aquatic ecosystems in Alabama and the industries and jobs that rely on them. The overarching goal of this project is to initiate the first Statewide HAB monitoring program in Alabama. The first step towards this goal will be to combine field, laboratory and modeling studies in a	AL Portal	N	Y	Y	N	N	N	N	N	N																		

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					coordinated effort to characterize the physical, chemical and biological processes governing the growth, distribution and impacts of HAB species in Alabama waters. We will deploy real-time environmental water quality sensors, buoys, and sampling devices that allow collection and automated hourly imaging of phytoplankton to identify toxic species as they enter the coastal waters, and a subsurface environmental sample processor capable of detecting HAB species and their toxins in the field. These methods will be combined with traditional monitoring of water samples, and shellfish from offshore, nearshore, and shoreline locations in marine, estuarine, and freshwater habitats for groundtruthing. In the laboratory, toxin analysis will be performed using state of the art technology to trace the levels and potential exposure of toxins in the environment. In freshwater sources, samples will be collected upstream of water intake of drinking water reservoirs, State parks, and affected agricultural areas. Towards this effort we will build on a strong network of trained citizen scientists who will be engaged in assisting with program monitoring efforts. This will provide a hands-on learning experience to engage students and community members who will have integral role to the health and conservation of the region. Protecting our coastal and freshwater resources is central to the functioning of the economy in Alabama. This program will provide an early warning and allow a rapid response to mitigate the harmful effects of HABs, protecting consumers, natural resources and commodities, wildlife, and ecosystem health.																												
Low Pressure Sewer System To Replace On-Site Systems in Sensitive Riverine Areas	185	Charles Hyland	Dog River	1100000	In this project, it is proposed to construct a low pressure sewer system within riverine areas of the Dog River Watershed to service existing residential and commercial properties. Properties in these riverine areas are currently utilizing on-site septic systems to service their sewage disposal needs. In this project, it is also proposed to conduct an evaluation of the structural integrity of an existing major concrete sewer trunk line varying in size from 36" to 48" which conveys sewage collected within the Dog River Watershed to the C. C. Williams Wastewater Treatment Plant. This project will connect failing on-site systems to sanitary sewer which have a documented failure rate, especially in southern Mobile County. Project costs include engineering, permitting, and construction (new sewer and sewer extension). This project will eliminate the discharge of pathogens into the adjacent bodies of water. Individual systems often suffer failure from lack of maintenance and/or damage from rising floodwaters. Further, there are many aging on-site systems that were built to lower standards, were damaged by Hurricane Katrina, and/or are not being maintained.	AL Portal	N	Y	N	N	N	N	N	N	N																		
Biopolymer Based Materials for the Removal of Harmful Metals from Mobile Bay Water	186	William Reichert	Mobile Bay	563003	Contamination of waterways by atmospheric deposition, industrial waste water and runoff is a common problem in industrial areas, and the Mobile Bay Estuary area is no different. The introduction of metals into the ecosystem can have negative effects. While there are a number of methods for the removal of these metals from water, many introduce new chemicals that can also be hazardous to the environment. One method that might provide a clean, cheap process for the removal of metals from waste water is the modification of biomass to produce new absorption materials.	AL Portal	N	Y	N	N	N	N	N	N	N																		

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					Biomass, such as cellulose and chitin, are a potentially inexpensive and renewable source of new advanced materials. Chitin is the major component of crab and shrimp shells and is a common byproduct of the fishing industry. Due to its chemical composition, chitin has the potential to remove heavy metals from waste water. Until recently, the use of chitin in many applications was limited by its insolubility in common solvents. However, now that ionic liquids (ILs) are being used for its dissolution, this roadblock has been removed. ILs are very similar to traditional inorganic salts, like sodium chloride. Like traditional salts, ILs are compounds composed entirely of ions. However, unlike traditional salts, ILs are composed of bulky ions, which leads to a decreased melting point (below 100°C) for the ILs. In addition to lower melting points, ILs have demonstrated unique physical and chemical properties such as large liquid range, low vapor pressures, low flammability, and the ability to dissolve a variety of materials. One unique property of ILs that is of interest to this research is their ability to dissolve various biopolymers such as cellulose and chitin. The ease at which ILs can dissolve biomass has rejuvenated areas of research in biomass application, including efficient degradation processing and new materials. The latter is of particular interest as this research will focus on the formation of new materials from chitin and cellulose using IL-based technology. Chitin and its derivative chitosan are both excellent absorbents for various metals. The thrust of this research will explore the utilization of chitin and chitosan films and fibers for the absorption of different metals from aqueous solutions, including Mobile Bay simulant water. Analysis of these solutions before and after contact will give an excellent indication of their absorption properties.																															
USA Center of Environmental Resiliency and Training (USA-CERT)	187	Eugene Cioffi	Mobile, AL	4700000	The University of South Alabama Center of Environmental Resources and Technology (USA-CERT) will have a mission to lead and promote multidisciplinary research, education, and outreach. The disciplines will include environmental sciences, environmental policy development, engineering, and sustainability. The members of USA-CERT will be comprised of affiliated USA faculty, adjunct faculty (AL Universities; regulatory agencies), as well as external engineering, business, and agricultural collaborators. In advancing our mission, we will provide analytical infrastructure support to the University faculty and researchers, promote undergraduate and graduate education in the sciences and engineering, formulate rational regulatory policy development, and provide training and outreach to Gulf Coast communities and businesses. In addition, we will train and assist the Gulf Coast communities in times of environmental emergencies with our Rapid Environmental Deployment initiatives (RED Teams), providing pre-	AL Portal	N	N	N	N	N	N	N	N	N																		

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					positioned sample collection devices and backpack-portable analytical instruments satellite-linked to the on-campus USA-CERT facility (to facilitate real-time interactions). These RED Team pre-deployments will be in custody of the various fire and police agencies within the Gulf Coast region, and the Center will train and support these personnel. A part of our overall mission will be to promote the health and vitality of our beaches and seafood, since we will be equipped to provide toxicological assessments of both the "health" of our surrounding environment, as well as the safety AND nutritional benefits of Gulf Coast seafood and agricultural products. All of our sampling and testing protocols will be based on accepted USEPA, USFDA, and ASTM protocols, to insure strict Quality Assurance and Quality Compliance (QA/QC) criteria. The on-campus USA-CERT analytical infrastructure will be comprised of the Metals lab, the Nutrients/Nutritional lab, and the Organics lab. Other instrumentation will be included as needed to provide the region with a state-of-the-art facility. USA-CERT will initially be housed in leased space in the USA Technical Park in Phase I/Phase III. Specific RESTORE Act eligible activities/criteria addressed: Restoration and protection of natural resources; Sustainable and resilient growth; regional job development; Promotion of tourism and seafood consumption in the Gulf Coast region.																													
Coastal Sustainable Tourism Laboratory	188	Dr. Jenny Manders	Gulf Shores	1102519	The World Tourism Organization defines sustainable tourism as, "tourism that takes account of its current and future economic, social, and environmental impacts, addressing the needs of visitors, the industry, the environment, and host communities." Sustainable tourism maximizes the benefits of tourism for communities and can be carried out indefinitely without harm to natural environments. Central to the concept is the role of local community empowerment and leadership. Ecotourism is the responsible visitation to natural areas that protects the environment and improves the well-being of citizens. The Ecotourism brings long-term environmental and financial solutions to communities; is reflective of the culture and values of local stakeholders; and has a positive economic impact. Given the wealth of ecotourism sites along the Alabama coast, any efforts to build tourism in the area should include a focus on ecotourism. The goal is to increase tourism in the region in ways that ensure economic development, the protection of the environment, and community leadership. The proposed Coastal Sustainable Tourism Laboratory will drive the development of tourism through the coordination and development of regional expertise and resources. It will be linked to the newly-approved Hospitality and Tourism degree program at the University of South Alabama (USA), and housed at USA's new Gulf Coast Campus in Gulf Shores, Alabama. Partners will be solicited from university-based colleges and departments, as well as industry leaders, community-based organizations and businesses,	AL Portal	N	N	N	N	N	N	N	N	N																			

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					chambers of commerce, and tourism boards in the Alabama coast region. The goal will be achieved through four outcomes: 1) the development of a Sustainable Tourism Leadership Consortium, consisting of community, business, and industry leaders, interdisciplinary faculty and subject-matter experts who will identify and work for the implementation of sustainable tourism policies and practices; 2) the development of a Professional Certificate Program in Sustainable Tourism, open to current professionals in related fields or businesses; 3) the development of an undergraduate Interdisciplinary Certificate Program in Sustainable Tourism, open to USA students from all majors, as well as students in regional community colleges and other four-year institutions; and 4) the development of a university-based interdisciplinary research program on sustainable tourism practices specific to our region.																												
Perch Creek Nature Trail at McNally Park	189	Debi Foster	Mobile, AL	1500000	The Perch Creek Nature Trail at McNally Park is phase one of an economic redevelopment plan for an underserved struggling area of town by connecting residents and visitors to critical habitat within the City and exposing them to the unique heritage and culture of this diverse community. The proposal creates a recreational and educational trail through wetlands that lie between the nation's fourth largest estuary Mobile Bay and the Mobile's urban river, the Dog now on the State's 303d list of Impaired Waterbodies. It is the first part of a master plan to connect the Crape Myrtle Bike Trail now undergoing technical assistance via a grant from the U.S. National Park Service (NPS) and the Dog River Blueway Trail, also a part of the NPS river trail system, together by creating a destination point featuring the beauty and ecological value of the City's only peninsula. The project will catalyze low impact development and eco-friendly employment opportunities along the community's major corridor, give much needed access to area waters, and serve to protect the natural and historic resources of the Peninsula in advance of the expansion of Mobile Aeroplex at Brookley via Airbus Americas, Inc., which is currently underway and is projected to greatly impact the mostly residential community. Through experiencing such urban beauty, users will connect their human experience to the natural world around them and expand their desire to retain storm water protection through better wetland function and coverage such as what is offered through the development of the Perch Creek Nature Trail.	AL Portal	N	N	N	N	N	N	Y	N	N																		
Mitigating Barotrauma in Red Snapper and Other Reef Fishes: A Means to Expedite Population Recovery and Increase Recreational	190	William Patterson	Gulf of Mexico	1381555	Reef fishes are the most targeted fishes in the US Gulf of Mexico (GOM), and increasingly shortened recreational fishing seasons have real economic impacts on coastal Alabama. Regulatory discards are the greatest challenge for rebuilding the GOM red snapper stock, and they also represent substantial economic and ecological losses. For example, the ratio of total kill (dead discards plus landed catch) to landed catch has averaged 1.5:1 for the past ten years. This study is aimed at developing methods to mitigate release mortality that would mean a larger percentage of the total kill (dead discards plus landed catch) could be taken as landings. Reducing discard mortality also would aid in the recovery of the red snapper stock such that the overall quota would increase. Both of these measures would serve to extend the	AL Portal	N	N	N	N	N	N	N	N	N																		

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Fishing Season Length					recreational seasonal, thus have positive economic impacts on coastal Alabama. Study objectives will be addressed via a multidisciplinary study that employs acoustic telemetry and conventional tagging in the artificial reef permit zones off Alabama (see attached map), and then places observers on charterboats utilizing descender devices to examine their efficacy in reducing release mortality. Acoustic telemetry will be employed to examine acute (hours to weeks) discard mortality, while conventional tagging (~10,000 fish tagged) will be conducted to examine longer-term mortality and chronic effects of catch and release. Mitigation strategies developed from field experiments will be employed on cooperating charterboats, and observers will evaluate the efficacy of descender devices in the GOM recreational reef fish fishery. Combined data from field and observer aspects of the study will be incorporated into stock assessment models to estimate population-level and fishery impacts of discard mortality mitigation. Another benefit of this study is that natural and fishing mortality will be estimated with tag-recapture data. An increasing percentage of the eastern GOM recreational red snapper harvest is coming from Florida waters yet the age distribution is severely truncated off Florida and the population density is estimated to be much higher off Alabama. Therefore, fishing mortality (i.e., removals as a fraction of total abundance), may be lower off Alabama than estimates for the entire eastern GOM. If true, then clearly such a finding would have important implications for the management of red snapper, especially under a regional approach.																												
Stormwater Wetland Construction in Big Creek Lake Watershed	191	Charles Hyland	Mobile, AL	1200000	This project will construct 3 stormwater wetlands within the Big Creek Watershed. These wetlands will provide stormwater detention and treatment of the stormwater entering into the Big Creek Lake. The constructed wetlands will reduce total organic carbon in stormwater runoff though the uptake of and filtration processes. Also, this project will detain water upstream in the watershed to accelerate treatment. After these wetlands are constructed, they will be monitored and used as demonstration project for local educational programs.	AL Portal	N	Y	N	N	N	N	N	N	N																		
Waterline Crossing to Serve as an Emergency Backup Line to Spanish Fort Area	192	Charles Hyland	Spanish Fort	6800000	This project will install a 38,200 linear feet (7.2 miles) of additional water line to serve the City of Spanish of and its surrounding area. Currently, the Spanish Fort Water Board purchases its water from the Mobile Area Water and Sewer System. The entire system is served by a singular waterline crossing over the Mobile Bay Causeway. This project would install a second water line to serve as a back up in case the main line was damaged form natural or man-made causes. An interruption in service would result in the loss of drinking water for over 20,000 residential and commercial customers.	AL Portal	N	N	N	N	N	N	N	N	N																		
Pumps to Supply Emergency	193	Charles Hyland	Mobile, AL	2700000	This project will install pumps at Mobile Area Water and Sewer System's Regulator House Station which would be able to pump raw water from the Mobile River to the Stickney Water Treatment Plant. Currently, all of the potable water used by MAWSS originates from Big Creek Lake. This	AL Portal	N	N	N	N	N	N	N	N	N																		

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Backup Water Source					installation of these pumps will provide for an alternative water source to serve of all of MAWSS' customers, including the City of Spanish Fort. The piping already exists, but the pumps are currently lacking to complete this project.																												
The World-Beater® All-Beach 10K	194	Joe Moore	Gulf Shores	1386000	The World-Beater® All-Beach 10K is a sanctioned Guinness World Records race of 6.2 miles, run completely on the beach stretching from Orange Beach, Alabama, to the Gulf Shores public beach at the end of Alabama Highway 59. In its inaugural year the winner was awarded the Guinness World Record for the "Fastest 10KM Run on Sand," certification of which can be found at http://www.guinnessworldrecords.com/world-records/11000/fastest-10-km-run-onsand-%28female%29. The national trend in running is toward "challenge running" -- that is running distances in unusual circumstances. This includes obstacle courses, mud runs, and ultra runs in treacherous terrain. The World-Beater All-Beach 10K will capitalize on this trend. It is our goal to capture both normal 5K and 10K runners, AND challenge runners, such as Tough-Mudders and ultra-runners. The primary objectives of this project are centered upon bringing runners, tourists and other visitors to the beach areas of the Alabama Gulf Coast, primarily during the shoulder- and off-months of the year. This project will help support the economy - generating hotel, restaurant, grocery, alcohol and other visitor-driven sales. It will also, in essence, create a new, non-traditional tourist-driven weekend event. A secondary objective is to generate international publicity for the Alabama Gulf Coast Region, highlighting the beautiful and unique beaches and the tourist-friendly attitude of the region. The tertiary objective is to associate the Alabama Gulf Coast Region with that of a "world class" destination - with runners from all over the world invited to participate. In addition to the actual race on a Saturday morning, there would be a runners' expo held in a large venue which would feature products and services targeted at runners and race participants. This expo could begin two days in advance of the race. The conservatively-estimated direct financial impact -featuring only lodging and food and beverage expenditures for participants - would be greater than $225,000 for 500 runners, and in excess of $900,000 for 2,000 runners. These projections do not include incidental expenses such as gasoline, snacks, etc., as well as expenditures from other non-runner visitors, retail shoppers, and spectators, which could raise expenditures to well above $2.0 million for a single weekend. In order to achieve maximum results, assuring long-term success, this project should be fully-funded for a period of five years.	AL Portal	N	N	N	N	N	N	Y	N	N																			
Mobile County Soccer & Aquatic Center Complex	196	Connie Hudson	Mobile County	40000000	The Mobile County Soccer and Aquatic Center Complex Master Plan was developed by a team of engineers and landscape architects charged with the task of defining the concept and preliminary cost estimate for a recreation complex that includes adult and youth sized soccer fields, future natatorium and water facilities, and a nature trail at a potential site located near I10/I65 intersection. Early in this master plan development process, a decision was made to use social media to receive public input. Very detailed comments were received from over 250 participants. The results of the survey were used as a guide in developing the master plan. The main concern expressed by the survey responders was the quality of the fields for the safety of the players.	AL Portal	N	N	N	N	N	N	Y	N	N																			

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					They also expressed the need for good concessions, good and clean rest rooms, and shade. The proposed development of the site includes a complex that will hold 10 collegiate size soccer fields or 20 youth size soccer fields; nature trails/cross country course, water park, and natatorium. The initial phase of the project will focus on constructing the soccer facilities. Along with the fields, the soccer complex area will include parking areas and access roads, a soccer events area, concession/restroom building, and landscaping. The Nature Trail and Cross Country Course will be located near the main entrance and meander through the eastern portion of the complex that includes the wetland areas. It will consist of a cleared, grassed, course. Approximately 13 acres of the site have been set aside for the future water park. An area has also been identified for the proposed ~25,500 square foot natatorium. The goal in creating a Mobile County Soccer and Aquatic Center is to enhance the quality of life for Mobile County residents, support a profitable sports tourism industry, and environmental protection. Along with serving to host tournaments, this facility will add to the local community's quality of life by offering individuals the opportunity to recreate, socialize in open space, and participate in soccer, trail walking/jogging, and water related activities. This regional and district level park will provide opportunities for organized sport clubs, scholastic athletics for training and competitive purposes, and outdoor space areas designed to cater to teams or individuals within the Mobile Metropolitan Statistical Area as well as those who reside within a one hour drive from the site.																													
Development for a Regional Strategic Plan for the Coastal Alabama Region	198	Wiley Blankenship	Coastal AL	562500	One of the primary goals of the proposed project is the creation, development and implementation of a strong regional community branding program to allow the two county region of southwest Alabama to continue to overcome the direct negative effects, and effects of the ongoing negative imagery, of the coastal Alabama region stemming from the Deepwater Horizon Incident. This effort will inspire and encourage community members from across the two-county region to "sing from the same sheet of music" about the region and allow the region to continue to advance beyond the negative images and negative perceptions that linger as a result of the spill. By settling on a common identity, vision, and brand, and by working together to achieve it, the coastal communities within the region stand to benefit much more than if each were working alone, and this project seeks to pull all those efforts together to advance the region as a whole and implement strategies to fully recover for the effects of the oil spill. A simple google search of "Alabama BP" confirms the oil-stained imagery and perception that our region continues to battle. It is undisputed that we have a long way to go to overcome the negative perception and damage to the	AL Portal	N	N	N	N	N	N	N	N	N																			

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					Coastal Alabama brand created by the Deepwater Horizon Incident. Although there have been multiple successful media campaigns aimed at addressing the on-going negative/lingering perceptions as to the oil on the coast, and damage to our seafood, this grant application takes those multiple efforts and pulls them into an overall plan to help ensure full recovery and continued restoration of our region. This project will help ensure that this region continues on its path to recovery on a measured and well developed path, while at the same time creating a brand for the region which shows that coastal Alabama has recovered and is open of business.																													
Bayfront Park Restoration and Improvement	199	Bill Melton	Mobile, AL	4000000	Mobile County's Bayfront Park is located on Dauphin Island Parkway near the Alabama Port community and is included in the Alabama Coastal Birding Trail. This ~ 20 acre park provides playground, picnic, and restroom facilities along with limited public access to Mobile Bay. Over 50% of the land area of Bayfront Park is classified as "estuarine marine wetland" in the National Wetland Inventory. The County Commission provides full-time staffing and maintenance of the grounds. Currently, the park receives over 300 visitors on the weekends and over 1,200 per week during the peak summer months. Recreational activities include covered picnic areas, fishing, kayaking, bird watching, and wildlife observation. The proposed project is to provide enhanced public access, salt marsh restoration, and infrastructure protection at Bayfront Park. A phased approach will begin with planning and design tasks that focus on defining specific goals and objectives, quantifiable performance criteria, specific habitat conditions in the park, the scope of wetland restoration and enhancement, and the feasibility and preliminary design for creating a living shoreline or sandy beach area along the armored section of the Mobile Bay shoreline. This design phase will include obtaining any permits required. The second phase will include construction and monitoring. The final phase will focus on assessing project performance and implementing a long term monitoring program. The scope of this project also includes developing a public access plan designed to promote public support and stewardship. The public access plan will be undertaken concurrent with the facility and habitat restoration design tasks. The process will develop educational and recreational activity goals and objectives so that the park provides visitors with information on specific habitats and resource conservation and provides greater opportunities to experience and enjoy nature. New activities envisioned for the park include an osprey watching program, geocaching interpretive nature trail, and kayak launch. Man-made nest platforms would provide a safe, natural habitat for ospreys. Live cams, strategically placed so as to not disturb nests, would enable remote observation of osprey behaviors and nesting without disturbing the natural ecosystem. Geocaching offers a real-world, outdoor treasure hunting game experience with the utilization of GPS enabled devices.	AL Portal	N	N	N	N	N	N	Y	N	N																		

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Chickasabogue Park Habitat Restoration and Enhancement	200	Bill Melton	Mobile County	6000000	Chickasabogue Park is a 1,100 acre urban natural area containing environmentally sensitive wetlands, bog, and sandhill pine habitats. It provides a wide variety of outdoor activities in a natural setting while protecting the environment and preserving the diversity of plants and animals indigenous to the area. The County Commission provides full-time staffing and maintenance of the grounds. Currently, the park receives over 370,000 visitors per year. Recreational activities include swimming, camping, picnic areas, fishing, canoeing, hiking, bird watching, and wildlife observation. A popular attraction revolves around a championship 27-hole disc golf course, sanctioned by the Professional Disc Golf Association (PDGA), drawing competitors from all over the Southeast. Local handicap tournaments are held weekly and several major PDGA tourneys held throughout the year. The Ron Jones Paddle Trail, a 3-mile stretch from Chickasabogue Park to William Brooks Park in Chickasaw, was the setting for the 2014 first annual Chickasabogue Paddle. The event was a success with over 60 participants. Along with restoring habitats in the park, the proposed project will provide enhanced freshwater beach access, nature and hiking trails, paddle trail launching, campsites, and picnic facilities. A phased approach will begin with planning and design that focuses on defining specific restoration goals and objectives, quantifiable performance criteria, specific habitat conditions throughout the park, invasive species control and wildfire risk reduction, and the feasibility and preliminary design for park enhancements for the benefit of sensitive ecosystems. This proposal also includes the development of a public access plan designed to promote public support and stewardship. The public access plan will be undertaken concurrent with the facility and habitat restoration design. Educational and recreational activity goals and objectives will adequately provide visitors with information specific to habitats and resource conservation, providing more opportunities to experience nature. New activities include an osprey observation program, geocaching interpretative nature trails, and extending hiking trails. Man-made osprey nest platforms provide a safe, natural habitat. Live cams, strategically placed as to not disturb nests or activities, would enable remote observation. Geocaching, based on GPS enabled devices, offers a real-world, outdoor treasure hunting game experience.	AL Portal	N	N	N	N	N	N	Y	N	N																			
Southeast Mobile County Sanitary Sewer/Oyster Reefs Protection Project	201	Joe Summersgill	Mobile County	6148750	The goal of this project is to mitigate and prevent further and future damage to oyster and other sensitive wildlife habitats caused by poorly-functioning septic systems in Southeastern Mobile County. The proposed scope of work includes the construction of 18 miles of new public sewer collection mains throughout communities along Fowl River and Mobile Bay and the connection of 600 households to the new system. MCWSFPA currently serves over 13,000 customers in Mobile County with public water and sewer services. Residents in south Mobile County have access to the public water system, but public sewer does not exist in this area. Residents rely on individual on-site septic tanks with high failure rates due to poorly-drained soils. MCWSFPA is expanding its sewer system to Heron Bay, Alabama Port and Delta Port with funding provided by a Coastal Impact Assistance Program (CIAP) Grant ($6.3 million). The project proposed here is Phase II of that project that will	AL Portal	N	Y	N	N	N	N	N	N	N																			

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					continue to extend public sewer services to the Fowl River and the Mon Louis Island communities. The project area, located along Mobile Bay, Fowl River and Portersville Bay, is subject to major storm events, and experiences heavy rainfall. Soil conditions are wet and sandy and generally not conducive to septic tank use. These conditions cause high rates of septic tank failure. This results in public health hazards caused by human exposure to raw sewage and environmental hazards when bacteria and pathogens enter nearby waterways. These waterways are home to the richest populations of fish and shellfish communities in Alabama. Oyster habitat is vital to the health of an estuary, effectively filtering nutrients, algae, bacteria, fine sediments and toxins from the water and improving water quality. The Alabama Marine Resources Division (MRD) through funding from NOAA's Emergency Disaster Recovery Program (EDRP), has engaged in an extensive effort to plant oysters and relay oyster populations to expand reefs in this area. Specific projects have planted shells in Portersville Bay, Heron Bay, and the relayed oyster populations from northern Mobile Bay to the mouth of Fowl River. Significant damage occurs especially during rainy summer months, when the Mobile County Health Department will close oyster reefs due to pollution from failing on-site septic tanks. There is an urgent need to resolve this problem and to reduce fecal contamination on our coastline in southwest Mobile County.																												
Household Hazardous Waste Collection Day Program	202	Bill Melton	Mobile County	2000000	The Mobile County Commission is currently implementing a series of Household Hazardous Waste Collection (HHW)events with funding from the Coastal Impact Assistance Program (CIAP). These one day collection events provide the residents of Mobile County the opportunity to properly dispose of residential household hazardous waste. During each event, the County allows residents to drop off a variety of items not eligible for regular waste collection. Some of the wastes to be collected include paints, thinners, herbicides, pesticides, used oil, and electronics. Three events held in 2013 and 2014 have collected over 292 tons of materials dropped off from over 3,200 vehicles. This newly proposed project would build upon the momentum and experience gained from the CIAP project to continue to provide the residents of Mobile County periodic household hazardous waste collection and drop off days. The County intends to conduct at least two HHW events per year for the duration of the program. Collection sites will be established at various locations throughout the County. Costs for each event are based on costs generated in previous years for the same event. A media campaign will be developed and implemented to inform citizens as to what is considered household hazardous waste and provide details on collection events. All hazardous wastes generated as a result of this project will be transported by truck by certified hazardous waste transporters to be properly disposed of in a permitted landfill.	AL Portal	N	Y	N	N	N	N	N	N	N																		
Using Off-Bottom Oyster	203	Ernie Anderson	MS Sound	4326631	This project is a long-term oyster restoration effort in the Alabama portion of the Mississippi Sound. Trained oyster farmers and high school teachers and	AL Portal	N	N	N	Y	N	N	N	N	N																		

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Farming to Restore Alabama Oyster Reefs					students, under the guidance of area experts, will spawn, set, and grow oysters that will be transplanted on historic oyster reef areas. Also, protected dense spawning aggregates will be created and tested to provide predator protection for concentrations of adult spawning oysters. The oysters will be produced using the latest techniques in off-bottom oyster farming (OBOF). Local culture efforts have produced high survival and rapid growth rates as the oysters are protected from predators and are grown in the food-rich, well oxygenated surface waters. This approach will also provide new economic/business opportunities for area residents, new education opportunities for high school students, and a sustainable means of continuing the restoration activities for years to come. The overall goal is to restore area oyster reefs to the point where they may once again be commercially harvestable. However, oysters will be grown for both restoration activities and the commercial half-shell oyster market. Oysters grown for restoration will be set on pieces of oyster shell producing clumps of adult oyster while the oysters for the half-shell market will be set on microcultch to produce single oysters. These two oyster harvesting activities do not compete with each other. Oysters harvested from reefs are typically destined to be "shucked" whereas off-bottom oyster culture produces oysters destined for "half-shell" markets. Additionally, OBOF provides a new sustainable seafood industry for this area and provides the added environmental benefit of improved water quality due to their filter-feeding activities. The oysters used for this project will be spawned at Auburn University Shellfish Lab (AUSL) on Dauphin Island. Once the larvae are ready to settle (approx. 2 weeks), they will be transported to a new nursery facility to be located at Point aux Pins. There the oysters will be set and nursed until they are large enough to be transferred to the farmers grow out cages. The nursery facility will include on-shore nursery tanks (upwellers), an off-shore nursery area, and a classroom/laboratory. The grow-out areas will include existing permitted oyster farms as well as a new growing site immediately south of the nursery area at Point aux Pins.																											
City of Foley Regional Stormwater Wetland	204	Chad Christian	Baldwin County	1515600	The restoration, protection, and enhancement of the water resources of South Baldwin County is critical for the continued growth and positive development of the region. The local rivers, estuaries and bays offer a high quality of life for local residents, support both commercial and recreational fisheries, and provide the habitat for diverse and abundant marine life. Urban runoff has been identified as one of the most serious threats to water quality nationwide. When unchecked, drainage from urban areas can destabilize streambeds through erosion, carry trash and debris into rivers and bays,	AL Portal	N	Y	N	N	N	N	N	N	N																		

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					choke waterways with excess sediment, and carry pollutants including pesticides, heavy metals and fertilizer into the aquatic environment. In order to protect our local water resources for the future, urban pollution sources should be identified, quantified, prioritized, and reduced or eliminated through the most cost-effective means possible. The City of Foley and the surrounding urbanized area drain almost entirely into two main watersheds: Bon Secour River, and Wolf Bay. The Wolf Bay watershed encompasses approximately 50% of the City Limits within the three basins, but drains just 35% of the Foley Urbanized Area contained in these watersheds, as indicated by the 2010 Census. Conversely, the Bon Secour basin covers only 26% of the City Limits, but drains 55% of the Urbanized Area of concern. This suggests that long-term planning and the promotion of low-impact development may be more cost-effective for Wolf Bay, while the retrofitting of existing infrastructure and other physical treatment methods, including constructed wetlands, may be required in the relatively more urbanized basin of the Bon Secour River. The proposed City of Foley Regional Stormwater Wetland project consists of property acquisition and three main construction components: 1) A stormwater conveyance channel with integrated runoff quantity control and physical treatment devices for the removal of floatables and other debris; 2) a thirty (30) acre constructed stormwater wetland for the biological treatment of urban runoff prior to discharge into a tributary of the Bon Secour River, and 3) the retrofit of an existing stormwater pond to provide additional volume control within the basin. Educational kiosks will be installed at key locations along the project to enhance public awareness of the threats to our ecosystem from urban runoff and the need for and methods of treating these discharges.																												
Bayou La Batre US 98 Express	209	Bill Melton	Mobile County	265000000	Construct a corridor in southwest Mobile County, from Bayou La Batre north to Semmes, to facilitate the flow of goods and services and provide hurricane evacuation to all of the southern portion of Mobile County to I-10 and the new Highway 98, and to facilitate access to the Mobile Regional Airport.	AL Portal	N	N	N	N	N	N	N	N	N																		
Infrastructure Improvements of existing park and green spaces, including conversion of an existing vacant railroad easement to a pedestrian and bike path.	210	Melanie Baldwin	Pritchard	10000000	This project requests Restore Act funds to construct improvements for outdoor recreation on city-owned property throughout the City of Prichard. The City of Prichard currently owns several hundred acres adjacent to Chickasobouge Park. This project can be restored and improved for public access and outdoor recreation. Further, the City of Prichard has obtained ownership of a railroad easement that runs from Chickasaw Creek south to 3-mile creek. This easement has tremendous potential for improvement as a pedestrian bike trail. The trail will provide a linkage throughout the City limits and will tie schools, parks, creeks, and other public facilities together.	AL Portal	N	N	N	N	N	N	Y	N	N																		
Drainage and Sewer Infrastructure Improvements of facilities along West Turner Road	211	Melanie Baldwin	Pritchard	15000000	There are numerous low lying areas in the City of Prichard associated with the Eight mile Creek, Three mile Creek and Chickasaw Creek watershed. Several areas in the City are constructed on filled wetlands. As a result of inadequate and aged infrastructure such as old cracked terra cotta sewer lines, polluted flows into the City's creeks and streams, these creeks are located on the Alabama 303d list. Toulmin Spring Branch and Three Mile Creek are listed for agricultural and municipal pathogens, municipal collection system failure,	AL Portal	N	Y	N	N	N	N	N	N	N																		

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and Dunlap Circle					urban runoff and storm sewers. This project will install and construct new sewer and storm sewer collection system to improve runoff into adjacent waterways and to help improve the overall water quality of Mobile Bay. There are two areas on West Turner Road and Dunlap Circle that flood regularly. Polluted runoff will flood the streets and yards, providing an environmental and health hazard. This project will install adequate drainage facilities while improving water quality of stormwater runoff.																													
City of Chickasaw Sewer Rehabilitation Project	212	Byron Pittman	Chickasaw	1300000	The City of Chickasaw is a historic coastal community located where Chickasaw Creek flows into the Mobile River at the southern extent of the Mobile-Tensaw Delta. With approximately 6,000 residents, the City contains a newly formed school system, a vibrant port, and a rich historical heritage. The City was developed in the early part of the 20th Century to provide housing for the shipbuilding industry. The City is unique as over 25% of the municipal limits are located within a FEMA-designated flood zone. Many of these areas consist of densely populated residential neighborhoods. The City of Chickasaw Utilities Board owns and operates the City's wastewater collection and treatment system, but unlike most municipal systems, does not provide potable water to its wastewater customers. The City of Prichard Utilities Board provides water services to Chickasaw's residents, resulting in a disconnect between the water and sewer systems. Traditional revenue generated from water systems, can provide capital funding for wastewater infrastructure. The sewer system was constructed in the 1940's and consists of mostly terra cotta sewer mains. Many of these lines have been cracked from age and tree roots, resulting in excessive inflow and infiltration throughout the system. In order to address the most critical areas, Project Engineers from Arcadis have prioritized several areas where the sewer collections lines are failing within low lying areas in the city. This project consists of the installation of cured in place pipe (CIPP) for approximately 10,000 linear feet. This technology provides a low cost alternative to replacing the lines, through the installation of a fiber glass liner after the lines have been cleaned. The project will also replace 8 manholes and will provide point repairs in areas where collection lines cannot be lined. This project will result in improved infrastructure and will also improve storm water quality. Further, this project will reduce the effluent requiring treatment at the Wastewater Treatment Facility located on Chickasaw Creek adjacent to Mobile River.	AL Portal	N	Y	N	N	N	N	N	N	N																			
Reuse Water System for the City of Foley and Blue Collar Country Sports and Entertainment Complex	213	Richard Peterson	Baldwin County	3500000	This project is a reuse water system for the proposed Blue Collar Country/City of Foley development of athletic fields and landscaping areas associated with the Blue Collar Country complex. The reuse water system will minimize wastewater effluent discharges into Wolf Creek and Wolf Bay, while preserving groundwater resources that provide base stream flows to Wolf Creek and Wolf Bay, thus minimizing the deleterious effects to fauna and biota of salt water migration into the estuary during drought conditions. This project will utilize Aquifer Storage and Recovery, ASR, wells to store and recover the reuse water in the shallow aquifer for the irrigation needs of this project. The Project will also serve as a demonstration project for similar applications	AL Portal	N	Y	N	N	N	N	N	N	N																			

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					to capture storm water and recharge the shallow aquifer with excess storm water during rain events to further enhance the base flows of coastal streams and water quality feeding into those streams. Base flows can also be augmented with the recovery of stored water from this application during prolonged drought conditions. With continued economic growth and the subsequent development of coastal Alabama, storm water runoff will continue to increase in volume while shortening the duration of runoff events, exacerbating this condition. The project will introduce ASR concepts in Alabama for applications with other wastewater effluents where the ecology can be better protected from variations in salinity, as seen with oysters in Apalachicola, FL in the Georgia-Alabama-Florida water issues. The professional expertise of this project in ASR well applications, Geology and Public Infrastructure are committed to work with State Regulatory agencies to develop a comprehensive approach to total water management in coastal Alabama through ASR well use and site specific applications of geology and infrastructure where the highest environmental and ecological benefit can be realized. Specifically, this project will utilize tertiary treatment improvements at the wastewater facility in Foley, provided by the Utilities Board of the City of Foley, to produce a Class A reuse water with a connecting reuse water transmission facility to deliver reuse water to four ASR wells in the parking area of the sports venue of the project to store and recover reuse water for the irrigation needs of the project. Planning and permitting will be coordinated with the Alabama Department of Environmental Management.																												
Dauphin Island Wastewater Treatment and Outfall Improvements	215	Vaile Feemster	Dauphin Island	19386000	To improve the overall health of the estuaries in and around Dauphin Island including fishery and shellfish habitats, the Dauphin Island Water and Sewer Authority (DIWSA) plans to upgrade treatment processes and techniques including those practices that directly affect the wastewater plant discharge into Aloe Bay. These improvements will reduce potential or actual impacts on receiving water quality, the general health of the Island's surrounding waters, shellfish harvesting, fishery management, tourism, commercial enterprises, recreational use, and local and regional economic values. Major components of this project include: • Relocation of the Aloe Bay wastewater discharge outfall to a deeper-water point that provides the least environmental impact. Environmental analyses would be performed to determine the best location for the discharge outfall. • Secondary Filtration and Disinfection Upgrades - The project will improve the treatment plant's filtration and disinfection capabilities to provide higher levels of contaminant removal and virus and bacteria deactivation. • Mechanical upgrades - The project would provide upgrades to mechanical equipment to increase the reliability of the	AL Portal	N	Y	N	N	N	N	N	N	N																			

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					treatment process. • Computer monitoring system improvements - Improved facility monitoring and communication will include remote alarms to notify operators of mechanical failures and help to prevent overflow events. • Structural improvements • Improved Solids Handling • Infiltration repairs and improved pumping capabilities within the collection system																												
Dauphin Island Water Supply	216	Vaile Feemster	Dauphin Island	7700000	In 2010 and for the duration of the BP oil-spill, Dauphin Island's primary source of drinking water originated from a shallow well aquifer. This aquifer is known to be susceptible to surface contaminants, and extensive testing and protection efforts had to be performed throughout the oil-spill and subsequent cleanup. The integrity of this aquifer, which now serves as the sole backup to Dauphin Island's drinking water needs, remains ill-fated in the event of another disaster such as that in 2010. The BP oil-spill highlighted the risk associated with some of the components of Dauphin Island's water production and distribution system, and these issues must be addressed. Further distressing Dauphin Island's water production capability is that no inter-connections with other utilities are practical. The remoteness of the island constitutes a critical need for long-term sustainability of a primary resource. Planned improvements to find and develop another viable water source must be made, along with interconnection improvements and overall distribution flexibility.	AL Portal	N	N	N	N	N	N	N	N	N																		
Planning for Economic Diversification of Bayou la Batre and Surrounding Area	217	Brett Dungan	Bayou La Batre	500000	The City of Bayou La Batre has successfully established itself as a regional hub for substantial seafood and shipbuilding industries. Currently, the local economy is almost totally dependent on these sectors and is susceptible to economic and environmental aberrations. The City recognizes the need to aggressively seek develop projects that will bring greater economic diversification with additional employment opportunities for the 6,500 citizens in the City and immediate surrounding area. It is equally vital that the City carefully attract those businesses that can integrate well with the existing economy and simultaneously promote conservation of the local natural resources. However, Bayou La Batre is a small community without the financial resources to underwrite this type of comprehensive economic planning and development. The objective of this project is to provide financial support over the next five years for Bayou La Batre to initiate a comprehensive economic and community development strategy. Projects would include, but not be limited to, 1) developing of new seafood related industries that support and enhance existing businesses; 2)coordinating economic and community development designed to meet the needs identified in the South Alabama Regional Planning Commission long range plan for Bayou La Batre; 3)	AL Portal	N	N	N	N	N	N	N	N	N																		

Project Information							Restoration Types Addressed											Programmatic Damage Assessment and Restoration Plan (PDARP) Criteria		Public Notice	Oil Pollution Act (OPA) Criteria (15 CFR 990.54)			Additional Criteria								
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					developing infrastructure businesses and programs that support local tourism; 4) promoting Bayou La Batre's docks to encourage international trade and commerce; 5) coordinating the City's participation in the comprehensive Bayou la Batre Watershed study being conducted by the Mobile Bay National Estuary Program (MBNEP) with funding from the National Fish and WildlifeFoundation Gulf Environmental Benefit Fund; 6) assisting the City with the development and enhancement of features that protect its unique heritage and quality of life such as parks, recreational facilities, and marine habitats; and 7) developing and executing plans for moving the City's public safety facilities (fire and police) away from their current locations within the flood plain. This project will provide the resources necessary for establishing a highly diversified local economy and creating attractive job opportunities for local citizens while focusing attention on protecting natural resources - a balanced approach to economic development.																												
Redevelop City Docks	218	Travis Short	Bayou La Batre	31814000	Bayou La Batre, Alabama was the first permanent settlement in southern Mobile County, established in 1786 as the result of a Spanish land grant. Commercial fishing along coastal Alabama began not long after the arrival of European settlers. Bayou La Batre's early beginning as a small fishing village is now known to many Alabamians as the "Seafood Capital of Alabama" for the seafood landings and economic impact to the state of Alabama. Seafood processing on the working waterfront provides a major source of employment for the residents of Bayou La Batre. Redeveloping the city docks will allow for expansion of commercial goods import/export. The city docks property is currently owned by the City of Bayou La Batre. The city docks are in need of bulkhead repairs and possibly maintenance dredging. In addition to these repairs, the project will include infrastructure improvements such as the construction of a warehouse building and a cold storage area. The redevelopment of the city docks will stimulate the marketing of seafood locally and regionally. There will also be opportunities for global marketing of seafood products from the gulf coast area.	AL Portal	N	N	N	N	N	N	N	N	N																		
CHARLIE DMMA Rehabilitation and Bayou Coden Maintenance Dredging	219	Travis Short	Mobile Bay	1315000	This project includes two phases: • Phase 1 - Rehabilitation of existing dredge material management area (DMMA) known as disposal area "CHARLIE" • Phase 2 - Dredging of the "inner harbor" portion of the Bayou Coden navigation channel A description of each phase is below: Phase 1, Rehabilitation of Disposal Area "CHARLIE" - The approximate 38-acre site area will be modified to increase capacity and initiate an intensive DMMA site maintenance program in order to allow long-term, sustainable use for dredging of the Bayou Coden inner harbor. Proposed actions include: - Remove trees from outside slope (leave stumps) - Remove trees from crown and inside slope (remove stumps) - Floor cuts with marsh buggy relaying to perimeter - Start widening and raising perimeter dike with off-site borrow material	AL Portal	N	N	N	N	N	N	N	N	N																		

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					- Fabricate/install new 16-ft weir with pipes Assumptions: - Approximate 6K linear feet of dike to be constructed with off-site borrow source - Ultimate dike rising approximately 3 ft. above existing Phase 2, Dredging of the "inner harbor" - The outer portion of the Federal navigation channel in Portersville Bay was recently dredged; however, the inner harbor portion was not. Dredging of the inner harbor is contingent upon rehabilitation of disposal area "CHARLIE." After that is accomplished, dredging can be performed. However, funding through normal Corps of Engineers' programs typically used in the past has become problematic and difficult to obtain. Phase 2 of this project will alleviate this uncertainty and assure waterway users that needed maintenance dredging will be performed.																													
DELTA DMMA Rehabilitation and Bayou La Batre Maintenance Dredging	220	Travis Short	Mobile Bay	3165000	This project includes two phases: • Phase 1 - Rehabilitation of existing dredge material management area (DMMA) known as disposal area "DELTA" • Phase 2 - Dredging of the "inner harbor" portion of the Bayou La Batre navigation channel A description of each phase is below: Phase 1, Rehabilitation of Disposal Area "DELTA" - The approximate 70-acre site area will be modified to increase capacity and initiate an intensive DMMA site maintenance program in order to allow long-term, sustainable use for dredging of the Bayou La Batre inner harbor. Proposed actions include: - Remove trees from outside slope (leave stumps) - Remove trees from crown and inside slope (remove stumps) - Develop borrow area by cutting/stacking top 6 ft. of material - Floor cuts with marsh buggy relaying to perimeter - Start widening and raising perimeter dike with borrow material - construct interior cross-dike for separation of factory - Fabricate/install 4-ft weir box extension Assumptions: - Approximate 7K linear feet of dike to be constructed with borrow source - Main cross-dike and perimeter dike for factory to be constructed with adjacent material - Ultimate dike raising approximately 3 ft. above existing with additional 10 ft. crown width Phase 2, Dredging of the "inner harbor" - The outer portion of the Federal navigation channel in Mississippi Sound was recently dredged; however, the inner harbor portion was not. Dredging of the inner harbor is contingent upon rehabilitation of disposal area "DELTA." After that is accomplished, dredging can be performed. However, funding through	AL Portal	N	N	N	N	N	N	N	N	N																			

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					normal Corps of Engineers' programs typically used in the past has become problematic and difficult to obtain. Phase 2 of this project will alleviate this uncertainty and assure waterway users that needed maintenance dredging will be performed.																												
Enhanced Nutrient Removal at the Saraland Wastewater Treatment Facilty	221	Howard Rubenstein	Saraland	2600000	The City of Saraland is a rapidly growing community. The wastewater collection system serves approximately 5,600 customers and is comprised of over 70 miles of gravity sanitary sewer lines, over 1,300 manholes, over 11 miles of force mains, and 35 lift stations. The sewer is transported to the City's Wastewater Treatment Facility (WWTF) where it is treated and effluent is discharged into Bayou Sara. As federal and state regulations become increasingly strict and the wastewater strength increases, the City of Saraland must endeavor to meet all imposed discharge limits. As a result, the City completed an outfall relocation in 1999 and a major renovation at the wastewater treatment facility in 2004. The 1999 new 30 inch diameter outfall line was installed from the treatment plant to Bayou Sara approximately one mile north of the Mobile River. The existing outfall line to Norton Creek was abandoned in place. Bayou Sara Creek can better assimilate the treated water being discharged. In order to go above and beyond to protect the water quality of discharge to local waterways of coastal Alabama, the WWTF will require renovation of existing equipment while the facility remains operational. The upgrades and modifications to the Saraland WWTF include improvements to the following existing features: automated screening and removal facilities for large debris and fine sand particles, SBR biological treatment facilities improvements, pumping component improvements, and ultraviolet disinfection improvements. The previous conversion to SBR treatment allows the facility to biologically treat nutrients including nitrogen and ammonia. Filters are being proposed to significantly reduce particles in the discharge and to further enhance treatment of nutrients, specifically Phosphorus which is currently being monitored and modeled in nearby waterways by ADEM. The goal of this project would be to further enhance the effluent quality and allow for the discharged effluent to be reuse type quality. This reduction in pollution will provide numerous ecological and environmental benefits as the discharge will not be high in nutrients or other particles. A cleaner environment will also benefit the economic conditions for the City of Saraland. Further, all equipment upgrades will improve overall energy efficiency as the equipment will be upgraded using state of the art green technology.	AL Portal	N	Y	N	N	N	N	N	N	N																		
City of Saraland	222	Howard Rubenstein	Saraland	6985000	The City of Saraland has emerged as one of Mobile County's up and coming communities through the development of its own school system and easy commuter access to the area's large employers. The City's wastewater collection system serves approximately 5,600 customers and is comprised of over 70 miles of gravity sanitary sewer lines, over 1,300 manholes, over 11 miles of force mains, and 35 lift stations. The sewer is transported to the City's Wastewater Treatment Facility (WWTF) where it is treated and effluent is discharged into Bayou Sara. This project requests funding to implement a 50% upgrade to the WWTF's overall capacity. The current WWTF is permitted for 2.6 million gallons per day and this project will request an upgrade of 1.3	AL Portal	N	Y	N	N	N	N	N	N	N																		

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					million gallons per day, or 50% of overall treatment capacity. The wastewater will continued to be treated via a Sequencing Batch Reactor (SBR) and will discharge to Bayou Sara via a modified NPDES permit. The project costs will include engineering, permitting, and construction. This project will provide a long-term innovative solution for addressing growth in Saraland along with providing centralized sewer treatment to many unserved areas currently utilizing on-site septic tanks after infrastructure has been installed to transport the sewer to the facility. In summary, this project will provide the adequate wastewater infrastructure to allow the City of Saraland to accommodate future growth and economic development.																												
Northwest Satsuma Water and Sewer Project	223	Paul Murray	Satsuma	1454929	The City of Satsuma is a coastal community located in Mobile County at the southern extent of the Mobile-Tensaw Delta. With approximately 6,000 residents, the City contains a newly formed school system, extensive park and recreation facilities, and provides numerous public services for its residents. The City provides potable water and centralized sewer to most areas within the City limits, except for the area west of Interstate 65, in the northwestern quadrant of the City. This area has approximately 100 homes which are served by private wells and on-site septic tanks. The city residents in this area pay the same taxes and fees as other city residents but are not provide equal services. This area does not have any fire hydrants for suitable fire protection, forcing the City of Satsuma Fire Department to truck water for fires. Further, the residential insurance rates are much higher due to the lack of fire protection. Further, lack of adequate water and sewer infrastructure, hinders economic growth in the only undeveloped area within City limits. This project will bring 800 linear feet of water and sewer lines under Interstate 65 and install a lift station on the western side of the Interstate. Further, this project will install 13,600 linear feet of 6-inch water lines, 4,200 linear feet of 8-inch gravity sewer lines, and install 6 fire hydrants on Regina Drive, South Oak Drive, West Oak Drive, Oak Ridge Drive, a small portion of Baker Road and I-65 service road. This project will provide basic public services to the existing residents while providing the much needed infrastructure to accommodate future growth for the City of Satsuma.	AL Portal	N	N	N	N	N	N	N	N	N																			
Dauphin Island Acquisition	224	Robin DeLaney	Dauphin Island	2400000	This project involves the acquisition of approximately 1,200 acres spanning across Dauphin Island from the east end at Pass Drury to the north side at Aloe Bay to the west end along the Mississippi Sound. The property will be transferred to the Dauphin Island Foundation for the ecological and environmental benefit of Dauphin Island and the surrounding environment. Nine currently commercial and residential parcels located from the main boulevard to the village to the west end on Mississippi Sound are included in the transfer for the ecological, environmental, seafood and tourism benefit of Dauphin Island. The total of 39 parcels represents a broad diversity of significant bottomland, shoreline, wetland, dune and woodland habitat strategically located on this barrier island. Their conservation for ecological and environmental preservation and use for seafood and tourism applications represents a unique and important opportunity for many Dauphin Island stakeholders to preserve, protect and promote Dauphin Island's unique natural habitat and seafood and tourism resources.	AL Portal	N	N	Y	N	N	N	N	N	N																			

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Alabama Artificial Reef Plan	226	Tim Gothard	Gulf of Mexico	42128583	Prior to the Deep Water Horizon Oil Spill, Alabama's artificial reef system was shown to have strengthened the ecological and environmental health of the northern Gulf of Mexico by providing habitat for economically viable reef fish, and creating a marine environment which made it possible for fish populations to flourish. The diverse and spatially expansive reef complex significantly increased the carrying capacity of reef fish over the years and yielded an astonishing level of production. In 2011, this man-made reef system was directly responsible for generating over $13 million in state and municipal tax revenues for the State of Alabama, and supporting over 2,460 jobs. However, fishery biologists with decades of experience conducting research offshore of Alabama indicate reef fish populations are limited by a habitat bottleneck due the fact that many of state's artificial reefs have reached the end of their usable life. In addition, research conducted in the years following the BP oil spill indicates that the spill may have had a tremendously negative impact on the early life-stage fish populations throughout the northern gulf, effectively reversing the previously recognized growth trends. Fortunately, these problems can be resolved. Alabama's Artificial Reef Plan represents a comprehensive review of Alabama's artificial reef infrastructure, and proposes an engineered effort that delivers the necessary enhancement and construction required to ensure the state's Gulf waters remain productive and ecologically sound for years to come. Investment in this proven resource will allow for better management of the fishery by enhancing inshore, nearshore, and offshore reef sites, and engineering a system that will provide desired habitat for numerous fish species as they migrate throughout their life cycle. The Plan proposes to establish bridges between habitats connecting early to adult life stage requirements through the following components: Inshore Deployments-8 new reefs; 31 reef enhancements: Nearshore Deployments-250 juvenile fish shelters; enhance reef base at 5 gas platforms; new snorkeling reef complex; 3 reef areas 2-3 miles offshore; 3 reef areas 3+ miles offshore; Offshore Deployments-20 acres low relief habitat; 100 exceptionally high relief structures; 3 large ship dive sites; 600 pyramids 6-9 miles offshore; FAD Program in 500-3000 foot depths. Inshore, Nearshore, and Offshore Research and Monitoring. Full details found at ALREEFS.COM.	AL Portal	N	N	N	N	N	N	N	N	N																			
Escatawpa River Trail System	227	Bill Melton	Mobile County	4000000	The Escatawpa River, located on the western boundary of Mobile County, drains the western area of the County into the Pascagoula River, Mississippi Sound, and out to the Gulf of Mexico. The Escatawpa River, a scenic and recreational river bordered by hardwood swamps and white sandbars, supports a variety of subtropical flora and fauna and provides scenic views, vistas, and multiple recreational opportunities. In the early 1980s, the Escatawpa River was evaluated by the National Park Service to determine its suitability for inclusion in the Wild and Scenic Rivers Act. The National Park Service identified the Escatawpa River as a high quality undeveloped black water stream. The goal of the Escatawpa River Trail System project is to enhance public access to, and appreciation for, black water river ecosystems in Mobile County. The river is a high-quality, undeveloped black water system with a	AL Portal	N	N	N	N	N	N	Y	N	N																			

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					long and narrow watershed area consisting of a 100-mile total length and approximately 15 miles wide. This fragile black water ecosystem contains significant and sensitive plant and animal habitats, providing an educational, scenic opportunity to enhance the public's understanding and appreciation of this natural resource. The County proposes to enhance public access to the Escatawpa River black water ecosystem by developing a 10+/- mile water trail system along the east side of the river from Mason Ferry Road extending south to US Highway 98. This includes the acquisition of public access easements and the development of associated facilities. In addition, the project includes the construction of north and south trailhead facilities that provide access and public use facilities. Principal features of the trail system include interpretative signage, canoe and/or kayak launch pads, boat launch with piers, paved parking areas, restroom facilities, group pavilions, picnic areas, and parking for trailers.																											
Mobile County Blueway Trail Development	228	Bill Melton	Mobile County	8000000	The Mobile County Commission proposes to bring together a broad based stakeholder group to develop and implement a comprehensive Mobile County Blueway Plan. The objectives of this water based trail development project include the enhancement of the public's access to local waters, protection of sensitive environments along the coast, the promotion of eco-tourism opportunities, and increased opportunities for business and revenue income in Mobile County. The approach calls for engaging in a planning process to develop the guiding vision and commitment required to define the physical and programmatic elements of a water based trail system that integrates conservation and protection of water resources as an economic engine for the entire county. This multi-phase project includes: • Creation of a countywide Blueways Task Force • Developing an inventory and evaluation of existing access points • Performing a Needs Assessment and Market Analysis focused on paddle trail and nature based tourism development • Creation of a Facility/Infrastructure plan and associated construction specifications • Media campaign development and implementation Four phases are envisioned for this project. Phase I will begin with establishing the planning team/task force, defining the planning process, developing the inventory and evaluation of existing access locations, and performing a needs assessment and market analysis. Phase II will focus on site specific facility and construction planning. Phase III will focus on trail construction and development. Phase IV will implement a marketing and communication campaign and document performance of the project. Anticipated outcomes include development of an extensive trail system infrastructure within Mobile County, improved public access for local citizens, opportunities for local businesses to support eco-tourism, and the creation of	AL Portal	N	N	N	N	N	N	Y	N	N																		

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Project Name	Proj No./ ID	Submitted By/ Primary Lead	Location	Cost	Project Description	Submitted via	Marine Mammals (Y/N)	Water Quality/ Nonpoint Source Nutrient Reduction (Y/N)	Wetland, Coastal, and Nearshore Habitat (Y / N)	Oyster Reef (Y / N)	Birds (Y / N)	Sea Turtles (Y / N)	Recreational Use (Y/N)	Habitat on Federal Lands (Y/N)	Monitoring, Adaptive Management, and Administrative Oversight to Support Restoration Implementation (Y/N)	Project is consistent with programmatic restoration goals (Y/N)	Project is considerate of strategic frameworks (Y/N/NA)	Project is consistent with criteria identified in the public notice (Y/N)	Project delivers benefits cost-effectively (+ / 0 / -)	Project meets Trustees' goals (+ / 0 / -)	Project has reasonable probability of success (+ / 0 / -)	Project prevents future and collateral injury to natural resources and services (+ / 0 / -)	Project benefits more than one natural resource and/or service (+ / 0 / -)	The effect of the project alternative on public health and safety (+ / 0 / -)	Project is not already required by existing regulations (Y/N)	Project complies with applicable laws and regulations (Y/N)	Project supports existing regional or local conservation plan or restoration effort (Y/N)	Project is not already fully funded (Y/N)	Project is technically feasible (+ / 0 / -)	Project readiness (+ / 0 / -)	Sustainability/Long-term Benefit of project (+ / 0 / -)	Project is time critical (+ / 0 / -)	Project offers opportunities for external funding & collaboration (+ / 0 / -)
					a robust environmental stewardship program that includes partnership opportunities for governments, agencies and community groups.																												
Distribution of flows and flow-rates through the Mobile-Tensaw River Delta	229	Athena Clark	Mobile County	800000	The Mobile River Basin (MRB), at nearly 44,000 square miles, ranks as one of the largest and most biologically diverse river basins in the U. S. draining parts of GA, TN, MS, and AL. The Alabama and Tombigbee Rivers converge to form the Mobile-Tensaw River Delta (Delta), a 960 square mile complex of braided river channels, serving as the interface between fresh upland waters and the brackish waters of Mobile Bay. The Delta functions as a productive fishery resource, biodiversity preserve, water-quality filter, and future conservation legacy for Alabama. Enhancing Alabama's ability to accurately determine the flow rates and distribution of flows through the Delta is critical as the state moves forward with improving water resource assessments and policies. Expanding the hydrological foundation of the delta will 1) aid in ecological and fisheries research linked to Alabama's seafood industry, 2) result in more accurate measurements of water flow rates during flood and drought periods, and 3) provide more accurate tools and models for analyzing delta flows in relation to future water policy scenarios and studies of instream and environmental flow needs. The U.S. Geological Survey (USGS) proposes to accurately determine flow rates and distribution of flows through the Delta, over a range of flow conditions, for both channel and overbank flows. This proposed project has two components. Component 1: Monitoring channel flows and distribution of flows through the Delta (Figure 1). USGS proposes to add 2 additional real-time streamgages, to the current network on the Mobile and Tensaw River, to better define flow rates and distribution of flows through the Delta. The new gages will be added on the Mobile River near river mile 14 and the Tensaw near Perkins Landing at Hurricane, AL. Numerous measurements will be made over a wide range of flow conditions and tide cycles to develop the ratings for the new gages. Component 2: Modeling overbank flows through the Delta (Figure 2). A physical (terrain) model of the basin will be constructed for a 38-mile reach of the Delta using the Surface Water Modeling System (SMS) grid generator. The hydro-dynamic model, FLO2DH, will be used to simulate flows, of varying magnitudes, above bankfull stage. The model will be calibrated to the 2013 and 2014 floods and other floods measured during the study period. The project duration is 5 years; A report will be published in the 5th year.	AL Portal	N	N	N	N	N	N	N	N	Y																		
Compressed Natural Gas (CNG) Filling Station to Support Economic Development and Reduce	230	Danny Lyndall	Daphne	1000000	The Utilities Board of The City of Daphne (aka "Daphne Utilities") is proposing a Compressed Natural Gas (CNG) filling station that will provide clean-burning natural gas fuel for use in properly-equipped public-use vehicles in the Daphne area. The filling station is intended to provide service to an "anchor fleet" of vehicles that will include vehicles operated by Daphne Utilities, the City of Daphne and possible future fleets including the Baldwin County Board of Education. The intent of the project is to lead to the development of a fleet of light-duty and heavy-duty vehicles powered by natural gas that will not only reduce air emissions but also provide significant fuel savings to the	AL Portal	N	N	N	N	N	N	N	N	N																		

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Carbon Footprint					respective fleets. Natural Gas vehicles emit significantly lower exhaust emissions over gasoline or diesel fuel vehicles. According to Natural Gas Vehicles for America when compared to gasoline or diesel vehicles, CNG vehicles exhibit Carbon Monoxide emissions reductions of 70 - 90%, Non-Methane Organic Compound reductions of 50-75%, Nitrous Oxide emission reductions of 75-95%, and Carbon Dioxide emissions reductions of 20-30%. In addition, natural gas used as a vehicle fuel provides significant fuel savings over gasoline or diesel fuel and may reduce fuel costs by as much as $1.00 per gallon equivalent over gasoline or diesel. The environmental benefits of a fleet of CNG vehicles are as described above through emissions reductions and in addition to the reduced vehicles emission, the CNG fueling process is virtually emissions free - fuel vapors do not escape into the atmosphere such as occurs when gasoline or diesel fuels are pumped into a vehicle. Southwest Alabama is expected to eventually fall within a U.S. Environmental Protection Agency "non-attainment" zone as result of the production of ozone. Should Baldwin County fall within a non-attainment zone it will be vital that tailpipe emissions of vehicles are reduced. An ever-growing fleet of CNG vehicles fueled by Daphne Utilities will serve to mitigate the air quality issues experienced in southwest Alabama.																													
Sediment geochemistry investigation of the Mobile-Tensaw River Delta	231	Patrick O'Neil	Mobile Basin	216300	The Alabama and Tombigbee Rivers merge at the terminus of the Mobile River Basin to form the Mobile-Tensaw River Delta, a 960 mi2 complex of braided river channels, off-channel bayous and lakes, interconnecting streams, and forested and emergent wetlands serving as the interface between fresh upland waters and the brackish waters of Mobile Bay (fig. 1) and which functions as a productive fishery resource, biodiversity preserve, water-quality filter, and future conservation legacy for Alabama. The Mobile River Basin, at nearly 44,000 square miles (mi2), ranks as one of the largest and most biologically diverse river basins in the United States draining parts of Georgia, Tennessee, Mississippi, and Alabama (fig 1). The environmental setting and water-quality issues in the Mobile River Basin were recently summarized by Johnson and others (2002) as part of the U.S. Geological Survey National Water-Quality Assessment (NAWQA) program and by O'Neil and Mettee (2008) in a limited synoptic water-quality survey. A study undertaken during the NAWQA Mobile Basin program (McPherson and others, 2003) found that total nitrogen, nitrate, and total phosphorus loads were nearly twice as high in the Tombigbee River compared to the Alabama River (greater agricultural influences in the Tombigbee River) and also noted differences with respect to pesticide contamination. O'Neil and Mettee (2008) conducted a synoptic water and sediment-quality survey in the upper (north of I-65 bridge) Mobile-Tensaw River Delta in 2005-07. Part of this study entailed the collection of one series of bottom sediment samples (November 2005) with the goal of assessing the presence of toxic trace metals and related constituents. Sediment samples were collected once from each station during November 2005. The variable constituent concentrations indicated that additional sediment sampling was needed to adequately	AL Portal	N	N	N	N	N	N	N	N	Y																			

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					characterize inorganic constituents in the delta region. Comprehensive sediment resource studies of the delta are lacking. The purpose of the proposed investigation is to expand our basic resource knowledge of aquatic and terrestrial sediment quality in the Mobile-Tensaw Delta region in Alabama. Approximately 200 samples will be collected in five geographic zones in the delta delineated from north to south (fig. 2).																													
Oyster Bay Restoration Feasibility Study	232	Ben Raines	Oyster Bay/ Baldwin County	600000	We propose a multi-part feasibility study for a project that will restore the water quality of both Oyster Bay and the Intracoastal Waterway (ICW) by redirecting the treated wastewater from the cities of Orange Beach and Gulf Shores. At present, the treated wastewater from the two cities is dumped into the ICW, where it contributes to high nutrient levels, algal blooms and the classification of oysters in the ICW as unsuitable for human consumption. The critical problem with using the Intracoastal Waterway as a receiving water is that the manmade canal does not flow as a river does, and the water in the canal tends to slosh back and forth with tidal shifts, without thorough flushing. As the coastal community grows, so will the issues associated with using the canal for treated effluent. In addition, a new regime of stricter effluent guidelines expected in the next 5 to 10 years will likely make it much more difficult for the municipalities to meet the new standards for discharge to state waters. Meanwhile, the ICW is responsible for destroying the traditional salinity regime in Oyster Bay. When the ICW was created, Oyster Bay was separated from its natural connection with the Bon Secour River, and higher salinity water was directed into the bay through the canal, to the detriment of the native oysters. Additionally, sediments disturbed by barge traffic moving through the ICW as it passes through Oyster Bay buried ancient oyster reefs. Our plan is multi-pronged and involves injecting the waste streams underground for a period of time, which will further reduce contaminants, then using the treated water to restore a more natural salinity regime in Oyster Bay, promoting oysters. The water quality in the ICW will be improved instantly as well, as soon as the waste stream are removed and redirected to the injection wells. At completion, we envision the creation of a barrier across the mouth of Oyster Bay, separating it from the ICW, thereby reducing sediment disturbance and saltwater intrusion. With a steady and endless supply of freshwater from the injection wells regulating salinity, we believe Oyster Bay could become a significant fishery for farmed oysters. Similar injection wells are now used in Destin for treated effluent, and we believe geologic conditions underlying the Fort Morgan peninsula are nearly identical. Gulf Shores Utilities owns a 160 acre site on Ft. Morgan adjacent to Oyster Bay where we plan to drill test wells.	AL Portal	N	Y	N	N	N	N	N	N	N																			
DOlive Creek Property	233	Danny Lyndall	Daphne	975000	Currently the Utilities Board of the City of Daphne (aka "Daphne Utilities") operates a municipal wastewater treatment plant at its water reclamation	AL Portal	N	Y	N	N	N	N	N	N	N																			

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Purchase, Habitat Study, and Nutrient Removal Research/Educational Facility					facility adjacent to D'Olive Creek which empties into Mobile Bay. The utility produces a high quality effluent that consistently meets or exceeds all regulatory treatment parameters for TSS, dissolved oxygen, pH, enterococcus, and others. Nutrient loads are not currently regulated by the Alabama Department of Environmental Management in this waterway, however, it is anticipated that within the next 5 years, nutrient loads will be regulated to some degree. This proposed project seeks to investigate natural alternatives to nutrient removal. Daphne Utilities is dedicated to innovative ideas and technologies as are apparent with their many environmental and green initiatives (biodiesel production, grease recycling, energy-efficient equipment retrofits, Compressed Natural Gas Vehicles, etc.). This project adds to that long line of environmentally-conscious projects. This project proposes the purchase of approximately 8 acres of land along D'Olive Creek. Daphne Utilities' water reclamation facility borders this property to the south with D'Olive Creek to the north. Along this section of D'Olive Creek are numerous cypress trees and a population of crayfish, the Rusty Gravedigger (Cambarus miltus), which have a very limited natural habitat. As part of this project, Daphne Utilities will stabilize any areas along the creek front that have erosional concerns, conduct a study to determine the population dynamics of the Rusty Gravedigger, and build an educational/research facility adjacent to the purchased property. The new 5,000 square foot facility will be used to conduct research geared towards developing natural alternatives for nutrient removal. Research will be supported by local educational institutions. In addition to research, the facility will also be used as an educational facility to teach local school groups about environmental stewardship, wastewater treatment, and biological diversity to name a few. Daphne Utilities will work closely with the Weeks Bay Foundation (who will be acting as the fiscal agent) and the Dauphin Island Sea Lab (who will handle research priorities) to support these efforts; and all work will be performed under the regulations and requirements of the Alabama Department of Environmental Management. Project Partners: Just Cebrian DISL, Ben Raines Weeks Bay Foundation																													
Expansion of Helen Wood Park and Preserve	234	Keri Coumanis		2380000	This project is part of the City's Bay Shore Habitat Acquisition and Conservation Initiative, which aims to preserve the remaining undeveloped properties on the City's bay shore, restore and conserve priority habitats, connect the community to our natural surroundings and foster an overall environmental ethic. Phase 1: Land Acquisition. Land acquisition by the City of Mobile of up to +40 acres of bay shore property (former MAWSS wastewater treatment plant and adjacent properties) in the Dog River Watershed, for purposes of environmental restoration and conservation of coastal resources. Contiguous bay shore properties to the south, down to the City's Helen Wood Park on the mouth of Dog River, are undeveloped and publicly-owned (ADCNR). Land acquisition will allow restoration, consolidation and intact preservation of the City's southern-most stretch of remaining undeveloped bay shore properties,	AL Portal	N	Y	Y	N	N	N	Y	N	N																			

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					remove incompatible development pressures on priority habitats (see NOAA Habitat Priority Planner, Mississippi-Alabama Habitats Tool at http://habitats.disl.org/) and connect the community to natural spaces in an underserved part of the City. Acquisition of this land by the City will allow shoreline alignment of the proposed regional Crepe Myrtle Trail under development by Mobile United with planning assistance from the National Parks Service (NPS), which would connect this preserved property to existing City parks (Helen Wood, McNally, Bay Shore) and proposed preserve projects at Perch Creek (City of Mobile, Peninsula of Mobile), Brookley Bayfront (MBNEP), and Three Mile Creek (City of Mobile, others). Phase 2: Site Remediation. Phase 2 of this project would raze the abandoned wastewater treatment infrastructure, conduct environmental testing, and perform any environmental remediation that may be needed to facilitate restoration of the acquire land to a natural state. Phase 3: Site Planning and Implementation. Phase 3 would involve planning, design and implementation, providing habitat preservation, public access to preserved areas for passive recreation uses (including planned linkage to the regional Crepe Myrtle Trail), resources for environmental education, and long-term stewardship. The City will coordinate with and build upon planning and development efforts on Mobile's coastal Peninsula by the USEPA, Auburn University, NPS, and numerous local community and environmental advocacy groups.																													
Perch Creek Blueway Trail and Park	235	Keri Coumanis		2982500	This project is part of the City's Bay Shore Habitat Acquisition and Conservation Initiative, which aims to preserve the remaining undeveloped properties on the City's bay shore, restore and conserve priority habitats, connect the community to our natural surroundings and foster an overall environmental ethic. Phase 1: Land Acquisition. Land acquisition by the City of Mobile of up to +300 acres in the Dog River Watershed (Perch Creek) near its connection to Mobile Bay, to conserve and restore sensitive riparian, wetland and upland habitats, create buffers and employ best management practices to improve water quality, and expand passive recreation amenities at existing City parks (Bay Shore and McNally parks) and proposed new natural park areas on the City's coastal Peninsula. Land acquisition will remove incompatible development pressures on priority habitats (see NOAA Habitat Priority Planner, Mississippi-Alabama Habitats Tool at http://habitats.disl.org/) and connect the community to natural spaces in an underserved part of the City. Phase 2: Planning and Design. Develop plans to create a "blueway" kayaking trail along Perch Creek from Bay Shore Park to McNally Park and across Dauphin Island Parkway (DIP) to connect to the Dog River Blueway Trail, part	AL Portal	N	N	Y	N	N	N	Y	N	N																			

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					of the National Parks Service (NPS) river trail system. Prepare plans to develop the expanded Bay Shore Park and new park areas between DIP and Dog River for conservation and passive recreation uses (e.g., kayaking, nature trails and environmental education). This project includes planned linkages to regional coastal trails (e.g., the Crepe Myrtle Trail) and community projects (e.g., the Peninsula of Mobile's proposed Perch Creek Nature Trail at McNally Park-project #189). Phase 3: Implement Plans Developed in Phase 2. This project will include long-term stewardship and adaptive resource management at City-owned lands and facilities. This project will facilitate sustainable redevelopment of nearby underused and blighted areas. The City will coordinate with and build upon planning and development efforts on Mobile's coastal Peninsula by the USEPA, Auburn University, NPS, Mobile United and numerous local community and environmental advocacy groups. Improved recreational access and amenities will attract and support positive economic redevelopment of the Peninsula in response to expansion of the Mobile Aeroplex at Brookley.																												
Wastewater Reuse Project for the City of Daphne and the Eastern Shore of Mobile Bay	236	Danny Lyndall	Daphne	950000	This project proposes to build a reuse water infrastructure in order to use treated municipal wastewater for irrigation purposes on public and private property in Daphne, Alabama along the eastern shore of Mobile Bay. By intercepting the discharge from the only wastewater treatment facility serving the area, the reuse water will not only reduce effluent discharges into Mobile Bay, it will reduce overall nutrient loading into the waterway. In addition, this reuse project will eliminate the current irrigation wells which have potential for contamination of the drinking water aquifer, overpumping of the aquifer effecting scarce resources and the potential for saltwater intrusion. Finally, this reuse project will serve an educational component providing one of the only wastewater reuse projects in Alabama and the only project in coastal Alabama to demonstrate its efficacy and effectiveness to other wastewater utilities in the State of Alabama. The Utilities Board of the City of Daphne (aka "Daphne Utilities") treats 2.5 - 3 million gallons per day of municipal wastewater at its water reclamation facility near the coast of Mobile Bay. Through the treatment process, the utility produces a high quality effluent that consistently meets or exceeds all regulatory treatment parameters for TSS, dissolved oxygen, pH, enterococcus, and others. Nutrient loads are not currently regulated by the Alabama Department of Environmental Management in this waterway. Daphne Utilities, though, is committed to proactively reducing TKN and TP in its discharge to Mobile Bay - an Outstanding Alabama Waterway. By diverting all or a portion of its effluent into a beneficial reuse, excessive nitrogen and phosphorous loadings can be	AL Portal	N	Y	N	N	N	N	N	N	N																		

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					eliminated from this portion of Mobile Bay benefitting all aquatic organisms in this area. A portion of the funds requested will be used to construct final filtration and polishing of the effluent, and pumping and piping to carry the reuse water to an adjacent public park area. The remaining funds will be used to educate the public on the environmental and ecological benefits of wastewater reuse in urban areas. Daphne Utilities will work closely with the Alabama Department of Environmental Management for planning and permitting of this project.																													
Safe Harbor Dock Facility for Coastal Alabama	237	Travis Short	Bayou La Batre	4150000	The Safe Harbor Dock Facility Project for Coastal Alabama is a much needed addition to a limited accessible working waterfront, and will protect the Alabama Fishing Fleet and Recreational vessels of Mobile County during tropical weather events. This project promotes commercial and recreational fishing industries and will protect the coastal environment. Bayou La Batre, Alabama was the first permanent settlement in southern Mobile County, established in 1786 as the result of a Spanish land grant. Commercial fishing along coastal Alabama began not long after the arrival of European settlers. Bayou La Batre's early beginning as a small fishing village is now known to many Alabamians as the "Seafood Capital of Alabama" for the seafood landings and economic impact to the state of Alabama. There is no longer sufficient shoreline docking for vessels and catch handling activities. Seafood processing on the working waterfront provides a major source of employment for the residents of Bayou La Batre. On August 25, 2005, Hurricane Katrina produced the largest storm surge ever recorded in the area, reaching nearly 18 feet and pushing commercial seafood boats, and the cargo ship M/V Caribbean Clipper on shore. Over 80 boats, shrimp boats, oyster boats, crab boats, and recreational boats, lay aground in mud or pushed nearly 2 miles in marshes and wooded areas. Trenches had to be dug to remove the vessels resulting in significant temporary habitat destruction. A Safe Harbor will provide the community with a place to moor vessels during significant storm events. Reducing losses in this manner will ensure a more stable fishing industry.	AL Portal	N	N	N	N	N	N	N	N	N																			
Brookley Bayfront Preserve	238	Walter Ernest	Mobile, AL	7000000	This project aims to preserve this remaining undeveloped property on the City's bay shore, restore and conserve priority habitats, connect the community to our natural surroundings and foster an overall environmental ethic. This parcel is one of the largest unfragmented waterfront parcels in the city of Mobile. The parcel consist of over 140 acres of bayfront property on the western shore of Mobile Bay in the Garrows Bend Watershed, see attached "Garrows Bend WS Map." The acquisition of this parcel will allow the ability to perpetually conserve and restore priority intertidal marsh and flats, priority maritime forest, non-riverine wetland and upland habitats; create buffers and employ best management practices to improve water quality; and expand passive recreation amenities and public access to the coast of Mobile Bay. Land conservation activities will remove incompatible development pressures on priority coastal habitats (see NOAA Habitat Priority Planner,	AL Portal	N	N	y	N	N	N	N	N	N																			

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					Mississippi-Alabama Habitats Tool at http://habitats.disl.org/) in a highly urbanized and developing part of the City (just east of the Mobile Aeroplex).The placement of a perpetual conservation easement on the protected property will provide long term conservation of the historic, cultural and ecological conservation values of this property. This project compliment efforts to create off-shore oyster reefs and living shore line initiatives underway at this location and plan linkages to regional coastal biking trails (e.g., the Crepe Myrtle Trail). This project will include long-term monitoring and stewardship by the Pelican Coast Conservancy.																													
Biofiltration for Wastewater Corrosion Control and Elimination of Sanitary Sewer Overflows	239	Van Baggett	Daphne	100000	Sanitary sewer collection systems produce corrosive gases which damage collection system structures, pumping and electrical equipment, and produce noxious odors. Failure of structures and equipment potentially leads to sanitary sewer overflows (SSOs) into natural wetland habitats and waterways discharging into Mobile Bay. In addition, odors impact air quality and quality of life for residents living near sanitary sewer collection infrastructure. The Utilities Board of City of Daphne (aka "Daphne Utilities") owns and maintains sanitary sewer collection piping and pumping structures in the City of Daphne and along the shores of Mobile Bay. Corrosive gases are produced within these structures and create the issues described above. This project is a demonstration and pilot study to determine the efficacy of a passive corrosion control system at selected locations in the most critical environmental and ecologically-threatened areas. The project will consist of testing natural materials and structures such as compost, biosolids, soil, and constructed wetlands on the efficiency of removal and biological breakdown of corrosive gases. The structures are designed to blend in with the natural environment and remain unnoticeable as a treatment structure to the passerby. This research project will be designed, constructed, built and maintained by Daphne Utilities in conjunction with biologists from a local university. The purpose of the project is to develop solutions for dealing with destructive corrosive gases in sanitary sewer systems with low-cost, low-maintenance, environmentally-sustainable, and aesthetically pleasing solutions. These solutions will have applicability to all wastewater utilities concerned with reducing the incidence of SSOs, especially those located in environmentally sensitive areas. In addition, this project will provide real-world educational opportunities for students at all levels of biological research, civil engineering, and wastewater design and treatment.	AL Portal	N	N	N	N	N	N	N	N	N																		
Delta Port Marina Oystermen Support Dock	240	Travis Short	Bayou La Batre	7450000	According to eatgulfseafood.com, the Gulf of Mexico sustainably produces more than 500 million pounds of in-shell oysters each year. The eastern oyster found in the Gulf is typically larger in size than oysters found elsewhere in the US. The Gulf's warm waters are the perfect place for oysters to thrive and grow quickly. Bayou La Batre, Alabama was the first permanent settlement in southern Mobile County, established in 1786 as the result of a Spanish land grant. Commercial fishing along coastal Alabama began not long after the arrival of European settlers. Bayou La Batre's early beginning as a small fishing village is now known to many Alabamians as the "Seafood Capital of Alabama"	AL Portal	N	N	N	N	N	N	N	N	N																		

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					for the seafood landings and economic impact to the state of Alabama. The proposed site for the Oystermen Support Dock is Delta Port Marina, located near Coden, Alabama. The Bayou La Batre Port Authority would like to purchase the property and upgrade the existing docks and parking areas. However, if this site becomes unavailable or infeasible, an alternate location would be identified during the planning phase of the project. The site upgrades would benefit both the city of Bayou La Batre and the Coden community. There would be boat landings, an Alabama Department of Conservation and Natural Resources (ADCNR) office, an Auburn Shellfish Lab/office, boat launches, cold storage, and vehicle parking. The creation of the Oystermen Support Dock will increase cooperation and sharing of information and data between the oystermen and ADCNR and researchers at Auburn University. This will have a positive impact throughout the Gulf Coast Region.																													
Alabama Gulf Seafood Marketing Program	241	Christopher Blankenship		2875000	Created in March 2011 by Alabama Gov. Robert Bentley with the signing of Executive Order 09, the Alabama Seafood Marketing Commission (ASMC) was established to increase business for Alabama's seafood industry after the Deepwater Horizon Oil Spill in April 2010. The ASMC is comprised of volunteer members appointed for a three-year term by the Governor of Alabama that includes fishermen, processors, charter boat operators, retailers, restaurant owners and others directly and indirectly related to the Alabama seafood industry. The ASMC has been very active since its formation. The "Alabama Gulf Seafood" marketing program has had a successful beginning in the short time it has been in existence. The mission of the ASMC is to build a marketing, public relations and outreach campaign to help consumers feel confident about the safety of Alabama seafood and to discover the availability and positive attributes of this bounty. The ASMC, representing all components of the seafood distribution chain, along with the tourism, charter boat sector and governmental entities, has been established to coordinate the efforts by providing cohesive vision and overarching strategies to showcase Alabama seafood. These strategies focus on expanding the value, pride, brand and global market share of Alabama seafood. The funds requested through this proposal will augment previous years funding received by the ASMC. As outlined above, the ASMC was expediently created and marketing and public relations activities were initiated and are on-going. Through the ASMC, the infrastructure is in place to immediately and efficiently utilize awarded funds. The work of the ASMC program will be focused primarily within the State of Alabama. There will be additional public relations and marketing work done regionally with an emphasis in the southeast United States. The audience served by the comprehensive seafood marketing and public relations program will be multi-faceted. We will primarily be targeting the seafood loving consumers. We plan to work to drive demand for fresh, local, Alabama Gulf caught seafood. If we can drive the demand from the consumer side, restaurants, distributors and retailers will have an incentive to increase their use of Alabama seafood. Other targets include journalists, bloggers, distributors, grocers, retailers, restaurateurs, chefs, event planners, foodservice companies and other state organizations.	AL Portal	N	N	N	N	N	N	N	N	N																			

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Alabama Gulf Coast Recovery Council Older Worker Program	242	Chris Miller		431928	Background - SARPC currently operates the Senior Community Service Employment Program (SCSEP) funded by Dept. of Labor. The SCSEP program provides training and job experience for individuals 55 and older through part time employment. Participants are assigned to Host Agencies (Government or Non-profit 501 C-3 Agencies). Grant funds and a local match (ten percent 10%) pay the wages. The program benefits the Older Worker by providing employment and Host Agencies by providing part time employees at no cost. After the Oil Spill, SARPC experienced a sharp increase in applications to the SCSEP program. The increase in applications was attributed to a number of factors: 1) Local businesses were reducing workforce and often the first to go were older workers. 2) Older Workers that previously received help from family members were no longer receiving assistance because family members were financially impacted by the Oil Spill and finally 3) Older Workers that may have previously been able to cover expenses with Social Security were now faced with sheltering or feeding younger family members impacted by the Oil Spill. PROGRAM PROPOSAL - SARPC proposes establishing a locally funded Older Worker Program. The Alabama Gulf Coast Recovery Council Older Worker Program (ACRCOWP) would be designed on the model of the Senior Community Service Employment Program. Eligible participants should be age 55 and older, unemployed and meet family income guidelines. For purposes of this program income guidelines would be defined as less than 150% of poverty. Participants selected to the program would be assigned to Host Agencies in the Alabama Gulf Coast Recovery Council Region. Host Agencies would be local government offices and 501c3 organizations in the coastal area of Mobile, Baldwin Counties. Proposed work sites and assignments may include the following: Visitor Center, Chamber of Commerce and City Hall reception staff, Library Support personnel, School Crossing or safety personnel, Senior Center and Recreation Center support staff. PROGRAM BENEFITS - The Older Worker Program would benefit the Older Workers that are hired by providing income and employment opportunities. The municipal and county offices benefit from additional workers at minimal cost (10% of actual wages). The citizens and visitors in the region will benefit from increased services.	AL Portal	N	N	N	N	N	N	N	N	N																			
Planning Assistance and Infrastructure Development for the USA Environmental and Marine Sciences Building	243	Tony Waldrop	Mobile, AL	3486150	The highest infrastructure priority for the University of South Alabama is the construction of the Environmental and Marine Sciences Building (ESB). The ESB will house state-of-the-art teaching and research laboratories as well as specialized instrumentation and resources that will be mobilized to respond to acute environmental challenges. The planning assistance and infrastructure development project presented in this proposal will be performed in two phases. Phase I: program creation and design and development drawings culminating in ESB site selection, and Phase II: site preparation resulting in the installation of utility infrastructure to support the ESB. During Phase I architectural expertise will be engaged to perform site surveys, soil borings and to perform environmental and wind current impact analyses. Design and development drawings will be created with a focus on sustainable practices and energy	AL Portal	N	N	N	N	N	N	N	N	N																			

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					efficiency. During Phase II: critical infrastructure, including electrical ductwork and thermoregulation utilities will be established at the site. The scope of this project encompasses approximately 40% of the pre-planning and soft cost activities and approximately 5% of the hard costs (site preparation) associated with a projected $45M ESB construction project. The funds requested for site development and preparation will provide the basis for securing and leveraging additional funding including bond funds, philanthropic support and federal construction funding.																													
Baldwin Beach Express	245	Cal Markert	Baldwin County	202500000	The proposed Baldwin Beach Express is a controlled access highway extension of the recently completed Southern Beach Express along CR83. It will run between Interstate 65 and Interstate 10. The proposed 24.5 mile link will provide a continuous high-speed north-south route between I-65 and Alabama's Gulf Coast. Not only does this project provide additional and vastly increased capacity for coastal evacuation during hurricane events, it also provides for a rapid emergency response artery from the northern support regions. $8.5 Million has been expended already in design engineering, environmental planning and permitting. The footprint of the proposed project has been minimized by reducing median size and required right-of-way, reducing its impacts on the project area. Of significant economic importance is the project's support to Alabama's tourism industry - especially that of our gulf coastal communities and our region's state parks - and to the growth of Baldwin County. It will assist in ladders of opportunity across multiple industries and also provide new opportunities for public access to natural resources within north-central Baldwin County for outdoor recreation. 5.4 million visitors came to Alabama's gulf beaches in 2013, up from 4.9million in 2011. 30% of our visitors come from states northeast and north of Alabama within driving distance, traveling via north-south interstate routes, eventually using Interstate 65 and a combination of secondary highways. Access to and through Baldwin County on a direct, high speed highway link provides today's visitors another positive decision point in choosing where to expend their valuable vacation and recreation time. Tourism throughout Alabama generates more than 108,000 jobs, mostly dependent upon Alabama's highways for visitor travel and employment access. This project supports two significantly transformational job creation movements: South Alabama's new aerospace industry and the Baldwin Mega Site located in Bay Minette, AL. The Mega Site project is expected to contribute 3,000 to 5,000 jobs. This proposed project contributes to the economic resilience of our gulf coast and the state of Alabama.	AL Portal	N	N	N	N	N	N	N	N	N																		
Development of a laboratory facility for monitoring and characterizing tar balls washing along	246	Prabhakar Clement	Baldwin County	3000000	The Deepwater Horizon (DWH) oil spill accident extensively impacted several sandy beaches located along the Gulf of Mexico (GOM). One of the unique characteristics of the DWH spill was that when the floating emulsified oil approached GOM beaches a portion of the mousse interacted with suspended sediments and sank, forming submerged oil mats (SOMs). Since their formation, hydrodynamic processes have continuously covered and uncovered SOMs and fragmented them to form surface residual balls (SRBs), which are also known as tar balls. These tar balls are highly mobile in the	AL Portal	N	N	N	N	N	N	N	N	N																		

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Alabama's beaches					nearshore environment and can be found on Alabama's beaches till to-date. Auburn University oil spill research team has collected and archived a large number of BP-oil spill related tar balls that have been washing along Alabama's beaches since June 2010. There are many basic research questions related to these potentially harmful tar balls that are yet to be answered and these include: how are these tar balls formed and transported from tar mats? How to identify and fingerprint these tar balls? How can we determine when toxic chemicals, such as polycyclic aromatic hydrocarbons, trapped in these tar balls are no longer harmful to the environment? What constitutes an acceptable background level of tar ball activity in Alabama's beach systems and how can we determine this level? How do we decide what physical, chemical, and biological indicators are most effective when monitoring the health of tar ball - impacted beach environments? How are toxic chemicals in tar balls impacting beach microfauna, meiofauna and macrofauna? What are the harmful effects to beachgoers when they are exposed to these tar balls via direct skin contact? Can we develop better methods for characterizing various chemical constituents and its degradation by-products in the tar balls? Can we develop strategies for monitoring the rate of recovery of tar ball contaminated beaches? The focus the five-year lab/field scale tar ball monitoring project is to develop a state-of-the-art characterization and oil-spill monitoring laboratory to investigate these important research questions. The tar ball monitoring efforts will cover the entire 30-mile long amenity beaches located from Orange Beach to the Fort Morgan tip.																												
Aloe Bay/ Mississippi Sound Water Quality Enhancement Project	247	Vaile Feemster	Dauphin Island	7992000	To improve the overall health of the estuaries in and around Dauphin Island including fishery and shellfish habitats, the Dauphin Island Water and Sewer Authority (DIWSA) plans to upgrade treatment processes and techniques including those practices that directly affect the wastewater plant discharge into Aloe Bay. These improvements will reduce potential or actual impacts on receiving water quality, the general health of the Island's surrounding waters, shellfish harvesting, fishery management, tourism, commercial enterprises, recreational use, and local and regional economic values. Major components of this project include: • Secondary Filtration and Disinfection Upgrades - The project will improve the treatment plant's filtration and disinfection capabilities to provide higher levels of contaminant removal and virus and bacteria deactivation. • Improve Biological Nutrient Removal - The project will improve the treatment plant's ability to biologically remove nutrients thereby reducing nutrient loading to Aloe Bay. • Mechanical upgrades - The project would provide upgrades to mechanical equipment to increase the reliability of the treatment process. • Computer monitoring system improvements - Improved facility monitoring and communication will include remote alarms to notify operators of mechanical failures and help to prevent overflow events. • Structural improvements - Existing tanks and adjacent structures are in need of rehabilitation or replacement to provide reliability and to increase service life.	AL Portal	N	Y	N	N	N	N	N	N	N																		

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					• Improved Solids Handling - The project will upgrade the facilities solids handling system to support the enhanced nutrient removal upgrades.																												
Assessment of injury to bay, sound, and estuary dolphin stocks in Alabama to support restoration and recovery	248	Ruth Carmichael	Gulf of Mexico	2600000	The project will support marine mammal recovery and conservation in the Gulf of Mexico by assessing health and abundance of live bottlenose dolphins (Tursiops truncatus) as sentinels of ecosystem level effects of the Deepwater Horizon oil spill (DWHOS) on coastal communities and habitats. Work will include research and training to better understand and respond to adverse events affecting marine mammals. Link to Injury: During the DWHOS marine mammals were exposed to oil and dispersants and impacted by cleanup activities. Aerial surveys conducted under the Natural Resource Damage Assessment found six species of whales or dolphins swimming in surface oil in the GOM and confirmed dolphins and manatees in areas where heavy oiling was observed. Two dolphins were rescued after being trapped behind oil booms in AL during the spill, and the MS-AL coastline had the highest number of perinatal dolphin mortalities. Live dolphin health assessments in Barataria Bay, LA in 2011 showed dolphins in the area had compromised immune function and disease consistent with oil exposure. The potential for long-term impacts exists for marine mammals that were exposed to contaminants, necessitating collection of key demographic and biological data as soon as possible. Rationale/ Benefits: Biological data on dolphins are limited due to ongoing DWHOS litigation and sample sequestration from stranded animals. This project will establish metrics and set new baselines for evaluating effects on dolphins in Alabama waters by sampling live animals. These new biological data can be applied to understand effects on ecosystem function, fisheries, and human health and will be useful for comparison to demographic and biological data from stranded animals when available. Dolphin recovery will have the broader impact of supporting the ecotourism industry in AL. Approach: The project will compare metrics of dolphin abundance and condition among sites in AL (Perdido Bay, Mobile Bay) by: 1) photo-identification to determine abundance by mark-recapture methods, identify individuals for longer-term tracking of movements and fate, and define individual body condition, 2) remote biopsy sampling to define genetic structure, physiological condition and diet, and contaminant exposures, and 3) measuring environmental drivers of condition and health. This work will define the status of dolphins following the DWHOS and build capacity for enduring future research and collaborative activities.	AL Portal	Y	N	N	N	N	N	N	N	Y																			
Fairhope Soccer Complex	249	Sherry Sullivan	Fairhope	2412410	The Fairhope Soccer Complex is a proposed outdoor recreational facility for the City of Fairhope, Alabama. The facility would allow the hosting of several outdoor sport competitions and tournaments (e.g., soccer, lacrosse, etc.). The 40 acre site will consist of nine sports fields, parking facilities, locker room/restroom/press box, bleachers, sidewalks, fencing, and landscaping. The	AL Portal	N	N	N	N	N	N	Y	N	N																			

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					City of Fairhope purchased the land in 2010 for more than $877,000 and have since awarded bids in excess of $2,500,000 with another $1,000,000 to be awarded. These will provide for the construction of the nine sports fields, the parking facilities, sidewalks, landscaping, and the stormwater management system. The City of Fairhope is requesting funding from the Alabama Gulf Coast Recovery Council for only a portion of the development described above. More specifically, that would include the following: a 6,037 square feet locker room/restroom/press box building, aluminum stadium seats (1,000 seats ADA accessible) for viewing of 2 fields, 2,100 linear feet of coated chain link fence with two gates to encompass two fields, concrete foundations for bleachers, related site grading and preparation, and the related engineering/surveying/architectural/CE&I. The goal of this proposed development is to create tourism related events and a development project to attract non-local visitors to the Fairhope area and the Baldwin County region. An economic impact study of this proposed outdoor recreational complex concluded that this facility would provide significant positive economic benefits to the local economy. The proposed outdoor recreational complex would have the ability to host various types of sports events which include: mega soccer tournaments, major soccer tournaments, ultimate Frisbee tournaments, and lacrosse tournaments. Without the proposed building and stadium seating, many of these events would not be possible. The conservative estimates indicate that hosting two mega soccer tournaments, four major soccer tournaments, and one each ultimate Frisbee and lacrosse tournaments, would produce an estimated total expenditures by non-local visitors in the amount of $5,771,550. Also, conservative estimates indicate the potential for 62 jobs as a result of the additional production and would include full-time and part-time jobs.																												
Promotion of Year-Round Tourism Opportunities on Alabama's Gulf Coast	250	Colette Boehm	Coastal, AL	3000000	Coastal Alabama has huge potential for year-round tourism. The region enjoys robust visitation as a family summer beach destination but it also has assets that appeal to non-summer visitors. Budget priorities have dictated that marketing focus be on driving summer business. Increasing visitation by just 10 percent in the months of March, April, May, September, October and November, however, would result in an additional $12.6 million in annual lodging rentals in Gulf Shores and Orange Beach alone. Other sectors will see proportionate increases. The result will be more tax funding to the state and cities and a more stable year-round economy. This stability will support year-round employment of many underemployed tourism industry workers and will allow businesses to better train employees to offer exceptional customer service all year. The benefits will extend beyond these two cities, as this program will promote regional businesses and attractions. The timing of this opportunity also coincides with the development of enhanced nature tourism and educational opportunities of the Gulf State Park's new master plan.	AL Portal	N	N	N	N	N	N	Y	N	N																		

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					The area's natural and historic assets offer appeal to many people beyond the traditional summer visitors. This project will enable promotion of them to a greater degree than has been possible to-date. The Battle for Mobile Civil War Trail is anchored by the nationally known landmarks of Fort Morgan, Fort Gaines and Blakeley State Park. Alabama's Coastal Birding Trail features Dauphin Island, the Mobile/Tensaw Delta, the Bon Secour National Wildlife Refuge, Gulf State Park and other state lands with special appeal to birders and nature tourism fans. Alabama's Coastal Connection National Scenic Byway, which combines these historic and natural assets, along with recreational opportunities, promotes the authenticity and uniqueness of the region and its local businesses. Sports Tourism has grown vastly here and continues to grow nationally. Through its on-going partnership with the cities of Gulf Shores and Orange Beach, the Gulf Shores & Orange Beach Sports Commission has additional opportunities to increase numbers of non-summer event participants. The Home School Market is another growing opportunity in this country, with 2 million homeschoolers in 2010 and a 7-15% increase each year. This funding will allow pursuing these year-round travelers through packaging and promoting learning opportunities in history, marine science and ecology.																												
Spanish Fort Estates Erosion Mitigation and Battlefield Preservation	251	Matthew Hinton	Spanish Fort	8940000	Perched atop the Eastern Shore bluffs at the mouth of the Blakeley River is arguably the most significant historic location in the entire state of Alabama. Originally the site of a French trading post in the early 1700s, the bluffs - about 100 feet above the river delta below - became a strategic defensive location for the Spanish government, which built a fort around the time of the American Revolution. It was here in 1781 that the Spanish repelled a British attack to re-take Mobile, which led to a counter-attack at Pensacola that expelled the British from the Gulf Coast forever. Nearly a century later, the same bluffs would provide defense for the Confederate Army in the form of Fort McDermott and Red Fort, which became the site of the "Final Battle of the Civil War", concluding in Union victory exactly one day before Lee's surrender at Appomattox. Today, the bluffs are occupied by a sprawling neighborhood by the name of "Spanish Fort Estates", which offers remarkable views of the Mobile-Tensaw Delta and the City of Mobile skyline. With work beginning in the 1950s, prior to the incorporation of the City of Spanish Fort in 1993, storm water runoff was of little concern during the construction process. Many of the valleys that were used for drainage have become gullies and canyons, eroding private land and dumping large quantities of sediment into the wetlands and estuary below, threatening to alter the unique ecosystem of the Mobile Bay National Estuary. The issue threatens not only the natural environment and its historic significance, but also the value of the estimated $20,366,500 in real property directly abutting the ravines. Although the area could not be protected from development, it is imperative that erosion within Spanish Fort Estates be mitigated to save the historical, ecological and private property values along the bluffs. The City would like to	AL Portal	N	N	N	N	N	N	N	N	N																		

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					alleviate imminent erosion problems as they exist, educate residents about minimizing storm water impacts, and preserve what remains of the battlefields for future generations. These projects may include rain barrel assembly, rain gardens, educational signage, historic preservation and public access associated with the battlefield, and ecological and historical tourism programs. This site is a significant historic and natural treasure that deserves protection.																												
Cambron Headcut Repair	252	Matthew Hinton	Spanish Fort	620000	Located at the terminus of Wildflower Trail in the Cambron neighborhood, the real estate developer and a local resident have employed a stop-gap measure to mitigate a head cut to the north of the cul-de-sac to no avail. The head cut continues to undermine the retaining wall, which now threatens at least one residential property. Increased runoff velocity from the head cut has resulted in the destabilization of Sibley Creek below, which has led to the loss of several trees that have been undermined due to erosion. The estimated cost to repair the head cut and stabilize the creek bed is $620,000.	AL Portal	N	N	N	N	N	N	Y	N	N																		
Development of a community-based tar ball and beach recovery monitoring program	253	Prabhakar Clement	Coastal Baldwin County	3500000	The 2010 Deepwater Horizon (DWH) oil spill event continues to impact Alabama's amenity beaches till to-date. Our recent May 2015 field survey, completed 5 years after the DWH accident, shows that the current tar ball activity levels along the white sandy beaches located in between Orange Beach and Fort Morgan are at least 100 to 1000 times higher than the expected background level. During our survey, we gathered about 50 to 100 tar balls within 30 to 45 mins from every sampling point. Currently, it is unclear when these levels would reach the low background levels of 1 or 2 tar balls per km every six months that existed prior to the BP oil spill. Our past research efforts have shown it is highly unlikely that the Alabama system would reach this very low background level in the next five to ten year period. Therefore it is extremely important to develop a long-term monitoring plan to manage this problem. One of the limitations of tracking tar ball activity levels is that they are influenced by highly dynamic coastal processes, and hence they need to be tracked continuously. Unfortunately, automatic monitoring is impossible since tar balls are discrete objects that need to be manually recovered. The objective of this proposal is to build a community-based tar ball monitoring program to facilitate this continuous monitoring process. The proposed monitoring program will employ a three-tier approach to identify and document the origin of the tar balls. It has been well established by our past research efforts that the DWH tar balls have several unique physical and chemical characteristics. Our monitoring protocol will use the following 3 distinct steps to objectively identify and document tar ball characteristics: 1) simple field based physical characterization step community members will be trained to do this); 2) simple laboratory testing step (selected community group leaders will be trained to do this); and 3) advanced chemical and other biomarker fingerprinting step (this will conducted at the National Science Foundation funded oil spill test facility at Auburn University). Step 3 requires advanced instruments and the funds requested as part of this effort will be used to build a state of the art oil spill testing facility that will serve entire Gulf	AL Portal	N	N	N	N	N	N	N	N	N																		

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					Coast region. The data collected will be directly uploaded into a web system and will be made available to a broader community.																												
Bon Secour River Headwater Restoration	254	Chad Christian	Coastal Baldwin County	6177160	The restoration, protection, and enhancement of South Baldwin's water resources is critical for the continued growth and positive development of coastal Alabama. Our local rivers, estuaries and bays offer a high quality of life for local residents, support both commercial and recreational fisheries, and provide the habitat for countless species. In order to protect and restore our local water resources, urban pollution sources should be identified, quantified, prioritized, and then reduced or eliminated.The City of Foley and the surrounding urbanized area drain almost entirely into two distinct watersheds: Bon Secour River, and Wolf Bay.The Wolf Bay watershed encompasses approximately 50% of the City Limits, but drains just 35% of the Foley Urbanized Area contained in these watersheds, as indicated by the 2010 Census.Conversely, the Bon Secour basin covers only 26% of the City Limits within the study area, but drains 55% of the Urbanized Area of concern. This suggests that long-term planning and the promotion of low-impact development may be more cost-effective for Wolf Bay, while the retrofitting of existing infrastructure and other physical treatment methods, including constructed wetlands, may be required in the relatively more urbanized basin of the Bon Secour River. A ninety-four (94) acre tract of land has been identified for purchase in the headwater region of the Bon Secour River. This property is the most-downstream undeveloped parcel within the City Limits, and encompasses the main River channel as well as the junction points of three tributaries. Therefore, this land is ideally located for cost-effective protection and restoration of the Bon Secour River. The proposed Bon Secour River Headwater Restoration project consists of property acquisition and three main construction components: 1) streamside flow diverters, physical treatment devices, and forebays for the removal of floatables, sediment, and other coarse debris; 2) a seventy (70) acre, multi-bay constructed stormwater wetland for the biological treatment of urban runoff prior to discharge into the Bon Secour River, and 3) a multi-media outreach program to explain and promote low-impact design (LID) techniques for use in new construction and redevelopment within the region. Permanent educational kiosks will be installed at key locations along the project to raise public awareness of the threats to our ecosystem from urban runoff and the need for, and methods of, treating these discharges.	AL Portal	N	N	Y	N	N	N	N	N	N																		
Extension of Effluent Force Main from Bayou La Batre WWTF	255	Annette Johnson	Bayou La Batre	12000000	The effluent force main from the Bayou La Batre WWTF extends approximately one (1) mile into Portersville Bay. Although the compliance of the WWTF is good, there has been studies to indicate that the effluent flow rate and allowable pathogens limits are of concern to the shellfish harvesting industry along the Bayou La Batre and Bayou Coden areas. Working with the ADCNR, Fish & Wildlife and Army Corp of Engineers, we are identifying solutions to achieve the goal of the effluent not potentially inhibiting the shellfish harvesting industry in the area. The project will relocate the effluent further into the Bay and Mississippi Sound as to provide adequate mixing to prevent an impact on the shellfish harvesting farms and wild harvesting areas. The proposed project will require design, bidding, award, inspection, and	AL Portal	N	Y	N	N	N	N	N	N	N																		

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					close out the project. The preliminary engineering cost estimate is approximately $12 million to achieve the relocation of the effluent force main further into Portersville Bay/Mississippi Sound.																												
City of Saraland Potable Water Expansion Project	256	O'Neil Robinson	Saraland	2054038	The City of Saraland Water Board provides potable water service to 4,700 customers for residents in the City of Saraland (north Mobile County) and surrounding area. The water system has grown steadily since its inception in the 1960s, enabling the system to improve its infrastructure through capital projects throughout the years. However, recent growth in Saraland spurred on by the creation of a city-wide school system and large annexations have caused the water system to fall behind on its necessary infrastructure upgrades. This project will install necessary water system infrastructure for the City of Saraland and its surrounding area through the construction of a new well, water treatment plant, and a booster pump station. In addition, approximately 15,000 linear feet (3 miles) of 8" and 10" water distribution lines will be installed along State Highway 158 (Industrial Parkway) and State Highway 45. The improvements in this project have been developed by the Saraland Water Board's consultant engineer in conjunction with the System Operator. The engineer has determined this project is much needed and will provide the most cost-effective benefit to the entire system. The new well will be located near an existing water storage tank on State Highway 158 (just past Walmart). A test well was dug a few years ago, and this is the best place to locate the new well and estimated flows will be 300-350 gallons per minute. The newly pumped water will be treated and pumped via a 750 gallons per minute booster pump. This additional volume will be added to the existing infrastructure on the west side of Interstate 65, and will provide necessary "looping" of the system. "Looping" typically refers to the elimination of a dead end water main by constructing an additional water main from the dead end to another water main to complete a "loop". This project integrates the entire water system in order to improve the efficiency of the water system while improving infrastructure for existing and future economic development.	AL Portal	N	N	N	N	N	N	N	N	N																			
Saraland Water Service Water Meter Upgrade and Replacement	257	O'Neil Robinson	Saraland	1134747	The City of Saraland Water Board provides potable water service to 4,700 customers for residents in the City of Saraland (north Mobile County) and surrounding area. The water system has grown steadily since its inception in the 1960s, enabling the system to improve its infrastructure through capital projects throughout the years. However, recent growth in Saraland spurred on by the creation of a city-wide school system and large annexations have caused the water system to fall behind on its necessary infrastructure upgrades. This project will install automatic energy-efficient radio read water meters for approximately 2,000 customers. Automatic meter reading is the technology of automatically collecting consumption, diagnostic, and status data from water meter and transferring that data to a central database for billing, troubleshooting, and analyzing. This technology will save the Saraland Water Service staff the expense of periodic trips to each physical location to read a meter. Further, this project will upgrade 2,700 existing radio read meters so they are compatible with the newly meters described above. The Saraland Water Service has been slowly upgrading the meters; however the technology is dynamic and changes too quickly to have system wide	AL Portal	N	N	N	N	N	N	N	N	N																			

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					consistency. Once all the new meters are installed, the Saraland Water Board will be able to collect streamlined data about the system and will be able to reduce leaks and improve customer service. This project integrates the entire water system in order to improve the efficiency of the water system while improving infrastructure for existing and future economic development in North Mobile County.																												
Shine Road Water Well and Pump Station	258	Annette Johnson	Bayou La Batre	4500000	The Shine Water Well project involves the installation of a production water well to provide potable water for the City of Bayou La Batre residents, commercial and industrial clients. An test production well was drilled less than 10 years ago and quantity measurements indicated the ability to provide greater than 950 gallons per minute (1.368 MGD) of potable water. With the Field Road well and the Vanity Fair well, there was not a need to install and began producing water unless the need was evident. Recently, the Vanity Fair well has begun losing production capacity and as recently as two years ago, had to have the system rebuilt to install new screens. There is concern the Vanity Fair well will not last more than another year. Therefore, the need for the Shine Road well to be installed and begin production is quite evident now. The project will involve the construction of the well, pump station with variable speed pumps, controls for the pumps to eliminate overfilling the tanks, and chemical feed system with analyzers. The project, since the test well analysis has been performed, should take less than two years to complete. But it is a priority due to the situation with the Vanity Fair well. Also, recently, there was concern from the Bayou La Batre Fire Department, that there was not enough flow capable to handle the necessary fire flow requirements for the schools nor industries. This additional flow will provide the necessary fire flow needs.	AL Portal	N	N	N	N	N	N	N	N	N																			
Iron and Manganese Removal - Sand Filtration - Existing Wells	259	Annette Johnson	Bayou La Batre	5000000	The City of Bayou La Batre is served by two (2) existing production wells. Both wells together produce greater than 1400 gallons per minute. Although this has proven sufficient for drinking water supply, there is still issues with discoloration of the water caused by iron and manganese. The aquifer on the Alabama coast exhibit higher than normal levels of iron and manganese concentrations than more inland wells and aquifers have in the source water. To reduce the concentration of iron and manganese and limit the issues with "red water", there is a proposed project to install a green sand filter to remove and bind the iron and manganese and reduce exponentially the levels of iron and manganese in the source water. Both wells will receive these sand filtration units. The backwash from the sand filters will flow to the WWTF. The project cost for the installation of green sand filtration units on the existing wells is approximately $5,000,000. The removal of the iron and manganese will greatly improve the taste and odor of the drinking water from the Bayou La Batre Utilities Department.	AL Portal	N	Y	N	N	N	N	N	N	N																			
Water Distribution System Upgrades	260	Annette Johnson	Bayou La Batre	4000000	Recently, during a review of the distribution system fire flow capacity for the Anna Booth Elementary School, it was determined that parts of the distribution were not sized properly to allow the higher volumes necessary for the fire protection for the school. This is also a dead end line and potentially	AL Portal	N	N	N	N	N	N	N	N	N																			

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					has the ability to allow a higher level of disinfection by-products to develop and required more frequent flushing of the system and increase the loss water percentages out of the system. The solution to provide the higher volumes of flow and the elimination of the dead end areas is to loop the water system and upgrade the size of the distribution lines. Also, there is the opportunity to increase the service line size to the Beach front and Shell Belt Road, Bayou side. These lines are currently 2" and need to be increased to 6" lines for adequate water flow service to these areas.																													
Collection System/Lift Station Upgrades	261	Annette Johnson	Bayou La Batre	11500000	The collection system includes over 16 lift stations that are in need of upgrading the structures, pumps, and controls along with the installation of auxiliary backup pumps to eliminate sanitary sewer overflows throughout the collection system. The upgrades will involve installing larger pumps with controls, and installing by-pass pumps instead of generators. The collection system rehabilitation is over five (5) miles of collection system that is exhibiting high infiltration and inflow. The collection system is recommended to be slip lined, which the method used for I&I reduction less than five years ago on other areas of the collection system. It is anticipated to cost $11,500,000.00 to perform this system upgrade. The environmental benefit is reduced infiltration and inflow and reduction of sanitary sewer overflows into highly sensitive waters of the State of Alabama.	AL Portal	N	N	N	N	N	N	N	N	N																			
Bayou La Batre WWTF-Class A/EQ Sludge Treatment	262	Annette Johnson	Bayou La Batre	3000000	The Bayou La Batre WWTF was completed in 2012. The initial treatment of the waste activated sludge included the aerobic digestion to reduce organics and pathogens, along with the dewatering of the sludge into a cake form to dispose as an agricultural soil amendment. This sludge application is currently handled by an outside firm responsible for the management and reporting of the biosolid applications on the agricultural fields. The Bayou La Batre Utilities Board wants to upgrade the level of treatment of the sludge from a Class B to a Class A/EQ sludge. The higher level of sludge classification requires additional pathogen removal. This can be accomplished by the installation of the Bioset Unit. This unit provides treatment via higher temperatures and higher pH values to achieve the pathogen reduction. With the achievement of the higher level of pathogen removal, it allows the Utilities Board to the opportunity to market the product for soil amendment. The product can be used like potting soil. During the construction of the new WWTF in 2010, another adjacent space was plumbed and would provide the necessary location for the new Class A/EQ sludge system. The estimated cost is approximately $3,000,000	AL Portal	N	Y	N	N	N	N	N	N	N																			
Bayou La Batre WWTF - Odor Control Upgrade	263	Annette Johnson	Bayou La Batre	1000000	The Bayou La Batre WWTF was completed in 2012. During the initial construction of the new WWTF, an odor control system was installed to provide the wet scrubbing to remove any noxious odors from the seafood waste being discharged from the industries specializing in seafood processing. The previous wastewater flow from these industries discharged directly into Portersville Bay. The odor control system installed at the new WWTF has experienced problems with the corrosion of the unit after less than 3 years in operation. Unfortunately, the systems manufacturer is no longer in operation and spare parts do not exist. To provide a means to control the odor from the seafood wastewater, we are proposing installing a new unit from another	AL Portal	N	N	N	N	N	N	N	N	N																			

Project Information								Restoration Types Addressed										Programmatic Damage Assessment and Restoration Plan (PDARP) Criteria		Public Notice	Oil Pollution Act (OPA) Criteria (15 CFR 990.54)			Additional Criteria									
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					manufacturer. This new unit will prevent the corrosion of the process units in operation at the WWTF like the screening headworks which lies directly above the existing dysfunctional odor control unit. The engineer's cost estimate for the new unit is $1,000.000.																												
Bayou La Batre WWTF-Handicapped Elevator	264	Annette Johnson	Bayou La Batre	300000	The Bayou La Batre WWTF was completed in 2012. Although a very state of the art WW facility, it lacks the necessity for handicap entry into the main floor. The Bayou La Batre Utilities Board has requested the installation of a handicap elevator at the WWTF. This will serve two purposes, handicap accessibility, but also the ability to evacuate any injured personnel from the office floor to ground level without accessing the stairs. There exists a location outside the entrance on the office floor which will allow the construction of this handicap service elevator. The preliminary engineering cost is approximately $300,000.	AL Portal	N	N	N	N	N	N	N	N	N																		
Bayou La Batre WWTF-Operations Elevated Walk	265	Annette Johnson	Bayou La Batre	300000	The Bayou La Batre WWTF was completed in 2012. The existing method to access the aeration basin is the ascent and descent of multiple sets of stairs. To better serve the operators analyzing the process in the aeration basin for mixed liquor suspended solids, pH, alkalinity, dissolved oxygen, etc.; it is proposed to construct a walkway from the laboratory/office to the aeration basin. As stated, this will provide readily available access to the process and provide less chance of Injury via the multiple sets of stairs currently required to analyze the basin. The proposed elevated walkway will be one linear walkway directly to the three stages of the activated sludge process. The preliminary cost estimate for this elevated walkway project is approximately $300,000.	AL Portal	N	N	N	N	N	N	N	N	N																		
Perdido Watershed Access Improvement	266	Cal Markert	Baldwin County	109670	Located at the conjunction of the Perdido and Styx Rivers, this site offers access to the managed Perdido River Corridor and the Lillian Swamp. This project will repair deteriorating wooden hardwall bulkhead structures currently in an increasing state of deterioration. There are public safety considerations, public access to the natural resource considerations, as well as environmental impact considerations should the existing bulkhead wall fail. The Project plans to replace the wooden bulkhead structure with new synthetic sheet pile anchored with steel "H" beams as tie backs. An Interpretive Information Phase for improvements to the public park and vehicular parking area will include interpretive and informative signage regarding the watershed and the site location, watershed and habitat educational materials, pathfinder signage and security lighting. Businesses in the Seminole area will benefit from increased utility of the park and watershed access. Through interpretive and educational materials placed strategically in the park, public awareness of watershed issues and the diversity of coastal water environments will be increased. Partnering will be sought for Interpretive Information planning and design with ADCNR, Alabama Water Watch, Mobile Bay NEP, FDEP, North West Florida Water Management District, Baldwin County Historical Society.	AL Portal	N	N	N	N	N	N	Y	N	N																		
New Stream-Gaging Station On Fish River	267	Cal Markert	Baldwin County	87250	The Baldwin County Commission seeks funding for a new stream-gaging stations on Fish River at Baldwin County Road 32 to assist authorities in flood forecasting and flood alert efforts. Flooding of roadways, campgrounds, residential communities, etc. are a significant concern in the area. Additional	AL Portal	N	N	N	N	N	N	N	N	N																		

Project Information							Restoration Types Addressed											Programmatic Damage Assessment and Restoration Plan (PDARP) Criteria		Public Notice	Oil Pollution Act (OPA) Criteria (15 CFR 990.54)				Additional Criteria								
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At County Road 32					river stage and streamflow data for Fish River will improve managers' ability to predict the timing and magnitude of flood events, thereby helping protect property and lives. Through prior working agreements, the USGS and the Baldwin County Commission will manage the construction, installation and operation of a continuous-record stream-gaging station on Fish River that will monitor both river stage and streamflow. Data will be recorded and logged at 15-minute intervals and transmitted via GOES (Geostationary Operational Environmental Satellite) every hour. The data will be displayed on the USGS web site at http://al.water.usgs.gov/data, and updated hourly. This data is publicly available for use by planners, businesses, emergency managers, science research programs, educational programs, and the general public. The new data will be coordinated with information from existing stream-gaging stations on Magnolia River and Styx River, and a rain gage at Fish River near Silverhill, AL.																												
Lillian Park Beach Habitat and Shoreline Protection Improvements	272	Cal Markert	Lillian	679500	Erosion of shoreline, loss/degradation of shoreline, nearshore and littoral habitat is occurring at and adjacent to this location. This project will create and enhance 700 linear feet of beach habitat while providing long term stability and shoreline protection, increase existing habitat value and resilience, increase public safety and protect the investment made in prior improvements providing greater public access to natural resources. To enhance and protect shoreline habitat, this project will also remove, repair and/or replace existing poorly-performing breakwater structures. Should existing conditions continue without this project's improvements, there are real and ongoing negative considerations to degradation of the immediate shoreline and littoral habitat, public safety and public access to the natural resource. The Owner is initiating the project through a Coastal Processes Study to assess existing conditions and littoral transport mechanisms, following which the concepts presented here may be modified. Included in this project concept is an Interpretive Information Phase to enhance outreach and education, improve the public park and vehicular parking area. This Interpretive Phase will provide interpretive and informative signage regarding the watershed and site location relevant to Gulf of Mexico access and hyrdography, watershed and habitat educational materials, and pathfinder signage. Businesses in the Lillian area will benefit from increased utility of the park and watershed access. Through interpretive and educational materials placed strategically in the park, public awareness of watershed issues and the diversity of coastal water environments will be increased. Coordination with local economic development will be included in the project's management plan to foster development of new opportunities and links with existing outdoor tourism businesses to best capture job creation and resource stewardship potential.	AL Portal	N	N	Y	N	N	N	N	N	N																		
Development of a Comprehensive Ecotourism Effort to Provide Jobs and Economic Stability for the Communities of	273	Michael Magnoli	Mobile County	500000	South Mobile County has successfully established itself as a regional hub for substantial seafood and shipbuilding industries. Currently, the local economy is almost totally dependent on these sectors and is susceptible to economic and environmental aberrations. The region recognizes the need to aggressively develop projects that will bring greater economic diversification with additional employment opportunities for the area's 20,000 citizens. It is	AL Portal	N	N	N	N	N	N	N	N	N																		

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South Mobile County					equally vital that the region carefully attract those businesses that can integrate well with the existing economy and simultaneously promote conservation of the local natural resources. However, the small communities of south Mobile County, including St. Elmo, Grand Bay, Dixon Corner, Irvington, Bayou La Batre, Coden, Mon Luis Island, Dauphin Island, Fowl River and Belle Fountain lack the financial resources to underwrite this type of comprehensive economic planning and development. The South Mobile County Community Development Corporation (SMCCDC) was created specifically to assist these communities with economic and community development. Months of research has revealed that the top priority for economic development for these communities, as identified by the citizens, is the development of a comprehensive ecotourism industry. The SMCCDC and the University of South Alabama are working together to define the existing and potential ecotourism related projects and resources in each south Mobile County community. This information will then provide the basis for a comprehensive "Ecotourism Trail" extending from Grand Bay to Dauphin Island and then up to Bellingrath Gardens. Examples of potential points of interest along the trail will include, but not be limited to, bike paths, walking/nature trails, a coastal instructional center, recreational boating/canoeing/kayaking, birding trails, a maritime museum, an African American Heritage Center, parks, waterfront tours, community gardens, working waterfronts, a farmer's/fisherman's market, oyster farm visits and boat tours/sightseeing. The ultimate objective is to provide a third major industry in south Mobile County (Ecotourism) to supplement the ship building and seafood industries. Over a period of five years, the comprehensive promotional plan for ecotourism will be developed; a combination of public and private funding will be explored; and projects will be initiated to bring jobs and economic stability to these communities.																												
Sediment Reduction Program	274	Bill Melton	Mobile County	59474528	Erosion and sedimentation can negatively impact stream and wetland habitats and their inhabitants, reducing biodiversity and eliminating sensitive species. Along with impacting habitats, sediment accumulation in streams can also can raise streambeds and make flooding worse. The objective of this project is to reduce the potential for erosion and sedimentation from unpaved roads in the coastal areas, wetlands, and floodplains of unincorporated Mobile County. This will be achieved through the development and implementation of a Sediment Reduction Program that undertakes road improvement projects based on selection and ranking critieria targeted towards improving environmental conditions and meeting road maintenance needs. A Geographic Information Systems approach will be utilized to identify environmentally sensitive roads to include in the program. Selection and	AL Portal	N	Y	N	N	N	N	N	N	N																		

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					prioritization critieria will include unpaved roads that are within the Alabama Coastal Area (below the 10 foot contour), the regulatory floodplain, and/or jurisdictional wetlands. Preliminary identification indicates that there are at least 55 unpaved roads countywide to consider for this program. The Mobile County Pay-As-You-Go Program includes a rating of all unpaved roads that takes into account maintenance details as well as estimated costs to improve each one to meet ALDOT standards and specifications. Additional elements of the project include the development of guidance for environmentally friendly road design and construction practices to include in program implementation.																													
Testing for BP Oil on the Alabama Coast	275	Ross Henderson	Lower Alabama	7000000	The primary purpose of this project is to test for oil along the Alabama Gulf Coast to determine where it is and how to deal with it today and the future. This process will take about one year to complete. I will have several boats and people to help do the project. We will be testing for oil on the water, barrier islands, wetlands, and marshlands, along with all bayous and rivers. It will be from the Mississippi/Alabama state line to the Florida/Alabama state line, to three miles out from Dauphin Island and Gulf Shores, to the northern part of Mobile Bay.	AL Portal	N	N	N	N	N	N	N	N	Y																			
Grand Bay Sewer Service Project	276	Buddy McGregor	Grand Bay	3480068	This project will extend 4,400 linear feet of new decentralized sanitary sewer service to 300 customers in the Grand Bay area to remove failing on-site septic tanks. The residents and businesses in Grand Bay rely on individual on-site septic tanks with high failure rates due to poorly-drained soils and its adjacency to Grand Bay - an ecologically significant water body located west of Portersville Bay, north of the Mississippi Sound at the Alabama Mississippi border. Grand Bay, Alabama is a densely populated unincorporated area located in southwestern Mobile County. This community is located in a heavily-traveled corridor of Interstate 10 and Highway 90 between Alabama and Mississippi. The Grand Bay community is well-established as it contains schools, numerous retail businesses, several households. The Grand Bay Water Works Board, Inc. (The Board) is a non-profit public utility in southeast Mobile County serving a geographic area of approximately 45 square miles. The system currently supplies drinking water to approximately 4,100 customers and public sewer to approximately 500 customers. In the past 10 years, with encouragement by the Environmental Protection Agency (EPA) and the Alabama Department of Environmental Management (ADEM), the Board has implemented state-of-the-art decentralized concepts in its strategy to serve customers with public sewer. This regional decentralized approach to wastewater treatment reduces the number of surface water discharges, offers alternatives to costly centralized treatment and collection, eliminates failing septic systems, and protects public health and the environment. To date, two facilities have been constructed in Grand Bay, promoting alternatives to high energy traditional wastewater treatment and disposal. This project will construct the collection system consisting of 4,400 linear feet of collection line including hook up fee and septic tank abandonment costs and will provide much needed infrastructure to remove the environmental threat to the adjacent productive waterways and oyster habitat of Grand Bay and Mississippi Sound.	AL Portal	N	Y	N	N	N	N	N	N	N																			

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Low Pressure Sanitary Sewer for Dauphin Island Parkway	277	Charles Hyland	Mobile County	5998580	This project will construct new low pressure sanitary sewer south of the Dog River and directly West of Mobile Bay. The new infrastructure will serve areas that currently do not have access to centralized sanitary sewer and use on-site individual systems. Many of these systems suffer from lack of maintenance and/or damage from rising floodwaters. Further, there are many aging on-site septic systems built to lower standards and were damaged by Hurricane Katrina. The project will connect 438 residences and businesses south of the Dog River Bridge, west of Mobile Bay and north of the Theodore Ship canal. Most of the new sewer will be installed via direct cut and directional bore. This project will eliminate the discharge of pathogens into surface waters and will improve water quality and help Alabama's seafood industry thrive. Project costs will include engineering, permitting and construction of new sewer lines along with the costs of household connections including required grinder pumps.	AL Portal	N	Y	N	N	N	N	N	N	N																		
Perch Creek Area Sanitary Sewer Trunk Line Cured in Place Pipe (CIPP) Project	278	Charles Hyland	Mobile, AL	5998590	This project will install 26,900 linear feet of Cured-in-Place-Pipe or CIPP inside sewer trunk lines in the Dauphin Island Parkway community. This innovative technology installs a liner inside the existing leaky older sewer line. The Dauphin Island Parkway community is a densely populated area located just north of the Dog River in southern extent of the City of Mobile. The area is low-lying and suffers from frequent flooding events. During Hurricane Katrina, the area was inundated and many homes were severely damaged. Sanitary Service is provided by the Mobile Area Water and Sewer System (MAWSS) and most of the sewer collection infrastructure is need of upgrade and repair. There are several 16", 18", 24", 30", 36", and 48" trunk lines that date back to the 1940's and 1950's when Brookley Field was a bustling economic engine for the area. The old trunk lines have outlived their useful lives and as result, there is a great deal of inflow and infiltration (I and I) into these lines. Further, the lines can be compromised by roots causing dangerous backups and sewage spills. This project will install CIPP in problematic sewer trunk lines located in the Perch Creek basin (just north of the Dog River). These trunk lines often break, causing "band-aid" fixes to the main lines lines. This project will greatly improve the function of the sewer basin and will result in less sewage spills and overflows. In addition, the flows to the Waster Water Treatment Facility will be greatly reduced.	AL Portal	N	Y	N	N	N	N	N	N	N																		
Enhancement and Stabilization of Priority Coastal Shoreline on Fowl River	279	Christian Miller	Fowl River	1950000	This proposed project, designated as the highest priority coastal zone project in the recently completed Fowl River Comprehensive Watershed Management Plan (WMP), would stabilize 2200 linear feet of shoreline providing habitat enhancement and protection of priority coastal wetlands and uplands. The project consists of bank regrading, limited structural stabilization of the shoreline and marshes, back-filling with suitable material where needed, and installation of appropriate vegetation. The lower reach of Fowl River, which encompasses the project area, is characterized by coastal marshes and areas of low topographic relief. The project area has established saltwater marshes and fringe marshes consisting mainly of smooth cord grass and saltwater rushes, with some forested wetlands at higher elevations. The project area comprises habitats that support a diversity of wildlife, including coastal and wading birds, waterfowl, neotropical migratory birds, and nursery	AL Portal	N	N	N	N	N	N	N	N	Y																		

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					habitat for coastal finfish and shellfish (such as speckled seatrout, redfish, Atlantic croaker, shrimp, and blue crabs). Shorelines along Fowl River have changed dramatically over the previous 80 years. The morphologic changes that have occurred in Fowl River are mostly due to natural processes, but have been exacerbated by anthropomorphic stressors within the watershed. These processes include changes in streamflow and sediment loading, high flow events, high water events, sea level rise, and wave action. Primary issues facing the intertidal zone of Fowl River are sea level rise and loss of habitat. The Sea Level Affecting Marshes Model (SLAMM) analyses performed as part of the WMP show that tidal marsh habitats have adequate space to migrate into low-lying undeveloped upland areas as sea levels rise. Accordingly, it is recommended that large undeveloped tracts in the lower Fowl River Watershed are identified for potential public acquisition as conservation easements to ensure adequate land area for upland migration of tidal marsh habitats with future sea level rise.																												
Survey and shoreline change analysis of Mobile Bay and Mississippi Sound, Baldwin and Mobile Counties, Alabama	280	Stephen Jones Jones	Coastal AL	352609	Shoreline change on Alabama's tidal shoreline can be characterized as inevitable and unpredictable. Although chiefly due to tropical storm systems, all natural processes coupled with human erosion practices are the dominant cause of adverse impacts. Shoreline change can also be observed through ensuing beach recovery from these adverse effects, beach-front development, inlet maintenance, and shore stabilization practices. It is essential to document and quantify shoreline change rates to increase public awareness of erosion issues and make up-to-date data accessible to stakeholders. No comprehensive study has been done to explore backshore and nearshore topography to establish any feasible baseline condition and understand short and long term change rates in Mobile Bay and Mississippi Sound. Both locations are targets for living shoreline installation and restoration. Shorelines of particular interest include failing armored shorelines, natural beach and marsh shorelines, and shorelines previously identified with critical erosion along the western and the northeast section of Mobile Bay. Further, it has been suggested that the Gaillard Island and channelization have had a negative impact along the western shoreline (James Leon Smith, Sr., PE, United States Army Corps of Engineers, retired, personal communication, February 2, 2016). Objectives for change detection are supported through the assessment of historic orthophotography and the collection and compilation of survey-grade topography that quantifies understanding of shoreline change. These objective are: 1) Implementation of recent orthophotography and conversion of historical aerial imagery into orthophotography for shoreline vector development and use in the Digital Shoreline Analysis System (DSAS) erosion model to establish shoreline change trends. 2) Annual field acquisition and comparison of backshore and nearshore shore-perpendicular topographic survey data. The Geological Survey of Alabama (GSA) will establish and monitor 166 transects across the locations mentioned above. A Topcon RTK GPS and a SonarMite MILSpec™ Echo Sounder will be used to acquire backshore and nearshore topographic data to establish a needed	AL Portal	N	N	N	N	N	N	N	N	Y																		

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					baseline and trend assessment. The DSAS model will statistically quantify estimated erosion and accretion rates. This project will generate geospatial characterization data that will be used in planning within Alabama's coastal waters and direct further erosion need assessments.																												
Sediment characterization and geochemistry distribution within Mobile Bay and Mississippi Sound, Baldwin and Mobile Counties, Alabama	281	Stephen Jones Jones	Coastal AL	755304	The last investigation of the sediments of Mobile Bay was published in 1979 by W.C. Isphording and G.M Lamb. Their study was limited in coverage and no further sediment work has been attempted since. The lithological character, distribution, and quality of sediment in Mobile Bay is influenced by many factors such as dredging, in-filling, natural and human-influenced hydrodynamics, geomorphologic change, and contamination. Sediments in Mobile Bay are derived from multiple sources including smaller watersheds and rivers draining the Mobile-Tensaw River Delta complex. The goal of this investigation is determine the distribution, character, and quality of sediments, determine the source of sediments, and compare this new information to the Isphording and Lamb 1979 study. Bottom lithology and sediment quality is integral for any hard bottom mitigation, planning, or restoration activity. An investigation of the type proposed will be critical as bottom sediment resources are targeted for placement or use regarding restoration and mitigation activities that must maintain high quality ecological functions. The Geological Survey of Alabama will sample bottom sediment in Mobile Bay and Mississippi Sound using standard sediment sampling methods estimated on a 1.5-km grid spacing. These samples will be analyzed for grain size using either a laser grain size analyzer or a Ro-Tap and hydrometer method. Clay smears will be developed and analyzed using x-ray defraction. Additionally, samples will be collected within estimated 4-km grid for inorganic and organic quality characterization. In partnership with the University of Alabama sediment trace metal content will be determined using inductively coupled plasma spectrometry (ICP). Gas chromatography-mass spectrometry will be used to determine organic isotopic and molecular composition of sediments to yield tracers (total organic carbon [TOC], total nitrogen [TN], d13CTOC, and d15N) for sediment sources and source-specific biomarkers including normal and isoprenoid hydrocarbons, fatty acids, and fatty alcohols. These tracers have characteristic values for each potential source and allow distinguishing and estimating contributions of sediments of various sources. Products of these investigations will include a GIS project for all analytical results, contour maps of inorganic elements and clay percentages, and an updated bottom sediment map determined using the Wentworth scale and Shepard classification and nomenclature.	AL Portal	N	N	N	N	N	N	N	N	Y																			
Current and wave analysis study of Gaillard Island in Mobile Bay, Mobile County, Alabama	282	Stephen Jones Jones	Coastal AL	169180	Change along Alabama's tidal shoreline is best characterized as inevitable and unpredictable. Significant shoreline change is due to unpredictable tropical storm systems, but shoreline erosion is also a function of the inevitable daily natural hydrodynamic processes coupled with human-induced practices that adversely impact shorelines. The western shoreline of Mobile Bay has been documented as an area of significant erosion. It has been suggested that Gaillard Island, an artificial island created by the U.S. Army Corps of Engineers for disposal of dredged ship channel sediments, the actual channels	AL Portal	N	N	N	N	N	N	N	N	Y																			

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					themselves, as well as ship movements in these channels, have a negative impact along the western shoreline (James Smith, Sr. P.E., U.S. Army Corps of Engineers, retired, personal communication, February 2, 2016). It is essential to document and quantify current patterns and wave regimes along the western shoreline where hydrodynamics are modified by the position of Gaillard Island, dredged channels, and by shipping activity. The proposed investigation will quantify current patterns and wave regimes along the western shoreline of Mobile Bay to understand the hydrodynamic impact of Gaillard Island. No comprehensive study has been completed exploring the wave and current regime around the island and waters between the island and western shoreline. The Geological Survey of Alabama (GSA) will partner with the University of South Florida School of Geosciences to monitor wave and current regimes for 40 days. A ship-mounted acoustic doppler profiler will be used to acquire current data and assess the impacts of geomorphology, ebb and flood tides, and wakes generated in the shipping channel as influenced by Gaillard Island. To better understand wave regimes that induce shoreline erosion, two directional wave gages will be deployed and monitored. The western shoreline is targeted for living shoreline installation and restoration and the data collected in this study will further our hydrodynamic knowledge of the system contributing to better design of living shorelines, restoration projects, shoreline protection measures, and potential modifications to Gaillard Island. This investigation will create a hydrodynamic characterization and profile for use in coastal planning and direct further assessments of erosion impacts in the study area.																													
Linking water quality, marine food web dynamics, and ecosystem health in Alabama: Improving seafood safety and human health	288	Alison Robertson	Mobile Bay	2986322	Alabama is home to significant heavy industry and agriculture, whilst also supporting high seafood productivity, budding oyster aquaculture, and tourism industry along the coast. The combined effects of toxins and anthropogenic contaminants on marine biota represent a significant and continued threat to both ecosystem and human health, yet are poorly characterized in the coastal zones of Alabama. This project will develop, integrate, and enhance water and marine sediment monitoring in Mobile Bay and using key marine and estuarine bioindicator species (invertebrates, fish, alligators), evaluate health indices and food web dynamics. This will allow us to assess impacts and characterize and improve on environmental contaminant baselines in our waterways, so that we may identify the sources and sinks of these toxins and dedicate efforts towards prevention and science based management of these critical resources. We will develop publicly accessible tools that will provide near-real time data on water and sediment quality, contaminant levels in key species, and ecological risk in coastal areas. These much needed datasets will inform remediation and mitigation efforts to improve the sustainability and recovery of our seafood species and improve the safety and health of local seafood.	AL Portal	N	Y	N	N	N	N	N	N	Y																		
Coastal Avian Rescue & Rehabilitation Center	290	Leslie Gahagan	Foley	850000	Baldwin County boasts a variety of coastal and upland habitats that are home to a variety of native and migratory bird species. Many of these habitats and actual birds were impacted by the Deepwater Horizon release. At the time of the incident there were no facilities in Baldwin County to rescue or	AL Portal	N	N	N	N	Y	N	N	N	N																		

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					rehabilitate these avian species that were impacted. Since that time, the Coastal Wildlife Rescue and Rehabilitation Center was created and permitted as a volunteer, nonprofit group to meet the needs of injured birds throughout Baldwin County. This group is located in the Foley's Graham Creek Nature Preserve where they have 0.5 acre with an office trailer as rehab facilities and flight cages. As a volunteer effort with no funding, they struggle to maintain their purpose of successful rescue and rehab of birds. In 2014, they acquired 247 birds, including migratory species, songbirds, shore birds and raptors. There were 86 successfully released, and 120 were either dead on arrival or perished from their injury. There were also 12 transfers to larger facilities and 29 birds euthanized. These numbers demonstrate a dire need for a funded facility to address injured bird species in Baldwin County. This project seeks to absorb and enhance this federally permitted facility for the rescue, initial analysis, treatment, rehabilitation and subsequent release of the bird to its habitat. The first step would be the design and plan of a permanent facility to include an office area, wash area, food preparation area, laboratory and indoor treatment room. The next step would be construction of the facility and outdoor improvements to include a privacy fence, small flight cages and large bird pens with water source for shore birds. Once the facility is completed, it would be stocked with supplies and ancillary equipment as well as a full time director hired through the City. A total cost for the project to include the first two years of operation would be $850,000. The City of Foley plans to seek out other municipal partners to assist with long term funding of operation and maintenance of the established facility. As Graham Creek currently houses an interpretive center, educational signage and information could be presented to the public without disruption to the rehab process. This collaborative effort would provide Baldwin County with access to a rehabilitation center saving countless birds injured by human impacts.																												
Aloe Bay Harbour Town	291	Jeff Collier	Dauphin Island	2183485	Phase I of the Aloe Bay Harbour Town (See Project No 79) will consist of the required Architectural and Engineers fees, soil testing, Environmental Assessments/Permits and property acquisition (to connect existing town-owned properties). This project encludes ecological, environmental, economic and public access features that will preserve habitats and bolster local economies for years to come.	AL Portal	N	N	N	N	N	N	Y	N	N																		
Magnolia River Preservation Project – Holmes Property	293	Yael Girard Girard	Weeks Bay	3233500	Acquisition of the Property by the Weeks Bay Foundation ("WBF") to (i) protect it in perpetuity and (ii) address restoration needs to ensure that it provides the best habitat for native and endemic species. This project will be accomplished with support from the town of Magnolia Springs and the Weeks Bay National Estuarine Research Reserve. The Property will be purchased from a willing seller at the Yellow Book appraised value and held by the WBF who, as an accredited land trust, will maintain the conservation value of the Property and prohibit any future development. In addition, the WBF will work with the Weeks Bay Reserve to create a management plan and prioritize restoration needs, including re-creation of longleaf pine savannas, pitcher plant bogs, and marsh and swamp habitat (where appropriate).	AL Portal	N	N	Y	N	N	N	N	N	N																		

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					As one of the few remaining tracts of undeveloped (but developable) riverfront land in Magnolia Springs, the Property has great environmental and public benefit. It is home to red bellied turtles (Pseudemys alabamensis) and gopher tortoise (Gopherus polyphemus). The red bellied turtle is listed as endangered and the gopher tortoise is listed as threatened by the US Fish and Wildlife Service. Protection of the Property will give these species valuable support. The scenic beauty of the Property is enjoyed by visitors and locals, and the estimated mile of waterfront wetlands provide habitat and shelter for wading birds and duck species and marine life. The filtration provided by the wetlands increase water quality and make the Magnolia River and Weeks Creek more enjoyable places to swim, kayak, and fish. Additionally, Magnolia River and Fish River are the two largest tributaries of Weeks Bay. Weeks Bay is listed as an "Outstanding National Resource Water" and is home to numerous native plant and animal species. Fish River is listed as a 303(d) waterway for unsafe levels mercury. It is only due to the excellent water quality of Magnolia River that Weeks Bay is able to sustain and support such an array of wildlife. As development continues throughout Baldwin County, and especially on the river banks of both Magnolia and Fish Rivers, we will see a decline in water quality. Protection of the Property will ensure that over a mile of riverfront remains in its natural state, thus mitigating erosion, siltation, eutrophication, and residential flooding – all factors that directly correlate to water quality and the health of the entire Weeks Bay ecosystem.																												
Toward Valuation of the Mobile Bay	294	Semoon Chang	Mobile Bay	120000	On June 30, 1999, this investigator and his assistant, Shelia Canode, completed a study titled "Toward Valuation of the Mobile Bay: A Study" for the Mobile Bay NEP. Annual expenditures related to Mobile Bay in the study included deepwater transportation, natural gas, waterfront homes, eco-sensitive industries, seafood industry, boat sales/repair/maintenance, beach activities, charter boats, and non-consumptive expenditures. An earlier article on the similar subject titled "Economic Aspects" was prepared by William Hosking, Howard Clonts, Albert R. St. Clair, and myself, and was included on pages 121-130 of the January 1990 NOAA Estuary of the Month Seminar Series Number 15: "Mobile Bay: Issues, Resources, Status, and Management". The primary objective of the proposed study is to update and expand the 1999 study so that the area's policy makers, community leaders and the general public can be reminded of the importance of preserving the delicate balance of Mobile Bay for future generations. Expansion of the study will be in the area of in-depth literature survey of benefit valuation of maintaining the natural environment. There will be no surveys other than in-depth interviews of many key persons as well as my own research that includes a number of national journal publications on the related subjects. The secondary objective is to search for ways to apply findings of this study for practical use. Hopefully, the study will generate information that can improve community discussion and decision-making process on numerous controversial issues relating to Mobile Bay that surface almost on a daily basis. One problem with	AL Portal	N	N	N	N	N	N	N	N	N																			

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					many of these issues is that there is the other side that merits just as much attention as whatever the proposal may be.																												
Promotion of Year-Round Tourism Activities on Dauphin Island, with emphasis on the "off-season."	296	Jeff Collier	Dauphin Island	2500000	Dauphin Island is seeking $2.5 million ($500,000 a year for five years) in Alabama Coastal Restoration funding. The barrier island off the coast of southwest Alabama is a sparkling jewel in the state's tourism crown, offering visitors a unique beach vacation unlike any other. While thoroughly modern in infrastructure and public services, it is at the same time an old-fashioned resort community where people can kick back and enjoy the breathtaking beauty of sand, surf and sunsets. In the wake of the 2010 oil spill, Dauphin Island experienced a precipitous drop in the number of tourists, not just in its formerly robust summer season but also in the fall, winter and spring months. Since then, with assistance from the BP Gulf Seafood and Tourism Promotional Fund, the town has begun rebuilding and expanding its tourism economy by promoting its attributes regionally and even nationally. Funding from the Alabama Recovery Council will allow the town to continue to grow its tourism economy through print, electronic and social media advertising as well as a public relations outreach and financial partnerships with the Dauphin Island Chamber of Commerce and South Mobile County Tourism Authority. The result will be a more stable economy that allows its businesses and tourist attractions to thrive throughout the year, not just in the summer. In addition to supporting jobs for island residents, the income from tourism provides more than half of the revenue in the town's $2.6 million annual budget. A healthy Dauphin Island economy also contributes to Mobile County and State of Alabama sales, lodging and property taxes. The ability to continue and expand its tourism outreach for another five years will permit Dauphin Island to promote its attractions that include: historic Fort Gaines; the 137-acre Audubon Bird Sanctuary and Dauphin Island Sea Lab and Estuarium, which offer numerous eco-tourism opportunities; Indian shell mounds dating back at least 1,000 years; and beaches on Mobile Bay, the Gulf of Mexico and Mississippi Sound. In addition, Dauphin Island will be able to boost its new brand, "The Sunset Capital of Alabama," and will build on its growing reputation as a laid-back, family-oriented tourist destination. Visitors are the key to Dauphin Island's prosperity, both now and in the future. It is paramount that the island be able to continue its recovery from the BP oil spill. The Alabama Coastal Restoration funding is a key component of that recovery.	AL Portal	N	N	N	N	N	N	N	N	N																			
Improving Coastal Water Quality through implementation of Clean Marina Standards	297	Christian Miller	Mobile and Baldwin Counties	752000	Marinas and recreational boating are recognized as potential sources of nonpoint source pollution in coastal watersheds. The Alabama-Mississippi Clean Marina Program (AMCMP) is a voluntary, incentive-based, program developed and implemented by Mississippi-Alabama Sea Grant Consortium and partners to promote environmentally-responsible and sustainable marina and boating practices. http://masgc.org/clean-marina-program This program, created to reduce water pollution and erosion in state waterways and coastal zones, helps marina operators protect the very resource that provides them their livelihood: clean water. The AMCMP	AL Portal	N	N	N	N	N	N	Y	N	N																			

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					promotes boater education, coordination among state agencies, and better communication of existing regulations, as well as offering incentives to creative and proactive marina operators. The AMCMP focuses on seven management measures identified by marina operators as priorities: Marina siting, design, and maintenance; Sewage management; Fuel management; Solid waste and petroleum recycling and disposal; Vessel operation, maintenance, and repair; Stormwater management and erosion control; Marina management and public education One of the major impediments to new marinas entering the program and becoming designated as "Clean Marinas" are costs associated with retrofitting existing infrastructure to meet clean marina standards, primarily this is infrastructure related to stormwater management at the marina. Many existing marinas along the Gulf Coast were constructed before current stormwater management requirements were in place. As a result, upgrading infrastructure to meet clean marina guidance may be cost-prohibitive to many perspective marina operators. A potential avenue to incentivize upgrading coastal marinas would be the creation of a cost-share program to offset the costs associated with these upgrades. Examples of potential projects that could be funded through this program are: Low Impact Development retrofits such as bioretention basins, infiltration swales, and pervious pavement; installation of oil/grit separators in existing stormwater infrastructure, installation of approved secondary containment for fluids and chemicals, and educational signage. Additionally, a successful cost share program for Clean Marina implementation has the potential to spread to surrounding Gulf States through their respective Clean Marina programs which are managed through their state's Sea Grant programs.																													
GulfQuest Deck 4 Exhibits Completion	298	Tony Zodrow	Mobile, AL	809195	Opened in 2015 on Mobile's downtown waterfront, GulfQuest (National Maritime Museum of the Gulf of Mexico) is the first maritime museum dedicated to the heritage and culture of the Gulf of Mexico – a $62 million educational tourism attraction that is raising the profile of Alabama and the Gulf Coast through its distinctive exhibits and programs. In addition to its sole focus on the Gulf region, GulfQuest is unique among maritime museums by featuring interactive, hands-on exhibits, complemented by maritime artifacts. Prior to the museum's opening, GulfQuest completed almost all of its permanent exhibits, except for its remaining Deck 4 exhibits which will focus on ship design and shipbuilding as well as historic ships of the Gulf Coast region. To date, GulfQuest has invested $1,213,725 in the design and fabrication of this final set of exhibits, with $733,445 remaining in fabrication and installation expenses with Hands On! Exhibits of St. Petersburg, FL. In addition, GulfQuest will incur $75,750 in administrative expenses associated with the completion of these exhibits. Once installed, visitors will enter through a tunnel that resembles the infrastructure of a modern ship, where they can view performance videos of ships under construction at Austal USA. Interactive exhibits like "Ship Design" will allow visitors to explore 3-D	AL Portal	N	N	N	N	N	N	N	N	N																			

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					renderings of a large ship and discover the complex engineering involved. "Ship Construction" will feature several interactives on Austal's ship design, materials and manufacturing methods. "Hull Shapes" will allow visitors to discover practical differences between monohull, catamaran and trimaran hulls in terms of ship design and purpose and see the advantages of each hull type. "Ship Stories" will feature five unique stories from the Gulf Coast's shipbuilding history—one from each state. Each story will include a detailed model of the featured ship, along with the storied history of that ship. Artifacts from two ships—the CSS Alabama and La Salle's flagship vessel La Belle—will be displayed. Other exhibits like "Anatomy of a Ship" will explore the similarities and differences between ships from different time periods—a Spanish Galleon and a World War II-era Liberty Ship. For this gallery, GulfQuest will develop new educational programs for families, school groups, and educators that utilize the new exhibits as resources and expand their themes through hands-on experiences in the museum's classrooms.																												
New Museum and Visitor Center at Fort Morgan	301	Lisa D. Jones	Fort Morgan	4000000	The Fort Morgan museum was constructed in 1967, and is no longer adequate to accommodate the functions of museum, gift shop, and exhibit space. The museum, when built, was designed for open storage of the collections. Due to inadequate space and lack of a dedicated curatorial storage area, staff can longer acquire/accept artifacts. The gift shop area is converted exhibit space, so display and inventory storage space is severely limited. The construction of a new museum will provide separate areas for a gift shop and curatorial storage. It will also provide an orientation space for assembling group tours, a theater space for educational programming, more exhibit space, and a stable and secure environment necessary for safeguarding our cultural resources. The Construction of Fort Morgan's New Museum will transform the community and region by enhancing the cultural resources of Fort Morgan, a national park, visited by over 75,000 people each year. This project will also improve the level of visitor satisfaction, which will in turn increases the site's demand and produces an upturn in heritage tourism attendance and revenue. Fort Morgan tells an important story of the evolution of military defense strategies employed by the United States over a span of more than 150 years. Today's National Historic Landmark was, at the time of its construction, part of a state of the art defense system. After the Civil War when Fort Morgan's armaments had become obsolete, the US still recognized the strategic importance of the site and invested in upgrading its armaments with four massive batteries. The again Fort, though clearly outmoded for its original purpose, continued to be play a part in US military planning throughout the Spanish-American War, World War I, and World War II. During all of the conflicts, its role changed according to the military needs of the area. Fort Morgan's importance extends beyond its military history. The acreage surrounding the Fort contains unique ecosystems providing habitat for many birds, endangered species, and plant communities. As coastal habitat is lost to development, Fort Morgan's natural setting becomes more and more valuable as a refuge for these species and a setting for telling their stories.	AL Portal	N	N	N	N	N	N	N	N	N																		

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					Today, Fort Morgan National Historic Landmark plays an important part in Alabama's Gulf Coast tourism industry.																												
Mobile Point Lighthouse Repair and Restoration	302	Lisa D. Jones	Fort Morgan	382890	The second Mobile Point Lighthouse is an iron tower built in 1872 to replace the original brick tower destroyed during the battle of Mobile Bay. In 1963 the iron tower was decommissioned and replaced by a steel tower. The historic lighthouse was removed from the site and stored until 1977, when it was donated to the State of Alabama. In 1991 the lighthouse was restored but had to be dismantled in 2003 because of deterioration. Since 2003 the lighthouse has been in storage. Structural reports indicate that before it was disassembled it was significantly rusted and in danger of damage during periods of high winds. Modern steel reinforcing components were more severely rusted than older cast iron components. The Mobile Point Lighthouse restoration will transform the community and region by enhancing the cultural resources of Fort Morgan, a National Historic Landmark and property of the Alabama Historical Commission, visited by over 75,000 people each year. This project will also improve the level of visitor satisfaction, which in turn increases the site's demand and produces an upturn in heritage tourism attendance and revenue. This restoration will have environmental benefits as well. By removing or minimizing harmful construction material and replacing it with more sustainable material, Gulf Coast habitats will be less at risk. Fort Morgan tells an important story of the evolution of military defense strategies employed by the United States over a span of more than 150 years. Today's National Historic Landmark was, at the time of its construction, part of a state of the art defense system. After the Civil War when Fort Morgan's armaments had become obsolete, the US still recognized the strategic importance of the site and invested in upgrading its armaments with four massive batteries. The again Fort, though clearly outmoded for its original purpose, continued to be play a part in US military planning throughout the Spanish-American War, World War I, and World War II. During all of the conflicts, its role changed according to the military needs of the area. Fort Morgan's importance extends beyond its military history. The acreage surrounding the Fort contains unique ecosystems providing habitat for many birds, endangered species, and plant communities. As coastal habitat is lost to development, Fort Morgan's natural setting becomes more and more valuable as a refuge for these species and a setting for telling their stories.	AL Portal	N	N	N	N	N	N	N	N	N																		
Restoration of Peace Magazine	303	Lisa D. Jones	Fort Morgan	300000	Peace Magazine is a brick masonry structure built by the Army for storage of artillery ammunition. Representative of the 1865 to 1908 era at Fort Morgan, it is one of at least forty-three structures built during the most active construction period in Fort Morgan's history, from 1897 to 1902. It is the only structure of this type remaining on the Gulf Coast. Severely damaged by Hurricane Frederick in 1979, the Magazine has continued to deteriorate over the years and has reached a critical stage. As a restored building, Peace Magazine would serve as an interpretive nature center. The Restoration of Peace Magazine will transform the community and/or region by enhancing the cultural resources of Fort Morgan, a national park, visited by over 75,000 people each year. This project will also improve the	AL Portal	N	N	N	N	N	N	N	N	N																		

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					level of visitor satisfaction, which will in turn increase the site's demand and produce an upturn in heritage tourism attendance and revenue. This restoration will stabilize this significant historical landmark and enable visitors to safely enjoy it. Fort Morgan tells an important story of the evolution of military defense strategies employed by the United States over a span of more than 150 years. Today's National Historic Landmark was, at the time of its construction, part of a state of the art defense system. After the Civil War when Fort Morgan's armaments had become obsolete, the US still recognized the strategic importance of the site and invested in upgrading its armaments with four massive batteries. The Fort, though clearly outmoded for its original purpose, continued to be play a part in US military planning throughout the Spanish-American War, World War I, and World War II. During all of the conflicts, its role changed according to the military needs of the area. Fort Morgan's importance extends beyond its military history. The acreage surrounding the Fort contains unique ecosystems providing habitat for many birds, endangered species, and plant communities. As coastal habitat is lost to development, Fort Morgan's natural setting becomes more and more valuable as a refuge for these species and a setting for telling their stories. Today, Fort Morgan National Historic Landmark plays an important part in Alabama's Gulf Coast tourism industry.																													
Restoration of the Lighthouse Keeper's House	304	Lisa D. Jones	Fort Morgan	495680	The Lighthouse Keeper's House is the oldest surviving wooden structure at Fort Morgan National Historic Landmark, a property of the Alabama Historical Commission. It is 1 of 3 structures built at Fort Morgan at the time of the construction of the new iron lighthouse in the 1870s. The one-story wing was built shortly after the Civil War to replace the keeper's house destroyed during the Battle of Mobile Bay. Presently, the Lighthouse Keeper's House functions as a storage building and suffers from persistent deterioration. With restoration, this structure would be used as housing for seasonal workers or become a revenue stream by serving as a vacation rental. The Restoration of the Lighthouse Keeper's House will transform the community and/or region by enhancing the cultural and educational resources of Fort Morgan, a National Historic Landmark, visited by over 75,000 people each year. This project will also improve the level of visitor satisfaction, which in turn increases the site's demand and produces an upturn in heritage tourism attendance and revenue. This restoration will also have environmental benefits. By removing or minimizing harmful construction material and replacing it with more sustainable material, Gulf Coast habitats will be less at risk. Fort Morgan tells an important story of the evolution of military defense strategies employed by the United States over a span of more than 150 years. The historic fort was, at the time of its construction, part of a state of the art defense system. After the Civil War when Fort Morgan's armaments had become obsolete, the US still recognized the strategic importance of the site and invested in upgrading its armaments with four massive batteries. The Fort, though clearly outmoded for its original purpose, continued to play a part in US military planning throughout the Spanish-American War, World	AL Portal	N	N	N	N	N	N	N	N	N																			

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					War I, and World War II. During all of the conflicts, its role changed according to the military needs of the area. Fort Morgan's importance extends beyond its military history. The area surrounding the Fort contains unique ecosystems providing habitat for many birds, endangered species, and plant communities. As coastal habitat is lost to development, Fort Morgan's natural setting becomes increasingly valuable as a refuge for these species and a setting for telling their stories. Today, Fort Morgan National Historic Landmark plays an important part in Alabama's Gulf Coast tourism industry.																													
Gulf Coast Revolving Loan Fund	305	Grover Brown	Mobile and Baldwin Counties	1500000	The Gulf Coast Revolving Loan Fund seeks to increase the capacity of the local economy by providing local businesses and private entities a financing source to grow, maintain and/or sustain their operations locally that will add value to the overall region. The project objectives are: 1. Expand business employment and ownership opportunities for Mobile and Baldwin County residents through economic development that is compatible with the areas existing regional strategies and physical and social environment. 2. Promote the economic well-being and growth of the region by helping to finance projects which maximize private sector investment. 3. Provide financial assistance to reduce the turnover rate caused by the failure of businesses due to inadequate start-up or expansion capital. 4. Encourage economic development by making available adequate and affordable credit to existing or new businesses that locate or expand commercial operations in the project operation area; The project seeks $1.5 million from the Alabama Gulf Coast Recovery Council, that will be leveraged by $1.5 million from private financial institutions, and other state and federal sources. The total capitalization of the fund will be $3 million, which is intended for the purpose of making loans to businesses to spur economic growth. The fund will attract and supplement (not supplant) private sector financing from conventional lenders by creating a mechanism to mitigate the risk commonly associated with small business lending. The fund will form collaborations with private lenders and provide businesses with low cost capital, long term financing that matches the useful life of the asset, technical assistance and reasonable interest rates. As a result, private lenders will participate through reduced collateral risk, reduced credit risk, and opportunities for business development on future projects within the community. The project will lend to businesses located within Mobile and Baldwin County. Eligible businesses will be private-for-profit firms, industries, corporations,	AL Portal	N	N	N	N	N	N	N	N	N																		

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					partnerships and sole proprietorships which may be included in the U.S. Small Business Administration (S.B.A.) definition of a small business.																											
Habitat Acquisition and Conservation of the Garrow's Bend Watershed-Radcliff -Goat Islands-Mobile Bay	306	Sandy Howard	Mobile Bay	255000	The acquisition of coastal wetland property is a means of providing a source of mitigation for the environmental and economic damages that resulted from the Deepwater Horizon incident. This project consists of acquiring the fee title property interest and placing a perpetual conservation easement on both of the barrier islands. These islands are located in the Garrow's Bend Watershed. The islands are in very close proximity to the Salt-Aire tract. Perpetual Land Conservation has been identified by the Mobile Bay National Estuary Program's Comprehensive Conservation Management Plan (CCMP) and the Partnership for Gulf Coast Land Conservation's (PGLC) "Conservation Vision as an important part of environmental stewardship. These two islands serve as a means to sustain critical birding and fishery habitat. The fee simple acquisition of these properties could allow future restoration activities to occur. Examples could include improved birding habitat and living shoreline demonstration projects. The conservation easement would ensure permanent protection of the two parcels.	AL Portal	N	N	Y	N	Y	N	N	N	N																		
Peninsula Living Shoreline	308	Royce Halstead	Bon Secour Bay	1579152	The Peninsula Living Shoreline Project is located along 1.2 miles of shoreline in the southeast corner of Bon Secour Bay. The property contains 195 acres of forested wetland, salt marsh, tidal creek, and sand beach that buffers the community from Bon Secour Bay. To the north, the property is adjacent to the Bon Secour National Wildlife Refuge and is an important coastal connection to the Refuge. Nesting bald eagles, owls, osprey and migratory neotropical birds utilize this buffer, as well as estuarine species such as blue crabs and fish in the bay adjacent to the property. The Peninsula shoreline, like most of the properties along Mobile Bay, is suffering high rates of erosion, with as much as 2 feet per year with obvious effects to the pine habitat on the western part of the shoreline and marsh / beach habitat in the northeastern part of the shoreline. Hurricanes Ivan (2004) and Katrina (2005) aggravated the erosion issues affecting the Peninsula infrastructure including a restroom and pier. In an effort to address the erosion issues and to keep the health and condition of the intact forested wetland buffer, salt marsh, sand beach, and benthic habitat, the Peninsula Master Association – the home owner association for the community –has developed a Living Shoreline Plan. Living shoreline features along this 1.2 miles of living shoreline would include a low-crested reef breakwater designed to reduce wave energy and shoreline retreat and provide habitat for benthic organisms and fish. The project is intended to enhance the waterfront through ecological friendly manner, while decreasing erosive forces on the property and infrastructure. This living shoreline would complement the Swift Tract complex of living shorelines that both The Nature Conservancy and NRDA Early Restoration have implemented north of the project site. Primary goals 1. The primary goal of the project is to reduce shoreline erosion. 2. The secondary goal of this project is to enhance benthic habitat and fish production in the area. 3. The tertiary goal is to reduce damage to infrastructure (board walks,	AL Portal	N	N	Y	N	N	N	N	N	N																		

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					facilities, and pier). Outcomes: • Maintenance of natural coastal processes and shoreline dynamics. • Creation and preservation of habitats for native species of aquatic and terrestrial flora and fauna. • Provide economical means of facilitating sediment accumulation, potentially resulting in formation of new land. • Protect infrastructure from minor storms.																												
Conservation of Upper Three Mile Creek Watershed	309	Thomas Root	Mobile, AL	93000	The acquisition of wetland property is a means of providing a source of mitigation for the environmental and economic damages that resulted from the Deepwater Horizon incident. This project consists of acquiring the fee title land acquisition and placing a perpetual conservation easement on a 48 acre palustrine forested wetland that is adjacent to the Copeland-Cox Tennis Center in Mobile Alabama (Worlds Largest Public Tennis Center). This parcel is located in the Three Mile Creek Watershed. The tract is in very close proximity to the City of Mobile's Langan (Municipal) Park and the University of South Alabama. Perpetual Land Conservation has been identified by the Mobile Bay National Estuary Program's Comprehensive Conservation Management Plan (CCMP) and the Partnership for Gulf Coast Land Conservation's (PGLC) "Conservation Vision" as an important part of environmental stewardship. The acquisition of this tract could serve as a measure of long term watershed protection of flood plain areas. The fee simple acquisition of this parcel could allow future restoration activities to occur. Examples could include improved birding habitat and a site for future three mile creek stream bank restoration activities, native plant identification and the construction of walking trails and interpretive boardwalks. The conservation easement would ensure permanent protection of this parcel.	AL Portal	N	N	Y	N	N	N	N	N	N																		
Longevity, Stability & Water Quality Improvements, Bon Secour DMDA	310	Cal Markert	Baldwin County	363343	The Baldwin County Commission accepted ownership of a Dredge Material Disposal Area (DMDA) from the U.S. Army Corps of Engineers. The area is used to receive the bottom material removed from the Bon Secour river as part of maintaining a navigation channel necessary to support the area's seafood industry. The weir drainage structure has significant corrosion and is not operating properly. Additionally, there is visible evidence of a former blowout in the DMDA containment berm wall. The weir's internal structural members are significantly corroded, some have already failed. Visual examination by professional engineers observe that inflow of water from the DMDA's containment area does not match outflow from the weir to the downstream outflow of water from the DMDA. This indicates that the water may be leaking internally through the drainage structure, which could create conditions that increase susceptibility to possible future berm failure (blowout), which would endanger area residents, properties and downstream wetlands and water quality. DMDA's are designed to filter water from dredged material in a manner which is environmentally acceptable under NEPA. Given the water quality factors associated with the function of a DMDA and a DMDA's weir structure, and the potential for negative downstream water quality impacts if either the DMDA or the weir functions improperly or fails; this project seeks to asses, design & implement necessary repairs or	AL Portal	N	N	N	N	N	N	N	N	N																		

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					replacement of the weir, and possible enhancement to the containment berm. This project will include Life Expectancy Analysis & DMDA Longevity Improvements.																												
Canby Canyon Erosion Mitigation	311	Matthew Hinton	Spanish Fort	3000000	Formerly the site of Union Army encampments and fortifications during the Seige of Spanish Fort, the last battle of the Civil War, "Canby Canyon" has become a significant gorge measuring approximately 60 feet deep by 200 feet wide for a distance of around 2500 linear feet. Nestled in the heart of the Spanish Fort Estates subdivision, "Canby Canyon" directly affects 72 residential properties, an estimated $16.2 million in real property value according to the Baldwin County Revenue Department. The City of Spanish Fort has investigated numerous reports of erosion including the toppling of large trees and significant loss of land, the exposure of a sewer line, and the threat to real property including swimming pools, a detached garage, and at least two homes. The erosion issues have reduced property values and made it nearly impossible for some to sell their homes. In addition, sedimentation in the Bay Minette Basin has become a major issue as well, filling known boating channels and cutting access to local wharfs. The full environmental effects of sedimentation in Bay Minette are unknown at this time. Daphne Utilities has attempted to stabilize the erosion and protect its sewer line; however, the stabilization project has since failed and is in need of significant repairs. Because the problem can be attributed to both public discharges from the rights-of-way surrounding the canyon and discharges from private residential properties, the proposed project would include a comprehensive study of the sources of water contributing to the erosion, along with a number of projects aimed at stabilizing the bluffs. Additional deliverables could include water quality monitoring results to evaluate the effectiveness of reducing sedimentation into the Bay Minette Basin; education materials; a comprehensive plan for homeowners to collectively address stormwater runoff on their properties, which could involve a variety of strategies including Low Impact Development and Green Infrastructure; and regulatory recommendations the City could implement to combat erosion issues within its jurisdiction.	AL Portal	N	N	N	N	N	N	N	N	N																			
Dauphin Island Audubon Bird Sanctuary Shoreline Restoration and Management	313	Sherry Cain	Dauphin Island	1525000	Dauphin Island has been named one of the top four locations in North America for viewing fall and spring migrations! The Audubon Bird Sanctuary consists of 164 acres of maritime forests, marshes, and dunes; including a lake, a swamp, and a beach. Recently, the 3 mile trail system within the Sanctuary has been designated as a National Recreational Trail. It is located at the Eastern end of Dauphin Island, a 14 mile-long barrier island situated off the Alabama Gulf Coast. The Sanctuary is of vital importance because it is the largest segment of protected forest on the Island and the first landfall for neo-tropical migrant birds after their long flight across the Gulf of Mexico from Central and South America each spring. The Bird Sanctuary has allowed Dauphin Island to be recognized by the American Bird Conservancy and the National Audubon Society as being "Globally Important" for bird migrations. Dauphin Island's East End consists of Historic Fort Gaines, the Dauphin Island Sea Lab, the Dauphin Island Campground, and the Audubon Bird Sanctuary. Recently, the Town of Dauphin Island and its partners, the Dauphin Island Sea	AL Portal	N	N	Y	N	N	N	N	N	N																			

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					Lab, the Park & Beach Board, and the U.S. Coast Guard has successfully been awarded a CIAP $8M grant for a shoreline restoration project on the East End of the Island. This area of the Island is under constant assault of shoreline erosion and it is estimated that this area of the island is losing around nine feet per year. To make this project a true success story we feel it is important to find a way to make the shoreline more stable by incorporating dune planting, educational signage, and shoreline monitoring. The project aims at implementing sustainability, controled burns, invasive species management strategies to enhance birding and wildlife habitat for Public use.. The Park & Beach Board, Dauphin Island Sea Lab, and the Town of Dauphin Island are proposing to leverage our resources of the State of Alabama's Coastal Impact Assistance Program (CIAP) grant for an East End Shoreline Restoration project to make this project a true success story for Dauphin Island, the State of Alabama, and the National Fish & Wildlife Foundation. The Park & Beach Board is seeking to partner with the National Fish & Wildlife Foundation so that together we can restore and properly manage the Sanctuary and the East End Beach.																													
Baldwin Beach Express I-10 to I-65 Extension Right of Way Acquisition	315	Cal Markert	Baldwin County	19840000	This submittal seeks funding for Right Of Way (ROW) property acquisition to accommodate the proposed 24.5 mile Baldwin Beach Express extension between Interstate 65 and Interstate 10. Procedures based in accordance with Federal Law, FHWA Office of Planning, Environment & Realty and established Alabama law will be followed. Specific properties to be acquired are to be identified as part of this project submittal. Funds may be used for all necessary documentation and expenses associated with the acquisition process including property assessment and appraisal costs, surveys, title search, etc. $8.5 Million has been expended already in design engineering, environmental planning and permitting. The proposed footprint of the proposed Beach Express extension project has been minimized by reducing median size and required rightof-way, reducing its impacts on the overall project area. Evidenced by the significant use of the recently completed North Baldwin Beach Express which connects at I-10 and runs southward to Orange Beach, access to and through Baldwin County on a direct, high speed highway link provides today's visitors another positive decision point in choosing where to expend their valuable vacation and recreation time. The proposed Beach Express Extension contributes to the overall resilience of our gulf coast and the state of Alabama. Tourism, industrial growth, and public safety are supported and enhanced through the completion of the Beach Express Extension project. It will be necessary to specifically identify, survey and acquire individual properties to establish the project's ROW to accomplish this very beneficial highway extension.	AL Portal	N	N	N	N	N	N	N	N	N																			

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Big Creek Lake Land Acquistion	317	Charles Hyland	Mobile County	9245000	This project proposes to purchase target parcels located in Big Creek Watershed to accomplish large-scale conservation of coastal habitats and protect water quality in Big Creek Lake Watershed. Big Creek Lake (or Converse Lake) is the potable drinking water supply for most of the populated areas of the City of Mobile and is located in western Mobile County. It is managed by the Mobile Area Water and Sewer System (MAWSS) which has committed numerous resources to protection the of water quality of the lake and its surrounding areas. Over the past 20 years, MAWSS has purchased 9,000 acres of critical areas surrounding the lake to proactively protect the water resources. In order to provide a landscape-scale conservation corridor to the neighboring Escawtawpa Watersheds, this project proposes to purchase approximately 4,000 acres of pristine diverse habitats including upland long leaf sandy hills, pine flatwood savannas, oak cheniers, and freshwater wetlands. These parcels are owned by 2 land owners (GM & O – John Wilson and Shriner's hospital) and will provide critical landscape level linkages to existing protected and managed areas, providing a more holistic approach to long-term management and stewardship for the entire system. These lands also contain habitats that support a diversity of wildlife, including black bear, coastal and wading birds, waterfowl, and neotropical migratory birds. The area is home to many threatened and endangered species, MS sandhill crane, MS diamondback terrapin, and Gopher tortoise. This project has identified 15 parcels, totaling approximately 4,000 acres north of US 98 in unincorporated Mobile County. As MAWSS has been systematically purchasing land adjacent to the Big Creek Lake, it assumed the landowners are willing sellers. The property will be appraised and a 15% management-stewardship fees are included in the project's budget.	AL Portal	N	N	Y	N	N	N	N	N	N																			
Perdido River Water Quality Protection, Habitat Restoration and Recreational Enhancement Project	318	Darryl Boudreau Boudreau	Perdido Bay Watershed	14220000	One of the key features of the Perdido River and Bay is that they form the north-south boundary between Florida and Alabama. The Nature Conservancy (TNC) and Escambia County are working together to develop a joint proposal and partnership to improve and protect the river and bay water quality and increase the ecotourism recreational opportunity in the Perdido Watershed. At this point the following entities are engaged in the development of this proposal: Federal – USFWS, NRCS; State – FDEP, NWFWMD, ADCNR, FL Sea Grant; Local – Escambia County, Baldwin County; NGO – TNC; Private – Westervelt Ecological Services. Leveraging existing property owned by TNC (Perdido River Nature Preserve) and public land owned by Alabama and Florida, this proposal seeks to: • Expand the boundary of the TNC Preserve across the river into AL, thus helping to protect both sides of the lower Perdido River's floodplain; • Restore longleaf and wetland habitat to improve & protect Perdido River water quality; • Enhance public access to natural habitat, and low impact water based recreation; and • Lessen the impact of, and help facilitate, future growth, by protecting/restoring key wetland floodplains and using that investment to provide wetland mitigation for impacts associated with development on property containing lower quality wetland areas.	AL Portal	N	N	Y	N	N	N	Y	N	N																			

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					The Perdido River watershed will face enormous development pressure as Navy Federal expands its Perdido campus to accommodate over 10,000 jobs by 2020 as well as the creation of a new "hi-tech" industrial park adjacent to the Navy Federal campus. This proposal is critically important to protect the quality and habitat of the Perdido watershed and provide recreational access to a resource that was impacted by the Deepwater Horizon oil spill as the development occurs. The overall projectl has three components: • Land acquisition to protect habitat and water quality; • Habitat & hydraulic flow restoration • Recreational opportunity: create a Perdido River "blueway trail" which will create the opportunity to navigate the Perdido River from the AL/FL line to the Gulf with camp sites strategically placed within a one day's paddle along the river. This project could become the first "multi-state" Deepwater Horizon project that becomes the model for interstate cooperation to protect and restore a watershed, create and facilitate economic growth and enhance recreational opportunities.																												
Mount Vernon Water Treatment Plant	319	Terry Williams	Mount Vernon	1500000	The proposed project is the construction of a water treatment plant for the Town of Mount Vernon, AL. The original plant was built in 1963 and has not been upgraded since, it is past its useful life; especially since it has had no significant maintenance or upgrades performed since construction. This is an extremely critical facility, the existing clear well is way undersized for current demand and ADEM regulations. There is a very thick layer of lime at the bottom of the clear well and the baffle walls show significant deterioration with rust and cracking. The chlorine room is dangerously small and the building, specifically the roof, show signs of deterioration past the point of rehabilitation. The well pump and motor are extremely aged and there is high water loss within the system (est. 30%). The Town of Mount Vernon doesn't have the funds to replace the plant. The new plant will have increased capacity for future growth. The design will be in compliance with current ADEM regulations. The Town of Mount Vernon owns the land in the vicinity of the existing water treatment plant and will be able to build a new one without having to purchase additional land.	AL Portal	N	N	N	N	N	N	N	N	N																		
Assure Timely And Effective Environmental Oversight Of Projects In Coastal Alabama, Including All RESTORE Act Projects, By The Replacement Of Substandard Facilities At The ADEM Coastal Office And	320	Lance LeFleur	Mobile, AL	5900000	Coastal Alabama is an area where two potentially conflicting activities, economic growth and environmental protection, must take place side-by-side. In this relationship between economy and environment, care must be taken to ensure balance. At the center of the effort to ensure balance is ADEM. Tasked with the statutory mandate of protecting Alabama' air/land/water resources, ADEM ensures that today's environmental resources support economic activity and at the same time are protected for all to enjoy. While virtually all RESTORE Act funded projects will require ADEM oversight, ADEM efforts are currently divided between two substandard/inadequate facilities. The separation of the ADEM Coastal Program and the Mobile Field Office creates logistical/communication/technological issues that create	AL Portal	N	N	N	N	N	N	N	N	N																		

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Mobile Field Office					inefficiencies in operations. Existing facilities are grossly inadequate to support ADEM efforts to review/approve RESTORE Act restoration projects and are grossly inadequate to support anticipated industrial growth. Projects receiving RESTORE Act funds will require ADEM action in the form of construction permits, coastal consistency determinations, environmental modeling, and inspections. Thus, this project facilitates and supports nearly all other RESTORE Act projects. Adequate ADEM facilities will support economic growth and facilitate timely actions on other RESTORE Act projects. In addition to overseeing over 3,000 permits in the coastal area and performing over 3,000 inspections each year, ADEM utilizes its resources to respond to emergency events such as the 2010 Deepwater Horizon oil spill. ADEM led Alabama's response efforts, expending over 65,000 staff hours (>30 work years), and is one of the few agencies still responding to tar ball impacts. An investment by the Council in this project will ensure ADEM maintains response capabilities for current and future coastal impacts. ADEM has approached this project with a deliberative, scientific approach and has worked with an independent firm to develop a construction budget and cost estimate for this project. The cost estimate of $5.9 million is based upon a similar project recently completed in Mississippi. ADEM has requested, but been unable to attain, funding from the General Fund or the NRDA process to support this project. In the event this project is not funded through the Council, the implementation of other projects funded by RESTORE Act funds will clearly suffer.																													
Alabama State Port Authority Automotive Logistics/ Ro-RO Terminal	321	H.S. "Smitty" Thorne	Mobile, AL	52000000	The Alabama State Port Authority (ASPA) seeks $25 Million in RESTORE ACT funding to develop by mid-year 2018 an Automotive Ro/Ro Terminal on 67 acres of Alabama State Port Authority owned property located on the Main Docks Complex at a former Bulk Material Handling Plant. The phased $52 Million project will repurpose and modernize a former coal handling facility into a state-of-the-art automobile Ro/Ro and processing facility servicing approximately 150,000 units annually. The Ro/Ro Terminal project components include rehabilitation of a deep draft ship dock and marginal wharf, administrative and processing facilities, rail infrastructure, paving, lighting and related improvements. The project would serve import/export markets supporting Alabama / Southeast U.S. automotive manufacturing, assembly and transportation logistics industries. Currently, there are no regional automotive Ro/RO logistics terminals serving Alabama and adjoining regional automotive manufacturing and assembly markets. Prospective automotive logistics concessionaire studies for this project demonstrate sustainable volumes through the proposed terminal. Further, seaport infrastructure investments commonly deliver and exceed 50 years in sustainable economic impact to the community. The project would contribute to local and regional economies by generating new business revenues from vessel and cargo handling service firms providing employment and income to individuals, and generating new taxes for state and local	AL Portal	N	N	N	N	N	N	N	N	N																			

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					governments. The project is projected to generate permanent jobs and consumption impacts as follows: Create 615 permanent, new direct, indirect and induced jobs generating $44 million in personal income and consumption impacts; generate over $34 Million in business revenues from vessel, carrier and cargo services; deliver $3.7 Million annually in local and state taxes and generate about $10 Million in local purchases. The construction impacts total $35.5 Million in personal income generating $2.9 Million in taxes. The project's permits, i.e., environmental management/storm water NPDES and a minor source air permit are in development and will be filed with Alabama Department of Environmental Management. The existing pier will also be modified requiring U.S. Department of Army Permits. As the project develops, the contractor may be required to file for a City of Mobile Flood Plain Management Permit. There are no known impediments to permitting.																													
Ambassadors of the Environment Program - Gulf Shores	322	Dan Bond	Gulf Shores	13500000	The Gulf Coast of Alabama is an ecologically diverse region with abundant natural resources. Many habitat types are easily accessible here, including the open waters of the Gulf of Mexico, beaches and coastal dune systems, brackish and salt marshes, large and small estuaries, maritime and upland forests, and freshwater rivers and wetlands. The catastrophic Gulf oil spill of 2010 served to remind us how closely connected our way of life on the coast is to a healthy, clean environment. Education programs based on sound science are critical to raising environmental awareness, promoting stewardship, increasing community resilience, protecting natural resources, and preserving our quality of life. The City of Gulf Shores proposes to use Restore Act funds to implement a comprehensive environmental education program to provide future generations the opportunity to experience and understand the importance of our vital natural resources. This program, called the “Ambassadors of the Environment Program”, will be implemented in partnership with Jean-Michel Cousteau's Ocean Futures Society, a non-profit marine conservation and education organization that currently operates eight such programs across the world. Through this program, students are introduced to the natural wonders of marine and coastal environments through presentations, snorkeling/skin diving excursions, kayaking, and hiking trips. Classes will focus on issues of biodiversity, sustainability, the unique ecology of the region, human impacts, and resource management. There will be a focus on critical environmental issues of the area – coastal development, Gulf oil spill, hurricanes, and sea level rise. Participants will engage in long-term monitoring, data collection, and restoration programs created in conjunction with local groups already working in the area. The project will create a permanent facility on City-owned property where the public would engage in educational programs, and the program will be staffed and administered by the City. Sustainable characteristics of human communities will be demonstrated and experienced in the facility’s solar collectors, composting toilets, recycling programs, organic gardens, and resource efficiency systems. Audiences would include primary and secondary school students, “Teach the Teacher” workshops, summer camps, environmental conferences and meetings, and ecotourism programs.	AL Portal	N	N	N	N	N	N	N	N	N																			

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Austal Vessel Completion Yard Phases 2 and 3 of 3	323	Bill Pfister	Mobile, AL	25000000	This is Phases 2 and 3 of a 3 phase project for the final construction of the Austal Vessel Completion Yard (VCY). This involves the construction of a 20,000 square feet Operations Building with production, administrative, and storage space, construction of a Hazardous Storage Facility, construction of a 600' sheltered pier with heavy weather moorings and ship services, the dredging of an adjacent slip down to 30 foot depth, and the addition of another 150 parking spaces, in order to complete and trial US Navy contracted ships. It will also provide for the construction of a fendered pivot point at the slip entrance and fendering along the slip bulkhead. This provides Austal the capability to retain/maintain approximately 1,000 of the 4,300 jobs involved with the Navy shipbuilding effort. The slip provides a heavy-weather safe-refuge mooring location for ships that would otherwise be located in the Mobile River. The project also provides for the restoration of the property to its former productive shipbuilding activity from an abandoned state.	AL Portal	N	N	N	N	N	N	N	N	N																			
Isle Dauphine Beach and Golf Study	324	Marc Whitehead	Dauphin Island	375000	The Isle Dauphine location consisting of 164 acres is part of Dauphin Island (Alabama's only barrier island) providing protection to over 10,000 acres in and around Mobile Bay and the Mississippi Sound by serving as a protective buffer. The Isle Dauphine area specifically serves to provide an outdoor experience and two restaurants to the property owners of Dauphin Island and currently serving the general public. The outdoor experience consists of golf, natural habit for watching animals, pool, beach access and fishing. The project above is the development of a planning-level feasibility study of the 164 acre area providing best use of the property through data research, economic impact, suggestions, details and plans for modification providing economic sustainably for the existing and suggested additions. These additions may consist of building restorations, golf course redevelopment, modifying golf course to be a birding sanctuary, potential lodging facility (on or off 164 area tract), beach nourishment, various walking/biking trails, access options for boating guests, kayak and sailboat rentals, and deed restriction reviews/suggestions. This study is needed to provide data on different aspects and benefits to the tourism, coastal impact, seafood industry, job creation and sustainability of the facilities. In addition, several discussions with representatives of the Town of Dauphin Island have confirmed this feasibility study and planned improvements could positively impact and enhance the viability of the Aloe Bay Project submission. This study will also provide the negative impacts of not providing the improvements needed.	AL Portal	N	N	N	N	N	N	N	N	N																			

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Innovating St. Louis Street: Mobile's Technology Corridor	325	Keri Coumanis	Mobile, AL	5800000	SUMMARY: Complete a thorough reconstruction of the St. Louis St. road bed; relocate all utilities; incorporate and implement comprehensive low-impact development techniques to manage stormwater. NARRATIVE: The City of Mobile, building on a study and conceptual design undertaken by the General Services Administration's Good Neighbor Program, is seeking funds to rebuild and upgrade the existing infrastructure found along, beside and beneath the St. Louis St. corridor. The St. Louis St. corridor is poised to be Mobile's Downtown Technology Corridor, which will house "Innovate Mobile," a regional science and research park. The City's vision, in partnership with the University of South Alabama, is to create a "vibrant, live, work, play and learn district" in downtown Mobile. The proposed Downtown Technology Corridor will provide the community with a continuum of physical spaces dedicated to housing and promoting the growth of new technologies. The University recently purchased the historic Dodge Brothers dealership on St. Louis St.; the University intends to rehabilitate the existing building into "innovation accelerator", or a high-tech space where startups will be housed. The accelerator will allow startup businesses or technologies to bridge the gap between incubation and commercialization. In addition to the University's investment, St. Louis St. has and continues to experience a number of economic development projects. The GSA broke ground on the construction of a new $89m federal courthouse and five existing warehouses are being redeveloped into professional office or retail space. In order to bolster the success of these projects, the City aims to replace a 200 year old infrastructure system with modern day technologies, pavings and aesthetics. The proposed project calls for removing the existing roadbed, drainage system, curbs and sidewalks of one-mile corridor; relocating all utilities so that they are subterranean; upgrading all existing underground stormwater pipes or culverts (which date to 1945); replacing existing stormdrains with low impact development technologies and "green" stormwater collection devices; replacing all curb, gutter and sidewalks, and installing "innovative" street lamps and fixtures. The result being, the St. LouisSt. infrastructure will be as innovative as the entrepreneurial activities and economic development occurring along the corridor.	AL Portal	N	N	N	N	N	N	N	N	N																			
Inventors Lab	326	Carletta Davis	Mobile, AL	2000000	Overview: The Coastal Community Council for M.O.R.E. (Making Opportunities and Resources Equitable Coalition) proposes a project to build capacity, plan, and implement an Inventors Lab in the Mobile and Washington Counties service area, located in the southwest corner of Alabama. This project intends to create innovative proof-of-concept capabilities in order to develop capacity within underserved communities to stimulate high-growth entrepreneurship and startup acceleration that will contribute to economic growth and competitiveness in our service area. In order to provide a wide range of programs and services that will support innovation-based economic development, the project will: leverage regional strengths, capabilities, and	AL Portal	N	N	N	N	N	N	N	N	N																			

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					competitive advantages; create a diverse ecosystem that fosters an innovation mindset and culture in minority and underserved individuals; and enable their communities to achieve greater economic prosperity and quality of life. As a result of this work -- and, ultimately, establishment of project-based commercialization programs -- the project aims to implement a scalable economic-development program that results in new jobs and businesses in our service area.																												
Baldwin County - ALDOT Capacity Improvements _Rev011317	327	Cal Markert	Baldwin County	126600000	Five very important Baldwin County projects are included in ALDOT's program of capacity improvements. This $56.8 Million funding request leverages a total of $69.8Million in identified state funding to accomplish $126.6 Million in total capacity improvements. It also leverages $14,400,435 in right of way acquisition, planning/permitting/design and utilities expenditures already completed. The Identified state funding support includes $34 Million from State BP economic damages settlement combined with $34.8 million from ALDOT. The five projects are listed with (construction cost estimates): a) widening SR 181 from CR 64 to SR 104 ($25 million); b) widening US 31 from Westminster Drive to SR 181 ($18.7 million); c) widening SR 180 east of the Foley Beach Express ($17.6 million); d) widening SR 180 west of the Foley Beach Express ($21.7 million; e) widening SR 181 from SR 104 to CR 32 ($43.6 million). These projects provide additional and vastly increased capacity for coastal evacuation during hurricane events. They also provide for rapid emergency response arteries in already burgeoning growth areas of Baldwin County. The projects support our tourism industry and provide additional opportunities for access to jobs and education. Baldwin's population has climbed by 21,444 since 2010, pushing it past 200,000, according to the latest Census data. No other county in Alabama is rising faster. This county added 3,000 residents in 2015 alone. The Daphne-Fairhope-Foley metro area, which includes all of Baldwin, was tied for the 12th-highest growth rate in the country among metropolitan areas. Since 2010, the county's population has grown by 9.8 percent. According to statistics provided by the Baldwin County Association of Realtors, the county has experienced a 39 percent increase in the number of residential properties purchased since 2011. 5.4 million visitors came to Alabama's gulf beaches in 2013, up from 4.9million in 2011. 30% of our visitors drive in from out of state. Tourism throughout Alabama generates more than 108,000 jobs, mostly dependent upon Alabama's highways for visitor travel and employment access. This proposed program of projects contributes to the economic resilience of our gulf coast and the state of Alabama.	AL Portal	N	N	N	N	N	N	N	N	N																		
Mobile Area Storm Water Mapping and Resiliency Planning	328	Keri Coumanis Coumanis	Mobile, AL	3000000	PHASE 1 -Storm Water Infrastructure Mapping and Flow Modeling: Building on a 2009 City pilot study and mapping efforts completed by the Mobile Area Water and Sewer Service (MAWSS), develop a GPS inventory and geographic information system (GIS) database of the storm water infrastructure network in the City and surrounds. The City will undertake a regional approach to the	AL Portal	N	N	N	N	N	N	N	N	N																		

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					mapping effort by identifying storm water infrastructure in areas that flow into the Three Mile Creek and Eight Mile Creek Watersheds. - Accurate GPS measurements locating storm water facilities will allow city to efficiently manage, design, and model the system and storm water flow within the watersheds that flow through the City and into Mobile Bay. The detailed storm water infrastructure mapping generated by this project will be foundational for many types of storm water management, flood control, water quality and watercourse planning, and The project will aid in the implementation of watershed management plans. PHASE 2 - Flood Loss Strategy: Using the data and digital GIS mapping developed in Phase I, identify properties within the City that are subject to repetitive flood loss. Once those properties are identified, develop a strategy to remedy prospective losses. The City anticipates a significant overlap between repetitive flood loss properties and property to be identified as part of the future Mobile Greenway. PHASE 3 - Storm Water Management Guidance Manual: Building on information and strategies developed in Phases 1 and 2, revise and update the City's Flood Plain Management Plan. The existing Flood Plain Management Plan was prepared in 1984. - City Engineering must routinely address standard storm water management design measures on a case-by-case basis; this is inefficient for both the City and the applicant. An updated Storm Water Guidance Manual will systematize the modern best management practices expected by City Engineering, resulting in better upfront design by applicants and reduced workload/quicker sign-off by the City, saving time and money for all parties. The updated manual would provide guidance on reliable Low Impact Development (LID) storm water management techniques.The City will identify incentives it could offer to encourage use of LID techniques. To gain buy-in from affected stakeholders, the City will hire an engineering consultant, engage a technical advisory committee made up of local engineers, scientists and developers, and encourage public input.																													
Mobile Greenway Initiative	329	Keri Coumanis	Mobile, AL	11000000	This project develops a continuous, twenty-mile-long, multi-modal trail system within the City of Mobile along the banks of Three Mile Creek and the Mobile Bayshore (the "Greenway"). The Greenway will provide safe infrastructure for bicycle and pedestrian traffic through urban and natural areas where none currently exists. The Greenway will revitalize parks and economically disadvantaged areas, promote exercise and healthy living, connect citizens to services, public amenities and the natural environment, and draw tourists and citizens for recreational use and enjoyment. Planning for the Greenway is long-established and documented in local and regional plans. Phase 1 of the project (in progress) involves construction of the first 1 mile of the Greenway along Three Mile Creek, connecting underserved parts of the community to Tricentennial Park, Mobile Infirmary, USA Hospital, and Health Department. Concurrently, the City is preparing the Three Mile Creek Greenway Trail Management Plan to identify next steps, cost estimates and funding strategies and priorities for developing the remainder of the Three Mile Creek sections. The City and its project partners have shown	AL Portal	N	N	N	N	N	N	Y	N	N																			

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					commitment to realizing the project by leveraging over $1m public and private funds to effectuate the Phase 1 work. Phase 2 involves construction of a second stretch along Three Mile Creek for which design and engineering is also complete, as well as design, real estate due diligence and construction of the remainder of the Three Mile Creek segments. Phase 2 also includes design and construction of the planned trail amenities (e.g., lighting, fitness courses, benches, signage) identified in the Three Mile Creek Greenway Trail Management Plan. Phase 3 will connect the Three Mile Creek segment to the Crepe Myrtle Trail by a network of "complete streets" along Dr. MLK, Jr. Ave, Broad, Beauregard and Water streets. Funding for the "complete streets" portion exceeds $20m and has been secured from City and federal funding sources and is not included in the attached budget. Phase 4 will leverage the model, momentum and learning experiences to date to effectuate the Crepe Myrtle Trail leg of the Greenway, connecting the eastern end of the Three Mile Creek leg, downtown to the bayfront. Phase 4 includes a trail management plan for Crepe Myrtle Trail leg, as well as design, engineering, real estate due diligence and construction of the trail and amenities.																													
Three Mile Creek Watershed Restoration	330	Keri Coumanis Coumanis	Mobile, AL	40000000	This project implements the priority best management practices (BMPs) and restoration actions identified in the Three Mile Creek Watershed Management Plan (WMP). Phase 1–Headwaters Restoration and Storm Water Infrastructure Mapping involves hydrologic restoration of the headwaters reaches of Twelve Mile Creek, Three Mile Creek and Toulmins Springs Branch (TSB) (implementation of structural and non-structural BMPs identified in the WMP), and survey-grade mapping of the drainage infrastructure throughout the Watershed. Phase 1 will leverage projects and funding from multiple public and private sources, including: construction of a storm water park on the TSB for which design and engineering was completed by The Nature Conservancy with use of ADEM 319 funds; implementation, in the headwaters reaches, of the invasive species management plan being prepared by the MBNEP with Federal RESTORE funds; and the design/engineering plan for hydraulic restoration measures of the Creek on the University of South Alabama (USA) campus, currently being prepared by USA using ADEM grant funds. Phase 2–Langan Park Lake to I-65 and Lower Watershed Restoration involves hydrologic restoration actions (implementation of structural and non-structural BMPs as identified in the WMP) in the Lower Watershed and areas of the Upper Watershed that are not addressed in Phase 1. Restoration actions in Upper Watershed areas will include dredging of Langan Park Lake and invasive species removal in accordance with MBNEP's management plan. Restoration actions in Lower Watershed areas will also include implementing a pilot bioremediation project at Hickory Street Landfill; invasive species removal; reconstruction of the stormwater drainage system beneath Ann Street (north from the intersection of Dauphin Street) and restoration of the historic stream channel/removal of the "plug." Phase 3–Middle Watershed Restoration will effectuate hydrologic restoration of the Middle Watershed area. Phase 3 will include implementation of structural and non-structural BMPs identified in the WMP, invasive species removal, and streambed and riparian buffer restoration. Restoring the natural hydrology of the watershed,	AL Portal	N	N	Y	N	N	N	N	N	N																		

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					restoring riparian buffers, and eliminating exotic species will benefit both surface water quality and habitat and recreational enjoyment. Implementing the BMPs will help eliminate flooding in the watershed by maintaining the drainage and surface water system design for flood protection.																												
Fairhope Area Community-Based Comprehensive Land Use Plan	331	Kain Wilson	Fairhope	650000	Project Description: The City of Fairhope is a unique treasure for the State of Alabama as it still retains much of its original small-town ambiance, while providing state of the art services for its residents. Fairhope is known as a pedestrian's paradise that has an active arts community, exceptional schools, excellent senior services, waterfront public spaces, and top-notch recreational programs for all ages. It is also home or a weekend retreat for many famous artist and authors. Fairhope has been recognized nationally and internationally for its environmental stewardship, beauty and quality of life. In 2010, Family Circle Magazine named Fairhope as one of the 10 best places to raise a family. Most recently, it was voted as the most business friendly city in Alabama by the Alabama Policy Institute. In order to steadfastly protect Fairhope's characteristics, this project requests funds to develop a community-based comprehensive land use plan. This plan will incorporate all previous planning efforts and integrate community involvement to create a long term vision for future growth in the Fairhope area including city limits, police jurisdiction and planning jurisdiction. This plan will provide a blueprint for all stakeholders so Fairhope can continue to grow and prosper in the future. A nationwide Request for Proposals for a consultant to develop the plan using innovative and community-based techniques. This project will involve numerous public meetings, mapping, review of existing public services and development of a future land use map.	AL Portal	N	N	N	N	N	N	N	N	N																			
Working Waterfront and Greenspace Restoration Project	332	Kain Wilson Wilson	Fairhope	6200000	The City of Fairhope is a unique treasure for the State of Alabama as it still retains much of its original small-town ambiance, while providing state of the art services for its residents. Fairhope is known as a pedestrian's paradise that has an active arts community, exceptional schools, excellent senior services, waterfront public spaces, and top-notch recreational programs for all ages. In an effort to improve the waterfront area, this project will implement recommendations of the most recent waterfront study to provide a comprehensive vision and working waterfront including public spaces located on Mobile Bay in Fairhope. First, this project will contribute to the redevelopment the Fairhope Marina located at the mouth of Fly Creek. This project will integrate the Clean Harbors program to provide a mixed-used environmentally friendly working waterfront. Second, recommendations in the Fairhope Beach Management Plan, a comprehensive bluff and shoreline stabilization project, planning and redevelopment of the waterfront park areas (including acquisition of inholdings) will be implemented. This development includes integration of pedestrian access into water front areas and development of more water-based transportation infrastructure impeding access to waterfronts. Last, this project will utilize funds to develop a comprehensive stormwater education program in order to reduce pollution and sedimentation entering Mobile Bay from the City public spaces. This project will provide a necessary catalyst so the City can host waterfront tourism activities such as regattas, sailing events, and fishing tournaments.	AL Portal	N	Y	N	N	N	N	N	N	N																			

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					These events provide the City of Fairhope, Baldwin County and State of Alabama with much-need tourism tax revenue.																												
Southwest Coastal Alabama Resiliency and Stewardship Center as	333	Jackie Antalan	Coastal AL	5800000	Southwest Coastal Alabama Resiliency and Stewardship Center as proposed will be a state of art, renewable energy facility. The project involves acquisition of forty (40) acre in Coden, Alabama. The center will serve as the infrastructure foundation toward a holistic approach to local community stakeholders taking ownership and pride in the natural resources in their own "Backyard". This infrastructure project will benefit historically underserved rural communities economy and sustain local ecological resources. Coden's natural habitat support a wide range of wildlife and neotropical migratory birds, finfish and shellfish and should be considered as "Nature Classroom". The overall objective of the center is to enhance community resilience in coordination with restoration activities that protect, replenish our living coast. The scope of the Center is as follows; Plan and Implement Sustainable Resiliency Programs Coordinate Stewardship Programs and Activities Improve public access to programmatic restoration activities. Increase public understanding of programmatic restoration activities. Design outreach and engagement module Plan educational and training modules Increase Public Enjoyment and Recreational Use	AL Portal	N	N	N	N	N	N	N	N	N																			
Mississippi Sound Coastal Eco-Tourism and Aquaculture Village	334	Brett Dungan	MS Sound	10320000	The purpose of this project is to implement an Eco-Tourism site on the Alabama Coast to demonstrate the viability of developing coastal marsh wetlands -and- adjacent coastal properties for aquaculture -and- eco-tourism, employing the fundamentals of Permaculture -and- within the bounds of environmental stewardship. This project will also provide a site for disabled veterans to participate in weeklong challenge therapy programs in a coastal setting, including the support structures -and- raised wheel-chair accessible boardwalks. It is essential that business entrepreneurs take a lead role in creating sustainable models to support coastal communities economic revitalization. This project will: *Provide public access, including for handicapped *Create a working coastal community, foster start-up businesses, -and- provide local jobs *Be a center for aquaculture production -and- research *Support aquaculture process that is sustainable -and- chemical-free *Local high school horticulture -and- aquaculture students will be encouraged to participate in hands-on experience *Provide an ecologically thriving learning laboratory interfacing with local schools, centers of excellence -and- research institutes *Facilitate the exchange of innovation utilizing local knowledge, the scientific community, and digital technology	AL Portal	N	N	N	N	N	N	N	N	N																			

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Maintaining and Expanding Information Infrastructure for Shipping and Boating Safety and Efficiency in Mobile Bay	335	Renee Collini & Brian Dzwonkowski	Gulf of Mexico	1479606	Alabama Real-time Coastal Observing System (ARCOS) and its website, www.mymobilebay.com, have become enmeshed in coastal decision-making. Industrial, commercial, and recreational captains, restoration specialists, and natural resource managers have relied on the data from www.mymobilebay.com for current conditions and long-term trends for over 13 years. The website currently averages 6000+ unique hits per month by fisherman, boaters, scientists, educators, and resource managers. Additionally, data are utilized by various state and federal agencies to confirm severe weather events and improve model-based weather predictions, manage public health and natural resources, and monitor coastal water quality. The proposed project will allow continued maintenance, as well as improvements and expansion, of the existing infrastructure that enables collection and dissemination of high quality data for coastal Alabama. The costly and time intensive processes of obtaining equipment, site identification and construction, and development of communication networks to disseminate data have already been invested; current maintenance of the system is being funded by ADCNR, Gulf of Mexico Coastal Ocean Observing System, and Dauphin Island Sea Lab. However, the infrastructure that these sites depend upon to provide quality, reliable data is aging rapidly. Without much needed upgrades and investment, the website and its benefits will cease to be available. The proposed funding will maintain the existing infrastructure for 5 years and expand the network to include a near-coastal buoy (see attached map). Expanding the scope of ARCOS provides valuable information to local captains, including commercial and recreational fisherman and Mobile Bay Bar Pilots. In addition to providing valuable information to the boating and shipping communities, ARCOS will continue to provide data in support of individual restoration and conservation projects – a critical aspect of natural resource management in coastal Alabama. Data provided will also facilitate adaptive management in response to threats to the built environment (e.g., high-winds, flooding, and salt-water intrusion). This infrastructure allows for data that enhance multiple economically critical endeavors, including shipping, fishing, and tourism, by improving the safety and efficiency of imperative coastal activities.	AL Portal	N	N	N	N	N	N	N	N	N																			
Weeks Bay East Gateway Tract	336	Yael Girard Girard	Weeks Bay	3000000	Acquisition of the Property to (i) protect it in perpetuity and (ii) access/address restoration needs to ensure that it provides the best habitat for native and endemic species. This project will be accomplished with support from the Weeks Bay Foundation (WBF) and the Weeks Bay National Estuarine Research Reserve (WBNERR). In addition, the WBF will work with the Weeks Bay Reserve to create a management plan and prioritize restoration needs, including re-creation of longleaf pine savannas, pitcher plant bogs, and marsh and swamp habitat (where appropriate). This management plan will also include the removal of a dilapidated bulkhead on the waterfront point of the Property that splits Weeks Bay and Mobile Bay. Working with Dr. Eric Sparks from the Alabama Mississippi SeaGrant, a new adaptable shoreline plan would be created. Weeks Bay is listed as an "Outstanding National Resource Water" and is home	AL Portal	N	N	Y	N	N	N	N	N	N																			

Project Information								Restoration Types Addressed										Programmatic Damage Assessment and Restoration Plan (PDARP) Criteria		Public Notice	Oil Pollution Act (OPA) Criteria (15 CFR 990.54)			Additional Criteria									
Project Name	Proj No./ ID	Submitted By/ Primary Lead	Location	Cost	Project Description	Submitted via	Marine Mammals (Y/N)	Water Quality/ Nonpoint Source Nutrient Reduction (Y/N)	Wetland, Coastal, and Nearshore Habitat (Y / N)	Oyster Reef (Y / N)	Birds (Y / N)	Sea Turtles (Y / N)	Recreational Use (Y/N)	Habitat on Federal Lands (Y/N)	Monitoring, Adaptive Management, and Administrative Oversight to Support Restoration Implementation (Y/N)	Project is consistent with programmatic restoration goals (Y/N)	Project is considerate of strategic frameworks (Y/N/NA)	Project is consistent with criteria identified in the public notice (Y/N)	Project delivers benefits cost-effectively (+ / 0 / -)	Project meets Trustees' goals (+ / 0 / -)	Project has reasonable probability of success (+ / 0 / -)	Project prevents future and collateral injury to natural resources and services (+ / 0 / -)	Project benefits more than one natural resource and/or service (+ / 0 / -)	The effect of the project alternative on public health and safety (+ / 0 / -)	Project is not already required by existing regulations (Y/N)	Project complies with applicable laws and regulations (Y/N)	Project supports existing regional or local conservation plan or restoration effort (Y/N)	Project is not already fully funded (Y/N)	Project is technically feasible (+ / 0 / -)	Project readiness (+ / 0 / -)	Sustainability/Long-term Benefit of project (+ / 0 / -)	Project is time critical (+ / 0 / -)	Project offers opportunities for external funding & collaboration (+ / 0 / -)
					to numerous native plant and animal species. This Property contains over 100 acres of wetlands. These include estuarine intertidal marsh, freshwater forested wetlands. There is also an unnamed creek that runs through the center of the marsh area. This provides protected habitat and shelter for wading birds and duck species and various indigenous marine life. The Diamondback Terrapin (Malaclemys terrapin), an Alabama species of concern, has also been seen in the marsh. The scenic beauty of the Property is enjoyed by pleasure boaters, birders, and recreational fisherman. The bay front edge of the Property is a popular place for fisherman to anchor and angle for Redfish and Speckled Trout. The Property meets the priority acquisition and protection goals of various groups. It sits adjacent to existing protected land, owned by the Weeks Bay Foundation, called Herndon. In addition, it falls within the Weeks Bay Reserve's Coastal Zone and Core Priority Area, as well as the Weeks Bay Project Acquisition Area. In the Mobile Bay National Estuarine Program's Comprehensive Conservation and Management Plan, the Fish River Watershed, where the property is located, was listed as the highest priority watershed in coastal Alabama for restoration. The 2005 Baldwin County Wetland Conservation Plan also highlights the area where the Property lies as having wetlands to be considered for conservation																													
Magnolia River North Gateway Tract	337	Yael Girard Girard	Weeks Bay	2000000	Acquisition of the Property to (i) protect it in perpetuity and (ii) access/address restoration needs to ensure that it provides the best habitat for native and endemic species. This project will be accomplished with support from the Weeks Bay Foundation (WBF) and the Weeks Bay National Estuarine Research Reserve (WBNERR). In addition, the WBF will work with the Weeks Bay Reserve to create a management plan and prioritize restoration needs, including re-creation of longleaf pine savannas, pitcher plant bogs, and marsh and swamp habitat (where appropriate). Weeks Bay is listed as an "Outstanding National Resource Water" and is home to numerous native plant and animal species. Magnolia River is listed as an "Outstanding Alabama Water." Fish River and Magnolia River are the two main tributaries to Weeks Bay. Fish River is listed as a 303(d) waterway for unsafe levels of pathogens and mercury. It is only because of the excellent water quality of Magnolia River that Weeks Bay is able to sustain and support such an array of wildlife. As development continues throughout Baldwin County, and especially on the river banks of both Magnolia and Fish Rivers, we will see a decline in water quality. Protection of the Property will ensure that over 1.2 miles of combined river and bay frontage remains in its natural state, thus mitigating erosion, siltation, eutrophication, and residential flooding – all factors that directly correlate to water quality and the health of the entire Weeks Bay ecosystem. This Property contains nearly 100 acres of wetlands. These include estuarine and palustrine wetlands. There is also a small stream that bisects the Northern half of the property, running northeast to southwest. The scenic	AL Portal	N	N	Y	N	N	N	N	N	N																		

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					beauty of the Property is enjoyed by pleasure boaters, birders, and recreational fisherman who visit Weeks Bay and Magnolia River. The Property meets the priority acquisition and protection goals of various groups. It falls within the Weeks Bay Reserve's Coastal Zone and Core Priority Area, as well as the Weeks Bay Project Acquisition Area. In the Mobile Bay National Estuarine Program's Comprehensive Conservation and Management Plan, the Fish River Watershed, where the property is located, was listed as the highest priority watershed in coastal Alabama for restoration. The 2005 Baldwin County Wetland Conservation Plan also highlights this area as containing wetlands to be considered for conservation.																													
Development of New Wastewater Treatment Facility (WWTF) for the City of Chickasaw	338	Byron Pittman	Chickasaw	7500000	In order to eliminate untreated wastewater from entering the Mobile Bay Ecosystem, the City of Chickasaw is requesting funding from the RESTORE Act to construct a 1.5 MGD Wastewater Treatment Facility. This facility would be designed to use state of the art treatment technology to eliminate the existing failing lagoon system. Without this new WWTF, the City of Chickasaw Utilities Board will be forced to make small improvements to the lagoons and will continue to operate under a Consent Decree issued by ADEM. A detailed cost estimate has been developed bnb professional consulting engineers at Malcolm Pirney – Arcadis which estimates the cost of permitting, construction, engineering, and project management to be approximately $7,500,000. After the plant is constructed, portions of the lagoon area will be restored to coastal wetlands. This project meets the eligible uses of the RESTORE act as it will significantly improve water quality of the Mobile Bay River System along with mitigating damage to wildlife and natural resources. This project would also provide the necessary infrastructure for Port of Chickasaw to continue to grow, creating a framework for economic prosperity through highly paid skilled jobs. Last, this project is endorsed by ADEM as they support any project that will improve water quality discharged to the Mobile River/Mobile Bay ecosystem.	AL Portal	N	N	N	N	N	N	N	N	N																			
Salt Aire Shoreline Restoration	339	Bill Melton	Mobile, AL	8219039	NFWF Gulf Environmental Benefit Fund provided funding for the Phase I of the Mobile Bay Shore Habitat Conservation and Acquisition Initiative to acquire the 233 acre Salt Aire parcel and develop restoration plans and specifications for the bayfront shoreline on the property. The need for stabilization and restoration is evidenced by the amount of shoreline erosion and marsh loss experienced in the past 30 years. The project team recently produced a conceptual plan and estimated project cost as a first step in defining the proposed project. This project suggestion is based upon the conceptual plan. Development of a detailed restoration plan and associated construction documents and permit application based on this concept is underway and on schedule to be complete by May 31st of 2017. The proposed Salt Aire living shoreline and marsh restoration project has been designed to stabilize the property's Mobile Bay shoreline and reestablish approximately 16 acres of tidal marsh. Approximately 5600 linear feet of low-profile breakwater would be installed in shallow water offshore Salt Aire and Goat Island; these wave attenuation structures would serve to enhance growth of estuarine biota such as oysters, while reducing wave-induced	AL Portal	N	N	Y	N	N	N	N	N	N																			

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					erosion. Oyster growth on these structures would be enhanced by distributing oyster spat across the breakwater structures. The recessed shoreline would be reestablished by placement of up to 80,000 CY of suitable sediments borrowed from the Fowl River Channel dredged material disposal area, located about 1.5 miles south of the project. Silt curtain would be installed to preclude excessive release of fine sediments from the placement area. The borrow area excavation would be refilled by maintenance dredging material from the Fowl River Channel. Once sufficient compaction of the sediment placed at the shoreline has occurred, tidal channels would be excavated to provide tidal flushing and nekton access to the restored marsh. Approximately 70,000 marsh plants would be planted in the restored site after the tidal creeks have been excavated. Project construction monitoring would involve water quality (turbidity) testing on a daily basis to ensure compliance with state water quality standards. Post-construction success monitoring would include five years of elevation surveying, marsh plant survival and growth, and fishery resources, and photographic documentation (using drones) of site conditions.during and after construction.																													
Beach Club West	340	Drew Niederriter	Fort Morgan	30845000	Objective: To acquire a large and ecologically diverse parcel of land in coastal Alabama. Outcome: Protection and management of approximately 79 acres of habitat for multiple protected species. This property provides one of the last known refuges for the endangered Alabama beach mouse, which utilizes the high ground on the property during storms. The beach is also utilized by three species of protected sea turtles, as well as piping plovers. The dune field is an important nesting area for least terns and other shorebirds and is home to several rare plants. Additionally, a maritime forest is located on the northern boundary of the property, which provides a canopy for roosting migratory birds. Maritime forests on Beach Club West represents one of the last places on the Fort Morgan peninsula where one exists. A biological assessment has been prepared by the USFWS and can be provided for information on the ecological value of the land. Beach Club West, in conjunction with the acquisition of Gulf Highlands, could be combined to create an incredible ecotourism opportunity. A site plan could be designed to best utilize the nearly 200 acres of property to both properly manage the sensitive habitat and also allow for passive human recreation. Threat of development is high due to increased sales and construction along the Gulf Coast. All federal, state and local permits have been acquired to develop the property as a significant, multi-family resort. Development of Beach Club West would be in contradiction with the use of the immediately adjacent Gulf Highlands parcel. Beach Club West and Gulf Highlands parcels collectively developed a habitat conservation plan (HCP) as part of the originally proposed developments. The HCP could be modified to incorporate a public use of both properties while minimizing a development footprint to areas of Beach Club West that have already been partially impacted.	AL Portal	N	N	Y	N	N	N	N	N	N																			

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Lower Dog river Bottomland Hardwoods Protection	343	Debi Foster Foster	Dog River	1802500	The Lower Dog River Bottomland Hardwoods Protection project aims to permanently preserve nearly 300 acres of undisturbed, high quality, Palustrine, riverine wetlands in the Dog River Watershed. It comprises the largest contiguous acres in the Lower Dog River basin and will sustain critical habitat for threatened and endangered species like the West Indian Manatee (Trichechus manatus) and the American Bald Eagle (Haliaeetus leucocephalus). Acquisition of this property will ensure a healthy and sustainable Dog River by retaining the natural eco-system services they preform: it slows the water down by allowing it to spread out over a natural floodplain thereby filtering the water and alleviating downstream flooding. Cumulative economic benefits will be derived from this project through increased eco-tourism activities like recreational fishing opportunities, canoe/kayaking, birding and nature photography and environmental education. Restoration and preservation are top priorities listed in both the Mobile Bay National Estuary Program's Comprehensive Conservation Management Plan and the draft Dog River Watershed Management Plan. Conservation of this little known area of extreme biodiversity is critical to the future health of Dog River.	AL Portal	N	N	Y	N	N	N	N	N	N																			
Dog River Watershed Restoration	344	Christian Miller Miller	Dog River	21900000	This project implements the priority best management practices (BMPs) and restoration actions identified in the Dog River Watershed Management Plan (WMP). The ecology, hydrology, and water quality of the Greater Dog River Watershed have been degraded by cumulative impacts for over fifty years by conversion of natural land to hard surfaces, including channelization, to enhance runoff of rainfall and minimize urban flooding. Management measures designed to mitigate the impacts of urban development have been identified by the WMP and when implemented will reduce impacts to habitat and water quality associated with urban stormwater runoff. Phase I –The Mobile Bay Shore Habitat Conservation and Acquisition Initiative will utilize funds to acquire and preserve remaining high priority intact tidal marsh habitats within the City of Mobile. The goal of this initiative is preserving up to 1,000 acres of riparian, wetland, and marsh habitats in the Greater Dog River Watershed. Phase II - Stormwater Management and Low Impact Development (LID) Program. This Program will install multiple structural and nonstructural BMPs throughout the watershed to more effectively manage stormwater by increasing infiltration and reducing stormwater runoff with a goal of restoring water quality and hydrology. The LID Program includes sustainable stormwater BMPs and utilizes natural hydrologic cycles through multiple measures or practices that include: permeable pavement, bioretention areas, vegetated swales, constructed wetlands, and Gross Pollutant Removal Devices. This program will also include restoration of priority stream reaches and riparian habitat identified in the WMP. Restoring the natural hydrology of the watershed, restoring riparian buffers, and eliminating exotic species will benefit both surface water and habitat quality. Phase III – Coastal Resiliency Program. Through this program, partial funding would be made available to offset the costs of creating natural, erosion-resistant (living) shoreline for private landowners instead of habitat-	AL Portal	N	Y	Y	N	N	N	N	N	N																			

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					degrading, vertical bulkheads. This ongoing program would help decrease the number of armored shorelines, increasing coastal resiliency, ecological diversity, and habitat throughout the Dog River estuary.																												
Environmentally-friendly alternatives to bulkheads for protecting shorelines: evaluation and implementation of two living shoreline designs	347	Just Cebrian	Mobile Bay	200000	Coastal erosion is a serious problem in the Gulf of Mexico and many other coastal areas in the US. The most conventional way to protect shorelines from erosion is the placement of hard walls, such as bulkheads. About 40% of the shoreline in Mobile Bay is armored. However, bulkheads have a number of drawbacks, such as erosion of adjacent bottom, degradation over time and failure to protect the coastline, and removal of habitat for commercially important fishes. These problems have motivated substantial debate on the adoption of more environmentally friendly strategies for coastal protection against erosion (i.e. "Living Shoreline" designs), such as marsh construction. Recognizing this, the US Army Corps of Engineers (USACE) conducted a review of their general permits and created a new category for "Living Shoreline" initiatives. This general permit (ALGP-10 – Living Shorelines) was adopted in Alabama in October 2011 and allows for waterfront homeowners and communities, including businesses, to obtain permits for living shorelines as easily as receiving a permit for a hardened shoreline. Our main objective is to implement the USACE Living Shorelines General Permit ALGP-10 for private owners by enhancing the cost-effectiveness of marsh construction practices. To do that we will compare the cost and effectiveness of various marsh construction designs in stabilizing the shoreline in comparison with bulkheads and eroding sediment slopes ("no action" options). We will also quantify additional benefits of the constructed marshes such as enhanced habitat for commercial fish species and filtration of nutrient pollution. Throughout the project we will work with a Project Advisory Panel, composed of various state and federal agencies, to ensure the information generated can be used to implement the general permit ALGP-10 with recommendations of cost-effective marsh construction designs. The results of this project are transferable to other US coastal regions because (1) similar cost-effective living shorelines designs can be adopted elsewhere; and (2) we will develop a framework for collaboration between researchers and federal and state managers as well as for implementation of environmental regulatory policies based on research results, a framework that can also be used in other parts of the country.	AL Portal	N	Y	Y	N	N	N	N	N	N																			
Dog River Watershed Water Quality Restoration	349	Christian Miller Miller	Dog River	125000000	This project implements the priority best management practices (BMPs) and restoration actions identified in the Dog River Watershed Management Plan (WMP) to reduce the impacts related to sanitary sewer overflows (SSO's) and associated bacterial pathogen pollution into the receiving waters of the Dog River Watershed. The advanced age of the sewage collection and conveyance facilities in the Greater Dog River Watershed, and the high amount of precipitation which falls in coastal Alabama have created a high frequency of SSO's in the Greater Watershed. The SSO's most often are the result of aging pipelines and pump lift stations incapable of handling large volumes of rainfall. Small cracks in conveyance pipelines, caused by tree roots and deterioration, allow rainwater to infiltrate into the pipelines. Millions of gallons of untreated sewage are released each year into the Dog River	AL Portal	N	Y	N	N	N	N	N	N	N																			

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					Watershed. Sanitary sewer overflows endanger human health as well as fish and wildlife by releasing bacteria, viruses, and other pathogens as well as nutrients and oxygen-demanding materials to nearby surface waters. The Mobile Area Water and Sewer System (MAWSS) has identified key infrastructure upgrades within the Dog River Watershed which have been outlined in the WMP. MAWSS currently has plans for several improvements and infrastructure upgrades to improve management of SSO's. These measures are as follows: Installation of a new lift station and severe weather attenuation basin (SWAB) in the Halls Mill Creek subwatershed; upgrades to the Williams wastewater treatment facility (WWTF)t; replacement of the trunk sewer line and installation of SWABs in the Eslava Creek subwatershed; replacement of the force main that extends from the Halls Mill lift station to the Eslava lifts station. This project will greatly improve the function of the sewer basin and will result in less sewage spills and overflows into the receiving waters of the Dog River Watershed. In addition, the flows to the WWTF will be greatly reduced.																													
Reducing runoff pollution in coastal waters through marsh restoration: a decision support tool for stakeholders	350	Just Cebrian	AL waters	269269	The main goal of this project is to carry out a cost-effectiveness analysis of how various marsh restoration designs ranging in plant density, platform slope and sediment grain size perform in terms of reducing runoff pollution under current and elevated sea level. With this information we will build a decision support tool to help managers maximize the reduction of runoff nutrient pollution through marsh restoration given their specific time and budget constraints. This project will provide science-based information important to the development of ordinances and regulations sought by coastal wetlands projects and efforts throughout the State of Alabama, encouraging implementation of federal- and state-approved wetlands resource management programs. To accomplish this we will closely work with an Advisory Panel comprised of environmental officers and managers representing a wide variety of agencies that deal with issues of coastal pollution and wetland restoration. The Panel has expressed much interest in participating in this project. Through this intense collaboration and training, the Panel will become vested in the design, development and applications of the decision support tool. Most importantly, through their professional networks they will disseminate and instruct others how to use the tool, thereby having far-reaching implications for the protection and restoration of wetlands and applications for environmental betterment throughout the Gulf of Mexico and other US coastal areas.	AL Portal	N	N	Y	N	N	N	N	N	Y																		
Fowl River Watershed Headwaters Conservation and Restoration Program	351	Christian Miller Miller	Fowl River	7416000	This project implements priority best management practices (BMPs) and restoration actions identified in the Fowl River Watershed Management Plan (WMP). A 2015 assessment completed by GSA indicates relatively healthy water quality in the Fowl River Watershed, attributable to the relatively rural landscape, extensive wetlands and forests, and use of cover crops on agricultural fields. In order to improve and protect water quality and habitats for the future, steps should be taken to employ best management BMPs identified in the WMP. The WMP has identified priority projects in the upper reaches of the Fowl River Watershed that can be divided into the following categories: Wetland restoration (including installation of agricultural BMPs),	AL Portal	N	Y	N	N	N	N	N	N	N																		

Project Information							Restoration Types Addressed											Programmatic Damage Assessment and Restoration Plan (PDARP) Criteria		Public Notice	Oil Pollution Act (OPA) Criteria (15 CFR 990.54)			Additional Criteria									
Project Name	Proj No./ ID	Submitted By/ Primary Lead	Location	Cost	Project Description	Submitted via	Marine Mammals (Y/N)	Water Quality/ Nonpoint Source Nutrient Reduction (Y/N)	Wetland, Coastal, and Nearshore Habitat (Y / N)	Oyster Reef (Y / N)	Birds (Y / N)	Sea Turtles (Y / N)	Recreational Use (Y/N)	Habitat on Federal Lands (Y/N)	Monitoring, Adaptive Management, and Administrative Oversight to Support Restoration Implementation (Y/N)	Project is consistent with programmatic restoration goals (Y/N)	Project is considerate of strategic frameworks (Y/N/NA)	Project is consistent with criteria identified in the public notice (Y/N)	Project delivers benefits cost-effectively (+ / 0 / -)	Project meets Trustees' goals (+ / 0 / -)	Project has reasonable probability of success (+ / 0 / -)	Project prevents future and collateral injury to natural resources and services (+ / 0 / -)	Project benefits more than one natural resource and/or service (+ / 0 / -)	The effect of the project alternative on public health and safety (+ / 0 / -)	Project is not already required by existing regulations (Y/N)	Project complies with applicable laws and regulations (Y/N)	Project supports existing regional or local conservation plan or restoration effort (Y/N)	Project is not already fully funded (Y/N)	Project is technically feasible (+ / 0 / -)	Project readiness (+ / 0 / -)	Sustainability/Long-term Benefit of project (+ / 0 / -)	Project is time critical (+ / 0 / -)	Project offers opportunities for external funding & collaboration (+ / 0 / -)
					stream/riparian buffer restoration, and stormwater management. These headwaters priority projects include an assortment of opportunities to manage upstream flows, increase nutrient and bacteria uptake/ removal, provide increased wildlife utilization, and offset future development within the Watershed. Restoration of impaired wetlands and streams and implementation of stormwater management projects will have the greatest benefits to nutrient and sediment removal in the receiving waters of Fowl River, and ultimately Mobile Bay. Wetland restoration projects have been identified for wetlands that have experienced significant change in land use and likely have experienced various types of hydrologic alterations. Similarly, identified stream restoration projects would restore stream ways that have been altered through channelization and changes in land use (mostly forested riparian buffers converted to row crops). Once installed, these BMPs will allow for increased flood capacity and increased nutrient uptake/sediment removal, prevent the further destruction of wetlands, prevent erosion and sediment transport from areas of active timber harvesting and agriculture, and control runoff from construction sites and urban areas with significant impervious cover.																													
Deer River Coastal Marsh Stabilization and Restoration	352	Christian Miller Miller	Mobile Bay	4000000	This purpose of this project is to restore the erosion-impacted and storm-vulnerable marsh at the mouth of Deer River, adjacent to the Theodore Industrial Canal and Mobile Bay. In addition to restoration the goal should be to establish the preservation and long term sustainability of the ecological habitats of this system. The target area is regionally recognized as a priority saltmarsh habitat by the Mobile Bay National Estuary Program. The existing inter tidal marsh of the Deer River watershed is currently and has been experiencing excessive deterioration and loss of natural function from erosion caused by heavy storms, excessive tidal wave impact and predominantly the wave loading effects of cargo ships ingressing and egressing the Theodore Industrial Canal. Since 1997, approximately nine acres of intertidal marshland and shoreline have been eroding thus causing the ongoing loss of a pristine and prioritized aquatic resource area of Mobile Bay. Due to previous indicated impacts to the salt marsh of Deer River, there is an added concern expressed by a group of citizens who reside along the canal portions of Deer River. These citizens of the Hollingers Island community live along stretches of the seminavigable reach of Deer River that has experienced degraded water and habitat quality, sedimentation, and benthic build-up along with solid waste pollution from Mobile Bay – caused by the gaping breach that is allowing significant impact to the marsh.	AL Portal	N	N	Y	N	N	N	N	N	N																			
West Fowl River Pathogen Study	353	Christian Miller Miller	Fowl River	450000	The proposed project seeks to identify sources of bacteria in the West Fowl River watershed. The West Fowl River Watershed is home to oyster farmers who have a long history of making a living off the Gulf waters. Recent water quality sampling for bacteria has exceeded regulatory thresholds and is impacting the local aquaculture industry. The presence of elevated concentrations of indicator bacteria in surface waters could be a serious threat to human health and safety because they indicate the potential for the presence of disease-causing micro-organisms. In	AL Portal	N	Y	N	N	N	N	N	N	Y																			

Project Information							Restoration Types Addressed											Programmatic Damage Assessment and Restoration Plan (PDARP) Criteria		Public Notice	Oil Pollution Act (OPA) Criteria (15 CFR 990.54)			Additional Criteria									
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					many watersheds pathogens are typically seen in higher numbers after rain events as a result of runoff laden with gross pollutants. While the presence of pathogens during wet-weather can be attributed to a variety of potential sources, the presence on pathogens in dry-weather conditions can be indicative of direct inputs of bacteria into the surface water system. Elevated bacterial loads have typically been attributed to a wastewater source such as a failed septic system, sanitary sewer leakage, periodic sanitary pump station overflows, illicit discharges, and illicit connections. However, significant bacterial loads can be documented from rotting vegetation and/or wildlife. Regardless of the source, elevated bacterial loads could pose a human-health risk. This project would include field surveys, bacterial sampling, and microbial source tracking to understand and identify areas of concerns in the watershed and identify potential sources of pathogens.																												
Bayou La Batre Pathogen Study	354	Christian Miller Miller	Bayou La Batre	450000	The proposed project seeks to identify sources of pathogens in the Bayou La Batre Watershed. The Bayou was placed on Alabama's 303(d) list of impaired waters for pathogens as indicated by elevated fecal coliform bacteria concentrations; and human-derived bacteria were detected during water quality sampling undertaken as part of the Bayou La Batre watershed study. The watershed plan identified bacteria as a water quality issue and preliminary sampling efforts indicated the presence of human bacteria; however, the proportion of human waste as a source is unknown relative to other potential sources (i.e., rotting vegetation, animal waste). The presence of elevated concentrations of pathogens in surface waters could be a serious threat to human health and safety because they indicate the potential for the presence of disease-causing micro-organisms. In many watersheds pathogens are typically seen in higher numbers after rain events as a result of runoff laden with gross pollutants. While the presence of pathogens during wet-weather can be attributed to a variety of potential sources, the presence on pathogens in dry-weather conditions can be indicative of direct inputs of bacteria into the surface water system. These are typically from a wastewater source such as a failed septic system, sanitary sewer leakage, periodic sanitary pump station overflows, illicit discharges, illicit connections or pets and wildlife. The Bayou La Batre community has a long history of making a living off the Gulf waters and oyster farming is conducted in nearby waters. Bacteria and related viruses can pose significant human health risks to oyster farms and recreational uses of waterbodies. This project would entail field surveys, bacterial sampling, and microbial source tracking to understand and identify areas of concerns in the watershed and identify potential sources of pathogens.	AL Portal	N	Y	N	N	N	N	N	N	Y																		
Old River Recreation Access Area - Gulf State Park	355	Rob Grant	Gulf Shores	4500000	Develop boat launching ramp, parking area, and 75 site RV campground. Project study for boat ramp component completed in July 2006 by the City of Orange Beach. Proposed project area is a 30 acre tract of land within Gulf State Park located east of Perdido Pass, north of Perdido Beach Boulevard,	AL Portal	N	N	N	N	N	N	Y	N	N																		

Project Information								Restoration Types Addressed										Programmatic Damage Assessment and Restoration Plan (PDARP) Criteria		Public Notice	Oil Pollution Act (OPA) Criteria (15 CFR 990.54)			Additional Criteria									
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					just west of Ono Island Bridge on Old River. Major project components are boat ramp, parking lot, 75 site campground, bath house, and office.																												
Comprehensive Shoreline Restoration Plan for Coastal Communities in Alabama	356	Judy Haner Haner	Coastal AL	1677337	The shorelines of coastal bays and estuaries on the Gulf of Mexico are the first line of defense against natural and man-made disasters. In Alabama, more than 80% of bay and tributary shorelines are privately owned. These landowners, especially on the major bay systems, i.e. Mobile Bay, Mississippi Sound, Bon Secour Bay, Wolf Bay, and Perdido Bay are experiencing high rates of erosion. The landowners experiencing the shoreline impacts do not have the information necessary to effectively address shoreline loss, especially on major bays where a comprehensive, rather than piecemeal, approach is needed. This project proposes to develop a comprehensive shoreline restoration plan for the shoreline reaches along the major bays, including a set of recommendations for waterfront landowners, municipalities and communities to consider when implementing shoreline protection measures that will dually serve to protect property, while also contributing to overall coastal and community resilience. A 'Basis of Design' for the interconnected, but physiographically unique, stretches of shorelines, will provide recommendations for materials, methods and techniques that incorporate nature-based solutions as options for living shoreline implementation that can also contribute to enhanced fish and wildlife habitat, property values and aesthetics, community rating system (CRS) rankings and overall mental health. This project will help advance current efforts to promote the utilization of nature-based solutions for shoreline protection and benefit communities. This shoreline plan will provide capacity for improved coastal and community resilience by developing a single, comprehensive shoreline restoration plan that could otherwise not be accomplished through the efforts of any individual, municipality, or county due to the cross-boundary nature of Alabama's coastal systems and municipal borders. The tributary systems can accommodate a wider range and mix of living shoreline techniques, however larger water-bodies are less accommodating and require a more coordinated approach to ensure environmental, societal and individual goals are realized. In addition, climate impacts will exacerbate current, known impacts from seasonal storms, ship wakes, water quality degradation and habitat loss. By developing a comprehensive shoreline plan, this project will provide options and tools for individuals and communities to help enhance their overall environmental and societal resilience.	AL Portal	N	N	Y	N	N	N	N	N	Y																		
Gulf State Park Pier Renovation	357	Rob Grant Grant	Gulf Sores	1000000	The original decking on the Gulf State Park Pier is now approaching ten years of age. The wood decking was the correct choice at the time, but we now recognize that alternative materials would likely have a longer life expectancy, and provide a more "customer friendly" surface than what presently exists. This project would replace the entire pier deck with more sustainable, ecologically friendly materials.	AL Portal	N	N	N	N	N	N	Y	N	N																		
Bayou Le Batre Nutrient Reduction Project	358	Homer Wilkes	Bayou La Batre	2000000	Excessive nutrient enrichment, or eutrophication, of Gulf Coast estuaries and their watersheds is a chronic threat that can lead to hypoxia (low oxygen levels), harmful algal blooms, habitat losses, and fish kills (PDARP/PEIS Section 5.5.4). The Nutrient Reduction restoration is consistent with the needs of the	AL Portal	N	Y	N	N	N	N	N	N	N																		

Project Information							Restoration Types Addressed											Programmatic Damage Assessment and Restoration Plan (PDARP) Criteria		Public Notice	Oil Pollution Act (OPA) Criteria (15 CFR 990.54)			Additional Criteria									
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					Bayou La Batre Watershed in Alabama. The watershed would benefit from activities designed to restore and enhance the ecological and hydrological integrity of water resources. The goal of this project is to reduce nonpoint source pollution from agricultural and forested lands. The Bayou La Batre Watershed covers over 19,500 acres in south Mobile County and flows southwesterly into Portersville Bay and Mississippi Sound. The City of Bayou La Batre, which is located within the watershed, is the source of the urban component of the watershed. Total land use breakdown: 13% urban, 32% agricultural land, 51% forested, 2% water/wetlands. Row crops, pasture, and silviculture accounts for the agriculture landuse within the watershed. The racial makeup of the city was 52.44% White, 10.25% Black or African American, 0.26% Native American, 33.29% Asian, 0.43% Pacific Islander, 0.95% from other races, and 2.38% from two or more races. The large Asian population is attributable to a large influx of Vietnamese American shrimpers as immigrants following the Vietnam War as well as Cambodian and Laotian refugees and their children. Bayou La Batre was originally placed on the State's 303(d) list for pathogens in 1998 with a TMDL developed in 2009. The lower half of the Bayou La Batre sub-estuary is rated “Fair” while the upper half is rated “Poor”. There are no NPDES discharges within the watershed, and nonpoint sources appear to be a significant source of pathogen contamination, with the TMDL indicating sanitary sewer overflows and agriculture runoff being the probable sources. The Bayou La Batre Nutrient Reduction Project would be implemented by NRCS in the Bayou La Batre Watershed in Alabama for the purpose of improving water quality by implementing conservation practices to reduce nutrient and sediment runoff. NRCS and its conservation partners would assist private landowners by developing conservation plans that identify natural resource concerns and conservation practices the landowner can implement to reduce nutrient and sediment runoff.																													
Fort Morgan Parkway Trail Extension	359	Rob Grant Grant	Fort Morgan	4433600	This project would extend, and ultimately complete, the Fort Morgan Trail from Fort Morgan in the west to Gulf State Park and the Hugh Branyon Backcountry Trail in the east. Currently, a 15 mile gap exists between Fort Morgan and Peninsula Boulevard. The proposed extension will complement the existing ten foot wide concrete trail. When completed, the Fort Morgan Trail will provide approximately 30 miles of recreation trail from Fort Morgan to Orange Beach and will connect with numerous trail spurs and loops along the way. A "mid-zone" trail head facility within the Parkway will provide parking spaces, restrooms, vending machines, interpretive signage, and informational kiosks.	AL Portal	N	N	N	N	N	N	Y	N	N																		

Project Information								Restoration Types Addressed										Programmatic Damage Assessment and Restoration Plan (PDARP) Criteria		Public Notice	Oil Pollution Act (OPA) Criteria (15 CFR 990.54)			Additional Criteria									
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Fowl River Watershed Nutrient Reduction Program	360	Homer Wilkes	Fowl River	2000000	Excessive nutrient enrichment, or eutrophication, of Gulf Coast estuaries and their watersheds is a chronic threat that can lead to hypoxia (low oxygen levels), harmful algal blooms, habitat losses, and fish kills (PDARP/PEIS Section 5.5.4). The Nutrient Reduction restoration is consistent with the needs of the Fowl River Watershed in Alabama. The watershed would benefit from activities implemented to restore and enhance the ecological and hydrological integrity of water resources. The Fowl River Watershed (HUC 031602050206) encompasses 52,782 acres, drains much of southern Mobile County, and is a direct contributor to Mobile Bay. Land use in the Fowl River Watershed is varied and characterized as urban, residential, and rural. Twenty-one percent of the watershed area is classified as urban, 15% as crop or pasture land, and 63% as forested. Increasing development and continuing erosion and sedimentation threaten water and habitat quality. The Fowl River Nutrient Reduction Project would be implemented by NRCS in the Fowl River Watershed in Alabama for the purpose of improving water quality by implementing conservation practices to reduce nutrient and sediment runoff. NRCS and its conservation partners would assist private landowners by developing conservation plans that identify natural resource concerns and conservation practices the landowner can implement to reduce nutrient and sediment runoff. Through this project, landowners would receive financial assistance to apply conservation practices near the source of soil erosion and nutrient application with additional conservation practices. The cost of $2.0 M for development and implementation of conservation plans and practices in the Fowl River watershed. USDA-NRCS would implement this proposed alternative by helping landowners voluntarily implement conservation practices that reduce nutrient and sediment runoff. Through their experience with the Environmental Quality Incentives Program (EQIP), USDA-NRCS is knowledgeable about activities required for the successful implementation of the proposed conservation practices.	AL Portal	N	Y	N	N	N	N	N	N	N																		
Phased Recreation Facilities Development at Meaher State Park	361	Rob Grant	Spanish Fort	3450000	This project could be developed in phases and would greatly increase and enhance outdoor recreation opportunities along a major east-west corridor used heavily by citizens and guests of Alabama. Meaher is a very popular state park and its campground frequently fills to capacity. This project would ultimately add 156 full-service campsites as well as support facilities such as parking, bath houses, a fishing pier, and utility infrastructure. In addition, ten (10) RV park model cabins would be installed along with appropriate skirting, decking, steps and/or ramps.	AL Portal	N	N	N	N	N	N	Y	N	N																		
Nutrient Reduction Projects - Mobile and	362	Homer Wilkes	Mobile and Baldwin Counties	6000000	Excessive nutrient enrichment, or eutrophication, of Gulf Coast estuaries and their watersheds is a chronic threat that can lead to hypoxia (low oxygen levels), harmful algal blooms, habitat losses, and fish kills (PDARP/PEIS Section 5.5.4). The Nutrient Reduction restoration is consistent with the needs of the	AL Portal	N	Y	N	N	N	N	N	N	N																		

Project Information							Restoration Types Addressed											Programmatic Damage Assessment and Restoration Plan (PDARP) Criteria		Public Notice	Oil Pollution Act (OPA) Criteria (15 CFR 990.54)			Additional Criteria									
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Baldwin Counties					Alabama coastal watersheds. The watershed would benefit from activities implemented to restore and enhance the ecological and hydrological integrity of water resources. This project would address nutrient and sediment reduction in the Dog River, Bon Secour, and Wolf Bay Watersheds. The Nutrient Reduction Projects would be implemented by NRCS in the coastal watersheds in Alabama for the purpose of improving water quality by implementing conservation practices to reduce nutrient and sediment runoff. NRCS and its conservation partners would assist private landowners by developing conservation plans that identify natural resource concerns and conservation practices the landowner can implement to reduce nutrient and sediment runoff. Through this project, landowners would receive financial assistance to apply conservation practices near the source of soil erosion and nutrient application with additional conservation practices. The cost of $6.0 M ($2 M for each watershed) for development and implementation of conservation plans and practices in the watersheds. USDA-NRCS would implement this proposed alternative by helping landowners voluntarily implement conservation practices that reduce nutrient and sediment runoff. Through their experience with the Environmental Quality Incentives Program (EQIP), USDA-NRCS is knowledgeable about activities required for the successful implementation of the proposed conservation practices.																												
Presence, Potential Sources, Behavior and Fate of Endocrine Disrupting Chemicals in Northern Gulf of Mexico Estuarine Systems	363	Joel Hayworth	Gulf of Mexico	1700000	This project will conduct the first detailed sediment, surface water, suspended organic matter, and sediment pore water assessment of northern Gulf of Mexico estuarine systems to identify the presence, potential sources, and physicochemical mechanisms controlling the behavior and fate of complex mixtures of known or suspected endocrine disrupting chemicals (EDCs) in these systems. EDCs are natural or synthetic compounds which, even at trace exposure levels, can alter early development in vertebrates and invertebrates and cause serious effects later in life or even in successive generations. Known or suspected EDCs include some of the more recalcitrant compounds associated with raw crude oil. EDCs can easily pass into ecological systems and are often persistent; moreover, the consequences of exposure are markedly different from how we usually think of exposure to environmental contaminants. At the levels found in natural systems, EDCs do not destroy cells or attack DNA. Rather, they target a developing organism's chemical messengers (hormones) and the messaging network (endocrine system). Organisms living in estuaries are particularly vulnerable to the effects of EDCs, since estuaries are sinks for contaminants moving from terrestrial to marine ecosystems. Estuaries are among the most productive biomes on earth; nearly 50% of the world's population lives or works in close proximity to estuaries. Consequently, estuaries are under increasing threat from both natural and anthropogenic stressors (including EDCs). Little is known about the behavior and fate of potential EDCs entering estuaries. The proposed project will	AL Portal	N	Y	N	N	N	N	N	N	Y																			

Project Information							Restoration Types Addressed											Programmatic Damage Assessment and Restoration Plan (PDARP) Criteria		Public Notice	Oil Pollution Act (OPA) Criteria (15 CFR 990.54)				Additional Criteria								
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					significantly advance our abilities to detect and quantitate mixtures of EDCs at trace concentrations in complex estuarine samples and will provide the first quantitative mechanistic evidence linking the behavior of EDC mixtures (transport and partitioning) to their fate (spatiotemporal accumulation, sequestration, and resuspension) as a function of dynamic estuary system conditions (hydrodynamics, water quality parameters, physicochemical conditions of partitioning phases). The results of this project will provide the first detailed, data-driven assessment of the scope of EDC contamination in northern Gulf of Mexico estuarine systems, provide a basis for examining ecological and human risks posed by EDCs in these ecosystems, and inform potential restoration actions to address these risks.																												
New RV Campground Facilities at Gulf State Park	364	Rob Grant	Gulf Shores	2500000	This project would construct 100 new RV campsites accommodating travel trailers and motor coaches with longer lengths and multiple slide-out sections, while still giving each site recreational space and privacy. Features would include adequate space for motor vehicles, bicycles, and pedestrians; paved campsite driveways and pads; full service utilities (electricity, water, sewer, cable TV, internet); energy-efficient bath houses; a modest sized recreational/fishing pond and pier; a central gathering place and office building, suitable to rent out for group functions; gazebos and pavilions; attractive non-invasive landscaping; a splash pad; RV dump station and washing area; playground; self-service laundry facility; dog play area. The primary area of interest to develop this project is the existing golf course, as noted in the recent Gulf State Park Master Plan.	AL Portal	N	N	N	N	N	N	Y	N	N																		
New Pier at Alabama/ Florida Point (Gulf State Park)	365	Rob Grant	Orange Beach	25000000	Gulf State Park's existing pier is a very popular park amenity. Like many of our facilities, it becomes extremely crowded during peak season. We propose to build a similar facility at our Alabama/Florida Point Unit which contains about 1/3 of the park's beach frontage, and is presently underutilized. We believe that this will greatly enhance the public's access to coastal waters and their related natural resources, while also better balancing the public's use and impacts on park land. As is the case with our existing pier, we plan to provide ecological and environmental education and information through various media.	AL Portal	N	N	N	N	N	N	Y	N	N																		
Expansion of Beach Access Areas - Cotton Bayou & Romar Beach - Gulf State Park	366	Rob Grant	Orange Beach	4180000	As is the case with most all of our facilities at Gulf State Park, at various peak times they reach their maximum capacity and citizens/guests are not able to access our beautiful beach areas. This project would increase vehicle parking capacity and construct energy-efficient bath house facilities.	AL Portal	N	N	N	N	N	N	Y	N	N																		
Boggy Point Shoreline Restoration & Stabilization - Gulf State Park	367	Rob Grant	Orange Beach	197500	Restore eroded shoreline on south side of the Boggy Point Access Area and install a living wave barrier to prevent future erosion.	AL Portal	N	N	N	N	N	N	Y	N	N																		
Longleaf Restoration bordering	12900	Gary Kolb sr	Baldwin County	25125	Would like to select or clear cut about 125 Acres on the north border of the Splinter Hill Bog Nature Preserve. We need help with site prep and planting. I know the state is also interested in longleaf restoration. This land has been approved for purchase by Forever Wild, but not sure it is going to happen	Trustee Portal	N	N	Y	N	N	N	N	N	N																		

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Splinterhill Bog Preserve					anytime soon so we march on. Thanks, Gary Kolb , DO Work 251-937-5652 Home 251-937-3485																												
Deepwater Sand Search	12876	Phillip West	Orange Beach	500000	The City of Orange Beach, via our coastal engineering consulting firm, proposes to perform a Phase I deepwater sand search for purposes of attempting to locate a borrow site suitable for future beach project maintenance. The significant distance offshore of such a site would necessitate the future use of hopper dredging technology (in lieu of cutter/pipeline equipment). The results of the Phase I investigation should be considered exploratory and therefore not necessarily suitable for construction. Olsen Associates, Inc. has preliminarily identified one offshore feature which appears to be self similar to the geomorphology of the existing Pensacola Beach borrow area. The site is in relatively deep water in Federal Waters (i.e. beyond the limits of the State of Florida or Alabama). Several candidate areas will be tested. The Phase I Scope-of-Services discussed herein provides for the following items: § Pre-planning, and coordination with neighboring states, counties and agencies. § Mob/demob of equipment and personnel, § Up to 60 VIBRACORES, § Up to 2 days of sub-bottom survey, § Laboratory analyses for 60 VIBRACORES, § Core transport to a Florida lab, § Project Management (onsite) by OA, § A Report of Findings by OAI (paper and digital). The cost for this work is proposed at $500,000. This amount includes a weather contingency and a pre-planning effort.	Trustee Portal	N	N	N	N	N	N	N	N	N																			
Mobile and Tensaw River Flows: Quantifying Flow into Mobile Bay	12882	Maurice	Mobile River	600000	The objective of the project is the better quantify surface-water flows in the Mobile River delta, primarily estimating flows in the Mobile and Tensaw Rivers further downstream from existing stream gages and flow distribution through the delta at stages above bank-full elevation. Currently, the USGS operates an index-velocity continuous flow station on the Mobile River at river mile 31 near Bucks, Alabama in cooperation with the Alabama Department of Economic and Community Affairs, Office of Water Resources and Alabama Power: https://waterdata.usgs.gov/al/nwis/uv/?site_no=02470629&PARAmeter_cd=00065,00060 Currently, flows are estimated for the Tensaw River just downstream of the split from the Mobile River at about river mile 41, based on a theoretical rating developed by correlating measured flow of the Tensaw with computed flows from the index-velocity station on the Mobile River at Bucks gage. The development and maintenance of the rating is funded in cooperation with the U.S. Army Corps of Engineers, Mobile District. In order to better quantify surface-water flows in the Mobile River delta, USGS proposes to construct an index-velocity streamflow station on the Tensaw River near Perkins Landing at Hurricane, Alabama (approximately river mile 14). A reconnaissance survey will identify a suitable structure to mount the index-velocity sensor (side-looker acoustic Doppler current meter) and gage house. If no suitable structure exists, pilings or other structure will be installed in the channel for mounting and housing the instrumentation. If the Hurricane site is deemed unacceptable, sites upstream at Sizemore (Cliffs) Landing and at Upper Hall Landing will be considered for the gage location. After the gaging station has been installed, numerous discharge measurements using a boat-mounted acoustic Doppler current profiler	Trustee Portal	N	Y	N	N	N	N	N	N	N																			

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					(ADCP) will be made over a two- to three-year period and wide range of flow conditions and tide cycles to develop ratings needed to compute r eal-time discharge from measured stage and index velocity. Additional flow measurements will be made on the Mobile River at approximately river mile 14 to develop a theoretic rating to estimate flows at this site based on hard data collected at the Mobile River at Bucks gage at river mile 31 and the new index velocity station on the Tensaw River at river mile 14 at Hurricane. Also, during flooding events, flow measurements will be made on the canal that transverses the delta and the Mobile River at river mile 13 and Tensaw River at river mile 14 to better define the flow distribution through the delta above bank-full stage. The duration of the project is proposed for five years. Development of ratings to compute flow will require two to three years; and the continued operation of the newly established gaging stations would then provide another two to three years of flow data. After five years, continued sources of funding will be needed to maintain the gaging station for the Tensaw River near Perkins Landing at Hurricane, Alabama.																											
Environmentally-friendly alternatives to bulkheads for protecting shorelines: evaluation and implementation of two living shoreline designs	12847	Just, Cebrian	Mobile Bay	200000	Coastal erosion is a serious problem in the Gulf of Mexico and many other coastal areas in the US. The most conventional way to protect shorelines from erosion is the placement of hard walls, such as bulkheads. About 40% of the shoreline in Mobile Bay is armored. However, bulkheads have a number of drawbacks, such as erosion of adjacent bottom, degradation over time and failure to protect the coastline, and removal of habitat for commercially important fishes. These problems have motivated substantial debate on the adoption of more environmentally friendly strategies for coastal protection against erosion (i.e. "Living Shoreline" designs), such as marsh construction. Recognizing this, the US Army Corps of Engineers (USACE) conducted a review of their general permits and created a new category for "Living Shoreline" initiatives. This general permit (ALGP-10 – Living Shorelines) was adopted in Alabama in October 2011 and allows for waterfront homeowners and communities, including businesses, to obtain permits for living shorelines as easily as receiving a permit for a hardened shoreline. Our main objective is to implement the USACE Living Shorelines General Permit ALGP-10 for private owners by enhancing the cost-effectiveness of marsh construction practices. To do that we will compare the cost and effectiveness of various marsh construction designs in stabilizing the shoreline in comparison with bulkheads and eroding sediment slopes ("no action" options). We will also quantify additional benefits of the constructed marshes such as enhanced habitat for commercial fish species and filtration of nutrient pollution. Throughout the project we will work with a Project Advisory Panel, composed of various state and federal agencies, to ensure the information generated can be used to implement the general permit ALGP-10 with recommendations of cost-effective marsh construction designs. The results of this project are transferable to other US coastal regions because (1) simi lar cost-effective living shorelines designs can be adopted elsewhere; and (2) we will develop a framework for collaboration between researchers and federal and state managers as well as for implementation of environmental regulatory policies	Trustee Portal	N	Y	Y	N	N	N	N	N	Y																		

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					based on research results, a framework that can also be used in other parts of the country.																												
Reducing runoff pollution in coastal waters through marsh restoration: a decision support tool for stakeholders	12849	Just Cebrian	coastal AL	269269	The main goal of this project is to carry out a cost-effectiveness analysis of how various marsh restoration designs ranging in plant density, platform slope and sediment grain size perform in terms of reducing runoff pollution under current and elevated sea level. With this information we will build a decision support tool to help managers maximize the reduction of runoff nutrient pollution through marsh restoration given their specific time and budget constraints. This project will provide science-based information important to the development of ordinances and regulations sought by coastal wetlands projects and efforts throughout the State of Alabama, encouraging implementation of federal- and state-approved wetlands resource management programs. To accomplish this we will closely work with an Advisory Panel comprised of environmental officers and managers representing a wide variety of agencies that deal with issues of coastal pollution and wetland restoration. The Panel has expressed much interest in participating in this project. Through this intense collaboration and training, the Panel will become vested in the design, development and applications of the decision support tool. Most importantly, through their professional networks they will disseminate and instruct others how to use the tool, thereby having far-reaching implications for the protection and restoration of wetlands and applications for environmental betterment throughout the Gulf of Mexico and other US coastal areas.	Trustee Portal	N	Y	Y	N	N	N	N	N	Y																			
Presence, Potential Sources, Behavior and Fate of Endocrine Disrupting Chemicals in Northern Gulf of Mexico Estuarine Systems	12881	Joel Hayworth	Gulf of Mexico	2000000	This project will conduct the first detailed sediment, surface water, suspended organic matter, and sediment pore water assessment of northern Gulf of Mexico estuarine systems to identify the presence, potential sources, and physicochemical mechanisms controlling the behavior and fate of complex mixtures of known or suspected endocrine disrupting chemicals (EDCs) in these systems. EDCs are natural or synthetic compounds which, even at trace exposure levels, can alter early development in vertebrates and invertebrates and cause serious effects later in life or even in successive generations. Known or suspected EDCs include many compounds used in or produced during oil and gas exploration/production; some of the more recalcitrant compounds associated with raw crude oil are known/suspected EDCs. EDCs can easily pass into ecological systems and are often persistent; moreover, the consequences of exposure are markedly different from how we usually think of exposure to environmental contaminants. At the levels found in natural systems, EDCs do not destroy cells or attack DNA. Rather, they target a developing organism's chemical messengers (hormones) and the messaging network (endocrine system). Organisms living in estuaries are particularly vulnerable to the effects of EDCs, mainly because estuaries are natural sinks for contaminants transitioning from terrestrial to marine ecosystems. Estuaries are among the most productive biomes on earth; nearly 50% of the world's population lives or works in close proximity to estuaries. Consequently, estuaries are under increasing threat from both natural and anthropogenic stressors (including EDCs). Little is known about the types, behavior, and ultimate fate of the vast number of potential EDCs entering	Trustee Portal	N	Y	N	N	N	N	N	N	Y																			

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					estuaries, although it is known that some EDCs are present in these systems and that some estuarine organisms show signs of EDC exposure. Very few field-based studies have considered EDC behavior and fate in estuaries. Of these, most have considered a limited number of sampling locations, a single sampling event, or both. Moreover, most did not consider mixtures of EDCs likely to be encountered in estuaries, nor were their methods of chemical analysis capable of detecting or quantifying EDCs at trace levels. Also, none considered sediment pore water as a partitioning phase, and none attempted to quantitatively link EDC partitioning behavior to spatiotemporal distributions of multiple EDCs within real estuarine systems. The proposed project will significantly advance our abilities to detect and quantitate mixtures of EDCs at trace concentrations in complex estuarine samples and will provide the first quantitative mechanistic evidence linking the behavior of EDC mixtures (transport and partitioning) to their fate (spatiotemporal accumulation, sequestration, and resuspension) as a function of dynamic estuary system conditions (hydrodynamics, water quality parameters, physicochemical conditions of partitioning phases). The results of this project will provide the first detailed, data-driven assessment of the scope of EDC contamination in northern Gulf of Mexico estuarine systems, provide a basis for examining ecological and human risks posed by EDCs in these ecosystems, and inform potential restoration actions to address these risks.																											
Comprehensive Monitoring to Quantify Ecosystem Benefits of Restoration Actions within the Perdido River and Bay Watersheds	12877	Joel S. Hayworth	Perdido Bay Watershed	2000000	This project establishes a program to provide science-based assessment and quantification of ecosystem benefits of restoration actions in the Perdido River and Bay watersheds. Although this project focuses on restoration actions in the Perdido River/Bay watersheds, the methodologies developed can be implemented in other northern Gulf of Mexico coastal watersheds. The Perdido River/Bay watersheds cover about 1200 square miles, with portions in both Alabama and Florida. They drain a variety of land use and cover types, including upland forests, wetlands, agricultural areas, and urban development. Water and sediment quality impairment and degradation of biological resources consistent with excess sediment deposition, nutrient imbalances, and other point and non-point source pollution from residential, agricultural, and industrial sources is widespread throughout the area. Evidence of ecological degradation includes imbalances in natural plankton populations, benthic and fish communities, and adverse changes in trophic dynamics and the loss of aquatic habitat. This program will substantially reduce uncertainties and increase effectiveness in identification and prioritization of potential restoration actions, quantify ecosystem benefits from current and future restoration actions, and improve decision-making in adaptive management of restoration actions. These goals will be accomplished by (1) characterizing existing environmental/ecological watershed conditions by establishing a science-based, integrated monitoring network for water and sediment quality, physical/hydrologic characteristics, and benthic invertebrate, planktonic, and fish community structure; (2) creating a dynamic, robust GIS spatiotemporal database of chemical, biochemical, and biological indicators necessary for predicting and quantifying environmental and ecosystem benefits of restoration activities; (3) linking	Trustee Portal	N	Y	N	N	N	N	N	N	Y																		

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					chemical, biochemical, and biological indicators of ecosystem degradation to defined sour ces of degradation; and (4) developing and implementing data interpretation and modeling protocols, employing the evolving database for prediction, confirmation, and long-term surveillance of restoration activities. This project will provide a science-based means for those funding, regulating, and implementing restoration actions to prioritize future restoration activities, assess ecosystem benefits of ongoing restoration actions, and predict the outcomes of adaptive management decisions for ongoing restoration actions. This will be a collaborative project between Auburn University's Environmental Engineering program, the Dauphin Island Sea Lab, Escambia County, Florida, and Baldwin County, Alabama.																													
Perdido Pass Sea Wall Rebuild	12879	Wade Stevens	Perdido Bay Watershed	6200000	Perdido Pass is one of the few and most widely used passages in the Northern Gulf of Mexico connecting the gulf waters to Perdido Bay and the many other contiguous inland waterways. Along the Western edge of Perdido Pass lies a seawall surrounding the Hwy 182 bridge landing. This public access area, once a thriving location for land-bound sportsman and wildlife enthusiasts, has been damaged by many years of storm activity and closed to the public approximately five years ago. Due to significant public outcry to re-open this area and our desire to provide public access to Alabama's diverse marine resources for those unable to afford a charter or personal vessel, the City of Orange Beach voted to invest local tax dollars into state facility. Orange Beach has recently opened phase one of the Pass Fishing Park and the response has been overwhelming. Another phase is currently up for consideration and bids have been received. When complete the current park will triple in size with an estimated annual usage of over 100,000 active sportsman and Orange Beach overall sees approximately 6.2 million potential visitors per year. The repairs Orange Beach has completed only included the surface portions of the project and did not include the seawall surrounding the park and bridge landing. This seawall is the ultimate infrastructure and support for the entire park and the seawall is in very poor condition. Orange Beach has attempted to seek funding through numerous avenues with no success. This request would provide the funding necessary to rebuild the seawall thereby preserving the integrity of the public land prevent the new park from eroding into the pass in a short period of time. Orange Beach obligated it's funds to the park to demonstrate our commitment to saving and maintaining this public asset. Orange Beach will continue it's commitment to repair, improve and enhance the entire length of the park and we feel that the project warrants the requested funding to ensure hundreds of thousands of sportsman and visitors alike can continue to enjoy the benefits of our gulf waters.	Trustee Portal	N	N	N	N	N	N	Y	N	N																			
Gulf State Park Romar BeachPublic Restroom Facility	12874	Phillip West	Gulf State Park	375000	The City of Orange Beach proposes to construct and maintain a public restroom facility at the current Gulf State Park Romar Beach Public Beach Access in Orange Beach, Alabama. The public beach access currently has paved parking and a dune walkover, but no sanitary facilities. These beach accesses have always been popular destinations for the day-tripping public, and competition for full-service facilities is increasingly intense. Therefore, it	Trustee Portal	N	N	N	N	N	N	Y	N	N																			

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					is imperative that beach facilities be improved to maximize their usability and to provide sanitary facilities to the public and their families.																											
Boggy Point Boat Launch Public Restroom	12873	Phillip West	Orange Beach	375000	The City of Orange Beach proposes--in cooperation with Gulf State Park and the Alabama Marine Resources' Division of the Department of Conservation & Natural Resources--to construct and maintain a boat-accessible public restroom at the Boggy Point Boat Launch, in Orange Beach, Alabama. The area is in dire need of sanitary facilities accessible by vessel, and the Boggy Point Public Boat Launch is in a convenient location to serve the boating public. This will greatly enhance the boating experience for the lower Perdido basin, as well as have beneficial effects on local water quality.	Trustee Portal	N	N	N	N	N	N	Y	N	N																		
Water quality dynamics and flux in hydrologically complex systems in Alabama	12870	Ana Maria Garcia	Mobile Bay	750000	We propose to design and develop a process-oriented study based on a system of 3 to 5 water quality sensors (including nitrate, specific conductance, carbon, temperature and dissolved oxygen) at select gaging stations in the Mobile Bay and/or direct drainages to the Gulf of Mexico located in Alabama. Potential project locations would be coincident with stream gage monitoring locations and in what we are terming hydrologically complex regimes. These could be study sites and locations along coastal wetlands with significant groundwater and surface water interactions, hyporheic flow and tidal influences. An example is the Mobile River at the causeway and the recently installed monitoring station on D'Olive Creek near Daphne, Al. The transport of nutrients such as nitrogen, phosphorus, and carbon to the Gulf of Mexico is of particular interest because these nutrients affect productivity, which in turn causes hypoxia in Gulf waters. Past investigations have utilized hydrologic data and nutrient concentrations to identify key aspects of temporal and spatial variation in river loads and their links to the magnitude and seasonal variation of hypoxic water in the Gulf. The addition of high-frequency sensors that measure nitrate concentrations, chromophoric dissolved organic carbon, and other constituents have improved the accuracy of these loads and have additionally identified previously unrecognized patterns of variation that may indicate heretofore unknown processes, sources and/or nutrients to the Mississippi and its principal tributaries (Pellerin et al., 2014). The Integrated Watershed Studies (IWS) team of the USGS National Water Quality Assessment Program has successfully developed new approaches for using data collected from high-frequency nutrient sensors in streams and groundwater chemistry data to inform and improve understanding of: (1) the relative roles of groundwater and storm runoff on riverine nutrient loads (Miller et al., 2016; Kronholm and Capel, 201 6), (2) the magnitude of diel nitrate concentration patterns and links to uptake and other biogeochemical processes (Burns et al., 2016), and (3) where nitrate losses through denitrification in groundwater are likely to be greatest (Tesoriero et al., 2015). The approaches developed in these studies can be applied in the Mobile Bay watershed to (1) improve estimates of loads discharging to the Mobile Bay system, (2) differentiate loads transported to the stream in hydrologically complex environments (groundwater surface water interactions, hyporheic zone chemistry, tidal influence) and loads transported to the stream rapidly in response to hydrologic forcings (e.g. precipitation events), and (3) inform water quality models that generate region-scale mass balance predictions,	Trustee Portal	N	Y	N	N	N	N	N	N	Y																		

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					such as SPARROW. High resolution water quality data can inform study processes related to hydrologically complex systems. For example specific conductance can to help identify the tidal cycles and distribution of water sources between the river and estuary, turbidity to help interpret nitrogen uptake process. Measurements of chlorophyll-a will be used to estimate changes in algal biomass for direct linkages to productivity and hypoxia. Samples can be analyzed for absorption and fluorescence properties of chromophoric dissolved organic matter to characterize the saltwater-freshwater interface.																													
Enhancement of Coffee Island	12867	Carl Ferraro	Coffee Island	13517000	Coffee Island is owned by the state of Alabama (ADCNR). The island serves as valuable bird nesting habitat and currently supports nesting for several bird species injured by the DWH spill. These species include a breeding colony of wading birds (including snowy egrets, tricolor herons, little blue herons, cattle egrets and similar colonial nesting wading bird species), as well as beach nesting black skimmers and several tern species. Habitat acreages created by the proposed design include approximately: 5 acres of shrubby wading bird nesting habitat (covering a containment berm approximately 6,280 feet in length), 7.5 acres of shelly beach bird nesting habitat, and 45 acres of salt marsh to help restore injuries to Wetlands, Coastal, and Nearshore Habitats in Alabama. The project is designed to maximize the longevity of the island based on historic erosion rates and patterns. Wading bird nesting habitat and salt marsh buffer will be created through the dredging and placement of silty and/or sand sediments from a target borrow area, either adjacent to the Bayou la Batre navigation project or from sand resources managed by USACE. Sediments will be contained during construction via a system of sediment berms constructed of in-situ stiff clays and sands. Sediment berms would be capped with shell hash to enhance longevity and provide nesting substrate for beach nesting birds. Habitat will be planted with native salt shrub species (Baccharis sp. and Iva sp.) and marsh grass species (Spartina sp. and Juncus roemerianus) as needed. Additionally, predator control will be conducted to reduce and/or eliminate the presence of raccoons, opossums and/or other mammalian predators on the island in order to maximize services to target bird species. Project success monitoring is proposed for 5 years, and will include parameters such as marsh extent, plant density and species composition and topographic and bathymetric profiles as well as use of created habitat by target bird species (nest density, species composition, etc.). Alabama DCNR and the USFWS are co-proponents of this project proposal. Direct collaboration among agencies will help streamline project design and implementation and adherence to environmental compliance. Proponents have already discussed the project concept and design with representatives from The Nature Conservancy(TNC), US Army Core of Engineers (USACE) (Mobile District) and the Dauphin Island Sea Lab, who are all in support of the project. Proponents will coordinate during design and implementation with TNC, who worked previously to construct a living shoreline on the east coast of the island. ADCNR continues to work collaboratively with partners to evaluate additional actions in that area. Finally, USACE is looking to dispose of dredge material (sand) in their upriver	Trustee Portal	N	N	Y	N	Y	N	N	N	N																		

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					disposal area. Depending on cost, the project may be able to use that material, partnering with USACE to benefit both parties in an efficient and environmentally sound manner.																												
Gulf-wide Resilience and Water Quality Enhancement through Longleaf Restoration	12866	Homer Wilkes	Gulf of Mexico		The longleaf pine ecosystem once dominated the Gulf's coastal plain, providing extensive habitat and abundant clean water feeding the Gulf. Restoration of the longleaf pine ecosystem is key to Gulf-wide resiliency and water quality enhancement to the scale and degree needed to revitalize the Gulf of Mexico. The USDA proposes activities which will protect and improve water quantity and quality through longleaf pine ecosystem restoration. Inland habitats such as the longleaf pine community and watersheds have a direct effect on the health of coastal wetlands and estuaries and "are critical to a sustainable Gulf of Mexico" (Walker et al., 2012)." The proposed efforts in this project area are significant to the restoration of the Gulf of Mexico because the injury caused by the DWH oil spill is far reaching and the true ecological scope is simply unknown. As part of a larger Range-wide Conservation Plan for Longleaf Pine, this comprehensive, multi-state ecological restoration proposal encompasses federal lands administered by the Forest Service (USFS), U.S. Fish and Wildlife Service (USFWS), Department of Defense (DoD), as well as, state-owned and private lands in proximity to Significant Geographic Areas and in proximity to the Coastal Management Zone and buffer. The project area in and around the Conecuh National Forest has tremendous potential for integrating ecological restoration, water conservation, outdoor recreation and public outreach through education. Restoration efforts would include decommissioning old roads and trails, repairing areas with altered hydrology by treating nonnative invasive species, and installing erosion control features (e.g., stream crossings, erosion near forest boundary with private lands, improving seasonal wetlands). Also, restoration would include reducing hazardous fuels and reestablishing the normal fire regime. The removal of hazardous hardwood fuels in the understory and restoring the natural fire regime would help regulate flow/quantity in addition to improving water quality. Additional, strategies would be implemented that contribute to increased surface and ground water supply and quality. Specific activities Include: Site preparation and planting of longleaf pine seedlings, removal of offsite species such as slash pine, prescribed burning and Non-native invasive species control.	Trustee Portal	N	N	Y	N	N	N	N	N	N																			
Gulf of Mexico Riparian Forest Buffer Program	12860	Homer Wilkes	Gulf of Mexico	2500000	NRDA funding will be used to create and implement a comprehensive and enduring Forest Buffer Program in and around the Conecuh National Forest. This Program will address policy and funding gaps; while taking advantage of existing federal, State, and partnership resources. It will use existing authorities to target financial and technical assistance, secure easements, and monitor progress. NRDA funding will help address policy gaps (i.e., federal limitations regarding adjusted gross income and/or corporate designations); support additional technical assistance for outreach, education, and monitoring; provide additional financial incentives to encourage landowner participation (e.g., when existing programs are inadequate or a critical riparian area requires an additional investment), provide matching funds to leverage other funding opportunities, and assist with the administrative costs.	Trustee Portal	N	N	Y	N	N	N	N	N	N																			

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					Utilizing the proposed Gulf of Mexico Riparian Forest Buffer Program, the USDA will establish, manage, and preserve critical forested riparian buffers adjacent to priority streams, rivers, lakes, and bays and their adjacent side channels, flood plains, and wetlands. Riparian areas are landscapes with high economic and ecological values. Many acres have been and continue to be converted to agricultural, residential, commercial, industrial, and infrastructure land uses. In their natural forested state, they provide crucial fish and wildlife habitat while helping to control and improve stream stability and flow; reduce sediment and nutrient loads; and cool water temperatures. In fact, in a recent analysis of USDA conservation practices, Riparian Forest Buffers were consistently ranked among the top 5 most effective options for addressing the challenges within the Gulf of Mexico. This proposal recognizes the significant value of forested buffers and designs a program to encourage their proper design, installation, preservation, and management. To help direct funding toward Resto ration priorities, high-level criteria (e.g., nexus to injuries, effectiveness, long-term resilience, geographic priority, linkage to a State's Comprehensive Plan, and budget) will be established within the Program's guiding documents. State Foresters will provide state-level leadership and utilize existing partnerships to further refine the Program's goals and priorities; establish criteria for project funding; identify, design, and install elements to assure success (additional partners, joint training, landowner recognition), coordinate financial and technical assistance with existing programs and partners; monitor and report progress.																												
Yellow and Blackwater River Headwaters Sediment Reduction Project	12858	Homer Wilkes	AL	2000000	The Conecuh National Forest located in South Alabama contains headwaters and main-stem sections of the Yellow and Blackwater Rivers. The rivers flow into the Northwest panhandle of Florida to Blackwater Bay, an arm of Pensacola Bay. The Yellow River and Blackwater River provide critical habitat for many aquatic species including segments of U.S. Fish and Wildlife designated critical habitat for the federally threatened Gulf Sturgeon. Spawning areas for the sturgeon have been documented in the Yellow River within the Conecuh National Forest. Projects to restore historical hydrologic conditions which are favorable for Sturgeon habitat have been effective in developing new management techniques to help restore or preserve the environment. Natural vegetation buffers along streams, rivers and estuaries are one of the most practical and effective management tools available to protect water quality and aquatic habitat. This proposed project seeks to reduce sediment transported to the Yellow River and Blackwater River systems which are unfavorable for sturgeon and enhance recreational and economic opportunities. USDA proposes the following activities in an effort to restore historical hydrologic condition and reduce sediment loading. 1. Improve or decommission roads and road crossings currently contributing undesirable sediment to the Yellow and Blackwater River systems. These roads would include both Forest Service and county roads, where many of the issues occur. Work would be done in partnership with County Engineering Departments and NRCS, which has capacity for providing road assessment and design support. There is potential to involve Florida Forest Service on Blackwater River State Forest. 2. Install conservation practices to control	Trustee Portal	N	N	Y	N	N	N	N	N	N																			

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					erosion on private agricultural and forest land. The USDA will work with private landowners to reduce erosion and improve waters designated as Gulf Sturgeon Critical Habitat. The implemented conservation practices will reduce sedimentation and attached pesticides, nutrients, and fecal coliform entering the watershed. This project will include structures for sediment and erosion control; livestock stream exclusion; stream restoration — such as replanting hardwoods and expanding buffers; forestland erosion control on forest roads and landings; and cropland erosion control such as sod-based rotations, cover crops and residue management. 3. Improve and develop recreational river access points to reduce water quality impacts and improve visitor experience and safety. Develop associated visitor information materials. 4. Assess and pursue opportunities to consolidate into public ownership key inholdings along river corridors and headwaters through land exchanges and acquisition.																													
Little Point Clear Unit - Bon Secour National Wildlife Refuge - land acquisition	12585	Raymond Herndon	BSNWR	11000000	This project will permanently protect lands identified by the U. S. Fish and Wildlife Service (USFWS) as the highest priority for acquisition and long-term management by the Bon Secour National Wildlife Refuge (NWR). It will add two separate tracts within the approved acquisition boundary, which are currently under agreement for purchase by The Conservation Fund, totaling approximately 488 acres of sensitive coastal lands to the Little Point Clear Unit at this refuge. These lands include significant frontage along St. Andrews Bay, Bon Secour Bay and greater than 200 acres of salt and freshwater wetlands, as well as numerous tidal sloughs, and adjacent upland areas. This acreage shares several property borders with the USFWS, and will immediately be managed for improved coastal habitat. The refuge is home to the endangered Alabama beach mouse, which is associated with the sand dunes and sea oats. Refuge beaches serve as nesting sites for loggerhead, and Kemp's Ridley sea turtles. Habitat types include beaches and sand dunes, scrub forest, fresh and saltwater marshes, fresh water swamps, and uplands. More than 370 species of birds have been identified on the refuge during migratory seasons, with many shorebirds and wetland-dependent species utilizing the habitats present for resting, wintering and nesting needs. The Conservation Fund has secured contracts for purchase of these lands, which would allow the project to proceed immediately pending availability of funds. In referencing the "Deepwater Horizon Bird Impact Data from the DOI-ERDC NRDA Database 12 May 2011," at the following link https://www.fws.gov/home/dhoilspill/pdfs/Bird%20Data%20Species%20Spreadsheet%2005122011.pdf, there are numerous bird species impacted through the incident, which occur on the Bon Secour National Wildlife Refuge. Of the 104 bird species specifically identified within the Deepwater Horizon Bird Impact Data list, 90 have been documented to occur on the Bon Secour NWR, or 87%. Of this number, 60 species are known, or suspected, to nest on the refuge, or 58% of the impacted species from the Deepwater Horizon spill. The habitats provided under this project would be representative of a cross sample of habitats included within the currently protected land base at the refuge. As a result, this project is expected to support approximately 87% of the impacted bird species from the spill. Importantly, this project benefits	Trustee Portal	N	N	Y	N	Y	N	Y	Y	N																		

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					from documented public support. Letters of support are included with this submission, as an attached PDF. In addition to the letters of support, Mobile Bay NEP has just finalized the Bon Secour River, Oyster Bay, Skunk Bayou Watershed Management Plan (http://www.mobilebaynep.com/assets/landing/Final_Bon_Secour_WMP_January_2017.pdf). Under Section 7.1.3, the plan specifically calls for increased habitat protection, and cites five individual land protection projects as the top priorities. Of these five projects, the National Fish & Wildlife Foundation has just announced (November 2016) funding for two, and the Little Point Clear project outlined here comprises two of the remaining three projects that have been identified as the top priority within this watershed. The threat to these lands is very real. It should be noted that one of these tracts was approved as a PUD by Baldwin County, on June 14, 2007. This approval (Case #Z-07006 MRI, LLC) allows for the development of more than 700 residential units on one of the two tracts. The other tract is zoned for commercial use, and therefore could be heavily impacted by development. Such impacts would clearly impact water quality within Mobile Bay and result in the loss of substantial habitat, as well as having negative implications to the already protected lands adjoining these two tracts. This project has also been submitted through the Alabama Coastal Restoration website, as two individual tracts, with identification numbers 67 & 113.																													
An evaluation of the Eastern oyster (Crassostrea virginica) as a biological surrogate for aquatic ecological health of Alabama estuaries: relations to hydrological, chemical, and physical variables	12848	Billy Justus	Mobile Bay	725000	Estuaries are ecologically, economically, and recreationally important; however, in some areas in the Gulf of Mexico (GOM) such as the Mobile Bay area, it has been difficult to balance ecological and recreational interest with economic and commercial interests. Estuaries provide critical habitats for many important aquatic species including the Eastern oyster (Crassostrea virginica), a keystone species. Oyster beds have declined in some areas over the last century, piquing interest in the ecological conditions leading to their demise. Because of its relations to estuarine conditions (hydrology and salinity, in particular), the oyster, and the biological assemblages that are associated to oyster beds, have potential for being strong indicators for ecological health of GOM estuaries. The natural biological, chemical, and physical factors in an estuary, as well as those brought on by unnatural human activity, influence the overall system or what scientists often refer to as the ecological condition. The ecological condition in an estuary or any waterbody can be measured and is most often assessed using biological indicators. This project will collect data that will be used to determine biological relations for different assemblages (macroinvertebrates, periphyton, nekton, and phytoplankton) to hydrologic (i.e. direction and velocity of water currents), chemical (e.g. nutrient, dissolved oxygen, and salinity concentrations in water, and metal concentrations in sediment), and physical variables (e.g. substrate particle size) in areas where oysters are successful (i.e. Mobile Bay or Portersville Bay) compared to areas where oysters are less successful (i.e. Bon Secour Bay). Measures (metrics) associated with biological indicators demonstrated as having strong relations to water quality, hydrology, or habitat conditions will be combined to form a biological index for assessing estuarine condition.	Trustee Portal	N	Y	Y	Y	N	N	N	N	Y																		

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Benthic Invertebrate Community Response and Recovery Rates following Barrier Shoreline Restoration Projects and Potential Impacts to the Habitats of the Threatened Piping Plover and Other Wintering and Migratory Shorebirds	12851	Scott Mize	AL waters	750000	As part of the RESTORE efforts, barrier island restoration is important through the entire Gulf of Mexico. The goal of coastal restoration in Alabama is to restore natural habitats and coastal processes, as well as to provide storm surge protection for local infrastructure and preserve commercial and recreational fisheries to the maximum extent practicable given the effects of relative sea level rise, climate change, and human disturbance within the coastal zone. Although coastal restoration efforts are beneficial to fish and wildlife target species within the coastal zone, in the long-term, because habitat is created and/or restored, some coastal restoration efforts cause temporary disturbance to wintering shorebirds of conservation concern and their foraging habitats, especially the threatened piping plover and its designated critical habitat. This study would provide some clarification as to how the benthic community is responding to coastal restoration techniques and features within barrier shoreline habitats. The study would also determine whether a more intense study of benthic prey species is warranted in the future as coastal restoration efforts continue and recovery and management strategies are developed for migratory shorebirds of conservation concern to prevent further listings under the ESA (Endangered Species Act). Future studies may provide information to help design restoration projects that would maximize or enhance shorebird habitats, including prey resource availability, while at the same time accounting for climate change effects. The purpose of the proposed work is to assess benthic invertebrate food resources for wintering shorebirds and the piping plover prior to and after restoration projects and the potential disturbance to these habitats. The specific objectives are to characterize benthic invertebrate community composition and diversity (prey base) within the intertidal zone both pre and post restoration in order to quantify diffe rences in communities between sampling periods and determine prey base recovery rates. The proposed project will assess what is available (diversity and composition), but future efforts using isotopes could help distinguish important food resources utilized by the birds. Sampling would occur during the fall migration, winter, and spring migration periods in order to determine benthic prey availability to piping plovers and other migratory and wintering shorebirds of conservation concern.	Trustee Portal	N	N	Y	N	Y	N	N	N	Y																			
Gulf State Park Pier renovations	12844	Lisa Laraway Atchley	Gulf State Park	500000	The Gulf State Park Pier is the largest Pier in the Gulf of Mexico. The pier was completed in 2009 after the old pier was destroyed in 2004 for the Storm Ivan. The project I am requesting is to replace all the old wooden boards that are breaking and shredding constantly with composite decking or some similar product as identified by an engineer. This pier is used by over 1 million visitors per year and has taken on three storms since it's opening causing extensive damage and weathering of the panels. Visitors come to the pier to fish but there are many visitors that come for sightseeing and to experience watching the fisherman. The condition of the panels needs to be addressed so the pier can be at it's best. I appreciate your time and consideration.	Trustee Portal	N	N	N	N	N	N	Y	N	N																			
Environmental Restoration of Cotton Bayou	12841	Phillip West	Orange Beach	500000	The City of Orange Beach, Alabama, has identified a restoration project that will serve to remedy harm and reduce the risk of future harm to Gulf Coast natural resources that were impacted by the DWH oil spill. Cotton Bayou and	Trustee Portal	N	N	Y	N	N	N	N	N	N																			

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and Adjacent Canals: Planning Assistance					its associated two canals are located in the heart of Orange Beach and are connected to the Gulf of Mexico by Perdido Pass. The canals and other shallow waters of Cotton Bayou historically served as nursery habitat for aquatic and avian wildlife. Over the years of development and redevelopment the natural canal shoreline has been replaced with seawalls, and the bayou and canals have accumulated sediments that limit tidal circulation, contribute to long-term degradation in ambient water quality, reduce dissolved oxygen concentrations and support harmful algal blooms. The City's proposed project has the goals of preserving and increasing native habitat for aquatic and avian wildlife, enhancing circulation patterns in the bayou and canals, restoring water quality and serving as a model for similarly impacted communities along the Gulf Coast. The project approach is designed to leverage public funds to implement this restoration project and re-establish resources that will serve to restore impacted species from the Macondo oil spill such as shrimp, crab, oysters, sea grasses, wading birds and shorebirds. The project approach was developed with a long term vision composed of three phases utilizing the best available science to ensure maximum success: Phase I is a proof of concept. During this phase we will gather information, define the problems, identify potential solutions, and determine the feasibility of implementation. This first step will serve to bring the stakeholders together with the City and define the intended goals for the project(s). Phase II will develop the design and environmental permitting for the selected project(s), establish costs and prepare construction Bid Documents. Phase III will facilitate construction of the project(s). Phase IV will be the on-going operation and maintenance of the constructed facilities and monitoring of the results. Phase I, II and III will each develop documents as deliverables that support the next funding request from the Restoration Council, NFWF, etc. In this way each installment of funds can be measured against the veracity of the documentation to ensure a cost effective approach is being employed at each stage of investment and to ensure maximum benefits are realized.																												
Marine Debris And Shoreline Enhancement Program	12840	Nicole	Orange Beach	350000	The City of Orange Beach has initiated a pilot program for regular trash and marine debris cleanup by force account labor and equipment along the city's shorelines and adjacent water bodies. Year One of this program proved to have a significant, positive impact on the amount of debris/trash collected during the annual "Coastal Cleanup", and trash types, volumes and poundage were recorded during this trial program. In this program, the city proposes to better staff and equip the program for a three-year period, and provide a comprehensive report and list of recommendations for other communities for this type of program.	Trustee Portal	N	Y	N	N	N	N	N	N	N																			
Gulf Coast Wildlife Recovery and Interpretive Center: Feasibility, Planning and	12839	Phillip West`	coastal AL	275000	Over 7,000 birds were impacted by the Deepwater Horizon Oil Spill, and while rescue efforts were unprecedented during the oil spill response, these worthwhile efforts have effectively been disbanded for the south Alabama region. There is a great need for a permanent, full-time wildlife rescue and rehabilitation program for the South Baldwin (Orange Beach, Gulf Shores, Gulf State Park, Foley and Fort Morgan) region. Due to our location along the northern Gulf of Mexico coastline, we play a significant role for both seasonal	Trustee Portal	N	N	N	N	Y	N	N	N	N																			

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Preliminary Design Phase (Phase I)					migratory birds and for shorebirds, seabirds and waterfowl. We routinely witness injuries, entanglements, fatigue and illness among these and other species. When coupled with interactions with tourists, these unfortunate situations lead to negative perceptions about the communities in which they occur. Our goal with this project is to create a bona-fide, effective wildlife rescue and rehabilitation facility that will be (partly) open to the public and educational groups. The project would offer meaningful response for wildlife emergencies and rehabilitation, provide significant opportunities for conservation education, and yet offer a worthwhile and unique experience for the regional visitor (i.e., ecotourism). Moreover, the project will prevent negative perceptions for those visitors and residents that encounter sick or injured wildlife, with little or no apparent effort made by any agency to offer assistance or care for the bird or animal. Several of the priorities of the facility and program will be: • Provide staff and personnel to respond to wildlife emergencies • Promote conservation and natural resource education and technical assistance • Reduce human/wildlife conflicts • Coordinate with and work closely with State and Federal resource management agencies in the interest of wildlife conservation and education; There will be no land cost associated with this project, as the facility will either be located on city-owned property. Over time, we believe the project will become largely self-sustaining, with funds becoming available from private donations and endowments, but it is doubtful these would ever cover the full cost of operation, etc. For Phase I of this project, we propose to complete the feasibility study, planning and preliminary design of the facilities and overall program.																												
Weeks Bay East Gateway Project	12838	Yael Girard	Weeks Bay	3000000	This project relates to the 175-acre "Weeks Bay East Gateway" tract. This unique property sits at the point where Weeks Bay and Mobile Bay meet. It encompasses the eastern side of the mouth of Weeks Bay, across the opening from Pelican Point/Big Mouth. The property has a combined 1.5 miles of frontage on Weeks Bay and Mobile Bay. The property is one of the largest privately owned undeveloped tract left on Weeks Bay and contains over 100 acres of wetland habitat, including estuarine salt marsh and bottomland forested wetlands. Species of concern, including the Diamondback Terrapin and Red Bellied Slider have been seen on the property. The Weeks Bay East Gateway Project would purchase the property from a willing seller and endeavor to restore the habitats within the property. These restoration efforts would cover the removal of invasive plants, selective thinning of unhealthy trees, and the planting of native trees, shrubs, and grasses, as needed. The majority of the restoration focus would be on the bulkeaded bay mouth. There is a 500 foot bulkhead that buttresses the corner of the property exposed to the bay inlet. The bulkhead is dilapidated and no longer serving to prevent erosion along the property edge. Working with an environmental engineering firm and Mississippi-Alabama SeaGrant coastal ecology specialist, Dr. Eric Sparks, the Foundation will create a plan for the removal and restoration of this section of bay frontage. The resulting plan will be based on the best available science and the needs of this particular site. The site is located just to the east of the only boat access into Weeks Bay from	Trustee Portal	N	N	Y	N	N	N	N	N	N																		

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					Mobile Bay, and as such, it experiences a lot of boat-created wave action. In addition, the narrow mouth of Weeks Bay funnels the waters down to a narrow bottleneck, causing significant tidal current. The restoration efforts for this site would take all of these factors into consideration. By acquiring and restoring the Weeks Bay East Gateway tract, a significan t amount of the estuarine habitat of Weeks Bay would be protected. This property, with its large protected salt marsh, provides habitat for aquatic creatures, shore birds, migratory birds, and small land mammals. The loss of this property to development would dramatically decrease the health and productivity of the Weeks Bay estuary. The area where the property is located fits into several regional planning plans. It is in the Fish River watershed which is listed with the Mobile Bay NEP Comprehensive Coastal Management Plan as having “Prioritized Wetlands.” It is listed by the Weeks Bay National Estuarine Research Reserve Federally Approved Management Plan as a priority project area. Weeks Bay is listed as an “Outstanding National Resource Water.” The new Weeks Bay Watershed Management Plan also encourages “strategic land acquisition” in its implementation measures. The Property, as a large undeveloped tract, directly connected to the bay, would undoubtedly be considered strategic.																													
Reef Innovations Reef Ball regional Production Sites	11965	Larry Beggs	Gulf of Mexico	3340000	Restore Act’s has created a wide area multi county combination of projects that are: restoring coastal habitat, creating oysters or restoring oysters, creating new snorkeling reefs, improving coastal living shoreline and adding deep water habitats along the coast of the Gulf of Mexico. Many projects have been proposed to deploy artificial reef modules with various objectives, rather than each community, county or non-profit organization having to work out a purchasing agreement this project would provide local jobs building the Reef Ball modules for deployment. The Reef Ball Regional Production Site is designed, to create local jobs, and reduce the overall cost of production and delivery of reef modules thus becoming more cost efficient. Rather than numerous projects having to handle the purchases of product, they would be allotted a portion of the production from the RPS. If production exceeds the immediate demand, product would be stockpiled for distribution over the next several years. This project provides employment for 4 to 6 local laborers over 3 to 10 years, and provide a continuous supply of reef modules to be used by the 24 impacted counties in Florida. Depending on the quantity of product that is needed, state funds from the 5 States could support production at additional Reef Ball Regional Production sites, thus reducing the delivery cost even more. Reef Innovations has years of experience setting up worldwide remote production sites. Reef Innovations would be responsible for setting up, and the quality control of Reef Ball production site using local labor. Funds drawn from the grant would be the amount of the sales price of the actual number of modules produced during that week. Reef Innovations would contract from a labor force of local workers. Reef Innovations would set up and manage the production site. Monitoring Projects supplied with Reef Balls will be monitored recording items such as site location objectives. Verification of deployment site, numbers of units and objectives. 1. All sites using Reef Balls are expected to	Trustee Portal	N	N	N	N	N	N	N	N	N																			

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					provide monitoring. A link to Monthly summaries by the organization in charge of the project will be made available during the first year and a yearly survey summary provided for the next 5 years. 2. Reef Innovations will maintain the right to monitor on a yearly basis or have it monitored by their designee. Results of the monitoring of each project site will be compiled for presentations at the 5 and 10 year mark. 3. A database will be established to be available for research and evaluation. Technical Feasibility 1. Building Reef Balls close to the deployment site can reduce the unit cost when projects are using large quantities of Reef Balls. 2. This is the most feasibly way to provide Reef Ball modules to various areas around the 5 Gulf State. 3. By stockpiling the modules for distribution to approved environmental groups, county Artificial Reef, and Breakwater projects this can become an ongoing project lasting many years. Production Sites and Use of Reef Balls will 1. make the communities a better place to live and help to restore the health of the Gulf of Mexico. 2. add local ownership to the projects 3. allow ecosystem services to obtain materials as projects are placed on the table Creation and preservation of jobs because of the Reef Ball Production Site 1. 4 - 6 local labor workers per site and a Reef Innovations foreman for quality control. 2. Increased work for a Concrete Company, Drivers and support personnel 3. The community economic benefits will include house rental, grocery stores, restaurants, barge and boat operators, etc. 4. Product from the site will benefit fishing, as well as in some projects adding resilience to shoreline, or increasing relief for oyster restoration projects. Supplemental materials are available by contacting Larry Beggs Larry@reefinnovations.com																												
Channel Marker Reef Ball Micro-Habitats	11967	Larry Beggs	Gulf of Mexico	613500	States, Counties and municipalities have channel markers they are responsible for maintaining under their USCG channel marker permit. Deployment of a Reef Ball® on each channel marker would provide increased micro habitat for finfish and invertebrate recruitment throughout the Gulf of Mexico. Production of Reef Balls is provided by Reef Innovations in Sarasota, FL. or the regional production sites (RPS) proposed for the area. This project can be run through the Reef Ball Foundation which is a 501(c) 3 publicly supported nonprofit and international environmental NGO working to rehabilitate marine reefs. This has proven beneficial where nonprofit organization involvement is desirable. The Reef Ball Foundation's mission is to rehabilitate our world's ocean reef ecosystems and to protect our natural reef systems using Reef Ball artificial reef technologies. A proposal has been submitted for funds to set up "Reef Ball Production Sites" in the Panhandle and Big Bend regions in Florida as well as proposals for sites in Texas and Mississippi. This would reduce the cost of deliver modules to the various projects in the region and reduce the cost per microhabitat unit. For this project, a crew of 3 workers could work their way across the state or region installing the micro habitats over a period of 3 to 10 years, or the units and deployment training could be supplied to the individual county for implementation. Reef Innovations would provide the product and quality control of the project. Local port authority could provide the labor with a crew normally installing markers. Reef Innovations could provide a foreman	Trustee Portal	N	N	Y	N	N	N	N	N	N																		

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					to work with locally hired crews. Reef Modules used depend upon the water depth, piling diameter and relief desired. As you move toward deeper water its is suggested to increase the size Reef Ball. Monitoring During the initial survey, objectives will be established for the microhabitat including expected species recruitment. Initial Surv ey Reef Innovations Government Organization ... Permitting Follow up Survey Reef Innovations has the right to make a full survey yearly, or an approved researcher appointed by Reef Innovations Government organization will provide survey reports to Reef Innovations on a yearly basis. Government organization will provide a 10 year survey report, and summary of project. A database of locations and observations will be established for the monitoring of the project results. Presentations will be prepared for at conferences at the 5 and 10 year point. There are three protocols for placing the units: 1. Unit incorporation during marker replacement as part of the regular maintenance 2. Lowering the Reef Ball over an existing channel marker piling 3. Placing a two piece unit around the piling of an existing marker Environmental Benefits Reef Balls have a proven track record for providing habitat for juvenile finfish and invertebrate recruitment. These units located along deep water channels will provide increased habitat for the movement of both finfish and invertebrates species in and out of coastal estuaries. They also provide increased settlement substrate for sessile oysters, corals and macroalgae. A supplemental document is available breaking down the costs and identifying the process. Contact Larry Beggs for that document Larry@reefinnovations.com The project can be implemented locally, the cost projection on this description is a yearly cost for 10 years, across multiple regions of the Gulf.																												
Dock and Sea Wall Reef Ball® Habitat	11973	Larry Beggs	coastal Gulf of Mexico	1000000	Docks and seawall have historically been viewed a significant developmental impacts to the coastal environment. These areas generally have a lower overall species diversity and abundance of finfish, invertebrates, and aquatic plants when compared to surrounding natural areas. The general characteristics of seawalls is a high energy zone where water continually scours the bottom restricting natural community formation, while docks have been shown to dramatically reduce the available sunlight and increase sedimentation. These types of environments are not conducive to increasing natural community structures. The addition of Reef Ball® habitat to approved docks, piers, and seawalls not only provide physical protection in the event of seasonal storms but can increase the recruitment and survivability of juvenile finfish and invertebrate populations. These structures have also been shown to provide ideal settlement substrates bivalves, corals, and macroalgae increasing natural nutrient cycling and reducing turbidity. Cleaner less turbid waters have been correlated to increased species diversity and abundance worldwide and could constitute a significant step in the conversion of sterile manmade structures into a more natural living shoreline. Addition of these habitats could help mitigate shoreline development that would normally not be directly used by native finfish and invertebrates. Starting with Phase I, Reef Innovations would provide a crew to survey public docks and piers determine suitability for the individual areas for enhancement. The criteria for suitability will be developed in conjunction with the regulatory agency ensuring	Trustee Portal	N	N	Y	N	N	N	N	N	N																			

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					compliance with local, state and federal guidelines. Reef innovations will develop a site plan for each deployment based on the site criteria and deploy the units to maximize structural protection and species recruitment. The addition of the Reef Ball Habitat units will immediately reduce water flows through these areas and provid e settlement areas for the finfish and invertebrate community. The extent and makeup of the community will depend on the area. Phase 2, expands this program to private property owners following the criteria used for public docks and seawalls. These homeowners would finance their own projects thus saving the government money and giving the homeowners vested interest in marine conservation and restoration. Science has shown a need for increased restoration efforts in estuarine habitats. Shareholder involvement is a vital component to establishing a living shoreline and helps to create sustainability along our coastline through habitat restoration. Reef Innovations and/or their approved contractors can handle all parts of Phase I and Phase II activities. Funding requests grant will be based on size of project, distance of travel, cost of modules, used, and transportation of modules to the deployment site. Additional Information, Pictures and Pricing on within attached file updated Jan 2017. The project could be a small community project or combined as a large area wide project, in the packet it identifies a 10 year progression for the project.																											
Understanding the use of Fish Aggregating Devices to enhance the conservation of tunas and protected species	12805	Amanda Nickson	Gulf of Mexico	400000	The Gulf of Mexico and Atlantic Ocean provide habitat for protected species such as sharks and the commercially and ecologically important species of bigeye and yellowfin tunas. Fish aggregating devices (FADs) are man-made floating objects consisting of a raft, synthetic netting, and plastic buoy that are deployed on the ocean to aggregate skipjack tuna for purse seine fishing vessels. FADs can be used in unlimited numbers, driving unsustainable fishing of juvenile bigeye and yellowfin tunas and contributing to fishing mortality on sharks. These species are caught incidentally when purse seine nets are set around FADs. Because most FADs are not recovered by fishing vessels, they contribute to ghost fishing and can entangle sea turtles and marine mammals before sinking in the ocean or washing ashore, adding to marine debris. FADs deployed by vessels in the Atlantic have been found washed ashore on the coast of Gulf States including Texas. This project would enable data to be gathered electronically on FADs deployed in commercial tuna fisheries in the Atlantic. FADs already transmit data to industry that indicates the numbers of FADs used, their locations and movement, and their fate (recovered, beached, and/or lost). The project partners, Pew and Quick Access Computing (QAC), have proven this data can be transmitted to a third party in near real-time and at no additional cost to industry. In 2016, eight countries in the Western and Central Pacific Ocean began using a software system designed by QAC to implement a FAD tracking and data collection effort that is generating new knowledge on the use of thousands of FADs in that region. In the Atlantic, precise information on FADs is not required to be reported to the international fishing management body. Data gathered by this project will improve scientific understanding on the effects of FADs on the marine ecosystem in the Atlantic, where bigeye is overfished and experiencing	Trustee Portal	N	N	N	N	N	N	N	N	Y																			

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					overfishing. Analysis of the data could lead to more effective conservation for tunas and protected species, which could improve their recovery from the Gulf oil spill. Studies showed juvenile yellowfin exposed to oil developed heart defects; other species such as dolphins developed chronic adrenal gland and lung disease. QAC, a respected Australia-based software organization, will develop software to receive and manage data from FADs in the Atlantic and manuals for the system. Pew will work with international fishery managers, industry, and scientists to build the institutional arrangements to enable the system to benefit science and management. (A brief description of the proof of concept to create a FAD tracking and data gathering system in the Pacific can be viewed at http://www.pewtrusts.org/en/research-and-analysis/fact-sheets/2014/09/electronic-tracking-of-fish-aggregating-devices)																													
Perdido River and Bay Paddle Trail & Boating Improvements	12799	Chips Kirschenfeld	Perdido River and Bay	6000000	This project will enhance recreational opportunity for paddlecraft, boating, snorkeling, and fishing lost during the oil spill. This project will include enhancements for the Wilson Robertson Boat Ramp (Perdido River Boat Ramp funded through NRDA), construct a new boat ramp on Perdido Bay, and support a joint effort to create a Perdido River Paddle Trail. The Perdido River Paddle Trail is a collaborative effort to turn Perdido River into an exciting recreational opportunity to explore the river. This application seeks to improve not only day trips, but also overnight stays. The end goal would be for a paddler to be able to travel from the headwaters down through Perdido Bay. Much of the northern portion of Perdido River riparian zone is privately owned, so Alabama partners have worked to create shelters, boat ramps, and kayak launches on their side of the river. Escambia County intends to focus on the southern portion of the trail. By creating two shelters, paddlers will be able to stay overnight in the southern portion of the river and Perdido Bay. One shelter will be placed at the Wilson Robertson Boat Ramp. The second shelter will be built at another location yet to be determined. Additional enhancements will also be made to the Wilson Robertson boat ramp such as fishing piers and picnicking amenities. The Perdido Bay Boat Ramp in Heron Bayou would be a exiting destination for the Perdido River Paddle Trail since it is only two miles past the mouth of the river and a great kick-off location for paddling Perdido Bay. It would also be the only public boat ramp into Perdido Bay. It would have a wildlife viewing platform, fishing dock, kids recreation, and possible camping sites. Additionally, a Aquatic/Wildlife Education Facility and Canoe/Kayak Rental Center will be built to support the Perdido Paddle Trail. Overall Project Goals from the Alabama-Escambia County-The Nature Conservancy Partnership: Perdido River Water Quality Protection, Habitat Restoration and Re creational Enhancement Project The Perdido River Watershed Area is approximately 920 mi² with 679.5 mi² in Alabama and 240.5 mi² in Florida. Surface waters, including lakes, streams, salt marshes, and freshwater wetlands, occupy 35,661 acres, or about 16 percent of the total watershed area. One of the key features of the Perdido River and Bay is that they form the north-south boundary between Florida and Alabama. The Nature Conservancy (TNC) and Escambia County are working together to develop a joint proposal and partnership to improve and protect the river and bay water quality and increase the ecotourism recreational opportunity in the	Trustee Portal	N	N	N	N	N	N	Y	N	N																			

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					Perdido Watershed. At this point the following entities are engaged in the development of this proposal: Federal – USFWS, NRCS; State – FDEP, NWFWMD, ADCNR, FL Sea Grant; Local – Escambia County, Baldwin County; NGO – TNC; Private – Westervelt Ecological Services. Leveraging existing property owned by TNC (Perdido River Nature Preserve) and public land owned by Alabama and Florida, this proposal seeks to: • Expand the boundary of the TNC Preserve across the river into AL, thus helping to protect both sides of the lower Perdido River's floodplain; • Restore longleaf and wetland habitat to improve and protect Perdido River water quality; • Enhance public access to cultural and historical sites, natural habitat, and low impact water based recreation; and • Lessen the impact of, and help facilitate, future growth, by protecting/restoring key wetland floodplains; • Recreational opportunity: create a Perdido River "blueway trail" which will create the opportunity to navigate the Perdido River from the AL/FL line to the Gulf with camp sites strategically placed within a one day's paddle along the river. This project could become the first "multi-state" Deepwater Horizon project that becomes the model for interstate cooperation to protect and restore a watershed, create and facilitate economic growth and enhance recreational opportunities																													
Gsmfc Cooperative Regional Monitoring Project	12771	Dave Donaldson	Gulf of Mexico	2418000	When the BP drilling rig Deepwater Horizon exploded approximately 50 miles southeast of the mouth of the Mississippi River on April 20, 2010, it caused significant damage to the waters of the Gulf of Mexico. In order to effectively assess the long-term effects of this event, there needs to be a coordinated regional approach in monitoring the status and health of the marine resources in the Gulf of Mexico. The Gulf States Marine Fisheries Commission (GSMFC) is uniquely poised to provide such an approach. Established by both state and federal statutes in July 1949, the GSMFC is an organization of the five states (Texas, Louisiana, Mississippi, Alabama, and Florida) whose coastal waters are the Gulf of Mexico. It has as its principal objective the conservation, development, and full utilization of the fishery resources of the Gulf of Mexico to provide food, employment, income, and recreation to the people of the United States. One of the most important functions of the GSMFC is to serve as a forum for the discussion of various challenges and programs of marine resources management, industry, research, etc. and to develop a coordinated approach among state and federal partners to address those issues for the betterment of the resource for all who are concerned. The GSMFC has a long history of successfully coordinating and administering cooperative, regional programs such as the Southeast Area Monitoring and Assessment Program (SEAMAP), Interjurisdictional Fisheries Program (IJF), Sportfish Restoration Program (SFRP), Fisheries Information Network (FIN), Economics Program (EP) and the Marketing, Traceability and Sustainability components of the Oil Disaster Recovery Program (ODRP). One of the reasons the GSMFC has been so successful is that it is a vertically-integrated organization that provides products and services that satisfy a common need to both its state and federal partners throughout the Gulf of Mexico. In addition, the GSMFC has sole-source authority, under the Magnuson Fishery Conservation and Management Act, Title IV, Sec 402(d), which will expedite the distribution of	Trustee Portal	N	N	N	N	N	N	N	N	Y																		

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					funds and quickly allow these important activities to commence. Outlined below are the various activities, by GSMFC program, that can be accomplished if the requested funding is provided. It is important to note that these activities will augment the existing long-term work (totaling $5,530,000) already being conducted and funded through the GSMFC. The total annual cost for all of the proposed GSMFC activities is $2,418,000. The duration of this proposed project is 10 years. With inflationary increases over a ten-year time period, the total cost of this project is $27,578,000. EXISTING & PROPOSED ANNUAL FUNDING REQUEST, BY PROGRAM EXISTING PROPOSED INTERJURISDICTIONAL FISHERIES PROGRAM $230,000 $434,000 SPORTFISH RESTORATION PROGRAM $200,000 $834,000 FISHERIES INFORMATION NETWORK $5,100,000 $1,150,000 GRAND ANNUAL TOTAL $5,530,000 $2,418,000																													
Restoring one of the most important Sooty Tern colonies of the Caribbean	12709	Yolanda Leon	Dom. Rep.	350000	Alto Velo is a small (1.5 km2) island off southern Hispaniola within Jaragua National Park of the Dominican Republic, hosting one of the largest nesting colonies of Sooty Terns (Onychoprion fuscatus) in the region (estimated at 25% of the total population of the West Indies; Lee & Mackin 2011). Although there are no recent estimates, this colony is in great decline: from an estimate of 600,000 eggs in 1952 to just 25,000 birds in 1978 (Ottenwalder 1979). This is largely attributed to predation of eggs and chicks by feral cats and rats found on the island since the 1960s and also human harvesting of eggs by visiting fishers (given their local delicacy status). In 2013, we conducted 115 interviews to fishers from 4 mainland coastal communities from the Dominican Republic and Haiti nearest to Alto Velo. Despite its distance from the mainland (up to 10 hours travel by some fishers), most interviewees (79%) had visited or camped on the island, and often said to have harvested tern eggs while being there. Fishers also confirmed the ongoing predation by rats and cats and a great reduction in colony size. We propose to eradicate cats and rats from Alto Velo island following an operational plan already developed in consultation with Island Conservation, while at the same time engage coastal communities and Park Management in project and educational activities to help recover this very important rookery.	Trustee Portal	N	N	N	N	Y	N	N	N	N																			
Little Lagoon Multiple Site Living Shoreline Restoration	12632	Dennis Hatfield	BSNWR	950000	Living shoreline quantity and quality in Little Lagoon has been severely impacted by ever increasing population density and property modifications such as bulkheads and piers. Coastal expert Scott Douglas has estimated over 50% of Little Lagoon has a hardened shoreline. Of the remaining 50% of Little Lagoon that remains unhardened, 2/3 can be found within the boundary of Bon Secour National Wildlife Refuge (BSNWR). Ultimately, the Lagoon is showing signs of stress due to the reduction of natural shorelines, inadequate flushing, high bacteria levels in parts of the Lagoon, and increasingly frequent and dense harmful algal blooms (HABs) throughout the Lagoon. Nutrient sources are significant and should be remediated. Flushing is part of the solution but another is nutrient removal via natural vegetation and filter feeders, such as mussels, that can both be found in functioning living shorelines. Shoreline loss/erosion is another chronic issue for properties along the Lagoon. Although efforts to keep oil out of the Lagoon during the Deepwater Horizon (DWH) oil spill were successful, some unintended	Trustee Portal	N	N	Y	N	N	N	N	Y	N																			

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					consequences were noted. Heavy rain fall during the latter part of the multiple pass closure period resulted in high water and infrastructure damage (sea walls/bulkheads, piers, roads, etc.). An opportunity exists to improve water quality in the lagoon, return shorelines to a natural state, repair roads/shorelines and "showcase" methods to improve the health of the Lagoon and remediate problems. Little Lagoon Preservation Society, the City of Gulf Shores, and the BSNWR would like to work in partnership to conduct several shoreline restoration projects: 1) restore .3 miles of shoreline along the south west corner and the south shore of the Lagoon within the BSNWR and on State owned water bottom. Pine Beach Road is nearly in the water along that potion of the Lagoon due to shoreline erosion and few viable options exist to move/repair the road due to adjacent Alabama beach m ouse and wetland habitats. Pine stumps and degraded shoreline vegetation in the water and along that waterfront are ample evidence of eroding shoreline. Restoration would include a combination of evaluation, planning and implementation of a living shoreline project. The specifics of the living shoreline project would be finalized during the evaluation and planning process. However, the living shoreline restoration project is likely to include, but is not limited to, shoreline grass planting (Spartina alterniflora and Juncus roemerianus), wave attenuation structure (reef balls), a graded bottom slope, and possibly mussel seeding in the shoreline grasses. 2) Construct a living shoreline at the City of Gulf Shores property at Moe's Landing Boat Launch. The water front there also is severely eroded and parts of it are hardened with deteriorating bulkheads. The same or a similar restoration method would be used at the Moe's Landing Boat Launch site. Both the Moe's Landing and BSNWR sites would provide very visible "showcases" of natural shoreline restoration for the public and could be a catalyst for future return of more hardened shorelines in the Lagoon to a natural state.																													
Restoration of globally important seabird colonies on Alto Velo island, Dominican Republic	12719	Jose Luis Herrera-Giraldo	Caribbean	2000000	Objective: The objective of this project is to restore and protect breeding colonies of Sooty Terns (Onychoprion fuscatus) and Brown Booby (Sula leucogaster) within the Caribbean region through the eradication of invasive rats, cats, and feral goats from Alto Velo island in the Dominican Republic. These invasive vertebrates depredate eggs, nestlings, and breeding adults, and limit the colony size and distribution on the island through habitat modification caused by grazing from goats and seed predation by rats. Activities: Eradication of invasive mammals from offshore islands is a proven conservation tool that has resulted in immediate and lasting benefits to seabird populations around the world. This project will develop and implement standard and proven methodology to eradicate rats, cats, and goats from Alto Velo, and document recovery of the seabird colonies in response to invasive mammal eradication. The activities proposed will build on the work already completed towards the objective which includes a feasibility assessment, operational strategy, and a biosecurity risk evaluation. Specific activities proposed here include operational planning, legal compliance, purchase of equipment and supplies, field team recruitment, operations implementation, and environmental monitoring. Outcomes will be measured by confirmation of eradication and seabird recovery goals. The	Trustee Portal	N	N	N	N	Y	N	N	N	N																		

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					project will be executed under an existing MoU between the Dominican Republic Ministry of Environment and Island Conservation, and in partnership with local NGOs including Grupo Jaragua and SOH Conservacion. The project could be implemented in its entirety (combined rat, cat, and goat eradication) or to address the primary seabird threat (cat eradication only), depending on the level of funding available. Please note that the estimated budget for cat and goat eradication only is $800,000. We list the estimated total budget for combined rat, cat, and goat eradication under Project Costs. Expected O utcomes: This project will directly restore losses of Sooty Tern and Brown Booby by increasing reproductive success and reducing mortality of eggs, chicks, and adults. On Alto Velo, a 10% increase of nests (approximately 850 Sooty Tern nests, five Brown Booby nests) could be expected within five years after mammal eradication. With increased chick survival, this would be adequate to replace the 247 Sooty Terns and two Brown Boobies injured. Re-colonization of seabirds known historically to breed is expected, including White-tailed Tropicbird (Phaeton lepturus catesbyi), Brown Pelican (Pelecanus occidentalis), Magnificent Frigatebird (Fregata magnificens), Brown Noddy (Anous stolidus), Roseate Tern (Sterna dougalli), Bridled Tern (Onychoprion anaethetus), Laughing Gull (Larus atricilla), and possibly the Endangered Black-capped Petrel (Pterodroma hasitata). Also five species of reptiles will benefit: three endemic to Alto Velo and two endemic to Hispaniola. Wider ecological benefits will also occur to plant and invertebrate communities. Alto Velo is located within the Jaragua National Park and the UNESCO Enriquillo-Bahoruco-Jaragua Biosphere Reserve which are both a Key Biodiversity Area and an Important Bird Area; this project will ultimately strengthen the integrity of these globally important protected areas. The following attachments are available upon request: Alto Velo Eradication Feasibilty Plan Alto Velo operational plan (in Spanish only) Alto Velo google earth image Map of Jaragua UNESCO biosphere reserve showing location of Alto Velo Photo of Alto Velo																												
Little Lagoon	12612	Stephen Kichler	Little Lagoon		The Little Lagoon is in very bad shape. I am from Gulf Shores and my family has been here since 1862. We commercially shrimped and fished and my ancestors made their living from the lagoon. As tourism hit, the commercial fishermen were squeezed out of the Lagoon. As the population has grown it has put more and more stress on the Lagoon to the point that it is very hard to catch any fish in the Lagoon and no shrimp. There are several inches of silt on the bottom, that I am told comes from algae blooms. I have done some research and I don't think everyone is aware of what goes into the Lagoon. There are 3 Golf Courses that are adjacent to the Lagoon or the Lagoons water shed (The Peninsula, The Gulf Shores Golf Club, and The State Park). Not only that, but high fecal levels are showing up in samples taken by the Lagoon Preservation Society on the most eastern end. The one simple solution that would greatly assist in alleviating this problem would be water turnover. The current model that is used to maintain the Lagoon Pass I do not feel is sufficient and the method to maintain it is definitely not efficient. The State has spent over 26 million dollars over the last 25 years to keep it open. Delays and breakdowns have always been a problem. The dredge has sank numerous	Trustee Portal	N	Y	N	N	N	N	N	N	N																			

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					times spilling diesel fuel and other contaminants into the water. The City of Gulf Shores doesn't want the headache or the expense to deal with it and it seems the State doesn't want to fix the problem, they only want to put a band aid on the problem to keep everyone quiet. In the meantime people are getting sick from being in the water. Several cases of Vibrio Vulnificus have been reported and people have almost died. Large amounts of foam have been witnessed most likely caused by some form of hypoxia. Algae blooms are killing the sea life. In my opinion the model used years ago to determine the depth of the Pass is out of date. The traffic on the Lagoon and the natural shoreline have chang ed dramatically since the last model was done. The design of the Lagoon Pass is insufficient. I would like to see this money used to extend the jetties beyond the beach so the Lagoon will maintain itself without have a dredge and construction equipment there all the time. Not to mention the disturbance on wild life moving sand down the beach with off road dump trucks and track hoes. I would also like to see a study to determine the best depth and width of the Pass to maintain sufficient flow so the Lagoon is able to flush itself and stop wasting tax payer dollars. I think that the health of this important waterway is far more important than weather or not someone has a little more or less sand in front of their house. Please consider using these funds to correct this problem and keep the state from wasting tax payer dollars																												
Spill oil picking up System	11434	Marko Kljaic	Gulf of Mexico	3000000	The project is intended to prevent large spread of spill oil in case of an offshore accident. In the project, the equipment has been designed that all together make a system protecting, actually, it limits the spill oil to spread over large surface all around an accident place. We have started from point of view that offshore accidents are always possible to occur. More or less we are witnesses after an accident occurs that impacts to environments are inevitable and restoration projects cost very much and take long time. Here we have designed and composed a system that do limit on oil spread, then make it possible to pick up all oil, up to the last drop in the literal sense of the word. This works even at a rough sea, gales and so. How to achieve the goals and perform the actions from the statement above? That is the matter what this Project deals with. The word Project denotes both the System and its application. How to manage with picking up of the spread oil in all sea conditions? The principle used in the System is not to defeat a rough sea, but opposite to take advantage of the sea forces. The meaning is to work together with the sea. To stress importance and efficiency of the Project, freely said, it is a long-term seen strategy. By using the high professional approach to the problem and composition of, already on market, existing and new designed equipment the Project finds how to cope with permanent existing problem which threats to destroy the environment. It is harm that this system has not been applied at Mexico Gulf accident. There will not be so much impact as it was. If the rig were surrounded from beginning of the accident by sufficient long booms of this system there would not be oil spread. The description of the system is available quickly. All described parts of equipment are presented on simplified drawings. For this moment, here, we line up briefly only the equipment list. More information we will present after you, or some other	Trustee Portal	N	N	N	N	N	N	N	N	N																			

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					institution show an interest for it. System description Part one 1 Bordering devices, the booms (Very special design) 2 Anchor 3 Buoy and inflation device 4 Floating Pump 5 Hoses 6 Wet oil processing (separate oil and water) 7 Hunter Boat 8 Oil Boat 9 Spilit Oil Part two 1. Strategy and realization 2. Information about an accident 3. Monitoring and getting start 4. Crew Part three 1. Scope of supply 2. Know-How The system is very interesting for use in many other purposes: clearing of harbors, wet oil processing ... Due to the System is subject of a patent protection procedure we do not give any more written details in this suggestion. But we are very ready to do in live our fully presentation on request. You are kindly asked to give us an opportunity to do the presentation. We are confident that after such one presentation we'll do a deal. We are looking forward for your response, Sincerely yours Marko Kljaic Please open the following link! https://www.dropbox.com/s/glveqksvlnpbmec/SOPS%20-%201115%20r1%202.pdf?dl=0																												
Gulf Coast Marine Life Center in Gulf Shores, AL.	12497	Patrick Barcus	Gulf Sores	13608750	The Gulf Coast Marine Life Center a Florida 501(c)(3) company, in collaboration with experts from the University of Florida, the University of Miami, Louisiana State University, Texas A&M, the University of Maryland, the University of North Carolina Wilmington, and the University of New Hampshirethe city of Gulf Shores, AL. is dedicated to restoring the economic and environmental health of the Gulf Coast in the wake of the Deepwater Horizon Oil Spillaims to develop a world-class educational center and aquarium focused on native Gulf marine species. Adults and children of all ages will have the opportunity to tour a 15,000 sqft. aquarium displaying the various ecosystems of the Gulf coast. The Center will also provide Gulf Shore's tourists with a very unique experience while exploring the importance of marine resources, the seafood industry, and the Gulf. The GCMLC in Gulf Shores will host several field trips throughout the year exposing children to the importance of our marine resources, wet lab exercises and encourage environmental stewardship. Aquaculture and fisheries seminars/workshops will be held in conjunction with the Alabama DNR's Claude Peteet Mariculture Center. The center will also focus its efforts towards public outreach in an effort to raise awareness and responsible stewardship towards the Gulf's marine environment and resources. A suitable site location for the facility has been determined and is under negotiation. Design plans and layouts for the center are in progress. This project will bring many ecological and economic benefits to both the state of Alabama and the Gulf region as a whole, as well as numerous educational opportunities for students of all ages.This project is bringing together some of the best minds the U.S. has to offer in the fields of hatchery technology, sustainable aquaculture, fisheries science, and habitat restoration to bolster the Gulf Coast ecosystem's ability to provide viable ecological services for decades to come. Bo th the economies of the region, and the nation as a whole, depend greatly on a healthy and productive Gulf of Mexico. The region's multi-billion dollar tourism industry is largely driven by access to beautiful Gulf beaches and world-class sport fishing. Much of our nation's shipping and oil production infrastructure is located in the Gulf. This infrastructure depends on healthy coastlines that have the resilience to	Trustee Portal	N	N	N	N	N	N	Y	N	N																			

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					withstand hurricanes and flooding. Approximately 40% of domestic seafood production comes from Gulf waters, thus ensuring its continued productivity is a matter of national food securityThe center's focus is to promote responsible stewardship of the Gulf through education and outreach programs.. The Center's efforts to address the NRDA restoration project criteria will also support the U.S. Department of Commerce and NOAA's National Aquaculture Policy, aimed at "Restoring Marine Habitats, Increasing Domestic Seafood Production, and Creating Sustainable Jobs." The GCMLC's goals are threefold: 1. Assist fisheries managers in rebuilding commercially important marine shellfish and finfish stocks through ecologically and economically sustainable stock enhancement and habitat restoration efforts. 2. Develop the physical and intellectual infrastructure to support the development of a sustainable aquaculture industry in the Gulf region. 3. Promote responsible stewardship of the Gulf through education and outreach programs.																												
A way to clean some of oil out of the gulf	12462	Joesph Ferguson	Gulf of Mexico		fisherman catch tar ball in there nets .they rake this tar balls back into water .So instead of them raking the tar ball back into water give them some kind of storage container to put the tar balls in .to give them an incentive to do this pay them by the pound or container .This how we feel some of oil can be removed from gulf .	Trustee Portal	N	Y	N	N	N	N	N	N	N																			
A Coastal Wildlife Rescue and Research Center Project *construct and maintain the first waterfowl and sea/shore birds implimenting the Coast natural history/ habitat	12463	Janet De La Oliva-Ripp	coastal AL	1500000	Background: CWRRC IS the ONLY FEDERAL USF&W PERMIT holder (migratory bird) REHAB in BALDWIN COUNTY AL., with 3 years of data collection and networking not limited to the 13 cities of Baldwin County, the over 60 counties statewide, Florida to our east, Mississippi to our west. As the only one of it's kind in South Baldwin County,(CWRRC) takes in more than a bird a day, many of these birds, if not one third of them all, come from a coastal wetland or water environment. The Aviary is planned to incorporate the natural history of specific species and their habitat using native plants and natural irrigation flow/ suitable and self sustainable irrigation techniques and the minimum standards of the National Wildlife Rehabilitators Council as these are standards adopted by our own permitting agency the USF&W. ***In this aviary, (>125' x25') built to reflect the variety of wetland habitat found on the coast ...beach and shoreline, deep water aquatic, sedimatary pools, tidal wetland, marsh, brackish and cold water and wet weather creek. Utilizing knowledgeable local field scientist and biologist to design these habitats and trouble shoot the pros and cons for any problem that may arise over time..foreseeable and the not so foreseeable. . In these mini ecosystems stress will be greatly reduced for recovering birds increase successful releases there by having a greater impact on the species itself, restoring viable birds to mates, off springs, colonies/family groups, . available for study and data collection, behavioral study or sample collection over time and climate conditions . networking to fly and assist other centers in need of flight space in the surrounding coastal areas . In maintaining would be a living nursery with access and controls for shaping as natural a habitat possible . Implications for banding and post release studies . Ongoing education and outreach programs specific to age and course study are considered v ital to promote understanding of how diverse habitats found on	Trustee Portal	N	N	N	N	Y	N	N	N	N																			

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					the coast are home to abundant species and why these sensitive systems need (their) local community to support these local conservation efforts. CWRRC's volunteers have successfully managed 3 years of operation, hundreds of birds, variety of injuries, releases, d ata collection, numerous hours phone counseling for the public as per individual wildlife distress calls. transport, procurement and outreach education programs for a variety of ages, all without routine or regular funding. The next logical step is building an aviary for our most plentiful avian resident,aquatic birds..inland and sea going.																													
Expand and Improve Gulf of Mexico Marine Mammal Stranding Response and Science Capacity	11966	Chris Robbins	Gulf of Mexico	45000000	Proposed Restoration Project: The project will augment resources available to the Marine Mammal Health and Stranding Response Program (MMHSRP) network members in the Gulf, helping them respond to and learn from future marine mammal strandings and thus increase the survival of rescued animals and the recovery of populations impacted by the Deepwater Horizon (DWH) oil spill. Added benefits from this project are the ability to augment the resources and response capability across networks that serve other impacted marine wildlife species, such as sea turtles and sea birds. Link to Injury: Marine mammals (whales, dolphins, and manatees) inhabit the northern Gulf and likely were exposed to petroleum hydrocarbons and impacted by cleanup activities resulting from the Deepwater Horizon oil spill. Aerial surveys conducted under the Natural Resource Damage Assessment observed 6 species of whales or dolphins swimming in surface oil in offshore waters. Two dolphins were rescued after being trapped behind oil booms in Alabama during the spill event. Live dolphin health assessments conducted in Barataria Bay in 2011 showed that animals in this highly impacted region were exhibiting signs of severely compromised immune systems -- symptoms consistent with those seen in other mammals exposed to oil. Approximately 930 marine mammal strandings (almost entirely bottlenose dolphin) have been reported as of 7 April 2013 as part of an ongoing Unusual Mortality Event that began in February 2010 in the northern Gulf. Strandings in 2010-2012 far exceeded the historical average (Figure 1). The majority of the strandings occurred in Louisiana, followed by Mississippi, Alabama, and the Florida panhandle (Figure 2). Scientists are still investigating the cause of the strandings. The potential for long-term impacts exists for marine mammals that were exposed to contaminants, but may take many years to be realized. Benefit and Rationale: The collection of biological information from stranded marine mammals is critical to understanding more clearly the long-term effects of the DWH oil spill and to ensuring the recovery of affected populations. Prior to the spill, stranding response efforts were patchy and inconsistent in many portions of the region, especially Louisiana and Alabama. Response capabilities increased in certain areas during the spill with funding from the Natural Resource Damage Assessment; however, long-term funding is needed across the Gulf because it is not known where or when delayed strandings related to the DWH spill may arise in the future. Institutional funding is variable but generally inadequate to provide the level of response needed for ongoing injury assessment. Limited global expertise in marine mammal veterinary care and diagnosis underscores the need to recruit and	Trustee Portal	Y	N	N	N	N	N	N	N	N																			

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					retain properly trained specialists in the impacted region. MMHSRP network members are often the first and only responders to marine mammal strandings in the Gulf region. Rapid response to live- and dead-stranded animals is key to collecting the high quality samples necessary to determine cause of death and to monitor the health status of wild populations. The availability of trained and qualified stranding responders, technicians, and veterinarians is essential in providing effective medical and forensic response. The unusually high number of sick and dead marine mammals recovered in the northern Gulf since the DWH oil spill underscores the importance of network members in responding to, rescuing, and rehabilitating stranded marine mammals. Often, MMHSRP network members participate also in response efforts for other injured or dead marine wildlife, including sea turtles and seabirds. Although none of the marine mammals rescued during the DWH event could be released back into the wild, other live-stranded marine animals (e.g., seabirds and sea turtles) were rescued and rehabilitated by network members and typically were released. There is an ongoing need to treat and successfully release stranded dolphins, whales, and manatees back to the Gulf. Released animals are then able to reproduce and contribute to the recovery of the wild population. Follow-up monitoring of released animals via tagging and resightings will provide data on the success of rehabilitation efforts and assist in adaptive management of rehabilitation and release techniques. Marine mammals, among other species, are the ocean's "canaries in the coal mine," and MMHSRP network members, through biological sampling and post-mortem examinations, collect high value information on the condition of animals that can help scientists not only understand the cause of illness or death, but also detect subtle or significant changes in ecosystem condition and function. Stranding response complements on-water observational studies of free-swimming wild animals, which provide a means to measure population vitality, births, juvenile survival, visual health indicators, and incidences of injury or harassment by human activities (e.g., vessel strikes and fisheries interactions). Description: This project would maximize the survival and recovery of marine mammals affected by the DWH oil spill by increasing the capacity of Gulf marine mammal health and stranding response program network members, with emphasis on areas affected by the spill, to 1) respond to reports or sightings of live- and dead-stranded marine animals, 2) support facilities and personnel involved in rehabilitation and release of stranded marine mammals, 3) conduct timely and thorough examinations of live- and dead-stranded animals, and 4) collect, analyze, maintain, and disseminate consistent and high quality information from stranded animals and stranding events. Specifically, this project would increase capacity within the existing MMHSRP network across the Gulf, particularly in the areas more heavily affected by the spill, over a 10-year period. The project emphasizes investments in the f ollowing operational areas: 1) salary support for stranding coordinators, veterinarians, and technicians to respond to strandings, conduct examinations, and collect and organize samples and data; 2) equipment, supplies, and contracted services needed to locate and respond to strandings,																												

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					conduct examinations, and collect and store biological samples; 3) laboratory analyses of biological samples; 4) operation and maintenance of necropsy and rehabilitation facilities; and 5) training of stranding responders. Adequate resources for existing Gulf MMHSRP network members would ensure that information collected from stranded marine mammals is consistent throughout the Gulf and with other U.S. regions. This vital work is integrated with other health assessment studies and contributes to a better understanding of the impacts of the DWH oil spill on Gulf marine mammals to inform marine mammal recovery strategies going forward. Enhancing capacity and long-term consistency of the MMSHRP network in the Gulf region will also augment response efforts that focus on other impacted species of wildlife. Location of Project: The project would increase capacity for MMHSRP network members throughout the Gulf, emphasizing investments in areas most heavily affected by the spill (Louisiana, Mississippi, Alabama, and the western edge of the Florida panhandle). Funding Source/Mechanism: Funding for this project would come primarily from funds awarded by the court or an out-of-court settlement under the Oil Pollution Act Natural Resource Damage Assessment to restore injured natural resources and services to pre-spill conditions. Other sources of funds could include funds from state trustee agencies, the National Fish and Wildlife Foundation, and/or the Gulf Coast Ecosystem Restoration Council. NOAA, as the lead Trustee for marine resources, is in the best position to administer and coordinate the allocation of funds for this project. Designated network members (see list below and th e attached map) would work in close partnership with the project administrator to determine the type of enhancements needed at their facilities. NOAA and other state and federal trustees, as appropriate, would determine the amount of funding for each network member based on restoration scaling; that is, the level of funding would be based on nexus to injury and the number and type of strandings (i.e., injuries) that occurred or are likely to occur in each network member's area of responsibility (see attached map). Network members in the primary DWH oil spill impact zone: - Audubon Aquarium of the Americas (New Orleans, LA; Suzanne Smith) - Louisiana Department of Wildlife and Fisheries (Grand Isle, LA; Mandy Tumlin) - Institute for Marine Mammal Studies (Gulfport, MS; Moby Solangi/Delphine Vanderpool) - Dauphin Island Sea Lab (Dauphin Island, AL; Ruth Carmichael) - Emerald Coast Wildlife Refuge (Fort Walton Beach, FL; Amanda Wilkerson/Steve Shippee) - Gulf World (Panama City Beach, FL; Ron Hardy) Network members in other areas of the Gulf potentially affected by the spill: - Texas Marine Mammal Stranding Network and authorized designees (Galveston, TX; Heidi Whitehead) - Marine Mammal Conservancy (Key Largo, FL; Art Cooper, Jr.) - Florida Fish and Wildlife Conservation Commission Marine Mammal Pathobiology Laboratory (Saint Petersburg, FL; Andy Garrett) - Florida Fish and Wildlife Conservation Commission Southwest Field Laboratory (Port Charlotte, FL; Denise Boyd) - Florida Aquarium (Tampa, FL; Kristen Aanerud) - Mote Marine Laboratory (Sarasota, FL; Gretchen Lovewell) - Clearwater Aquarium (Clearwater, FL; Mike Hurst) Cost Estimate: Approximately $45 million over 10 years The following cost estimates are for																												

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					planning purposes only; the actual resource needs for each network member organization will vary considerably on both an initial and annual basis, based on each organization's existing capabilities and facilities as well as actual marine mammal stra																												
Buyout of Longliners' Use of the Gulf of Mexico During the Bluefin Tuna Spawning Season	12340	James Chambers	Gulf of Mexico	10000000	I suggest that in distributing funds ($2.4 billion) received from the settlement of British Petroleum's Deepwater Horizon oil blowout, consideration be given to recovery of the marine organism whose population, while already dangerously close to extinction, was the most directly and severely affected by the disaster – the bluefin tuna. I believe the best way to do this is to close the entire Gulf of Mexico to commercial fishing for highly migratory species (HMS) during the period when adult western North Atlantic bluefin are using the area for spawning (late April through early June of each year) and to pay commercial vessels not to fish in the closed area each year for 10 years until a full recovery of the population to a healthy level can be demonstrated. The amount to be disbursed to each vessel with a demonstrated history of recent landings of HMS species during April through June at ports in the Gulf of Mexico (including Miami) could be based on average net revenue of the fleet during the closure period plus an annual inflation adjustment. The annual allocation of funds (following each year's closed season) could be made as a lump sum to the Blue Water Fishermen's Association, which represents all the involved fishing vessel operators. Violators could be sanctioned by suspension of their HMS permits for an appropriate period of time. North Atlantic bluefin tuna spawn only in the Mediterranean Sea and in the Gulf of Mexico. They are two separate and distinct populations. The South Atlantic bluefin tuna population was extirpated by commercial fishing in just 10 years (1960-1970) once its spawning area off Brazil was discovered. The western North Atlantic population spawns each May in the north central Gulf of Mexico. Many of ilts eggs and larvae would thus have been carried by the Loop Current directly into the Deepwater Horizon's plume of toxic petroleum and toxic dispersants where they would die. Because of overfishing on this the world's most valuable f ish, the western North Atlantic population - "our" bluefin tuna - has declined in abundance by about 98% since 1960 (for the details, see my website, www.BigMarineFish.com/bluefin.html). As a result, on May 24, 2010, the Center for Biological Diversity petitioned the U.S. federal government to "list" the North Atlantic bluefin as "threatened" or as "endangered" and to protect it under authority of the Endangered Species Act. If the adult bluefin can be protected where they are concentrated in a relatively small area for spawning, we should be able to reverse the recent succession of poor year class formation thus allowing the population to recover and providing much greater value in increased catch through time for both recreational and commercial fishing interests. The closure would also reduce mortality of severely depleted Atlantic blue marlin, white marlin, a variety of sea turtles and the great number of other non-targeted marine life which are caught and die particularly during this season on longlines set for the "money fish" (swordfish and yellowfin tuna). Accordingly, such a program should have the support of bluewater (HMS) commercial fishermen, commercial fisheries businesses, chefs, offshore sport fishermen,	Trustee Portal	N	N	N	N	N	N	N	N	N																		

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					conservationists and the public. Economic benefits to both the commercial and sport fishing industries of increased survival of populations of not only bluefin tuna but also other premiere big game fish (e.g., blue marlin, swordfish, white marlin, sailfish, etc.) would be many times the annual cost to fund the proposed longliners' buyout.																													
Gulf Accesses-Land Formation	12330	John	Gulf of Mexico		Are there to many gulf accesses or openings? Over many years accesses were made to the gulf that might slow down the land build up processes. Should several of these openings be closed off allowing sediment to be kept from being distributed into the Gulf! How was the land exteriors islands formed 50 or 100 years age? Did several openings exist? Also, are fresh water diversions operated properly? Are salinity levels monitored? The diversions should be opened and closed with spring flooding of the Mississippi River with fluctuation of flow rates. Creation of more recycled oyster shell reef will help trap sediment and create land with the ebb and flow of tides and fresh water diversions. Monitored salinity levels will keep existing oyster reef alive. In other words, the system must be closely balanced. Could portable bulkheads with tidal openings be build and encircled certain land areas, as sediment is trapped and land is build the bulkheads lifted and moved. Recyled oyster shells then could be placed close to shore up new land formation and prevent new land from eroding away again!	Trustee Portal	N	N	N	N	N	N	N	N	N																		
GulfCoastRestaurants.com Website	12306	Jordan Copeland	coastal Gulf of Mexico		Promote tourism in the Gulf Coast Region on GulfCoastRestaurants.com through featured content-rich restaurant and chef profiles of the restaurants along the Gulf Coast that prepare and serve fresh Gulf Seafood. The Restaurant profiles will include details of the Gulf seafood dishes they serve and the origin of the seafood used to prepare it.	Trustee Portal	N	N	N	N	N	N	N	N	N																		
Recreational fisheries data enhancements	12296	Chris Robbins	Texas	1500000	This project would provide labor, equipment, and funding to expand the collection, processing, analysis and dissemination capacity of recreational fishing data by Texas Parks and Wildlife's Coastal Fisheries Division. Texas primarily collects and analyzes recreational fishing data according to methods designed to optimize resources during high and low use periods. Different methods of capture and transmission of fishing data for federally managed species (like red snapper and greater amberjack) will help the Gulf transition to more real-time science and management of these popular species. These Gulf fisheries improvements will support sustainable fishing opportunities for popular reef fish species and sustain the coastal economies that rely on fishing. The estimated project cost is 1.5m over a 5 year period.	Trustee Portal	N	N	N	N	N	N	N	N	N																		
iSnapper electronic charter for-hire logbook reporting system	12295	Chris Robbins		500000	This one year grant will fund an iSnapper electronic logbook (ELB) reporting system and validation pilot program for charter for-hire vessels at multiple ports throughout Texas. This project would complement a previous project by expanding coverage in the pilot to federally permitted boars and state permitted boats and by increasing the level of validation of self-reported, electronic fisheries data. Federal managers need near-real time fisheries data to meet conservation goals, and state managers will need to adhere to these goals if regional fisheries management is implemented by individual states. The iSnapper electronic logbook (ELB) program is a cost-effective and user friendly technology that allows fishermen to report their information in	Trustee Portal	N	N	N	N	N	N	N	N	N																		

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					near real time. More efficient, precise reporting enables managers to make more timely management decisions and gives charter boats a catch history.																												
Economics and The Gulf Coastal States	12028	Kay Williams	Gulf states	5000000	The Objective is to collect economical data for the Gulf Coast fishermen, Anglers, processors, charter for hire and businesses that rely on our Nations marine resource to provide food and jobs for our Nation. This project will attempt to capture the true value of our Gulf of Mexico States marine resources and seafood to the Nation as a whole. Activities include the collection of economic data which will include mail out surveys, email surveys, phone calls to various users of our resources to validate the data collected from the mail out surveys. We will also meet face to face with many of our businesses. We will collect economic data from the products harvested throughout the entire seafood supply chain. We have never collect the true value to regional businesses benefitting from Gulf seafood. In most surveys they only show the x-vessel price. We will do a literature review to make sure we have included all value from the fish to the plate and all the jobs that depend on our Marine resource and all revenue that our nation receives. One example is Menhaden is used for making oil, fertilizer, dog and cat food. The oil is used as the primary ingredient in WD forty. This example is to show how the value chain comes into play and the many jobs that are created through the value chain. The outcome is to have a social and economical survey that will help capture the true value of the commercial seafood industry to the Nation as a whole. We will also provide the other businesses that depend on the seafood from the Gulf of Mexico to make their living. This data has never been collected before. If a Disaster should strike again we will have the true value and as an extra bonus of this proposal .Our science center will have the information and so will our fishery management councils that use this type of information in their management plans.	Trustee Portal	N	N	N	N	N	N	N	N	N																			
Conservation Educational Outreach Program (CEOP)	12282	Jessica Griffen	Gulf states	3750000	The Soft Skills Training Institute of Florida and its strategic partners will develop a program involving cooperative efforts in cultural and natural resource conservation training and education program or projects related to trail development and maintenance, historic, cultural and native habitat restoration and rehabilitation. CEOP is a hands-on, environmental education program that teaches young people valuable lessons about wildlife management, conservation, leadership, team-building, citizenship, and communication. As a participant in CEOP, you will gain a greater understanding of the value of land and how it can be managed to benefit much wildlife and fish species. Participants will use their skills and knowledge to create better habitats for wildlife now and in the future, and be open to perhaps a career as a wildlife professional, a landowner, or an active volunteer in their community to help teach others to become good stewards of their natural resource environment. The team will promote and stimulate public purposes such as education, job training, development of responsible citizenship, productive community involvement and furthering the understanding and appreciation of natural and cultural resources through the involvement of youth and young adults in the care and enhancement of public resources SSTI will enhance the longstanding efforts of state parks to provide opportunities for public service, youth education and training programs for	Trustee Portal	N	N	N	N	N	N	N	N	N																			

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					minority and underrepresented youth and young adults development and participation in accomplishing conservation-related opportunities to learn and be stewards of natural resources. Youth and young adults will learn: 1. About different kinds of wildlife, what they eat, and where they live. 2. Wildlife terms and ideas. 3. How to attract different wildlife species. 4. How to judge the quality of wildlife habitat. Other CEOP activities include: Wildlife Identification – Participants are tested on their ability to identify pre-determined wildlife species. Twenty photographs of wildlife species, which clearly show a juvenile, adult, male, or female of the species is presented to the participants. General Wildlife Knowledge – Participants are tested on their knowledge of topics ranging from wildlife habitat for select species to management practices that benefit wildlife. Wildlife Management Practices – Participants compete are taken to an outdoor site with defined boundaries and are asked to evaluate the quality of habitat for select wildlife species. Based on each participant's site evaluation, he or she is asked to recommend wildlife management practices that will benefit each select wildlife species. Written Wildlife Management Plan – Participants will participate on a team and will write a two-page management plan for an outdoor site with defined boundaries that meets objectives established in a field conditions sheet provided to each team. Oral Defense of Written Plan – Each participant completes an activity individually, the individual score counts toward their final team score for the written plan. Each individual team member appears before a panel of two to three judges and answers questions over a five-minute period about their written plan, as well as general wildlife questions.																													
Restoration Education Environment Preservation Training Wildlife Program (R.E.E.P.)	12280	Jessica Griffen	Gulf states	3000000	The Soft Skills Training Institute of Florida and its partners will provide education and training in the areas of restoration, rehabilitation, and improvement of wildlife habitat; wildlife management research; hunter education and safety programs; coordination; development of facilities; facilities and services for conducting a hunter education and safety programs; and public use of wildlife resources. The Wildlife Education and Safety Program will include education and training in the safe handling of archery equipment;restoration, hunter responsibilities and ethics; survival; construction, operation, and maintenance of public shooting ranges; and basic wildlife management and identification. Hunter Education and Safety Programs will include the development and implementation of a programmed course of instruction leading toward the achievement of the hunter safety training goals and objectives in the state of Florida and specifically Escambia and Santa Rosa Counties. In general, the course is designed to train adults and students to be safe and responsible in restoration and assist Escambia and Santa Rosa County in preserving its wildlife. Facilitates training and supports educators in working together through collaboration and partnership to engage youth and adults in an online place-based approach to teaching and learning using natural resources as a context for learning. Students become environmentally literate citizens equipped to make informed decisions, exhibit responsible behavior, and take constructive action to ensure a sustainable future for the state's natural resources. Provide 15-30 hours of education and training development to youth and adults and any appropriate	Trustee Portal	N	N	N	N	Y	N	N	N	N																			

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					community members and student grade levels. Design and provide technology driven education and training platforms based on the needs of the state and communities. Provide materials, resources, tools, and strategies. Establish support and collaboration with the community organiz ations. Stewardship Commitment: • Sustain participation from 85-100% of targeted communities. • Ongoing implementation and application of the curriculum and resources.																												
Bird-friendly lighting on oil and gas platforms in the Gulf	11605	Chris Robbins	Gulf of Mexico		Bird species impacted by the BP oil disaster are also among those that are vulnerable to the lighting generated by oil and gas platforms. In particular, tubenoses (e.g., petrels, shearwaters) and migratory birds are susceptible to platform lighting and mortalities that can result from direct collisions with those platforms. An estimated 200,000 bird-collision deaths may occur each year in the Gulf due to changes in flying behavior influenced in part by platform lighting. Reducing bird-platform collisions by replacing existing lighting with bird-friendlier lighting could have an immediate effect in reducing mortalities and help the recovery of species affected by the oil disaster. Replace white (tube lights) and orange (sodium high pressure) lighting on oil and gas platforms with lights low in spectral red.	Trustee Portal	N	N	N	N	N	N	N	N	N																		
Mobile Bay Park Project	12274	clarence carrio	Mobile Bay	50000000	3/30/14 Dear Senator Richard Shelby, Senator Jeff Sessions, Congressman Bradley Byrne and USAFoundation Director Maxine Roberts, Please consider our project that we desperately need your support on. I've written you before but I want to try one more time. Everybody loves going to visit the beach and this is what our proposal is all about. We want you to support turning the Brookley Field (Aero-space) property that Univ. Sou. Al. Foundation owns into a public waterfront park. Hopefully the entire 300 acres. Using the oil spill " restore funds " or any other funds available from any source. This would be a permanent and very appropriate restitution to all citizens of the entire city, county and beyond. The Brookley (funding name only) park would cost less than the proposed Gulf Shores/Orange Bch. Convention Ctr. BUT would serve and benefit 10 times the number of people minimum and serve ALL the people not just the AFFLUENT. USAFoundation spent $20 million on the purchase and ?????? on razing the old housing on property. We think they would support this if they were compensated adequately. Coastal engineers at USA have told me they could build a beach, you may have seen beach built at Grand Hotel, only MUCH bigger and much nicer w/ 100's of scub oaks and palm trees. This could really be the gem of the Gulf coast if done properly. We could possibly use the up coming ship channel dredging material as a base for expanded beach. Another entrance around end of runway could be built if needed (and tie into another hardly used park) to keep traffic away from Airbus traffic. We could lease part of property to hotels, restaurants, and appropriate commercial (for a 1st class State or National Park ?) to pay for upkeep and maintenance of park. A LARGE BEAUTIFUL WATERFR ONT PARK and the hub of aviation we think we would attract many commercial interests. There is plenty room enough else where for commercial development associated w/Airbus and its' suppliers. They should NOT locate on the water anyway ! THIS IS THE LAST and ONLY place we could build a park of this scale, close to the city so the maximum number of citizens, families, and tourists	Trustee Portal	N	N	N	N	N	N	N	N	N																		

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					could benefit . And IF it is big enough and beautiful enough, then there would room enough to attract everyone - black- white- rich and poor. You know 99% of us don't own waterfront property and we all (likely you and your family) LOVE the water. AND this water is nice, VERY NICE - i have waded in it numerous times flounder gigging. It is much nicer than Easter Shore really, Fairhope and Daphnes' water can't compare ! Google map shows most of turbidity (mud and silt) flows to the Eastern Shore ! Our bay water, (most of time except after rainy weather) is CRYSTAL CLEAR ! This would be an tremendous economic boost for all the surrounding neighborhoods, especially Broad St. , Michigan Ave., Down the Bay, and South Brookley neighborhood. We think it would be an incomparable economic STIMULOUS for the WHOLE City of Mobile. Citizens would flock to those neighborhoods in particular and renovate and rehabilitate just to be close to a large beautiful waterfront public park, where there would always be something going on. We think it would also bring crime down too because people would have something to do. We don't want this park to be a money trap for tourists and locals. We want it to be a spectacular landscaped park that people come to relax and enjoy the beautiful view, but also to be able to SWIM and PLAY : beach volleyball (tournaments ?), skate and rollerblade, skateboard park, jog, walk, ride bicycles, play soccer, shuffle board, disk golf (tournaments ?), checkers and chess under the lge. oak trees (already there), something for everyone. We DON																												
"BP" The Blue Print for Restoring the Gulf's Fisheries	12134	Harolyn Williams	Gulf of Mexico	8000000	This program will allow Fishers and NMFS to test and address some of the possible management strategies that the fishing industry has recommended to Gulf of Mexico Fishery Management Council since the Oil Spill. It will contain the basic blue print of those recommendations. It will help to address the needs of the commercial reef fish fishermen in the Gulf of Mexico with their by catch of regulatory discards. This will benefit the fishery by having those fish available to the market place instead of being thrown back into the Gulf Waters.This provides benefit to the fisherman, the consumer of the resource, the coastal communities and the living marine resource. This program will allow the fisherman a way to participate at a cost that may not be available to them now.Plus it would help distribute the fishery resource among the coastal states and the profit from the product to the local community. This program will lease fish from Red Snapper and Grouper Allocation holders and make them available at a reduced price to those that presently have a commercial reef fish permit and do not presently hold adequate allocation to address their by catch. There will be the necessary safe guards build into the lease so that those purchasing the leased fish will have to fish them. The second phase will have a working group meet to discuss the success they have had with a fish tagging system and various ways to administer the program in a such a way that there may be additional benefits to such a program. Their are methods the states could use to administer the program so that there are no added cost for the states should such a program be done as management in the future. This second phase of the program will help to also address the needs of the charter for hire and special tournament needs for the private angler and the private angler that	Trustee Portal	N	N	N	N	N	N	N	N	N																			

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					has not been able to fish due to close seasons and disasters. This program would be done through a fish tagging program and w ill require the fisherman, the states, the science center and NMFS coming on board. This would be done at a extra cost to the program for the second phase. This program would help to address the regulatory discards in the recreational community and will benefit the coastal communities through tourism. The charter for hire could use their fish tags when it was beneficial to their business and community and the Tournament caught fish will allow the private angler the opportunity to fish out of season when their season is closed, as well as the private angler that has not had the opportunity to fish during closed seasons and disasters. These programs will help the managers with the recommendation they make for management for the future. These programs will be protecting the fishery by reducing by catch while producing income and food for the Nation. This "Blue Print for Restoring the Gulf Fisheries brings Opportunities" that will be lost if not funded!																													
Africatown Historical Restoration	12275	Womack, Joe N.	Mobile County	1000000	Africatown is a Historical Community established along the Mobile River in north Mobile County in 1865. It was recently put on the National Registry Of Historic Places by the Federal Government and reconized as the last place slaves were brought into this country in 1859. The Africatown CDC is a non-profit organization created to restore historic homes, the first Training School in the State Of Alabama and create a tourist attraction in honor of those 110 slaves that came here in 1859. Funds allocated here would be used for that purpose.	Trustee Portal	N	N	Y	N	N	N	N	N	N																			
Erosion Prevention, Marsh Creation and Land-Building	11793	Gary Cook	coastal Gulf of Mexico		Shoreline and Marsh erosion prevention and land building, with new designed geotextile containment units (GEO-TECH- Jetti), with planted native plants and grass in RZHO. GEO-TECH Units are spiked with XX Heavy Duty PVC Pipe for stabilization. This is help Shoreline Erosion Control, Stabilization, Accretion, and Habitat Assurance and "coast building." This new concept will co-inside with the two other projects submitted. Confirmation #'s WPXWHOC2 and 2KE7KQ8Q Would like to summit Power Point Presentation, please send email address.	Trustee Portal	N	N	N	N	N	N	N	N	Y																			
Ecosystem Based Restoration Project Management and Decision Support System	12092	Steve Ashby	Gulf states	20000000	As multiple restoration projects are implemented in the northern Gulf of Mexico, there is a need to understand and quantify impacts on the ecosystem. Furthermore, there is risk that interactions across projects may have "unintended consequences". For example, changes in water quality such as salinity and sediment load may adversely impact desired habitat conditions (e.g., oyster reefs and marsh restoration. This could result from freshwater diversions and changes in circulation with barrier island construction. Consequently, a method that informs ecosystem based management is needed. This proposal is to develop and deploy a placed-based decision support system (DSS) for scientific assessments of synergistic interactions of multiple restoration projects. The DSS will be built using existing technologies and data for conducting scenario analyses and simulations. Existing models and ongoing ecosystem assessments will used to develop a place-based DSS. Projects and their alternative will be assessed using Multi-Criteria Decision Analysis (MCDA). MCDA provides a systematic tool for identifying a preferred course of action when considering multiple	Trustee Portal	N	N	Y	N	N	N	N	N	N																			

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					forms of dissimilar information and differing value judgments among stakeholders. The DSS will allow managers to evaluate impacts of multiple projects on the overall quality of the ecosystem in the northern Gulf of Mexico and provide science based assessments for adaptive management as restoration projects develop over time. Enhanced assessment techniques will be used to evaluate the stability and sustainability of projects during construction and post construction. The project will be a collaborative effort with engineers and scientists from Mississippi State University (MSU) and the University of Southern Mississippi (USM) and will be coordinated with state and Federal agencies conducting restoration in the northern Gulf of Mexico. Emphasis will be placed on projects in the Mississippi Sound and Lower Mississippi River. More detailed proposal is available upon request.																													
Western Shore Mobile Bay/Fowl River Nature & Education Center	12095	Logan U. Gewin	Mobile County	1800000	The Western Shore Mobile Bay/Fowl River Nature & Education Center project has several components as described below: 1. Land Acquisition: Purchase of the approximately 186 acre tract would place this site in public ownership and control. This property contains one of the last remaining mesic woodlands found along Mobile Bay, as well as highly productive brackish tidal marsh. The property had been part of a planned residential community development but that plan has not yet been implemented in this tract. Given the projected economic impact of the new Airbus Plant approximately 16 miles from this site, it is realistic to project that this geographic area will again be targeted for residential and commercial development in the next few years. This site is also approximately 10 miles from Interstate 10, approximately 13 miles from Interstate 65, and approximately 20 miles to downtown Mobile, Alabama. The subject property is located just off of Dauphin Island Parkway (State Hwy. 193) which is a well traveled Highway which ends at City of Dauphin Island, Alabama. Area visitor attractions close to the subject property include Dauphin Island Beaches, Dauphin Island Sea Lab, Dauphin Island Ferry to Fort Morgan (all approx. 16 miles) and Bellingrath Gardens (approx. 6.8 miles). The Acquisition and protection of this site will preclude clearing and construction within the woodlands and will allow public access to and enjoyment of the important biological resources contained within the tract. 2. Shoreline Stabilization: Various living shoreline measures would be evaluated (eg. installation of subaqueous breakwaters, placement of pocket beach structures in eroded areas, planting of marsh/shoreline vegetation for sediment stabilization, etc.). Measures determined to be optimal for this site would be implemented. It is anticipated that approximately 10 acres of eroded marsh would be restored, and the existing 75 acres of marsh would be protected from further erosional loss. 3. Marsh Restoration: As noted above, shoreline protection measures will be selected to facilitate restoration of eroded marshlands as well as to protect the shoreline from further erosional loss. In addition to the potential benefits of restoration of approximately 10 acres of marsh along the shoreline, certain other areas could be restored; these include some of the canals that had been excavated during the 1950's and the area between Goat Island and the marsh on the mainland. One particular canal that could be removed occurs in the southernmost part of the marsh; it extends for about 800 feet from near Old Fowl River to the open water area	Trustee Portal	N	N	N	N	N	N	Y	N	N																			

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					that separates Goat Island from the mainland marsh. This canal is approximately 60 feet wide including spoil berms and represents roughly 1 acre of restoration potential. Placement of suitable sediment between Goat Island and the mainland marsh could form an additional 5 acres of marsh. Some of the canals within the tract were excavated in parallel form; the potential for eliminating some of these double canals will be addressed, but restoration of such areas could comprise 2 to 3 acres of marsh restoration. 4. Recreational Access: The subject property can provide excellent opportunities for the public to observe wildlife and a wide variety of natural habitats. Access to these areas will be enhanced through installation of small docks designed for canoes and kayaks. The numerous canals, Old Fowl River, and nearshore Mobile Bay waters are ideal for such watercraft. Nature trails and boardwalks will be constructed to allow visitors to view mesic woodlands, marshes, and estuaries; one or more bird/nature observation platforms will be built in or adjacent to the tidal marsh. The boardwalks and observation platforms will be built in or adjacent to the tidal marsh. The boardwalks and observation platforms will support outdoor classroom activities that could be made available to area schools and the public at lar ge. 5. Educational and Administration Facilities: A nice approximately 4,000 square foot office building is located on the subject property and is fully heated and cooled and handicap accessible. The office building is sited between two large oak trees and contains three restrooms, reception area, conference room, copy/technology rooms, multiple furnished offices, large covered porch areas, and ample paved parking area. This office building provides an excellent facility for Nature & Education Center offices, meetings, and classrooms. The office building is located on SaltAire Road near Dauphin Island Parkway and will serve as the base of operations for this Nature & Education Center.																												
Capacity Buidling, Disaaster Preparedness, and Sustaining Fishing Communities in the Gulf after the BP Oil Spill	11987	Christopher Moreno	Gulf of Mexico	500000	In the wake of the interconnected cultural, socio-economic, and environmental effects of the BP Oil Spill, Gulf fishing communities are facing unprecedented short- and long- term challenges in sustaining their traditional lifeways. Our two years of ethnographic research investigating traditional cultural communities and properties in the Gulf during the BP Oil Spill and response efforts has demonstrated the intimate and vulnerable cultural relationships these communities have with their surrounding environments. This research also illustrated the need for more inclusivity of fishing community traditional ecological knowledge (TEK) in implementing innovative capacity building strategies and the development of effective conservation and sustainability plans. McGoodwin (2001) has importantly pointed out that: Over the course of its development, much of fisheries-management science, both in theory and in practice, has had a misplaced emphasis. Whereas its first concerns should have been the human beings who utilize fisheries resources, its cornerstones were instead…the conservation of important marine-biological species…[and] allocating fisheries resources and maximizing the economic benefits from them. The aftermath of the BP Oil Spill has particularly elucidated the need to emphasize and better understand the human aspects of fisheries and the roles fishing communities play in	Trustee Portal	N	N	N	N	N	N	N	N	N																			

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					producing and promoting sustainable fishery environments. In this context and in conjunction with mandates presented by the Magnuson-Stevens Act and National Standards 8 regarding the need for fishing community consideration in fishery conservation and management decision making, this proposed project seeks to establish capacity building strategies inclusive of fishing community perspectives, values, beliefs, and TEK in: (1b) the development of community sustainability and management plans; (1c) the creation of fishery conservation networks; and (1d) the development of inter-generational and ent ry level access to and inclusion in fisheries. Methods: Participatory Learning and Action (PLA) is a method that promotes community interfacing and provides a vehicle for people to share, discuss, and expand their knowledge related to particular contexts and situations as well as to effectively prioritize, monitor, plan, and act at the community level. With each participating fishing community, the project team will organize a PLA workshop by collaborating with community members, educational institutions, and other local institutions. The workshops will be held in public facilities (where possible) at times most convenient for fisher communities and will extend over the course of three days. These workshops will provide structured as well as open interactive forums and activities where communities can present their concerns and needs, identify solutions to meet those needs, and develop community action plans and best practices related to sustainability and management programs; the creation of fishery conservation networks; and the development of intergenerational and entry level access to fisheries. The process of working in partnership with fishing communities to develop inclusive, feasible, desirable, and sustainable programs will contribute to innovative capacity building strategies that can aid the short- and long-term interests and needs of these communities in confronting the conservation and sustainability management challenges as well as the social and cultural impacts of the BP Oil Spill. Project Outcome(s): Anticipated short-term outcomes of the PLA workshops include: 1) wider community participation in capacity building activities, 2) community specific fishery TEK exchanges that can help strengthen capacities of communities to identify local fishing community needs, build community consensus, and develop appropriate strategies to meet those needs, 3) the development of culturally informed fishing community sustainability plans, and 4) establishment of Fishing Community Sustainability Planning Committees. Each of these steps will help initiate community ownership of sustainable and conservation planning processes and help build local accountability. Long term utility of this project will help integrate local fishing community needs and perspectives into management and conservation strategies related to the BP Oil Spill and response and will help meet goals established by the Magnuson-Stevens Act and National Standards 8 mandating consideration for the impacts of conservation and management practices on fishing communities. It will also provide baseline data of the management challenges related to the BP Oil Spill as well as present a path forward for future research needs regarding the integration and use of fishing community perspectives and TEK into conservation and sustainability strategies outlined in the																												

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					Magnuson-Stevens Act and National Standards 8. Proposed Activities: The project team has two years of experience working directly with the fishing communities listed above. The tasks necessary for identifying community stakeholders, building trust, and developing working relationships have already been established. The following are the steps the project team will take to successfully organize and implement PLA workshops with the identified fishing communities: 1. Follow-up with community leaders and government representatives to ensure community participation; 2. Work with community leaders and government representatives to establish PLA workshop logistics and participant recruitment strategies; 3. Directly engage and recruit fishing community members on the ground in coordination with community leaders and representatives; 4. Hold PLA workshops with participating fishing community members and stakeholders; 5. Analyze results from PLA workshops; 6. Present PLA workshop results back to participating fishing communities; 7. Select members for Fishing Community Sustainability Planning Committees in coordina tion with community leaders and representatives; 8. Work with Fishing Community Sustainability Planning Committees in using PLA workshop results to draft Fishery Conservation and Sustainability Plans inclusive of fishing community values, beliefs, and TEK; 9. Provide Fishing Community Sustainability Planning Committees with Fishery Conservation and Sustainability Plan drafts for review; 10. Author final Fishery Conservation and Sustainability Plan Report and submit to Fishing Community Sustainability Planning Committees, NFWF, and other agencies overseeing NRDA. Measure of Success: We will measure progress and success of the PLA workshops through the percent of the participating target populations, including the active participation of multigenerations, support agencies, and institutions (e.g. educational, governmental, NGOs) as well as those seeking entry level access to fisheries. We will measure progress and success of the Fishery Conservation and Sustainability Plan through a recording and accounting for identified management challenges related to the BP Oil Spill and response, how TEK can assist in sustaining fishing community lifeways while abiding by the parameters of the Magnuson - Stevens Act and National Standards 8, and development of an action plan that can be implemented by individual fishing communities as well as through fishing community networks and partnerships in the context of these events and regulatory requirements. All progress and success, as well as new challenges and obstacles, of Fishery Conservation and Sustainability Plans will be monitored in conjunction with Fishing Community Sustainability Planning Committees. Funding for future research and program implementation will assist effective monitoring of progress and success of Fishery Conservation and Sustainability Plans and will be sought by the project team.																													
the Marinovich Proposal	11986	Joseph (wayne) Ferguson	Gulf of Mexico		WHY Pertaining to the adult shrimp coming out of the gulf. Protect the adult shrimp coming out of gulf to spawn so they will be will able to reproduce without be caught up by trawl. change (tweak) the shrimp laws close the season from last week in march do not open until last week in June Re-closed in August not reopened end of three week into September. This may fix a FAILING INDUSTRY and bring back multitudes of jobs (INCREASE shrimp	Trustee Portal	N	N	N	N	N	N	N	N	N																			

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					population CUT DOWN ON DRAG TIME for fisherman which will make trip shorter and less fuel.. (More shrimp for fish to eat for red snapper ,speckled trout)																												
Coastal Ecosystem health: American Oystercatcher as an indicator of exposure and effects of pollutants on breeding birds on the Gulf Coast	12003	Felipe Chavez-Ramirez	coastal Gulf of Mexico	4800000	The Gulf Coast of Mexico is one of the most important regions in North America for bird-watching and outdoor activities. Bird conservation along the Gulf Coast is of primary importance because it contributes to the conservation of natural resources but also because it provides economic incentives to the coastal communities by increasing tourism, including bird-watchers and nature lovers to the region. Thus, maintaining healthy bird populations along the coast is important from an economic and ecological standpoint. Fish-eating birds are at the top of the food chain and often accumulate more contaminants than other species at lower trophic levels. American oystercatchers feed on bivalves which are also consumed by humans. This study could be used to assess general ecosystem health and potential impacts of contaminants in bivalves on human health. This research project will address the impacts of environmental contaminants on aquatic birds breeding along the Gulf Coast, using the American Oystercatcher (Haematopus palliatus palliatus) as an indicator species. Coastal wetland areas, estuaries, and islands along the Gulf of Mexico coast constitute a primary nesting and feeding ground for many North American birds. Most of the species nesting on these areas are waterbirds which nest in colonies and feed on aquatic vegetation, invertebrate organisms, and fish. Exposure to environmental contaminants in these species can occur through the diet, but also directly through dermal absorption, preening, and inhalation. To our knowledge, up until now, there has not been a complete assessment of the potential impacts that environmental contaminants in the Gulf of Mexico could have on many aquatic birds, including species of special concern and in need of protection. The results of this research can also be used to determine the health of coastal areas and their potential associated impacts on other species of concern, i.e. fish, shellfish, and humans.	Trustee Portal	N	N	N	N	Y	N	N	N	N																			
Conservation and evaluation of limiting factors for American Oystercatchers along the Gulf Coast	12004	Felipe Chavez-Ramirez	coastal Gulf of Mexico	5800000	The American Oystercatcher (Haematopus palliatus) is the most widely distributed of the four oystercatcher species found in the Western Hemisphere with a range stretching from the northern U.S. Atlantic Coast to the tip of South America. The total population is estimated to be 43,000 with the subspecies found in the U.S. (H.p. palliatus) making up 20,000 of that total. The U.S. population is estimated to be 11,000. American Oystercatchers are restricted to the narrow band of the coastal zone throughout their range where they feed mainly on oysters and other bivalves. The threats to their survival are many and include a low overall population size, low reproductive success, and delayed breeding (3+ years of age). Productivity rates from the Atlantic Coast range from .30 to .50. Nests are subject to a whole host of mammalian, avian, and even reptilian egg and chick predators and are also subject to overwash from high tides and tropical storm events. Chicks can starve to death during high tide events when the adults are unable to find enough food. Because oystercatchers nest in the coastal zone, disturbance from human recreation is common and exacerbates other natural threats. Sea level rise is major threat to oystercatcher survival. The U.S. Shorebird	Trustee Portal	N	N	N	N	Y	N	N	N	Y																			

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					Conservation Plan lists the American Oystercatcher as a species of high concern, it is a National Fish and Wildlife Foundation (NFWF) priority species, and it is included on the list of Texas Parks and Wildlife Department's priority species. The majority of projects associated with the American Oystercatcher have been along the Atlantic seaboard with limited focus on Gulf Coast populations. In 2011, the Gulf Coast Bird Observatory embarked on a multi-year study to fill information gaps on Gulf Coast oystercatchers. We have learned much from our work so far but there are still many unknowns. We have only begun to scratch the surface of understanding of oystercatcher conservation however as there remain many unanswered qu estions. Our primary focus would be to determine how and why eggs go missing from nests and how vegetation aids in chick survival. It appears the vegetation provides chicks with critical refugia from predation but we do not have a complete picture of what type of vegetation works best. We propose to expand oystercatcher nest monitoring throughout the Gulf to determine if other Gulf oystercatchers have similar productivity and threats as Texas oystercatchers. We propose to deploy motion activated video cameras to capture egg predation events and determine without question what is causing them so that we can counteract this with appropriate conservation measures. Thirdly, we propose to conduct a detailed vegetative analysis of oystercatcher nesting islands to determine which type of vegetation provides the best chick refugia. Without this information we cannot successfully create more oystercatcher nesting habitat.																												
Fisheries Oceanography of the Northern Gulf of Mexico (FONGOM)	12002	Dr. Frank Hernandez	Gulf of Mexico	7500000	This proposal requests support for continuation of the Fisheries Oceanography of Coastal Alabama (FOCAL) program, a research unit within the Richard C. Shelby Center for Ecosystem Based Fisheries Management at Dauphin Island Sea Lab (DISL). The FOCAL program serves as a fisheries management and restoration resource for the Alabama Department of Conservation and Natural Resources’ Marine Resources Division (ADCNR/MRD). FOCAL is currently funded by ADCNR/MRD through Hurricane Katrina EDRP funds, however this funding expires in November 2011. Without further funding, we will lose a valuable opportunity to monitor and assess the short- and long-term recovery of our marine resources in the wake of the Deepwater Horizon oil spill, which is critical to the restoration of Alabama's coastal waters and the return of recreational and economic use to pre-spill conditions. Since 2004, the backbone of the FOCAL program is a monthly plankton survey along a series of stations across the Alabama shelf. This survey (and related FOCAL sampling) generates a valuable, fisheries-independent database of baseline conditions and ecosystem variability. It is one of the only fisheries data sets available for pre- and post-spill assessments of acute and chronic effects due to the Deepwater Horizon oil spill on fish eggs and larvae (the life stages most vulnerable to the oil spill's impacts) and their food resources (zooplankton). FOCAL’s objectives are to continue to provide accurate information and guidance to ADCNR/MRD for efficient management of Alabama's coastal fisheries. By aiding management, we increase and sustain the human use value of our coastal waters by insuring healthy fish populations and restoring marine ecosystem services.	Trustee Portal	N	N	N	N	N	N	N	N	Y																			

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					Additionally, the continuation of FOCAL allows for pre- and post-spill comparisons of fish egg and larval abundances and distributions, which can be used to assess the efficacy of ADCNR/MRD's habitat enhancement and restoration programs, such a s Alabama's Artificial Reef Permit Areas. We will accomplish these goals by continuing our monthly collections of biological (e.g., fish eggs and larvae) and physical (e.g., temperature and salinity) data in Alabama coastal waters in support of ADCNR/MRD and DISL fisheries research and management goals. Detailed information about FOCAL can be found on our website: http://focal.disl.org/index.html. We have also attached a more detailed, point-by-point description of how FOCAL meets NRDA restoration needs.																													
Pay Dirt Mitigation Bank	11949	Dana Cleverdon	Gulf states		To create a wetlands mitigation bank from the portion of the Pay Dirt LLC properties currently designated as forested wetlands.	Trustee Portal	N	N	N	N	N	N	N	N	N																		
BP Deepwater Horizon Oil Spill Restoration Evaluation and Monitoring Program	739	Chris Robbins	Gulf states		The Natural Resource Damage Assessment regulations make clear that final Restoration Plans should include a monitoring component so that the effectiveness of restoration measures can be evaluated. Given that BP is providing $1 billion for early restoration projects before completion of a Deepwater Horizon Restoration Plan, some of these funds should be used to establish a restoration evaluation and monitoring program. There is precedent for funding monitoring activities before an oil spill restoration plan is final. Before a restoration plan was complete, the Exxon Valdez Oil Spill Trustee Council invested funds in tracking injury and recovery at the species level, as well as research and monitoring at the ecosystem scale, to identify restoration opportunities, understand factors limiting recovery, and evaluate the effectiveness of restoration measures. An early and steady flow of information on the recovery status of specific natural resources and ecosystem services generated through this program would help managers make responsive management decisions. Without this information, less effective restoration may result, potentially requiring managers to restrict human uses of these resources. Specifically, a restoration evaluation and monitoring program is needed to: 1) evaluate the effectiveness of early restoration projects; 2) track the recovery of specific injured natural resources or lost or reduced services; and 3) report to the public on the status of injured resources, lost services, and progress toward restoration. Establishing a restoration evaluation and monitoring program for early restoration can be adapted as restoration needs change and transition into a longer-term program. On behalf of the Deepwater Horizon Oil Spill Trustee Council, NOAA, in cooperation with the Department of Interior (USFWS), is in the best position to establish and administer a Deepwater Horizon Oil Spill restoration evaluation and monitoring program. Together, NOAA and USFWS hav e the experience and existing infrastructure to coordinate monitoring across state-federal boundaries. Both agencies would serve as joint custodians of this program. This structure will facilitate the efficient gathering of data that will allow comprehensive monitoring of the full range of restoration activities. Regardless of the entity implementing monitoring, this program will require coordination among trustee agencies and possibly some new data gathering.	Trustee Portal	N	N	N	N	N	N	N	N	Y																		

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					Each year NOAA and USFWS would produce a report on the results of restoration measures, recovery of injured species, and newly discovered injuries.																												
WorldWide Consortium For Any Dangerous Manufacturing Processes	11925	John Jenkins	Gulf states		1% FROM EACH COMPANY TO FUND RESEARCH AND TO BE ABLE TO STOP CONTAIN OR DIFFUSE DANGEROUS SITUATIONS THAT CAN BECOME HARMFUL TO THE PLANET AND ITS BEINGS ie. Valdez Oil Spill, Fukashima, BP, Chernoble, 3 mile island................ For the future of this planets sake.	Trustee Portal	N	N	N	N	N	N	N	N	N																		
A Gulf-wide multi-year research project to determine best practices for minimizing barotrauma effects on red snapper following capture and release	11840	Chris	Gulf of Mexico	2000000	Proposed Restoration Project: The project would clarify the effects of barotrauma on red snapper and better define expected rates of discard mortality in the Gulf of Mexico. Additionally, the project will determine, through stakeholder involvement, methods and devices best fit to increase post-release survivorship of red snapper in Gulf fisheries. A detailed understanding of barotrauma and its effects on red snapper will inform efforts to help the recovery of fish populations impacted by the Deepwater Horizon (DWH) oil disaster. Link to Injury: The DWH oil disaster footprint overlapped with portions of the geographic range and spawning period of many reef fish species, including red snapper (Lutjanus campechanus). The eggs and larvae of red snapper and other finfish spawning at the time, in addition to adult fish, were exposed to petroleum hydrocarbons and chemical dispersants. Acute mortality of fish eggs and larvae and sublethal effects on adult fish could affect year class strength and population levels. Benefit and Rationale: Red snapper is an iconic and popular recreational and commercial fish species in the Gulf. In 2011, commercially landed red snapper had an ex-vessel value of $11.5 million. The recreational fishery generates millions of dollars as well. Red snapper are known to suffer from barotrauma related injuries and mortality. Barotrauma is the condition that results when a fish is brought up from depth rapidly and the change in ambient pressures can cause potentially lethal internal injuries. Most red snapper barotrauma studies have been regional , and have not encompassed the full geographical, depth and temperature ranges in which the red snapper fishery is prosecuted. Increasing the post-release survival rate of red snapper Gulfwide would reduce the impacts of fishing and allow the population to recover from the DWH injury. Description: Red snapper are susceptible to barotrauma. Barotrauma can cause internal injury (e.g., gas bladder rup ture, hemorrhaging, etc.) and positive buoyancy (i.e. floating). These injuries may not allow the fish to return to depth upon release or cause behavioral effects that can increase the risk for predation. Mortality caused by barotrauma hinders rebuilding of overfished populations of red snapper and could deter recovery from DWH impacts. Overall, fishery managers lack data on the post-release mortality of many reef fish species, including red snapper. This prevents accurate prediction of discard mortality in commercial and recreational fishery harvest estimates and stock assessments. Lack of confidence in release mortality may lead to increased management uncertainty. Accurate prediction of post-release survival is integral to setting appropriate annual catch limits of affected species in order to meet	Trustee Portal	N	N	N	N	N	N	N	N	N																		

Project Information							Restoration Types Addressed											Programmatic Damage Assessment and Restoration Plan (PDARP) Criteria		Public Notice	Oil Pollution Act (OPA) Criteria (15 CFR 990.54)			Additional Criteria									
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					conservation goals. This project barotrauma would follow the established protocols (e.g., Jarvis and Lowe) , modified as necessary for red snapper, for both field (e.g., cages, release devices, etc.) and laboratory procedures (e.g., hyperbaric chambers and underwater acoustic tags). In general, these protocols focus on and characterize internal/external signs of barotrauma, physiological status, and short/long term post release mortality of the species. Stakeholder participation will define their needs and will assist in development of best release practices for this species. Preliminary studies have demonstrated recompression devices have great potential to increase fish survival from barotrauma related injuries. Though promising new methods are available to fishermen, including recompression devices (e.g. Seaquilizer , Shelton Fish Descender , etc.), information of their real world applicability has yet to be determined in great detail. Identifying recompression devices most effective at reducing post release mortality and determining the ones best suited to anglers through active involvement of stakeholders will guide outreach efforts to increase their accepta nce and use among fishermen. This is especially important for those species affected by the DWH disaster, potentially offsetting DWH impacts by allowing these populations to recover at a faster rate than if these devices went untested and unused. Results of this research project will add to the state of knowledge regarding methods of survivability for reef fish species. Data derived from this pilot study will help managers determine tools that can aid the recovery of red snapper populations impacted by DWH and are suitable for wider use in Gulf of Mexico fisheries. These data will also increase the accuracy of discard mortality estimates and improve annual catch calculations. This project could generate signficiant support and interest in the recreational fishing community. Location of Project: To be determined, but likely in multiple Gulf of Mexico locations (depending on fishermen interest)																													
Supplement and expand fishery-independent surveys	11865	Chris Robbins	Gulf of Mexico	150000000	Proposed Restoration Project: Expand current fishery-independent surveys, develop new surveys, and expand data collection to better track population trends and recovery of managed fish species and support an ecosystem approach to management. Link to Injury: Many commercially and recreationally fished species, including reef fishes, highly migratory pelagic fishes, sharks, and invertebrates, in the Gulf of Mexico were exposed to oil or dispersants during the 2010 BP Deepwater Horizon (DWH) oil disaster. As a result, the status of some species requires closer monitoring to track population trends and recovery to assist in managing fisheries for those species and impacts on associated ecosystems. Benefit and Rationale: Abundance and ecosystem data (such as age and growth, hydrographic/oceanographic, predator-prey relationships, habitat, and genetic data) from fishery-independent surveys are a vital input in stock assessments which are used to assess the status of managed species in the Gulf and allow managers to make management decisions that will achieve the legally mandated goals of preventing overfishing and allowing the fishery to take optimum yield. Stock assessments can be and are performed without reliable long-term fishery-independent indices of abundance, but results from those assessments are often more uncertain from the ones that do use good	Trustee Portal	N	N	N	N	N	N	N	N	N																		

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					fishery-independent (FI) survey data. Existing FI surveys in the Gulf, while providing essential information for management, suffer from several limitations. Low sample sizes, year-to-year variation in sampling effort, and inadequate spatial coverage result in high sampling variance for many surveys, which limits our ability to detect population biomass trends even for commonly targeted species. For many less common species there is no suitable FI index of abundance at all, and as a consequence, the status of these species is currently unknown, and catch quotas have been set based on recent landings. The DWH oil di saster added an additional component of uncertainty to Gulf fisheries management. This uncertainty stems from acute oil and dispersant-related mortality of adults and spawning products, long-term population-level impacts, and food web and habitat impacts. When unknown to management, the negative effect of these impacts can be magnified, as exemplified by the 2006 episodic mortality event that reduced the gag grouper spawning stock biomass by 18 percent. This population reduction was not detected until three years later, and consequently, projected allowable catch limits in the meantime were too high, and the gag population ended up in a severely overfished situation. In addition to short-term impacts, the unknown long-term effect of the disaster on population trends and food web dynamics may invalidate some assumptions made in previous models to predict the future condition of the resource, and it may undermine the assumptions on which current catch control rules for unassessed species are based. Expanded and additional fishery-independent surveys will help reduce uncertainty about current stock status and likely future condition of living marine resources and the ecosystem in response to human activities. They will enable scientists to track impacts and recovery of Gulf species and their environment, allowing managers to set management measures to aid species recovery, not unknowingly undermine it. Description: A number of different FI data collection programs exist in the Gulf, led by federal and state management agencies as well as universities. Many of these existing surveys could benefit from spatial and temporal expansion in sampling as well as increased sample sizes and expansion of the kinds of data collected to improve survey precision and support an ecosystem approach to management. This project would expand existing SEAMAP, NOAA Fisheries, and select university surveys to attain adequate sampling coverage (CVs of 20% or less for the dominant species) a nd collect and analyze additional data such as reproduction and gut content, age and growth, genetic, habitat, and hydrographic data. Preference would be given to surveys that provide information which has been identified by stock assessment panels and scientific advisers as being critical to Gulf stock assessments. In addition, this project would fund new surveys in the Gulf of Mexico, such as the new reef fish video and acoustic biomass surveys. Any data collected and analyzed as part of this project would need to be made available to the public as an annual or summary report. Individual geospatial data layers would also be posted to a central website and made publicly available following QA and QC.																												
Increase amount of	11863	Chris Robbins	Gulf of Mexico	150000000	Proposed Restoration Project: Conduct more frequent stock assessment updates for overfished or near overfished Gulf finfish species and first-time	Trustee Portal	N	N	N	N	N	N	N	N	N																		

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assessments for potentially impacted finfish species					stock assessments for lesser known, unassessed finfish species that were potentially impacted by the Deepwater Horizon (DWH) oil disaster. The information will be used to inform adaptive management of fisheries and promote recovery of populations impacted by DWH. Link to Injury: Many commercially and recreationally fished species in the Gulf of Mexico were exposed to oil or dispersants during the DWH disaster. As a result, potentially injured reef fishes, highly migratory pelagics, and sharks require closer monitoring for the next several years in order to help managers better track population status and trends and set catch quotas consistent with recovery from the DWH disaster. Benefit and Rationale: Finfish contribute to regional seafood sales totaling $17 billion and support a thriving recreational fishing industry, which generates nearly $10 billion in economic activity and supports 92,000 jobs in the Gulf of Mexico. Therefore, knowing the status of finfish populations through assessments is critical for effective management of fisheries and maintaining the health of the ecosystem and the fishing-related industries that depend on it. The 2010 DWH disaster may have affected the year-class strength of exposed Gulf fish species by reducing survival of eggs and larvae, or it could have reduced the spawning population itself through lethal or sublethal impacts. Sublethal exposure to oil and dispersants could, for instance, compromise the immune system of affected fish, and signs of compromised immunity in the form of external lesions and abnormal markings on fish (e.g., red snapper) have been documented by researchers at LSU and USF. The population status of Gulf species is assessed through the Southeast Data, Assessment and Review (SEDAR) process, which is the stock assessment process established by the South Atla ntic, Gulf of Mexico, and Caribbean Fishery Management Councils. These three Councils are all served by the Southeast Fisheries Science Center within NOAA Fisheries. All three Councils rely heavily on SEDAR assessments for generating science-based management advice for NOAA Fisheries. However, due to the large volume of managed species in the Southeastern U.S., only a small fraction of managed species are assessed in any given year, and many have never been assessed. Assessed species are managed through multi-year population projections in years between assessments, but episodic events such as hurricanes, red tides, or oil spills can affect the population in ways that can reduce the usefulness of the population size projections, potentially leading to inappropriate management decisions. For species that are nearing an overfished condition or are overfished, the DWH disaster may have further negatively affected population health. More frequent status updates are needed to ensure that these species do not become overfished or if a species is already overfished that rebuilding is on track. There are currently four species in the Gulf that are in rebuilding plans: red snapper, gag grouper, greater amberjack, and gray triggerfish. More frequent assessment updates for gag grouper may have been able to prevent the population from deteriorating from a near overfished condition in 2005 to severely overfished in 2009 (due to a 2006 episodic mortality event that reduced the spawning stock biomass by 18 percent). More frequent status updates may have also been able to detect the lack of progress in greater amberjack rebuilding and prevent missing the																													

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					rebuilding deadline. Species impacted by DWH that have not been assessed present a unique challenge to fishery managers because less is known about their population status and how DWH might have affected populations. Managers need accurate population size estimates to detect changes in abundance that might be influenced by sub- lethal effects resulting from DWH. This information will facilitate adaptive management and recovery and help managers prevent overfishing while achieving optimum yield. Specifically, an evaluation of available data-poor assessment methods and application of the most suitable ones to unassessed, undermanaged Gulf species is needed. An additional need is a method for annually setting catch limits for these species that is based on feedback control to adjust for errors in our perception of population status and changes in abundance trends. Alternative catch setting methods, based either on results from simple assessment methods or empirical data, can be tested using simulations through the management procedure approach. Employing this approach would enable managers to choose the method that is expected to best meet management goals and to respond appropriately to any changes in population trends that may arise from DWH impacts. Description: Annual or biennial update assessments would be performed for previously assessed, managed Gulf species that have been determined to be overfished or are nearing an overfished condition. These updates would be done in house by the Southeast Fisheries Science Center or responsible state management agency without the physical, public workshop required by the more involved “standard” or “benchmark” assessment. Doing more frequent update assessments will require additional stock assessment expertise as well as additional data processors and analysts. For species requiring more frequent assessments, updating the data time series that go into the model would become a routine annual process that is performed by the responsible data curators. For minor, unassessed species, a series of workshops modeled after the SEDAR process would be held to evaluate current assessment methods for data-limited fisheries and apply the appropriate one(s) to Gulf fish species with unknown status. This project would consist of a workshop for assembling avai lable data, a series of webinars for applying and evaluating alternative assessment methods, a series of webinars for constructing and testing alternate management procedures (empirical and model-based), and another workshop for review of the process. To produce the best results, these workshops would incorporate many of SEDAR’s characteristics such as transparency, openness to public participation and independent review and would involve the Center for Independent Experts (CIE). A university with relevant expertise and capacity would lead this project, with the involvement of federal, state, university, and NGO scientists, fishery managers and local fishery representatives. Every five years over a 10-year period, webinars and a workshop will be held to review and, if necessary, adjust management procedures.																												
Gulf of Mexico Fishery Management	11891	John Froeschke	Gulf of Mexico		At the October 29 - November 1, 2012 Gulf Council Meeting in Gulfport Mississippi, the Gulf of Mexico Fishery Management Council (hereafter: Council) discussed data needs to priorities for restoration activities in	Trustee Portal	N	N	N	N	N	N	N	N	N																		

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Restoration Priorities					response to the Deepwater Horizon oil spill. The Council discussed potential impacts to important stocks, critical habitat, and humans due to lost fishing opportunities etc. The Council requests that upon settlement or through early restoration the following activities are given the highest priority: • Increase and fund frequency and number of stock assessments. • Enhance and fund fishery independent surveys, both federal and state. • Work with MRIP to decrease the frequency to two week waves for high profile species. • Develop and fund a more robust observer program. • Enhance/create and fund oyster restoration projects and coastal reef fish habitat. • Development of and funding for data collections programs for the headboat and for-hire sector and a charterboat electronic data collection system. • Research and fund projects on barotrauma tools for reductions in bycatch mortality. Each of these activities are critical to improving conservation and management efforts of federally managed fish species and associated habitat necessary to provide maximum benefit to the nation as required by the Magnuson-Stevens Fishery Conservation and Management Act.																													
Northern Gulf of Mexico Super Project	11591	Paul E. Petro, "Dutch"	Gulf of Mexico	120000000	Goal of the project is to enhance habitat and augment wild stocks through an aquculture base project. To bring together all of the current educational resources of the Gulf Coast to create an educational mecca for ocean studies programs. To create a large consortium of stake holders in the Gulf to share resources that can be received through the restoration efforts and BP funding to super utilize and maximize the restorative proccess. Currently, there are near 700 projects requesting funding from the BP settlement grants that have been allocated. Many of these projects are redundant, not in the materials or siting, but in the logistical requirements needed to complete them. I believe that in combining asset requirements, and through proper scheduling and project resources, that it will be possible to greatly reduce cost, while increasing efficiency and longevity of the selected projects. Working in unison will also encourage communication and cooperation between all the separate entities involved. Example; after reading through the project lists, there are no less than 100 separate projects that either stipulate the acquisition of a vessel through purchase, or leasing a vessel for a specified period of time. Some of these are purely scientific research endeavors, others are involved in delivery or deployment of reef materials. Vessels are an expensive proposition for any project, in most cases they are the most important and expensive line item, in any project. To let them sit idle is to still incur the cost, while representing a loss of valuble production time. Leasing a vessel gains that vessel for a preset period, but for long term ongoing projects, represents cost with no equity. To utilize one vessel capable of the versatility of handling a multitude of projects and tasks, would increase efficiency on many levels. Having the ability to load modular equipment on to a deck, complete the project, return, and in a matter of hours be refitted for a completely d ifferent project, and the duties that are included, would mean that the funding dollars that would have only served one particular endeavor, can now accomplish twenty. Resources to manage the vessel are kept to a minimum, crew familiarity with the vessel is at a maximum, and in turn operating and maintenance cost are reduced as well, substantially. The funding not	Trustee Portal	N	N	N	N	N	N	N	N	N																			

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					duplicated on repetitive vessels would mean the amount of separate projects could be quadrupled with the same amount of funding. This would insure that the restorative effort gains the most from each dollar put forth, and would also give the a larger amount of projects the longevity they need to be accomplished. Using the the network of sharing the vessels would create, different projects and groups would also be exposed to each other and be able to share both data, and expertise gathered through the entire restoration projects course. Extending the beneficial cycle of the restorative effort indefinitely to aide in the education of the coming generation most affected by this spill.																													
Advancing Estuarine Research and Education at the Weeks Bay Reserve	11885	Walter C. Ernest, IV	Weeks Bay	2939200	The Weeks Bay National Estuarine Research Reserve (Reserve) provides leadership to promote informed management of estuarine and coastal habitats through scientific understanding and encourages good stewardship practices through partnerships, public education, and outreach programs. The Reserve is one of 28 reserves within the National Estuarine Research Reserve System (NERRS). In an effort to continue and enhance such programs it is recommended that funds be provided to implement the future planning improvements specified in the Weeks Bay Reserve Facility Master Plan. This plan has been developed to ensure the Weeks Bay Reserve will be able to accommodate future needs and advance the long term capacity of the program. Previous NRDA project proposals have been submitted for the estuarine research laboratory and boat ramps. This project incorporates the cost to provide funds to advance estuarine research and education at the Weeks Bay Reserve . It could serve as a mechanism for providing a source of mitigation for the environmental and economic damages that resulted from the Deepwater Horizon incident. There were limited facilities being utilized for environmental education and research in coastal Alabama. during the Deepwater Horizon disaster. These improvements to the Visitor Center site will establish the needed infrastructure to advance and support estuarine education ,public outreach and coastal research. A recent Facility Master Plan Study and Design (September 2011) has determined the need for such improvements. In addition, this plan has sited the locations for construction, provided designs for evaluation, and projected costs for construction and equipment for all of the Weeks Bay Facility Master Plan improvements. The Reserve will serve as a primary partner on this transaction. Others partners could include the Weeks Bay Foundation, Weeks Bay Volunteers, Baldwin County Commission and the Pelican Coast Conservancy. This project will provide imp rovements to the Weeks Bay Visitors Center specified within the Facility Master Plan to increase the capacity of future coastal and estuarine science and education. It will establish the infrastructure needed to best support research, public use environmental education and outreach associated with the mission of the Weeks Bay Reserve, a site positioned to provide a sentinel role in coastal waters of Alabama. The Reserve supports the mission of the 2011-2016 NERRS Strategic Plan.	Trustee Portal	N	N	N	N	N	N	Y	N	N																			
GSMFC Cooperative Regional	11656	David Donaldson	Gulf states	27578000	When the BP drilling rig Deepwater Horizon exploded approximately 50 miles southeast of the mouth of the Mississippi River on April 20, 2010, it caused significant damage to the waters of the Gulf of Mexico. In order to effectively	Trustee Portal	N	N	N	N	N	N	N	N	N																			

Project Information								Restoration Types Addressed										Programmatic Damage Assessment and Restoration Plan (PDARP) Criteria		Public Notice	Oil Pollution Act (OPA) Criteria (15 CFR 990.54)			Additional Criteria									
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Monitoring Project					assess the long-term effects of this event, there needs to be a coordinated regional approach in monitoring the status and health of the marine resources in the Gulf of Mexico. The Gulf States Marine Fisheries Commission (GSMFC) is uniquely poised to provide such an approach. Established by both state and federal statutes in July 1949, the GSMFC is an organization of the five states (Texas, Louisiana, Mississippi, Alabama, and Florida) whose coastal waters are the Gulf of Mexico. It has as its principal objective the conservation, development, and full utilization of the fishery resources of the Gulf of Mexico to provide food, employment, income, and recreation to the people of the United States. One of the most important functions of the GSMFC is to serve as a forum for the discussion of various challenges and programs of marine resources management, industry, research, etc. and to develop a coordinated approach among state and federal partners to address those issues for the betterment of the resource for all who are concerned. The GSMFC has a long history of successfully coordinating and administering cooperative, regional programs such as the Southeast Area Monitoring and Assessment Program (SEAMAP), Interjurisdictional Fisheries Program (IJF), Sportfish Restoration Program (SFRP), Fisheries Information Network (FIN), Economics Program (EP) and the Marketing, Traceability and Sustainability components of the Oil Disaster Recovery Program (ODRP). One of the reasons the GSMFC has been so successful is that it is a vertically-integrated organization that provides products and services that satisfy a common need to both its state and federal partners throughout the Gulf of Mexico. In addition, the GSMFC has sole-source authority, under the Magnuson Fishery Conservation and Management Act, Title IV, Sec 402(d), which will expedite the distribution of funds and quickly allow these important activities to commence. Outlined below are the various activities, by GSMFC program, that can be accomplished if the requested funding is provided. It is important to note that these activities will augment the existing long-term work (totaling $5,530,000) already being conducted and funded through the GSMFC. The total annual cost for all of the proposed GSMFC activities is $2,418,000. The duration of this proposed project is 10 years. With inflationary increases over a ten-year time period, the total cost of this project is $27,578,000. EXISTING & PROPOSED ANNUAL FUNDING REQUEST, BY PROGRAM EXISTING PROPOSED INTERJURISDICTIONAL FISHERIES PROGRAM $230,000 $434,000 SPORTFISH RESTORATION PROGRAM $200,000 $834,000 FISHERIES INFORMATION NETWORK $5,100,000 $1,150,000 GRAND ANNUAL TOTAL $5,530,000 $2,418,000 INTERJURISDICTIONAL FISHERIES PROGRAM (IJF) Introduction: The Interjurisdictional Fisheries Act (IFA) of 1986, as amended (Title III, P.L. 99-659), was established by Congress to: (1) promote and encourage state activities in support of the management of interjurisdictional fishery resources; and (2) promote and encourage management of interjurisdictional fishery resources throughout their range. Overview of Current Interjurisdictional Fisheries Activities: The IJF Program is the cornerstone of the fishery management programs for the states and has provided the support for long-term databases for shrimp and juvenile finfish																												

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					in the Gulf of Mexico, which would otherwise not be available. In recent years, it has provided for regional planning efforts, by states, to manage nearshore resources similar to the Magnuson Fishery Conse rvation and Management Act of 1976. In essence, the IFA is to the states what the Magnuson Act is to the nation and the benefits of sound management under these acts do not accrue separately. The IFA is probably the single most important Congressional act to professionalize the states' scientific staff within the marine resource agencies. Proposed Activities: Activity 1. Expand Existing Management Plan Development: Task 1 - Creation of Management Plan Specialist Position. The GSMFC's IJF program must hold technical task force meetings to complete its current FMP workload in a timely fashion. At any point in time, the IJF staff is either developing or revising three or four FMPs simultaneously. FMPs initiated in a given year are carried over and completed in subsequent years; thus more than one management planning effort is ongoing in each year of the program. There currently is not adequate staff to maintain all the FMPs that are out-of-date and begin development for those species identified by the states not yet under regional management. A Management Plan Specialist position is needed to assist in the development of additional FMPs, profiles and revisions. Task 2 - Support Task Forces and Subcommittees. Following completion of the FMPs, task forces and subcommittees need to be maintained and kept active to ensure new and relevant issues in each IJF fishery are identified, review the status of the fisheries on a regular basis as required in the FMP process, and to coordinate regional management strategies that match the dynamics of these fisheries. Task 3 - Coordination of Fish "Age-And-Growth" Activities. The GSMFC continues the coordination of fish "age-and-growth" activities in the region through the Otolith Workgroup, in support of the Fisheries Information Network (FIN). The biological sampling activities under FIN are in direct support of both state and federal stock assessments which are in the FMP development process. There is a need to de velop additional methodologies and standardized techniques for species common to the five Gulf States. Task 4 - Support of Law Enforcement Committee. The GSMFC's IJF program has always supported its Law Enforcement Committee as funds have permitted. These activities continue with only administrative support and include participation with the Gulf of Mexico Fishery Management Council. The ability to provide financial support for GSMFC enforcement-related activities is severely limited. Task 5 - Support of Habitat Activities. The Habitat Program, which directly contributes to the development of FMPs under IJF, links the states' habitat components with fishing activities. The Habitat Program also coordinates and provides input to local and regional development activities that have an impact on important fisheries habitats. With additional funding, this program would provide distinct habitat descriptions and GIS output on the distribution of life history stages associated with specific life history requirements and habitat components of fisheries under current and future IJF management. Activity 2. Creation of a Stock Assessment Program (GDAR): Task 1 – Implementation of the GDAR Program. The Gulf Data, Assessment, and Review (GDAR) is intended to																												

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					support the development of inshore, regional assessments required in the Commission's fishery management plans (FMPs). The GDAR is designed to mirror the federal assessment process (SEDAR - SouthEast Data, Assessment, and Review) to develop reliable fishery stock assessments for the Gulf of Mexico not evaluated through the federal SEDAR program. GDAR relies on the expertise available in the state marine agencies to develop an assessment through a transparent, open process. The completed stock assessments undergo a rigorous and independent scientific review to ensure consistent and appropriate use of all the available data pertinent to a specific fishery and establish population targets and thresholds for regiona l management. Upon completion of each assessment, the results will be incorporated into the FMP for use in future management by the five Gulf States' marine agencies based upon the goals determined and recommended by the TTFs and various species subcommittees in the FMP. Each assessment requires three meeting components which include the associated TTF and state marine agency analysts. Assessments are completed using three workshops; 1) the Data Workshop (DW) where datasets are documented, analyzed, and reviewed and the data required for conducting assessment analyses are compiled and standardized. 2) The Assessment Workshop (AW) where quantitative population analyses are developed and refined and population parameters are estimated. 3) The Review Workshop (RW) where a panel of independent experts reviews the data and final assessment model and recommends the most appropriate values of critical population measures. Task 2 - Support for GDAR/Creation of Stock Assessment Scientist Position. The GSMFC has created a program through IJF that mirrors the federal SEDAR (Southeast Data Assessment and Review) program in an effort to complete regional assessments of state managed species. The IJF Program is presently combining the GDAR (Gulf Data, Assessment, and Review) with the TTF meetings, but as more assessments are needed, the ability to continue funding GDAR is questionable. To assist with assessments and the GDAR Program, the GSMFC needs to create a Stock Assessment Scientist position to develop the regional stock assessments and assist the states with their analytical activities. This individual would coordinate and process the states' fishery data and work with the Stock Assessment Team to develop and integrate new models for stock assessment in the Gulf. Task 3 - Support of Stock Assessment Team. The GSMFC's Stock Assessment Team currently has no funding for regional stock assessments in support of FMP development. In addition, there is not a way to pro																												
marine sea oil spill cleanup	11866	zebulon john egai	Gulf of Mexico	800000000	through cleanup marine oil spills,like the one in nigeria niger delta bonga oil spills,chevron nigeria oil spills, niger delta nigeria oil spills,using modern technology,if giving me the opportunity,i will done the beat of it.	Trustee Portal	N	N	N	N	N	N	N	N	N																			
Upgrades to the Electronic Logbook Program for the Offshore and Inshore	11609	Chris Robbins	Gulf of Mexico	6650000	Project: Upgrade the Gulf of Mexico shrimp fishery electronic logbook (ELB) program in order to improve the precision of shrimp fishing temporal-spatial effort and estimation of red snapper and sea turtle bycatch in the shrimp fishery. Specifically, this project will purchase new ELB units and make program enhancements necessary to expand ELB coverage up to 100 percent of the offshore shrimp fleet and a higher percentage of the inshore shrimp	Trustee Portal	N	N	N	N	N	N	N	N	Y																			

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Commercial Shrimp Fishery for a 5-Year Period					fleets for a period of 5 years. Link to Deepwater Horizon Oil Spill Injury: In 2010, the estuarine and offshore waters upon which shrimp species depend were oiled, offshore and nearshore shrimp fisheries were closed and visibly oiled sea turtles were collected alive and dead from northern Gulf. Sharp declines in shrimp catch in SE Louisiana in 2011 may be related to habitat damage or adult or post-larval mortality caused by exposure to Deepwater Horizon oil or chemical dispersants used to break up oil. In addition, red snapper with lesions and other signs of a compromised immune system have been documented in the oil spill impact area, though cause and effect are not yet established. Benefit and Rationale: Inshore and offshore shrimp fisheries in the Gulf of Mexico are known to interact with sea turtles and juvenile red snapper. These two species' populations may have been detrimentally affected by the DWH oil spill in 2010. Sea turtle strandings in the Gulf of Mexico increased significantly since 2010 and have continued to rise since the BP oil disaster. More than 5,000 dead or weakened turtles washed ashore, or have been stranded, since the BP oil disaster. More than 460 sea turtles were found visibly oiled during oil spill response efforts and an unknown number died as a direct result of the disaster. ELB analysis provides fine-scale spatial data that can help identify sea turtle/shrimp fishery interaction hot spots. These data can assist managers in reducing the number of interactions and related sea t urtle mortalities through such means as time/area closures while potentially avoiding broad management measures like complete fishery closure. Shrimp fishing effort data recorded by ELBs are also a proxy for estimating red snapper bycatch mortality in the offshore shrimp fishery. Bycatch mortality estimates are important for determining whether management measures are needed to help red snapper populations exposed to oil recover from potential injury. The long-term effects of oil and chemical dispersants on shrimp species or their habitat remain unknown. Tracking the location and catch per unit of effort of shrimp can help scientists and fishery managers better understand trends in abundance and possible relationships between areas of low catch and oiled estuarine habitats. Expanding ELBs to the entire offshore fleet and making them available on a voluntary basis to a greater portion of the inshore fleet will improve the precision of sea turtle bycatch estimates needed to facilitate and track recovery of impacted sea turtle populations in the Gulf of Mexico. The recent increase in offshore shrimp fishing effort and potentially higher number of sea turtle interactions that could result also underscore the importance of ELBs in estimating sea turtle bycatch for developing mitigation and recovery strategies going forward. Description: Implemented through a joint reef fish/shrimp management plan amendment in February 2008, a statistically valid sample of shrimp vessel permit holders are randomly selected and must report shrimp fishing effort via an ELB. A simple ELB that records spatio–temporal fishing effort is currently used by approximately one-third of the federally permitted offshore shrimp fleet. Researchers have found these devices to be a reliable method for estimating sea turtle interaction and red snapper bycatch mortality in the Gulf of Mexico offshore shrimp fishery. NOAA has been making the ELBs available to members of the inshore shrimp fleet. A bout 150																													

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					inshore shrimp vessels use ELBs on a voluntarily basis. Upgrading this program to expand coverage in the offshore and inshore fleets will generate a wealth of fine scale spatial data. These data will allow scientists to better characterize the shrimp fishery's effort and classify overlapping areas of fishing effort in regards to sea turtle and juvenile red snapper habitat areas. Determination of where and when this fishery interacts with sea turtle and red snapper populations may allow more fine-scale management of the fishery (versus the need for broader management measures) while reducing bycatch mortality, which in turn would offset injuries caused by the oil spill and help affected populations recover more rapidly.																												
Lead By Example -- Use Non-Petroleum Motor Fuels to Prevent Future Oil Spills	11857	David Bruderly PE	Gulf states		Every ship, boat, truck, car and aircraft engaged in the response to this oil spill and all restoration activities to date have used vehicles powered by a liquid petroleum-based motor fuel. This fact is not only ironic, but symbolic of the fundamental challenge faced by Florida citizens who would prefer to not be a party to future oil spills. This restoration effort can, and should, demonstrate how the risk of future leaks, spills and releases of petroleum-hydrocarbons can be minimized, if not completely eliminated, by the use of commercially available natural gas and electric motor fuels in all types of vehicles. This action is relevant because, under current federal policy and industry practices, boaters and drivers in Florida have no choice but to purchase and use a liquid petroleum-based motor fuel to power all of their motor vehicles. Non-petroleum motor fuels, such as methane and electricity, are cheaper, cleaner and widely available, but are not easily used to power motor vehicles or boats. This means that restoration activities will contribute to the risk of a future oil spill and will do nothing to mitigate the risk of future spills. In effect, this contradicts Administration policy that instructs federal agencies to take action, where possible, to reduce petroleum consumption and reduce pollution created by the use of fossil fuels. When used to power motor vehicles alterntaive motor fuels, such as methane and electricity, completely eliminate the risk of hydrocarbon leaks, spills and releases from the supply chain and use in the vehicle; risk of petroleum releases are eliminated, both during routine operations and in the event of an accident. I propose to develop a program to advise recipiants of monies under this program that use of natural gas and electric motor fuels in most types of vehicles is both technically feasible and, in many applications, commercially available from local vendors. Use of these fuels, however, requires education and behavior change. To change behavior I propose that specifications for funded projects that use of boats, cars, trucks and heavy equipment include the requirement that those vehicles be powered by a non-petroleum motor fuel when technically feasible. Natural gas and electricity is commercially available throughout the Gulf Region. Given sufficient demand, natural gas and electric motor fuels can be suppled to land or marine vehicles used to support administrative and restoration work. Many types of land vehicles powered by electricity or natural gas are commercially available; some of these vehicles operate in the Florida Panhandle today. Suppliers are standing by, waiting, for the opportunity to make these vehicles fuels available to help restore Gulf resources. Marine engines can be modifed to operate on natural gas; natural	Trustee Portal	N	N	N	N	N	N	N	N	N																		

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					gas motor fuels can be stored on boats in either compressed or liquid form. There are no technical barriers to using natural gas to power boats; only perception. Natural gas retails at prices that are 50% to 75% cheaper than the price of gasoline or diesel fuel. Natural gas is now the fuel of choice for waste trucks, transit buses and other high-fuel consuming vehicles. In the marine sector, natural gas has become the fuel of choice for a variety of work boats, including harbor craft and ocean going ferry boats. Tampa Bay Watch operated a natural gas outboard 15-years ago. There are absolutely no technical barriers to the use of this non-petroleum motor fuel. The only barrier to the use of natural gas motor fuels is perception that this non-petroleum motor fuels is not practical or available; in other words, barriers are cultural, institutional and bureaucratic. Cultural, institutional and bureaucratic caused the Deepwater Horizon disaster; these are the very behaviors that these monies are intended to overcome. Widespread use of cheaper, cleaner, domestically produced natural gas and electric motor fuels and vehicles will create jobs, save consumer s money, stimulate local economies and break the market power of OPEC, thus enhancing the economic security of this Nation.																													
Gulf of Mexico Ecosystem Assessment: The Role of and Possible Oil Spill Impacts to Menhaden as a Keystone Species	11610	Chris Robbin	Gulf of Mexico		Description: This multi-year, interdisciplinary research project would aim to clarify questions about the role of Gulf menhaden in the ecosystem and whether and how its population and ecosystem were affected by BP Deepwater Horizon oil. The resulting models and information could improve estimates of menhaden productivity and guide fisheries management decisions that bear on recovery of menhaden from any oil-related injuries. Link to Injury: Menhaden's offshore spawning and subsequent egg/larval drift into the estuaries in the northern Gulf coincided with the DWH oil disaster. Juvenile menhaden and oil would have been in the estuary at the same time. Therefore, it is likely that menhaden in one or more life history stage was exposed to the oil or chemical dispersants. Brown pelican and other species whose diets include menhaden were injured. Benefit and Rationale: An ecosystem assessment is needed to better understand the role and productivity of menhaden in the Gulf of Mexico and to what extent that DWH oil may affect the future health and ecological role of its population. Gulf menhaden is a significant part of Gulf of Mexico's base food web. Menhaden eggs, larvae, and young of-the-year are a major forage source for many economically important finfish. Upwards of 95 percent of the brown pelican's diet can be Gulf menhaden. The revenue generated by this fishery is of great economic importance to the Gulf of Mexico, especially to Louisiana. Recommendations made in an October 2011 stock assessment for Gulf menhaden provide an excellent starting point for the types of research needed for an ecosystem assessment. For example, the stock assessment recommends research to examine menhaden reproductive biology, predator/prey relations, genetics, and natural mortality through tagging studies. These studies are important components of an ecosystem assessment. Other: T The Exxon Valdez oil spill injured Pacific herring and pink salmon in Prince William Sound and like ly contributed to the long-term collapse of the herring population in that region. As a result, the Sound	Trustee Portal	N	N	N	N	N	N	N	N	N																		

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					Ecosystem Assessment (SEA) project was designed to determine the root causes of their decline and elucidate the factors that driver their productivity. Between 1994 and 1999, the SEA program yielded an ecosystem level understanding of factors influencing juvenile pink salmon and Pacific herring survival in Prince William Sound. Multiple models were developed that better explained the relationships between such elements as the environment, predation and the associated food webs.																													
Replace lights on oil rigs with bird friendly lights	11850	Julia O'Neal	Gulf of Mexico	1000000	I don't know the details at all, but it would be easy to find out. There has been some research on migrating birds hitting the lights on oil rigs. Ben Raines had a story in the Mobile Register (Gulflive.com online) about the fish that hung around waiting for the dead birds. Just changing the lights on the rigs to a different kind would stop the birds from being attracted to the lights. These oil companies are not going to do anything that is bird-friendly without being forced to. If some of the restoration money could be used to buy and install the correct lights, that would make a huge difference.	Trustee Portal	N	N	N	N	Y	N	N	N	N																			
FishSmart: Building Sustainability in the Snapper and Grouper Recreational Fisheries and Associated Industry in the Gulf of Mexico	11834	Andrew Loftus/ Michael Nussman	Gulf of Mexico	20000000	Justification: The Deepwater Horizon Oil Spill substantially impacted recreational fisheries and their supporting industry in the Gulf of Mexico. Responses to a questionnaire following the spill indicated that nearly all surveyed fishing equipment retailers experienced reductions in their monthly sales, with the majority reporting losses of greater than 50%. Bookings for charter fishing trips and other associated recreational businesses plummeted. Even though some fish stocks such as red snapper are now showing signs of rebounding, NOAA Fisheries noted that as the population grows and the fish get bigger, recreational fishermen are likely to catch their quota faster, resulting in even shorter fishing seasons. This will translate into reduced recreational fishing trips, further reductions in tackle and equipment sales, fewer bookings for charter business, and generally lower economic viability for many recreational fishery-related businesses still trying to recover from the oil spill. Mandatory catch and release due to regulations will result in a slower stock rebuilding process and be a continuing drag on the recreational industry if anglers are not engaged to adopt "Best Practices" (tools and techniques to avoid catching fish that must be released combined with tools and techniques to improve the survival of recreationally caught and released fish). Objective: To increase angler adoption of "Best Practices" thereby advancing the sustainability of fish stocks and potentially extending fishing opportunities, anglers must be aware of practices that have proven successful. In four Gulf states alone (Florida, Louisiana, Mississippi, and Alabama) anglers released more than 4 million snappers (1.5 million of these red snapper) in 2011. Using conventional release techniques, between 15% and 40% of released red snapper do not survive, depending on depth at which they were caught, water temperature, and other factors. Increasing the survival of these by a few percent will re sult in a tremendous conservation benefit to fish stocks and eventually increase sustainable fishing opportunities and economic benefits from recreational fishing. Since 2008, anglers have been required by Federal fisheries authorities to use release devices and to "vent" fish (remove gases from the fishes' body to enable it to return to habitat depth on its own) that they release in an effort to improve survival.	Trustee Portal	N	N	N	N	N	N	Y	N	N																			

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					However, recent findings of the "2012 FishSmart Workshop on Improving the Survival of Released Fish" concluded that use of recompression (returning a fish to depth without invasive procedures involved with venting) may be equally effective in improving the survival of released fish. Whether venting or recompressing, it is imperative that anglers are knowledgeable of the best scientifically-based information and implement Best Practices that minimize interaction with the fish that must be released and maximize the survival of those fish that are caught and released. This is not only a sound conservation practice, it is also good for business since reductions in mortality will eventually be reflected in longer seasons and/or larger bag limits that provide more angling opportunities. However, increasing survival is dependent on educating the anglers who interact with and handle the fish. Approach: The project will consist of four primary aspects to educate anglers to implement Best Practices, measure results, and potentially increase fishing seasons and the economic returns to coastal communities: o A survey of anglers in the Gulf states to develop a baseline for awareness of Best Practices. To accomplish this, 8-10 focus groups will be conducted across the Gulf states to assess the knowledge of and attitudes toward Best Practices. These focus groups will allow baseline information to be gathered on responses of anglers to test messages in each region of the Gulf community. Following this, a telephone survey to anglers will be conducted to ascertain the gener al knowledge across the regional angler base before the multi-media campaign is initiated. o A 3 year multi-media awareness/education campaign to inform anglers of the need for implementing Best Practices and drive them to online information sources. The TV/Radio and Digital Media communications will be conducted in segmented markets of Alabama, western Florida, Louisiana, Mississippi, and Texas coordinated through the Recreational Boating and Fishing Foundation (RBFF). RBFF was established for the sole purpose of communicating messages to anglers to affect behavior and fishing participation rates. o Development and delivery of online content on Best Practices and gear. Information gained from the 2012 FishSmart Gulf of Mexico/South Atlantic workshop on Best Practices and messaging will provide the basis for a communications and media campaign. This information will be assembled into on-line delivery mechanisms for anglers. o Effectiveness Evaluation: A follow up survey of anglers in the Gulf states to determine effectiveness of and response to the multi-media awareness campaign and online education material. Cost: Approximately $20 - $20.5 million ($15 million of this for creative ad campaign development, media buys, and ad placements covering 5 states). Expected Results: Measurement of success will be the adoption of Best Practices and tools by anglers reached through the multimedia campaign. Statistics will be available on extent of reach and demographic characteristics, increases in web traffic to information sources, and effectiveness of the campaign in changing angler behavior. Ultimately, increased survival of fish will translate into enhanced fishing opportunities, increases in angler opportunities, and Increases in retail traffic to stores to purchase appropriate gear. A similar effort in Australia to encourage anglers to adopt "fish friendly" tackle (known as FishSmart tackle in the USA) and																												

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					techniques had 59% recall with 35% of anglers saying that it help ed change their practices. Sales of some fish friendly tackle increased 20-50% in the outlets surveyed. Other Considerations: The FishAmerica Foundation is the conservation and research foundation of the American Sportfishing Association and an early supporter of the FishSmart program. FishSmart is a program driven by the angling community, not a top-down government program, to identify best release practices and communicate those to anglers. FishSmart utilizes several approaches consisting of; 1) expanding our knowledge and understanding of released fish survival; 2) developing new technologies and equipment to enhance released fish survival, 3) promoting the adoption of careful release techniques, and; 4) developing an angler communication infrastructure to disseminate best practices to increase the survival of released fish.																													
Shine Light	11792	sanjith	Gulf of Mexico	250000	The idea is based on a research article which underscores the importance of light penetration in productive lakes(ref 1) . Since many lakes,water bodies suffer have limited light penetration due to pollutants ,natural conditions or external factors like oil spills ,we need to tink about "reversing " it. The idea "Shine light" proposes to rectify the situation by shining light underneath the lake using a solar concentrators-fiber optic systems. We can station floating "shine-light" systems which provide pockets of light underneath the water (like a under water light house)..In addition this system can be used to aerate the water as well providing a local environment for the microorganisims to thrive and drive the natural Lake ecosystem.	Trustee Portal	N	N	N	N	N	N	N	N	N																			
Improving Public Access to Alabama Coastal Waters-Viewpoint Park Public Access	11785	Walter C. Ernest, IV	Weeks Bay	810000	The Weeks Bay National Estuarine Research Reserve (Reserve) provides leadership to promote informed management of estuarine and coastal habitats through scientific understanding and encourages good stewardship practices through partnerships, public education, and outreach programs. In an effort to continue and enhance such programs it is recommended that funds be provided to provide additional public access and maintain pristine estuarine and marine environments. The proposed project site adjoins existing Weeks Bay Reserve public access property. This site was utilized as a staging area during the Deepwater Horizon oil spill incident. This project is a means of providing a source of mitigation for the environmental and economic damages that resulted from the closure of public waters and the utilization of the site as an emergency staging area. This project will support the conducting of future resource recovery activities by allowing restoration activities to be conducted on the site. This location has been selected as a future 100/1,000 restoration site by The Nature Conservancy and the 100/1,000 project partners. Accessibility to best steward public trust coastal resources is important to federal and state trustees in the resource recovery process. This project will acquire additional public lands for research, restoration and public use within the Reserve boundary and will establish the needed infrastructure to support future disaster response and recovery efforts. The mission of the Weeks Bay Foundation is to protect the natural resources of coastal Alabama and provide assistance and support to the goals and programs of the Reserve. The Foundation is a land trust accredited by the Land Trust Accreditation Commission. The Foundation has the capacity to	Trustee Portal	N	N	Y	N	N	N	N	N	N																			

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					provide technical assistance for this project. The Reserve will serve as a primary partner on this proposal. This project will acquire additional property that will improve public water access to the waters of Coastal Alabama and allow future estuarine research and education to be conducted on the site. It will also connect two existing parcels owned by the State of AL. The estimated cost of this project is $810,000. Partners include the Y Weeks Property Owners Association, Weeks Bay Foundation, Weeks Bay Reserve and the ADCNR Marine Resources Division.																													
Coastal Land Acquisition in Alabama	5113	Steve Northcutt	coastal AL	125000000	Consistent with Section 1006 of the Oil Pollution Act, this project will: - Contribute to making the environment and the public whole by acquiring lands that provide coastal habitat protection for the Gulf of Mexico's critically important bays, estuaries, barrier islands, and coastal rivers. Such acquisitions ultimately provide habitat to animals, plants and wetlands, improve water quality, protect and restore coastal fisheries, and support heritage-based tourism and recreational opportunities for people. - Address habitat protection and provide new recreational opportunities; additional protected lands may become part of national wildlife refuges, state parks, nature preserves, or recreational areas. Alabama ranks last in percentage of protected lands in the southeast with approximately 4% of state land area in protected status. - Compensate for loss of coastal wetlands and other important habitats, degradation of water quality, loss and impairment of oyster reefs, seagrass beds and other submerged habitats. - Apply land acquisition and management in a consistent manner at several landscape-scale sites in Coastal Alabama, including Perdido River, Fort Morgan Peninsula (Baldwin County), the Mobile Delta, and Grand Bay Savanna, Dauphin Island (Mobile County). Acquisition efforts are underway for several high-priority tracts that are currently available in these areas. Project Scope The landscape of coastal Alabama is dominated by several striking geographic features, notably the major estuary of Mobile Bay and its vast wetland delta formed by the confluence of the Alabama and Tombigbee Rivers with the Perdido River, the Escatawpa River and, to the south, a well-developed chain of barrier islands along the Gulf of Mexico coastline that protect Mississippi Sound and other smaller estuaries. A series of overlapping terrestrial, freshwater aquatic, and unique marine sites fit together to form a complex and diverse landscape. The primary threats to this project area i nclude altered hydrologic regime and degraded water quality, altered fire regime, incompatible forestry practices, and urbanization/development. Conservation partners have worked over the last several decades to protect over 100,000 acres in Alabama's coastal counties. This project would add to these efforts to preserve and protect water quality and provide habitat for the vast array of wildlife on the Gulf Coast. Protection of our parks, forests, local recreation areas, refuges and other lands is a strong, permanent investment which is crucial to our natural heritage. Examples of how the proposed Coastal Land Acquisition Project will help recover the NRDA Resources: 1. Water Column and Invertebrates - Coastal land acquisition will enhance water quality and protect headwater streams 2. Marine Fish - Coastal land acquisition will enhance coastal habitats for estuarine finfish and shellfish by protecting and restoring the condition of	Trustee Portal	N	N	Y	N	N	N	N	N	N																			

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					habitats adjacent to the coast 3. Marine Mammals - Coastal land acquisition will enhance coastal habitats for marine mammals by protecting and restoring the condition of habitats adjacent to the coast 4. Sea Turtles - Coastal land acquisition will enhance coastal habitats for many species of sea turtles by protecting and restoring the condition of habitats adjacent to the coast, including nesting areas for many of these species 5. Nearshore Sediment and Resources - Coastal land acquisition will limit ground disturbance activities and associated sediment runoff - Coastal land acquisition will enhance water quality and protect headwater streams 6. Submerged Aquatic Vegetation - Coastal land acquisition will enhance coastal habitats for aquatic vegetation by protecting and restoring the condition of habitats adjacent to the coast 7. Oysters - Coastal land acquisition will enhance coastal habitats for aquatic vegetation by protecting and restoring the condition of habitats adjacent to the coast 8. Shorelines -Coastal land acquisition wil l enhance coastal wetlands, which protect developed and natural shorelines (e.g. coastal marsh, uplands and coastal communities) from erosion, storm surges and other coastal hazards 9. Birds - Coastal land acquisition will improve fish abundance, providing food for the health and recovery of foraging wading, shore, sea, and migratory birds. 10. Terrestrial Species - Coastal land acquisition will enhance coastal habitats for health and recovery of terrestrial-based species such as turtles, alligators, birds and others 11. Human Use: - Coastal land acquisition will enhance watchable wildlife opportunities for birding, manatees, dolphins and other coastal life																												
Alabama Oyster Shell Recycling Program	5098	Judy Haner	coastal AL	6400000	The Nature Conservancy recommends $6.4M to initiate and sustain a restaurant and public oyster shell recycling program in Mobile and Baldwin Counties, Alabama. Globally, oyster reefs are the single most impacted marine habitat (85% loss). The Gulf of Mexico supports the only remaining significant wild oyster harvest in the world and has some of the best examples of the few remaining reefs. Even with 10% - 90% loss of oyster reefs, the Gulf of Mexico likely represents the last place in the world where large scale oyster reef conservation and sustainable fisheries may be possible (Beck et al. 2011). Across the Gulf, the Conservancy is currently compiling known current and historic oyster reef information to identify key areas for large-scale restoration. Information gained through this project will help to inform the Conservancy's National and Regional (Gulf of Mexico) shellfish strategies, decision support tools and plans. Despite significant loss of oyster reefs, Mobile Bay, with the 4th largest drainage basin in the US, represents one of the largest potential areas for outright restoration, replacement and enhancement of this lost habitat due to the size of the estuary, historic distribution of oysters in the Bay, high natural oyster spat sets and warm water for fast growth. The Nature Conservancy proposes engaging local businesses and the public in this restoration through an oyster shell recycling program. This program will engage restaurants and the general public and will serve as a nexus between education and restoration to create direct, tangible linkages between oyster restoration and local communities, while addressing impacts from the oil spill. Consistent with Section 1006 of the Oil Pollution Act, this project will: -Contribute to making the environment and the	Trustee Portal	N	N	Y	Y	N	N	N	N	N																			

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					public whole by recycling oyster shells discarded by the public for restoration projects to restore the natural resources used by people, wildlife and fisheries. -Address impacts to oyster r eefs and associated ecosystem services by engaging businesses and the public. -Compensate for impacted oyster reefs, by recycling, rather than discarding, this limited resource, which can then be used for restoration projects. - Apply in a consistent manner to restore fish and shellfish stocks and the livelihoods inextricably linked with them, as well as enhance the resiliency of coastal Alabama and its communities. - Currently, oyster shells from restaurants and private consumption are discarded and sent to landfills. This is a cost-effective way to secure a crucial resource that is currently being thrown away, while educating and engaging businesses and the public about the connection between their food and the natural resources needed to support them. Examples of how the proposed Living Shoreline/Oyster Breakwater Reef Project will help recover the NRDA Resources: note: The shells from this project will be used to enhance and restore oyster reefs. Thus, the comments below reflect the final use of the shells in the restoration project, rather than the actual collection. 1. Water Column and Invertebrates -Healthy living shorelines/oyster reef breakwaters contribute larvae as a free-swimming plankton that, in turn, serve as a food source for other larger nekton and benthic organisms such as crabs and adult oysters -Living shorelines/oyster reef breakwaters provide habitat for estuarine nekton such as fish and benthic organisms such as crabs and adult oysters 2. Marine Fish -Living shorelines/oyster reef breakwaters increase fishery species abundance by providing nursery and structural habitat for the health and recovery of recreational and commercial estuarine species (redfish, snapper, blue crab, stone crab, shrimp) 3. Marine Mammals -The diversity of fish species using living shorelines/oyster reef breakwaters are prey species for estuarine bottlenose dolphin populations -Living shorelines/oyster reef breakwaters can improve water clarity for seagrass hab itat that is essential for the survival of the West Indian manatee and economically important fishery species 4. Sea Turtles -Living shorelines/oyster reef breakwaters can improve water clarity for seagrass habitat that is essential for the survival of many species of sea turtles and economically important fishery species 5. Nearshore Sediment and Resources -Living shorelines/oyster reef breakwaters increase habitat and available food sources for health and recovery of crabs, shrimp, fish, birds and terrestrial wildlife 6. Submerged Aquatic Vegetation -Living shorelines/oyster reef breakwaters can improve water clarity for seagrass habitat (ex. one adult oyster can filter up to 50 gallons of water a day) -Living shorelines/oyster reef breakwaters stabilize sediments and enhance seagrass recruitment 7. Oysters -Living shorelines/oyster reef breakwaters can improve water clarity through filtration (ex. one adult oyster can filter up to 50 gallons of water a day) -All stages of the oyster (larvae, spat and adult) are a critical base of the food chain for the health and recovery of valuable commercial and recreational fish, crab and shrimp species, wading and shorebirds, bottlenose dolphin, pelagic fish -Living shorelines/oyster reef breakwaters serve as a source of oyster larvae to benefit establishment and maintenance of nonharvestable																												

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					and harvestable oysters reefs in the system 8. Shorelines -Living shorelines/oyster reef breakwaters are a natural line of defense, protecting developed and natural shorelines such as salt marsh, uplands and coastal communities from erosion, storm surges and other coastal hazards 9. Birds - Living shorelines/oyster reef breakwaters provide food for the health and recovery of wading, shore, foraging seabirds, and migratory bird species 10. Terrestrial Species -Living shorelines/oyster reef breakwaters are a critical base of the food chain for health and recovery of terrestrial based species such as turtles, alligators, crabs, birds and other species 11. Human Use - Living shorelines/oyster reef breakwaters can improve water quality for recreational activities including fishing, boating and swimming -Living shorelines/oyster reef breakwaters provide habitat for economically important fish species such as blue crab, spotted seatrout, red drum, and shrimp -Healthy living shorelines/oyster reef breakwaters serve as a source of oyster larvae to maintain or establish other reef areas such as harvestable oyster reefs -Living shorelines/oyster reef breakwaters enhance watchable wildlife opportunities for birding, bottlenose dolphin and other estuarine life -Living shorelines/oyster reef breakwaters minimize shoreline erosion, protecting personal property and its associated value Criteria: 1. Contribute to making the environment and the public whole by restoring, rehabilitating, replacing, or acquiring the equivalent of natural resources or services injured as a result of the Deepwater Horizon Oil Spill or response (collectively, incident), or compensating for interim losses resulting from the incident: The oyster shell recycling project will return or compensate for injured natural resources and services resulting from the incident by enhancing estuarine and nearshore habitats, marsh and submerged aquatic vegetation and nursery habitat for finfish, shellfish, birds and marine mammals. In addition, the oyster shell recycling project will contribute to making the environment and the public whole by restoring and rehabilitating the ecosystem services (fishing, cultural values, boating, birdwatching, etc.) that are significant to the health and livelihood of coastal communities and local economies. 2. Address one or more specific injuries to natural resources or services associated with the incident: The oyster shell recycling project addresses more than one specific injury to natural resources and services associated with the incident by enhancing estuarine and nearshore habitats, marsh and submerged aqu atic vegetation and nursery habitat for finfish, shellfish, birds and marine mammals, benefitting multiple habitats, their respective services and the numerous wildlife resources dependent upon them. 3. Seek to restore natural resources, habitats or natural resource services of the same type, quality, and of comparable ecological and/or human use value to compensate for identified resource and service losses resulting from the incident: The oyster shell recycling project seeks to restore natural resources, habitats or natural resource services of the same type, quality, and of comparable ecological and/or human use value to compensate for identified resource and service losses resulting from the incident by restoring, rehabilitating, and enhancing coastal and submerged habitats that are essential for the survival of commercially and recreationally important finfish, shellfish, birds and																											

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					marine mammals. In addition, the project will serve to restore and enhance natural services to improve enjoyment of water-dependent recreational activities and coastal attractions. 4. Are not inconsistent with anticipated long-term restoration needs and anticipated final restoration plan: The oyster shell recycling project is consistent with long-term restoration needs for the area and is anticipated to be consistent with the final restoration plan. 5. Are feasible and cost-effective: The oyster shell recycling project would provide more cost-effective management of a natural resource that is currently being wasted.																													
Perdido Pass Seawall Replacement	11772	Don C. Powell	Orange Beach	7359816	The proposed project will replace a severely damaged seawall along Perdido Pass, at Alabama Point in Orange Beach, Alabama. The seawall and attendant parking area serves as a landmark fishing access and sight-seeing location. Access to the Pass from this location is currently closed, due to the unstable asphalt surface of the parking lot and walking/fishing access areas. The reconstruction project will consist of installing a new seawall immediately behind the existing. The existing tiebacks will be used. Once the new sheets are installed the existing sheets will be removed to some depth that is yet to be finalized. A new concrete cap will be placed on top of the new wall. The areas of the parking lot that were disturbed during construction will be repaved. The existing lighting will be upgraded.	Trustee Portal	N	N	N	N	N	N	N	N	N																		
Fowl River Shore and Island Restoration and Stabilization	11771	Casi Callaway	Fowl River	6500000	In recent years the shoreline and islands that make up Fowl River have experienced rapid erosion as well as the loss of wetlands and valuable habitat for fish, shirpm, crabs, osprey and wood ducks and many of other species. The main cause of this is significant increase in boat traffic, especially since the BP Oil Disaster in April of 2010. In order to prevent further erosion and restore the damage that has occurred, a combination of shoreline stabilization, breakwaters, and wetland restoration is essential. We have consulted with coastal engineers and the Dauphin Island Sea Lab to get advice as to the best actions to take to address the problem. It is estimated that around 50% of project cost will go towards engineering and design. Even though the wetlands and islands are uninhabited, they are all privately owned. Project managers are currently in the process of researching and contacting property owners for permission to do the work. Short-term project plan: Get permission from landowners to work. Secure money for project. Prioritize the shoreline projects. Secure permits and begin work. Long-term project goal: Restoration and stabilization of degraded shoreline on river and islands as well as restoration of wetlands. Economic impact: Project will include design engineering firms, waterfront construction. Will provide continued recreational use of river by all Mobile County residents and fishermen.	Trustee Portal	N	N	Y	N	N	N	N	N	N																		
Alabama Coastal Forest Restoration Project	5111	Keith Tassin	AL	3000000	UPDATE: CURRENTLY WORKING WITH 10 PRIVATE LANDOWNERS REGARDING ~5,000 ACRES The fire-maintained, longleaf pine dominated forests of the Southeast U.S. were once so expansive they covered some 90 million acres from Virginia to Texas. Today, however, less than 4% of that forest remains. Much of the landscape within Alabama's coastal watersheds has fared this same fate and, over the last 100 years, has been converted to industrialized pine plantations. During this time, ditches have been dug to drain wetlands, thousands of forest roads have been created, thousands of acres have been	Trustee Portal	N	N	Y	N	N	N	N	N	N																		

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					bedded, non-native invasive species have been introduced, and natural fires have been excluded. All of these activities have had a significant impact on the natural flow and water quality that drains from these headwaters, providing vitally important freshwater inflows to the Gulfs estuaries. This project will work with selected private landowners/managers and public partners on longleaf pine conservation and restoration strategies within the Perdido, Escatawpa, and Mobile/Tensaw River basins. It will proactively seek large private forest ownerships with high biological diversity and watershed protection in mind. The results of this project will be improved natural function in the habitats surrounding the headwaters of streams and rivers critical to the survival of healthy estuarine and marine systems. The Nature Conservancy has long worked with partners, such as the U.S. Fish and Wildlife Service, the Alabama Department of Conservation and Natural Resources, and others to preserve over 100,000 acres in Mobile and Baldwin Counties in areas including the Mobile/Tensaw Delta, Perdido River WMA, Bon Secour NWR, Lillian Swamp, and Splinter Hill Bog. Currently, the Conservancy, in partnership with the US Fish and Wildlife Service, is working with numerous private forest landowners in Baldwin, Escambia, Mobile, Monroe, and Washington Counties focusing on longleaf pine conservation and restorat ion. A particular focus has been on reintroduction of prescribed fire to longleaf pine forests,and a gradual movement toward application of prescribed fire in the growing season. Benefits to injured natural resources: The Perdido and Escatawpa River watersheds cover more than 220,000 acres and are Alabama's largest and most ecologically significant blackwater rivers. The Mobile-Tensaw Delta encompasses more than 300,000 acres of tidal freshwater marshes, cypress-tupelo swamps, and bottomland hardwood forests. All of these rivers provide freshwater to very significant estuarine and marine areas in Alabama and Mississippi on the Gulf coast that were impacted by the oil spill. The adjoining uplands and tributaries of all these streams contain only remnants of a once vast longleaf pine forest, Atlantic white cedar swamps, and pitcher plant bogs. These watersheds are home to numerous globally imperiled or rare species of animals and plants. The mosaic created by these interlaced habitats serves as shelter, resting and forage areas for waterfowl, neotropical migrants and wading birds. Job Creation and Economic Value: This project will support 2-3 full time positions, 4-6 seasonal positions, and will employ a number of contractors to conduct offsite species removal, invasive species control, tree planting, and site preparation burning and spraying. Local businesses will directly benefit from this project, too. Thirty-five percent of the nation's seafood comes from the Gulf of Mexico, including 70% of the shrimp and 35% of the oysters. The coastal waters in and around Mississippi Sound and Mobile Bay historically contained some of the most productive oyster reefs, saltmarshes, and seagrass beds along the northern Gulf coast. This project seeks to preserve and enhance water quality to allow these industries to continue. Examples of how the proposed Forest Restoration Project will help recover the NRDA Resources: 1. Coastal Forests - Restoration of severely altered forest habitats will restore natural flow and enhance water quality in headwater streams and thus Mobile Bay and other																													

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					coastal habitats. 2. Prescribed fire - Virtually all upland habitats in coastal Alabama evolved with prescribed fire, but have suffered significant fire exclusion over the past century. Restoring natural fire regimes to these habitats is critical to maintaining the high level of biodiversity known to occur in the longleaf pine ecosystem. 3. Coastal Rivers - Coastal rivers provide freshwater to very significant estuarine and marine areas in Alabama and Mississippi on the Gulf coast that were impacted by the oil spill. Adjoining uplands and tributaries of these streams contain only remnants of a once vast longleaf pine ecosystem. These watersheds are home to many rare animals and plants. 4. Birds -Forest restoration will increase habitat for migratory and neotropical birds, waterfowl, and other important species such as bobwhite quail and red-cockaded woodpecker. 5. Terrestrial species -Forest restoration will enhance species habitat for numerous rare terrestrial species including: gopher tortoise, dusky gopher frog, eastern indigo snake, eastern diamondback rattlesnake, black bear and many others. 6. Human Use - Forest restoration can improve forest quality for recreational activities including hiking, birding, hunting, cycling, etc. - Forest restoration will support job development in local communities by increasing demand for forest vendors and consultants. Criteria: 1. Contribute to making the environment and the public whole by restoring, rehabilitating, replacing, or acquiring the equivalent of natural resources or services injured as a result of the Deepwater Horizon Oil Spill or response (collectively, ¿incident¿), or compensating for interim losses resulting from the incident: The Perdido and Escatawpa River watersheds cover more than 220,000 acres and are Alabama's largest and most ecologically significant blackwater rivers. The Mobile-Tensaw Del ta encompasses more than 300,000 acres of tidal freshwater marshes, cypress-tupelo swamps, and bottomland hardwood forests. All of these rivers provide freshwater to very significant estuarine and marine areas in Alabama and Mississippi on the Gulf coast that were impacted by the oil spill. 2. Address one or more specific injuries to natural resources or services associated with the incident: The forest restoration project addresses more than one specific injury to natural resources and services associated with the incident by enhancing wetlands (including coastal marsh), water quality and benefitting multiple habitats, their respective services and the numerous wildlife resources dependent upon them. 3. Seek to restore natural resources, habitats or natural resource services of the same type, quality, and of comparable ecological and/or human use value to compensate for identified resource and service losses resulting from the incident: The forest restoration project seeks to restore natural resources, habitats or natural resource services of the same type, quality, and of comparable ecological and/or human use value to compensate for identified resource and service losses resulting from the incident by restoring flushing between the river and bay systems, thus enhancing water quality and coastal habitats. 4. Are not inconsistent with anticipated long-term restoration needs and anticipated final restoration plan: This project is consistent with long-term restoration needs for the area and is anticipated to be consistent with the final restoration plan. 5. Are feasible and cost-effective: The project costs are																												

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					estimates based on past similar projects. If necessary, the project could be phased: environmental assessment and permitting; design and engineering; and construction.																												
Wetland Habitat Restoration in Upper Mobile Bay	11768	Judy Haner	coastal AL	60000000	The Deepwater Horizon incident impacted many habitat types in the Gulf of Mexico and in coastal Alabama specifically. Timing for the incident coincided with the northern movement of neotropical migratory birds, as well as the spawning of fish species, many of commercial and recreational importance. Shrimp, crabs and other nearshore species were impacted by either the presence of oil or its decomposition components, like hydrocarbons. Coastal birds and shore birds were impacted by oil on the surface of the water, as well as along shorelines and in marshes. The proposed project will address the restoration of habitats that support numerous impacted species. While Mobile Bay, for the most part, was not directly impacted by the oil from the Deepwater Horizon incident, the repercussions rippled like shockwaves ecosystem-wide, affecting an area already in decline from stormwater runoff, coastal development and habitat loss. This system continues to suffer as the amount of suitable habitat for the recovery of impacted species has been compromised or altogether lost. Much of the shoreline in Upper Mobile Bay has been degraded from natural (sea level rise, wave energy) and man-made (erosion from ship wakes) causes, impacting marsh habitat that serves as critical nursery and forage habitat for a myriad of finfish, shellfish and birds. The construction of the causeway has restricted the flow of water and sediments from the rivers that feed into the north of the bay. Sediment transport that would have naturally constructed and maintained these wetlands has been interrupted also contributing to the loss and degradation of marsh in the system. This project proposes to create these lost marshes using dredge material that would otherwise be wasted. Historically, the U.S. Army Corps of Engineers disposed of dredged material from the Mobile Harbor Ship Channel in open water on the west side of the ship channel. The dredged material created mounds along the ship channel which h elped to protect marsh and submerged aquatic vegetation (SAV) along the western shore of Mobile Bay from erosion. These mounds have eroded since open water disposal of dredged material was discontinued in Upper Mobile Bay. Dredged material is now taken offshore for disposal, bypassing any marsh creation and removing it from the system. This project will provide a beneficial use for that dredge material that will help the impacted species (brown shrimp, redfish, brown pelicans and double-crested cormorants), restore impacted and lost habitats and increase the resiliency of coastal Alabama. Creation of these wetlands will restore the habitat that would likely have formed in the absence of the causeway. Using a combination of dredge material bounded by living shorelines, this project will also enhance the condition of surrounding area, potentially providing areas for SAV recruitment. The restored wetlands will have the capacity to buffer the adjacent natural areas that lead to the Delta, as well as nearby communities and infrastructure from erosion, storm surges and other coastal hazards. The creation of wetlands at the northern end of Mobile Bay where the rivers form a large delta of marshes and mud flats will help expand these important	Trustee Portal	N	N	Y	N	N	N	N	N	N																			

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					habitats and greatly benefit the endangered Alabama Red-bellied turtle by providing additional nesting and forage habitat. The proposed project will create approximately 500 acres of marsh and 3 miles of reef habitat. Fill material will come from channel dredging projects or from existing dredged material disposal areas. In addition, this project will also incorporate the construction of a parking area and public fishing pier off of the Mobile Causeway for public safety and access. Currently, residents and visitors often park on the roadside and fish from the roadside, creating a dangerous situation. The parking area and pier will provide a safe area to access the Upper Bay for land-based fishing, wildlife watching and publi c enjoyment. The project is feasible and cost effective utilizing techniques that have already been applied at other restoration sites in coastal Alabama. The project specifically contributes to making the environment and the public whole through habitat restoration and shoreline protection. Habitat restoration and water quality improvement components of this project could compensate for resource losses resulting from the Deepwater Horizon incident. The ultimate project is consistent with long-term restoration goals in Alabama and along the Gulf Coast. Examples of how the proposed Wetland Habitat Restoration Project will help recover the NRDA Resources: 1. Water Column and Invertebrates - Wetland habitat restoration will enhance coastal habitats, such coastal marsh and reefs for estuarine finfish and shellfish - Healthy living shorelines/oyster reef breakwaters and coastal marsh contribute larvae as a free-swimming plankton that, in turn, serve as a food source for other larger nekton and benthic organisms such as crabs and adult oysters - Living shorelines/oyster reef breakwaters and coastal marsh provide habitat for estuarine nekton such as fish and benthic organisms such as crabs and adult oysters 2. Marine Fish -Living shorelines/oyster reef breakwaters and coastal marsh increase fishery species abundance by providing nursery and structural habitat for the health and recovery of recreational and commercial estuarine species (redfish, snapper, blue crab, stone crab, shrimp) 3. Marine Mammals - The diversity of fish species using living shorelines/oyster reef breakwaters and coastal marsh are prey species for estuarine bottlenose dolphin populations - Living shorelines/oyster reef breakwaters and coastal marsh can improve water clarity for seagrass habitat that is essential for the survival of the West Indian manatee and economically important fishery species 4. Nearshore Sediment and Resources - Wetland habitat restoration, including coastal marsh and liv ing shorelines/oyster reef breakwaters, will increase habitat and available food sources for health and recovery of crabs, shrimp, fish, birds and terrestrial wildlife - Wetland habitat restoration will restore habitats impeded by severed sediment transport pathways and enhance coastal wetlands 5. Submerged Aquatic Vegetation - Wetland habitat restoration will enhance conditions that will benefit submerged aquatic vegetation - Living shorelines/oyster reef breakwaters and coastal marsh can improve water clarity for seagrass habitat (ex. one adult oyster can filter up to 50 gallons of water a day) - Living shorelines/oyster reef breakwaters and coastal marsh stabilize sediments and enhance seagrass recruitment 6. Oysters - Living shorelines/oyster reef breakwaters and coastal marsh can																														

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					improve water clarity through filtration (ex. one adult oyster can filter up to 50 gallons of water a day) - All stages of the oyster (larvae, spat and adult) are a critical base of the food chain for the health and recovery of valuable commercial and recreational fish, crab and shrimp species, wading and shorebirds, bottlenose dolphin, pelagic fish - Living shorelines/oyster reef breakwaters and coastal marsh serve as a source of oyster larvae to benefit establishment and maintenance of nonharvestable and harvestable oysters reefs in the system 7. Shorelines -Wetland habitat restoration, including coastal marsh and living shorelines/oyster reef breakwaters, will enhance coastal wetlands, which protect developed and natural shorelines such as salt marsh, uplands and coastal communities from erosion, storm surges and other coastal hazards 8. Birds -Wetland habitat restoration, including coastal marsh and living shorelines/oyster reef breakwaters, will provide habitat for many avian species 9. Terrestrial Species - Wetland habitat restoration, including coastal marsh and living shorelines/oyster reef breakwaters, will enhance coastal habitats for health and recovery of terrestrial ba sed species such as turtles, alligators, birds and other species 10. Human Use - Wetland habitat restoration, including coastal marsh and living shorelines/oyster reef breakwaters, will enhance watchable wildlife opportunities for birding, manatees and other coastal life - Wetland habitat restoration will enhance coastal wetlands, which protect developed and natural shorelines such as salt marsh, uplands and coastal communities from erosion, storm surges and other coastal hazards - This project will also incorporate the construction of a parking area and public fishing pier off of the Mobile Causeway for public safety and access Criteria: 1. Contribute to making the environment and the public whole by restoring, rehabilitating, replacing, or acquiring the equivalent of natural resources or services injured as a result of the Deepwater Horizon Oil Spill or response (collectively, ¿incident¿), or compensating for interim losses resulting from the incident : The wetland habitat restoration project, including coastal marsh and living shorelines/oyster reef breakwaters, will return or compensate for injured natural resources and services resulting from the incident by enhancing wetlands which will benefit many species injured as a result of the incident. 2. Address one or more specific injuries to natural resources or services associated with the incident: The wetland habitat restoration project, including coastal marsh and living shorelines/oyster reef breakwaters, addresses specific injury to natural resources and services associated with the incident by enhancing wetlands (including coastal marsh), and the numerous wildlife resources that are dependent upon them. 3. Seek to restore natural resources, habitats or natural resource services of the same type, quality, and of comparable ecological and/or human use value to compensate for identified resource and service losses resulting from the incident: The wetland habitat restoration project, including coastal marsh an																												
Eastern Mobile Bay and Bon Secour Bay Coastal	894	Judy Haner	coastal AL	16500000	UPDATE: 4 MILES HAVE BEEN PERMITTED, 7 MILES ARE IN PROGRESS FOR PERMITTING Coastal habitats of the northern Gulf of Mexico have declined substantially since 1950, with significant losses of saltmarsh, submerged aquatic vegetation (SAV) and oyster reefs across all five states (Texas,	Trustee Portal	N	N	Y	Y	N	N	N	N	N																		

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Resiliency and Habitat Restoration					Louisiana, Mississippi, Alabama and Florida). It is well documented that these coastal and submerged habitats serve as nursery areas for more than 90% of commercially and recreationally important finfish and shellfish. In fact, 35% of the nation's seafood comes from the Gulf of Mexico: 70% of the shrimp and 35% of the oysters. The coastal waters in and around Mississippi Sound and Mobile Bay in Alabama historically contained some of the most productive saltmarshes, submerged aquatic vegetation (SAV) beds and oyster reefs along the northern Gulf coast. Adding a distinctive notch to Alabama's Gulf Coast shoreline, Mobile Bay - with an average depth of 10 feet - is one of the shallowest bays of its kind. It is also the fourth largest estuary in the United States and plays an important role in sheltering and nurturing the finfish, shrimp, crabs and oysters that are vital to Gulf communities. In the northern Gulf of Mexico, oyster reefs form living breakwaters that help protect the soft coastal marsh shorelines from erosion and storm damage. In addition, the protected areas of marsh and seagrass landward of the reefs serve as critical foraging areas for wading birds, shorebirds and coastal waterfowl. The Eastern oyster, Crassostrea virginica, is an integral component of coastal ecosystems and local economies along the Gulf and Atlantic coasts of the United States. Globally, 85 percent of reefs have been lost, making oyster reefs the most severely impacted marine habitat on the planet (Beck et al. 2009). The northern Gulf of Mexico is one of the few remaining locations where oysters have the potential to regain their foothold. As architects of the coast, oyster reefs in the northern Gulf of Mexico can form expansive vertical structures that provide high quality habitat for numerous species of fishes and invertebrates, many of which are of commercial and recreational importance (Coen et al. 1999; Peterson et al. 2003), while protecting the soft marsh shorelines. Oysters, and other encrusting organisms, also serve as filters for estuarine water and likely influenced energy flow and nutrient fluxes in estuarine ecosystems in the past (Newell 1999). The dramatic decline in oyster populations throughout the eastern United States and many Gulf States has resulted from the combined effects of intensive harvesting, habitat destruction, reduced water quality, disease and storm events. Over the last several decades, Mobile Bay has experienced significant loss of oyster reefs, seagrass beds and coastal marsh habitats through dredge-and-fill activities, construction of seawalls and jetties, erosion, storm events and other causes. Despite these challenges, Mobile Bay represents one of the largest potential areas for outright restoration, replacement and enhancement of these lost habitats on the northern Gulf Coast due to the size of the estuary, historic distribution of oysters in the Bay, high natural oyster spat sets and warm water for fast growth. Engaging in restoration efforts for the oyster reef, seagrass bed and coastal marsh habitats is a perfect first step in addressing the chronic issues of coastal Alabama and the northern Gulf of Mexico, helping fisheries of importance across the Gulf both immediately and for the long-term. Previous efforts to protect shorelines in this region have involved the introduction of hardened structures, such as seawalls, rock jetties, or bulkheads to reflect wave energy. A major concern in implementing bulkheads and seawalls for coastal property protection is reflection of erosive																												

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					(number of shoots per m^2) and morphological characteristics (number of leaves per shoot, leaf length and width) of the seagrass at those stations will be measured. In addition, using submerged scanning technology (Ceeducer), the bottom between the breakwater or control edge and shoreline will be scanned for seagrass presence during the summer. Shoreline dynamics: Shoreline elevation and slope will be measured along three transects extending from the upland marsh into 0.5 m mean water depth using a Radio Tele-Kinematic GPS. The horizontal accuracy of this technology is 5 cm and the vertical accuracy is 3 cm, thus allowing portrayal of changes in shoreline shape (i.e. accrual or erosion) with unprecedented sensitivity. In addition, current meters, to determine the impact of breakwaters on water flow and direction, and water level loggers, to determine the impact on wave height, will be deployed leeward of the breakwaters and control edges. Sediment Composition: Sediment samples will be taken for grain-size analysis once per year to determine the ratio of silt-clay to sand and to determine the concentration of organic matter in the sediment. Marshes: The abundance, diversity and morphological characteristics of marsh plants will be measured along the same transects used for shoreline dynamics. Two stations (high and low marsh) will be monitored per transect. Marsh vegetation will be quantified within 1-m^2 quadrats. Beginning at the shoreline edge, quadrat samples will be collected at 0.5 m and 2.0 m (defined as low marsh and high marsh, respectively) along a transect perpendicular to the shoreline. All vegetation will be quantified, classified and characterized by growth state (e.g.-live, dormant, and dead). Short Term Goals Once deployed, the oyster breakwaters will immediately begin to abate wave energy, thereby stabilizing the shorelines. In addition, the oyster breakwaters will be readily colonized by oyster spat or other encrusting organisms. The complex structure of the oyster breakwaters will provide nursery habitat for larval and juvenile and forage grounds for adult finfish and shellfish. The primary short-term goals associated with this project include: (1) Stabilization of eroding shorelines; (2) Restoration of reef habitat and associated ecosystem services; and (3) Enhanced community knowledge of living shorelines and estuarine ecosystems. Long Term Goals Over time, each breakwater will evolve into a self-sustaining oyster reef breakwater / living shoreline. As the breakwaters mature, the resulting ecological serv																												
Western Mobile Bay and Portersville Bay Coastal Resiliency and Habitat Restoration	893	Judy Haner	coastal AL	15000000	UPDATE: 6 MILES HAVE BEEN PERMITTED, 4 MILES ARE IN PROGRESS FOR PERMITTING Coastal habitats of the northern Gulf of Mexico have declined substantially since 1950, with significant losses of saltmarsh, submerged aquatic vegetation (SAV) and oyster reefs across all five states (Texas, Louisiana, Mississippi, Alabama and Florida). It is well documented that these coastal and submerged habitats serve as nursery areas for more than 90% of commercially and recreationally important finfish and shellfish. In fact, 35% of the nation's seafood comes from the Gulf of Mexico: 70% of the shrimp and 35% of the oysters. The coastal waters in and around Mississippi Sound and Mobile Bay in Alabama historically contained some of the most productive saltmarshes, submerged aquatic vegetation (SAV) beds and oyster reefs along the northern Gulf coast. Adding a distinctive notch to Alabama's Gulf Coast	Trustee Portal	N	N	Y	Y	N	N	N	N	N																			

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					shoreline, Mobile Bay - with an average depth of 10 feet - is one of the shallowest bays of its kind. It is also the fourth largest estuary in the United States and plays an important role in sheltering and nurturing the finfish, shrimp, crabs and oysters that are vital to Gulf communities. In the northern Gulf of Mexico, oyster reefs form living breakwaters that help protect the soft coastal marsh shorelines from erosion and storm damage. In addition, the protected areas of marsh and seagrass landward of the reefs serve as critical foraging areas for wading birds, shorebirds and coastal waterfowl. The Eastern oyster, Crassostrea virginica, is an integral component of coastal ecosystems and local economies along the Gulf and Atlantic coasts of the United States. Globally, 85 percent of reefs have been lost, making oyster reefs the most severely impacted marine habitat on the planet (Beck et al. 2009). The northern Gulf of Mexico is one of the few remaining locations where oysters have the potential to regain their foothold. As architects of the coast, oyster reefs in the northern Gulf of Mexico can form expansive vertical structures that provide high quality habitat for numerous species of fishes and invertebrates, many of which are of commercial and recreational importance (Coen et al. 1999; Peterson et al. 2003), while protecting the soft marsh shorelines. Oysters, and other encrusting organisms, also serve as filters for estuarine water and likely influenced energy flow and nutrient fluxes in estuarine ecosystems in the past (Newell 1999). The dramatic decline in oyster populations throughout the eastern United States and many Gulf States has resulted from the combined effects of intensive harvesting, habitat destruction, reduced water quality, disease and storm events. Over the last several decades, Mobile Bay has experienced significant loss of oyster reefs, seagrass beds and coastal marsh habitats through dredge-and-fill activities, construction of seawalls and jetties, erosion, storm events and other causes. Despite these challenges, Mobile Bay represents one of the largest potential areas for outright restoration, replacement and enhancement of these lost habitats on the northern Gulf Coast due to the size of the estuary, historic distribution of oysters in the Bay, high natural oyster spat sets and warm water for fast growth. Engaging in restoration efforts for the oyster reef, seagrass bed and coastal marsh habitats is a perfect first step in addressing the chronic issues of coastal Alabama and the northern Gulf of Mexico, helping fisheries of importance across the Gulf both immediately and for the long-term. Previous efforts to protect shorelines in this region have involved the introduction of hardened structures, such as seawalls, rock jetties, or bulkheads to reflect wave energy. A major concern in implementing bulkheads and seawalls for coastal property protection is reflection of erosive wave energies back into the bay, instead of absorbing or dampening the wave energy. This subjects adjacent shorelines to even greate r wave energy and can cause vertical erosion down the barrier with subsequent loss of intertidal habitats (Douglass and Pickel 1999). Recently, protection efforts have shifted towards 'living shorelines', including oyster reef breakwaters (NRC 2007). The Nature Conservancy, as part of the 100-1000: Restore Coastal Alabama Partnership, proposes to build 100 miles of oyster reefs, which will in turn help to protect and promote the growth of more than 1,000 acres of coastal																													

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					marsh and seagrass. The project will provide substrate for oyster larvae to settle and colonize; serve as nursery habitat for commercially and recreationally important finfish and shellfish; dampen wave energy and decrease erosion; and, stabilize sediments and decrease turbidity. This project focuses on sites along western Mobile Bay and Portersville Bay, along 10 miles of shoreline, of which 6 miles are permitted and 4 miles are in progress for permitting. Pre-restoration monitoring will include the basic parameters outlined above to establish a baseline to assess changes. Post-reef restoration monitoring will occur at semi-annual or annual intervals for a 5-year required monitoring period. In addition to directly measuring the response of marine habitats to the restoration efforts, these data will measure the change in available habitat and food resources for birds and other marine animals that may use this habitat. Monitoring results will be evaluated annual to determine any obvious positive or negative trends. Those trends will be examined in annual reports and used as points of discussion for any needed adaptive strategies. Rigorous analyses will be completed for the following accomplishment targets: o Oyster counts: Species richness and abundance o Abundance of shellfish and finfish: Species richness and abundance o Seagrass beds: Density, percent cover and mapping o Shoreline dynamics: Shoreline profile and change over time o Marshes: Species richness and abundance Oyster counts: J uvenile and adult oysters, as well as other settlers (e.g. mussels), and dead oysters will be counted using a 0.25 m^2 quadrat placed on the reef. Triplicate measurements will be taken on each reef at each sampling time. Should high water and turbidity hinder quadrat sampling, volumetric sampling will be used for treatments involving oyster shell and a total surface count will be performed for artificial structures. Abundance of shellfish and finfish: For juvenile fishes and larger mobile invertebrates (e.g., crabs and shrimp), samples will be collected using 8-m (26 ft) wide bag seines. Triplicate seines per breakwater or control area on each sampling date will be pulled by hand towards the shoreline, which will prevent animals from escaping the seine. Animals retained will be placed in plastic bags, put on ice and returned to the lab where enumeration of species will be performed. Seagrass beds: Because the presence of the reef is expected to have a positive effect on shoreline vegetation and may have a positive effect on SAV near the reef, we will monitor the density (shoots m^-2) and cover (% of bottom area covered) of SAV before and after restoration efforts. Stations located at equidistant intervals between the breakwaters or control edge and the shoreline will be visited on each sampling date and the benthic community sampled with a 20 cm-diameter corer. The abundance (number of shoots per m^2) and morphological characteristics (number of leaves per shoot, leaf length and width) of the seagrass at those stations will be measured. In addition, using submerged scanning technology (Ceeducer), the bottom between the breakwater or control edge and shoreline will be scanned for seagrass presence during the summer. Shoreline dynamics: Shoreline elevation and slope will be measured along three transects extending from the upland marsh into 0.5 m mean water depth using a Radio Tele-Kinematic GPS. The horizontal accuracy of this technology is 5 cm and																													

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Grand Bay Coastal Resiliency and Habitat Restoration	892	Judy Haner	Grand Bay	7500000	UPDATE: 5 MILES ARE IN PROGRESS FOR PERMITTING Coastal habitats of the northern Gulf of Mexico have declined substantially since 1950, with significant losses of saltmarsh, submerged aquatic vegetation (SAV) and oyster reefs across all five states (Texas, Louisiana, Mississippi, Alabama and Florida). It is well documented that these coastal and submerged habitats serve as nursery areas for more than 90% of commercially and recreationally important finfish and shellfish. In fact, 35% of the nation's seafood comes from the Gulf of Mexico: 70% of the shrimp and 35% of the oysters. The coastal waters in and around Mississippi Sound and Mobile Bay in Alabama historically contained some of the most productive saltmarshes, submerged aquatic vegetation (SAV) beds and oyster reefs along the northern Gulf coast. Adding a distinctive notch to Alabama¿s Gulf Coast shoreline, Mobile Bay - with an average depth of 10 feet - is one of the shallowest bays of its kind. It is also the fourth largest estuary in the United States and plays an important role in sheltering and nurturing the finfish, shrimp, crabs and oysters that are vital to Gulf communities. In the northern Gulf of Mexico, oyster reefs form living breakwaters that help protect the soft coastal marsh shorelines from erosion and storm damage. In addition, the protected areas of marsh and seagrass landward of the reefs serve as critical foraging areas for wading birds, shorebirds and coastal waterfowl. The Eastern oyster, Crassostrea	Trustee Portal	N	N	Y	Y	N	N	N	N	N																		

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					virginica, is an integral component of coastal ecosystems and local economies along the Gulf and Atlantic coasts of the United States. Globally, 85 percent of reefs have been lost, making oyster reefs the most severely impacted marine habitat on the planet (Beck et al. 2009). The northern Gulf of Mexico is one of the few remaining locations where oysters have the potential to regain their foothold. As architects of the coast, oyster reefs in the northern Gulf of Mexico can form expans ive vertical structures that provide high quality habitat for numerous species of fishes and invertebrates, many of which are of commercial and recreational importance (Coen et al. 1999; Peterson et al. 2003), while protecting the soft marsh shorelines. Oysters, and other encrusting organisms, also serve as filters for estuarine water and likely influenced energy flow and nutrient fluxes in estuarine ecosystems in the past (Newell 1999). The dramatic decline in oyster populations throughout the eastern United States and many Gulf States has resulted from the combined effects of intensive harvesting, habitat destruction, reduced water quality, disease and storm events. Over the last several decades, Mobile Bay has experienced significant loss of oyster reefs, seagrass beds and coastal marsh habitats through dredge-and-fill activities, construction of seawalls and jetties, erosion, storm events and other causes. Despite these challenges, Mobile Bay represents one of the largest potential areas for outright restoration, replacement and enhancement of these lost habitats on the northern Gulf Coast due to the size of the estuary, historic distribution of oysters in the Bay, high natural oyster spat sets and warm water for fast growth. Engaging in restoration efforts for the oyster reef, seagrass bed and coastal marsh habitats is a perfect first step in addressing the chronic issues of coastal Alabama and the northern Gulf of Mexico, helping fisheries of importance across the Gulf both immediately and for the long-term. Previous efforts to protect shorelines in this region have involved the introduction of hardened structures, such as seawalls, rock jetties, or bulkheads to reflect wave energy. A major concern in implementing bulkheads and seawalls for coastal property protection is reflection of erosive wave energies back into the bay, instead of absorbing or dampening the wave energy. This subjects adjacent shorelines to even greater wave energy and can cause ver tical erosion down the barrier with subsequent loss of intertidal habitats (Douglass and Pickel 1999). Recently, protection efforts have shifted towards `living shorelines', including oyster reef breakwaters (NRC 2007). The Nature Conservancy, as part of the 100-1000: Restore Coastal Alabama Partnership, proposes to build 100 miles of oyster reefs, which will in turn help to protect and promote the growth of more than 1,000 acres of coastal marsh and seagrass. The project will provide substrate for oyster larvae to settle and colonize; serve as nursery habitat for commercially and recreationally important finfish and shellfish; dampen wave energy and decrease erosion; and, stabilize sediments and decrease turbidity. This portion of that project focuses on approximately 5 miles of shorelines in Grand Bay in Mississippi Sound, a relatively pristine area bounded by Grand Bay National Wildlife Refuge and Grand Bay National Estuarine Research Reserve. Pre-restoration monitoring will include the basic parameters outlined above to establish a baseline to assess changes. Post-reef restoration																												

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					monitoring will occur at semi-annual or annual intervals for a 5-year required monitoring period. In addition to directly measuring the response of marine habitats to the restoration efforts, these data will measure the change in available habitat and food resources for birds and other marine animals that may use this habitat. Monitoring results will be evaluated annual to determine any obvious positive or negative trends. Those trends will be examined in annual reports and used as points of discussion for any needed adaptive strategies. Rigorous analyses will be completed for the following accomplishment targets: o Oyster counts: Species richness and abundance o Abundance of shellfish and finfish: Species richness and abundance o Seagrass beds: Density, percent cover and mapping o Shoreline dynamics: Shoreline profile and change over time o Marshes: Species richness and a bundance Oyster counts: Juvenile and adult oysters, as well as other settlers (e.g. mussels), and dead oysters will be counted using a 0.25 m^2 quadrat placed on the reef. Triplicate measurements will be taken on each reef at each sampling time. Should high water and turbidity hinder quadrat sampling, volumetric sampling will be used for treatments involving oyster shell and a total surface count will be performed for artificial structures. Abundance of shellfish and finfish: For juvenile fishes and larger mobile invertebrates (e.g., crabs and shrimp), samples will be collected using 8-m (26 ft) wide bag seines. Triplicate seines per breakwater or control area on each sampling date will be pulled by hand towards the shoreline, which will prevent animals from escaping the seine. Animals retained will be placed in plastic bags, put on ice and returned to the lab where enumeration of species will be performed. Seagrass beds: Because the presence of the reef is expected to have a positive effect on shoreline vegetation and may have a positive effect on SAV near the reef, we will monitor the density (shoots m^{-2}) and cover (% of bottom area covered) of SAV before and after restoration efforts. Stations located at equidistant intervals between the breakwaters or control edge and the shoreline will be visited on each sampling date and the benthic community sampled with a 20 cm-diameter corer. The abundance (number of shoots per m^2) and morphological characteristics (number of leaves per shoot, leaf length and width) of the seagrass at those stations will be measured. In addition, using submerged scanning technology (Ceeducer), the bottom between the breakwater or control edge and shoreline will be scanned for seagrass presence during the summer. Shoreline dynamics: Shoreline elevation and slope will be measured along three transects extending from the upland marsh into 0.5 m mean water depth using a Radio Tele-Kinematic GPS. The horizontal accuracy of this technology is 5 cm and the vertical accuracy is 3 cm, thus allowing portrayal of changes in shoreline shape (i.e. accrual or erosion) with unprecedented sensitivity. In addition, current meters, to determine the impact of breakwaters on water flow and direction, and water level loggers, to determine the impact on wave height, will be deployed leeward of the breakwaters and control edges. Sediment Composition: Sediment samples will be taken for grain-size analysis once per year to determine the ratio of silt-clay to sand and to determine the concentration of organic matter in the sediment. Marshes: The abundance,																											

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Swift Tract Coastal Resiliency and Habitat Restoration	11744	Judy Haner	coastal AL	5250000	UPDATE: ALL 3.5 MILES PERMITTED Coastal habitats of the northern Gulf of Mexico have declined substantially since 1950, with significant losses of saltmarsh, submerged aquatic vegetation (SAV) and oyster reefs across all five states (Texas, Louisiana, Mississippi, Alabama and Florida). It is well documented that these coastal and submerged habitats serve as nursery areas for more than 90% of commercially and recreationally important finfish and shellfish. In fact, 35% of the nation's seafood comes from the Gulf of Mexico: 70% of the shrimp and 35% of the oysters. The coastal waters in and around Mississippi Sound and Mobile Bay in Alabama historically contained some of the most productive saltmarshes, submerged aquatic vegetation (SAV) beds and oyster reefs along the northern Gulf coast. Adding a distinctive notch to Alabama's Gulf Coast shoreline, Mobile Bay - with an average depth of 10 feet - is one of the shallowest bays of its kind. It is also the fourth largest estuary in the United States and plays an important role in sheltering and nurturing the finfish, shrimp, crabs and oysters that are vital to Gulf communities. In the northern Gulf of Mexico, oyster reefs form living breakwaters that help protect the soft coastal marsh shorelines from erosion and storm damage. In addition, the protected areas of marsh and seagrass landward of the reefs serve as critical foraging areas for wading birds, shorebirds and coastal waterfowl. The Eastern oyster, Crassostrea virginica, is an integral component of coastal ecosystems and local economies along the Gulf and Atlantic coasts of the United States. Globally, 85 percent of reefs have been lost, making oyster reefs the most severely impacted marine habitat on the planet (Beck et al. 2009). The northern Gulf of Mexico is one of the few remaining locations where oysters have the potential to regain their foothold. As architects of the coast, oyster reefs in the northern Gulf of Mexico can form expansive vertical struct ures that provide high quality habitat for numerous species of fishes and invertebrates, many of which are	Trustee Portal	N	N	Y	Y	N	N	N	N	N																		

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					of commercial and recreational importance (Coen et al. 1999; Peterson et al. 2003), while protecting the soft marsh shorelines. Oysters, and other encrusting organisms, also serve as filters for estuarine water and likely influenced energy flow and nutrient fluxes in estuarine ecosystems in the past (Newell 1999). The dramatic decline in oyster populations throughout the eastern United States and many Gulf States has resulted from the combined effects of intensive harvesting, habitat destruction, reduced water quality, disease and storm events. Over the last several decades, Mobile Bay has experienced significant loss of oyster reefs, seagrass beds and coastal marsh habitats through dredge-and-fill activities, construction of seawalls and jetties, erosion, storm events and other causes. Despite these challenges, Mobile Bay represents one of the largest potential areas for outright restoration, replacement and enhancement of these lost habitats on the northern Gulf Coast due to the size of the estuary, historic distribution of oysters in the Bay, high natural oyster spat sets and warm water for fast growth. Engaging in restoration efforts for the oyster reef, seagrass bed and coastal marsh habitats is a perfect first step in addressing the chronic issues of coastal Alabama and the northern Gulf of Mexico, helping fisheries of importance across the Gulf both immediately and for the long-term. Previous efforts to protect shorelines in this region have involved the introduction of hardened structures, such as seawalls, rock jetties, or bulkheads to reflect wave energy. A major concern in implementing bulkheads and seawalls for coastal property protection is reflection of erosive wave energies back into the bay, instead of absorbing or dampening the wave energy. This subjects adjacent shorelines to even greater wave energy and can cause vertical erosion down the barrier with subsequent loss of intertidal habitats (Douglass and Pickel 1999). Recently, protection efforts have shifted towards 'living shorelines', including oyster reef breakwaters (NRC 2007). The Nature Conservancy, as part of the 100-1000: Restore Coastal Alabama Partnership, proposes to build 100 miles of oyster reefs, which will in turn help to protect and promote the growth of more than 1,000 acres of coastal marsh and seagrass. The project will provide substrate for oyster larvae to settle and colonize; serve as nursery habitat for commercially and recreationally important finfish and shellfish; dampen wave energy and decrease erosion; and, stabilize sediments and decrease turbidity. This project focuses on Eastern Mobile Bay and Bon Secour Bay, along approximately 3.5 miles of shoreline, all of which is permitted. Pre-restoration monitoring will include the basic parameters outlined above to establish a baseline to assess changes. Post-reef restoration monitoring will occur at semi-annual or annual intervals for a 5-year required monitoring period. In addition to directly measuring the response of marine habitats to the restoration efforts, these data will measure the change in available habitat and food resources for birds and other marine animals that may use this habitat. Monitoring results will be evaluated annual to determine any obvious positive or negative trends. Those trends will be examined in annual reports and used as points of discussion for any needed adaptive strategies. Rigorous analyses will be completed for the following accomplishment targets: o Oyster counts: Species richness and abundance o Abundance of shellfish																													

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					shorelines. In addition, the oyster breakwaters will be readily colonized by oyster spat or other encrusting organisms. The complex structure of the oyster breakwaters will provide nursery habitat for larval and juvenile and forage grounds for adult finfish and shellfish. The primary short-term goals associated with this project include: (1) Stabilization of eroding shorelines; (2) Restoration of reef habitat and associated ecosystem services; and (3) Enhanced community knowledge of living shorelines and estuarine ecosystems. Long Term Goals Over time, each breakwater will evolve into a self-sustaining oyster reef breakwater / living shoreline. As the breakwaters mature, the resulting ecological services provided will be compounded. The synergistic effects of reduced wave energy and improved water clar																												
Mobile Causeway Hydrologic Restoration Project, Mobile and Baldwin Counties, AL	5099	Judy Haner	Mobile Bay	70000000	The Nature Conservancy recommends $70M to restore hydrologic connectivity between the Mobile/Tensaw Delta and Mobile Bay in Mobile and Baldwin Counties, Alabama. The Mobile/Tensaw Delta is the terminus of the fourth largest watershed in the continental United States in terms of water volume, receiving 20% of our nation's freshwater supply. The Mobile/Tensaw Delta in turn empties into Mobile Bay. Within the Delta proper, a large dike-like causeway built in the late 1920s has sealed off a number of once open bays from immediate contact with the Gulf. By altering the seasonal variation and volume of flows, these hydrological modifications have altered the ecological function and biodiversity of one of North America's largest, most productive and diverse estuaries, on a local and system-wide basis. All of these activities have had a significant impact on the natural flow and water quality that drains from these headwaters, providing vitally important freshwater inflows to the Gulf's estuaries. This project will involve reconnecting tidal exchange in the Mobile/Tensaw Delta by bridging Justin's Bay and Chocolatta Bay to address upstream and downstream modifications that have altered ecological productivity. The existing roadway has altered saltwater and freshwater exchange, impacting coastal marsh and seagrass habitats north and south of the causeway and thus, the finfish, shellfish and wildlife that depend on them. The Delta's importance lies in the connection between the riverine and coastal ecosystems. The causeway has reduced the Delta's critical ecosystems services, including habitat function, productivity, and species and habitat diversity. Examples of how the proposed Hydrologic Restoration Project will help recover the NRDA Resources: 1. Water column and invertebrates - Hydrologic restoration will restore water exchange between the freshwater Mobile Delta and saline Mobile Bay, allowing free-flowing larvae, as well as coastal finfish and shellfish acces s to critical coastal nursery areas - Hydrologic restoration will enhance coastal habitats such as submerged aquatic vegetation and marshes for estuarine finfish and shellfish 2. Marine Fish - Hydrologic restoration will remove in-stream barriers to coastal finfish and shellfish mirgration, as well as migration by anadromous and diadromous species - Hydrologic restoration will increase fishery species abundance by providing access to nursery habitat for the health and recovery of recreational and commercial estuarine species (redfish, snapper, blue crab, stone crab, shrimp) 3. Marine Mammals - The diversity of finfish and shellfish species that will benefit from the hydrologic restoration are prey	Trustee Portal	N	Y	N	N	N	N	N	N	N																			

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					species for estuarine bottlenose dolphin populations - Hydrologic restoration will enhance water clarity for seagrass habitat that is essential for the survival of the West Indian manatee and economically important fishery species - Hydrologic restoration will be implemented to provide safe and maple passage by the West Indian manatee 4. Sea Turtles - Hydrologic restoration will enhance water clarity for seagrass habitat that is essential for the survival of many species of sea turtles and economically important fishery species 5. Nearshore sediments and resources - Hydrologic restoration will increase habitat and available food sources for health and recovery of crabs, shrimp, fish, birds and terrestrial wildlife - Hydrologic restoration will restore severed sediment transport pathways and enhance coastal wetlands 6. Submerged aquatic vegetation - Hydrologic restoration will improve water flow which may benefit estuarine submerged aquatic vegetation 7. Oysters - Hydrologic restoration will provide access for oyster larvae establishment in the system 8. Shorelines - Hydrologic restoration will restore severed sediment transport pathways and enhance coastal wetlands, which protect developed and natural shorelines such as salt marsh, uplands and coastal communities f rom erosion, storm surges and other coastal hazards 9. Birds - Hydrologic restoration will increase fishery species abundance, providing food for the health and recovery of wading, shore, foraging seabirds, and migratory bird species 10. Terrestrial species - Hydrologic restoration will enhance coastal habitats for health and recovery of terrestrial based species such as turtles, alligators, birds and other species 11. Human use - Hydrologic restoration can improve water quality for recreational activities including fishing and swimming - Hydrologic restoration will enhance habitat for economically important fish species such as blue crab, spotted seatrout, red drum, an shrimp - Hydrologic restoration will provide access for oyster larvae establishment in the system - Hydrologic restoration will enhance watchable wildlife opportunities for birding, manatees and other coastal life Criteria: 1. Contribute to making the environment and the public whole by restoring, rehabilitating, replacing, or acquiring the equivalent of natural resources or services injured as a result of the Deepwater Horizon Oil Spill or response (collectively, incident), or compensating for interim losses resulting from the incident: The hydrologic restoration project will return or compensate for injured natural resources and services resulting from the incident by enhancing wetlands, submerged aquatic vegetation and nursery habitat for finfish, shellfish, birds and marine mammals. Coastal marsh and submerged habitats will benefit, as well as numerous finfish, shellfish, avifauna and marine mammals injured as a result of the incident. 2. Address one or more specific injuries to natural resources or services associated with the incident: The hydrologic restoration project addresses more than one specific injury to natural resources and services associated with the incident by enhancing wetlands (including coastal marsh), submerged aquatic vegetation and nursery habitat for finfish, shellfis h, birds and marine mammals, benefitting multiple habitats, their respective services and the numerous wildlife resources dependent upon them. 3. Seek to restore natural resources, habitats or natural resource services of the same type, quality, and of																												

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					comparable ecological and/or human use value to compensate for identified resource and service losses resulting from the incident: The hydrologic restoration project seeks to restore natural resources, habitats or natural resource services of the same type, quality, and of comparable ecological and/or human use value to compensate for identified resource and service losses resulting from the incident by restoring flushing between the river and bay systems, thus enhancing water quality and coastal habitats. It will also restore public access (by boat) to the associated bays and rivers. 4. Are not inconsistent with anticipated long-term restoration needs and anticipated final restoration plan: This project is consistent with long-term restoration needs for the area and is anticipated to be consistent with the final restoration plan. 5. Are feasible and cost-effective: The project costs are estimates based on past similar projects. If necessary, the project could be phased: environmental assessment and permitting; design and engineering; and construction.																															
Enhancing Oyster Reef Restoration In Coastal Alabama: Oyster Farming As A Restoration Multiplier	5105	Bill Walton	coastal AL	13000000	The core partners listed have formed a coalition to assist with and supplement any oyster restoration projects planned throughout the coastal waters of Alabama. Here we propose to contribute significant numbers of live oysters (both larval and post-set) to restoration projects throughout the coastal waters of Alabama, increasing the likelihood of success of restoration efforts, jump-starting oyster populations in these areas, and increasing the return on investment of restoration dollars. A secondary benefit of this NRDA restoration project will be the creation of environmentally, economically and socially sustainable jobs for coastal residents pursuing off-bottom oyster farming in Alabama, as well as provide outstanding educational opportunities at an area high school. Additionally, the oyster farming jobs will relieve fishing pressure on natural reefs. Public oyster reef restoration projects will be supplemented by seeding with larval and/or juvenile oysters spawned by the Auburn University Shellfish Laboratory (AUSL), raised by local oyster farmers, and in partnership with Alma Bryant High School¿s aquaculture program. Within 5 years, up to 10 billion oyster larvae and 100 million juvenile oysters could be added to public oyster restoration sites in the region. This supplemental restoration program will increase the likelihood of successful reef restoration by ensuring that oyster reefs are initially seeded with hatchery reared oyster larvae and then supplemented with juvenile oysters at each restoration site. While wild oyster set is expected and hoped for, successful oyster set is not guaranteed. Supplemental planting will provide two benefits. It ensures that the site has an initial population of oysters before competing species (e.g., barnacles, mussels) become established and preempt oyster settlement and decreases the time for oysters to reach sexual maturity. Additionally, supplemental stocking will help oysters become established in areas where larval supply may be limited (e.g., Bon Secour Bay) and will decrease the time to see a return on investment of restoration dollars. The enhancement of natural oyster reef structure and oyster abundance as early as possible will also provide critical `ecosystem services¿ through improved water quality, increased biodiversity and creation of more diverse habitat. In addition to assisting with the restoration of public oyster	Trustee Portal	N	N	N	Y	N	N	N	N	N																			

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					reefs, this project will provide an important boost to the development of off-bottom oyster farming in Alabama and other Gulf of Mexico states. The quantity of oyster larvae needed for this project can be readily produced at the Auburn University Shellfish Lab located on the campus of the Dauphin Island Sea Lab with upgrades in infrastructure (as was done with the Louisiana Sea Grant shellfish hatchery as one of Louisiana¿s early restoration projects). Production of juvenile oysters, however, requires the establishment of environmentally-friendly oyster farms. We propose to establish 2 100-acre oyster aquaculture parks (or 4 50-acre parks) in coastal Alabama, where watermen are paid to produce juvenile oysters to supplement oyster reef restoration. Over the long-term and when the restoration project ends we expect to see these farms continue and shift to producing adult oysters for the food market as an additional sustainable source of income through the operation of environmentally-friendly family farms. For this project the parks will support 40 independently operated 5-acre oyster farms each capable of producing 500,000 juvenile oysters per year per farm for restoration efforts. Combined the cooperative project with local famers would produce up to 20 million oysters per year for supplementation of restoration efforts. Additionally, 40 farms, once established, could raise oysters for premium half-shell markets, generating at least $5 million per year of combined income within 5 years through sales of premium oysters. Single choice oysters c ommand higher prices than those oysters traditionally produced from the oyster reefs in Alabama thereby providing greater income for the oyster producers and also reducing pressure on natural oyster resources by creating additional sources of income. Research in Alabama suggests that a 5-acre operation would allow an oyster farmer to raise 400,000 oysters per year; potentially yielding a gross annual income (with a conservative 80% survival) of over $80,000. This would be a significant increase in annual income for the typical oyster catcher who might currently earn $20,000/year. This project will also develop and implement an aquatic environmental education program for high school students throughout Mobile County. COASTAL Academy (Coastal Ocean Aquatic Science Technology And Learning Academy) will be centered around the aquaculture and marine biology programs located on the campus of Alma Bryant High School. Although the academy will involve all aspects of aquatic environmental sciences and coastal issues, the primary program focus will be on ¿Half-Shell High School¿, a program that will educate students and community members through the hands-on management and operation of an oyster farm, including restoration and biology projects, and the development of a curriculum that can serve as a model for the region. This combination of opportunities is a powerful means of engaging students, improving student knowledge, and, ultimately, student achievements and decision-making abilities. The emphasis on science, technology, engineering, and math education (STEM) and a hands-on, project-based learning system will be the core of ¿COASTAL Academy¿. STEM education will lead to students being able to pursue occupations that require similar skills that have been acquired in the Academy and prepare students for success in technical schools, and two- and four-year colleges. Total project budget of $13 million over 5 years																													

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					broken into the following categories: -Juvenile oys ters for restoration projects, 20 million `spat on shell¿/yr for 5 years @ $20/1,000 for $400,000/yr or $2 million total -Assistance with initial permitting and surveying of oyster parks, for $1 million total -Eyed Oyster larvae (larvae that are ready to set) for restoration projects, 2 billion larvae/yr for 5 years @ $1/1,000 for $400,000/yr or $2 million total -Expansion of capacity and increase in storm-preparedness (building addition, larval tanks, generators, etc.) for Auburn University Shellfish Laboratory as a resource for oyster restoration, for $2.5 million total -Oyster gardening program to expand restoration capabilities and increase community involvement, for $50,000/yr for 5 years or $250,000 total -Oyster restoration assistance and educational program development at Alma Bryant High School¿s aquaculture program (Bayou la Batre), for $250,000/yr for 5 years or $1.25 million total -Oyster restoration assistance and educational program development at Sea, Sand & Stars (Orange Beach), for $100,000/yr for 5 years or $0.5 million total -Program funds for state agencies for management of and assistance to restoration projects and aquaculture oversight, for $2.5 million total -Monitoring and technical assistance provided to partners by Auburn University Marine Extension & Research Center, for $200,000/yr for 5 years or $1 million total																													
Salt Creek Marsh Restoration	11741	Glendon Coffee	coastal AL		The primary objective of the Salt Creek Marsh Restoration Project is to mitigate for historic losses of salt marsh on Dauphin Island. Dauphin Island today is the result of an intense island-wide development project undertaken in the 1950s and 1960s. The development resulted in the destruction of large areas of native salt marsh habitat. The project area is located in Graveline Bay, an embayment of Mississippi Sound on the north side Dauphin Island. The bay is bordered to the east, south, and west by land, and open to Sound on the north. This results in Graveline Bay being protected from wind generated waves from most points on the compass, creating a physical environment conducive for the establishment of marsh. The project consists of three elements: (1) deepening the existing Bayou Heron Canal to -5.0 feet; (2) construction of a new -5.0-foot channel into Graveline Bay; and (3) use of the dredged material to provide habitat on which marsh would be restored. The dredging work would produce 52,000 cubic yards of primarily silty sand and sand. The dredged material would be deposited in an area located between the two dredged channels. The material would be deposited to produce a sloping elevation of no more than +1.5 feet. The existing marsh to the south would serve to contain the dredged material within the deposition area. The remaining perimeter would be ringed with either burlap bags containing oyster shells or metal gabions containing oyster shells. Intermittent openings would be provided to allow the exchange of tidal flows. Plugs of black needlerush (Juncus roemerianus) and saltmarsh cordgrass (Spartina alterniflora) from existing marsh areas within the project area would be used to establish approximately 32 acres of marsh on the dredged material. The restored marsh habitat would provide the following environmental benefits: -An important annually renewable energy source for the estuarine food web -Habitats for a wide variety of birds and other fo rms of terrestrial wildlife -Benefits migrating neotropical birds - A range of physical habitats required for	Trustee Portal	N	N	Y	N	N	N	N	N	N																		

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					different life stages of many important estuarine species - Hard substrates on which oyster reefs could be established - Improved water quality due to the increased flushing of the channels and marsh during tidal exchanges - Improved recreation access into Graveline Bay - Opportunity for various scientific studies																												
100-1000: Restore Coastal Alabama	56	Judy Haner	coastal AL	150000000	UPDATE: 11 MILES HAVE BEEN PERMITTED, 15 MILES ARE IN PROGRESS FOR PERMITTING Coastal habitats of the northern Gulf of Mexico have declined substantially since 1950, with significant losses of saltmarsh, submerged aquatic vegetation (SAV) and oyster reefs across all five states (Texas, Louisiana, Mississippi, Alabama and Florida). It is well documented that these coastal and submerged habitats serve as nursery areas for more than 90% of commercially and recreationally important finfish and shellfish. In fact, 35% of the nation's seafood comes from the Gulf of Mexico: 70% of the shrimp and 35% of the oysters. The coastal waters in and around Mississippi Sound and Mobile Bay in Alabama historically contained some of the most productive saltmarshes, submerged aquatic vegetation (SAV) beds and oyster reefs along the northern Gulf coast. Adding a distinctive notch to Alabama's Gulf Coast shoreline, Mobile Bay - with an average depth of 10 feet - is one of the shallowest bays of its kind. It is also the fourth largest estuary in the United States and plays an important role in sheltering and nurturing the finfish, shrimp, crabs and oysters that are vital to Gulf communities. In the northern Gulf of Mexico, oyster reefs form living breakwaters that help protect the soft coastal marsh shorelines from erosion and storm damage. In addition, the protected areas of marsh and seagrass landward of the reefs serve as critical foraging areas for wading birds, shorebirds and coastal waterfowl. The Eastern oyster, Crassostrea virginica, is an integral component of coastal ecosystems and local economies along the Gulf and Atlantic coasts of the United States. Globally, 85 percent of reefs have been lost, making oyster reefs the most severely impacted marine habitat on the planet. The northern Gulf of Mexico is one of the few remaining locations where oysters have the potential to regain their foothold. Over the last several decades, Mobile Bay has experienced significant loss of oyster reefs, seagrass beds and coastal marsh habitats through dredge-and-fill activities, construction of seawalls and jetties, erosion, storm events and other causes. Despite these challenges, Mobile Bay represents one of the largest potential areas for outright restoration, replacement and enhancement of these lost habitats on the northern Gulf Coast due to the size of the estuary, historic distribution of oysters in the Bay, high natural oyster spat sets and warm water for fast growth. Engaging in restoration efforts for the oyster reef, seagrass bed and coastal marsh habitats is a perfect first step in addressing the chronic issues of coastal Alabama and the northern Gulf of Mexico, helping fisheries of importance across the Gulf both immediately and for the long-term. Previous efforts to protect shorelines in this region have involved the introduction of hardened structures, such as seawalls, rock jetties, or bulkheads to reflect wave energy. A major concern in implementing bulkheads and seawalls for coastal property protection is reflection of erosive wave energies back into the bay, instead of absorbing or dampening the wave energy. This subjects	Trustee Portal	N	N	Y	Y	N	N	N	N	N																			

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					adjacent shorelines to even greater wave energy and can cause vertical erosion down the barrier with subsequent loss of intertidal habitats (Douglass and Pickel 1999). Recently, protection efforts have shifted towards 'living shorelines', including oyster reef breakwaters (NRC 2007). The Nature Conservancy, as part of the 100-1000: Restore Coastal Alabama Partnership, proposes to build 100 miles of oyster reefs, which will in turn help to protect and promote the growth of more than 1,000 acres of coastal marsh and seagrass. The project will provide substrate for oyster larvae to settle and colonize; serve as nursery habitat for commercially and recreationally important finfish and shellfish; dampen wave energy and decrease erosion; and, stabilize sediments and decrease turbidity. Currently 11 miles have been permitted while 15 additional miles are in progress for permitting. Pre-restoration monitoring will include the basic parameters outlined above to establish a baseline to assess changes. Post-reef restoration monitoring will occur at semi-annual or annual intervals for a 5-year required monitoring period. In addition to directly measuring the response of marine habitats to the restoration efforts, these data will measure the change in available habitat and food resources for birds and other marine animals that may use this habitat. Monitoring results will be evaluated annual to determine any obvious positive or negative trends. Those trends will be examined in annual reports and used as points of discussion for any needed adaptive strategies. Rigorous analyses will be completed for the following accomplishment targets: o Oyster counts: Species richness and abundance o Abundance of shellfish and finfish: Species richness and abundance o Seagrass beds: Density, percent cover and mapping o Shoreline dynamics: Shoreline profile and change over time o Marshes: Species richness and abundance Oyster counts: Juvenile and adult oysters, as well as other settlers (e.g. mussels), and dead oysters will be counted using a 0.25 m^2 quadrat placed on the reef. Triplicate measurements will be taken on each reef at each sampling time. Should high water and turbidity hinder quadrat sampling, volumetric sampling will be used for treatments involving oyster shell and a total surface count will be performed for artificial structures. Abundance of shellfish and finfish: For juvenile fishes and larger mobile invertebrates (e.g., crabs and shrimp), samples will be collected using 8-m (26 ft) wide bag seines. Triplicate seines per breakwater or control area on each sampling date will be pulled by hand towards the shoreline, which will prevent animals from escaping the seine. Animals retained will be placed in plastic bags, put on ice and returned to the lab where enum eration of species will be performed. Seagrass beds: Because the presence of the reef is expected to have a positive effect on shoreline vegetation and may have a positive effect on SAV near the reef, we will monitor the density (shoots m^-2) and cover (% of bottom area covered) of SAV before and after restoration efforts. Stations located at equidistant intervals between the breakwaters or control edge and the shoreline will be visited on each sampling date and the benthic community sampled with a 20 cm-diameter corer. The abundance (number of shoots per m^2) and morphological characteristics (number of leaves per shoot, leaf length and width) of the seagrass at those stations will be measured. In addition, using																													

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					submerged scanning technology (Ceeducer), the bottom between the breakwater or control edge and shoreline will be scanned for seagrass presence during the summer. Shoreline dynamics: Shoreline elevation and slope will be measured along three transects extending from the upland marsh into 0.5 m mean water depth using a Radio Tele-Kinematic GPS. The horizontal accuracy of this technology is 5 cm and the vertical accuracy is 3 cm, thus allowing portrayal of changes in shoreline shape (i.e. accrual or erosion) with unprecedented sensitivity. In addition, current meters, to determine the impact of breakwaters on water flow and direction, and water level loggers, to determine the impact on wave height, will be deployed leeward of the breakwaters and control edges. Sediment Composition: Sediment samples will be taken for grain-size analysis once per year to determine the ratio of silt-clay to sand and to determine the concentration of organic matter in the sediment. Marshes: The abundance, diversity and morphological characteristics of marsh plants will be measured along the same transects used for shoreline dynamics. Two stations (high and low marsh) will be monitored per transect. Marsh vegetation will be quantified within 1-m^2 quadrats. Beginning at th e shoreline edge, quadrat samples will be collected at 0.5 m and 2.0 m (defined as low marsh and high marsh respectively) along a transect perpendicular to the shoreline. All vegetation will be quantified, classified and characterized by growth state (e.g.-live, dormant, and dead). Short Term Goals Once deployed, the oyster breakwaters will immediately begin to abate wave energy, thereby stabilizing the shorelines. In addition, the oyster breakwaters will be readily colonized by oyster spat or other encrusting organisms. The complex structure of the oyster breakwaters will provide nursery habitat for larval and juvenile and forage grounds for adult finfish and shellfish. The primary short-term goals associated with this project include: (1) Stabilization of eroding shorelines; (2) Restoration of reef habitat and associated ecosystem services; and (3) Enhanced community knowledge of living shorelines and estuarine ecosystems. Long Term Goals Over time, each breakwater will evolve into a self-sustaining oyster reef breakwater / living shoreline. As the breakwaters mature, the resulting ecological services provided will be compounded. The synergistic effects of reduced wave energy and improved water clarity are expected to contribute to the facilitation or expansion of submerged aquatic vegetation and emergent salt marsh. In addition to the short-term goals, one long-term goal associated with this project is to establish an aquatic migratory corridor for sessile and encrusting organisms, as well as other finfish and shellfish, to adapt or migrate in response to climate change impacts. Examples of how the proposed Living Shoreline/Oyster Breakwater Reef Project will help recover the NRDA Resources: 1. Water Column and Invertebrates - Healthy living shorelines/oyster reef breakwaters contribute larvae as a free-swimming plankton that, in turn, serve as a food source for other larger nekton and benthic organisms such as crabs and adult oysters -Living shorelines/oys																												
Lower Alabama River	5119	Paul Freeman	AL waters	1500000	At a time when the fisheries and marine habitats in the Gulf of Mexico have been impacted, it is imperative to implement feasible restoration of key	Trustee Portal	N	N	N	N	N	N	N	N	N																		

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Diadromous Fish Passage, Multiple Counties, Alabama					ecological processes of freshwater habitats that are intertwined with the whole marine, estuarine, and freshwater system. Many species of fish move from coastal habitats into the freshwater rivers to complete their life cycle or take refuge when conditions in the Gulf are not appropriate. Dams are well known to impede movements of diadromous fish across river systems including those that flow to the Northern Gulf of Mexico. The Nature Conservancy, working in collaboration with the U.S. Army Corps of Engineers and several other agencies and partners, will modify lock operations on the two lowermost dams on the Alabama River, which were installed around 1970, and measure the effectiveness these changes have at improving the passage of migratory fish across approximately 400 river miles. Structural and operational modifications at Claiborne Lock and Dam and Millers Ferry Lock and Dam have the potential to benefit over 50 species of fish, numerous mussel species and the overall ecosystem stretching from the Gulf of Mexico, across Mobile Bay, through the Alabama River and reaching upstream to the free-flowing Cahaba River. The key restoration activities include installation and operation of water pumps inside the navigation locks to provide attraction flows for fish and then opening and closing of the lock gates to allow fish the opportunity to swim through and past the dams on their upstream and downstream journeys. To measure the effectiveness, subsets of fish need to be tagged with transmitters to allow researchers to track their movements over the next five years or more. The Mobile District of the U.S. Army Corps of Engineers has recently allowed the installation of water pumps to aid in restoration activities at their facilities and has agreed to implement lockages for fish movement. The Nature Conservancy pr oposes to expand the fish passage efforts to maximize benefits for a suite of valuable fish species by maintaining the attraction flow pumps and expanding the monitoring and assessment phase of this project over the next five years to include additional diadromous fish or their surrogates. Consistent with Section 1006 of the Oil Pollution Act, this project will: -Contribute to making the environment and the public whole by restoring and rehabilitating connectivity between riverine habitats and estuarine habitats used by wildlife and fisheries as nursery and foraging habitat, especially for diadromous finfish -Address impediments to migration, reproduction and feeding for multiple species of fish including Gulf sturgeon, striped bass, American eel, and Alabama shad -Compensate for impacted, degraded and loss of riverine habitat, estuarine and freshwater fisheries and impacts to the federally threatened Gulf Sturgeon -Apply in a consistent manner to the long-term restoration needs of high priority riverine and estuarine habitats as described in Alabama's State Wildlife Action Plan -This project provides feasible and cost effective restoration of fish and wildlife over 400 river miles by using low cost techniques for moving fish past barriers. The project will likely require informal federal consultation under the Endangered Species Act. The project is in compliance with categorical exclusions described in the NEPA and thus will not require formal NEPA consultation. Examples of how the proposed Diadromous Fish Passage Project will help recover the NRDA Resources: 1. Marine Fish -Improved migration, survival and reproductive success by																												

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					diadromous species including: Gulf Sturgeon, American Eel, Alabama Shad, Gulf Menhaden, Gulf Striped Bass, Atlantic needlefish, Skipjack herring. -Fish Passage will benefit other marine species as many of the diadromous fish are prey species for marine species 2. Human Use -Fish passage will enhance populations of recreational ly and commercially important species of fish. -Fish passage will enhance and population of fish important to completing the reproductive cycle of freshwater mussels which play an important role in water quality. Criteria: 1. Contribute to making the environment and the public whole by restoring, rehabilitating, replacing, or acquiring the equivalent of natural resources or services injured as a result of the Deepwater Horizon Oil Spill or response (collectively, incident), or compensating for interim losses resulting from the incident: The fish passage project will return or compensate for injured natural resources and services resulting from the incident by enhancing marine and diadromous species affected by the spill. 2. Address one or more specific injuries to natural resources or services associated with the incident: The diadromous fish passage project addresses specific injury to natural resources and services associated with the incident by enhancing marine, diadromous and freshwater fish benefitting multiple habitats, their respective services and the numerous wildlife resources dependent upon them. 3. Seek to restore natural resources, habitats or natural resource services of the same type, quality, and of comparable ecological and/or human use value to compensate for identified resource and service losses resulting from the incident: The diadromous fish passage restoration project seeks to restore natural resources, and natural resource services of the same type, quality, and of comparable ecological and/or human use value to compensate for identified resource and service losses resulting from the incident by restoring movement between the river, bay and marine habitats. It will also have economic benefits by improving recreationally and commercially valuable species and services. 4. Are not inconsistent with anticipated long-term restoration needs and anticipated final restoration plan: This project is consistent with long-term restoration needs f or the area and is anticipated to be consistent with the final restoration plan. 5. Are feasible and cost-effective: The project costs are estimates based on past similar projects.																												
Sanitary Sewer Collection System Rehabilitation	11715	Vaile Feemster	Dauphin Island	4400000	The majority of Dauphin Island's sewer collection system infrastructure is nearing the end of its design life. Hurricanes and tropical storms have helped to increase the wear and tear on the collection system. The gravity sewer is predominately comprised of vitrified clay pipe which has a tendency to settle and break over time; and pipe joints lose their ability to remain water tight. The breaks and loose pipe joints allow increased infiltration of sand and ground water into the system and exfiltration of wastewater into the environment. Similarly, the pumping stations that move wastewater to the treatment facility are aged and in need of upgrades to stop Sanitary Sewer Overflows (SSO) and sewer exfiltration. Ground water infiltration increases pumping cost, increases treatment plant operating cost and decreases the systems overall capacity. Reduction in hydraulic capacity lost in the system due to infiltration increases the occurrence of SSO's. The sand infiltration	Trustee Portal	N	Y	N	N	N	N	N	N	N																			

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					increases wear on pumps, pipes, screens and other mechanical equipment. This project will be an effort to rehabilitate the existing collection system by means of trenchless pipe and manhole lining. Repairing the system by trenchless methods will save time and money over conventional digging and replacing. Dauphin Island has plans to restore the public beach and private property lost from past hurricanes and tropical storms. For the restored property to be utilized for residential or commercial development, this project would be required to coincide with the plan to restore the lost beaches on the west end of the Island. The new gravity sewer would provide service to the restored areas of the island that currently have no sewer service. The project objectives will be to restore system capacity and reduce SSO¿s within the collection system and at the waste water treatment plant, and prevent exfiltration of wastewater into the groundwater, surrounding bays, the intercostal water way and the gulf.																													
Water Supply and Distribution Improvements	11714	Vaile Feemster	Mobile County	2300000	As south Mobile County continues to recover, as it grows and becomes more viable with each passing day, so must the water infrastructure to support such prosperity. The planned improvements will provide reliable pressure and fire flow improvements to areas that currently experience problems during peak water demand periods. The upgrades proposed will provide the Town of Dauphin Island with reliable drinking water flow and fire protection to support economic development. Dauphin Island currently has only one reliable source for drinking water, a deep aquifer well. The well source can be susceptible to mechanical failure, and any well source can be susceptible to environmental contamination. Dauphin Island has plans to add an additional deep aquifer well that would serve as a second reliable raw water source for the businesses, residents and visitors to the Island.	Trustee Portal	N	Y	N	N	N	N	N	N	N																			
Dauphin Island Emergency Response Personnel Storm Shelter	11712	Vaile Feemster	Dauphin Island	3200000	Dauphin Island seeks to create a "base of operations" that will be protected during storm events. In the past, equipment and materials stored in the weather had to be relocated off the Island for protection during the threat of tropical storms or hurricanes. The proposed building would have the ability to house generators, backhoes, trucks and other equipment necessary to carry out storm damage relief operations. The reinforced building will be constructed above the 500 year flood plain to protect equipment and personnel from wind and rising storm surges. The shelter would allow for a faster response to emergencies, human and environmental, that have a tendency to occur after a storm.	Trustee Portal	N	N	N	N	N	N	N	N	N																			
Wastewater Treatment Facility Rehabilitation	11710	Vaile Feemster	Dauphin Island	6800000	The Dauphin Island wastewater treatment plant discharges directly into the waters of Aloe Bay and the Mississippi Sound. Providing adequate treatment involves many components and a complex series of events for the proper biological breakdown of waste matter. The improvements will allow Dauphin Island to continue meeting its effluent discharge permit limits set forth by the State of Alabama and US EPA. The waters around the outfall are permanently closed to shellfish harvest and recreation activities due to this discharge. Dauphin Island recognizes the ongoing struggles of fishermen, and is aware of the commercial and recreational values these waters potentially hold. Although the wastewater plant continually meets State and EPA permitting limits, these waters will forever remain closed to seafood harvesting and	Trustee Portal	N	Y	N	N	N	N	N	N	N																			

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					recreational activities unless the outfall is relocated. Major components of this project would include: - Relocation of the wastewater discharge outfall - The project would relocate the outfall from Aloe Bay to a possible ocean discharge thereby providing less environmental impact and allowing Aloe Bay to be safely open for oyster reefs and recreational activities. - Mechanical upgrades - The project would provide upgrades to mechanical equipment to increase the reliability of the treatment process. - Computer monitoring system improvements ¿ The project will provide 24 hour monitoring of the facility and communication with operators. Improved facility monitoring and communication will include remote alarms to notify operators of mechanical failures and help to prevent overflow events. - Structural improvements - The project will provide a needed rehabilitation to existing wastewater process tanks. The rehabilitation will stop partially treated wastewater from leaking and possibly contaminating the bay. - Create a living shoreline - The project will include establishing approximately 400 feet of living shoreline along Aloe Bay on property adjacent to the wastewater treatment facility. The living shoreline will provide protection against erosion, improve water quality and create habitat for aquatic and terrestrial species.																												
Laguna Cove , Little Lagoon- A Resource Protection Project	11688	Walter C. Ernest, IV	Gulf Shores	3000000	The acquisition of coastal wetland property is a means of providing a source of mitigation for the environmental and economic damages that resulted from the Deepwater Horizon incident. This project consists of the fee simple acquisition of the two Laguna Cove tracts located on Little Lagoon. These two tracts total 53 acres and 6091.251 linear feet of shoreline on Little Lagoon. These parcels are in close proximity to the USFWS Bon Secour National Wildlife Refuge. There is also 2880.193 of road frontage on West Beach Boulevard (Al Hwy. 182). This land acquisition project will allow future resource recovery activities to be conducted on these sites. The activity of land acquisition has been identified as an important factor in the resource recovery process by the Mabus Report and federal and state resource trustees. The Land Trust Alliance Southeast Program's Gulf Coast Partnership for Land Conservation (GCPLC) has also identified protection of ecologically sensitive properties gulf wide as a high conservation priority. The Erie Meyer Foundation owns both of these parcels. The owner has been identified as a willing seller. The property has high development potential. A 69 acre marina and 69 upscale lot subdivision has previously been permitted for development by the owners. Little Lagoon has been nominated by the State of Alabama¿s Coastal Resource Advisory Committee as a Geographic Area of Particular Concern designation candidate. The Little Lagoon Pass was closed off during the Deepwater Horizon Oil Spill. Little Lagoon is culturally valuable for its serene beauty which provides a natural recreation area with white sand beaches, nature walks, bird watching, and guided wildlife tours The acquisition of these two tracts would provide additional public access to Little Lagoon and mitigate for any natural events that may have occurred while the lagoon pass was closed off during the Deepwater Horizon oil spill. The site would be an ideal location for a Cit y of Gulf Shores nature preserve or a future addition to the Bon Secour National Wildlife Refuge. The Weeks Bay Foundation is a nationally accredited land trust by the Land Trust	Trustee Portal	N	N	Y	N	N	N	N	N	N																		

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					Accreditation Commission. The Foundation has the ability to provide technical assistance for this fee simple transaction. The Little Lagoon Preservation Society and the Erie Hall Meyer Charitable Fund will also serve as a conservation partners																												
Continued Shrimp Fishing Effort Data Collection Through the Use of an Electronic Logbook System in the Gulf of Mexico	11685	Judy Jamison	Gulf of Mexico	500000	Because the red snapper stock of the Gulf of Mexico is classified as overfished, the National Marine Fisheries Service has regulated the directed commercial (IFQ system) and recreational (size and trip limits and closed seasons) red snapper fisheries to reduce mortality of large juvenile and adult fish. To reduce the fishing mortality of small juvenile fish, the NMFS has also regulated the shrimp trawl fishery; a fishery that is thought to bottleneck adult populations. Disagreement has existed regarding the magnitude, age composition, and monthly distribution of shrimp trawl red snapper bycatch in time and space. The Foundation completed a research study that augmented the collection of electronic logbook (ELB) data through the use of observers in the fishery. The goal was to enable the fishing industry to evaluate and address fishery management issues, including the estimation of shrimp fishing effort and bycatch. The ELB was developed by LGL Ecological Research Associates, Inc., to directly measure shrimp fishing effort, thereby reducing the dependence on modeling to provide better estimates of effort and red snapper bycatch. Over the course of a 3 year pilot study, ELB systems were placed onboard commercial shrimp fishing vessels to collect fishing effort data. Results from this study indicated that the ELB system accurately estimated the fishing practices of a vessel on a per trip basis and that individual tows could be identified. Currently, shrimp fishing effort data recorded by ELBs are used as a proxy for estimating red snapper bycatch mortality in the offshore shrimp fishery. We propose to continue the Foundation's ELB observer program that collects data with the ELB system and observers to make the results of the previous work more robust. Importantly, this will increase the data available to verify models used by scientists to compute red snapper bycatch levels within the fishery. Specifically: 1) Complement an electronic logbook (ELB) study with onboard observers to collect data on fishing effort, red snapper bycatch, and shrimp landings within the Gulf of Mexico; 2) Analyze all observer collected data to further ensure that ELB landings estimates are accurate and defensible; and 3) Determine the spatiotemporal abundance of juvenile red snapper, compute a total mortality (Z) estimate for shrimp-trawl red snapper bycatch, and conduct a formal cohort analysis (VPA) on all observer collected red snapper data. The ELB program is vital to managing the shrimp and red snapper fisheries in the Gulf and needs to be continuously funded, especially as the impacts of the Deepwater Horizon oil spill become better understood.	Trustee Portal	N	N	N	N	N	N	N	N	N																		
Introduction and Evaluation of New Designs of Propellers and Nozzles in the Gulf Shrimp	11680	Judy Jamison	Gulf states	750000	A combination of increased operating expenses and reduced ex-vessel prices for catch has created a perfect storm of economic hardship in the Gulf Shrimp Fishery. The fishing industry has worked to reduce costs of operation, but unfortunately, few new avenues for this exist. One major cost to the shrimp industry is fuel and there are potential avenues to reduce fuel consumption aboard vessels. One of these is improved propellers and nozzles for propulsion. A recent collaborative evaluation aboard one vessel by Texas	Trustee Portal	N	N	N	N	N	N	N	N	N																		

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Fishery for Enhanced Efficiency and Fuel Economy					A&M Sea Grant researchers and a shrimp company showed that fuel consumption was reduced by approximately 28% when replacing a traditional Kaplan propeller with a Rice Speed Propeller and match Speed Nozzle. These results closely resembled that of a similar study performed in Australia where 25% fuel savings was achieved. An older study showed a 5% reduction in fuel by changing only a Kaplan style propeller with a skewed propeller design without modification of the propeller nozzle. The scope of this project will involve rigging out several collaborating vessels throughout the Gulf of Mexico with new designs of propellers and nozzles (different from the traditional Kort nozzle). Evaluations of fuel savings potential during actual fishing conditions will be performed utilizing fuel flow meters. As many offshore trawlers are now encountering fuel bills of over $200,000 per year, demonstrations with this new technology could provide significant savings to the industry and contribute to our nation's goal to reduce fuel consumption. The results of this project will be shared with the fishing industry throughout the Gulf through printed reports, local workshops, and through direct contact with industry.																													
Multi-Function Vessel -- Aquatic Weed Harvester, Marine Trash Skimmer, Oil/Muck Dredge	11676	Louis E. Shenman	coastal Gulf of Mexico	1500000	Detailed Features - Proposed Multi-Function Vessel The multi-function vessel design for applications in the Gulf Coast Wetlands will be basically that of Alpha Boats Unlimited (ABU) Aquatic Weed Harvester(s) and/or Trash Skimmer(s)-(refer to ABU's website: http://www.alphaboats.com)...modified to contain the following features: 1. The HULL will be a "Mono Hull", rather than the traditional & conventional twin pontoon units previously designed and built for Aquatic Weed Harvesters & Trash Skimmers. Considering the added weight of larger engines, added fuel capacity & specially designed operating features necessary to deal with a wide variety of debris & materials anticipated to be found in the wetlands, they will be larger, more effective and able to be deployed in shallow wetland waters. 2. Rather than using paddle wheels for propulsion and steering, this unit would be equipped with a set of light weight individual rubber "twin tracks" (much like those used on "tanks"), each equipped with flights and each positioned along and outside of each side of the Mono Hull. We feel that traditional paddle wheels and propellers (which could cause "blowholes") are too restrictive to be as versatile as we wish, for this concept. Each "track" could be individually (and independently) raised and lowered (hydraulically) to enable these shallow-draft vessels to continue operating in "mud flats" when floating or when the hull bottoms out as the tide "goes out". The modifications to ABU's standard Aquatic Weed Harvester (and Trash Skimmer) would basically entail enlarging the Mono Hull to deal with the added weight of tracks, a larger higher horsepower engine (w/ sufficient HP to operate all systems), sufficient hydraulic pumping systems (to operate all systems), additional fuel capacity, increased debris load, the addition of an all-weather, 2-man cab (operator + 2nd person for safety reasons) w/ heating & air conditioning (able to operate in all seasons & under all weather conditions), etc., plus fabricating the Mono Hull pontoons of stainless steel (instead of a conventional steel hull with zinc anodes as an option) to deal with the salinity of the tidal water. Obviously, when the tide goes out, the tracks, which would be individually reversible and have variable speed in both directions, would	Trustee Portal	N	N	N	N	N	N	N	N	N																			

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					take over both precise steering and propulsion when the hull bottoms out. 3. The "multi-function" unit will be equipped with INTERCHANGEABLE/COMPATIBLE "HEADS" with "universal" mechanical connections to the main front lifting conveyor + quick-connect hydraulic connections to supply power to these systems, and with the capability of: a) harvesting aquatic vegetation and recovering floating trash & debris, plus b) the ability to mechanically & hydraulically dredge "oily muck" in the weed infested wetland areas' designed with a horizontal hydraulically powered auger-cutter (w/ left & right auger flights) to move materials from sides to the center head mounted slurry pump...to move the material to a barge or shore disposal site, the auger will be shrouded to confine turbidity and equipped with cutting bars to chop vegetation into pieces small enough for pumping. c) accumulate "oily water" liquids (both drainage and/or disposal) that will undoubtedly drain through the on-board storage areas on both the weed harvester(s), trash skimmers and/or the transport barges during operations. d) high pressure hosing systems to enable clearing of mud, weeds & debris from under permanently rooted vegetation and/or trees or plants. 4. OTHER CONSIDERATIONS: There is also the possibility of equipping the vessels with a twin propeller, hydrostatically-driven system for moving quickly back and forth from work sight to offloading sites. The prop systems would operate independently of the side mounted "track" systems and be able to be raised & lowered in order to get them out of the water when pulling out on land. Also, the units will be able to independently operate in both direction & speed, allowing for easy and precise maneuverability. NOTE: Both the "twin-track" and propeller systems, combined with the different "heads", will enable precise (horizontal & vertical) cutting and/or removal of materials. SUPPORT EQUIPMENT: Both the Harvesters & Trash Skimmers will have compatibly sized Support Equipment ("click" on the photos on ABU's homepage, http://www.alphaboats.com) to enhanced performance: a) Shore or Pier Conveyors - for offloading weeds at shorelines (down embankments or over a pier). b) Transport Shuttle Barges - to transfer weeds (or debris) from multiple Harvester(s) or Trash Skimmers while out in the water, thus eliminating non- productive round trip down time, should these vessels have to go back & forth to shore to offload recovered materials. c) Transport Tilt-Deck Trailers - to launch & retrieve Harvesters & Trash Skimmers, & haul them over the highway from site to site. It is anticipated that the final design, even with an enlarged Mono Hull, will still enable the vessels to be easily launched and retrieved (on a ramp or at shorelines) and transported over the highways, which will be advantageous in flexibly designating its usage to high priority locations. With 100's of pieces of these types of equipment in operation worldwide modification of the special Weed Harvester (or Trash Skimmer) unit(s) with interchangeable "heads", modified hulls, the addition of tracks and a larger diesel engine, etc., will not be a major undertaking.																												
Project Space Mop	11661	Matthew, Carrell	Gulf states	200000000	There are still vast underwater plumes of oil in the gulf to this day, killing everything in their path as they migrate around. These plumes are vast in	Trustee Portal	N	Y	N	N	N	N	N	N	N																		

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					size, and should not be underestimated as to their continuing devastating effect on gulf wild-life eco-systems. The remaining oil in the gulf needs to be completely accurately mapped using NASA satellite imaging and environmental deflecting technology. With accurate maps in hand, then crews need to be dispatched to go underwater with long siphons and siphon up the oil plumes to waiting tankers that will take the oil ashore for reprocessing. This reclaimed oil can be used to help fill the national strategic oil reserve and help to drive the price of fuel down a bit.. Once the oil is all "mopped up" then biologists can go into the areas that were saturated and assess the true environmental damage and remedies.																													
Fill borrow pits on north side of Dauphin Island	11667	Jeffrey Collier	Dauphin Island	5565000	This project will fill in holes dredged in the northern side of the barrier island of Dauphin Island, Alabama. The holes were dredged in May 2010 in response to the BP oil spill to build small sand piles and dunes as a defense against the surface oil slicks. The barrier island will likely breach at these areas in the next major hurricane if they are not filled. Such a breach will sever the developed portion of the island in two and destroy all the infrastructure. This project will fill the holes dug in 2010 with beach and barrier island compatible sands from an offshore source. Following a barrier island overwashing event on May 2, 2010, the Town of Dauphin Island constructed emergency sand barriers along the Gulf facing beaches. One sand barrier was constructed just south of Bienville Blvd, the main east to west road on the west end of the island, with the goal of preventing complete overwashing during a strong non-tropical or weak tropical storm. A second, smaller sand barrier was placed on the beach at or near the highest seaward elevation of the subaerial beach to contain oil on the beachface under typical conditions. A portion of the sand for these barriers was mined from 20 privately owned lots on the north side of Island's west end. Sand from the 20 lots was dug using backhoes up to within 40 feet of Mississippi Sound, creating "ponds" at those locations. Some of these "ponds" are now (April 2012) part of Mississippi Sound because of the rapid erosion of the north shore of the island typical after major overwashing events. It should be noted that the emergency sand barriers were successful. They prevented oil from depositing on a wide expanse of the beach and they have successfully prevented all island overwash to date. Dauphin Island did not experience the wide deposits of oil across the beach that other towns experienced. Later in 2010, the first sand barrier was kept and vegetated to establish a dune feature. The second, smaller sand barrier was sifted and redistributed in a flatter, more naturally-shaped beach berm. The condition of the ponds was not readdressed following the containment of the oil spill. These dredged holes have weakened the barrier island in these locations by narrowing the width of the island significantly. The island will likely breach through these areas in the next major storm. Such a breach will destroy the road and all the infrastructure to the houses on the western portion of the island. A quasi-permanent inlet could develop (like "Katrina Cut") at these hole/pond locations. The Town of Dauphin Island has identified a source of good quality sand already which could be used for this project. The sand source is a submerged shoal roughly 5 miles south of the eastern end of the island. The Town would like to provide those property owners wanting to fill	Trustee Portal	N	N	Y	N	N	N	N	N	N																		

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					the ponds on their property with hydraulically dredged sand from the designated borrow site. It is possible that this project could be done in conjunction with construction of the planned east end beach and barrier island restoration project. For this proposed project, filling of the holes, an estimated 350,000 cubic yards of sand will be needed to fill in the ponds of all property owners at a cost of approximately $5,565,000 (this cost estimate is for a project which is done in conjunction with the planned east end project).																													
Improving Public Access to Alabama Coastal Waters	11659	Walter C. Ernest, IV	Weeks Bay	902721	The Weeks Bay National Estuarine Research Reserve (Reserve) provides leadership to promote informed management of estuarine and coastal habitats through scientific understanding and encourages good stewardship practices through partnerships, public education, and outreach programs. In an effort to continue and enhance such programs it is recommended that funds be provided to construct a new public boat launch facility on the east side of Fish River and adjacent to the US Hwy. 98 Fish River bridge. This project is a means of providing a source of mitigation for the environmental and economic damages that resulted from public waters and public access boat ramps being closed during the Deepwater Horizon incident. There were limited public access boat ramps that could be utilized in Baldwin County, AL during the Deepwater Horizon disaster. This project will support the conducting of future resource recovery activities. Accessibility to best steward public trust coastal resources is important to federal and state trustees in the resource recovery process. Construction of a boat launch facility in the Reserve boundary will establish the needed infrastructure to support future disaster response and recovery efforts. This facility would be sited on Alabama Department of Transportation property. A recent Facility Master Plan Study and Design (September 2011) has determined the need for such a facility (http://www.outdooralabama.com/public-lands/stateLands/WeeksBay/AboutUs/MasterPlan/). In addition, this plan has sited the location for construction, provided designs for evaluation, and projected costs for construction and facilities at $ 902,721 (2011 dollars). The mission of the Weeks Bay Foundation is to protect the natural resources of coastal Alabama and provide assistance and support to the goals and programs of the Reserve. The Foundation is a land trust accredited by the Land Trust Accreditation Commission. The Foundation has the capacity to provide technical assistance for this project. The Reserve will serve as a primary partner on this proposal. This project will construct a new public boat launch facility and will improve public water access to the waters of Coastal Alabama.	Trustee Portal	N	N	N	N	N	N	Y	N	N																			
Stormwater Media Campaign	11651	Casi Callaway	Mobile, Baldwin Counties	160000	A Mobile/Baldwin county media campaign designed to inform the citizens of the Mobile Bay watershed of the imminent and serious threats of stormwater runoff. Project intends to use radio, television, and other marketing techniques to reach a very broad general population from the Mobile Bay Watershed area. The impacts from stormwater are relatively unknown to the general population, but the effects are very dangerous and could greatly impact the important work of restoration.	Trustee Portal	N	N	N	N	N	N	Y	N	N																			
Bypassing of Dredged Sands	11626	Lisa Hansen	Dauphin Island	5000000	This project will fund the incremental cost of improved sand bypassing at Mobile Pass. Specifically, this is the additional cost of disposal of beach	Trustee Portal	N	N	Y	N	N	N	N	N	N																			

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from the Mobile Ship Channel					quality sand around Sand Island Lighthouse, instead of (the federal standard) in the areas currently used for disposal. Dauphin Island, Alabama is located northwest of the ebb-tidal delta of Mobile Pass. The ebb-tidal system includes all of the shoals around Mobile Pass: the Dixie Bar shoals to the east and the Sand/Pelican shoal complex to the west. The ebb-tidal delta (the outer bar) is bisected by the southern end of the Mobile Ship Channel. Sediment is periodically dredged from this outer bar to maintain the channel to the economically vital Port of Mobile. Dredged sediments are typically placed in designated disposal areas along the channel in unconfined open-water. Placing dredged sediment in deep water areas permanently removes large volumes of sand from the littoral system (Morton 2008). About 20 million cubic yards have been dredged from the ship channel to maintain the channel since 1960 (total historical dredging including new widening work exceeds 43 million cubic yards). The natural littoral movement of sand is from the area of the ship channel to the beaches of the west end of Dauphin Island. Most of the dredged maintenance material is sand and much of it apparently has been disposed of offshore where it has not effectively rejoined the littoral system of the state. It is predominately beach quality sand that was on the beaches of Fort Morgan Peninsula, moved to the Dixie Bar area, then moved into the ship channel. Some portion of the dredged sands has probably moved up into the beach system but a report (Morton 2008) indicates that much of it is still offshore. The US Army Engineers Mobile District used $6 million in federal funding following the BP oil spill to place 1.4 million cubic yards of clean sand around the Sand Island Lighthouse between October and December 2011. Sand was dr edged from the designated disposal areas along the Mobile Ship Channel. This project was a "one-time effort, requiring special dredging equipment to deliver sand to the shallower waters around the lighthouse." In Press-Register article "Sand Island resurrected: Island is open to the public and tarball free," the Corps estimates the annual cost to dredge the ship channel with the type of dredge used to create the island as roughly $1 million. The Town of Dauphin Island is committed to working hand-in-hand with the Corps of Engineers in the future to continue placing beach quality sands dredged from the ship channel around the Sand Island Lighthouse to address the long-term problem of removing sand from the littoral system. This project proposes disposal of beach quality sand around Sand Island Lighthouse using sand dredged from the Mobile Ship Channel during the next 5 dredging cycles, or time between filling operations, at an estimated cost of $5,000,000. Dauphin Island is important not only for the residents but for the entire coastal system as it is the upland sand source for the Mississippi/Alabama barrier island chain. Dauphin Island protects south Mobile County from hurricane storm surge and waves as well as defines and protects the extremely productive estuary of the eastern Mississippi Sound.																												
Quantitative Fish and habitat assessment and	10104	Bob McClure	Gulf states	45000	A suite of tools that can be used from virtually any vessel of opportunity for collection of acoustic data and analysis software for assessment of substrate and habitat characteristics - as well as fish abundance and distribution in deeper waters. The BioSonics DT-X Digital Scientific Echosounder system is used for quantitative assessment of substrate class, submersed aquatic	Trustee Portal	N	Y	N	N	N	N	N	N	N																		

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monitoring, using scientific acoustics					vegetation (SAV; location, density, canopy height), and fish biomass (distribution and quantity). The calibrated, portable system can be deployed from virtually any vessel and data can be analyzed by trained personnel to provide unbiased, quantitative assessment of biological and physical environmental variables. BioSonics provides hardware, software, training, support, and technical services. Clients include NOAA/NMFS, Bureau of Reclamation, Tribes, Universities, and private consultants. Additional information available on web site.																												
Gulf Of Mexico Hatchery And Fisheries Restoration Consortium	11419	Lee A. Fuiman	Gulf of Mexico	60000000	Problem: The Deepwater Horizon Oil Release (DWH) caused environmental and economic damage to fisheries in the northern Gulf of Mexico. America must employ novel and effective approaches to restore both economic and environmental wellbeing of the affected fisheries. In addition, habitat destruction caused by hurricanes and other man-made causes (over-fishing, erosion and spills) have led to significant decrease in Gulf fish populations during the last decade. Solution: Marine aquaculture of key species can be employed to restore fisheries through restocking and to restore economic vitality through technology transfer and stimulation of small businesses resulting in job creation. This effort should be highly collaborative involving institutions in all five Gulf States as well as other national and international institutions, public and private, with significant hatchery technologies. Implementation Team: Gulf of Mexico Hatchery and Fisheries Restoration Consortium. - Gulf Coast Research Laboratory/University of Southern Mississippi (GCRL; lead institution) - University of Texas Marine Science Institute (UTMSI) - Louisiana University Marine Consortium (LUMCON) - Auburn University (AU) - Mote Marine Laboratory (MML) - University of Maryland- Baltimore (UMB) These institutions are leaders in marine aquaculture and stock enhancement research, implementation, and technology transfer for the northern GOM. The consortium is built on established relationships and will employ the highest quality science and economic approaches to implement, and transfer the technology to raise significant numbers of fish for fishery restoration and to stimulate private sector small business development. In addition to the implementation team, the consortium has established scientific, governmental agency and commercial advisory teams. Implementation Plan: The technology for aquaculture and fishery restoration of marine fish varies among species. This necessitates the collaborative invo lvement of these 6 leading institutions that have conducted research on over 10 of the most economically and ecologically important Gulf fish species. Among the species are those for which the technology to implement stocking, technology transfer, and business stimulation already exists. The species targeted for immediate implementation of stocking and technology transfer include Red Drum, Spotted Sea Trout, Red Snapper, White Shrimp, Bull Minnows, Croaker, Florida Pompano, Cobia, Greater Amberjack and Southern Flounder. Projected Results: The work of the consortium will result in advanced technologies for use by Gulf States fishery agencies and private industry. Similar efforts in the Mediterranean Sea led to a $1 Billion industry in 10 years. The 2007 NOAA aquaculture plan projects 75,000 jobs created for every	Trustee Portal	N	N	N	N	N	N	N	N	N																		

Project Information							Restoration Types Addressed											Programmatic Damage Assessment and Restoration Plan (PDARP) Criteria		Public Notice	Oil Pollution Act (OPA) Criteria (15 CFR 990.54)			Additional Criteria									
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					million tons of seafood produced by aquaculture. It is estimated that aquaculture of Gulf fish species would double the seafood output of the Gulf of Mexico ($700 Million in 2008). Additionally the recreational fishing industry (>$12 Billion in 2008) would realize expanded employment and business opportunities as natural populations are restocked with hatchery produced fingerlings.																													
New Marketing Tool for BP to Generate Sales For Local Merchants and Consumers Along Gulf Coast	11422	Ken Dugas	Gulf states		We have a new viral marketing platform to submit to your PR/Marketing Department for review. The program will help the merchants realize a tool that will help them generate sales and is cost effective for your firm. The merchant will offer a discount for their business on behalf of BP! This Platform developed for The New Economy, works in conjunction with a client's website or Facebook page, handles mobile marketing (free mobile app), provides tools for print publications (auto generates QR Codes), video commercial Indexed on search engines and social media broadcasting. Bp will be able to regulate a discount offer the merchant can promote to market their business. This marketing tool can be branded to BP and also to the merchant's business. Please contact Ken Dugas at 985-518-1388 oe email us for more information info@mediaadgroup.com	Trustee Portal	N	N	N	N	N	N	N	N	N																			
Finish the Cleanup underseas	11559	Joanne McClellan	Gulf of Mexico		I've heard nothing about BP finishing the job of cleaning all the oil off the bottom of the seabed - there is still an oil slick out there lying on the bottom of the Gulf at least 5 miles square - when are they going to clean that up????	Trustee Portal	N	N	N	N	N	N	N	N	N																			
Oil Re Mediation	11622	Tom Clark	Gulf of Mexico		I have a Product called Oil Digester that was approved to re mediate tar balls, Oil, Toxins etc. from the GULF. Go to web site www.bioremediationinc.com and this will give you more information on the green products we sell. This is a microbe that turns into water and carbon dioxide. Will not harm animal life not human life. I discussed with Senator Crowe to get a coalition together with Bio Companies and work together to remedy this situation.	Trustee Portal	N	Y	N	N	N	N	N	N	N																			
Leasing Commercial Red Snapper IFQ shares to Restore the Gulf	11620	Russell Underwood	Gulf states		For 40 years, I Russell Underwood have been a commercial Snapper fisherman. My livelihood depends on a healthy and abundant gulf, full of red snapper and many other species of fish. As we are all aware the BP oil spill has done much environmetnal damage to the ecology of the gulf and no telling what adverse things we could see down the road. We have seen that hatchery programs are not the best route to go as they do not seem to work. Being on many fisheries advisory councils and committees over the past years I have learned that there must be a certain amount of the snapper left in the water to spawn and reproduce, to ensure a healthy and abundant snapper population. I have not heard of any positive recovery plan for the reef fish in the gulf, therefore i propose that ep/nrda consider leasing a percentage of red snapper allocation IFQ shares that will remain unfished for five years to give the snapper time to spawn and reproduce abundantly. It is my belief that this would be to everyones advantage, commercial and recreational, to protect both resources and our livelihoods. This would ensure a healthy red snapper population for future generatioms and a viable Gulf of Mexico. As a IFQ shareholder I am willing to lease a percentage of my allocation to aid the gulf restoration project. Thank You, Russelll Underwood	Trustee Portal	N	N	N	N	N	N	N	N	N																			
Restoration Barrier Island	11619	Richard Schmohl	Dauphin Island		Dear Trustees of The NRDA, Feb. 8, 2012 We property owners of Dauphin Island are pleading with you to allocate monies for the	Trustee Portal	N	N	Y	N	N	N	N	N	N																			

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					restoration of the south west beaches of the island. Since the early 1950's we have watched the errosion cause loss of natural habitate to all wildlife. We planted sea oats and various compatibale vegitation over the years to protect the beaches for the wild life inhabitants while of course, protecting our investment. I don't pretend to know as much about the ecology of the coast, the sound and the wet lands but I have seen many changes for the worse of it all because of the damage to the barrier (Dauphin Island). Some benifits listed below should be the concern of all people because of the amount of square miles this island protects; Strengthen Alabama's only barrier island Protect Alabama's largest continuous salt marsh habitat in the Mississippi Sound Protect the oyster reefs that have gone into being brought back to life Protect the inshore estuarine habitats of the Mississippi that serve as important nursery areas for many commercial and recreational species that depend on this area Protect the Island from the forces of tropical storms and hurricanes that have damaged and eroded the beaches and dunes that have previously protected the Island. Dauphin Island acts as the protector of the mainland/Mobile County coastline. Help to re-establish critical nursery areas/dunes for sea turtles and other important animals such as the piping clover and other shoreline birds. Provide a protection for existing structures on Dauphin Island Contribute to the integrity of integrity of our neighbor state's barrier island's through improvement of sand movement westward through the littoral system and their marsh and oyster habitats. Last but not least, This area provdes the best tasting seafood in the nation and abroad! Thank You for yor consideration in this matter. Sincerely, Richard Schmohl																													
Treat Subsurface Contamination	11625	William Baird	Gulf states		In wetlands, oil exists below the surface of the sediments. Inject MicroSorb microbes into subsurface to degrade oil. Below beaches, oil is floating on the groundwater. With horizontal drilling, injection wells and recovery wells can be placed. Inject MicroSorb microbes with seawater into the injection wells. Mobilize the oil and recover oil in recovery wells. Separate oil and use recovered water to mix with microbes and inject into injection wells. If there are still oiled oyster beds, install parallel aeration systems on each side of the bed. Inject MicroSorb microbes onto the beds. The aeration systems will supply oxygen to the microbes and improve the growth of oysters. The microbes will destroy remaining oil. In deep water where there are plumes on the seabed, install an aeration system and apply MicroSorb microbes. MicroSorb Environmental Products, Inc. is in part owned by Oppenheimer Biotechnology, Inc. The Oppenheimer Formula was the best microbial product in the BP Biochem Strike Team Report on NCPPL products conducted by Dr. Portier of LSU. The Oppenheimer Formula is capable of destroying PAHs as well as light ends in crude oil. I have a patent pending on subsurface aeration systems. Oil in sediments, on oyster beds and in subsurface plumes can be treated and destroyed more quickly than nature can provide. If you would like more information, please contact me. William E. Baird, PE MicroSorb Environmental Products, Inc. 104 Longwater Drive, Norwell, MA wbaird65@aol.com	Trustee Portal	N	Y	N	N	N	N	N	N	N																		

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Reef Fish Restoration	11618	Wayne Werner	Gulf of Mexico		Fishermen along the Louisiana coast are seeing far less juvenile red snapper, as well as fewer juveniles in the grouper fishery since the BP oil spill of 2010. Because of the increased incidence of lesions and other problems we are seeing in the Gulf of Mexico I feel the NRDA program should have a policy to ensure the health of these fish stocks. Considering the issues of hatchery programs and other ideas which seem to have produced no positive results, some fishermen along the Gulf coast propose that NRDA lease a percentage of reef fish for a five year period. The current IFQ system allows leasing allocation of these fish to participants who are not commercial fishermen. Not harvesting these fish would allow them time to reproduce. This would be very conducive to restoring the health of our fishery in the Gulf of Mexico for the future of the United States.	Trustee Portal	N	N	N	N	N	N	N	N	N																		
Reef fish	11617	Donald Waters	Gulf of Mexico		I believe that the BP/NRDA process should explore the option of leasing commercial red snapper shares that will remain in the water to help ensure a healthy and vibrant red snapper fishery for years to come . By leaving a certain percentage of the fish in the water to spawn and reproduce will help ensure any damage to the red snapper fishery will be mitigated through a long-term leasing option. However, you would not want to lease too many fish as it will disrupt the processor/wholesaler industry and would negate any gains made by leaving spawning fish in the water to aggregate. I feel that this was imperative and will create a win win situation for both the BP/NRDA process and the stakeholders as a whole.	Trustee Portal	N	N	N	N	N	N	N	N	N																		
boat ramp	11601	r.d alexander	Wolf Bay		we need boat ramps on the north side of orange beach. there is a lot of boating in the bays.the terry cove ramps are a long way from wolf bay. the bp spill stopped us from using those. alot of fuel could be saved. the benefit list could go on and on.	Trustee Portal	N	N	N	N	N	N	Y	N	N																		
Shoreline, Marsh Restoration and Recovery	11623	Gary Cook	Mississippi		Install RZHO filled TECH Units with grass and trees Includes all labor, equipment, insurance and management. Completed Projects: Project location: Pass a Loutre Louisiana - Technical design advisory and provider of RootZone Humus blend RZHO for GS Bags (special container fill & consultation as to scientific accuracy of specific oleophilic microbes and ecological correctness/safety of container contents and container materials) (latitude: 29.069608, longitude: -89.230950). Mississippi coastal restoration projects which include shore areas from Pass Christian, MS to Ocean Springs beach and inland coastal areas. Projects in Hancock, Harrison, and Jackson Counties of Mississippi. Chief Scientist John Wear, Trident Environmental Services & Technologies, Inc., serves as lead consultant, designer, advisor for the Mississippi projects and developer of methods which ensure bioremediation and vertical accretion for marshlands plant growth, with strong root development and nature-cooperative land building that includes tidal and river flow sediment capture.	Trustee Portal	N	N	Y	N	N	N	N	N	N																		
A low-cost solution for a cleaner gulf	11598	Julia O'Neal	Gulf of Mexico		Clean up bays and estuaries by paying fishermen to bring in garbage. This is from a Brazilian architect who has been a mayor and a governor in Brazil and has won awards for his "green" activities and ideas: http://readersupportednews.org/off-site-opinion-section/60-60/9217-low-cost-solutions-for-a-sustainable-world Of course, there might be some haggling about how much to pay for the garbage, but if you set up an	Trustee Portal	N	N	N	N	N	N	N	N	N																		

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					ENDOWMENT with some of the restoration money, you could use some of that, in perpetuity, to keep the program going.																												
Fish River and Weeks Bay boat launchs and parking access.	11602	Dan Valentim	Weeks Bay		Directly and indirectly related to the BP/DWH spill: 1) The boat launch facility at the end of Baldwin County Road 1; (entrance to Weeks Bay from Mobile Bay), sustained damage as a result of response activites. During response, several vessels along with various types of booms were put in place in an attempt to prevent spill contaminates from making their way into the Weeks Bay and Magnolia River water systems. As a result, some sections of the seawall, (where the booms and vessels were anchored), bacame damaged by those anchors. There has been a temporay repair made to the seawall but a proper repair is what is needed. Otherwise, the entire seawall and adjoing parking lot will be in danger of complete collapse, most likely during the next tropical system. In addition, the high use of the ramp and associated pier resulted in damage with the use of the V.O.O program. The pier is in dire need of repair. 2) The boat launch facility at the US Highway 98 bridge and entrance to Fish River is also in need of repair. The ramp is still in fairly good shape however, the launching pier is in need of repair. But the single most important repair to this facility MUST be the parking lot. Numerous attempts have been made in the past to fill in the potholes. This is loosing battle as repairs never last. Again, a more lasting solution is what is required. I would suggest paving the paking lot with a good grade of ashpalt, (like the Weeks Bay launch). And beause so much of the available parking space was lost with the construction of the Weeks Bay Explorium, I would suggest paving all of the land under the US 98 bridge as well. Many users are forced to park in this area, (under the bridge), simply because there is no space to park in the launch parking lot. This results in numerous stuck vehicles because it's on muddy unimproved ground. In general, these two ramps are dealing with far more traffic than they were designed to. 3) And to that end, ther e is very very high need for more launching facilites all throughout southern Baldwin County.	Trustee Portal	N	N	N	N	N	N	Y	N	N																		
South Baldwin Wildlife Rescue and Rehabilitation Facility	368	Phillip West	Baldwin County	5500000	During the height of the Deepwater Horizon Oil Spill (DWI), some of the most disturbing and lasting images were those of oil-covered wildlife, primarily sea birds. Even though over 7,000 birds were counted as impacted by the oil spill, this estimate is believed to represent only a portion of the total birds affected by the spill. Although wildlife rescue efforts were unprecedented for this region during the DWI, these worthwhile efforts have effectively been disbanded for the south Alabama region. There is a great need for a permanent, full-time wildlife rescue and rehabilitation program for the South Baldwin (Orange Beach, Gulf Shores, Gulf State Park, Foley and Fort Morgan) region. Due to our location along the northern Gulf of Mexico coastline, we play a significant role for both seasonal migratory birds and for shorebirds, seabirds and waterfowl. We routinely witness injuries, entanglements, fatigue and illness among these and other species. When coupled with interactions with tourists, these unfortunate situations lead to negative perceptions about the communities in which they occur. Our goal with this project is to create a bona-fide, effective wildlife rescue and rehabilitation facility that will be (partly) open to the public and for educational groups. The	Trustee Portal	N	N	N	N	Y	N	N	N	N																		

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					project would offer meaningful response for wildlife emergencies and rehabilitation, provide significant opportunities for conservation education, and yet offer a worthwhile and unique experience for the regional visitor (i.e., ecotourism). Moreover, the project will prevent negative perceptions for those visitors and residents that encounter sick or injured wildlife, with little or no apparent effort made by any agency to offer assistance or care for the bird or animal. Several of the priorities of the facility and program will be: ¿ Provide staff and personnel to respond to wildlife emergencies ¿ Promote conservation and natural resource education and technical assistance ¿ Reduce huma n/wildlife conflicts ¿ Coordinate with and work closely with State and Federal resource management agencies in the interest of wildlife conservation and education There will be no land cost associated with this project, as the facility will either be located on city-owned property or will be donated by private interests. We do request this project be fully funded and maintained. Over time, we believe the project will become largely self-sustaining, with funds becoming available from private donations and endowments, but it is doubtful these would ever cover the full cost of operation, etc. PROJECT COST (ESTIMATE): $5.5 million for initial construction, staffing and equipment																											
Replacement for the Research Vessel Tom McIlwain	11541	Jeffrey M Lotz	Gulf states	1500000	- The Problem: The R/V Tom McIlwain - Old with high maintenance costs - Poorly designed for research and education programs - Energy inefficient - The Solution: A replacement vessel custom-designed for research and education - New with low maintenance costs. - Custom-designed for research and education programs - Energy efficient - The Cost: $1.5 M The University of Southern Mississippi's Gulf Coast Research Laboratory (GCRL) is a premier coastal and marine environmental research and education laboratory in Ocean Springs, Mississippi. GCRL has broad expertise in and knowledge of local marine resources and associated ecosystem function. Given its geographic location in the north central Gulf of Mexico, GCRL is strategically positioned to contribute to the assessment, restoration, monitoring, and education related to Mississippi's coastal and marine environments that were affected by the Deepwater Horizon (DWH) oil spill of 2010. Scientists at GCRL have conducted coastal ecosystem and marine resources research and education in the northern Gulf, especially in the Mississippi Sound, since 1947. The diversity of educational and scientific expertise within GCRL's faculty and staff is an asset to the State of Mississippi as it moves through the assessment, restoration, monitoring, and educational aspects of the Natural Resources Damage Assessment (NRDA) process. Critical to the Laboratory's role in assessment, restoration, monitoring, and education related to the DWH is its fleet of research vessels. Presently, GCRL's workhorse vessel is the R/V Tom McIlwain. This 55ft vessel provides GCRL and USM researchers and students access to near-shore and near-offshore sites for research and education on the natural resources of the Gulf of Mexico. Much of the research and education is done on behalf of Mississippi's natural resource agencies, The Mississippi Department of Environmental Quality (MDEQ) and the Mississippi Department of Marine Resources (MDMR). However, the R/V Tom McIlwain was built in the late 1970s and is reaching its expected useful	Trustee Portal	N	N	N	N	N	N	N	N	N																			

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					lifespan. Over the past year 30% of scheduled trips were cancelled or postponed due to mechanical failures. The cost of repairs from January 2011 to date is $65,000. As a platform for scientific investigation and education the McIlwain is faulty. It was never designed to be a research vessel and as a result lacks ideal stability and adequate deck space for investigations. In addition the McIlwain is on loan from the Environmental Protection Agency (EPA) and is not owned by GCRL. The Deepwater Horizon oil spill in the spring of 2010 highlighted the short comings of the vessel and the need for a replacement. Therefore we have developed preliminary plans for a replacement vessel. The proposed replacement is a catamaran-style, aluminum hull, 55ft by 22ft and draws 4ft. This vessel is a custom design that incorporates berthing for eight and will allow the vessel to be used for overnight trips. This new vessel is a modern, energy-efficient, low-emission, stable platform with adequate deck space for the education, assessment, restoration, and monitoring work related to the DWH oil spill, especially that on behalf of Mississippi's NRDA activities. The enhanced utility and operational range of the vessel will allow it to conduct virtually all biological or environmental sampling necessary to support the State's education, assessment, restoration, and m																													
BP Funded Coastal Restoration Project - Cat Island , Alabama	11582	Dr. John Dindo	Mobile County		Cat Island Alabama is approximately 1/2 mile from Marsh Island in Portersville Bay. This island along with Isle aux Herbs, Raccoon Island and Lady Island, constitute a network of habitats that provide a buffering for the mainland during hurricanes. Even more critical Cat Island has been the site of the largest nesting colony of herons, egrets and ibis in Alabama. Documented as a nesting site for over a hundred years, this island is the only one in Porterville Bay that maintains an area within the island above high tide. These areas support vegetation like Baccharis halimifolia (Groundsel tree) and Iva frutesscens (Marsh elder) the only semi-woody vegetation that can be used for nest building and located predominately on Cat Island. Alabama listed species are found nesting on this island the Reddish egret (Dichromanassa rufescens) and Little Blue Heron (Florida caerulea). This island is listed in the U.S. Coast Guard Rapid Response protocol as a site to be protected in the event of any type of spill because of this nesting colony. As a result of repeated hurricane this island has eroded from it original size back in the 1970's and 80's when I was studying the nesting populations out there. Please consider this island restoration project in the next cycle of NRDA funded projects	Trustee Portal	N	N	Y	N	Y	N	N	N	N																		
Increase the pace, quality and permanence of voluntary land and water conservation through the Partnership for Gulf Coast	11546	Julia Weaver	Gulf states	1000000	The Partnership for Gulf Coast Land Conservation project The Partnership for Gulf Coast Land Conservation (PGCLC) is a new coalition of local, regional state and national land conservation organizations devoted to advancing land and water conservation in the Gulf of Mexico region. This initiative is organized under the auspices of the non-profit Land Trust Alliance (Alliance) and is patterned after other successful land trust coalitions across the country. Today our membership consists of 25 national, regional and local land trusts operating in the Gulf States. The Partnership's mission is to work together across the five Gulf of Mexico states to increase the pace, quality and permanence of voluntary land and water conservation in the coastal	Trustee Portal	N	N	N	N	N	N	N	N	Y																		

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Land Conservation					region. Land trusts are community-based non-profit organizations that work with landowners to permanently conserve forests, rivers, farms, ranches and other natural areas critical to a sustainable environment and healthy, thriving communities. Through this project, the Partnership proposes to: 1. Increase the effectiveness and efficiency of land trusts in the Gulf Region. 2. Develop and promote a public policy agenda which will reduce the barriers to private sector conservation efforts and increase funding for acquisition and restoration. 3. Develop collaborative projects that will enable the land trust community and supporters to implement landscape scale conservation measures in the region. Collaborative projects may be built around water quality, critical habitat, or other criteria. 4. Participate in landscape-scale conservation planning in collaboration with other conservation partners (resource agencies and other non-government organizations) that prioritizes habitat for endangered and threatened species, improvements to water quality, connectivity to other protected lands, trust resources and important cultural and recreational features. 5. Participate in and coordinate our efforts with other ong oing conservation planning and implementation activities through entities suach as the Gulf of Mexico Alliance and the Gulf of Mexico Foundation and others.																												
Shrimp Restoration	11531	David Brockwell	Gulf states		We believe we have a very unique hatchery. We have been in the R&D stage for three years and believe we are the only commercial hatchery in the U.S. that has had success raising domestic shrimp at the hatchery level. As a Florida company, Scientific Associates is very concerned about the health of the gulf seafood industry including the fishermen, the processing plants, restaurants, and all those local businesses that depend on a thriving shrimp industry. Given the recent dramatic falloff in wild shrimp catch in the Gulf of Mexico, (which may or may not be related to the effects of the BP oil spill), there is a need to replenish the wild stocks in time for the 2012 harvest. Scientific Associates of Florida has perfected hatchery techniques so that they can produce hundreds of million of post larval shrimp (PL's, i.e. baby shrimp) , typically transported at the 10 days into the larval phase (PL10's). They have been raised in a closed, fully recirculating system that has now been in continuous operation for three years. There are no antibiotics used. The shrimp are free of disease. The PL's are first generation offspring coming from brood stock (mom and dad) taken directly from the Gulf of Mexico waters. With this technique, the shrimp can be raised in appropriate water conditions for the locations where they would be released, i.e. similar pH and salinity to maximize survival rates. This is an opportunity to restock the estuaries with hundreds of millions of viable larval shrimp and bring the Gulf shrimp industry back to health. This restocking program can be for a short duration or on-going. The available species are Litopenaeus setoffrus (gulf white shrimp) and Fartantepenaeus Duorarum (gulf pink shrimp). In order to change production to produce this product for Spring 2012, arrangements would need to be agreed fairly soon. Please feel free to contact me with any questions or suggestions and please feel free to pass this e-mai l along to appropriate individuals. Dave Brockwell President of Scientific Associates LLC 239-677-8914 or e-mail at dave@scientificassociates.us	Trustee Portal	N	N	N	N	N	N	N	N	N																		

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Alligator Bayou Bridge Project	11519	Daniel Dyas	Baldwin County		Let me begin by saying: Thank you all for your service to our State. I appreciate you sending the information about Restoration Project suggestions. I have one that I believe would meet the criteria and really benefit the Weeks Bay Watershed and Ecosystem. Along the Eastern Shore of Weeks Bay is a bayou that has historically (if not officially) been referred to as Alligator Bayou. I believe it got the name from the old alligator(s) that used to dwell there and feed occasionally on the Roh family's dogs. Forgive me, I digress. Inshore from Alligator Bayou is a large tidal marsh. I don't know its size, but it encompasses several acres of tidal wetlands. Sometime in the past, what was then referred to as Vernant Park Rd. (now Baldwin County Road 26) was extended across Alligator Bayou, effectively cutting off much of the flow in and out of this wetland. The wetland (a large part of which is East of County Road 26) is now stagnant and is in poor health as a result. The suggestion I would like to make is that we design and build a small bridge over Alligator Bayou and restore it to health. It would be necessarry to remove the earthen bridge and culvert that was built across the bayou years ago. Obviously, it would be ideal to remove the invasive species which have begun to proliferate in the wetland and restore it to its native state by bringing in native species. The bridge would allow the natural tidal flow and watershed drainage to the bayou to be restored and thus restore it to natural health, befitting Weeks Bay and all affected water bodies. As you know, the State of Alabama and the residents of Weeks Bay have been very diligent in woring to protect this precious resource. I believe this project would help advance that cause and continue to improve Weeks Bay's health and beauty for future generations. Please let me know if this is something that will be considered or approved. We have restored a tidal wetland on our family property just north of this p roposed project and I would certainly like to be involved in this proposed project.	Trustee Portal	N	N	Y	N	N	N	N	N	N																			
Dog River Scenic Blueway	11513	BJ Smith	Mobile County	430000	Dog River Scenic Blueway plans to promote habitat revitalization through outdoor recreation while growing the economic resilience of the entire Dog River Watershed through nature based tourism. Develop 10 kayak/canoe access points to the Dog River and its tributaries. Along with river signage and promotional pieces. People protect what they know. At this time there are few people with access to the Dog River. Few citizens of Mobile County know that every day they pass over, around and nearby the Dog River. The Dog River has few public access sites and is virtually unknown by most in Mobile County. Increasing the visibility of the Dog River with access points (ie parks and kayak/canoe putin-takeout spots) and promotional campaigns will develop a greater appreciation for the river and its tributaries. Kayaking and canoeing are great exercise. Walking along a shore or just sitting a looking at the water offer health benefits. Developing recreation on Dog River impacts restaurants, tourism, retail outdoor recreational sports sales, and others. Also exposing children to the river gives them a chance to discover careers in marine biology. It will also educate the public to our impact on the river. This is important because The Dog River's watershed is 65% degraded. It is basically a drainage ditch. Stormwater runoff, debris, and silt from Mobile County enter Mobile Bay and the Gulf of Mexico through a degraded Dog	Trustee Portal	N	N	N	N	N	N	Y	N	N																			

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					River. Placing an emphasis on the Dog River offers opportunities to improve the watershed; which encompasses 60% of Mobile County. This project is being developed with assistance from the National Park Service's Rivers, Trails and Conservation Program. The project is in its second year and has participants from City, County, State and Federal agencies as well as businesses and nonprofits. This project complements green way developments (trails). It links to Alabama Scenic River Trails. The project could leverage funds from City, County, State, Fed eral, Foundations, and Corporations. Cost of land acquisition is not included above since the City of Mobile owns the land for blueway access sites. One parcel is owned by the Mobile Area Water and Sewer Service. User fees would be unwieldy. Other funding could be available as the project progresses. Early funding from the CRF would be critical to move the planning along and develop the branding and signage. Maintenance by City and County as with other parks in the community. Also funding campaigns would be mounted by community groups active in blueway recreation.																														
Clean, Healthy, Resilient Dog River: Secondary Litter Traps	11517	Claire T. Wilson		240000	This project will address the need to prevent litter from entering Dog River from City storm sewers and roads via Dog River tributaries. The Bandalong Litter Trap and Deflection Boom will collect litter and debris in Moore Creek before it can be carried downstream to Dog River, Mobile Bay and the Gulf of Mexico. Litter and debris from the Dog River and its tributaries is a major source of pollution for the Dog River. The DRCR Keep It Clean Committee and the City of Mobile have worked with litter barriers for several years effectively trapping litter and debris in the shallows upstream where it is easier to remove. Alabama Department of Environmental Management (ADEM) finds that litter is the number one source of pollution in the headwaters of Dog River. Trapping the litter for removal is expected to reduce the amount of litter entering from Moore Creek and its tributaries by 80%. A clean river is a sign of a healthy eco system. A community can connect with a healthy ecosystem. Keeping the river clean by trapping litter may help residents see their impact on this important urban resource and change our view from drainage ditch to natural resource and may help on a larger scale by preveting trash from flowing into the ocean. Litter traps will be emptied by the City of Mobile 10-12 times per year.	Trustee Portal	N	Y	N	N	N	N	N	N	N																			
Clean, Healthy, Resilient Dog River: Moore Creek Litter Trap	11512	Claire Wilson	Mobile County	80000	This project will help prevent litter from entering Dog River from City storm sewers and roads via Montlimar Canal and Moore Creek. The Bandalong Litter Trap and Deflection Boom will collect litter and debris in Moore Creek before it can be carried downstream to Dog River, Mobile Bay and the Gulf of Mexico. Litter and debris from the Dog River and its tributaries is a major source of pollution for the Dog River. The DRCR Keep It Clean Committee and the City of Mobile have worked with litter barriers for several years effectively trapping litter and debris in the shallows upstream where it is easier to remove. Alabama Department of Environmental Management (ADEM) finds that litter is the number one source of pollution in the headwaters of Dog River. Trapping the litter for removal is expected to reduce the amount of litter entering from Moore Creek and its tributaries by 80%. A clean river is a sign of a healthy eco system. A community can connect with a healthy	Trustee Portal	N	Y	N	N	N	N	N	N	N																			

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Orange Beach/Gulf State Park/Gulf Shores Beach Restoration	11509	Phillip A. West, AICP	Orange Beach, Gulf Shores	14700000	The cities of Orange Beach and Gulf Shores, along with Gulf State Park (ADCNR) currently maintain an "engineered beach" along 16.2 miles of shoreline. In 2005, the project originally placed approximately six (6) million cubic yards of dredged, beach-quality sand along 16.2 miles of shoreline. Additionally, nearly 1.5 million sea oats and panic grass were planted in the project's dune feature, and 80,000 linear feet of sand fencing were installed at the base of the dune. The project later received 2006's "Top Restored Beach" award from the American Shore and Beach Preservation Association. Since its construction, the OB/GS/GSP beach restoration project has withstood damage from eight (8) named tropical storms or hurricanes, but has prevented any significant damage to Gulf structures during this time period. Beginning in 2008, the project has been impacted from Tropical Storms Gustav, Ike and Ida, with the damage having been collected and summarized in FEMA Category G project worksheets for each project owner. Currently, the two cities and Gulf State Park are working toward completing a permit application to repair the damage, per FEMA's guidelines and approved project worksheets, and to commence construction in Fall 2011 in order to meet a March 31, 2012 deadline for construction. However, because the damage being repaired does not meet "full" beach fill volumes, the Owner Group proposes to construct an "improved" beach fill project, which could be constructed in a more conventional manner, and offer even greater protection for landward structures and public infrastructure. The Owner Group members of Orange Beach and Gulf Shores believe the utmost consideration and priority be given to this project for the following reasons: 1. Providing additional, valuable storm protection for our residents and tourism industry; 2. Meeting FEMA deadlines and maintaining "eligibility" for Federal disaster assistance following Presidentially-declared storm events; 3. Facilita te the search for compatible beach-quality materials in Federal waters; 4. The project is currently being designed and permitted, and should be considered "shovel ready". 5. The project could have a significant, positive impact on the public's perception of area beaches. The beach restoration project is a vital component to maintaining the recreational viability of the area's beaches, and continuing to afford the protection to coastal structures and public infrastructure that prevents costly business interruption. This project, moreover, is shovel-ready and needs to be expedited in order to meet federal deadlines.	Trustee Portal	N	N	Y	N	N	N	Y	N	N																			
Ecosystem restoration research upgrades	11508	George Crozier	Dauphin Island	3000000	Restoration projects will be largely dependent on knowing the characteristics of the ecosystem prior to the disturbance. The analytical and assessment capacity of the Dauphin Island Sea Lab is currently seriously hindered by the inherent limitations of its principal research facility, a 60-yr old partially renovated military building constructed during the cold war. In order to properly support the State's capabilities in habitat and ecosystem restoration,	Trustee Portal	N	N	N	N	N	N	N	N	N																			

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					the building needs $3M for a thorough modernizing retrofit. The investment for the future is a good one at this location because the building was constructed to be atomic bomb proof and is therefore completely hurricane proof.												
Gulf Shores Oil Removal	11507	Steve Garman	Gulf shores		While monitoring the Gulf Shores beach coastline, it has come to our attention that significantly large mats of oil exist submerged along our shoreline. The enclosed map defines these areas. It is imperative that the ongoing strategy be put in place to ensure these concentrations of oil do not threaten the progress that has been made to date and our future environmental and economic stability. BP is actually trying to remove the deposits on a daily basis. Based on the information from the GCIMT, it is our opinion that technology does not exist at this time to properly and totally remove this material. Oil under sand, under water, on our beach is no different than oil in the marshes of Louisiana. The following information outlines an example of the quantity of oil we believe to be an imminent threat. Between map point 008 and 009 July 1 thru July 31, 400 linear feet of oiled area extending up to 65 feet from the waters edge, over 10,200 pounds of oiled material was removed in 9 days during this time frame. We believe this to be only a small portion of the oiled material. Therefore, please consider this letter a request from the City of Gulf Shores to place this project on the list for consideration of NRDA funding as soon as it becomes available.	Trustee Portal	N	Y	Y	N	N	N	N	N	N		
City of Fairhope- Fly Creek Restoration (Project #3)	11506	Jennifer Fidler	Fairhope	19000000	The City of Fairhope (Baldwin County, Alabama) is aware that the State of Alabama stands to receive 1 00 million dollars in early restoration funds provided by BP. Fairhope is one of the waterfront communities in Alabama that took a direct hit from the oil spill. The City is respectfully requesting $19 million in BP early restoration funds to restore the Fly Creek watershed. Fly Creek in northern Fairhope is an important watershed that drains most of northern Fairhope east to State Highway 181. This creek channel has changed over the years as a result of an accumulation of impacts. There is a large tract of property 104 acres under private ownership that is undeveloped and borders the creek. This project includes restoring the creek to its historic functioning capacity and acquiring the 104 acres and developing it into a stormwater quality and quantity treatment facility, a City park, and an arboretum. The design and implementation of the project will provide long-term water quality protection. Thank you very much for your consideration of this project.	Trustee Portal	N	N	Y	N	N	N	N	N	N		
City of Fairhope- Public Beach's Water Quality Treatment (Project #1)	11505	Jennifer Fidler	Fairhope	4500000	The City of Fairhope (Baldwin County, Alabama) is aware that the State of Alabama stands to receive 1 00 million dollars in early restoration funds provided by BP. Fairhope is one of the waterfront communities in Alabama that took a direct hit from the oil spill. The City is respectfully requesting $4.5 million in BP early restoration funds to restore and protect our public beach and North Bayview Park area along the Eastern Shore of Mobile Bay. The project includes water front property, a bluff, and park property that is elevated approximately 100 feet above the Bay. All stonnwater in the approximately 58 acre watershed drains to Mobile Bay. This drainage area receives stonnwater from the existing duck pond, N. Bayview Park where many animals are walked, and an existing residential neighborhood. All of	Trustee Portal	N	Y	N	N	N	N	N	N	N		

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					these factors work together to impair water quality at the park swimming beach. The proposed project includes the relocation of the park road to create a larger natural stormwater treatment, and quality in the form of constructed wetlands. It includes the routing and control, and treatment of stormwater from the N. Bayview Park. The City of Fairhope also owns a public park and beach from the Pier Street boat ramp south to the American Legion near Laurel A venue. There is nearly 200 acres in the watershed that drains through the park area. The park is also used by walkers, joggers, and citizens walking their dogs. As a result the water quality of the Bay is impacted. This phase of the project includes the construction of water quantity treatment, quality, and treatment. The stormwater quality will be treated through constructed wetlands. The implementation of this project will provide long-term water quality protection, and environmental protection of the public beach and park area. Preliminary cost estimates provided by professional engineers indicate tllis project will cost approximately $4.5 million. Therefore, the City of Fairhope requests consideration of this a mount to be granted to the City for implementation of the proposed project. Thank you very much for your consideration of this project.																													
Titi Swamp Wetland Purchase and Preserve (Project #2)	11504	Timothy Kant, A.C.M.O	Fairhope	500000	The City of Fairhope (Baldwin County, Alabama) is aware that the State of Alabama stands to receive 100 million dollars in early restoration funds provided by BP. Fairhope is one of the waterfront communities in Alabama that took a direct hit from the oil spill. The City is respectfully requesting $500,000 million in BP early restoration funds to acquire Titi Swamp located in south Fairhope east of Scenic 98 and south of Nelson Road on 62 acres of natural wetland. The project will include the purchase of the property from the private owner and the creation of a nature preserve and local wetland mitigation bank to restore it to full function. The swamp drains to Mobile Bay and acts as a large stormwater attenuation and treatment facility. The implementation of the project will provide long-term water quality protection for Mobile Bay. Thank you very much for your consideration of this project. Please feel free to contact our Public Works Director, Ms. Jennifer Fidler, with questions or if you need additional information. She can be reached at (251) 928-8003.	Trustee Portal	N	N	Y	N	N	N	N	N	N																			
Town of Dauphin Island Beach and Barrier Island Restoration Project Alternative 3	11503	Jeff Collier	Dauphin Island	28506000	This is an engineered shoreline restoration project for the approximate seven (7) miles of Gulf fronting beach on Dauphin Island. The Town contracted with South Coast Engineering, Inc. to develop templates to rehabilitate and strengthen Dauphin Island as a natural barrier and provide a "first line of defense" to protect critical economic and environmental resources in Mobile County. This particular project represents the initial phase of a more substantial project that will provide an increased level of protection for years to come. The Town of Dauphin Island will continue to work through all possible funding sources to secure the remaining $40 million +/- needed to accomplish that goal. Shoreline restoration and nourishment of barrier islands is critical to the overall health of the coastal Alabama environment and economy. Serving as a "first line of defense", barrier islands provide a physical barrier that protects coastal mainland infrastructure, salt marches that serve as havens for juvenile fish,crab and shrimp, oyster reefs that provide job	Trustee Portal	N	N	Y	N	N	N	N	N	N																			

Project Information								Restoration Types Addressed										Programmatic Damage Assessment and Restoration Plan (PDARP) Criteria		Public Notice	Oil Pollution Act (OPA) Criteria (15 CFR 990.54)			Additional Criteria									
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					opportunities for local residents and much more. The Town of Dauphin Island recently completed a comprehensive shoreline restoration project, complete with engineering design and sand source locations identified, that is "shovel ready". Serious consideration should be given to provide necessary funding :(or such efforts as the entire Alabama coastline is critical to our overall environmental and economic stability. In addition, better coordination with the Corps for improved use of quality dredge materials could also enhance coastal recovery and reduce costs associated with ~ture nourishment projects. It is imperative that shorelines and beaches remain healthy for future generations. Town of Dauphin Island Beach and Barrier Island Restoration Project Alternative 3 MEMO This summarizes the cost estimate for Alternative 3 developed by CP&E and SCE for the Town of Dauphin Island Beach and Barrier Island Restoration Project. The cost estimate for Alternative 3 developed for the Town of Dauphin Island Beach and Barrier Island Restoration Project ranges from $25,498,000 to $28;506,000 as shown in the attached tables excerpted from the draft repmi. The higher value, $28.5 million, is probably the appropriate single value at this time. Alternative 3 is the smallest island wide alternative developed for the Town. Alternative 3 consists of placing 1.1 MCY of sand on the west end and 0.24 MCY of sand on the east end. The good, clean, beach quality sand will be obtained from the identified offshore shoal and placed to widen the beach and build some dunes with vegetation and dune overwalks. On the east end, this alternative will restore the beach to conditions roughly 10 years ago and provide improved protection to the freshwater lake. On the west end it will essentially stabilize the existing shoreline, with a five year renourishment interval, by widening the beach on average 70 feet (after post-construction profile equilibration) with smaller dunes to reduce storm overwash in lower level storms. It should be noted that these design alternatives are flexible and thus if more funds are available you can obtain more sand and thus more protection for the west end infrastructure (e.g. Alternative 1 or Alternative 2). The project is designed at this time (draft plans/specs and pre-application coordination meetings with state and federal agencies) and ready to move forward towards permits and construction.																												
GulfQuest: National Maritime Museum of the Gulf of Mexico	11501	Tony Zodrow	Mobile	7000000	As we discussed, GulfQuest/National Maritime Museum of the Gulf of Mexico will be the first maritime museum in the U.S. to focus on the Gulf of Mexico and its coastal region- a museum that aspires to raise the profile of the Gulf of Mexico nationally and internationally through its exhibits, programs and events. To do so, GulfQuest will feature interactive exhibits and experiences, complemented by maritime artifacts, designed to encourage visitors to embark on their own quest to explore the Gulf of Mexico. This $64 million project stems from a public/private partnership between the City of Mobile and a private, nonprofit organization that is responsible for funding and producing the exhibits. The City of Mobile has entered the structural phase of construction for GulfQuest' s building (located by Cooper Riverside Park and the Alabama Cruise Terminal). The non-profit has engaged nationally-known exhibit design and fabrication firms (LyonsZaremba, 1220 Exhibits, Monadnock Media) to produce the interactive exhibits, simulators and	Trustee Portal	N	N	N	N	N	N	Y	N	N																			

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					theaters. GulfQuest is set to open in September 2012, and will attract an estimated 350,000 visitors annually. For the City of Mobile, GulfQuest ranks as the top priority for receiving economic assistance from Natural Resource Damage Assessment (NRDA) funds. We would like to investigate the possibility of this funding coming from a combination ofthe $100 million being managed by the State of Alabama and the $300 million overseen collectively by the five Gulf Coast states. In particular, the project partners are seeking $7 million in NRDA funds to help underwrite one-third of the museum's $20 million in exhibits and infrastructure costs. GulfQuest features many exhibits that focus on the environmental vitality of the five Gulf Coast states: - America's Sea-A large interactive model of the Gulf of Mexico that introduces visitors to the region's natural world including the Gulf's bathymetry, marine life, and vital habitats (bays, rivers and bayous). - Ocean Planet- Through this computer-animated visualization of our planet, visitors will engage in an interactive program that will highlight the Gulf of Mexico's relationship to the world's oceans. - Extreme Storms -A massive hurricane is entering the Gulf, calling visitors to serve as "emergency response managers" and make decisions that will affect the lives and livelihoods of Gulf Coast residents. - Offshore Rigs- Visitors will explore the technology of offshore oil/gas rigs and their relationship to the natural environment in the Gulf of Mexico, including the ongoing effects of the BP oil spill. - Deep Explorer- In this simulator, visitors will pilot a submersible to explore underwater features such as the Pinnacles off Alabama and Flower Garden Banks, a National Marine Sanctuary off Texas/Louisiana. ~ Great Gulf Challenge - Two teams of visitors will learn about environmental challenges that affect the Gulf, and compete to balance the various needs and interests impacting the Gulf Coast's environment. In addition to exhibits, GulfQuest will offer a wide range of educational programs for schools and groups, including classes that address environmental issues stemming from the BP oil spill and other topics related to the restoration and preservation ofthe Gulf Coast's natural resources and habitats. Also, GulfQuest will host workshops, seminars and special events for the public that will focus on the continued recovery of the Gulf region in the years following the oil spill. One of our goals is to educate youth and encourage them to consider pursuing educational endeavors and careers in maritime science and industry, including environmental efforts. As an educational attraction, GulfQuest will help ecotourism along the northern Gulf Coast rebound from recent declines. The effects of the BP oil spill on the City ofMobile have been both environmental and economic. Tourism is the #1 employer in the Mobile area, and most of the economic impact of the oil spill has been realized in this sector. Apart from Gulf Shores and Orange Beach, Mobile Bay hosts 2.5 million visitors and generates tourism revenues of $829 million annually. Tourism supports 16,000 jobs -the largest single employer in the Mobile area. The city has lost significant revenues from tourism since the April2010 spill. An economic study prepared by Dr. Semoon Chang of the University of South Alabama shows that GulfQuest will have an immediate and long-term economic impact in Mobile, the State of Alabama, and the Gulf region. The construction ofGulfQuest will have an estimated $37.5 million																													

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					impact in Mobile, generating $27.9 million in earnings and supporting 498 jobs over two years. So far, eight out of nine of the construction contracts have gone to companies in Alabama and Mississippi. Once it opens, GulfQuest will have an estimated $19.2 million annual impact, generating $9.1 million in earnings and supporting 419 tourism-related jobs annually. At this time, we are seeking your advice and counsel as a trustee representing the State of Alabama and the five Gulf Coast states in regard to the process of submitting a proposal for NRDA funding that can help underwrite GulfQuest in 2011 and 2012. Our request will be based on the significant educational impact of the museum's interactive exhibits, especially those that provide information on the Gulf's vast natural resources and encourage public understanding and appreciation of the need to preserve those resources for the future. Thank you again for taking the time to meet with us last week. We look forward to continuing this discussion on how NRDA funding could be utilized to help underwrite GulfQuest's interactive environmental exhibits.																													
South Shoreline of Dauphin Island	11500	Al Howes	Dauphin Island		Please consider restoring the South shoreline of Dauphin Island which protects all the natural habitat of the Mississippi Sound and the oyster beds and wetlands along the South shore of Mobile County.	Trustee Portal	N	N	N	Y	N	N	N	N	N																			
Oyster Reef Rebuilding in Grand Bay- Priority 1	11486	Organized Seafood Association of Alabama	Mobile County		Oyster Reef Rebuilding in Grand Bay Restoring the oyster reefs in Alabama waters will have multiple advantages including improving the marine environment, increasing seafood supply and employment and improving local and state economies. Having more reefs will also help increase marine life and improve water quality. The reason for giving Grand Bay the first priority is because these waters are less venerable to pollution. This project will be an asset to improvement of Alabama's marine wetlands, including any Oil damages that may have occurred. Over 90 percent of all marine life depend on marine wetlands at some stage in their life cycles. Restoration of the oyster reefs will provide long term benefits to local oystermen, processing plants (shucking houses), distributors, restaurants, etc. There is a long history of successful oyster reef rebuilding. Costs are recovered over a three to four year period. This is one of several oyster projects that were discussed at the June 8, 2011 public meeting at Five Rivers by Avery Bates. In a discussion at the end of meeting with Alabama Conservation Commissioner Mr. Gunter Guy, Avery Bates and B.G. Thompson, Mr. Guy requested that a separate recommendation for each oyster reef rebuilding be submitted by priority.	Trustee Portal	N	N	N	Y	N	N	N	N	N																			
Oyster Reef Rebuilding off east and west of Cedar Point - priority five	11493	Organized Seafood Association of Alabama	Mobile County		Restoring the oyster reefs in Alabama waters will have multiple advantages including improving the marine environment, increasing seafood supply and employment and improving local and state economies. Having more reefs will also help increase marine life and improve water quality. Rebuilding the reef off east and west of Cedar Point is ranked fifth in priority because these waters are more venerable to pollution but oyster conch predation oystering days are reduced by wave height. This project will be an asset to improvement of Alabama's marine wetlands, including any Oil damages that may have occurred. Over 90 percent of all marine life depend on marine wetlands at some stage in their life cycles. Restoration of the oyster reefs will provide long term benefits to local oystermen, processing plants (shucking houses), distributors, restaurants, etc. There is a long history of successful	Trustee Portal	N	N	N	Y	N	N	N	N	N																			

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					oyster reef rebuilding. Costs are recovered over a three to four year period. This is one of several oyster projects that were discussed at the June 8, 2011 public meeting at Five Rivers by Avery Bates. In a discussion at the end of meeting with Mr. Guy, Avery Bates and B.G. Thompson, Mr. Guy requested that a separate recommendation for each oyster reef rebuilding be submitted by priority. This is the fifth submission.																												
Oyster Reef Rebuilding in Bon Secour Bay (in the eastern part of Mobile Bay)- priority six	11492	Organized Seafood Association of Alabama	Mobile County		Restoring the oyster reefs in Alabama waters will have multiple advantages including improving the marine environment, increasing seafood supply and employment and improving local and state economies. Having more reefs will also help increase marine life and improve water quality. Rebuilding the reef in Bon Secour Bay is ranked sixth in priority because of the small number of oystermen who oyster there. This project will be an asset to improvement of Alabama's marine wetlands, including any Oil damages that may have occurred. Over 90 percent of all marine life depend on marine wetlands at some stage in their life cycles. Restoration of the oyster reefs will provide long term benefits to local oystermen, processing plants (shucking houses), distributors, restaurants, etc. There is a long history of successful oyster reef rebuilding. Costs are recovered over a three to four year period. This is one of several oyster projects that were discussed at the June 8, 2011 public meeting at Five Rivers by Avery Bates. In a discussion at the end of meeting with Mr. Guy, Avery Bates and B.G. Thompson, Mr. Guy requested that a separate recommendation for each oyster reef rebuilding be submitted by priority. This is the fifth submission.	Trustee Portal	N	N	N	Y	N	N	N	N	N																		
Oyster Reef Rebuilding off north and south of the mouth of east and west East Fowl River - priority four	11491	Organized Seafood Association of Alabama	Mobile County		Restoring the oyster reefs in Alabama waters will have multiple advantages including improving the marine environment, increasing seafood supply and employment and improving local and state economies. Having more reefs will also help increase marine life and improve water quality. Rebuilding the reef off the mouth of East Fowl river is ranked fourth in priority because these waters are more venerable to pollution but the risk for oyster conch predation is less. Oystering days are reduced by wave height. This project will be an asset to improvement of Alabama's marine wetlands, including any Oil damages that may have occurred. Over 90 percent of all marine life depend on marine wetlands at some stage in their life cycles. Restoration of the oyster reefs will provide long term benefits to local oystermen, processing plants (shucking houses), distributors, restaurants, etc. There is a long history of successful oyster reef rebuilding. Costs are recovered over a three to four year period. This is one of several oyster projects that were discussed at the June 8, 2011 public meeting at Five Rivers by Avery Bates. In a discussion at the end of meeting with Mr. Guy, Avery Bates and B.G. Thompson, Mr. Guy requested that a separate recommendation for each oyster reef rebuilding be submitted by priority. This is the fourth submission.	Trustee Portal	N	N	N	Y	N	N	N	N	N																		
Oyster Reef Rebuilding in east and west Heron Bay - priority three	11490	Organized Seafood Association of Alabama	Mobile County		Restoring the oyster reefs in Alabama waters will have multiple advantages including improving the marine environment, increasing seafood supply and employment and improving local and state economies. Having more reefs will also help increase marine life and improve water quality. Heron Bay is ranked third in priority because these waters are less venerable to pollution but the risk for oyster conch predation is greater because of higher water salinity.	Trustee Portal	N	N	N	Y	N	N	N	N	N																		

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					The Portersville Bay and the Heron Bay areas are very good areas. This project will be an asset to improvement of Alabama's marine wetlands, including any Oil damages that may have occurred. Over 90 percent of all marine life depend on marine wetlands at some stage in their life cycles. Restoration of the oyster reefs will provide long term benefits to local oystermen, processing plants (shucking houses), distributors, restaurants, etc. There is a long history of successful oyster reef rebuilding. Costs are recovered over a three to four year period. This is one of several oyster projects that were discussed at the June 8, 2011 public meeting at Five Rivers by Avery Bates. In a discussion at the end of meeting with Mr. Guy, Avery Bates and B.G. Thompson, Mr. Guy requested that a separate recommendation for each oyster reef rebuilding be submitted by priority. This is the third submission.																													
Oyster Reef Rebuilding in Portersville Bay outside the mouth of West Fowl River - priority two	11488	Organized Seafood Association of Alabama	Mobile County		Restoring the oyster reefs in Alabama waters will have multiple advantages including improving the marine environment, increasing seafood supply and employment and improving local and state economies. Having more reefs will also help increase marine life and improve water quality. The reason for giving Portersville Bay the second priority is because while these waters are less venerable to pollution the risk for oyster conch predation is greater. This project will be an asset to improvement of Alabama's marine wetlands, including any Oil damages that may have occurred. Over 90 percent of all marine life depend on marine wetlands at some stage in their life cycles. Restoration of the oyster reefs will provide long term benefits to local oystermen, processing plants (shucking houses), distributors, restaurants, etc. There is a long history of successful oyster reef rebuilding. Costs are recovered over a three to four year period. This is one of several oyster projects that were discussed at the June 8, 2011 public meeting at Five Rivers by Avery Bates. In a discussion at the end of meeting with Alabama Conservation Commissioner Mr. Gunter Guy, Avery Bates and B.G. Thompson, Mr. Guy requested that a separate recommendation for each oyster reef rebuilding be submitted by priority. This is the second submission.	Trustee Portal	N	N	N	Y	N	N	N	N	N																		
Upgrades To The Marine Science Hall	11484	George Crozier	Dauphin Island	3000000	The capacity to restore the natural components of the coastal Alabama ecosystem impacted by the Deepwater Horizon Oil Spill is completely dependent on our understanding and quantification of those ecosystem services and values that existed prior to the perturbation. DISL has been providing those very parameters for the better part of three decades and is one of the few institutions within the State that has that capability. The incident has more clearly established the dependence of the State's economy on those ecosystem values than ever before! The DISL physical plant is a 1950's era military base which has reached the limitations of its original design. The principal research center is the Marine Science Hall which originally housed the computer facilities of a Strategic Air Command radar tower. The building was partially renovated using National Science Foundation funding about 20 years ago but those upgrades are themselves aging and the facility needs dramatic modernization if the Laboratory is to be able to provide the services needed as demonstrated by the recent oil spill. Preliminary estimates have been developed for reconfiguring the Marine Science Hall, increasing research capacity and energy efficiency. These efforts	Trustee Portal	N	N	N	Y	N	N	N	N	N																		

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					indicate that $3 million is needed to bring the capabilities of the Laboratory to a level that will allow continued support of the State's needs.																												
Marine Environmental and Science Consortium Research Vessel Request	11482	George Crozier	Dauphin Island	3500000	The Marine Environmental and Science Consortium is comprised of 22 colleges and universities within the state of Alabama and centered at the Dauphin Island Sea Lab. The Sea Lab responded immediately to the recent oil disaster with manpower and vessel time allocation. The R/V E.O. Wilson and the R/V Alabama Discovery were already scheduled for education and research activities before the spill and became maximized in use during the spill and continue to be used to collect data related to this event. The vessels also need to support ongoing research and educational efforts that were initiated pre-spill. However useful our existing ships were, we have discovered many shortcomings in the use of our fiberglass decked /hulled vessels with regards to heavy equipment use and deployment. Also, there are multiple requests by state-wide scientists asking for costs and dates to utilize our vessels in response to the RFP's related to the immediate and long term sampling near and offshore of Alabama. Currently at the rate of these requests the sea lab cannot meet the demands or specialized use of these research efforts with the existing vessels. In addition, many of these missions require the ability to stay offshore for extended periods of time (2-5 days) and neither of the vessels currently operated by the sea lab can meet this need. Many of the requests coming in require equipment, and power generation that does not exist on our current vessels and would be simplified by a steel constructed vessel. With these concerns a vessel of seventy feet with full berthing for scientific party and crew is needed. A vessel of this class would support a larger generator, winches, computer linkage, and sample storage to meet the demands of researchers within the state of Alabama. Previous estimates for a fully equipped steel hulled research vessel have ranged between $3-3.5M.	Trustee Portal	N	N	N	N	N	N	N	N	N																		
State-owned and operated public boat-launch facility on Old River	11480	Phillip West	Orange Beach	2200000	The original project's development, which was proposed to the State in recent years. The project was never implemented, however, yet we (the city) completed the design, engineering and operations plan for the boat launch. As proposed, our expected cost to complete construction was $2.2 million. However, even though there are attached plans and artistic renderings of the project as developed by the City,it is not expected that the State would necessarily construct the project along the same lines. Why a New Boat Launch? Boat registration is increasing at the same rate as the population increase in Baldwin County: 2.6 % annually; In 10 years, boat ownership will have increased from 21,208 to 27,414. Boating access is increasing in demand, proportionally. Facility Highlights 112 parking spaces (reduced from 175) ~ 5 acres (total: landscaped area+parking) Full-time staff: manager (+ part-time cleaning crews) Hours of Operation: Daylight hours, only Seasonal operation: April thru September NO asphalt: use of pavers, other pervious surfaces Landscaping: -Native dune vegetation: sand live oak, saw palmettos and sea oats -Landscaped island berms¿screening -Vegetated berms along perimeter -Ground level, low-wattage lighting (motion activated) Facility Use "Fee-based" use (free to Orange Beach residents and _________________) Marine Police/Marine Resources "precinct" No commercial access/use	Trustee Portal	N	N	N	N	N	N	Y	N	N																		

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					permitted Other pertinent information Will require a no-wake zone from just outside the mouth of Old River to the Ono Island bridge																												
Fisheries Oceanography of Coastal Alabama: Restoration and Sustainability	11478	George Crozier	Dauphin Island	1500000	The Fisheries Oceanography of Coastal Alabama (FOCAL) program at the Dauphin Island Sea Lab has been in operation since 2004 and provides a fisheries management and restoration resource for the Department of Conservation and Natural Resources' Marine Resources Division (ADCNR/MRD). The FOCAL program is economically relevant to the State of Alabama as it provides valuable information about fisheries health and sustainability to ADCNR/MRD. FOCAL is currently funded by ADCNR/MRD through Hurricane Katrina EDRP funds. Without further funding, sampling efforts will cease in December 2011. The FOCAL database of baseline conditions and ecosystem variability provides important pre- and post-impact data to assess acute and chronic effects of the Deepwater Horizon (DWH) oil spill on plankton communities, including the early life stages (eggs and larvae) of critical fishery resources. This program is essential to restoring Alabama's Gulf Coast to pre-DWH conditions. FOCAL provides a road map and waypoints for managing Alabama's coastal fisheries thus restoring recreational and economic use of our nearshore waters. Below, we address each of the criteria that are required of NRDA restoration projects. 1. Suggested projects should contribute to making the environment and the public whole by restoring, rehabilitating, replacing, or acquiring the equivalent of natural resources or services injured as a result of the Deepwater Horizon Oil Spill or response (collectively, "incident"), or compensating for interim losses resulting from the incident. Without clear metrics for success, restoration efforts often result in uncertainty. It is important to note that the valuable herring fisheries of Prince William Sound did not collapse until 4 years after the Exxon Valdez accident (http://www.evostc.state.ak.us/recovery/status_herring.cfm). Gulf menhaden occupy a similar niche in the northern Gulf of Mexico in that they are important prey species for recreationally sought after spec ies (e.g., king mackerel and cobia) and represent the second largest fishery (by weight) in the United States. Through identification of fish eggs and larvae, FOCAL scientists ascertain information about the recruitment and resilience of prey species such as Gulf menhaden, longspine porgy, Atlantic croaker and spot, as well as commercially and recreationally important species such as red snapper, red drum, Spanish mackerel, and cobia. Separating "real change" resulting from the DWH spill from the routine variability of the coastal ecosystem is a complex task. FOCAL scientists have 6 years of experience in interpreting the effects of physical factors (salinity, temperature, freshwater inflow) on the marine fisheries resources of Alabama. As Alabama's coastal fisheries recover from the post-DWH food web collapse, FOCAL provides certainty regarding rehabilitating and restoring fisheries commodities. 2. Suggested projects should address one or more specific injuries to natural resources or services associated with the DWH incident. FOCAL was in a unique position to respond immediately to the DWH oil spill due to an established 6 year sampling schedule designed to address ADCNR/MRD fisheries management goals. FOCAL responded to the DWH spill by doubling	Trustee Portal	N	N	N	N	N	N	N	N	N																			

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					the sampling effort both during and after the spill (from May through December 2010). Because of its geographic proximity and the ongoing research program, FOCAL was able to mobilize quickly and capture impacts of the DWH spill that might otherwise have been missed. Data collected in the days, weeks, and months post-DWH point to a number of relevant findings: Oil and the Food Web - FOCAL researchers confirmed that carbon from the DWH spill entered the marine food web in amounts equivalent to that of one to two months of photosynthetic production from phytoplankton. - Bacteria dominated the food web after the spill causing a collapse of the classical marine food web and the dominance of the microbial food we b. This is significant because it represents a shift in the normal food available to zooplankton, which in turn serve as food for larval fish. Post DWH Hypoxia - Hypoxic (low oxygen) zones also were observed during summer 2010 in the FOCAL sampling area (Alabama coastal waters) where they had not been observed before. - While it is unclear if DWH was the ultimate cause of hypoxia, it is possible that hydrocarbons from the spill or applied dispersants caused mortality of planktonic and nektonic organisms, and that dissolved oxygen (DO) levels plummeted due to bacterial degradation of organic matter. Another hypothesis is that the pulse of organic carbon in the form of DWH hydrocarbons was rapidly taken up by heterotrophic microbes, which in turn caused a spike in biological oxygen demand that drove down DO levels. Fisheries Resources - Genetically-identified fish eggs collected during the height of the spill identified which fish early life stages were most at risk, including Spanish mackerel, king mackerel, and red snapper. - Abundances and distributions of fish larvae collected during the oil spill are currently being compared with historic FOCAL data (2004-2009) to determine what effect, if any, the spill had on fish reproduction. Data collected by FOCAL have been fundamental to discerning potential ecosystem effects of the DWH spill, and clearly they will be invaluable to the recovery process. However, the value of past FOCAL sampling will become limited if sampling is not continued such that chronic effects of the DWH spill to larval fish and plankton communities can be investigated. There are a number of possible implications from these findings that are relevant to fisheries management and production. For example, if oil, by enhancing the microbial food web, interfered with normal primary production (photosynthesis in phytoplankton), the flow of energy (food) to higher organisms could be reduced, thus reducing the amount of energy flo wing into fisheries, thereby reducing fisheries production Previously unobserved hypoxic zones could have impacted spawning habits of fish and fish community species composition. 3. Proposed projects should seek to restore natural resources, habitats or natural resource services of the same type, quality, and of comparable ecological and/or human use value to compensate for identified resource and service losses resulting from the DWH incident. FOCAL seeks to provide accurate information such that ADCNR/MRD may manage coastal fisheries as efficiently as possible. This restores the ecosystem services provided by the fisheries and increases and sustains the human use value of our coastal waters by insuring healthy and open fisheries. Furthermore, by quantifying the decrease and shifts in the planktonic																														

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					community resulting from the DWH spill and how that loss affects the food web and subsequent economic use of our waters it quantifies what we lost during the summer of 2010. In addition, the continuation of the FOCAL larval fish survey allows for pre- and post-spill comparisons of larval fish abundances and distributions, which can be used to assess the efficacy of ADCNR/MRD's habitat enhancement programs, such as Alabama's Artificial Reef Permit Areas. 4. Proposed projects are not inconsistent with the anticipated long-term restoration needs and anticipated final restoration plan. The FOCAL work plan has been designed and structured with MRD management goals in mind. Those goals are synonymous with long term fisheries health and sustainability. Meeting these goals also provides a benefit to other restoration projects in that it provides juvenile species for recruitment. The overarching goal of FOCAL has always been and will continue to be maximizing fisheries production and sustainability. It is important to note that NOAA/NRDA recognizes the FOCAL program as a valuable resource. As a result, FOCAL researchers (in collaboration with ADCNR/MRD) are working with NRDA to make the historic FOCAL baseline time series available for damage assessment and long-term restoration needs. 5. Projects should be feasible and cost effective. The FOCAL Program's consistency is well established. FOCAL's sampling regime, data analysis, and reporting process produce valuable results. The program's feasibility has been demonstrated since 2004. When the benefits of the program are weighed against the work effort, we believe it is a cost effective program. A one page budget summary is available upon request. FOCAL employees 79 scientists, technicians, students and interns. Sampling for FOCAL occurs monthly and includes boat, equipment, supply, and personnel costs. The resulting cost is approximately $1.5 million annually. Given the 4 year timeline of fisheries collapse post-Valdez, we feel that a 5 year program is appropriate in this instance to capture long term impacts of the DWH to Alabama fisheries. The program will restore and protect cultural and economic resources of the State of Alabama. Large areas closed to fishing during summer and fall 2010 (due to the presence of DWH oil over the shelf) not only had implications for the Alabama economy, but also disrupted cultural traditions all along the coast. By working together, FOCAL scientists can provide information that is invaluable to the State of Alabama in restoring fisheries resources. FOCAL scientists will work with MRD personnel to make data available, conduct the most relevant analyses, and provide scientifically supported answers to fisheries related questions on behalf of the State of Alabama. We welcome the opportunity to submit FOCAL's complete annual work plan and operating budget.																												
Wave and Currents Flume for Gulf Coast Marine Processes Research	11476	Russ Lea, Ph.D.	Gulf of Mexico	1500000	The many NRDA coastal restoration projects that will be considered as a result of the Deepwater Horizon Oil Spill will require engineering, modeling,and evaluation in terms of probability for success and long-term resiliency. Whether restoring, rehabilitating, or replacing natural coastal habitats, sophisticated models will have to be produced to ensure success and cost effectiveness. Many of the models for evaluating coastal processes could be achieved by using a two-dimensional wave and current flume system that has been built into the new Shelby Hall engineering complex at the University of	Trustee Portal	N	N	N	N	N	N	N	N	N																		

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					South Alabama. While the infrastructure for the wave and current flume has already been installed in the building, the equipment, monitoring, and computer controls have not been fully funded. USA has a long history in assisting the Alabama Department of Transportation, the Army Corps of Engineers, coastal towns, and coastal industries design coastal infrastructure and projects that can prevail in extreme coastal environments. The Department of Civil Engineering, in conjunction with USA's Coastal Transportation Engineering Research and Education Center (CTEREC), seeks to augment its physical modeling capabilities in the areas of coastal engineering infrastructure and environmental fluid mechanics research and education through the acquisition of a two-dimensional wave and current flume, and implementation of a web-based control system. The proposed equipment and instrumentation will enable faculty and students to perform dimensionally consistent scale modeling of two-dimensional fluid, fluid-sediment, and fluid-structure processes. These facilities will enable faculty and students to perform state-of-the-art research, and will enhance the educational experience of students at both the undergraduate and graduate levels through physical demonstrations of natural processes and the opportunity to perform interdisciplinary laboratory experiments. The proposed equipment is a long, two-dimensional wave flume with closed-loop recirculation and sediment transport capabilities. The flume section will be 28 m in length, 1 m in depth, and have a width of 1 m. A suite of complimentary instrumentation will also be purchased to collect data during experiments: gages for measuring wave heights, sensors for measuring water velocity, sonar units for mapping sediment contours (bathymetry), and high-speed cameras for imaging and particle tracking. Additional controls and infrastructure will be purchased to develop the web portal integration. A general location sketch is provided below. The proposed instrumentation and equipment will enable cutting-edge research in the areas of civil engineering, coastal engineering, environmental engineering, electrical engineering, and marine science. The single-element flume will allow simulation of two-dimensional fluid dynamics and fluid-sediment processes including wave transformation (breaking), cross-shore sediment transport (erosion and accretion), and biological transport. The proposed facility would provide opportunities for interdisciplinary, multi-institution, and institution-industry research. This new facility compliments the existing wave basin, providing very different capabilities, particularly those associated with verifying the mathematical models of transport of solid or liquid contaminants with the water currents. Another important capability for the new facility is the ability to use the internet for collaborative research at the new wave flume. The controls and instrumentation will include robust web interfaces allowing students and faculty at other Alabama research universities to use the facility to conduct their experiments. This feature, sometimes called a "co-laboratory" is patterned after the similar capability provided by the Pacific Northwest National Laboratory where unique microscopes and environmental instrumentation can be operated by researchers from around the world, once they have been trained on the instrument and their physical samples have been provided to PNNL. This will																											

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					provide new opportunities for Alabama universities as well as encouraging new and productive collaborations with our colleagues. The University of South Alabama's Department of Civil Engineering and CTEREC currently have demonstrated expertise in coastal engineering that is unique to the state of Alabama, as well as the Northern Gulf Coast. The proposed equipment and resulting facilities will have a profound impact on the ability of USA to serve as a leader in coastal engineering infrastructure research, and will constitute a unique research facility both regionally and nationally. Such a facility will promote state-of-the-practice and state-of-the-art training for undergraduate and graduate students in civil, coastal, and environmental engineering, as well as other related disciplines. Furthermore, K-12 curriculum units could be developed that will utilize the proposed instrumentation and equipment for educational purposes and outreach service. These units will make use of an integrated web-based Internet portal allowing K-12 teachers and students, as well as other academic institutions throughout the state of Alabama, to perform experiments and collect data via the web interface. The estimated cost of the flume, equipment, instrumentation, and control systems is $1.5 million.																												
Shoreline Restoration on Ft. Morgan Peninsula and Pine Public Access Boat Ramp	11473	Paul B. Looney, CEP, CSE, PWS	Baldwin County	13500000	Dixie Graves Highway (County Road 180) in Baldwin County is the northern coast road along the Ft. Morgan Peninsula in Baldwin County Alabama. For much of the distance of this road the northern shoreline is sufficiently wide that there is housing along the shoreline of Bon Secour Bay. In the vicinity of the boat ramp that is labeled Pine Public Access, near the intersection with Plantation Road the roadway is very close to the waters of the Bay. Comparison of aerial photography from 1992 and present conditions clearly show shoreline erosion from the end of the housing development to the completely undeveloped shoreline to the west. Existing conditions are actually less than the most recent aerial photography which shows a shoreline more than 110 feet in 1992 and approximately 50 feet in 2010. The 1992 photograph also shows nearshore sand bars along the shoreline indicating a sand source for feeding the beaches along the coast line. A current view from the roadway illustrates the issue more clearly with the road approximately 50 feet from the shoreline and a small pull off area for vehicle parking directly adjacent to the roadway. Boat launching clearly impinges smooth and safe traffic flow. This presents a public danger. Continued shoreline erosion will eventually cause roadway failure. Further to the west in the undeveloped lands, the shoreline beaches completely disappear and tree stumps can be found in the nearshore waters. The proposed project includes shoreline supplementation to include the restoration of marsh habitat and sand beach. Additionally, as a protection measure against continued shoreline erosion, the placement of specifically designed wave attenuation devices to reduce wave action on the shoreline is expected to provide some stabilization to the shoreline in the vicinity of the boat ramp. Public access improvements may provide a means to correct the existing safety concerns by allowing for safer launch and parking for public users. The u ndeveloped shoreline is in the ownership of the Alabama Department of Conservation and Natural Resources (ADCNR) from the end of the shoreline development to the	Trustee Portal	N	N	Y	N	N	N	Y	N	N																			

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					point associated with the Bon Secour refuge to the east. The project proposes supplementing the shoreline from the end of the housing development to the peninsula east of the boat ramp. Total project length is approximately 8,500 feet. With the addition of approximately 150 feet of marsh habitat and 50 more feet of sandy beach, the total restoration would entail the creation of approximately 30 acres of marsh habitat and add 10 acres of beach habitat to the existing shoreline. The total new width of replenished shoreline would amount to 200 feet with an additional 100 feet between the shoreline and the WAD (approx. 20 acres for shellfish and sea grass restoration). A total of 992,000 yd3 of additional material would need to be placed. This is proposed to be recovered from the regular maintenance of the nearby Intracoastal Waterway and using some of the existing dredge material storage locations found in nearby Mobile Bay. There is no requirement for land acquisition. The project would reset the shoreline to conditions present prior to development of the Ft. Morgan peninsula. In the vicinity of the boat ramp, the additional land will provide a small protected embayment for launch and retrieval of boats during stormy conditions. The WAD placement and new shoreline location will provide protection from continuing erosion in the undeveloped lands to the east. The created habitat and the calm waters between the new shoreline and the WAD shoreline protection would also provide excellent habitat for the restoration of seagrass habitat and the potential for the establishment of oysters on the WAD structures and the adjacent waters. Essential Fish Habitat provided by the calm waters could help in increasing the availability of finfish nursery habitat and thus assist in the recovery of the Mobile Bay comme rcial and recreational fisheries. The project is feasible and cost effective utilizing techniques that are already in place at other restoration sites in similar settings along coastal Alabama. The project specifically contributes to making the environment and the public whole through habitat restoration and shoreline protection. Habitat restoration and water quality improvement components of this project could compensate for resource losses resulting from the Deepwater Horizon incident. The ultimate project is consistent with long-term restoration goals in Alabama and along the Gulf Coast.																													
Old Plantation Park	11470	Jaime Podratz	Mobile County		Parks are an important part of our community it provides a place for children to play in the woods, on playground equipment, walk your pets, exercise, sit under a shady tree and enjoy a picnic. It's a place for wild life to reside, and a place to relax amongst friends in a game of disc golf. It is always a healthy place to spend the day. As a business if run right it can be a very profitable with little overhead and low start up cost. Old Plantation Park would be the first and only park in Tillman's Corner located on the corner of Old Pascagoula and Carol Plantation. It would be in the heart of Tillman's Comer, a populated community ten miles from Mobile but still in city limits. Old Plantation Park is two blocks from an elementary school, surrounded by businesses, apartment complexes and neighborhoods we would cater to everyone looking to relax and have fun. Old Plantation Park will also provide long term RV camping for a monthly fee of $ 500.00 which would include all utilities including cable and internet access. Old Plantation Park will have full facilities including restrooms	Trustee Portal	N	N	N	N	N	N	Y	N	N																			

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					with hot and cold showers and a laundry mat for our camping customers convenience. The park will have a Thirty Six hole disc golf course which will be the only double course in mobile which will enable us to hold professional disc golf tournaments that require thirty six holes. All Disc Golf tournaments are currently being played at two different Parks to fulfill the requirements. Old Plantation Park will be able to accommodate these large tournaments our Park Office will take care of the rest of their needs as far as disc golf equipment sales like discs, golf bags, stickers, and snack foods. An Admission Fee will be collected to enter the park to help maintain the facilities the admission fee will be $1.00 per adult or twelve years old and up and $.50 per child five to twelve years old and senior citizens or children under five years of age would get in free. Old Plantation Park will be o pen seven days a week three hundred sixty five days a year with an experienced committed to the goal of customer service. Our staff will consist of four Park Rangers and two office Personnel, who will work a split shift based on four ten hour days the first shift will work from Sunday to Wednesday and the second shift would work from Wednesday to Saturday 7:00am to 5:30pm. The Park will be patrolled by a security officer from 5:00pm to 11:00pm than relieved from 11:00pm to 7:00am by another security officer, who will stay in the office until a Park Ranger relieves them at 7:00am. As our community has become more health conscious it is essential that there are provided with a clean, safe environment to be active. In my opinion a community park is an essential landmark in town. It sends a message of environmental awareness and helps bring a community together. Now that our beaches are in danger our community needs a place to go and feel good about where they live a place to enjoy nature. Old Plantation Park will serve that purpose for Tillman's Corner and help people bring play time back into their day. A safe place to GO-PLAY, while making a profit for those involved. Please consider this as a project suggestion and help me get it up and running Thank you																												
University of South Alabama Medical Center	11469	Lawrence A. Gardner	Mobile	4300000	The University of South Alabama Medical Center is an acute-care University teaching hospital which offers unique programs and services for the citizens of the northern Gulf Coast region, thus enhancing the health and well-being of these residents. The Medical Center is located in a region that experiences high incidents of natural disasters. It is Alabama's only Level One Trauma Center south of Birmingham and is certified in both the Mississippi¿s and Alabama's Trauma systems. As such, it provides a systematic response to trauma that utilizes resources from all medical specialties to meet the needs of the critically injured patient at a moment's notice. This is accomplished with in-house trauma surgeons, anesthesiologists, and OR teams, 24/7. The hospital has a Burn Center that has earned national and international recognition for its contributions to the art and science of Burn treatment in the area of use of artificial skin. The Medical Center is a Memorandum of Agreement signature partner with the National Disaster Medical System, a part of the Department of Health and Human Services. The hospital building was constructed in the 1960's with an 11-story tower and basement level. The tower, from floors three through eleven, is clad with a metal curtain wall	Trustee Portal	N	N	N	N	N	N	N	N	N																			

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					and window system. The original design and construction did not include wind load and suction criteria appropriate for the coastal region. Through multiple hurricane events in the history of the building, portions of the exterior cladding has been blown or sucked from the building. The goal of the project is to reduce the potential for the facility to be rendered unusable due to a high wind event such as a hurricane. History has demonstrated that the facility is susceptible to damage to the exterior walls and serious water intrusion as a result of minor hurricane force winds. The objective of the project is to complete the upgrade of the tower building envelope so as to mitigate these potential pro blems. The replacement of the wall and windows systems of the tower will bring envelope of this part of the building up to current coastal region wind codes. The upgrade of the wall system will allow the hospital to function during and after a hurricane and continue to provide needed healthcare to the region.																													
Gulf Of Mexico Hatchery And Fisheries Restoration Consortium	11421	Edward Chesney	Gulf of Mexico	60000000	Problem: The Deepwater Horizon Oil Release (DWH) caused environmental and economic damage to fisheries in the northern Gulf of Mexico. America must employ novel and effective approaches to restore both economic and environmental wellbeing of the affected fisheries. In addition, habitat destruction caused by hurricanes and other man-made causes (over-fishing, erosion and spills) have led to significant decrease in Gulf fish populations during the last decade. Solution: Marine aquaculture of key species can be employed to restore fisheries through restocking and to restore economic vitality through technology transfer and stimulation of small businesses resulting in job creation. This effort should be highly collaborative involving institutions in all five Gulf States as well as other national and international institutions, public and private, with significant hatchery technologies. Implementation Team: Gulf of Mexico Hatchery and Fisheries Restoration Consortium. - Gulf Coast Research Laboratory/University of Southern Mississippi (GCRL; lead institution) - University of Texas Marine Science Institute (UTMSI) - Louisiana University Marine Consortium (LUMCON) - Auburn University (AU) - Mote Marine Laboratory (MML) - University of Maryland- Baltimore (UMB) These institutions are leaders in marine aquaculture and stock enhancement research, implementation, and technology transfer for the northern GOM. The consortium is built on established relationships and will employ the highest quality science and economic approaches to implement, and transfer the technology to raise significant numbers of fish for fishery restoration and to stimulate private sector small business development. In addition to the implementation team, the consortium has established scientific, governmental agency and commercial advisory teams. Implementation Plan: The technology for aquaculture and fishery restoration of marine fish varies among species. This necessitates the collaborative invo lvement of these 6 leading institutions that have conducted research on over 10 of the most economically and ecologically important Gulf fish species. Among the species are those for which the technology to implement stocking, technology transfer, and business stimulation already exists. The species targeted for immediate implementation of stocking and technology transfer include Red Drum,	Trustee Portal	N	N	N	N	N	N	N	N	N																			

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					Spotted Sea Trout, Red Snapper, White Shrimp, Bull Minnows, Croaker, Florida Pompano, Cobia, Greater Amberjack and Southern Flounder. Projected Results: The work of the consortium will result in advanced technologies for use by Gulf States fishery agencies and private industry. Similar efforts in the Mediterranean Sea led to a $1 Billion industry in 10 years. The 2007 NOAA aquaculture plan projects 75,000 jobs created for every million tons of seafood produced by aquaculture. It is estimated that aquaculture of Gulf fish species would double the seafood output of the Gulf of Mexico ($700 Million in 2008). Additionally the recreational fishing industry (>$12 Billion in 2008) would realize expanded employment and business opportunities as natural populations are restocked with hatchery produced fingerlings.																												
Gulf Of Mexico Hatchery And Fisheries Restoration Consortium	11412	Phillip G. Lee	Gulf of Mexico	60000000	GULF OF MEXICO HATCHERY AND FISHERIES RESTORATION CONSORTIUM Problem: The Deepwater Horizon Oil Release (DWH) caused environmental and economic damage to fisheries in the northern Gulf of Mexico. America must employ novel and effective approaches to restore both economic and environmental well being of the affected fisheries. In addition, habitat destruction caused by hurricanes and other man-made causes (over-fishing, erosion and spills) have led to significant decrease in Gulf fish populations during the last decade. Solution: Marine aquaculture of key species can be employed to restore fisheries through restocking and to restore economic vitality through technology transfer and stimulation of small businesses resulting in job creation. This effort should be highly collaborative involving institutions in all five Gulf States as well as other national and international institutions, public and private, with significant hatchery technologies. Implementation Team: Gulf of Mexico Hatchery and Fisheries Restoration Consortium. - Gulf Coast Research Laboratory/University of Southern Mississippi (GCRL; lead institution) - University of Texas Marine Science Institute (UTMSI) - Louisiana University Marine Consortium (LUMCON); - Auburn University (AU) - Mote Marine Laboratory (MML) - University of Maryland- Baltimore (UMB) These institutions are leaders in marine aquaculture and stock enhancement research, implementation, and technology transfer for the northern GOM. The consortium is built on established relationships and will employ the highest quality science and economic approaches to implement, and transfer the technology to raise significant numbers of fish for fishery restoration and to stimulate private sector small business development. In addition to the implementation team, the consortium has established scientific, governmental agency and commercial advisory teams. Implementation Plan: The technology for aquaculture and fishery restoration of marine fis h varies among species. This necessitates the collaborative involvement of these 6 leading institutions that have conducted research on over 10 of the most economically and ecologically important Gulf fish species. Among the species are those for which the technology to implement stocking, technology transfer, and business stimulation already exists. The species targeted for immediate implementation of stocking and technology transfer include Red Drum, Spotted Sea Trout, Red Snapper, White Shrimp, Bull Minnows, Croaker,	Trustee Portal	N	N	N	N	N	N	N	N	N																		

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					Florida Pompano, Cobia, Greater Amberjack and Southern Flounder. Projected Results: The work of the consortium will result in advanced technologies for use by Gulf States fishery agencies and private industry. Similar efforts in the Mediterranean Sea led to a $1 Billion industry in 10 years. The 2007 NOAA aquaculture plan projects 75,000 jobs created for every million tons of seafood produced by aquaculture. It is estimated that aquaculture of Gulf fish species would double the seafood output of the Gulf of Mexico ($700 Million in 2008). Additionally the recreational fishing industry (>$12 Billion in 2008) would realize expanded employment and business opportunities as natural populations are restocked with hatchery produced fingerlings.																													
Long-Term Recovery of Gulf Shorebirds and Waterbirds	11413	Jeff Trandahl	Gulf of Mexico	71900000	This collaborative proposal supports three strategies that contribute to the full recovery of shorebird and coastal waterbird populations impacted by the oil spill, while ensuring such gains are sustained over the long-term. Specifically, the work proposed will: 1) Create and maintain nearly 28,000 acres of seasonal freshwater wetland habitat that completely address the habitat conservation 'gaps' for five important shorebird species, as well as provide demonstrable benefits to an additional 41 species of shorebirds, waterbirds, and waterfowl affected by the oil spill. 2) Increase the regional breeding populations of 37 species of beach and island nesting waterbirds and shorebirds that were directly impacted by the oil spill by 10,000-16,000 birds by improved management of critical nesting and stopover habitat along the Gulf and Atlantic coasts. 3) Ensure bird population gains are sustained through long-term stewardship of their key habitats, thereby avoiding a common shortcoming of conservation actions - that is, diminishing returns over time because of lack of resources to maintain those initial gains. The plan proposed below will ensure the long-term recovery and health of Gulf Coast shorebird and other waterbird populations affected by the Deepwater Horizon oil spill. These strategies are meant to complement, not duplicate, other activities (e.g., coastal marsh and barrier island restoration) that are likely to be undertaken by others and funded through the NRDA process. Key partners include the National Audubon Society, U.S. Fish & Wildlife Service, Ducks Unlimited, American Bird Conservancy, Manomet, Coastal Bird Conservation/Conservian, and Gulf Coast Bird Observatory. In 2010 and 2011, NFWF directed more than $13 million in the Gulf region towards conservation of birds that were likely to be negatively affected by the oil spill. Those innovative investments, developed and implemented collaboratively with federal, state, and private partners, resul ted in unprecedented gains in habitat enhancement, restoration, and protection; direct augmentation of affected bird populations; and increased capacity for regional recovery of imperiled species. This proposal builds directly upon those initial investments.	Trustee Portal	N	N	Y	N	Y	N	N	N	N																			
Increasing Research Capacity in the Weeks Bay National Estuarine	11415	Walter C. Ernest, IV	Weeks Bay	2084830	The Weeks Bay National Estuarine Research Reserve (Reserve) provides leadership to promote informed management of estuarine and coastal habitats through scientific understanding and encourages good stewardship practices through partnerships, public education, and outreach programs. In an effort to continue and enhance such programs it is recommended that funds be provided to construct a laboratory to support coastal and estuarine	Trustee Portal	N	N	N	N	N	N	Y	N	N																			

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Research Reserve					science. The construction of an estuarine research laboratory is a means of providing a source of mitigation for the environmental and economic damages that resulted from the Deepwater Horizon incident. There were limited estuarine research laboratories that could be utilized in Baldwin County, AL during the Deepwater Horizon disaster. This project will support future resource recovery activities to be conducted. The activity of research and monitoring of coastal resources has been identified as an important factor in the resource recovery process by the Mabus Report and federal and state resource trustees. Construction of a research laboratory at the Reserve will establish the needed infrastructure to support coastal research. This facility would be sited on Reserve property. A recent Facility Master Plan Study and Design (September 2011) has determined the need for such a facility. In addition, this plan has sited the location for construction, provided designs for evaluation, and projected costs for construction and equipment at $2,084,830.00 (2011 dollars). The mission of the Weeks Bay Foundation is to protect the natural resources of coastal Alabama and provide assistance and support to the goals and programs of the Reserve. The Foundation is a land trust accredited by the Land Trust Accreditation Commission. The Foundation has the capacity to provide technical assistance for this project. The Reserve will serve as a primary partner on this transaction. This project will provide a research laboratory to support coastal and estuarine s cience. It will establish the infrastructure needed to best support research associated with restoration and monitoring activities at the Weeks Bay Reserve, a site positioned to provide a sentinel role in coastal waters of Alabama.																													
Addressing Marine Debris to Expedite Recovery along the Gulf Coast	11411	Neal Parry	Gulf of Mexico	10000000	The significant and long-term negative impacts along the Gulf Coast resulting from the Deepwater Horizon oil spill will require a suite of restoration projects. In addition to physical marsh restoration and other activities to restore resources, the entire Gulf region will significantly benefit from a targeted, sustained outreach and education campaign to improve the health of impacted resources. This type of restoration project, conducted as part of NRDA in the past, will reduce future injury to protected species - both marine mammals and sea turtles - and their habitats through the reduction of existing marine debris as well as the prevention of future introduction of hazards. By preventing preventable future injuries, this project will enhance the capacity for species and habitat recovery and the time of impact to recovery will be shortened. Enhancing nearshore and shoreline habitats through reducing impacts of marine debris will aid in the long-term, sustainable recovery of the Gulf Coast at an accelerated rate. Specifically, this project will effectively coordinate and execute a two-year, intense outreach and education campaign that will result in lasting changes after the project is complete. Hosted at the NOAA Disaster Response Center in Mobile, AL, and coordinated as a NOAA partnership project with the NOAA Marine Debris Program as lead coordinator, this project will engage all five states, maintain and improve partnerships with state and local organizations, and strengthen public engagement across the Gulf. This project t is specifically targeted to involve and educate Gulf Coast communities how marine mammals, sea turtles, and habitat will all directly benefit from debris prevention and removal. The	Trustee Portal	N	N	N	N	N	N	Y	N	N																			

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					project will also look to identify targeted areas for debris removal that will have the most impact to improve the ecological health of the Gulf. Key contacts associated with this project already have strong professional working relationships across th e region. As has been successfully demonstrated in previous projects in the Gulf of Mexico, Sea Grant extension agents have a unique capacity to strengthen community involvement - including select communities where English is not the first language - and broaden awareness through effective beach clean-ups, fish rodeos, etc. This project will incorporate powerful Public Service Announcements, print materials, and technology to effectively raise the awareness across the Gulf States that a sustained outreach campaign focused on debris prevention and removal will benefit livelihoods in the entire region in both the short and long-term.																												
Restoration of Tidal Flow to Meadows Tract	11410	Walter C. Ernest, IV	Baldwin County	1000000	The hydrological restoration of coastal wetland property is a means of providing a source of mitigation for the environmental and economic damages that resulted from the Deepwater Horizon incident. This project consists of the installation of three 100 x 30 ft. small bridges on County Rd. 1 in Baldwin County, AL. These bridges will increase tidal flow and serve as a means of providing coastal resiliency adaptation to the occurrence of future sea level rise. This project will allow future resource recovery activities to be conducted on the Meadows project site. The mission of the Foundation is to protect the natural resources of coastal Alabama and provide assistance and support to the goals and programs of the Weeks Bay Reserve. The Foundation is a land trust accredited by the Land Trust Accreditation Commission. The Weeks Bay Reserve and the Y Weeks Property Owners Association will also serve as a conservation partners. The Weeks Bay Reserve will serve as a primary partner on this transaction. This wetland property is under tidal influence as allowed by very small culverts that limits the extent of this tidal flow. The Meadows Tract and adjacent wetland habitats have been historically impacted by construction of County Road 1. This has greatly reduced tidal influence of Mobile Bay upon adjacent wetlands associated with the Meadows area west of Weeks Bay, north of Mobile Bay, and landward of County Road 1. The culverts passing under County Road 1 allow limited tidal flow from Mobile Bay into the Meadows Tract. It is recommended that these structures be enlarged to allow greater flow of estuarine waters that will increase estuarine habitat in the area. This will expand recovery in the Weeks Bay and greater Mobile Bay estuarine systems following impacts of a post-oil event. Estimated cost of each bridge is $250,000 for a total cost of $750,000 ; engineering design and associated construction/administrative cost is $250,000. Total cost of the project would equal app roximately $1,000,000. The result of this project would be that increased tidal flow to the wetland tract would restore resources to a more estuarine driven system. This increase in tidal flow will expand recovery habitat of the Mobile Bay estuarine system helping the damaged resource recover more quickly.	Trustee Portal	N	N	Y	N	N	N	N	N	N																		
Gallops Creek	11392	Tim Richardson	Mobile County	4000000	This parcel contains +/- 1,600 acre in Mobile County with half dozen natural springs feeding Gallop's creek. The property has a 20-30-acre beaver pond, and is forested with Long Leaf Pine. Recreational attributes are very good with hunting and horseback riding presently occurring. The property is	Trustee Portal	N	N	Y	N	N	N	N	N	N																		

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					subdivided for small tract development for primary residences and recreational cabins.																												
Implement High Speed Passenger Ferry Service on Mobile Bay	11330	Al Stokes	Mobile	10000000	Project will provide for the re-establishment of passenger ferry service from a modern hub terminal located on the Mobile River immediately adjacent to the downtown business and entertainment district of Mobile, Alabama to the many communities which surround Mobile Bay, including Gulf Shores, Alabama This project will relieve congestion on a currently over-capacity interstate segment, increase transportation safety by facilitating passenger movement, reduce fuel consumption and carbon emissions, and create new job opportunities for workforce that are currently restricted due to lack of public transportation service between their area of residence and the regional area of available jobs. This project will also enhance and create jobs through increased tourism by providing safe alternative transportation between communities. In 2001, the City of Mobile initiated the "Mobile Waterfront Terminal Complex" redevelopment project for a brownfield site located on the immediate waterfront of downtown Mobile. The basis of this project was built upon re-establishing passenger ferry service on Mobile Bay as an alternative transportation activity to reduce commuter-based and excursion-based vehicle impacts on an already overcrowded interstate segment. Federal funding has been received since FY2001 and used to stabilize the riverfront site, design and construct a bulkhead and dock system, install site infrastructure, design and initiate construction for a state of the art multi-use public facility to house the ferry terminal. Planning and design for the overall waterfront complex included transportation linkage and logistics between land-side public transit and future passenger ferry services. An environmental assessment was performed for the facility, a ferry feasibility and services requirement study was performed in 2004, and the City of Mobile has lead meetings, demonstration rides, and ongoing discussion with area community leadership regarding the long term project goa ls. This year, the multi-use facility building will start construction, which provides a definable schedule for the implementation of passenger ferry services to start operations from the Mobile, Alabama hub terminal. The City of Mobile is seeking funding to be used for supplemental planning and services acquisition, route planning and establishment, to include establishing bid-ready performance requirements for ferry services, updating environmental reviews, capital funding commensurate with acquisition of two high speed 90-passenger passenger ferry vessels, authoring contract documents for operations and terminal equipment and staff support, fit-out and equipping of terminal facilities necessary for ready operations, fit-out and equipping for vessel operations and maintenance for two years. Transportation Infrastructure Benefits: Currently, well more than 100,000 vehicles per day travel across the Interstate 10 (I-10) four-lane bayway bridge between Mobile and the residential communities of the eastern shore of Mobile Bay and near inland communities within central and south Baldwin County. This bridge segment of I-10 has a design peak load of 84,000 vehicles per day. The vast majority of this traffic being one passenger commuters from the eastern shore going to and from work in Mobile. With the advent of the Thyssen-Krupp steel mill, these	Trustee Portal	N	N	N	N	N	N	Y	N	N																		

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					numbers will continue to increase. The drive times for the workforce in Mobile who live in communities along the eastern shore or along the major north-south gulf access arterial state highway 59 has increased in some cases to more than one hour for a 20 mile drive. Likewise, the tourism industry of south Baldwin County, which has grown to more than eight million visitors annually, requires a service sector workforce which could be readily supplemented by a large unskilled labor pool from Mobile County that might use the ferry service to commute. Safety Benefits: The project will reduce the number of passenger ve hicles on an overcapacity segment of I-10 and major arterial roadways. It will provide a less stressful commute and thereby enhance personal health of the workforce. Economic Development Benefits: The project will serve as a statement of stable growth for this region, continuing to attract businesses that require a workforce capable of being on-time and productive. It will generate job opportunities for an underserved workforce between Mobile and south Baldwin County. It will increase tourism and entertainment opportunities. Mobility Benefits: The project will provide alternative means of delivering people facing all matter of challenges to participate in opportunities for jobs, entertainment, education, and social interactions that they may otherwise choose to avoid due to the hardship of transportation. It will energize greater mobility between communities on and around Mobile Bay with an alternative means of visitation. Environmental Benefits: The project will reduce atmospheric impacts of car exhaust by removing these vehicles from the daily traffic load. This is a critical factor in an area which prides itself on a quality of life supported by the 3rd largest estuary and delta system in the United States. Through outreach and interpretive programs while in transit, passengers will have the opportunity to learn about the marine ecosystem of Mobile Bay and be aware of their active role in helping preserve and sustain it. The project will serve as a statement of stable growth for Mobile, and as it serves the Mobile Bay and Gulf Shores areas - this region. The State of Alabama directly benefits from the 4.5 million (+/-) tourists that visit the gulf beach areas annually. This is a growth sector of business for Alabama which in turn creates downstream business and employment growth. However, Mobile, the Bay Area and southern beach areas of Mobile and Baldwin Counties, and the State of Alabama are actively involved in recruiting economic development oppo rtunities and in growing a stable, flexible and sustainable workforce that brings in business and employment opportunities beyond the tourism market. All these businesses require employees that can find reliable, cost effective transportation to and from their place of employment. Our community, region and State have a commitment to building a flexible, multi-modal transportation capability to service our needs to get where we need to go using safe, healthy, efficient and environmentally sustainable choices. Having this project in place provides a significant opportunity for businesses to locate and grow in our area with our commitment of support through this transit capacity. This project will help our economic development teams continue attracting businesses that require a workforce capable of being on-time and productive. It will generate job opportunities for an underserved workforce between																													

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					Mobile and south Baldwin County. It will increase tourism and entertainment opportunities. A 2004 ferry service study survey estimated that start-up operations between the eastern shore and the City of Mobile may provide between 600 to 800 commuter passengers per day, noting that the survey is limited to those people who would use the service to commute to and from work. Factors such as rising fuel costs, increases in the commuting population across an already over-capacity interstate bridge between Mobile and the eastern shore, and the effects of marketing this transportation option could easily triple these commuting numbers. The study also did not factor in excursion passengers who would use the passenger ferry service to visit communities around the bay area. The community of Gulf Shores has been vocal in support of the potential for this ferry service to bring workers from the Mobile County area to fill the increasing numbers of service positions in the beach communities. These job numbers have not been quantified. As a part of this funding request, updates to the 2004 studies are proposed in order to better quantify the greater numbers of potential passengers served and jobs possibly created or filled. This project has been a part of a multi-year redevelopment of the Downtown Mobile Waterfront which has as one of its final elements the implementation of the passenger ferry operations. Only this year (2010-2011) has the Waterfront Development Project reached the stage where a definable window for implementation of ferry service can be established.																												
Seagrass Restoration and WQ Management in Old River Estuary	11275	John Dougherty	Mobile	12000000	The proposed project consists of installing an ocean inlet pipeline across the barrier island to deliver transparent, high-salinity, low-nutrient seawater into the degraded estuary. An in-line, high-volume pump station is to be operated by remote control as determined by data collected from a variety of in-situ sensors and public data sources within the respective watershed. The objectives include active regulation of residence time, salinity, nutrient concentration and water clarity with the goal of providing optimum conditions for proliferation of seagrasses and increased aquatic species diversity. The pipeline crossing is to be located near the tidal node of the estuary. Pump operation generally will occur during the ebb tide with shut-off during the flood tide to allow for mixing of seawater and estuarine waters. Benefits accrue over time from the point of delivery to the ocean inlet. During low rainfall periods, no pumping may be required; during high rainfall periods, continuous pumping may be conducted to provide a benthic layer of seawater for protection of seagrass beds. Avg project cost=$7,500/ac ; Restored Economic Benefit Value=$20,500/ac/yr Estimated Benefit::Cost Ratio= 2.73 Long term station operation and estuary management will be the responsibility of state and/or local government with a funding mechanism established by NRDA. Project success will be measured under the quality ranking process cooperatively established by NOAA and IMAR through the ASSETS software - Assessment of Estuarine Trophic State (http://www.eutro.org); and by annual comparison of standing seagrass acreage and blade density with pre-project conditions. These results will ultimately determine the quantity of environmental offsets achieved on behalf of the Deepwater Horizon Oil Spill damage assessment.	Trustee Portal	N	N	Y	N	N	N	N	N	N																			

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Deep Seafloor Habitat Restoration	11242	Anonymous	Gulf of Mexico	11825000	Oil products from MC252 have covered a vast area of the deep seafloor, which may have sterilized the benthic habitat. Normal sedimentation rate in this area is appx. 1 cm/yr. Assuming burrowing organisms occupy the vertical space of -60 cm into the sediments, full habitat recovery might require 60 years of sediment deposition to isolate the oiled layer from the biota. A habitat restoration project of 25 km2 is proposed to provide vertical attachment surfaces above the oiled seafloor for occupation by endemic biota. The recommended substrate consists of a 4 m length of black iron pipe 3-inch diameter with 3- 1/2-inch holes spaced 70 cm apart starting at the top of the pipe. The bottom of the pipe is flared and embedded 10-inches into a conical-shaped, concrete drive-point 6-inch diameter X 24-inch length. At a density of 1 pipe/1,000 m2, 25,000 pipes are fabricated, loaded onto a barge and dropped into the Gulf using GPS coordinates for the project location grid. The force of gravity drives the descending pipe into the seafloor (>1,000 m BSL), allowing appx 3 m of pipe to extend above the oiled layer. Monitoring of the deep seafloor habitat grid (plus 60,000 acres adjacent) is performed for 10 years by a scientific team using ROVs (e.g., detached motorized submersibles or gliders) deployed from a research vessel. Telemetry data from the ROV is analyzed for species colonization of the pipe surface and the benthos, and pipe integrity (useful life estimated at 50 yrs). cost/pipe= $25 $625,000 delivery dockside $75,000 Vessel transport DWH $5 $125,000 Total cost/pipe $3 $825,000 Scientific Team 1y $300,000 Deep Submersible ROV $33 $500,000 Ship Time 60 days/yr $300,000 1 yr monitoring cost $1,100,000 1st yr total $1,925,000 9 yr monitoring cost $9,900,000 1 0 yr Total Project Cost $11,825,000 Cost/km2= $473,000 Cost/m2= $0.47	Trustee Portal	N	N	Y	N	N	N	N	N	N																			
Oyster Reef Reestablishment in Portersville Bay and Mobile Bay, Alabama	11225	Barry A. Vittor	coastal AL	5000000	Oyster reefs in coastal Alabama have been managed and mapped for over 100 years. Several surveys of this valuable fishery resource have been conducted, including H.P. Ritter (1894-1896); H.F. Moore (1910-1913); J.O. Bell (1951-1952); and Alabama Department of Conservation, Seafoods Division (1968-1971). These surveys depicted generally similar patterns of natural oyster reef distributions; however, Moore and Bell devoted greater attention to the reefs in Portersville Bay than did Ritter or the Seafoods Division. Most of the viable reefs occur around Cedar Point or within Mobile Bay, but oysters have formed harvestable reefs along the east and west sides of Isle aux Herbes (Coffee Island) and southwest of the mouth of West Fowl River. In addition, relict reefs had extended several thousand feet westward form Cedar Point, based on studies of buried shell deposits. The habitat variables that are most important in the distribution of oyster reefs are substrate and salinity. Oyster larvae (termed "spat" when they attain the settlement life stage) must settle on, and attach to, hard substrates to survive and grow. Typically the hard structure most-suitable for spat set is other oyster shell, but spat may successfully attach to clam shell, rock, brick, concrete, or wood. Oysters cannot colonize habitats that consist of sand or mud because they would eventually sink into the sediment. Areas that are susceptible to active sediment deposition are generally unsuitable for oyster survival because the	Trustee Portal	N	N	Y	N	N	N	N	N	N																			

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					spat are likely to be killed by burial. Although oysters are relatively tolerant of a wide range of salinity, they are most successful in waters characterized by salinities of 5 to 15 parts per thousand. Prolonged lower salinities associated with flooding (freshets) can killed oysters, while extended periods of higher salinities tend to encourage incursions of oyster drills, a predatory gastropod that can decimate an oyster reef within one season. Seafood interests in sout h Mobile County (individual fishermen, seafood associations, and the Seafood Division) have conducted oyster reef enhancement and maintenance projects for many years. Such programs have usually involved placement of oyster shell ("cultch") in areas where oysters already occur in at least moderate numbers, or where substrates and salinities are suitable for establishment of oyster beds/reefs. At the same time, the Seafood Division has periodically allowed relocation of oysters from reefs located in areas to be affected by construction of channels (eg., near Theodore Ship Channel). Recent oyster reef restoration and enhancement efforts in Portersville Bay and Mobile Bay provide excellent documentation of the labor and material resources necessary to re-build reefs, as well as the economic benefits of such projects. For example, local fishermen were hired to apply rock and oyster shell cultch to a 60-acre section of Heron Bay, to restore historic harvestable reefs after Hurricane Katrina. A survey of the restored reef revealed densities of about 50 harvestable oysters per square meter (roughly 200,000 per acre). The cost to improve the reef was bout $8,000 per acre, while the direct value of harvestable oysters was $40,000 per acre. With normal reef management, this return to the oyster fishermen would be on an annual basis. Based on existing maps of Alabama's oyster reefs, approximately 600 acres of habitat could be restored or reestablished in Portersville Bay and lower Mobile Bay, using existing manpower, vessels and cultch resources. The cost of this program would be approximately $4,800,000 excluding monitoring. Five years of monitoring would cost an additional $200,000 for a total project cost of $5,000,000. The most important elements of proposed oyster reef restoration in this area are: - Ability to use natural oyster shell resources; - Proven restoration methods; - Presence of suitable substrates at historic reef sites; - Employment of local citizens at a rate of about person-days per acre; - High economic benefit, with a benefit-to-cost ratio of about 5-to-1 based on the direct value of harvested oysters; and - Ability to verify the success and economic benefits of reef restoration or enhancement.																												
Habitat Acquisition and Conservation for Neotropical Migratory Birds	11223	John F. Porter, Ph.D.	Dauphin Island	1560000	Dauphin Island Bird Sanctuaries, Inc. (DIBS) is a 501 (c) (3), nonprofit corporation, dedicated to preserving the island's stopover habitat for all neotropical migratory birds, to benefit birds and island residents and visitors alike. Our objectives are to: 1) Maintain a network of quality stopover habitats. 2) Work with government and other agencies to ensure a balance between human land uses and conservation. 3) Educate landowners about practices that strengthen the island's unique ecosystem. 4) Promote the economic value of ecotourism by attracting more birders to Dauphin Island. Originally founded as Friends of the Dauphin Island Audubon Bird Sanctuary, since 2000 DIBS has expanded its mission to include acquiring parcels on the island with the express intent of permanently protecting desirable habitat for	Trustee Portal	N	N	Y	N	Y	N	N	N	N																			

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					resident and migratory birds. To date, DIBS has raised over $1.4M to acquire and permanently protect nearly 10 acres (28 parcels) of critical habitat, through hundreds of generous donations from individuals and through the support of the National Fish and Wildlife Foundation/ Shell Marine Habitat Program, ConocoPhillips, The Moorer Foundation, The Nature Conservancy, the Gulf Coast Bird Observatory, the Diane and Tram Sessions Foundation, the Birmingham Audubon Society, the Alabama Ornithological Society and the Hummer/Bird Study Group. Additionally, DIBS works informally with the Alabama Department of Conservation and Natural Resources (ADCNR), the Dauphin Island Park and Beach Board (DIPBB), and the town of Dauphin Island to promote birding and other forms of ecotourism activities on the island. MIGRATION Dauphin Island is one of the top birding destinations on the northern coast of the Gulf of Mexico, and for good reason: an incredible 348 species have been reported on the island. For hundreds of species of neotropical migrants on their northbound spring migration, Dauphin Island is the first landfall following a 600-mile non-stop flight across the Gu lf of Mexico from the Yucatan Peninsula. When they experience adverse weather and flying conditions, exhausted birds, sometimes numbering into the thousands and hundreds of thousands, seek shelter on the Island. During these spectacular fallouts birds are stranded on the island and it is crucial that they have suitable habitat for shelter and a resting place, fresh water for drinking and bathing, and that there be enough food of the appropriate type to replenish depleted stores of fat. Once they depart from the island, these migrants continue to their breeding grounds throughout all of eastern North America. For this reason, the importance of Dauphin Island as a refueling and resting site cannot be understated. Protecting and preserving habitat on the island ensures that these birds have enough food reserves to continue their northward journey. Similarly, fall migration, which begins as early as July, can also be a very rewarding time on the Island for birders as southbound migrants make one last stop before flying across the Gulf of Mexico to their wintering grounds in Central and South America. Whereas wildflower blossoms and the insects they attract are important food sources in the spring, in the fall berries become an equally vital food source. Thus, a healthy and intact ecosystem, with a full complement of native vegetation, is vital to meeting the needs of neotropical migrants during both spring and fall migration. In addition to the many permanent species that reside on the Island, a variety of waterfowl, seabirds, and shorebirds are commonly observed in and around the island during the winter season. Federally endangered Piping Plovers and other shorebirds ply the sandy beaches in search of invertebrates buried in the sand, while various species of loons, gulls, terns and waterfowl are often observed in the waters of the Gulf of Mexico and Mississippi Sound. HABITAT PROTECTION To date, DIBS has acquired, from generous donors and/or willing seller s only, 28 parcels of habitat on Dauphin Island. Most of these are classified as wetlands, and all are in the easternmost portions of the island where vegetative cover is plentiful, and thus of the greatest benefit to migratory birds. Among the more significant properties are: eight parcels adjacent to and contiguous with																												

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					Shell Mounds Park, which is managed by the Alabama Department of Conservation and Natural Resources' Marine Resources Division, the Goat Trees Reserve (a large Live Oak tree which derives its name from when goats that formerly roamed the island and sought refuge in the low hanging branches from alligators), plus several holdings in the adjacent Steiner block, the Tupelo Gum Swamp and the General Gorgas Swamp. The habitat in the Steiner block consists of an ecotone where coastal saltmarsh transitions into an upland maritime forest, whereas the two swamps are depression-type seasonal wetlands. DIBS seeks funds from the Natural Resource Damage Assessment program to permanently protect the remaining lots in the Steiner block and the Tupelo Gum and Gorgas Swamps. Given the proximity of the Steiner block to the two swamps, acquisition of the remaining 30-40 lots offers the best chance at ensuring nearly contiguous habitat of sufficient cover and food resources for migratory birds. The target area stretches from just behind the dune line on the Gulf of Mexico, to the waters of Dauphin Island Bay and Mobile Bay, thus spanning the central portion of the island from south to north. The somewhat drier upland habitat of the Steiner block complements the wetter habitat found in the swamps, thus assuring the greatest variety for the most species. Prices of property have varied widely in the past decade, with the highest property values occurring just prior to the spate of hurricanes that have struck the island since the mid-2000s. Following the hurricanes, and with the downturn in the housing market, prices have remained at suppressed levels for the p ast 2-3 years. A recent Tupelo Gum Swamp acquisition was purchased for $25,000 - a price more typical of the mid to late 1990s. Acquiring these lots now, while the market is more favorable, is the most economically effective means of protecting this habitat resource. DIBS estimates that these 30-40 lots would have an average appraised value of approximately $30,000 each, assuming relatively steady prices for the next few years. Thus, DIBS seeks a total of $1.56M from the Natural Resource Damage Assessment program, which includes monies necessary to maintain and manage the acquired properties. All such purchases will be based on formal "Yellow-book" appraisals.																													
Town of Perdido Beach Shoreline Restoration Project	595	Patsy Parker	Perdido	6000000	Perdido Beach is one of the coastal communities in Alabama that took a direct hit from the oil spill. The proposed multi-faceted habitat restoration projects will be located within Perdido Bay which historically has suffered from habitat degradation through the loss of coastal wetlands and associated sea grasses. The proposed project is aimed at the enhancement of coastal aquatic resources through the implementation of a 14 acre living shoreline within waters adjacent to Town public access points. This project will not only allow Town residents to enjoy the benefits of the project but provide a unique ecosystem that will provide direct benefits to Perdido Bay's aquatic productivity through the restoration of highly productive ecosystems, including oyster reefs, submerged aquatic grass, emergent saltmarsh systems, and tidal channels, all which provide beneficial form and function to the overall aquatic ecosystem. The design, and implementation of the Perdido Beach living shoreline will address shoreline erosion in this lower energy environment by providing long-term shoreline protection, the project will	Trustee Portal	N	N	Y	N	N	N	N	N	N																			

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					maintain considerable ecological restoration of vegetated shoreline habitats through strategic placement of plants, stone, sand fill and other structural material such as oyster shells. In this case the design and location will be within a large shallow unvegetated/unconsolidated sand flat. The development of the estuarine habitats, will enhance the natural coastal processes and maintain an interconnectiveness between open water estuarine aquatic habitats, and the intertidal zone. This is the most effective location for living shoreline's and this location is best suited for this habitat placement. Living shorelines increase ecological function within the coastal and marine environments. These benefits include water quality improvement, aquatic habitat, tidal water exchange, sediment movement, plant community ecotones, and generally improved habitat for the estuarine/commercially important vertebrates and invertebrates. Specifically tidally influenced wetlands reduce the rate of surface water flow and temporarily store flood waters like a sponge. Wetlands receive stormwater runoff and release it gradually. They change sharp runoff peaks and discharge water flows over longer periods of time thus reducing the danger of flooding and also recharging groundwater supplies. Wetlands, filter and trap sediments and pollutants, increase dissolved oxygen levels and reduce nutrient levels. As water flow is slowed over the marsh, sediments and chemicals drop out of the water column, high rates of productivity lead to high rates of mineral uptake, and decomposition processes occur within wetland sediments. The presence of wetland vegetation, and associated structures of the living shoreline provide a buffer to adjacent shoreline by reducing wave energy and reducing current velocity thereby trapping, and maintaining sediments. The most sought after benefits include habitat augmentation for resident and migratory species of fish, invertebrates, and shorebirds. In this particular location the living shoreline will provide habitat for spawning, rearing, and nursery for commercially valuable fish and shellfish. Finally, these systems provide aesthetic, and recreational values for outdoors orientated activities such as birding, kayaking and fishing opportunities. In this particular estuarine environment, the design will include a series of deeper breakwaters (below MLLW), which consist of a footprint of marine mattresses with intermittent deep channels overlain with class 2 rip rap, and covered with oyster shells. The marine mattresses act to reduce settling to maintain target elevations. This design will facilitate the oyster reef development within the outer deeper waters that are not as subject to sedimentation and infilling processes. The inner portions will again be ringed by a series of shallower breakwaters tha t will be designed to be exposed at low tide, providing shorebird roosting opportunities, as well as quiescent environment for the establishment of the areas where the sea grasses and tidal marsh habitats will be installed. Typically, the design will include 35 percent deepwater reef/breakwater habitat, 50 percent shallow water sea grass/emergent marsh ecotypes, and 15 percent tidal channels, to allow access (kayak) and maintenance of tidal inflow and flushing. The project will also include the dredging of the channels into Soldier Creek and Palmetto Creek to provide flushing and to improve water quality to the estuaries																												

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					(Soldier Creek, Palmetto Creek and Spring Branch). Spoils from dredging could be used as backfill on the Living Shoreline.																												
Meadows Addition- A Resource Protection Project	11164	Walter C. Ernest, IV	Baldwin County	750000	The acquisition of coastal wetland property is a means of providing a source of mitigation for the environmental and economic damages that resulted from the Deepwater Horizon incident. This project consists of the fee simple acquisition of a suite of seven parcels adjacent to the State of Alabama's 634 acre and Baldwin County Commission's 134 acre Meadows parcel. These tracts total 299 acres of wetland property. These tracts consist of palustrine forested wetland dominated by broad leaved deciduous trees. In addition portions of this property are characterized as palustrine scrub/shrub wetlands. The forested wetlands provide nesting habitat for many bird species. This acquisition will allow future resource recovery activities to be conducted on all of these sites. The activity of land acquisition has been identified as an important factor in the resource recovery process by the Mabus Report and federal and state resource trustees. The Land Trust Alliance Southeast Program's Gulf Coast Partnership for Land Conservation (GCPLC) has also identified protection of ecologically-sensitive properties Gulf wide as a high conservation priority. The owners of these seven parcels have been identified as willing sellers. These tracts have also been nominated for acquisition to the State of Alabama's Forever Wild Land Trust Program. The Weeks Bay Foundation is a land trust accredited by the Land Trust Accreditation Commission. The Foundation has the capacity to provide technical assistance for this fee simple transaction. The Weeks Bay Reserve will serve as a state conservation partner. The Y Weeks Community Association will serve as a local community partner on this project. The Weeks Bay Foundation will serve as the primary partner on this transaction.	Trustee Portal	N	N	Y	N	N	N	N	N	N																			
100-1000: Community Education and Outreach	11157	Casi Callaway	coastal AL	82230	Develop specific education and outreach materials for participating waterfront property owners. Training Program will include the following: Volunteer Field Observer Program training for continued shoreline documentation to include habitat, erosion and wildlife monitoring; The importance of oyster reef / living shorelines, coastal marsh and seagrass restoration to the health of shorelines and water quality; Potential for participating and adjacent property owners to become involved in restoration (e.g. what types of restoration can they do on their own). All community education and outreach programs will be vetted through proper science/experts and agencies for input and regulatory requirements. Deliverables include: Training Program Manual for Landowners; Powerpoint Presentations - 1 short for introduction of subject within a larger presentation and 1 full presentation Powerpoint; Handouts on the training topics listed above; Press/Outreach packet to promote attendance; Host 10 training workshops upon completion of the materials listed above.	Trustee Portal	N	N	N	N	N	N	Y	N	N																			
D'Olive Creek Watershed Restoration	1212	Roberta Swann	baldwin County	42723000	Excessive erosion and sedimentation have plagued the D'Olive Watershed since the 1970s, and ongoing urban development continues to intensify problems there. Of almost 23 miles of streams in the watershed, 2 miles are substantially degraded, 4 miles are currently being degraded, and 6 miles have potential to experience future degradation. Five D'Olive Watershed streams are listed on the ADEM's 2010 303(d) impaired waters list for siltation	Trustee Portal	N	Y	Y	N	N	N	N	N	N																			

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					(habitat alteration). Surveys of coastal Alabama show that only 31% of areas with SAV coverage in 1940, 1955, and 1966 had retained coverage by 2002, with an additional loss of 1,300 acres by 2008-09. Siltation is a primary stressor to this important fisheries habitat, limiting necessary light penetration through the water column. In 2010, a broad-based coalition of federal, state, and local stakeholders facilitated by the Mobile Bay National Estuary Program completed a comprehensive Watershed Management Plan. Three classes of proposed management measures, restoration of streams, wetlands, and Lake Forest Lake, provide site specific solutions that address historical and ongoing problems requiring immediate attention to prevent future stream and wetland degradation, reduce sediment transport downstream, and restore habitat. -Stabilization of 20,000 linear feet of priority stream reaches is necessary to minimize further head-cutting, channel incision, and bank erosion processes contributing substantial sediment loads. Restoration techniques including grade control, flow deflection/concentration, and bank protection will reduce sediment loads transported downstream and restore aquatic habitats. -Several areas within the watershed have been identified for wetland restoration or enhancement. Proposed restoration techniques include mechanical sediment removal, removal of invasive species, excavation to restore width to riparian areas, and planting of native plants. -Lake Forest Lake drains 91% of the Watershed and receives 7,800 tons of sediment per year. 70% of the total capacity of the Lake has been displaced by sediments. Besides biological and aesthetic values, the lake serves a critical role in trapping sediments that would otherwise impact Mobile Bay habitats. Restoration of watershed hydrology by improved stormwater management measures is critical to eliminate the factors that have degraded the watershed's streams and wetlands and have allowed abnormally high sediment loads to be transported to the Mobile Bay estuary.																												
Seagrass Restoration and WQ Management in Cotton Bayou	1240	Phillip West	Perdido Bay Watershed	12000000	The proposed project consists of installing an ocean inlet pipeline across the barrier island to deliver transparent, high-salinity, low-nutrient seawater into the degraded estuary and also supply sea water at the west end of two "dead-end" canals immediately north of Cotton Bayou; all three are embayments connected to Perdido Bay. An in-line, high-volume pump station is to be operated by remote control as determined by data collected from a variety of in-situ sensors and public data sources within the respective watershed. The objectives include active regulation of residence time, salinity, nutrient concentration and water clarity with the goal of providing optimum conditions for proliferation of seagrasses and increased aquatic species diversity. The pipeline crossing is to be located near the southwest end of the Cotton Bayou. Pump operation generally will occur during the ebb tide with shut-off during the flood tide to allow for mixing of seawater and estuarine waters. Benefits accrue over time from the point of delivery to the ocean inlet. During low rainfall periods, no pumping may be required; during high rainfall periods, continuous pumping may be conducted to provide a benthic layer of seawater for protection of seagrass beds. Installed project cost=$100,000/ac ; Restored Economic Benefit Value=$20,500/ac/yr 10-year Estimated Benefit::Cost Ratio= 2.05 (excluding operating costs). Long term station	Trustee Portal	N	Y	N	N	N	N	N	N	N																			

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					operation and estuary management will be the responsibility of state and/or local government with a funding mechanism established by NRDA. Project success will be measured under the quality ranking process cooperatively established by NOAA and IMAR through the ASSETS software - Assessment of Estuarine Trophic State (http://www.eutro.org); and by annual comparison of standing seagrass acreage and blade density with pre-project conditions. These results will ultimately determine the quantity of environmental offsets achieved on behalf of the Deepwater Horizon Oil Spill damage assessment. Additional information is attached.																												
Wolf Bay Wetland Nature Preserve A Coastal Resource Recovery Land Acquisition Project	1238	Dan Dumont	Baldwin County	3000000	This project is a fee simple resource recovery land acquisition project . The acquisition of properties with a high conservation value has been identified by the Mabus Report and the Land Trust Alliance's Gulf of Mexico Land Trust which are members of the Partnership for Gulf Coast Land Conservation. The 569 acre Wolf Bay Nature Preserve Tract is within the Alabama Coastal Area. The Wolf Bay Coastal Area has been designated as a Geographic Area of Particular Concern (GAPC) in the Alabama Coastal Area Management Plan (ACAMP). This tract is recognized as a Gulf Ecological Management Site (Gulf of Mexico Program). In 2007 Wolf Bay was designated as an Outstanding Alabama Water (OAW) by ADEM and the EPA. The parcel consists of 458 acres of wetlands and 111 acres of upland property. It has 147 species that have been documented in September of 2010 by Troy University. The natural communities exhibited on the parcel are East Gulf Coastal Plain Wet Flatwood Bog,Southern Coastal Plain Blackwater River Floodplain Forest and Black Needle Rush Tidal Herbaceous Alliance. There is a large threat of development to this site. The 111 acres of uplands would allow for a large development to occur on this site. The tract has been nominated to Forever Wild. In a recent paper, these environments were estimated to be ten times more valuable to humans than any terrestrial habitat for ecosystem services like recreation and nutrient cycling (2000, Identification of Priority Sites for Conservation in the Northern Gulf of Mexico: An Ecoregional Plan, TNC). According to the National Wetlands Priority Conservation Plan (USFWS) the tract incorporates three nationally decreasing Palustrine wetland types: emergent, forested and scrub-shrub. The Southeast Regional Wetland Concept Plan (USFWS) notes that up to 50% of Alabama's historical wetlands have been lost primarily due to development. Acquisition of this tract would further protect a wide diversity of microhabitats that serve the dual purpose of enhancing breeding habitat for resident species as well as providing suitable stopover habitat for transients. Coastal stopover habitats of the Gulf Coastal Plain should receive special attention with regards to management, conservation and restoration activities that could occur with the acquisition of this parcel. The acquisition of this property would create an opportunity for future maintenance/management and restoration activities to be conducted on this site.	Trustee Portal	N	N	Y	N	N	N	N	N	N																		
Giving Gulf Wetlands a Future	2144	Ernest Estevez	Gulf states		I propose that low coastal uplands surrounding the Gulf of Mexico be protected now so that 1. Tidal wetlands damaged by the spill but that cannot recover can be recompensed by future wetlands 2. Tidal wetlands for which mitigation is attempted but fails can likewise be recompensed, and 3. Total	Trustee Portal	N	N	Y	N	N	N	N	N	N																		

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					tidal wetland area along the Gulf coast is maintained as close to existing area in the face of subsidence and sea-level rise. Tidal wetlands in the Gulf of Mexico are being lost to subsidence caused in part by oil and gas exploration and development. Additional tidal wetlands will probably be lost due to sea-level rise resulting from climate change, for which the consumption of fossil fuels including oil and gas is responsible. Even at present low rates of sea-level rise, substantial coastal landscape evolution is occurring as coastal forests retreat, wetlands migrate up-slope, and open water replaces tidal wetlands. These effects will become more significant as the rate of sea-level rise accelerates. At present, low coastal uplands provide a destination for migrating wetlands but in decades to come these uplands will be developed, defended, and otherwise unavailable to tidal wetlands. The benefit of protecting such low uplands now is high because developed lands will not be undeveloped for the sake of wetland migration. The economy provides an opportunity to protect low coastal uplands at a considerable savings. I suggest that a planning horizon of 50 years guide the protection of low coastal uplands. Fee-simple purchases and conservation easements could sunset if the rate of sea-level rise observed by then, or predicted with very high confidence by expert models, are found within the natural adaptive range of tidal wetlands to maintain themselves in place.																												
Enhancements to marine private recreational fishing surveys	1094	Chris Robbins	Gulf of Mexico		Make enhancements to the marine private recreational fishing survey to improve timeliness and spatial resolution of catch and fishing effort data for better management. Link to Injury: Private recreational anglers lost access to a considerable portion of federal and state waters in the northern Gulf that were closed to fishing during the BP oil disaster. Therefore, the angling public must be compensated for lost access to fishing as a service. Benefit and Rationale: Improving the private recreational survey in the Gulf of Mexico will help keep fishery resources healthy and available to anglers. Specifically, improving the timeliness and spatial resolution of catch and effort data can help fishery managers keep total catch within prescribed fishing limits and prevent recreational anglers from exceeding their quotas and incurring penalties. These improvements would benefit the public by lowering the likelihood of overfishing and accountability measures, which, if triggered, could result in shorter fishing seasons in the future.	Trustee Portal	N	N	N	N	N	N	N	N	N																		
Proposed Emergency Seagrass Restoration	842	Louis E. Shenman	coastal Gulf of Mexico	500000	Per descriptive information in documents entitled "A Concise Environmental Assessment (EA) for Emergency Restoration of Seagrass Impacts from the Deepwater Horizon Oil Spill Response", the following ideas can address and deal with the "Overview of OPA - Emergency Restoration Requirements" (para. 2.3.1 - Items # (3) and (5). I am suggesting that Aquatic Weed Harvester equipment be considered to methodically remove aquatic weeds & vegetation (i.e. - seagrass) that has been impacted by the oil spill and continues to contain oil residues. This process is not to "dig out" the weeds, but to harvest those weeds that continue to maintain oil residues...esentially, HARVESTING those designated weeds without impacting their root systems, thus allowing them to continue to thrive and grow, but without the oil residues on the newly growing vegetation. Aquatic weed harvesting is a known technology and can	Trustee Portal	N	N	Y	N	N	N	N	N	N																		

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Project Name	Proj No./ ID	Submitted By/ Primary Lead	Location	Cost	Project Description	Submitted via	Marine Mammals (Y/N)	Water Quality/ Nonpoint Source Nutrient Reduction (Y/N)	Wetland, Coastal, and Nearshore Habitat (Y / N)	Oyster Reef (Y / N)	Birds (Y / N)	Sea Turtles (Y / N)	Recreational Use (Y/N)	Habitat on Federal Lands (Y/N)	Monitoring, Adaptive Management, and Administrative Oversight to Support Restoration Implementation (Y/N)	Project is consistent with programmatic restoration goals (Y/N)	Project is considerate of strategic frameworks (Y/N/NA)	Project is consistent with criteria identified in the public notice (Y/N)	Project delivers benefits cost-effectively (+ / 0 / -)	Project meets Trustees' goals (+ / 0 / -)	Project has reasonable probability of success (+ / 0 / -)	Project prevents future and collateral injury to natural resources and services (+ / 0 / -)	Project benefits more than one natural resource and/or service (+ / 0 / -)	The effect of the project alternative on public health and safety (+ / 0 / -)	Project is not already required by existing regulations (Y/N)	Project complies with applicable laws and regulations (Y/N)	Project supports existing regional or local conservation plan or restoration effort (Y/N)	Project is not already fully funded (Y/N)	Project is technically feasible (+ / 0 / -)	Project readiness (+ / 0 / -)	Sustainability/Long-term Benefit of project (+ / 0 / -)	Project is time critical (+ / 0 / -)	Project offers opportunities for external funding & collaboration (+ / 0 / -)
					be accomplished at a reasonable cost. Item 3.2.1 - Description of Proposed Action. The Aquatic Weed Harvesters are basically shallow draft (under 12 inches), twin-pontoon (catamaran type) boats are propelled by twin hydraulically driven/reversible/variable speed paddle wheels. The weeds to be harvested are cut by reciprocating sickle knives (they can cut up to 12 ft wide and to variable depths of 6 ft.), and the weeds then land on and come up open mesh wide conveyors, then load into the vessels storage areas, where they can be further accumulated via storage bed conveyors. Once fully loaded, the Harvester can back up to shore areas, where they can be matched up & aligned w/ conveyorized Shore Conveyors that move the harvested weeds to dump trucks, etc. for off site removal. The entire operation will "avoid causing the same kind of damage to teh seagrassses that response boats caused" Item 3.2.2 Site Identification and Characterization This Item indicates "depth contours of less than one meter depth", certainly wit hin the operating capability of the Weed Harvesters. The operator's elevated position enable a clear sight of the areas to be harvested, thus virtually eliminating the likelihood of injury to the seagrass beds...i.e. this is a very methodical operation. Considering that areas to be harvested are tidal, the Harvesters pontoons can be outfitted w/ hydraulically powered cleats to enable the vessel to operate during periods of very shallow tide.																													
Fisheries Oceanography of Coastal Alabama (FOCAL)	871	Dr. Frank Hernandez	Gulf of Mexico	7500000	This proposal requests support for continuation of the Fisheries Oceanography of Coastal Alabama (FOCAL) program, a research unit within the Richard C. Shelby Center for Ecosystem Based Fisheries Management at Dauphin Island Sea Lab (DISL). The FOCAL program serves as a fisheries management and restoration resource for the Alabama Department of Conservation and Natural Resources’ Marine Resources Division (ADCNR/MRD). FOCAL is currently funded by ADCNR/MRD through Hurricane Katrina EDRP funds, however this funding expires in November 2011. Without further funding, we will lose a valuable opportunity to monitor and assess the short- and long-term recovery of our marine resources in the wake of the Deepwater Horizon oil spill, which is critical to the restoration of Alabama's coastal waters and the return of recreational and economic use to pre-spill conditions. Since 2004, the backbone of the FOCAL program is a monthly plankton survey along a series of stations across the Alabama shelf. This survey (and related FOCAL sampling) generates a valuable, fisheries-independent database of baseline conditions and ecosystem variability. It is one of the only fisheries data sets available for pre- and post-spill assessments of acute and chronic effects due to the Deepwater Horizon oil spill on fish eggs and larvae (the life stages most vulnerable to the oil spill's impacts) and their food resources (zooplankton). FOCAL’s objectives are to continue to provide accurate information and guidance to ADCNR/MRD for efficient management of Alabama's coastal fisheries. By aiding management, we increase and sustain the human use value of our coastal waters by insuring healthy fish populations and restoring marine ecosystem services. Additionally, the continuation of FOCAL allows for pre- and post-spill comparisons of fish egg and larval abundances and distributions, which can be	Trustee Portal	N	N	N	N	N	N	N	N	Y																			

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					used to assess the efficacy of ADCNR/MRD's habitat enhancement and restoration programs, such a s Alabama's Artificial Reef Permit Areas. We will accomplish these goals by continuing our monthly collections of biological (e.g., fish eggs and larvae) and physical (e.g., temperature and salinity) data in Alabama coastal waters in support of ADCNR/MRD and DISL fisheries research and management goals. Detailed information about FOCAL can be found on our website: http://focal.disl.org/index.html. We have also attached a more detailed, point-by-point description of how FOCAL meets NRDA restoration needs.																												
The Development of The Advanced Real Time GNSS and Physical Atmosphere and Ocean Observing System within the Gulf of Mexico	923	Dr. Gary Jeffress	Gulf of Mexico	16000000	The Development of The Advanced Real Time GNSS and Physical Atmosphere and Ocean Observing System within the Gulf of Mexico Conrad Blucher Institute for Surveying and Science Texas A&M University-Corpus Christi & University Corporation for Atmospheric Research Boulder, CO & Center for Space Research University of Texas at Austin Introduction: The ability to observe our environment in real time significantly increases our capacity to anticipate and respond to changing conditions that may increase the risk of injury and property damage. The installation of a network of instrumentation clusters is proposed for the Gulf of Mexico. The primary instrument of each cluster will be a geodetic quality Global Navigation Satellite System (GNSS) receiver. Observations derived from this network will promote research on ocean-atmosphere interactions; hurricane intensity forecasting; sea level and coastal subsidence monitoring; and storm surge modeling. Each of these topics was given high priority in a recent survey of the oil and gas industry operating in the Gulf . It is anticipated that equipment can be deployed on both fixed and floating platforms, significantly improving the observational capability of the region. The deployment of this instrumentation on offshore platforms would allow these research topics to be addressed and combined in a unified measurement system throughout the Gulf region. Advances in GNSS analysis techniques now enable the continuous positioning of mobile instrumentation to less than a few centimeters. The precision of this measurement can be used for continuous monitoring of sea surface height, tides, and wave motion. The addition of both temperature thermistor strings and underwater acoustic instrumentation provides a link to sea surface temperatures and ocean bathymetry. These same analysis techniques are able to measure the delay of GNSS signals as they pass through the atmosphere. This delay can then be related to the integral of atm ospheric water vapor. This establishes a link between the sea surface temperatures and the latent heat in the atmosphere that contributes to hurricane intensity changes. The recent environmental disaster following the sinking of the Deepwater Horizon offshore drilling rig has highlighted the need for more ocean observing systems to better measure the physical processes occurring in the Gulf of Mexico. Scientific measurements in this harsh offshore environment are difficult to obtain and cannot be undertaken without access to the large number of offshore platforms owned and operated by the offshore industry. This white paper proposes a partnership between the private offshore industry and the scientific community to collect critical physical data to enhance our knowledge of the atmospheric and	Trustee Portal	N	N	N	N	N	N	N	N	Y																			

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					oceanographic processes that drive the forces that interrupt our ability to manage the vast economic and natural resources of the Gulf of Mexico. Figure 1: Proposed GNSS network in Gulf of Mexico (yellow). Existing GNSS stations used to estimate PW (precipitable water vapor) are shown in black and red. A collaborative research group, consisting of academic and governmental researchers, has expressed interest in the establishment of this Gulf network. The members of the group have diverse expertise and research interests, ensuring that there would be broad application of these data if available. Scientific Applications A report by the American Geophysical Union (AGU) after the 2005 hurricane season summarized some of the fundamental research and observational capability that is relevant to the Gulf . Topics that were addressed in this report include hurricane intensity forecasting, storm surge modeling, and subsidence monitoring. A short synopsis is provided on how each of these topics would benefit from this network. Atmospheric interactions and hurricane intensity forecasting: GNSS observations can be analyzed to provide integrated precipitable water vapor (PW) es timates of the atmosphere. These measurements provide continuous monitoring of atmospheric PW and are insensitive to rain and clouds. PW estimates are now routinely being used at NOAA to improve precipitation forecasts in the continental U.S. Estimates of PW within the Gulf would provide a strong link between ocean temperatures and atmospheric water vapor. An illustration of this is shown in Figure 2 for data collected on the island of St. Maarten in the Caribbean. This figure shows the PW estimates obtained from a GNSS station on the island and the sea surface temperature (SST) around the island. It is clear from this comparison that the two fields are highly correlated. This implies that the local SST in the region has a significant influence on the total column water vapor, not just surface humidity just above the surface. Figure 2: Time series of daily PW values (blue) and sea-surface temperature (red) for the region round St. Maarten. Assimilation studies for two specific hurricanes, Dean in 2007 and Gustav in 2008, have been extensively studied. Both show a positive improvement in the forecast of minimum surface pressure with the three-dimensional variation assimilation of PW into the Weather Research and Forecasting (WRF) model. Assimilation results are shown in Figure 3 (Dean) and Figure 4 (Gustav). The WRF model is running with a 12-km horizontal resolution and is initialized using the GFS analysis fields. Both cases show an improvement of approximately 20 hPa (1 hPa ≡ 100 Pa SI units of pressure) when the PW data are assimilated into the model. A simulation experiment with stations distributed in the Gulf of Mexico has shown further improvement in intensity forecasts, highlighting the need for routine atmospheric observations in the Gulf. Figure 3: The GOES satellite image on the left shows Hurricane Gustav as it entered into the Gulf of Mexico. The color-coded numbers represent the location of continuously operating GNSS stations and the in tegrated water vapor in the atmosphere above each station. The more water vapor, the more latent heat available that the storm can use to strengthen and intensify. Incorporating these data into the Weather Research and Forecast (WRF) model improved the prediction of hurricane strength, as shown by the time series of minimum surface pressure																												

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					shown on the right. The forecast without GPS observations is shown in blue, with observations in maroon, and the observed minimum surface pressure is shown in red. The addition of GPS instrumentation into the Gulf of Mexico is expected to further improve hurricane intensity forecasts. Figure 4: Same as Figure 3, but for Hurricane Gustav in 2008. Storm Surge Modeling: The data and research will be based on the operation of the coastal observation network managed by the Texas A&M University-Corpus Christi (TAMUCC) Division of Nearshore Research (DNR) [Michaud, 2001]. The core of the network is composed of the 25 Data Collection Platforms of the Texas Coastal Ocean Observation Network (TCOON) and the 7 water level monitoring platforms of the National Ocean Service National Water Level Observation Network in Texas. Other platforms include the Houston/Galveston PORTS stations, the Sabine PORTS stations, and the Port of Corpus Christi Real Time Navigation System (RTNS), three of the largest U.S. ports by tonnage. The overall network presently consists of 30 active stations and is the largest coastal ocean observation network in the Gulf of Mexico (see figure 1). It should be emphasized that all aspects of the operation of this network including instrumentation, measurement procedures, maintenance, and data management follow NOS equipment and instrumentation, data quality control, maintenance and operation procedures, and standards. Principal investigator, Dr. Gary Jeffress, is the director of the TAMUCC unit overseeing all aspects of the network operations. Other project participants manage the operation of the network an d design and implement associated predictive and now-casting models. The network archives and publishes in real-time or near-real time the following time series: water levels, wind speeds, wind directions, barometric pressures, water and air temperatures, dissolved oxygen, salinity, water currents and wave climates depending on the station. Data transfers are completed via Freewave packet radio, GOES satellite communications, and Internet Protocol Modems depending on the station location. The data is accessed through the World Wide Web, at http://lighthouse.tamucc.edu/, and through dedicated phone lines. The operation and management of the network is entirely based on the World Wide Web. The underlying software has been developed at DNR over the past fifteen years [Michaud, 2001] using open source technologies such as Linux and Perl, with the advantage that DNR is not subject to changes in proprietary systems and has the flexibility to replace and evolve software components as new technologies become available. In the past five years data intensive modeling techniques have also been developed to take advantage of the flow of real time data. Models based on Artificial Neural Networks (ANN) and Statistical techniques are presently implemented to provide predictions of water levels [Tissot, 2005] as well as other parameters such as water temperature. Background on ANN Modeling and Hind-casting: The concept of artificial neural networks (ANN) emerged in the sixties as scientists aimed at emulating the functioning of the brain. After the development in the late eighties of efficient training techniques ANNs have become powerful modeling tools especially for non-linear systems. The other main advantages and key characteristics of ANNs for this application are their generic modeling																												

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					capacity, their robustness to noisy data, and their ability to deal with high dimensional data. The range of ANN applications span a growing number of fields including an increasing n																												
Exploratory committee to examine the possibility of a class action civil law suit against British Petroleum	905	Dean Newcomb	Gulf of Mexico		Establish an exploratory committee to examine the possibility of a class action civil law suit against British Petroleum for the damage done by the BP Horizon Gulf oil spill. This would replace lost revenue for affected business and funds to restore polluted wetlands and diminished wildlife. The purpose is to supplement government fines and penalties.	Trustee Portal	N	N	N	N	N	N	N	N	Y																		
Restoring critical habitats in the Gulf of Mexico Marine Protected Area Network	904	Gary Lytton	Gulf of Mexico	50000	In April 2011, the Rookery Bay National Estuarine Research Reserve (RBNERR) hosted a two-day workshop in Naples, Florida, with funding support from NOAA's Marine Protected Area (MPA) Center, that brought representatives from four key agencies managing MPAs in the Gulf together to discuss collaborative efforts. NOAA's NERRs and NMS, and DOI's NPS and NWRs were represented. Outcomes of the workshop included a commitment from the Gulf MPA partners to work together to build a framework for regional response to catastrophic events such as the Deepwater Horizon spill, share information and technology relating to climate science, and to seek regional opportunities to advance common stewardship goals of MPAs such as habitat restoration. A regional approach to restoring critical marine and coastal habitats within the Gulf of Mexico MPA Network has significant benefits: -Gulf MPAs already have long-term monitoring and GIS capabilities that can effectively track changing environmental conditions correlating with restoration success, such as water quality. -Gulf MPAs have on-the-ground programs in place designed to provide protection and increase awarenwess of the need to conserve resources, such as law enforcent, education, outreach and training, visitor use management, and active community-based volunteer programs. -Gulf MPAs have a diverse range of critical marine and coastal habitats within their designated boundaries (e.g corals, seagrasses, oyster reefs, mangroves, saltmarshes) including offshore submerged resources, that link directly to the life cycles and migratory patterns observed in economically important marine species including various species of sportfish, shrimp, and crabs. Envisioned is a three-year regional collaborative restoration project that builds on the strengths of the newly established Gulf of Mexico MPA Network noted above. RBNERR, with support from NOAA, is currently working on developing the initial framework and communications/training supp ort for the Gulf Network. The proposed regional habitat restoration project would have three components: (1) Year I: Gulf MPAs will work collaboratively within the Network to identify high priority habitats suitable for restoration that meet criteria for regional linkages, and develop a regional scope of work for restoring habitats within 8 - 10 MPAs. (2)Year II: Gulf MPAs initiate site restoration projects, engaging community volunteers as appropriate and monitoring progress. (3) Year III: Gulf MPAs complete site restoration projects, continue monitoring efforts, and conduct targeted outreach to raise awareness of value of restored Gulf habitats.	Trustee Portal	N	N	N	N	N	N	N	N	Y																		

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Enhancements to marine charter for-hire fishing surveys	667	Chris Robbins	Gulf of Mexico	5000000	Make enhancements to the charter for-hire telephone fishing effort survey for improving fisheries management. Link to Injury: Members of the public who hire charter boats to fish offshore lost access to a considerable portion of federal and state waters in the northern Gulf of Mexico that were closed to fishing during the BP oil disaster. Charter boats provide access to offshore fishery resources for members of the public who do not own vessels themselves. Benefit and Rationale: A telephone survey is the primary method used by fishery managers to collect charter for-hire fishing effort, which helps track quota usage. Making enhancements to the survey, such as increasing frequency and sample size, would result in more effective monitoring of fishing effort, improved management and possibly longer fishing seasons. Better data from enhanced telephone surveys would help fishery managers be more responsive and adaptive in their management of fishery species exposed to oil. Other: This project could be compensatory in nature if a reduction in fishing that anglers experienced in 2010 due to oil-related fishery closures is offset in the future by extending fishing seasons made possible through better (more accurate and precise) data on fishing effort. For example, an enhanced charter for-hire telephone survey in summer 2010 increased the precision of catch and effort estimates that allowed, in part, the red snapper fishery to reopen in the fall of 2010 after a summer closure.	Trustee Portal	N	N	N	N	N	N	Y	N	N																			
Mechanically Produced Thermocline (Hurricane Barrier)	650	Bailey, Laura	Gulf of Mexico	82500000	The Gulf of Mexico is expected to be Oxygen depleted for the next ten years due to the accelerated bacterial activity feeding on the oil in the deep. We propose a system to oxygenate the surface waters and increasing the available food at the bottom of the food chain by promoting phytoplankton growth. The Mechanically Produced Thermocline Based Ocean Temperature Regulatory System is a system to pump cold water from a depth sufficient enough to produce a thermocline on the surface of the ocean. The difference in temperature and salinity between the surface water and the water pumped up from the deep keeps the two from mixing. The temperature and salinity differences between the water from a depth of 2000 to 3000 ft and the water on the surface in most tropical and subtropical seas is sufficient to create a thermocline. The system to create the thermocline consists of a floating pump surrounded by a separation barrier, with a feed tube attached to the bottom of the pump. The pump in the system that we have designed is powered by ocean currents, but the concept is not limited to the use of our pump. The pump we have designed is a floating vessel with turbines set into each of its two sides. The turbines are directly geared to an impeller. The impeller pumps water from the top of the column of water in the feed tube. The feed tube is open at the bottom. The water that is replacing the water that is being pumped is coming up from depths up to 2000-3000 ft. The water that is pumped off of the top of the column of water overflows the pump and is caught by the separation barrier. The feed tube is a flexible membrane that is seamed into the shape of a tube which is open on each end. The feed tube is suspended from the bottom of the pump and hangs down into the deep water. The feed tube is kept open with rings which are attached to the inside of the tube at regular intervals. The tube is kept in a vertical position by lines which are attached to the bottom of the pump, ha ng down the length of the	Trustee Portal	N	Y	N	N	N	N	N	N	N																			

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					tube, inside the tube, and are attached to a weighted ring, which is attached to the bottom of the feed tube. The separation barrier is a flexible membrane attached to the perimeter of the pump, above the level of the turbines. The separation barrier extends out to an inflated ring, to which it is attached. The separation barrier catches the water that is pumped up. The separation barrier prevents mixing of the pumped up water and the water below it. The barrier allows the water to flow out smoothly over the surface of the water as the pumped up water overflows the inflated ring. The thermocline is beneficial in many ways. The mass of cold water promotes phytoplankton growth, increasing food available for fish. The increased growth of phytoplankton sequesters CO2 which can then be consumed by zoo-plankton in the form of carbohydrates. The zoo-plankton sequesters the carbohydrates into calcium carbonates and calcium bicarbonates. The calcium carbonates and bicarbonates sink and are sequestered into the depths of the ocean, potentially for thousands of years. A larger scale thermocline can be created by the use of multiple pumps in strategic groupings. These large-scale created thermoclines can be positioned to work as a cold water barrier to hurricanes and tropical storms.																													
Building a better Gulf Floor	1085	Tom Steber	Gulf of Mexico		The build fishing Habitat of the Alabama Gulf Coast 1. To deploy 12 40' x 60' x 25' high Reef spots of Florida Limestone in the north end of the Alabama reef zone (EEZ) 2. To deploy 200 Ecosystems in 30' of water, from the Florida State line and the Gulf State park pier (in the newly permitted reef zone, inside 3 miles of Alabama shore) 3. To deploy 200 Ecosystems just outside Mobile Bay for Juvenile fish (Habitat would provide safety and food until juvenile were large enough to move into offshore reefs) 4. To deploy 80 Ecosystems in Cotton Bayou to improve water quality, provide estuary, reduce damage from boat wakes. 5. To deploy 80 Ecosystems in Terry Cove to improve water quality, provide estuary,reduce damage from boat wakes.	Trustee Portal	N	N	N	N	N	N	N	N	N																		
Andrew Benton Tract-Protection and Restoration of Coastal Alabama - A Coastal Resource Recovery Land Acquisition Project	1084	Walter Ernest	Weeks Bay	2000000	This project is a fee simple resource recovery land acquisition project . The acquisition of properties with a high conservation value has been identified by the Mabus Report and the Land Trust Alliance's Gulf of Mexico Land Trust which are members of the Partnership for Gulf Coast Land Conservation. The 407 acre Andrew Benton Estate Tract is within the Weeks Bay Coastal Area as delineated in the Weeks Bay Reserve Management Plan as established under the Coastal Zone Act of 1972: "Within the Weeks Bay Coastal Area the highest priority exists for land acquisition and for resource protection activities". The Weeks Bay Coastal Area has been designated as a Geographic Area of Particular Concern (GAPC) in the Alabama Coastal Area Management Plan (ACAMP). The parcel is recognized as a Gulf Ecological Management Site (Gulf of Mexico Program). This Tract is ranked the second most favorable site in Baldwin County for potential restoration according to the criteria described in the Alabama Wetlands Program (Alabama Department of Conservation and Natural Resources, State Lands Division, Natural Heritage Program). The tract consists of 2,750 feet of water frontage on Bon Secour Bay. In a recent paper, these environments were estimated to be ten times more valuable to humans than any terrestrial habitat for ecosystem services like recreation and nutrient cycling (2000, Identification of Priority Sites for Conservation in the Northern	Trustee Portal	N	N	Y	N	N	N	N	N	N																		

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					Gulf of Mexico: An Ecoregional Plan, TNC). According to the National Wetlands Priority Conservation Plan (USFWS) the tract incorporates three nationally decreasing Palustrine wetland types: emergent, forested and scrub-shrub. The Southeast Regional Wetland Concept Plan (USFWS) notes that up to 50% of Alabama's historical wetlands have been lost primarily due to development. Acquisition of the Benton Tract would further protect a wide diversity of microhabitats that serve the dual purpose of enhancing breeding habitat for resident species a s well as providing suitable stopover habitat for transients. Coastal stopover habitats of the Gulf Coastal Plain should receive special attention with regards to management, conservation and restoration activities that could occur with the acquisition of this parcel. The acquisition of this property would create an opportunity for future maintenance/management and restoration activities to be conducted on this site.																													
Blue Crab Trap Removal	1058	Nancy Wallace	coastal Gulf of Mexico	10000000	Crab traps are a significant problem in the Gulf of Mexico, having negative impacts on habitat and species. Derelict gear such as blue crab traps can cause a number of problems since throughout the Gulf of Mexico, more than 250,000 traps are thought to be added to the derelict population each year (Guillory 2001). The most significant is that they continue to catch and kill a variety of species, in a process called ghost fishing. Traps can also damage habitat, interact with threatened and protected species, and introduce debris into the food web. They also hinder commercial operations such as shrimp fishing and can result in damage to boats and injuries to people. Derelict gear can persist for decades once it is lost. These traps can be physically removed during winter months due to the shallow water depths at that time of year. This is a "shovel-ready" project that would involve both state partners as well as local fishermen who would be contracted to conduct the removal. Based on estimated annual trap losses, including increased loss rates due to hurricanes and storms, it is estimated that this project could retrieve 500,000 derelict crab pots if fully funded. States have derelict trap programs that are habitually compromised by inconsistent budgets and participation rates. There are no NEPA concerns, with the only legal requirement being coordination with State agencies for short-term closures to facilitate removal activities. Removal will positively impact species by minimizing bycatch, including more than 20 species of fish and 6 species of invertebrates. The number of derelict traps in the Gulf of Mexico is currently unknown. There are, however, some annual estimates of trap disposal and overall trap loss; the latter also includes trap loss due to theft. Estimates of annual trap loss on a percentage basis for each Gulf state range widely: 30%-50% in Florida; 20%-50% in Alabama; 20%-30% in Mississippi; and up to 100% in Louisiana (Guillory 2001). Rolling fishe ry closures, coordinated closely with the most appropriate agency in each state, will allow for the physical collection of derelict or lost blue crab traps. States independently manage their own existing trap removal efforts, and this restoration project will have strong education and outreach. Traps will be removed from the coastal environment, and recycled to avoid waste contribution to landfills. Local fishermen and personnel will be consulted to determine the regions most in need of cleanup.	Trustee Portal	N	N	Y	N	N	N	N	N	N																			

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Fairhope Beach Shoreline Enhancement & Water Quality Project	1010	Jennifer Fidler	Fairhope	420000	1. From American Legion Post North to Pier Street boat ramps beach re-nourishment and shoreline enhancement. 2. South Beach and North Beach Front Parks, beach re-nourishment and shoreline enhancement. A beach line will be created directly in front of South Beach front park. The North and South ends of the rocked wall will be a living oyster reef, for the purposes of enhancing the growth of shellfish and providing fish with shellgrounds for habitat. This living reef will also serve as a wave attenuating mechanism providing protection for existing structures and sandy shorelines. Educational signage will be installed throughout. 3. Stormwater Instrastructure Computer Software and one, four month internship for data entry. Computer sofwater sepcialized for mapping stormwater infrastructure within the city watershed areas. Areas affected are city wide with a direct impact on water quality in the bay. A college intern will be hired for data entry over a four month period. 4. Repair detention pipe at Morphy Avenue (Winn Dixie) site. The detention area located along Morphy Avenue is in disrepair. The repair of the outflow structure would allow additional detention and improve storm water quality downstream.	Trustee Portal	N	Y	Y	N	N	N	N	N	N																			
Visitors Center at Bon Secour National Wildlife Refuge	990	Herbert J. Malone, Jr.	BSNWR	3500000	The explosion of the Deepwater Horizon and subsequent events of 2010 clearly resulted in loss of human use of the natural resources of Alabama's Gulf Coast, including the closure of many parts of the Bon Secour National Wildlife Refuge. The primary indicator of the level of human use in this region is tourism revenue. In 2009, 4.6 million people visited Baldwin County, spending more than $2.3 billion dollars.* The 2009 Visitor Profile Study** conducted for Gulf Shores & Orange Beach Tourism shows that more than 105,000 visitors reported visiting the refuge during their stay. Visitors report coming to the area for both active and passive recreational uses, including activities such as relaxing on the beach, fishing, boating and birding. The most influential factors in determining their decision to visit Alabama's Gulf Coast include "white sandy beaches", "safe destination", and a "clean, unspoiled environment". As a result of the Deepwater Horizon disaster, those factors were no longer perceived to be descriptive of the area and in fact, were at significant risk. The result was a massive decline in human use by tourists as well as area residents. As a result, in addition to the damage to the animals and natural habitats that are of primary concern to the Refuge System, the incident took away the cultural, recreational and aesthetic values of the coastal environment as well. Use of the trails and beaches of the refuge was critically impacted resulting in near total loss of use. Because of this decrease in human use, Baldwin County experienced the most significant economic impact from the disaster of any on the Gulf and its coastal cities saw losses of $64,278,920 in lodging revenue alone. Total tourism losses and subsequent decrease in local, county and state revenues is estimated to be in excess of a billion dollars. For many years the Friends of Bon Secour National Wildlife Refuge (FBSNWR) have been lobbying the Fish & Wildlife Service (FWS) to build a Visitors a nd Education Center at the refuge. The building of such a center has the active support of Gulf Shores & Orange Beach Tourism as well as all neighboring cities, chambers of commerce, the citizens of Baldwin County, and the multitude of visitors who visited the refuge. The FBSNWR,	Trustee Portal	N	N	N	N	N	N	Y	Y	N																			

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					recognizing that a large number of tourists, local residents and particularly school students have little or no understanding of the underlying importance of a refuge, what types of wildlife and habitats it contains, envision the center as a means to provide an educational experience as well as to pique the interest of even more visitors. The center would not only to provide visitors a place to learn more but also a place where groups of students can come on field days and have initial classroom instruction, then actually go out into the field. We believe such opportunities are the foundation for stewardship of the natural resources by future generations. Visitor Centers are becoming a significant part of the worth of the Refuge System, but with the current economy are likely to take a back seat for years to come. This funding opportunity is a one-time source to make this project a reality and to mitigate lost access with increased capacity for exposure -- and support -- in the future. The FBSNWR have pledged to donate $60,000 to such a center, to be dedicated to instructional and educational elements. The center's design will include ecologically themed areas such one for the local Share the Beach program, which is dedicated to the protection and conservation of our nesting sea turtles. No entity profits monetarily from such an endeavor and all personnel engaged in educational activities will be volunteers (except for Refuge staff who would assist when time permits). The land is available and the structural drawings, approved by FWS, are in place. The estimated cost, based on these drawings, is $3.5 million. The FBSNWR and Gulf Shores & Orange Beach Tourism request that Early Restoratio n Funds be used to construct this center. We believe that this project is a logical way to compensate for the loss of use caused by the 2010 incident and would greatly benefit the area not only short-term but into the foreseeable future and help us ensure that the public maintains an abiding interest in our natural world.																											
Three Mile Creek Repair/Maintenance	943	NICK AMBERGER	Mobile County	1500000	Three Mile Creek is an approximately sixteen (16) mile long creek that meanders through the northern part of the City of Mobile. It begins west of Cody Road flowing generally east and north, ending at the Mobile River. Over time the City's growth within this creek's watershed (approximately 30 square miles) has had a detrimental impact on this watercourse. Development has taken place adjacent to the creek causing a significant decrease in the areas adjacent to, and within, the flood plain. This has increased the risk of flooding and reduced the amount of buffer that would minimize the impact of overland runoff and sediment entering the creek. This creek is also a habitat for many species of flora and fauna that are at risk due to the illicit discharges and sediment loading. One of the proposed activities would include an inventory of the existing stormwater discharges to aid in the future maintenance of the creek and to pinpoint and eliminate illicit discharges within the creek's watershed. Other activities would involve returning sections of the creek to their historic shape by dredging, filling in eroded areas, grading and stabilizing slopes and outfalls. The benefits of this project include: 1) Increase the water quality of Three Mile Creek and Mobile River 2) Reduce loss of property due to flooding 3) Reduce loss of property due to erosion 4) Minimize future maintenance costs related to Three Mile Creek 5)	Trustee Portal	N	Y	Y	N	N	N	N	N	N																		

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					Allow investigation and elimination of the apple snail habitat 6) Offset the losses to overall revenues in the City																												
Informed Restoration: Assessing the uptake of Deepwater Horizon-derived heavy metals and organic contaminants by coastal molluscan species in the Gulf of Mexico	921	Peter Roopnarine	Gulf of Mexico	90000	The Deepwater Horizon oil spill, which dumped more than 600,000 tons of crude oil into the Gulf of Mexico (GOM) between April and August 2010 is the largest accidental spill in history. While immediate environmental impacts of the spill, such as direct and fatal fouling of wildlife and the physical contamination of coastal areas were easily observed, long-term effects of the spill are still being determined. Efforts to restore impacted areas and species of the GOM, in fact the GOM ecosystem itself, must begin with informative assessments of the initial and ongoing impacts. Toward that goal, we have been monitoring the impact of the spill on a variety of molluscan species (shellfish) in coastal areas of the GOM, including the commercially important oyster Crassostrea virginica, since May 2010. Other species include the mussel Geukensia demissa and marsh periwinkle (snail) Littoraria irrorata. Monitoring has consisted of examination of both the shells and soft-tissues of specimens collected from May through August 2010, searching for reliable indicators of exposure to and incorporation of crude oil components, namely specific heavy metals such as vanadium, lead, nickel and chromium, and particular organic polycyclic aromatic hydrocarbons (PAHs). We have compared specimens of C. virginica collected in Louisiana and Alabama prior to landfall of the spill and those that were exposed during the entire spill interval, as well as specimens collected outside of direct spill impact in Florida, and outside of the GOM from off the southeastern United States. Additionally, we are examining the shells of specimens collected in the GOM from the period 1880-2000 to establish baseline levels of contamination unrelated to the Deepwater Horizon spill. We propose that any restoration efforts of the coastal ecosystem of the GOM will be aided greatly by detailed understanding of the less visible impacts of the spill and the potential for long-term effects of the spill. Our specific res earch goals are: 1. Determine which crude oil components, both metallic and organic, are being incorporated into shells and tissues of the three species. We will also examine soft-tissues histologically to determine whether exposure to crude oil induces tissue pathologies. 2. Model the potential distribution of these components into the broader GOM food web by examining predators of these species as well as data on predation intensity and interaction strengths. This goal will be used as a tool for further prediction of potential long-term bio-accumulation in higher trophic level marine species, including commercially important crustaceans and fish. To-date we have completed analyses of specimens of C. virginica collected in the 20th century, and May and August 2010. We have confirmed, using inductively coupled laser mass spectrometry, that specimens collected in August 2010, after exposure to the spill, have significantly higher concentrations of vanadium, lead and chromium in their shells. Furthermore, examination of soft tissues shows that vanadium, lead and cobalt are present in significantly higher concentrations in gill and muscle tissues of August 2010 specimens. We therefore propose to continue and extend this work by: 1. Conducting similar work with additional 20th century and 2010 specimens of C. virginica to test current results. 2. Extending those analyses to include PAH	Trustee Portal	N	Y	N	N	N	N	N	N	N																		

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					(using gas chromatographic mass spectrometry) and histological analyses of the soft-tissues. 3. Expand the work to include other molluscan species for which we have relevant collections, namely G. demissa and L. irrorata. 4. Continue the collection and monitoring of those three species for the next two years. This extended monitoring will allow us to cover at least three reproductive cycles for each species, and determine if there is a decline in the rates at which contaminants are being incorporated. Furthermore, we will be able to coordinate our efforts with those of other groups working on different species in other parts of the GOM food web.																													
Dauphin Island Eco-Tourism and Environment Education Area	879	Jeff Collier	Dauphin Island	3000000	The project is located on the north side of Dauphin Island from Eldorado Street south to near the Alabama Deep Sea Fishing Rodeo site and west of LeMoyne Drive (Hwy 193-S). Estimated Cost: $3 million (requested from this program) Goals and Objectives of the Project: The primary goal is to acquire a total of one hundred (100) acres of property including uplands (6.23 acres), wetlands (6 acres) and associated bottomlands (88 acres) on the north side of Dauphin Island along Aloe Bay (see map). This represents approximately 1500 feet (north-south) along the west side of Lemoyne Drive (Hwy 193-S). Preservation of this environmentally important region will protect critical habitats and provide unique educational and research opportunities. Project Description: The proposed project will transfer a vitally important ecological and environmental tract of land to public ownership. The location of the parcel is critical to the long term protection of State Hwy 193, which serves as the island¿s only evacuation route. Maintaining and enhancing native salt marsh and shoreline vegetation will provide an increased level of protection from future storms while creating a healthy natural environment. The unique natural characteristics associated with this property make it a good fit for limited public access and related educational and environmental research opportunities. To further enhance the island¿s eco-tourism experience, interpretive signs can be strategically placed depicting flora and fauna species native to the area. The Town would also be willing to partner with local scientists and conservationists to develop study areas in support of the local seafood industry. For example, the relatively shallow water bottomlands could serve as an ideal site for experimental oyster beds to restock area reefs in Mississippi Sound and lower Mobile Bay. If successful, local oyster harvesters could return to work and the entire South Mobile County economy would benefit. I n addition, salt marsh and tidal inlets could be used similarly to study juvenile shrimp, crab and fish populations.	Trustee Portal	N	N	N	N	N	N	Y	N	N																		
Black Belt Prairie Restoration Project	850	James L. Cummins	AL	1700000	Early explorers to the Blackland Prairie (BLP) Region described them as "expansive illuminated grassy plains" and "rolling prairie with scattered pine and crabapple thickets". W. Roberts, writing in the Emigrant's Guide in 1818, described the prairie he saw as "wide spreading plains, of a level, or gently waving land, with skirts of rich interval wood land; and exhibiting, in the month of May, rich cast, and has the appearance of great fertility. Early settlers also noted the "blackness" of the soil and its great fertility. There are two main areas that make up the BLP. The largest of the Blackland Prairies, as well as the most southeastern of the tall prairie type, is the Black Belt Prairie (BBP). The BBP is a crescent-shaped region that covers some 14,141 square	Trustee Portal	N	N	Y	N	N	N	N	N	N																		

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					km and extends some 500 km from McNairy County Tennessee, south across east-central Mississippi and east to Russell County Alabama. Development of the Black Belt was chiefly from chalk, a soft limestone, with small concentrations of clay and silt. The "blackness" of the soil as described by early explorers and settlers is a result of humus of the grassland that forms dark colored topsoil. The second area of the BLP is the Jackson or Central Prairie. The Jackson Prairie (JP) extends from Yazoo County to the eastern border between Alabama and Mississippi. The fine textured soils of this prairie were derived from calcareous clays and are well suited for cultivation. Much of the BBP prairie was converted to agricultural use during the 1800¿s with cotton being the primary crop. The 1900s saw the conversion from cotton to soybeans, grazing lands and other agricultural crops. Early settlement and intensive cultivation have severely degraded the soils of these prairies and have resulted in the loss of valuable topsoil as well as extensive erosion. This erosion has contributed greatly to non-point pollution in the many rivers and streams that traverse the BBP. Excessive grazing and the exclusion of fire h ave also allowed the expansion of Eastern Red Cedar (Juniperusvirginiana) and other noxious species. The Conservation Reserve Program has allowed much acreage to be converted to loblolly pine production. Today, the BLP has been listed as one of the critically endangered ecosystems in the nation with less than one percent of the prairie still remaining, making it the most degraded habitat type in Mississippi and Alabama. The only remnants of native prairies left are in cemeteries, 16th section lands and on the Tombigbee and Bienville National Forests. This project will focus of restoring native prairies using sound, scientifically based management practices within the BBP, and to a lesser extent the JP. The desired goal of this proposed project is to improve through restoration and enhancement, native grassland habitats for rare, threatened, endangered, and declining species that are dependent on native prairie communities found within the BBP region of Mississippi and Alabama. Today, the BBP is listed as one of the most critically endangered (>98 percent decline) ecosystems in the nation with less than one percent of the prairie still remaining, making it the most degraded habitat type in the country. By restoring quality native grassland habitats, the project partners hope to increase and improve habitat for grassland songbirds, pollinator insects, and other terrestrial and aquatic wildlife. The project partners hope to restore/enhance 10,000 acres of native grasslandswithin the BBPregion of Mississippi and Alabama. Infrastructure is already in place to establish native grass, forb, and legume communities in Mississippi and Alabama. A bird-monitoring plan, modeled after the CRP CP38 monitoring plan, will be implemented to measure bird response to restoration practices. Butterfly communities will also be monitored inrestored fields and both bird and butterfly populations will be monitored for at least 3 years after fields have been restored. Many species will b enefit from the restoration of native grassland habitat and the subsequent reduction in non-point source pollution. Some of the species that would benefit include the Bewick¿s Wren, Northern Bobwhite, Southern Combshell, Orange-nacre Mucket, Rough Fatmucket, Alabama Moccasinshell, Southern Hickorynut, Black Combshell,																												

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					Southern Clubshell, Flat Pigtoe, Ovate Clubshell, Heavy Pigtoe, Inflated Heelsplitter and Tapered Pondhorn. The Natural Heritage Program (NHP) at the Mississippi Museum of Natural Science and the U.S. Fish and Wildlife Service (USFWS) has listed many endangered and declining prairie floral species that would benefit by this project. Those species include Ohio Buckeye, Earleaf False Foxglove, Shinners¿ False Foxglove, Green False Foxglove, Price¿s Potato bean, Spreading Rockcress, Canada Wild Ginger, White Heath Aster, Barrens Silky Aster, Rattle-Vetch, Great Indian-Plantain, Wild hyacinth, Slender Sedge, Nebraska Sedge, Mead¿s Sedge, Small Toothed Sedge, Big Shellbark Hickory, Scarlet Indian Paintbrush, Vase Vine Leather Flower, Ashe Hawthorn, Gallion Hawthorn, Blue Waxweed, Dwarf Larkspur, Shooting Star, Eastern Purple Coneflower, White Dog¿s Tooth Violet, Burning Bush, Bighead Pygmycudweed, Pumpkin Ash, Blue Ash, Kentucky Coffee Tree, Drummond Pennyroyal, Large Flowered Heartleaf, Green Violet, White Walnut, Texas Plains Rush, Spreading Bladder Pod, Turk¿s Cap Lilly, Grooved Yellow Flax, Carolina Anglepod, Canada Moonseed, Pitcher¿s Stitchwort, Woodland Muhly, Prairie Iris, Prairie Evening Primrose, Limestone Adder¿s Tongue, Small Palafoxia, American Ginseng, Narrow Glowered Beard Tongue, Eastern Eulophus, Odorless Mock Orange, Purple Fringeless Orchid, Prairie Parsley, Shadow Witch Orchid, Rough Rattlesnake Root, Barbed Rattlesnake Root, Bur Oak, Lance-Leaved Buckthorn, Balsam Ragweed, Northern Slender Ladies¿ Tresses, Great Plains Ladies¿ Tresses, Lesser Ladies¿ Tresses, American Bladdernut, American Colombo, Yellow Pimpernell, Southern Meadow Ru e, Stiff Greenthreads, Narrow Leaf Fever Root and September Elm. By utilizing financial incentives and landowner outreach, it is the goal of the partners to help educate private landowners about native prairies and the effects of non-point source pollution on aquatic ecosystems. To date, the project partners have restored approximately 8,000 acres of native grassland habitat within the BBP region of Mississippi and Alabama. This project will add valuable resources to continue this large landscape-level conservation effort.																												
100:1000 Restore Coastal Alabama	888	Mark Spalding	coastal AL		The Ocean Foundation has partnered with Mobile Baykeeper, The Alabama Coastal Foundation, Alabama Wildlife Federation, The Mobile County Wildlife and Conservation Association, and The Nature Conservancy to build 100 miles of oyster reef along Mobile Bay. This oyster reef creates the conditions needed to plant, support and promote more than 1,000 acres of coastal marsh and seagrass.	Trustee Portal	N	N	N	Y	N	N	N	N	N																		
Restoration and protection: Marsh Island, AL	807	Mel Landry	Mobile County	7000000	This project would consist of creation of approximately 42 acres of marsh habitat on the south side of Marsh Island in Pottersville Bay. This project will utilize sediment dredged from the Mississippi Sound, the Coden Navigation Project or from other sources, such as the beneficial use of dredged materials located in upland disposal area. Area will be planted with transplanted Spartina from nearby locations. The north, east, and west sides of the islands will be protected with WADs. This project is an initiative of ADCNR for the State of Alabama.	Trustee Portal	N	N	Y	N	N	N	N	N	N																		
Restoration and protection:	827	Mel Landry	Weeks Bay	3000000	This project would protect and restore the Swift Tract of the Weeks Bay NERR through the construction of a offshore breakwater and the planting of salt marsh species along three miles of shorelines. Additionally, this project will	Trustee Portal	N	N	Y	N	N	N	N	N	N																		

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Swift Tract Weeks Bay NERR, AL					protect freshwater marsh and forested wetlands located just inland of the shoreline at this site. Invasive species control and the planting of native species will take place in these freshwater marsh and forested wetlands. This project would be part of the 100-1000 Restore Coastal Alabama initiative and is supported by State, NGO and NERR partners.																													
Buttahatchie River Restoration Project	848	James L. Cummins	AL	11686300	The main focus of the Buttahatchie River Restoration Project is the acquisition, restoration and perpetual protection of lands found along the Buttahatchie River in Monroe and Lowndes County, Mississippi and Lamar County, Alabama. Lands that have been identified for purchase within the Buttahatchie River Restoration Project Area (BRRPA) for this project encompass 5,081 +/- acres. These lands are owned by landowners who at the date of submittal of this proposal are willing to sell their lands for this project. The BRRPA is situated within the U.S. Environmental Protection Agency’s Fall Line Hills (Level IV) ecoregion which is part of the greater Southeastern Plains (Level III) ecoregion. The Southeastern Plains ecoregion is rich in species richness, species endemism and community diversity in terrestrial, freshwater and aquatic systems. One of the significant aspects of this ecoregion is its diversity of fish, aquatic turtle and mussel species which are among the most significant and at-risk in North America. Many aquatic species are endemic to a single river system and its tributaries. Thus, conservation of aquatic biodiversity in the Southeastern Plains requires conservation of most of the river systems. The restoration and perpetual protection of lands within the BRRPA will benefit a myriad of terrestrial and aquatic species found within the Buttahatchie River Watershed that are listed as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS). Those aquatic species listed as threatened or endangered include the Southern combshell (Epioblasmapenita), orange-nacre mucket (Lampsilisperovalis), Alabama moccasinshell (Medionidusacutissimus), black clubshell (Pleurobemacurtum), Southern clubshell (Pleurobemadecisum) and the ovate clubshell (Pleurobemaperovatum). The Natural Heritage Program at the Mississippi Museum of Natural Science has listed other aquatic species as critically imperiled and/or of special concern in the area that woul d also benefit from the restoration and protection of the BRRPA They include the Southern hickorynut (Obovariajacksoniana), tapered pondhorn (Uniomerusdeclivis), flat floater (Anodontasuborbiculata), rock pocketbook (Arcidensconfragosus), crystal darter (Crystallariaasprella), Alabama shiner (Cyprinellacallistia), Alabama spike (Elliptioarca), delicate spike (Elliptioarctata), backwater darter (Etheostomazonifer), black-knobbed map turtle (Graptemysnigrinoda), Tombigbee rivulet crayfish (Hobbseuspetilus), luvial shiner (Notropisedwardraneyi), frecklebellymadtom (Noturusmunitus), Alabama hickorynut (Obovaria unicolor), freckled darter (Percinalenticula), paddlefish (Polyodonspathula), red salamander (Pseudotritonruber), monkeyface (Quadrulametanevra), ridged mapleleaf (Quadrularumphiana) and the Southern creekmussel (Strophitussubvexus). The Buttahatchie River Watershed is part of the larger Tombigbee River Drainage. Consequently, the Tombigbee and all of its tributaries are a part of the greater Mobile River Basin (MRB). In the Recovery Plan for Mobile River Basin Aquatic Ecosystem	Trustee Portal	N	N	Y	N	N	N	N	N	N																			

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					(RPMRBAE) (U.S. Fish and Wildlife Service.2000. Mobile River Basin Aquatic Ecosystem Recovery Plan. Atlanta, Georgia) which was compiled by the USFWS, the MRB is described as: “… significant for its size, location, and its exceptional diversity of natural habitats. The Basin includes seven major river systems draining portions of ten physiographic provinces and subdivisions in four states, and forming the largest Gulf Coast drainage system east of the Mississippi River.” The report goes on to describe the MRB’s diversity as “truly astounding” with the MRB containing 17 species of aquatic turtles which represents almost 40 percent of North America’s aquatic turtle species. The MRB also contains 160 species of fish ranking it third in the nation and has been ranked in the top 10 river basins in the world for diversity of freshwater mussels with 75 species. The MRB has also been ranked as the richest in the world for aquatic snails with 120 species. However, changes to the MRB have brought about a drastic and alarming decline in many of the aquatic species of the MRB. Many species have become extinct while others are on the brink of extinction. In the RPMRBAE, the extinction of many of the species is described. “Over half of all known or presumed aquatic animal extinctions in the United States since European settlement have been freshwater mussels and snails unique to the Mobile Basin. In an extinction event unparalleled in the history of the United States, many of these endemic mussels and snails have disappeared within the past few decades.” The restoration and perpetual protection of lands within the BRRPA will contribute to species and ecosystem restoration goals established by Mississippi’s Comprehensive Wildlife Conservation Strategy (Mississippi Museum of Natural Science. 2005. Mississippi’s Comprehensive Wildlife Conservation Strategy. Mississippi Department of Wildlife, Fisheries and Parks, Mississippi Museum of Natural Science, Jackson, Mississippi), the RPMRBAE and Mississippi’s Forest Legacy Program (Mississippi Forestry Commission. 2007. Mississippi’s Forest Legacy Program. Jackson, MS). One of the overall goals of Wildlife Mississippi and its project partners is to help restore and protect the Buttahatchie River Watershed from conversion and development. On the Southern end of the Buttahatchie River, numerous gravel mines have severely altered the natural flow of the river and have severely degraded the habitat for many terrestrial and aquatic species. Working with the U.S. Army Corps of Engineers, Mobile District, Regulatory Division and other state and federal agencies, Wildlife Mississippi hopes to protect one of the most ecologically significant river systems in the Southeast from such continued conversion. Approximately 60% or 3,048.60 ac res that are targeted for acquisition under this project will need some type of restoration/enhancement work. Restoration activities will included, but are not limited to, removal of pine plantations and replanting of sites back to native bottomland hardwood species, stabilization of stream banks to prevent/stop bank erosion, restoration of riparian buffers along streams and replacement and/or removal of stream crossings. Enhancement activities will include, but are not limited to, supplemental planting of bottomland hardwood sites and riparian buffers that have inadequate stem counts and/or																													

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					species composition.All lands acquired through this project will be perpetually protected with a conservation easement through the Mississippi Land Trust. Approximately 5,081 acres have been identified for acquisition for this project. These lands are owned by landowners who at the date of submittal of this proposal have expressed some willingness to sell their lands. To date, Wildlife Mississippi has purchased approximately 7,000 acres along the Buttahatchie River in Mississippi and Alabama. All lands purchased by Wildlife Mississippi will be/have been restored back to bottomland hardwoods and perpetually protected with a conservation easement with the Mississippi Land Trust. Wildlife Mississippi plans to purchase an additional 1,804 +/- acres over the next few years for this project. If awarded funding through this program, Wildlife Mississippi and its project partners will be able to purchase, restore/enhance and protect over 40 miles of the Buttahatchie River making this one of the largest and most ambitious wetland restoration projects in the country! Wildlife Mississippi will assume all responsibility (financial and other) for the long-term maintenance, monitoring and management of the project lands. A Long-term Stewardship Board will be created and will ultimately be responsible for the long-term management and monitoring of the project lands and will have oversight over all long-term maintenance and monitoring activities to be conducted on the sites. Because of the nature of bottomland hardwood management, little management is anticipated. However, the following activities will be required as perpetual management measures:  Spot control of invasive and/or exotic species;  Road maintenance and erosion control; and  Beaver control.																																	
Gulf State Park Convention Center	863	Herbert J. Malone, Jr.	GSP		The Alabama Gulf Coast Convention and Visitor Bureau’s (dba: Gulf Shores & Orange Beach Tourism) mission is to market the Alabama Gulf Coast as a destination, thus enhancing the area's economy and quality of life for all residents. Each year our local tourism industry contributes more than 25 percent of the lodging revenues generated state-wide. The explosion of the Deepwater Horizon and subsequent events of 2010 clearly demonstrated that the survival of the Alabama Gulf Coast business community and the quality of life of its residents are reliant upon the health of its environment and the availability of that environment for human uses. The primary indicator of the level of human use in this region is tourism revenues. In 2009, 4.6 million people visited the Baldwin County, spending more than $2.3 billion dollars.* Ongoing Visitor Profile Studies** show that visitors come for both active and passive recreational uses, including activities such as relaxing on the beach, fishing, boating and birding. The most influential factors in determining their decision to visit Alabama’s Gulf Coast include “white sandy beaches,” “safe destination,” and a “clean, unspoiled environment.” As a result of the Deepwater Horizon disaster, those factors were no longer perceived to be descriptive of the area and in fact, were at significant risk. The result was a massive decline in human use by tourists as well as area residents. For those residents, the incident not only took away the cultural, recreational and aesthetic values of their coastal environment, it also took away the economic support that environment provides for their businesses and their communities. Because of	Trustee Portal	N	N	N	N	N	N	Y	N	N																			

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					this decrease in human use, Baldwin County experienced the most significant economic impact from the disaster of any on the Gulf and its coastal cities saw losses of $64,278,920 in lodging revenue alone. Total tourism losses and subsequent decrease in local, co unty and state revenues is estimated to be in excess of a billion dollars. The Gulf State Park was at the center of the crisis, with its accommodations, beaches, boating amenities and waters left vacant. Some of those included new modifications to the campground such as new swimming pool and camp store. These amenities were underused during the inaugural summer. The development of a convention center will be an effective and appropriate venture to offer increased access to the state’s beaches, wildlife and waters in order to mitigate the injury created by the Deepwater Horizon disaster. It has been estimated that such a facility will generate tens of millions of dollars a year for the Alabama Gulf Coast economy, producing millions each year in tax collections for schools, roads and other vital services as well as generating thousands of new jobs. Unlike the predominantly leisure tourism market the area is currently dependent upon, the new facility would attract convention and meeting markets. This would allow for additional access by these delegates on several levels. First, the facility itself will significantly increase the number and size of groups that the area can accommodate. Currently many Alabama based associations and other groups are meeting at out of state beach destinations because they cannot be accommodated. Additionally, these groups will add more stability to the area’s economy in both their seasonality and their resilience in the event of future disasters such as the Deepwater Horizon incident. Unlike vacationers, their meetings are not fully dependent upon the typical “beach season” or even upon physical access to the natural resources. Passive access (views) to beaches as well as access to secondary natural assets and amenities – including mild shoulder season climate for golf and fishing, protected wildlife areas and trails, and fresh Gulf seafood – are draws for these groups throughout the year. Having add itional meeting facilities also ensures increased future access from returning visitors. Research** shows that first time visitors are extremely likely to return to Alabama’s Gulf Coast for additional visits. By increasing the number of first time visitors who come for meetings, subsequent visitation will be increased, as well. By the same token, introducing those visitors to Alabama’s state park system by showcasing Gulf State Park facilities and amenities will surely increase interest in and visitation to the park system as a whole. For all these reasons, Gulf Shores & Orange Beach Tourism suggests the Alabama Department of Conservation & Natural Resources construct a convention center at Gulf State Park. It is estimated such a facility will cost $79 million. The facility will be a logical way to compensate for the loss of use injury to our natural assets and subsequent economic losses resulting from the 2010 incident.																											
Callaway Land Acquisition	805	Brandan Franklin	Baldwin County	4000000	Purchase approximately 65 acres of land located along Little Lagoon and Oyster Bay. THere is approximately 900 feet of shoreline located along Little Lagoon and approximately 350 feet of shoreline along Oyster Bay. THis land has approximatley 40 acres of uplands and 20 acres of wetlands. The	Trustee Portal	N	N	Y	N	N	N	N	N	N																		

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					shorelines can be utilized as restoration projects to enhance the environmetal and ecological resources for the area. The wetlands can be preserved to help water quality for both Little Lagoon and Oyster Bay.																												
Dog River Scenic Blueway - Put-in/Take-out Canoe/Kayak Launch Sites	9054	BJ Smith	Mobile County	430000	Dog River Scenic Blueway: Promoting habitat revitalization through outdoor recreation while growing the economic resilience of the entire Dog River Watershed through nature based tourism. Develop 10 kayak/canoe access points to the Dog River and its tributaries. Along with river signage and promotional pieces.	Trustee Portal	N	N	N	N	N	N	Y	N	N																		
Fairhope Public Beach's Water Quality Treatment	776	Jennifer Fidler	Fairhope	4500000	The City of Fairhope owns a public beach and park along the Eastern Shore of Mobile Bay. This park includes water front property, a bluff, and park property that is elevated approximately 100 feet above the Bay. All stormwater in the approximately 58 acre watershed drains to Mobile Bay. This drainage area receives stormwater from the existing duck pond, N. Bayview Park where many animals are walked, and an existing residential neighborhood. All of these factors work together to impair water quality at the park swimming beach. The project includes the relocation of the park road to create a larger natural stormwater treatment, and quality in the form of constructed wetlands. It includes the routing and control, and treatment of stormwater from the N. Bayview Park. The City of Fairhope also owns a public park and beach from the Pier Street boat ramp south to the American Legion near Laurel Avenue. There is nearly 200 acres in the watershed that drains through the park area. The park is also used by walkers, joggers, and citizens walking their dogs. As a result the water quality of the Bay is impacted. This phase of the project includes the construction of water quantity treatment, quality, and treatment. The stormwater quality will be treated through constructed wetlands.	Trustee Portal	N	N	N	N	N	N	Y	N	N																		
Fly Creek Restoration	797	Jennifer Fidler	Fairhope	19000000	Fly Creek in northern Fairhope is an important watershed that drains most of northern Fairhope east to State Highway 181. This creek channel has changed over the years as a result of an accumulation of impacts. There is a large tract of property 104 acres under private ownership that is undeveloped and borders the creek. This project includes restoring the creek to its historic functioning capacity and acquiring the 104 acres and developing it into a stormwater quality and quantity treatment facility, a City park, and an arboretum.	Trustee Portal	N	Y	Y	N	N	N	N	N	N																		
Titi Swamp Wetland Purchase and Preserve	777	Jennifer Fidler	Fairhope	500000	Titi Swamp located in south Fairhope east of Scenic 98 and south of Nelson Road is a large 62 acre natural wetland that is under private ownership. The functioning swamp drains to Mobile Bay and acts as a large stormwater attenuation and treatment facility. The City would like to purchase this property and create a nature preserve and explore the possibility of a local wetland bank in order to restore it to full function.	Trustee Portal	N	N	Y	N	N	N	N	N	N																		
GOM Marine Sanctuaries	5052	Kathleen Garland	Gulf of Mexico		Funds and Trustee influence should be used to promote the legislative effort to expand the marine sanctuaries in the GOM to cover all the natural reef systems as well as the bridging artificial reefs. Protecting this important habitat may help to offset some of the fisheries impacts of the oil spill.	Trustee Portal	N	N	N	N	N	N	N	N	N																		
Repair/ Maintenance	2138	Nick Amberger	Mobile County	1500000	REPAIR MAJOR EARTHEN CHANNEL AND DROP STRUCTURES TO ELIMINATE SEDIMENTATION AND CORRECT EROSION.	Trustee Portal	N	Y	N	N	N	N	N	N	N																		

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Of Three Mile Creek																																	
Giving Gulf Wetlands a Future	2144	Ernest Estevez	gulf states		I propose that low coastal uplands surrounding the Gulf of Mexico be protected now so that 1. Tidal wetlands damaged by the spill but that cannot recover can be recompensed by future wetlands 2. Tidal wetlands for which mitigation is attempted but fails can likewise be recompensed, and 3. Total tidal wetland area along the Gulf coast is maintained as close to existing area in the face of subsidence and sea-level rise. Tidal wetlands in the Gulf of Mexico are being lost to subsidence caused in part by oil and gas exploration and development. Additional tidal wetlands will probably be lost due to sea-level rise resulting from climate change, for which the consumption of fossil fuels including oil and gas is responsible. Even at present low rates of sea-level rise, substantial coastal landscape evolution is occurring as coastal forests retreat, wetlands migrate up-slope, and open water replaces tidal wetlands. These effects will become more significant as the rate of sea-level rise accelerates. At present, low coastal uplands provide a destination for migrating wetlands but in decades to come these uplands will be developed, defended, and otherwise unavailable to tidal wetlands. The benefit of protecting such low uplands now is high because developed lands will not be undeveloped for the sake of wetland migration. The economy provides an opportunity to protect low coastal uplands at a considerable savings. I suggest that a planning horizon of 50 years guide the protection of low coastal uplands. Fee-simple purchases and conservation easements could sunset if the rate of sea-level rise observed by then, or predicted with very high confidence by expert models, are found within the natural adaptive range of tidal wetlands to maintain themselves in place.	Trustee Portal	N	N	Y	N	N	N	N	N	N																		
Dauphin Island Park and Beach Board (Audubon Bird Sanctuary)	10168	Sherry Cain	Dauphin Island		Provide more handicap boardwalks for the disable to visit the Audubon Bird Sanctuary.	Trustee Portal	N	N	N	N	N	N	Y	N	N																		
Saving the Gulf Coast one bale at a time.	207	Bryan Kemp	LA	250000	We are a Louisiana Non-Profit 501(c)(3) Corporation (pending) devoted to preservation and reclamation of the Gulf Coast. We have developed and perfected the use of locally grown hay and wheat straw to mitigate, prevent, and ultimately reverse coastal erosion. Our process not only stops erosion, it also restores nesting and colonization sites for the countless species of birds that are native to the Louisiana Gulf Coast, including the Brown Pelican. When fully deployed, our process will clean and restore existing habitats while literally creating new wildlife havens to be enjoyed by future generations. Our process uses round hay bales produced by American farmers and delivered by American truckers. The environmental benefits of using hay instead of toxic chemical dispersants are plainly obvious. Hay is the only truly "green" solution available to preserve, restore and reclaim our Gulf coast. Hay has incredible natural absorption capacity and has proven ability to stop and even reverse coastal soil erosion. We propose to purchase large quantities of hay and wheat straw from regional farmers, paying them a favorable price-per-ton for delivery to established distribution points along the Gulf Coast. 1000	Trustee Portal	N	N	N	N	N	N	Y	N	N																		

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					pound plus round hay bales will serve as barriers along the coastal areas and wetlands around the gulf region. Our market research shows a fully adequate supply of hay is readily available. In particular, there is 200,000 to 400,000 acres of winter wheat planted in Louisiana alone each year. We would like to create a market for the farmers by baling the straw that is leftover after the wheat is harvested. This leftover straw is usually just burned in the field. LSU and the Wildlife and Fisheries Department have expressed interest in coming in behind our barriers to plant marsh grasses and mangrove trees. They feel that they will get an additional 2-3 years of protection from our plan. In time the wicking of the hay will collect and create sediments and for m a natural barrier. This plan is just a larger scale of what is used in construction sites along the highway systems when small square bales are used to control erosion. Our ultimate goal is to provide a lucrative market for hay grown and produced by American Farmers and to use that hay for cleaning, preserving and reclaiming our treasured Gulf Coast. In turn, any profits earned will be donated to other coastal and wildlife preservation organizations and agriculture related organizations.																													
BioRestore®	2106	Lecaillon	Gulf states	300000	BioRestore® will contribute to help mitigating marine resource status quo. BioRestore® is a process based on the Capture and Culture of Post-larvae (PCC) marine animals. The idea is to effectively "rescue" a small proportion of post-larval fish before predation, then rear and release them to boost marine ecosystem recovery. Restocking can thus be achieved for a wide range of coastal fish species, and pre-release juveniles are conditioned to survive in the wild before restocking. We feed them on live food, and a patented "halfway house" is created placed in the nursery where the fish can become familiar with them. Pieces of the "halfway house" are then released in the same area as the fish, thus reducing stress and encouraging the juveniles to settle at that location. BioRestore® is a 3-step "all inclusive" marine restoration process in full accordance with the maritime status quo and the regulatory context. It simultaneously aims to monitor biodiversity losses, to mitigate impacts and help rebuild stock of local species. This process is being used in the Mediterannean sea.	Trustee Portal	N	N	N	N	N	N	N	N	N																			
cedar point	431	tom granger	Mobile County		fix bulkhead	Trustee Portal	N	N	Y	N	N	N	N	N	N																			
Low-cost, 10km-range Oil Spill Sensor and Spread-predictive Sensor Deployment	633	Fei Hu	Gulf of Mexico	350000	This project will establish a low-cost, remote oil spread monitoring system with the following features: - Oil Sensor Design: There is an urgent need for inexpensive, weather-robust oil spill sensors that can wirelessly report oil data. Existing oil spill sensing technologies have the following drawbacks: (1) Inaccuracy: Infrared thermal sensing and ultrasonic wave / pulse cannot accurately detect oil existence and oil thickness levels because the temperature, weather, and water current can greatly change their readings. (2) High-cost: SAR imaging and laser fluorosensors use heavy, expensive, large-size devices, and thus are not suitable to large area monitoring. (3) Power inefficiency: Although some wireless sensors can use low-cost light array sensors to detect oil thickness, their chip designs have not emphasized low-power circuit layout. More importantly, it does not have long-distance wireless transmission capability due to its use of common, low-sensitivity	Trustee Portal	N	N	N	N	N	N	N	N	Y																			

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					antenna (to be discussed in next item). In this research, we will design a low-power, low-cost, weather-robust oil spill sensor and its corresponding sensor operation control software (such as sampling rate adjustment and sleep/wake control). - 10-km oil sensing data transmission: The harsh sea conditions necessitate 10-km-transmittable oil sensors. Due to the large area monitoring of sea surface, the existing wireless sensors cannot be used here due to their short RF communication range (typically less than 100 m). The windy sea weather and harsh water current could make any two neighboring sensors separate from each other for a distance of >100 meters (even though the proposed sensors are adhesive to the oil). In this project, we will use our unique ferrite miniature antenna technology to achieve a 10-km RF communication distance and 1-km neighbor communication range. If an oil sensor cannot use its neighbors to relay the sensing data, it can directly send signals to a wireless base station. Those flo atable base stations are pre-deployed sporadically on the sea surface. A sensor can communicate with its neighbors or 10-km away base stations. - Oil spread boundary estimation: It is important to build an accurate oil spread trend estimation model based on the analysis of the data from oil spill sensors. Such a boundary estimation model can be used to guide the deployment of new sensors (ty																												
Coastal Land and Marsh Protection	705	Alice Lawrence	Gulf of Mexico		This is a general recommendation, not tied to a specific project: Instead of habitat restoration, focus instead on purchasing lands in fee title or in easement to protect these fragile and ecologically important areas that are threatened by future development while they still exist. As you know, land development usually causes condiitons that are irreversible. By protecting these areas in perpetuity, we would permanently protect these areas and the ecological services they provide for a multitude of coastal terrestrial and aquatic species. By doing so, we not only protect habitat for many species, but also prevent future damage to human structures as a result of climate change (severe weather events such as hurricanes, sea level rise, etc.). It is my personal opinion that protecting as much currently undeveloped land as is possible from future land development, especially in coastal areas that typical exhibit a more rapid growth rate than in other areas, is the singlemost important thing we should be doing with available funding. To me it is a more valuable use of dollars than habitat restoration, which is very costly and may or may not be successful.	Trustee Portal	N	N	Y	N	N	N	N	N	N																		
Habitat Mapping for Improved Stock Assessments and Developing an Integrated Habitat Restoration Approach for	740	Chris Robbin	Gulf of Mexico		Habitat mapping will facilitate comparisons of species distributions and abundances across like habitats, allowing scientists to better stratify fishery-independent sampling by habitat type and improve the quality of information used to assess the health of fish populations. Habitat mapping is critical following the BP Deepwater Horizon disaster because fishery scientists will need the maximum amount of spatial precision to detect changes in abundance of fish exposed to or injured by oil or chemical dispersants. This information would also reduce the scientific uncertainty used to define catch limits and would improve managers' ability to aid the recovery of injured fish species through suitable measures. A better understanding of habitat types and distributions generated through habitat mapping would also help the Deepwater Horizon BP Trustee Council identify habitats for restoration that	Trustee Portal	N	N	N	N	N	N	N	N	Y																		

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Marine Habitats					would provide services of the same type and quality and of comparable value to those lost. Results of habitat mapping could be used in an Integrated Habitat Restoration Approach, which is a comprehensive plan based on restoration of key habitats that, together, will benefit the range of different resources injured by the release of Deepwater Horizon BP oil or related response effort. This project will also lay the foundation for broader research and management applications of habitat mapping, and has the potential to be integrated with additional information systems. For example, coordination with oceanographic data (Gulf Coastal and Ocean Observing System) or the development a fishing vessel data collection system habitat maps could be incorporated into real-time management and research tools. The cost of this project is scalable, depending on the size of area and degree of resolution selected for mapping. Prioritizing habitat mapping activities can be done in consultation with the Southeast Fisheries Science Center whose stock assessment scientists would be among the primary users of this information. Time to implementation is six months to one year.																													
N&P pollution control, and restoring clean water	712	John Olsen	Gulf of Mexico		We have a "SLOW", dissolving-in-water 1 kilo log, which can be dropped by helicopter or by hand into any water area. The Log contains a patented formula of Fertilizer, which allows the DIATOMS to bloom and become the dominant algae and clean up the water. 1 log will clean approx 1 million gallons.	Trustee Portal	N	Y	N	N	N	N	N	N	N																		
Lagoon Pass Parking	704	Brandan Franklin	Gulf Shores	1600000	- The public parking area and restroom facilities located at the Little Lagoon Pass Bridge were completely occupied by BP and its contractors during the entire summer of 2010 and into the winter months of 2011. This area is typically used by families and fisherman who enjoy the water outlet and sandy beaches located along the Little Lagoon Pass. Due to the amount of equipment and personnel staged at this site, the general public was denied use of this natural resource. - The City is proposing this area be developed to accommodate additional parking, pier structures and additional restroom facilities. This would allow a greater number of people to utilize this beautiful resource.	Trustee Portal	N	N	N	N	N	N	Y	N	N																		
10th Street Access	728	Brandan Franklin	Gulf Shores	1200000	- In an effort to expedite the clean up process by BP and its contractors, the city allowed BP to utilize the public accesses to the beaches located along State Highway 182. These accesses are typically used by the general public to access the beach. - The city owns a 100' right of way located on the south side of State Highway 182. The city would like to propose the development and construction of parking and restroom facilities located at this site along with a dune walkover. This would allow the general public better access to the beach. During the clean up, this site was utilized by BP for staging equipment and dumpsters for oil removal. By awarding this project, this area will be restored and enhanced to give the public a better use of the beach they were denied during the oil spill and clean up.	Trustee Portal	N	N	N	N	N	N	Y	N	N																		
Acquisition of a $1.5M Wave-Current Flume for Gulf Coast Marine	741	Bret Webb	Mobile County	1500000	The Department of Civil Engineering, in conjunction with USA’s Coastal Transportation Engineering Research and Education Center (CTEREC), seeks to augment its physical modeling capabilities in the areas of coastal engineering infrastructure and environmental fluid mechanics research and education through the acquisition of a two-dimensional wave and current flume, and	Trustee Portal	N	N	N	N	N	N	Y	N	N																		

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Processes Research					implementation of a web-based control system. The proposed equipment and instrumentation will enable faculty and students to perform dimensionally consistent scale modeling of two-dimensional fluid, fluid-sediment, and fluid-structure processes. These facilities will enable faculty and students to perform state-of-the-art research, and will enhance the educational experience of students at both the undergraduate and graduate levels through physical demonstrations of natural processes and the opportunity to perform interdisciplinary laboratory experiments. The proposed equipment is a long, two-dimensional wave flume with closed-loop recirculation and sediment transport capabilities. The flume section will be 28 m in length, 1 m in depth, and have a width of 1 m. A suite of complimentary instrumentation will also be purchased to collect data during experiments: gages for measuring wave heights, sensors for measuring water velocity, sonar units for mapping sediment contours (bathymetry), and high-speed cameras for imaging and particle tracking. Additional controls and infrastructure will be purchased to develop the web portal integration. The proposed instrumentation and equipment will enable cutting-edge research in the areas of civil engineering, coastal engineering, environmental engineering, electrical engineering, and marine science. The single-element flume will allow simulation of two-dimensional fluid dynamics and fluid-sediment processes including wave transformation (breaking), cross-shore sediment transport (erosion and accretion), and biological transport. The proposed facility wo uld provide opportunities for interdisciplinary, multi-institution, and institution-industry research. This new facility compliments the existing wave basin, providing very different capabilities, particularly those associated with verifying the mathematical models of transport of solid or liquid contaminants with the water currents. Another important capability for the new facility is the ability to use the internet for collaborative research at the new wave flume. The controls and instrumentation will include robust web interfaces allowing students and faculty at other Alabama research universities to use the facility to conduct their experiments. This feature, sometimes called a “co-laboratory” is patterned after the similar capability provided by the Pacific Northwest National Laboratory where unique microscopes and environmental instrumentation can be operated by researchers from around the world, once they have been trained on the instrument and their physical samples have been provided to PNNL. This will provide new opportunities for Alabama universities as well as encouraging new and productive collaborations with our colleagues. The University of South Alabama's Department of Civil Engineering and CTEREC currently have demonstrated expertise in coastal engineering that is unique to the state of Alabama, as well as the Northern Gulf Coast. The proposed equipment and resulting facilities will have a profound impact on the ability of USA to serve as a leader in coastal engineering infrastructure research, and will constitute a unique research facility both regionally and nationally. Such a facility will promote state-of-the-practice and state-of-the-art training for undergraduate and graduate students in civil, coastal, and environmental engineering, as well as other related disciplines. Furthermore, K-12 curriculum units could be																												

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					developed that will utilize the proposed instrumentation and equipment for educational purposes and outreach se rvice. These units will make use of an integrated web-based Internet portal allowing K-12 teachers and students, as well as other academic institutions throughout the state of Alabama, to perform experiments and collect data via the web interface. The estimated cost of the flume, equipment, instrumentation, and control systems is $1.5 million.																													
Increased Catch and Effort Reporting for the Gulf of Mexico's Marine Recreational Fishery Based on 1-month waves	648	Chris Robbins	Gulf of Mexico	10000000	Recreational anglers lost access to a considerable portion of federal and state waters in the northern Gulf that were closed to fishing during the BP oil disaster. Fishery closures amount to lost ecosystem services or human uses of resources that the Natural Resource Trustees are required to estimate and offset through appropriate compensatory restoration projects. One strategy for compensating the angling public for lost fishing access is making investments in fishery management tools that help keep fishery resources healthy and available to anglers. One such tool is the Marine Recreational Fisheries Statistics Survey (MRFSS), which collects data on recreational fisheries data used to estimate total catch. The public can be compensated for lost access to fishing grounds during the 2010 Deepwater Horizon BP oil spill by establishing a one month survey reporting waves versus the current two month reporting waves of MRFSS. A more timely reporting system would benefit the public by lowering the likelihood of overfishing and accountability measures (i.e., penalties), which if triggered, could result in a shorter fishing season. Increased data collection and reporting periods will lead to more precise and timely catch estimates. MRFSS in the Gulf of Mexico does not produce timely fishery catch and effort estimates required by managers. The MRFSS catch and effort estimates are based on a two month data collection waves with estimates produced up to 45 days after the end of a wave. For reporting to be on one month waves, with sufficient precision for management, an increase in sampling will need to occur. MRIP proposes to meet this goal; however a concurrent increased funding allotment has not been secured. Survey costs, on average, will need to double from the current level of funding. The National Research Council's 2006 Review of Recreational Fisheries Survey Methods, recommended for one month reporting of catch and effort estimates be implemented. The Marine Recrea tional Information Program (MRIP) is redesigning the MRFSS survey to accomplish this task. As an example, the red snapper season, as currently defined, closes well before the estimates are produced. The current estimation methodology has inadvertently allowed the recreational fishery to overharvest red snapper in twelve of the last twenty years, and has triggered fishery accountability measures; such as shorter red snapper seasons for recreational anglers. A timely and accurate recreational data reporting system will allow fishery managers to be proactive in the Gulf of Mexico, improving their ability to predict fishing trends and prevent overfishing.	Trustee Portal	N	N	N	N	N	N	Y	N	N																			
Shell Belt Road and Coden Belt Road Shoreline Restoration	659	Bill Melton	Coden	2000000	The Mobile County Commission proposes to work with the Alabama Department of Conservation and Natural Resources, State Lands Division to restore critical shoreline habitat and provide protection of vital infrastructure in South Mobile County. This Project is consistent with Section 1006 of the Oil	Trustee Portal	N	N	Y	N	N	N	N	N	N																			

Project Information							Restoration Types Addressed											Programmatic Damage Assessment and Restoration Plan (PDARP) Criteria		Public Notice	Oil Pollution Act (OPA) Criteria (15 CFR 990.54)			Additional Criteria									
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and Preservation					Pollution Control Act because; The restoration of salt marsh habitats contributes to making the environment and public whole by restoring and rehabilitating natural resources to compensate for losses resulting from the Deepwater Horizon Oil Spill, Marsh restoration supports addressing specific injuries to natural resources associated with the incident, Restoring living shorelines along the Mississippi Sound is consistent with restoration of natural resources, and habitats of the same type, quality, and comparable ecological and/or human use value to compensate for losses resulting from the incident, This type of project is highly likely to be consistent with long-term restoration needs and final restoration plans, and Similar projects in the immediate area have been proven to be feasible and cost effective. Project Description Shell Belt Road and Coden Belt Road run parallel to the Mississippi Sound shoreline in south Mobile County near the Coden community. There is currently 5600 linear feet of seawall along Coden Belt Rd and 3500 linear feet of seawall along Shell Belt Rd. This is a timber seawall that has been damaged by multiple hurricanes and suffers from wave and high water impacts from higher frequency storms. Due to the continued exposure to extreme events, there are signs of advanced decay and failure along the seawalls. There has also been scour of the roadway and shoulder and area between the road and seawall. The Commission proposes to implement a multi-objective project designed to create a "living" shoreline and to retrofit the bulkhead in order to protect the roadway and restore marsh habitat along the Mississippi Sound. The proposed project includes the installation of breakwaters along the shoreline to dissipate wave energy and includes the planting of vegetation along the shoreline to counter erosion. The vegetation will not only protect against erosion, but will also create an environment for small fish and invertebrates to thrive. Planting sea grasses will restore coastal marsh areas and will provide a natural environment for fish, invertebrates, waterfowl, and marine mammals to thrive.																												
Cedar Point Restoration and Enhancement Project	660	Bill Melton	Cedar Pt	10000000	The Mobile County Commission proposes to restore valuable shoreline and provide critical public access to Mobile Bay and the Mississippi Sound by enhancing County-owned property in the Cedar Point area. Cedar Point is located on the Dauphin Island Causeway (State Highway 163) immediately to the north of the Dauphin Island Bridge. It is currently a popular public fishing area with limited facilities to accommodate the public demands. The Commission proposes to enhance the existing facilities, restore natural habitat lost, and provide a high profile venue for public access to local waters. This Project is consistent with Section 1006 of the Oil Pollution Act because; The restoration of shoreline and habitat contributes to making the environment and public whole by restoring and rehabilitating natural resources to compensate for losses resulting from the Deepwater Horizon Oil Spill, Habitat restoration supports addressing specific injuries to natural resources associated with the incident, Enhancing public access infrastructure and the environment along Mobile Bay and the Mississippi Sound is consistent with restoration of natural resources, and habitats of the same type, quality, and comparable ecological and/or human use value to compensate for losses resulting from the incident, This type of project is highly likely to be consistent	Trustee Portal	N	N	Y	N	N	N	N	N	N																			

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					with long-term restoration needs and final restoration plans, and Engineering analyses performed during the development of the Cedar Point Master Plan indicate that this project is feasible and cost effective. A master plan developed by the Commission for the Cedar Point area includes elements designed to reclaim and restore the shoreline and associated habitats and to construct public access facilities along the Bay and Sound shorelines of the Point. The plan includes the reclamation of approximately 3 acres of sandy beach protected by rip-rap groins and breakwaters, the construction of a 700 foot bayside pier, and extensive renovation of the existing boat launch. The boat launch area will be located on the west side of Alabama State Highway 193 and will include the construction of rip-rap breakwaters and a new bulkhead for shoreline protection. Habitat restoration elements of the plan will be implemented in and around the hardened structures designed for the project. These facilities could also serve as launching point for multiple restoration and rehabilitation projects proposed for the area. The land included in the Master Plan is owned by the Mobile County Commission. Construction plans and specifications are complete and the permitting is nearing completion allowing for construction to begin on this Project within 90 days.																												
Safe Harbor Marsh Restoration	666	Eric Brunden	Weeks Bay	822375	Project Suggestion for the Alabama Natural Resource Trustees Safe Harbor Marsh Restoration Project Weeks Bay National Estuarine Research Reserve in collaboration with the Dauphin Island Sea Lab and Ecosystems, Inc. Weeks Bay National Estuarine Research Reserve (the Reserve) staff and collaborators propose the use of Deep Water Horizon restoration funds for the purpose of restoring estuarine associated marsh habitat within man-made canal structures located on the Safe Harbor Tract of the Reserve. The proposed project would directly create two acres of estuarine marsh habitat, remedy ongoing water quality issues, and test cost-effectiveness of restoration practices and methodologies applicable to similarly impaired canal structures found within coastal habitats. Estimated cost $822,375.00 Background Information Man-made canals in developed coastal watersheds often feature poor environmental quality due to restricted water flushing and elevated nutrient inputs from the surrounding land via groundwater and surface runoff. Canals are ubiquitous in many coastal environments and their frequently impaired water quality has become a problem of highest concern for environmental managers. Indeed, anoxic/hypoxic conditions, unpleasant scent, fish kills, and toxic algal blooms are a recurrent nuisance in many man-made canals. Three such impaired canals occur within the Safe Harbor property of the Weeks Bay National Estuarine Research Reserve (NERR). The Safe Harbor tract was acquired by Weeks Bay NERR in October of 2004. In the late 1950's the tract was developed for use as a recreational vehicle and trailer park. To meet this use, massive alterations were made to the property, including the creation of canals linking the upland areas of the property with the Fish River. A natural stream connection between the property and Weeks Bay was altered with the filling of topographically low areas and the creation of three dead-end canals dredged through marsh habitat (Figure 1 below) . Repeated anoxic/hypoxic events have been documented within the canals	Trustee Portal	N	N	Y	N	N	N	N	N	N																			

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					and numerous fish kills have been observed on a yearly basis since 2007. For instance, in 2007 five large fish kills were observed within the greater Weeks Bay system. A post fish kill algal survey in 2007 conducted by the Dauphin Island Sea Lab revealed persistent high levels of the toxic alga Karlodinium micrum, which was first observed within the Safe Harbor canals (personal communications, Novoveska, Brunden and Phipps). Toxins from Karlodinium micrum were found in violet goby (Bobioides broussonnetii) tissue. Proposed actions Weeks Bay NERR proposes to increase flushing rates within the canals by filling and contouring portions of the canals. To alleviate increased nutrient inputs, we propose to grade the slope of the canal side banks and plant marsh vegetation on the reshaped banks and filled ends. The restored marsh should absorb a large fraction of the nutrient pollution that enters the canal via runoff and groundwater (Tobias 2001a,b, 2003, White and Howes 1994a,b). A brief synopsis of work to be completed is as follows: - Year 1: Monitor depth, water residence time and nitrogen inputs via runoff and groundwater in the canals. A number of water quality metrics, such as oxygen concentrations, transparency, chlorophyll concentration and abundance of toxic algae will also be monitored. - Year 2: Physical modification of canal structures. Sediment filling and the reworking of the side banks in two of the canals will be done by the environmental engineering company Eco-Systems (http://www.eco-systemsinc.com) in consultation with the Applied Science Investigator Dr. Jim Connors. Marsh planting will be done by Dr. Just Cebrian's group, which has successfully performed many similar restoration projects in the northern Gulf of Mexico (Sparks et al. 2010; for more information see http://ecosystemslab.disl.org). - Year 3: Continued monitoring and analysis of results. Benefits Restoration of the canals within the Safe Harbor Tract will directly address water quality issues important to the mission of the Reserve (Weeks Bay NERR Management Plan, 2007) the National Estuarine Research Reserve System (NERRS Strategic Plan 2005-2010) and the objectives of the Southeast Aquatic Habitat Plan (Southeast Aquatic Resource Partnership, 2008). The importance of these activities is also recognized by the Weeks Bay Restoration Advisory Committee, which is composed of representatives from the United States Fish and Wildlife Service, University of South Alabama, Grand Bay National Estuarine Research Reserve, Alabama Department of Environmental Management, The Nature Conservancy, Mobile Bay National Estuary Program, Alabama Department of Conservation and Natural Resources, and private environmental consulting firms. Upon request for full project proposal, Weeks Bay NERR staff and collaborators will submit a detailed narrative that includes restoration methodologies, budget narrative, implementation timeline, and letters of support. Full funding of the project would allow for an evaluation of the cost effectiveness of restoration design components with a widespread applicability for the management of environmental quality in developed watersheds and in degraded environments.																													
Coastal Watershed Property	677	Bill Melton	coastal AL	9000000	Project Scope Mobile County has miles of coastline along Mobile Bay as well as the Mississippi Sound. In addition, the County has miles of coastal streams winding through the County with ultimate discharge into these two bodies of	Trustee Portal	N	N	Y	N	N	N	N	N	N																		

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Acquisition in Mobile County					water. Protection of coastal and riverine properties is becoming more difficult as development of these properties encourages human encroachment and increases potential for degradation. The coastal streams and the sensitive coastlines provide a unique natural habitat for fresh and saltwater marine life, fish, invertebrates, shellfish, as well as a broad range of coastal birds and other mammals. The Mobile County Commission proposes to acquire available riverine and coastal properties in an effort to conserve, restore, and preserve natural habitats, conserve natural resources, and improve water quality. In addition, the Commission is researching several locations for installation of public boat launches for both recreational and commercial activities to support human use capacity. The Commission is proposing that some acquired parcels be enhanced for public boat launch facilities to promote controlled access to coastal waters. Many of the vessels responding to the Deepwater Horizon Oil Spill launched along sensitive coastal shorelines in areas not suited for boat traffic. Damage to salt marsh grasses, wetlands, and sensitive water bottoms occurred due to poor launching practices and poor site selection. Constructing and maintaining adequate boat launch facilities will provide controlled access points for proper launching. Sites will be selected to preserve the natural environment and prevent damage to critical coastal habitat. Acquisition of these properties will compensate for natural resources injured during the response to the Incident and protect against future damage to the natural resources of the same type and quality. Identified properties will be assessed for their acreage, location, and ecological value or potential. Offers for purchase will be based on the appraised value of the property with consideration given to the long term value of their environmental restoration and preservation. The feasibility of acquiring properties is high and the method for their acquisition is cost effective.																																	
Dauphin Island Parkway, Bayfront Park, and Heron Bay Cut-Off Shoreline & Habitat Restoration & Public Access Enhance-ments	701	Bill Melton	Dauphin Island	5000000	The Mobile County Commission proposes to provide shoreline restoration for the promotion of coastal marsh grass revegetation, wetland expansion, and protection of vital infrastructure. In addition, this project will make improvements to an existing County waterfront parks with the same resulting effects. The Project begins at Bayfront Park and extends southward along Dauphin Island Parkway terminating at the Heron Bay Cut-Off Access. Linear in nature, the Project covers improvements to approximately 1.9 miles of coastline and enhancement of an existing Coastal County Park. This Project is consistent with Section 1006 of the Oil Pollution Control Act as it will: Contribute to making the environment and public whole by restoring and rehabilitating natural resources to compensate for losses resulting from the Deepwater Horizon Oil Spill by planting marsh grass, restoring habitat, and expanding wetlands in the project areas. Address specific injuries to natural resources associated with the incident by restoring natural habitat for marine fishes, water fowl, and other marine species. Restore natural resources, and habitats of the same type, quality, and comparable ecological and/or human use value to compensate for losses resulting from the incident with the stabilization of shoreline preventing further degradation of wetland areas, restoration of salt marsh, and expansion of public access areas. Be consistent	Trustee Portal	N	N	Y	N	N	N	N	N	N																				

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					with long-term restoration needs and final restoration plan by reestablishing natural habitat for spawning grounds for fish and mollusks and restoring wetland areas. Be feasible and cost effective as the majority of the engineering for this project has been completed and the contract for the implementation of the projects will be awarded via an open, competitive bid process. Project Scope Dauphin Island Parkway Shoreline Restoration Dauphin Island Parkway (Hwy 193) is the north/south link connecting Dauphin Island to the mainland in south Mobile Count y. Much of the roadway is constructed as a Causeway with direct exposure to the destructive effects of wave, wind, and tidal forces of Mobile Bay. Salt marshes along the shoreline once provided a natural protection against damage to the infrastructure of the Causeway. In addition, these marshes provided a rich habitat for marine fishes, invertebrates, migratory birds, waterfowl, and other marine species to thrive. Much of the natural habitat and shoreline protection provided by salt marshes along this stretch of roadway no longer exists due to degradation from hurricanes and tropical storms. Bulkheads, concrete rubble, and rip-rap have been installed along the shoreline to protect the Causeway from continued erosion; however these structures do not provide the natural habitat for marine life in comparison to the salt marshes. This project proposes to place wave attenuators along the Causeway from Bay Front Park to the Heron Bay Cut-Off Access, a distance of approximately 1.9 miles to reduce wave energy and subsequent erosion of the shoreline. In addition, it is proposed to place fill from maintenance dredging along the shoreline and plant marsh grasses to create approximately 9 acres of low maintenance, energy absorbent salt marsh wetlands. The Project also proposes to place approximately 2,250 cubic yards of hard bottom substrate over 4 acres to enhance existing and encourage new oyster bed habitat and restore critical habitat for young shrimp, blue crab, speckled trout red snapper, and the dozens of other species found in this area. This Project began in 2004 when the U.S. Army Corps of Engineers (USACE) conducted a study and published their findings in the report "Preliminary Restoration Plan for Dauphin Island Parkway Aquatic Ecosystem Restoration, Mobile County Alabama." Restoring the ecosystem by creating salt marsh wetlands has the added benefit of a low maintenance erosion protection system for the Causeway. The natural filtering provided by the we tlands will improve water quality along the shoreline in addition to enhancing the marine life habitat. Further, this Project provides a beneficial use of waste dredge material from maintenance dredging of the ship channel which is costly to dispose of in most cases. Bayfront Park Improvements In 2001, the Mobile County Commission constructed shoreline stabilization and park amenities along the shores of Mobile Bay in south Mobile County to minimize damage to fragile coastal environments. The Project utilized Coastal Impact Assistance Program funding to make improvements to the Mobile County Bayfront Park in the Alabama Port Community that included the construction of boardwalks and onsite sewage infrastructure for restroom facilities. The park's coastal location on the shores of Mobile Bay in south Mobile County places it adjacent to sensitive wetlands and waterfront. This provides an opportunity to protect																												

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					critical habitat by controlling public access. This Project will enhance and restore 7 to 12 acres of native vegetation including wetlands. The project will also construct and enhance public access infrastructure with the continuation of the existing boardwalk providing controlled access to additional areas of the property, replacement of aging playground equipment, enhancement to entrance roads, refurbishment of picnic areas, and lighting. Heron Bay Cut-Off Access Improvements Heron Bay Cut-Off is located on Dauphin Island Parkway just north of the Dauphin Island Bridge in southern Mobile County. It is a linear area located parallel to the Alabama Department of Transportation (ALDOT) right-of-way. Thousands of people regularly use this aging access point as it is near the Cedar Point oyster beds, the Mississippi Sound, as well as Mobile Pass and Pelican Pass. Abundant fringe Juncus marsh and sea grass beds line the entire site providing productive spawning grounds for many varieties of fish and mollusk species Uncontrolled public access at this site has impacted these fragile habitats. For example, boats are launched through the marsh digging up the sea grasses and substrate causing long term damage to these habitats. The goal of this project is to enhance infrastructure at the Heron Bay Cut-Off to minimize damage to fragile coastal environments, provide enhanced access for the oystermen and recreational fishermen, and restore the damaged habitats. The project will consist of the construction of a boat ramp, in a location chosen to minimize impact to sensitive wetlands. The dimensions of the boat ramp will be 39' by 70' and will contain two ramps. There will also be one, center pile-supported, wooden pier that is 5' wide x 58' with a 5' X 50' cross section on the end that will be constructed to provide the public a view of and access to the habitats. In addition, 200'+ of shoreline will be stabilized to prevent further degradation of the wetlands. As this area is located adjacent to the roadway, guard rails and additional lighting will also be installed to provide for the public's safety. This project addresses the problems of shoreline erosion and wetland damage that has occurred as a result of uncontrolled access and will provide for management of this coastal resource for the public to enjoy and cherish as an aesthetic area for recreation while protecting the sensitive habitat against future damage. This project develops amenities that support and improve natural resource based activities, encourage a sense of ownership and stewardship of public land, and protects the natural coastal environment. These sites highlight land conservation, and demonstrate successful protection and management of coastal natural resources. Providing the public a place to experience natural resource conservation, protection, and management enhances their appreciation of the natural coastal environment and makes the public part of the conservation effort.																											
Swift Tract Addition- A Resource Protection Project	646	Walter C. Ernest, IV	Weeks Bay	309200	The acquisition of coastal wetland property is a means of providing a source of mitigation for the environmental and economic damages that resulted from the Deepwater Horizon incident. This project consists of the fee simple acquisition of a suite of three land tracts located on Bon Secour Bay in Alabama. These tracts total 131 acres and 6,650 linear feet of shoreline. These tracts adjoin the Weeks Bay Mitigation Bank, Weeks Bay Reserve Swift and Beck tract. There is also water frontage on Skunk Bayou. These tracts	Trustee Portal	N	N	Y	N	N	N	N	N	N																		

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					consist of palustrine forested wetland dominated by broad leaved deciduous trees. In addition portions of this property are characterized as palustrine scrub/shrub wetlands. The forested wetlands provide nesting habitat for many bird species. This acquisition will allow future resource recovery activities to be conducted on all of these sites. The activity of land acquisition has been identified as an important factor in the resource recovery process by the Mabus Report and federal and state resource trustees. The Land Trust Alliance Southeast Program's Gulf Coast Partnership for Land Conservation (GCPLC) has also identified protection of ecologically-sensitive properties Gulf wide as a high conservation priority. The owners of these three parcels have been identified as willing sellers. These tracts have also been nominated for acquisition to the State of Alabama's Forever Wild Land Trust Program. The Weeks Bay Foundation is a land trust accredited by the Land Trust Accreditation Commission. The Foundation has the capacity to provide technical assistance for this fee simple transaction. The Conservation Fund will also serve as a conservation partner. The Weeks Bay National Estuarine Research Reserve will serve as the primary partner on this transaction.																													
Waters to the Sea: Discovering Alabama	10055	Allison Jenkins	AL	900000	The BP oil spill provides a perfect opportunity for U.S. citizens to learn how our daily lifestyle choices and common land-use activities can contribute to the health of waterways and coastal environments. Few people are aware, for example, that petroleum products leaked onto the landscape, carried to coastal waters by rivers and streams, have contributed more pollution to our oceans than all off-shore drilling spills combined--and that reducing this kind of non-point source pollution is something we can all do. Waters to the Sea: Discovering Alabama (WTTS), is an interactive educational program under development that will engage Alabama's teachers and students, families, decision makers, and citizens in learning about the state's key water resource issues and becoming better water stewards. Adopting a watershed approach and promoting a personal stewardship ethic, WTTS clearly illustrates the impacts of human land uses, natural resource extraction activities, and common lifestyle decisions on freshwater and coastal environments. The program emphasizes best management practices that promote water quality and conservation within predominant industries, including agriculture, petroleum, mining, and logging, while motivating citizens to take personal actions that reduce pollution, improve water quality, and preserve water quantity. Principals in the development of WTTS are the Alabama Clean Water Partnership, the University of Alabama's Discovering Alabama public television series, and Hamline University's Center for Global Environmental Education, the developer of the WTTS series. Waters to the Sea uses stories rich in regional characters, images, video, animations and visualizations based on an internationally acclaimed template that has proved highly successful in other regions of the country. This content is modularized so that thematic elements can be selected, reconfigured, and targeted for maximum impact with specific audiences. For example, content on red using nutrient pollution entering coastal estuaries from upland waterways will be extracted from the larger WTTS program and configured for deployment in computer kiosks at public interpretive centers throughout the Gulf coast region. Also, when used	Trustee Portal	N	N	N	N	N	N	Y	N	N																			

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					in K-12 educational settings (primarily in grades 4-8), all of the program's content is correlated to science and social studies standards and the corresponding courses of study in the states that share watersheds with Alabama (i.e., Mississippi, Georgia, Tennessee and Florida). Furthermore, web based distribution will make the program broadly accessible to stakeholders and citizens statewide. The program's interactive elements, which in total will require approximately five-hours of user interactivity, will provide in depth information and conservation strategies concerning coastal and marine ecosystems, lake and stream hydrology, the water cycle, water quality testing, water conservation, and the impact of the most common land use and water related activities and lifestyle choices on terrestrial and aquatic ecosystems. Waters to the Sea: Discovering Alabama will provide the region's teachers, youth, their families, and members of the general public (watershed protection groups, elected officials, planning and zoning boards, etc.) with a comprehensive watershed education resource that combines cutting-edge interactive multimedia with hands-on classroom and field-based learning and stewardship activities. This program is designed to achieve the following goals: 1. To instill an appreciation of the importance of the region's coastal environments and freshwater resources, 2. To introduce a watershed-based landscape perspective and an understanding of the fundamental relationship between historical and current land-use and natural resource extraction to water quality and water quantity throughout the region, 3. To motivate students, their families and the general public to become active watershed stewards, 4. Fo r K-12 students, to contribute to the learning of core social studies, science, language arts and math content as related to state educational standards. Funds totaling $40,000 received to date have been used to develop a "Demo" version of the program plus classroom curriculum guide, which are available on the ACWP web site: http://cleanwaterpartnership.org/current-projects/?portfolioID=37. Funding from NOAA will enable the program to be completed, support comprehensive distribution throughout Alabama and in shared watershed areas in neighbor states, and fund statewide delivery of teacher training and support services. NOAA funding will also facilitate distribution of segments of the program's content to targeted audiences through the program's partner organizations, including the Mobile Bay National Estuary Program, and the U.S. Fish and Wildlife Service.																												
Gulf of Mexico Community-based Restoration Partnership	635	Ryan Fikes	Gulf of Mexico	1500000	The Gulf of Mexico Community-based Restoration Partnership (GCRP) is a regional multi-year partnership that was established in 2001 between the NOAA Community-based Restoration Program (CRP), the EPA Gulf of Mexico Program Gulf Ecological Management Sites (GEMS) Program, and the Gulf of Mexico Foundation. The purpose of the partnership is to strengthen conservation efforts by supporting on-the-ground projects to restore coastal marine habitats, benefit living marine resources, and foster local stewardship of the sites. This successful collaboration will help to expand restoration of habitats that are critical to the sustainability ofnatural resources in the Gulf of Mexico, and to continue to expand public education and outreach efforts to broaden participation in restoration activities, further developing a	Trustee Portal	N	N	Y	N	N	N	Y	N	N																			

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					conservation ethic at the community level. To date, the GCRP has funded 76 community-based restoration projects. These projects occurred in a number of habitat types. In total more than $3 million has been funded by the Gulf of Mexico Foundation towards these restoration projects, of which an additional $5.5 million has been leveraged in matching contributions from project partners. This match includes nearly 50,000 contributed volunteer hours. In total, more than 15,000 acres of coastal habitat have been restored as part of these partnership projects. A multi-agency steering committee works effectively to guide the partnership in soliciting and developing projects, reviewing and selecting projects for funding, ensuring required permits and assurances are acquired, and monitoring project progress and compliance. There is a broad diversity of groups involved in the partnership projects, including school children and other community volunteers, universities, nonprofit groups, business and industry, and coastal planning organizations, such as NEPs and NERRs. Collaboration between the partners, many of which have their own public outreach programs to link w ith the GCRP, will result in long-term stewardship of the restored resources and help generate a community conservation ethic. The GMF will lead further development of the GCRP in a manner that best addresses a regional approach to restore coastal marine habitats and benefit the natural resources of the Gulf of Mexico. Our goal is to take action towards reversing the downward trend in habitat loss and increase the attention on the growing need to preserve and protect America's Gulf Coast.																												
Gulf Place Development	631	Brandan Franklin	Gulf Shores	2500000	- In an effort to create diversity for the public beach area at the intersection of State Highway 59 and State Highway 182, eyebrow parking along State Highway 182 should be developed. This would allow the existing public parking areas to be developed into open space. This would allow the general public use of this area while also enjoying the beaches. - Construct dune walkovers from the new parking over the vegetated dunes to the beach. This would allow access to the beaches without destroying the vegetation and dunes established along State Highway 182. - Construct new restroom facilities at this site for the general public.	Trustee Portal	N	N	N	N	N	N	Y	N	N																		
BayWinds Living Shoreline	541	Kevin Marek	Fairhope	70000	As a nursery for the fish and other aquatic life of the Gulf of Mexico, restoration of Mobile Bay habitat will help to mitigate the impact of the Gulf oil spill which occurred during the spring and summer of 2010. Through the years, much of Mobile Bay has been armored with seawalls/bulkheads. This has resulted in the degradation of water quality through the elimination of coastal marshes and seagrass, which has negatively affected fish and shell fish of the bay and beyond. The section of shoreline in Fairhope where this project is proposed has also been armored. Substantial erosion had occurred prior to the installation of the southernmost seawall, approximately 5 years ago. Other seawalls in the area were constructed more than 20 years ago. Essentially all shoreline habitat in the immediate area has been lost. This project proposes to create a reef structure, with the potential to return beach and underwater habitat to more favourable conditions. The City of Fairhope is also undertaking a living shoreline project in the same vicinity. This project would be an extension of that effort. The proposed reef structure would also	Trustee Portal	N	N	Y	N	N	N	N	N	N																		

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					serve to protect the shoreline from future storm damage providing a long term solution to the loss of shoreline in the area. A similar structure has already been completed on the opposite of the bay at Mon Louis Island.																												
Town of Dauphin Island Beach and Barrier Island Restoration Project	594	Jeffrey Collier	Dauphin Island	68000000	Dauphin Island is important not only for the residents but for the entire coastal system as it is the upland sand source for the Mississippi/Alabama barrier island chain. Dauphin Island protects south Mobile County from hurricane storm surge and waves as well as defines and protects the extremely productive estuary of the eastern Mississippi Sound. Dauphin Island's shoreline is receding and overwash is becoming more prevalent. The island is so susceptible to overwashing that the west end had been overwashed at least six times in the twelve-month period preceding the oil spill; and it had been partially or completely overwashed dozens of times including most tropical storm events during the past 15 seasons. The oil-spill crisis highlights the need for a complete restoration of the barrier island system of the Gulf. Following a mild overwashing event on May 2, 2010, the Town of Dauphin Island constructed sand barriers along the Gulf facing beaches with the goal of containing oil on the beach face. Sand for the barriers was trucked in from pits and mined from the north side of the island. The sand barriers were successful in contained oil on the beach face, while neighboring beach communities had a much more serious oil problem. However, overwash and sand mining has left Dauphin Island thinner, lower, and more vulnerable to breaching. The causes of land loss on Dauphin Island are storms, sea level rise, and a sediment budget deficit. The west end is experiencing an average shoreline recession of 12.7 ft/yr while the east end is experiencing a shoreline recession rate of 9.0 ft/yr. The objective of the Beach and Barrier Island Restoration Project for Dauphin Island is the direct placement of large amounts of good quality sand in conjunction with vegetation plantings on constructed sand dunes to increase island longevity and prevent overwash. The purpose and associated public benefits of a restoration project include: stabilization of the Gulf sh oreline, protection and restoration of existing habitat, protection of residential and commercial infrastructure, and support of the tourism industry. This project will restore the areas along the eastern and western ends of the island that have been sand starved to their natural state. Barrier islands such as Dauphin Island, Alabama are critical to the protection of island-based and coastal mainland ecosystems and represent regional significant economic drivers. Specifically, this project will restore coastal and marine habitat for threatened and endangered species and also benefit species of concern; preservation of coastal wetlands through shoreline restoration or hydrological reconnection; protection of communities and infrastructure through habitat restoration to improve coastal resiliency to storms and flooding; and improvement of coastal habitat to respond to climate change through restoration or protection of transition zones that provide room for habitat migration with sea level rise. The design for the eastern project area includes the placement of 240,000 cubic yards of sand along 0.92 miles of public beach between Fort Gaines and Audubon Street. The purpose for the east end project is primarily environmental benefits and to restore the public beach at Fort Gaines. The	Trustee Portal	N	N	Y	N	N	N	N	N	N																			

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					beach crest will be constructed to +5.5 feet, NAVD. A "hummocky dune," will be constructed to tie into the existing dune elevation. The project provides a renourishment interval of approximately 5 years. Three offshore, segmented breakwaters will be constructed in the vicinity of the Fort Gaines public beach. The breakwaters will reduce wave energy from the Gulf of Mexico impacting the constructed beach, thus promoting the accretion of sand in the lee of the structures. The two easternmost breakwaters will have an elevation of approximately +4 feet, NAVD and be approximately 250 feet long. The westernmost breakwater will have a crest elevation of +3 feet, NAVD and be approximat ely 140 feet long. The design for the western project area includes the placement of almost 3.6M cubic yards of sand along 4.5 miles from the public park at the western end of Bienville Blvd to the attachment of Pelican Island near the fishing pier. The beach crest will be constructed to +5.5 feet, NAVD. A continuous dune with an elevation of +12 feet, NAVD, will be constructed in front of the existing houses. At the east end of the western project area, only a dune will be constructed to provide a higher elevation to protect against inundation from storm surge. The project will provide a 40-foot beach in front of the dune 10 years after construction. The cost is estimated between $64M and $72M, including the construction of the east end design. Two borrow areas have been delineated on the western ebb shoal of Mobile Pass. The material in the borrow areas closely matches the material on the beach. The borrow areas contain enough beach compatible material to construct the eastern and western restoration projects.																													
Restoring Finfish of Importance to the Northern Gulf of Mexico	601	Charles Weirich	coastal Gulf of Mexico	5000000	Aqua Green, LLC is an established aquaculture firm located in Perkinston, MS. The company is involved in production of freshwater and marine finfish for food as well as for restoration purposes. The following juvenile marine finfish species can be produced by Aqua Green to help restore northern Gulf of Mexico coastal waters (prices/species available upon request): red drum (Sciaenops ocellatus), spotted seatrout (Cynoscion nebulosus), cobia (Rachycentron canadum), southern flounder (Paralichthys lethostigma), Florida pompano (Trachinotus carolinus), and Atlantic croaker (Micropogonias undulates). In addition to the company's operational status with completed facilities, Aqua Green has established working relationships with the following partners: Auburn University, Gulf Coast Research Laboratory, Louisiana State University, Louisiana Universities Marine Consortium, Mississippi Dept. of Marine Resources, Mississippi State University, Mote Marine Laboratory, Southern University, and USDA. Aqua Green can provide immediate impact to the restoration of finfish of importance to northern Gulf of Mexico inshore and nearshore waters.	Trustee Portal	N	N	N	N	N	N	N	N	N																			
Shoreline Restoration near Skunk Bayou- Mobile Bay - Eastern Shore	419	Paul B. Looney	coastal AL	25000000	The property referenced for this project is located on the eastern shore of Mobile Bay north of the Gulf Intracoastal Water Waterway (GIWW). Much of the property is currently in ownership of the Alabama Department of Conservation and Natural Resources and managed by the Weeks Bay National Estuarine Research Reserve. Volkert has contacted The Weeks Bay National Estuarine Research Reserve and they are supportive of a restoration project in this area. The southern portion of the project location is in private ownership. One of the property owners is Wetland Resources L.L.C. that operates the	Trustee Portal	N	N	Y	N	N	N	N	N	N																			

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					"Weeks Bay Mitigation Bank", the proposed project will protect further loss of wetlands that have been included as part of the mitigation bank. The project will occur on state owned water bottoms of Mobile Bay. The project shoreline extends from the developed area south of Week's Bay to the Bon Secour River. Along this shoreline, bottom land hardwood (BLHW) forest has been subject to varying degrees of erosion for many years. Current aerial photography compared to historic photographs provides evidence that the southern portion of the project area has experienced the greatest amount of shoreline loss. Site surveys reveal tree stumps in the water where erosion and land loss has contributed to loss of forest and marsh habitat. The near shore area within the bay has been a traditional site of oyster reefs and the site has also been the focus of several local studies for oyster gardening. As proposed, the project will add to oyster resources in the area and help provide source material for the natural settlement of spat on adjacent suitable habitat. The proposed project includes shoreline supplementation to include the restoration of marsh habitat along the entire shoreline. The project can be considered for segmented construction with an emphasis on the southern part of the land where evidence of erosion is most recognizable. As a protection measure against continued s horeline erosion, the placement of specifically designed wave attenuation devices (WAD) to reduce wave action on the shoreline is expected to provide added stabilization to the shoreline. The project proposes supplementing the shoreline from the end of the housing development at the north and ending near the peninsula at the entrance to the Bon Secour River. Total project length is approximately 35,000 feet. Shoreline supplementation would add approximately 200 feet of fill to create approximately 160 acres of marsh habitat. The open water between the shoreline and the WAD structures would be approximately 50 feet wide. This will allow for the creation of 40 acres of aquatic habitat that will support oysters and Submerged Aquatic Vegetation (SAV). Essential Fish Habitat provided by the calm waters could increase the availability of finfish nursery habitat and thus assist in the recovery of the Mobile Bay commercial and recreational fisheries. While there would not be any effort to create BLHW habitat, it is anticipated that the project will protect what remains and allow for natural recruitment to expand the habitat in the future. Based on rough design calculations the project would need approximately 780,000 cubic yards of repurposed dredge material to create the new wetland habitat. The dredge material is anticipated to be recovered from storage locations of dredge material currently located along the GIWW and from other sources near the project site. The project is feasible and cost effective utilizing techniques that are already in place at other restoration sites in similar settings along coastal Alabama. The project specifically contributes to making the environment and the public whole through habitat restoration and shoreline protection. Habitat restoration and water quality improvement components of this project could compensate for resource losses resulting from the Deepwater Horizon incident. The ultimate project is consistent with long-te rm restoration goals in Alabama and along the Gulf Coast.																												

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Interpretive Educational Center for Foley's Graham Creek Nature Preserve	408	Leslie Lassitter	Foley	870000	The Graham Creek Nature Preserve is 484 acres of natural wetland habitats that house threatened and endangered plants and animals of the Alabama coastal environment. The goal of the Preserve is to provide an educational and passive recreational opportunity for the residents and visitors of the Gulf Coast. Currently the Preserve includes a canoe/kayak launch, recreational pavilion, picnic areas and rustic hiking trails. The Preserve also hosts educational field trips to many local schools and youth groups with an annual participation level of approximately 1000 students. In order to increase environmental stewardship and awareness, the Graham Creek Nature Preserve could serve coastal Alabama as the largest coastal accessible municipal property for citizens and tourists to receive an environmental education with passive recreation activities. An interpretive center is the main educational component for the Preserve. Currently the Preserve hosts numerous field trips of middle and high school students. The City provides an educational hike discussing wetlands, water quality sampling, and native flora and fauna. The addition of an interpretive center would allow an expansion to educate all visitors to the Preserve. This center could educate visitors on the resiliency of the coastal habitats to natural and man induced disasters. The center would include a foyer for educational displays, an auditorium, restrooms and several offices. A nonprofit group or college student researcher would have access to the offices within the center. Visitors could access trail maps, local displays, and information on other ecotourism opportunities. School groups would have a place to assemble before and after field trips. The construction of the facility with utility installation would cost approximately $750,000. Exhibits, presentation electronics, auditorium furnishings and an educational program are estimated at a cost of $100,000. For educational tours throughout the 484 a cres of the preserve, the City proposes a large capacity rugged electric golf cart and a small shed for storage at a cost of $20,000. The total cost for the educational interpretive center $870,000.	Trustee Portal	N	N	N	N	N	N	Y	N	N																					
Bicycling Trail Connecting Foley to the Graham Creek Nature Preserve	409	Leslie Lassitter	Foley	400000	The Graham Creek Nature Preserve is 484 acres of natural wetland habitats that house threatened and endangered plants and animals of the Alabama coastal environment. The goal of the Preserve is to provide an educational and passive recreational opportunity for the residents and visitors of the Gulf Coast. Currently the Preserve includes a canoe/kayak launch, recreational pavilion, picnic areas and rustic hiking trails. The Preserve also hosts educational field trips to many local schools and youth groups with an annual participation level of approximately 1000 students. In order to increase environmental stewardship and awareness, the Graham Creek Nature Preserve could serve coastal Alabama as the largest coastal accessible municipal property for citizens and tourists to receive an environmental education with passive recreation activities. A bicycling trail exists in the City of Foley from Highway 59 eastward along County Road 20 to Glenlakes, the largest subdivision in Foley. To further promote non motorized access to the Nature Preserve, we propose a 3.3 mile extension of the bike trail from the intersection of County Road 20 and the Foley Beach Express. This would be south along the Beach Express to County Road 12 eastward to Wolf Bay Drive	Trustee Portal	N	N	N	N	N	N	Y	N	N																					

Project Information							Restoration Types Addressed											Programmatic Damage Assessment and Restoration Plan (PDARP) Criteria		Public Notice	Oil Pollution Act (OPA) Criteria (15 CFR 990.54)			Additional Criteria									
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					to the Preserve. With stream crossings, crosswalks, and drainage this project component would have a cost of approximately $400,000.																												
Shoreline Restoration on Ft. Morgan Peninsula - Pine Public Access Boat Ramp	422	Paul Looney	Ft Morgan	13500000	Dixie Graves Highway (County Road 180) in Baldwin County is the northern coast road along the Ft. Morgan Peninsula in Baldwin County Alabama. For much of the distance of this road the northern shoreline is sufficiently wide that there is housing along the shoreline of Bon Secour Bay. In the vicinity of the boat ramp that is labeled Pine Public Access, near the intersection with Plantation Road the roadway is very close to the waters of the Bay. Comparison of aerial photography from 1992 and present conditions clearly show shoreline erosion from the end of the housing development to the completely undeveloped shoreline to the west. Existing conditions are actually less than the most recent aerial photography which shows a shoreline more than 110 feet in 1992 and approximately 50 feet in 2010. The 1992 photograph also shows nearshore sand bars along the shoreline indicating a sand source for feeding the beaches along the coastline. A current view from the roadway illustrates the issue more clearly with the road approximately 50 feet from the shoreline and a small pull off area for vehicle parking directly adjacent to the roadway. Boat launching clearly impinges smooth and safe traffic flow. This presents a public danger. Continued shoreline erosion will eventually cause roadway failure. Further to the west in the undeveloped lands, the shoreline beaches completely disappear and tree stumps can be found in the nearshore waters. The proposed project includes shoreline supplementation to include the restoration of marsh habitat and sand beach. Additionally, as a protection measure against continued shoreline erosion, the placement of specifically designed wave attenuation devices to reduce wave action on the shoreline is expected to provide some stabilization to the shoreline in the vicinity of the boat ramp. Public access improvements may provide a means to correct the existing safety concerns by allowing for safer launch and parking for public users. Th e undeveloped shoreline is in the ownership of the Alabama Department of Conservation and Natural Resources (ADCNR) from the end of the shoreline development to the point associated with the Bon Secour refuge to the west. The project proposes supplementing the shoreline from the end of the housing development to the peninsula east of the boat ramp. Total project length is approximately 8,500 feet. With the addition of approximately 150 feet of marsh habitat and 50 more feet of sandy beach, the total restoration would entail the creation of approximately 30 acres of marsh habitat and add 10 acres of beach habitat to the existing shoreline. The total new width of replenished shoreline would amount to 200 feet with an additional 100 feet between the shoreline and the WAD (approx. 20 acres for shellfish and sea grass restoration). A total of 992,000 cubic yards of additional material would need to be placed. This is proposed to be recovered from the regular maintenance of the nearby Intracoastal Waterway and using some of the existing dredge material storage locations found in nearby Mobile Bay. There is no requirement for land acquisition. The project would reset the shoreline to conditions present prior to development of the Ft. Morgan peninsula. In the vicinity of the boat ramp, the additional land will provide a small protected embayment for launch and	Trustee Portal	N	N	Y	N	N	N	N	N	N																			

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					retrieval of boats during stormy conditions. The WAD placement and new shoreline location will provide protection from continuing erosion in the undeveloped lands to the east. The created habitat and the calm waters between the new shoreline and the WAD shoreline protection would also provide excellent habitat for the restoration of seagrass habitat and the potential for the establishment of oysters on the WAD structures and the adjacent waters. Essential Fish Habitat provided by the calm waters could help in increasing the availability of finfish nursery habitat and thus assist in the recovery of the Mob ile Bay commercial and recreational fisheries. The project is feasible and cost effective utilizing techniques that are already in place at other restoration sites in similar settings along coastal Alabama. The project specifically contributes to making the environment and the public whole through habitat restoration and shoreline protection. Habitat restoration and water quality improvement components of this project could compensate for resource losses resulting from the Deepwater Horizon incident. The ultimate project is consistent with long-term restoration goals in Alabama and along the Gulf Coast.																													
Access Road and Trails for Foley's Graham Creek Nature Preserve	423	Leslie Lassitter	Foley	630000	The Graham Creek Nature Preserve is 484 acres of natural wetland habitats that house threatened and endangered plants and animals of the Alabama coastal environment. The goal of the Preserve is to provide an educational and passive recreational opportunity for the residents and visitors of the Gulf Coast. Currently the Preserve includes a canoe/kayak launch, recreational pavilion, picnic areas and rustic hiking trails. The Preserve also hosts educational field trips to many local schools and youth groups with an annual participation level of approximately 1000 students. In order to increase environmental stewardship and awareness, the Graham Creek Nature Preserve could serve coastal Alabama as the largest coastal accessible municipal property for citizens and tourists to receive an environmental education with passive recreation activities. Philomene Holmes Boulevard is a gravel road that provides access to the Preserve from the Foley Beach Express. The first phase was completed with a roadway length of 3000 feet. The second phase is 3000 feet with five low area crossings which would require culverts and road buildup and one stream crossing (north tributary Graham Creek) requiring a small bridge of about 150 feet. This roadway would allow visitors to access the entire Preserve, including pitcher plant bogs and pine savannas. The gravel roadway construction cost would be approximately $250,000, and the bridge construction cost would be approximately $150,000 for a total of $400,000. One of the major features of the nature preserve is the diverse and unique habitats. The City plans to enhance the recreational opportunities by providing multi-use trails throughout the Preserve. Trail uses will include walking, hiking, cross-country running and bicycling for a total of 18 miles of trails. For trail improvement and directional signage the City anticipates the cost to be $65,000. For educational information displays, the City proposes a kiosk within each majo r habitat (5) for habitat description and flora and fauna found within each at a total cost of $30,000. Maps/brochures will be offered for Preserve users at an initial cost of $5000. Restroom facilities are another need based on the	Trustee Portal	N	N	N	N	N	N	Y	N	N																			

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					increased usage of the Preserve. To add a small restroom facility with the necessary utility installations would cost approximately $100,000. The trail component within the Preserve would need a total of $200,000 in funding. Passive recreation is encouraged by the nature preserve, and the addition of an archery trail would further enhance the Preserve. The Foley School System is participating nationally with archery, although there are no outdoor courses in the area. The Preserve has the opportunity to add the archery course for competitions on the coast. This activity would require funding in the amount of $30,000 for targets and the isolated and dedicated archery trail.																												
Land Expansion for Foley's Graham Creek Nature Preserve	407	Leslie Lassitter	Foley	2527900	The Graham Creek Nature Preserve is 484 acres of natural wetland habitats that house threatened and endangered plants and animals of the Alabama coastal environment. The goal of the Preserve is to provide an educational and passive recreational opportunity for the residents and visitors of the Gulf Coast. Currently the Preserve includes a canoe/kayak launch, recreational pavilion, picnic areas and rustic hiking trails. The Preserve also hosts educational field trips to many local schools and youth groups with an annual participation level of approximately 1000 students. In order to increase environmental stewardship and awareness, the Graham Creek Nature Preserve could serve coastal Alabama as the largest coastal accessible municipal property for citizens and tourists to receive an environmental education with passive recreation activities. Much of the coastal Alabama habitat was impacted during the Deepwater Horizon Incident; therefore preserving local natural habitats will provide additional areas for flora and fauna to thrive. Wolf Bay and Graham Creek are Outstanding Alabama Waters, which deserve protection from future human degradation. The City proposes a land acquisition of 133 acres of coastal forested wetlands. This property is located east of the Foley Graham Creek Nature Preserve. Graham Creek flows through the property, which serves as a habitat for brown pelicans, great blue herons, osprey and a bald eagle nest. The creek also provides a fishing ground for the Atlantic bottlenose dolphins, especially in the winter. Furthermore, gopher tortoise colonies exist on the upland areas within this property. This land acquisition would increase the amount of protected habitats that have been vanishing or have been impacted throughout the coastal areas, including pine savannas, pine forests and tidal marshes. It would also protect the pristine waters of Graham Creek.	Trustee Portal	N	N	Y	N	N	N	Y	N	N																			
Gulf Shores/ Orange Beach/Gulf State Park Beach Restoration	411	Mark Acreman	Gulf Shores, Orange Beach	14700000	The cities of Gulf Shores and Orange Beach, along with Gulf State Park (ADCNR) currently maintain an "engineered beach" along 16.2 miles of shoreline. In 2005, the project originally placed approximately six (6) million cubic yards of dredged, beach-quality sand along 16.2 miles of shoreline. Additionally, nearly 1.5 million sea oats and panic grass were planted in the project's dune feature, and 80,000 linear feet of sand fencing were installed at the base of the dune. The project later received 2006's "Top Restored Beach" award from the American Shore and Beach Preservation Association. Since its construction, the GS/OB/GSP beach restoration project has withstood damage from eight (8) named tropical storms or hurricanes, but has prevented any significant damage to Gulf structures during this time period. Beginning in 2008, the project has been impacted from Tropical Storms Gustav, Ike and	Trustee Portal	N	N	Y	N	N	N	Y	N	N																			

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					Ida, with the damage having been collected and summarized in FEMA Category G project worksheets for each project owner. Currently, the two cities and Gulf State Park are working toward completing a permit application to repair the damage, per FEMA's guidelines and approved project worksheets, and to commence construction in Fall 2011 in order to meet a March 31, 2012 deadline for construction. However, because the damage being repaired does not meet "full" beach fill volumes, the Owner Group proposes to construct an "improved" beach fill project, which could be constructed in a more conventional manner, and offer even greater protection for landward structures and public infrastructure. The Owner Group members of Gulf Shores and Orange Beach believe the utmost consideration and priority be given to this project for the following reasons: 1. Providing additional, valuable storm protection for our residents and tourism industry; 2. Meeting FEMA deadlines and maintaining "eligibility" for Federal disaster assistance following Presidentially-declared storm events; 3. Facilit ate the search for compatible beach-quality materials in Federal waters; 4. The project is currently being designed and permitted, and should be considered "shovel ready". 5. The project could have a significant, positive impact on the public's perception of area beaches. The beach restoration project is a vital component to maintaining the recreational viability of the area's beaches, and continuing to afford the protection to coastal structures and public infrastructure that prevents costly business interruption. This project, moreover, is shovel-ready and needs to be expedited in order to meet federal deadlines.																												
Nearshore and Snorkeling Reef Project	396	Phillip West	Orange Beach	500000	The City of Orange Beach is requesting the State of Alabama, Department of Conservation & Natural Resources (Marine Resources Division) to implement a program funded by NRDA to establish nearshore (i.e., within State waters) artificial for both hook and line fishing, and, closer to the beach, for snorkeling. This project would greatly benefit reef fish species and baitfish, and provide additional recreational opportunities for tourists as well as residents. The project would utilize commercially-available artificial reefs in State waters, which would allow smaller boats access to fertile fishing grounds near Perdido Pass, Alabama. Also, reefs placed near the shoreline (approx. 14' of water) within reach of swimmers will provide exciting opportunities to explore reefs and reef fish species. Water clarity in eastern Baldwin County is generally amenable to this type of use, and will create additional recreational opportunities, similar to the Snorkeling Trail project in Pensacola Beach and Perdido Key, Florida.	Trustee Portal	N	N	N	N	N	N	Y	N	N																			
South Baldwin Wildlife rescue and Rehabilitation Facility	399	Leslie Lassitter	Baldwin County	2500000	Baldwin County is filled with a diversity of coastal habitats. These habitats are the home of numerous flora and fauna that have been impacted by the Deepwater Horizon release. Migratory species use many of these habitats for wintering. Currently there are no local facilities for injured animals. The nearest locations are in Auburn and Birmingham, which means many of these animals do not survive. The establishment of a local facility would allow for quick rescue and initial analysis of the affected animal and if possible, subsequent release of the animal back into its habitat. The coastal communities of Foley, Orange Beach, Gulf Shores, the Alabama State Park and	Trustee Portal	N	N	N	N	Y	N	Y	N	N																			

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					the Bon Secour National Wildlife Refuge plan to combine efforts to establish and maintain a South Baldwin Rescue and Rehabilitation Facility. The main facility could be established within the Foley Graham Creek Nature Preserve where there is ample land to establish flight cages and educational facilities. A main satellite facility could be established in Orange Beach. This could promote ecotourism while offering initial rescue and rehabilitation for injured wildlife. This would allow for a collaborative effort to protect and preserve numerous species. Each community would offer a different aspect of the rehabilitation and release. Funds would be needed for a main facility with trained staff and satellite facilities. Each facility would need numerous types of cages, medical equipment and food supplies. An educational aspect would be provided through signage and viewing areas for visitors at the facilities. Also there could be a partnership with universities to provide assistance in the management of the facility with lab areas and housing. Municipal owned lands could house the facilities to avoid land purchase costs. The request is to fully fund and maintain a facility for the rescue, rehabilitation and release of wildlife. This endeavor would over time become self-sustaining through grant s, endowments and donations. The partnership between the coastal cities would be a model effort in the revitalization of the Gulf Coast. PROJECT COST (ESTIMATE): $2.5 million for initial construction, staffing and equipment																													
Coastal Alabama Habitat Restoration - Arlington Cove Project, Mobile, Alabama	366	Henry Malec	coastal AL	4000000	Coastal Alabama has tremendous environmental beauty. From the fringing coastal saltwater marshes, to the tourist-filled beaches of Gulf Shores and Orange Beach, Alabama contains tremendous natural resources. The Deepwater Horizon incident impacted many habitat types in the Gulf of Mexico and in coastal Alabama specifically. Timing for the incident coincided with the northern movement of neotropical migratory birds as well as the spawning of fish species (non-target and sport species). Shrimp, crabs and benthic macroinvertebrates in shallow coastal waters were adversely impacted by either the presence of oil or the presence of other polycyclic aromatic hydrocarbons (PAH) components. Aquatic birds, such as the pelican, gannet, and some shore birds, were negatively impacted by the presence of oil on the surface of the water, on shorelines, and in marshes. The proposed project is expected to address the restoration of tidal marsh habitats that support all of the impacted species. The impact to species is difficult to compensate in areas that were not heavily oiled. In some cases, the presence of the oil is now minimal. However, because the overall coastal ecosystem has been suffering from continuing environmental impact from natural (sea level rise, wave energy) and man-made (erosion from ship wakes) sources, the amount of suitable habitat for the recovery of the impacted species has been compromised or has disappeared altogether. Much of the shoreline in Upper Mobile Bay is in some state of environmental degradation. Due to the high energy wave environment many of the tidal marshes have suffered significant land loss due to coastal erosion and sea level rise. The marsh islands would provide additional fringing marsh habitat. Additionally, the marsh habitat will provide for further decrease in discharge velocity that enters the cove through the City of Mobile stormwater discharge. The breakwaters outside will serve to lower the current wave energy tha t enters the system. This will	Trustee Portal	N	N	Y	N	N	N	N	N	N																			

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					have two effects. There will be much less erosion of marsh habitat and will provide a less energetic environment through which SAV, now existing along the edge of the existing wetland, to expand throughout the shallow waters in the cove. The shoreline development to the west of the proposed project is mitigation wetlands for the Alabama State Port Authority's (ASPA) Choctaw Point Terminal project and a public park and access area that was also constructed by the ASPA and is operated by the City of Mobile. The project being proposed will create approximately 40 acres of Marsh Islands in Arlington Cove adjacent to the new Arlington Park complex. The Marsh Islands would be protected from erosion with either a segmented rip-rap breakwater or a breakwater constructed of wave attenuation devices (WAD). The WAD will be specifically designed to protect the cove from existing wave energy. The project would provide increased finfish habitat in the Upper Mobile Bay. The proposed project is consistent with anticipated long-term restoration needs and the anticipated final restoration plan and is feasible and cost effective.																												
Coastal Alabama Habitat Restoration - Bayou Heron, Dauphin Island, Alabama	367	Henry	coastal AL	8000000	Coastal Alabama has tremendous environmental beauty. From the fringing coastal saltwater marshes, to the tourist-filled beaches of Gulf Shores and Orange Beach, Alabama contains tremendous natural resources. The Deepwater Horizon incident impacted many habitat types in the Gulf of Mexico and in coastal Alabama specifically. Timing for the incident coincided with the northern movement of neotropical migratory birds as well as the spawning of fish species (non-target and sport species). Shrimp, crabs and benthic macroinvertebrates in shallow coastal waters were adversely impacted by either the presence of oil or the presence of other polycyclic aromatic hydrocarbons (PAH) components. Aquatic birds, such as the pelican, gannett, and some shore birds, were negatively impacted by the presence of oil on the surface of the water, on shorelines, and in marshes. The proposed project is expected to address the restoration of tidal marsh habitats that support all of the impacted species. The impact to species is difficult to compensate in areas that were not heavily oiled. In some cases, the presence of the oil is now minimal. However, because the overall coastal ecosystem has been suffering from continuing environmental impact from natural (sea level rise, wave energy) and man-made (erosion from ship wakes) sources, the amount of suitable habitat for the recovery of the impacted species has been compromised or has disappeared altogether. Much of the shoreline in Mobile Bay and Mississippi Sound, including Bayou Heron, is in some state of environmental degradation. Due to the high energy wave environment many of the tidal marshes have suffered significant land loss due to coastal erosion, sea level rise and boat wakes. The project being proposed will contribute to making the environment whole by restoring approximately 25 acres of tidal marsh in Bayou Heron on the north side of Dauphin Island, Alabama. The marsh would be protected from erosion with either a segmented rip-rap breakwater or a breakwater constructed of wave attenuation devices (WAD). The WAD will be specifically designed to protect the marsh from existing wave energy. Stone armoring would be placed along the toe of the dike adjacent to the Bayou Heron Navigation Channel. Alternative designs will be evaluated	Trustee Portal	N	N	Y	N	N	N	N	N	N																		

Project Information							Restoration Types Addressed											Programmatic Damage Assessment and Restoration Plan (PDARP) Criteria		Public Notice	Oil Pollution Act (OPA) Criteria (15 CFR 990.54)			Additional Criteria									
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					including construction of small islands behind breakwater protection similar to restoration projects that have been complete in Galveston Bay, Texas. The project would provide new oyster reef habitat and increase finfish habitat in Bayou Heron. Additionally, specific plantings on the island are proposed to help restore bird habitat. This would increase habitat for neotropical migratory birds, including resting and foraging habitat. Additional vegetative manipulation is expected to provide a habitat conducive for the roosting and nesting habitat of many aquatic bird species. The proposed project is consistent with anticipated long-term restoration needs and the anticipated final restoration plan and is feasible and cost effective.																												
Coastal Alabama Habitat Restoration Brookley Marsh Island Project, Mobile, Alabama	369	Henry	coastal AL	15000000	Coastal Alabama has tremendous environmental beauty. From the fringing coastal saltwater marshes, to the tourist-filled beaches of Gulf Shores and Orange Beach, Alabama contains tremendous natural resources. The Deepwater horizon incident impacted many habitat types in the Gulf of Mexico and in coastal Alabama specifically. Timing for the incident coincided with the northern movement of neotropical migratory birds as well as the spawning of fish species (non-target and sport species). Shrimp, crabs and benthic macro invertebrates in shallow coastal waters were adversely impacted by either the presence of oil or the presence of other polycyclic aromatic hydrocarbons (PAH) components. Aquatic birds, such as the pelican, gannett, and some shore birds, were negatively impacted by the presence of oil on the surface of the water, on shorelines, and in marshes. The proposed project is expected to address the restoration of tidal marsh habitats that support all of the impacted species. The impact to species is difficult to compensate in areas that were not heavily oiled. In some cases, the presence of the oil is now minimal. However, because the overall coastal ecosystem has been suffering from continuing environmental impact from natural (sea level rise, wave energy) and man-made (erosion from ship wakes) sources, the amount of suitable habitat for the recovery of the impacted species has been compromised or has disappeared altogether. Much of the shoreline in Upper Mobile Bay is in some state of environmental degradation. Due to the high energy wave environment many of the tidal marshes have suffered significant land loss due to coastal erosion and sea level rise. Historically, the U.S. Army Corps of Engineers disposed of dredged material from the Mobile Harbor Ship Channel in open water on the west side of the ship channel. The dredged material created mounds along the ship channel which helped to protect marsh and submerged aquatic vegetation (SAV) along the western shore of Mobile Bay from erosion. These mounds have eroded since open water disposal of dredged material was discontinued in Upper Mobile Bay. Creation of the marsh islands would restore marsh habitat, help protect the remaining marsh from additional erosion, and reduce wave energy along the western shoreline. These conditions could also make the environment conducive to natural recruitment of SAV or provide the opportunity to plant SAV in the protected nearshore habitat. The proposed project is anticipated to not only protect the existing marsh and SAV, but provide the protected environment necessary to build new habitat through natural processes. The project being proposed will create approximately 150 acres of Marsh Islands between the	Trustee Portal	N	N	Y	N	N	N	N	N	N																			

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					Mobile Harbor Ship Channel and the Mobile Airport Authority's Brookley Aeroplex. The Marsh Islands will provide habitat and reduce wave energy along the eroding West Mobile Bay shoreline. The Marsh Islands would be created from fill material using Geotubes or other containment methods. Fill material will likely come from channel dredging projects or from existing dredged material disposal areas. Other potential sources of fill material would be investigated to determine the most suitable and cost effective source of the fill material. The beneficial use of dredge material is an added benefit of the proposed project. The proposed project is consistent with anticipated long-term restoration needs and the anticipated final restoration plan and is feasible and cost effective.																													
Orange Beach/Gulf State Park/Gulf Shores Beach Restoration	389	Phillip West	Gulf Shores, Orange Beach	14700000	The cities of Orange Beach and Gulf Shores, along with Gulf State Park (ADCNR) currently maintain an "engineered beach" along 16.2 miles of shoreline. In 2005, the project originally placed approximately six (6) million cubic yards of dredged, beach-quality sand along 16.2 miles of shoreline. Additionally, nearly 1.5 million sea oats and panic grass were planted in the project's dune feature, and 80,000 linear feet of sand fencing were installed at the base of the dune. The project later received 2006's "Top Restored Beach" award from the American Shore and Beach Preservation Association. Since its construction, the OB/GS/GSP beach restoration project has withstood damage from eight (8) named tropical storms or hurricanes, but has prevented any significant damage to Gulf structures during this time period. Beginning in 2008, the project has been impacted from Tropical Storms Gustav, Ike and Ida, with the damage having been collected and summarized in FEMA Category G project worksheets for each project owner. Currently, the two cities and Gulf State Park are working toward completing a permit application to repair the damage, per FEMA's guidelines and approved project worksheets, and to commence construction in Fall 2011 in order to meet a March 31, 2012 deadline for construction. However, because the damage being repaired does not meet "full" beach fill volumes, the Owner Group proposes to construct an "improved" beach fill project, which could be constructed in a more conventional manner, and offer even greater protection for landward structures and public infrastructure. The Owner Group members of Orange Beach and Gulf Shores believe the utmost consideration and priority be given to this project for the following reasons: 1. Providing additional, valuable storm protection for our residents and tourism industry; 2. Meeting FEMA deadlines and maintaining "eligibility" for Federal disaster assistance following Presidentially-declared storm events; 3. Facilita te the search for compatible beach-quality materials in Federal waters; 4. The project is currently being designed and permitted, and should be considered "shovel ready". 5. The project could have a significant, positive impact on the public's perception of area beaches. The beach restoration project is a vital component to maintaining the recreational viability of the area's beaches, and continuing to afford the protection to coastal structures and public infrastructure that prevents costly business interruption. This project, moreover, is shovel-ready and needs to be expedited in order to meet federal deadlines.	Trustee Portal	N	N	Y	N	N	N	Y	N	N																			

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Dauphin Island Parkway Salt Marsh, Finfish and Shellfish Habitat Restoration	390	Buddy Covington	Dauphin Island	10800000	Dauphin Island Parkway is the connecting link between Dauphin Island and mainland Alabama. Located in southern Mobile County along the western shoreline of Mobile Bay, the project site is exposed to heavy wave action from the long fetch across Mobile Bay and other erosive forces such as ship wakes. Studies indicate that a historically salt marsh protected shoreline has eroded more than 400 feet landward and the area has lost intertidal emergent habitat, salt marsh habitat, oyster reefs and areas of submerged aquatic vegetation (SAV). In an effort to protect the Dauphin Island Parkway roadway from the rapid erosion, sheetpile bulkhead and rubble mounds were constructed at various points along the remaining shoreline. The bulkhead was installed after 1999 and has been the subject of regular maintenance activities and emergency repairs following storm events. Structural shoreline protection has caused scour, a decrease in water quality and the further loss of aquatic habitat. In 2004 the U.S. Army Corps of Engineers (USACE) prepared a study "Preliminary Restoration Plan for Dauphin Island Parkway Aquatic Ecosystem Restoration, Mobile County Alabama" (PRP) proposing 3,960 feet of protective artificial wave break, utilizing 7,100 CY of material from a federally authorized maintenance dredging project for fill and then planting the fill area to stabilize the shoreline creating 4 acres of wetlands. The project also included depositing 2,250 CY of oyster shells between the breakwater and the marsh to improve shellfish habitat. The benefits of the project were stabilizing unconsolidated sediment in the nearshore, reducing turbidity and erosion, improving water quality and improving biodiversity and productivity by improving habitat for marine fishes, invertebrates, migratory birds and marine mammals. The construction cost estimate for this project was $875,000 in 2004. The project limits of the PRP focused on an area between the Heron Bay Cutoff bridge and the Daup hin Island bridge. There is ample opportunity to expand northward in phases from the Heron Bay Cutoff to Dauphin Island Bridge PRP project. Approximately 7,800 feet north of the Heron Bay Cutoff, Mobile County owns 8 acres of parkland known as Bayfront Park. Bayfront Park is described as a bird lover's paradise, and is listed as site #47 on the Alabama Coastal Birding Trail. It is located in the Alabama Port community north of the Dauphin Island Bridge. Many species of local and migratory birds visit this park in the spring and fall to take advantage of its fresh water and to shelter themselves among the trees and reeds. Pelicans are ever present, soaring on the wind-wave formed as bay breezes blow up against and over dense stands of pines. Herons, egrets, osprey, gulls, and terns stalk the shoreline. Playground equipment and covered picnic tables with grills are available. The area is also popular with windsurfers and people wading for crabs, mullet, and flounder. The Dauphin Island Parkway Salt Marsh, Fin Fish and Shell Fish Restoration project could ultimately extend from the Dauphin Island bridge to north of Bayfront Park for a total distance of 18,000 feet and involve 18,000 feet of segmented breakwater, 115 acres of salt marsh restoration, 550,000 CY of beneficial use of dredge material and 30 acres of oyster reef habitat while further enhancing the protection of the only evacuation route from the Town of Dauphin Island and helping to stabilize the shoreline at Bayfront Park. The project is feasible and cost effective utilizing	Trustee Portal	N	N	Y	N	N	N	N	N	N																			

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					techniques that are already in place at other restoration sites in similar settings along coastal Alabama. The project specifically contributes to making the environment and the public whole through habitat restoration and shoreline protection. Habitat restoration and water quality improvement components of this project could compensate for resource losses resulting from the Deepwater Horizon incident. As noted, portions of the ulti mate project have been studied for more than a decade and are consistent with long-term restoration.																													
Robinson Island Restoration Project	370	Phillip West	Perdido Bay		The overall project consists of five primary objectives: 1. Restore 250 feet of eroded shoreline on Robinson Island The northeastern tip of Robinson Island has experienced sustained erosion for many years. Recent storms have seriously aggravated the situation. Heron nest trees have been lost, and numerous others are currently threatened by shoreline retreat. The grant would support a project to restore the shoreline to its 1985 configuration, while protecting remaining trees and stabilizing the island's northeastern end. A U.S. Army Corps of Engineers permit would be obtained as well as necessary state authorizations to dredge a small amount of sand (estimated at 2500 cubic yards) from shoal areas in adjoining Terry Cove to reconstitute the island's northeast shoreline. Fabric protection would be installed and riprap of suitable size placed to protect the reconstituted shoreline. Project costs would be related to permit acquisition (including surveys), dredging and sand placement, fabric installation, and riprap placement. Permanent markers would be installed to facilitate monitoring of project effectiveness over time (10 years). Without this project, additional loss of Robinson Island will occur, including more nest trees. 2. Install bird nesting platforms The loss of large mature pine trees used as nest sites to hurricanes will be temporarily offset by installation of 20 bird nesting platforms on Robinson, Gilchrest, and Walker Islands (the latter two after they are acquired from private interests). Most of the platforms would be placed on Robinson Island, where the largest amount of nesting has historically occurred. Great blue herons will be the primary target specie, although other wading bird species may also use the platforms. Construction would take place during the June-January timeframe to avoid bird nesting activities. Costs associated with purchase of lumber, hardware, associated equipment; and to support city employees to carry out the work or sup ervise volunteeers would be paid out of grant funds. Acquisition of a 27 ft. pontoon boat-motor would support this activity by providing a means to transport equipment and people from the mainland to the island worksites. This boat would also be vital is carrying out the other activities associated with this project. Platform sites would be selected based on the location of pine trees used for nesting prior to recent storms. Follow-on monitoring of bird use would be carried out for 10 years using volunteers. Colonial-nesting birds have been confined to three nesting sites in coastal Alabama according to officials with the Dauphin Island Sea Laboratory, one of which is Robinson Island. These islands were identified as one of 4 priority areas in collaboratory work by the Mobile Bay National Estuary Program and The Nature Conservancy in their 2006 report "Conserving Alabama's Coastal Habitats - Acquisition and Restoration Priorities of Mobile and Baldwin Counties." 3.	Trustee Portal	N	N	Y	N	Y	N	N	N	N																			

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					Install sand fencing enclosures to protect least tern/heron nesting areas. Least terns have nested on the ground on Robinson and Gilchrest Islands. Human activities and the episodic presence of dogs on the islands have restricted tern nesting or compromised its success. Herons have abandoned use of nest trees near human activity areas on Robinson Island. The project would construct and maintain a permanent sand fence enclosure around areas historically used by terns and herons for nesting. Approximately 1000 feet of fence would be installed. This should eliminate disturbance to nesting terns and herons, thereby help sustaining populations that have been suffering impacts from humans, particularly during the past 15 years. The acquisition of a boat-motor (as above) would help with this project by facilitating transport of materials, equipment, and personnel from the mainland to island construction areas. 4. Install protective/interpretive signage and develop education brochures. Human behavior problems have adversely affected island environments for the past 25 years. Intrusions into bird nesting areas, widespread littering, free-roaming dogs, and incursion of motorized vessels into extremely sensitive sea grass beds have all contributed to declining environmental conditions. Existing signage is not adequate in the face of increasing human use of the area. The grant would support a comprehensive signage program involving the perimeter of the three islands as well as the perimeter of the sea grass beds that encircle these islands. The conspicuous signs would mark bird nesting areas, the perimeter of sea grass beds, and reminders about the need for animal control and litter removal from the islands when people depart. Additionally, at least four large educational type signs would be installed featuring information about the environmental features of the islands and the role/behavior of human conduct in sustaining island uses into the future. The grant would also support an educational "island care joint venture" with marinas, restaurants, boat rentals, and other commercial interests in the Perdido Pass, Terry Cove, Cotton Bayou, and Bayou St. John area, most, if not all of which depend (directly or indirectly) on the islands well-being to support their customer base. This effort would include educational brochures, signs, place mats, and other materials featuring the islands value and the need for environmentally sustainable human interactions with these resources. The signage project would be facilitated by purchase of the boat/motor (as above) that would help transport equipment and personnel to work sites, as well as acting as a work platform for in-water sign installation. 5. Reestablish native island vegetation. The upland vegetation of Robinson, Gilchrest, and Walker Islands has been severely affected by tropical storms and sea level rise. Natural re-vegetation has been slowly occurring. A significant number of pine trees on the islands previously used f or bird nesting have been lost. The project would boost recovery of natural vegetation. The project would include planting native species such as sand pine, slash pine, salt bush, smooth cordgrass, and sea oats on the three islands. Some removal of exotic vegetation may be necessary to facilitate success of this planting program. A partnership with Gulf Shores High School would be developed to facilitate this part of the project. Two greenhouses would be constructed at Gulf Shores High School under supervision of Orange Beach city employees.																												

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					Students/volunteers would gather seeds from native plants in the project area and raise the young plants at the greenhouse. When the seedlings are of suitable size, students and volunteers would plant them on the islands. Monitoring, follow-up care, and replanting (to the degree necessary) would be conducted by students and volunteers. A total of 15 acres on the three islands would be restored. Acquisition of the boat/motor (as above) would facilitate this part of the project by transporting students/volunteers to the islands and carrying equipment-supplies necessary to support the work on the islands.																													
Public Boat Launch Facility	394	Phillip West	Orange Beach	2200000	The City of Orange Beach hereby requests the State of Alabama, Department of Conservation and Natural Resources (ADCNR) to construct a public boat launch facility along Old River, in Gulf State Park (Baldwin County, Alabama). The city has designed and engineered a facility for the proposed location, and these schematics and plans have been submitted to the ADCNR as part of a concurrent NRDA project request.	Trustee Portal	N	N	N	N	N	N	Y	N	N																		
Boat-Accessible Public Restroom Facility for Boggy Point Boat Launch	395	Phillip West	Orange Beach	350000	The proposed project would provide a pile-supported, boat-accessible restroom facility at the State-owned and managed Boggy Point Boat Launch, in Orange Beach, Alabama. This facility would be centrally located for boaters in the Terry Cove/Cotton Bayou/Bayou St. John/Perdido Pass area, and located within easy reach of Robinson and Bird Islands, which can host thousands of leisure boats and swimmers during the busy Spring and Summer boating season. There are no other public facilities in the area that are accessible by boat. The purpose would be to provide clean, sanitary comfort facilities for the boating public, and to reduce pollution in the concentrated swimming and boating areas.	Trustee Portal	N	N	N	N	N	N	Y	N	N																		
Pilot Town Acquisition and Finfish and Shellfish Habitat Restoration	340	Brett Gaar	Ft Morgan	8100000	Project Title: Pilot Town Property Acquisition and St. Andrews Bay Finfish and Shellfish Habitat Restoration Projected Cost: NTE $2,000,000 (land acquisition) Dredging $3,600,000 Breakwater $1,500,000 Planting, etc. $1,000,000 Total $8,100,000 Pilot town is a large part of Alabama History. For some, the history of Mobile is dependent on the establishment of Pilot Town. The settlement was established early in the 19th century as a communal town on the Fort Morgan Peninsula. The settlement got its name from the bar pilots who guided sea-going vessels past the sand bars of Mobile Bay. In prehistory, the land is known to have been used and settled by Native American people. Pilot Town was destroyed in a 1906 hurricane, but traces of the settlement, including an old graveyard, can still be found there. Archeological proof of Native American settlement can also be found. Historians have stated that the area was truly a paradise. "Citrus grew wild and oysters paved the bottom of nearby St. Andrews Bay." "Pilot town is one of Alabama's most significant historical sites." The aerial photograph below compares the 1940 shoreline of Navy Cove and St. Andrews Bay (red line) against the 2009 shoreline. Erosion of the protective peninsula that was a signature of Navy Cove is almost completely lost to erosion. The shoreline in the project area has eroded approximately 600 feet since 1940 with the loss of approximately 25 acres of high quality wetlands and uplands. . The property lies within the congressionally outlined acquisition area for the 1,990-acre Little Point Clear Unit of the Bon Secour National Wildlife Refuge. Purchase of the Little Point	Trustee Portal	N	N	Y	N	N	N	N	N	N																		

Project Information							Restoration Types Addressed											Programmatic Damage Assessment and Restoration Plan (PDARP) Criteria		Public Notice	Oil Pollution Act (OPA) Criteria (15 CFR 990.54)			Additional Criteria									
Project Name	Proj No./ ID	Submitted By/ Primary Lead	Location	Cost	Project Description	Submitted via	Marine Mammals (Y/N)	Water Quality/ Nonpoint Source Nutrient Reduction (Y/N)	Wetland, Coastal, and Nearshore Habitat (Y / N)	Oyster Reef (Y / N)	Birds (Y / N)	Sea Turtles (Y / N)	Recreational Use (Y/N)	Habitat on Federal Lands (Y/N)	Monitoring, Adaptive Management, and Administrative Oversight to Support Restoration Implementation (Y/N)	Project is consistent with programmatic restoration goals (Y/N)	Project is considerate of strategic frameworks (Y/N/NA)	Project is consistent with criteria identified in the public notice (Y/N)	Project delivers benefits cost-effectively (+ / 0 / -)	Project meets Trustees' goals (+ / 0 / -)	Project has reasonable probability of success (+ / 0 / -)	Project prevents future and collateral injury to natural resources and services (+ / 0 / -)	Project benefits more than one natural resource and/or service (+ / 0 / -)	The effect of the project alternative on public health and safety (+ / 0 / -)	Project is not already required by existing regulations (Y/N)	Project complies with applicable laws and regulations (Y/N)	Project supports existing regional or local conservation plan or restoration effort (Y/N)	Project is not already fully funded (Y/N)	Project is technically feasible (+ / 0 / -)	Project readiness (+ / 0 / -)	Sustainability/Long-term Benefit of project (+ / 0 / -)	Project is time critical (+ / 0 / -)	Project offers opportunities for external funding & collaboration (+ / 0 / -)
					Clear unit would extend the refuge lands further west to include the western shore of St. Andrews Bay and encompass Pilot Town. Land prices, however, have prevented the Pilot Town tract and surrounding acreage from being acquired. The property has been described as "acre for acre the best wildlife habitat on the peninsula." Th e adjacent refuge property, which protrudes out from the Fort Morgan peninsula, is primarily an estuary habitat streaked with narrow tidal inlets called finger sloughs and is host to species of marsh birds such as king rails, herons, egrets, piping plovers and seaside sparrows. It is also host to many migratory Neotropical birds at certain times of the year. Other shore birds, like ospreys, use dead trees to roost. The protected waters of the sloughs and shallow bays act as a nursery for a myriad of aquatic species. In 2001, the U.S. Fish & Wildlife Service, which manages the refuge, offered to purchase the property for $2 million. It included about 90 acres the owners had bought in a 1998 auction for $620,000, but the bid was rejected. Since that time an entrance road has been constructed to a subdivision on a portion of the property. However, 47 acres remain untouched and include some of the most ecologically diverse habitat on the peninsula and most if not all the of the cultural history of Pilot Town. St. Andrews Bay lies to the East of the Pilot Town property and historically contained substantial oyster bed reefs. Due to Hurricanes, many areas of the Bay have been silted-in covering most of the oyster beds. Beds can still be found in places particularly in the finger sloughs. The bay also includes a small marsh island that was once connected to Pilot Town by a Peninsula. Over the years, hurricanes and other erosional forces have breached the Peninsula causing salinity levels to increase in the bay as well as shoaling in the bay that further reduced suitable habitat for oyster beds. This project as proposed would provide a unique opportunity to restore oyster habitat that once thrived in St. Andrews Bay and provide the opportunity preserve one of the most unique historical sites and ecologically diverse sites along the Gulf Coast. The proposed action is to construct a fish and shellfish habitat restoration project to restore habitat lost due to erosi on of the shoreline at Pilot Town and to acquire approximately 47 acres of the historic site. The proposed project includes constructing a segmented breakwater along approximately 1800 linear feet of eroding shoreline to prevent further erosion and to protect the wetland and upland restoration area that is proposed for creation between the segmented breakwater and the existing eroding shoreline. The project would require dredging approximately 360,000 cubic yards of material from St. Andrews Bay and placing it in the historical limits of the Peninsula. The proposed project is needed to prevent further erosion of the shoreline with additional loss of wetlands and to restore wetlands that have been lost due to erosion. The project would also provide a physical barrier to reduce salinity levels in St. Andrews Bay which could promote the reintroduction of Submerged Aquatic Vegetation (SAV) and Oyster Habitat. The project would also help protect approximately 440 acres of high quality wetland and upland habitat to the south and east of the Proposed Peninsula from erosion.																												

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Seagrass Restoration and WQ Management in Old River Estuary	351	John Dougherty	Coastal Gulf of Mexico	12000000	The proposed project consists of installing an ocean inlet pipeline across the barrier island to deliver transparent, high-salinity, low-nutrient seawater into the degraded estuary. An in-line, high-volume pump station is to be operated by remote control as determined by data collected from a variety of in-situ sensors and public data sources within the respective watershed. The objectives include active regulation of residence time, salinity, nutrient concentration and water clarity with the goal of providing optimum conditions for proliferation of seagrasses and increased aquatic species diversity. The pipeline crossing is to be located near the tidal node of the estuary. Pump operation generally will occur during the ebb tide with shut-off during the flood tide to allow for mixing of seawater and estuarine waters. Benefits accrue over time from the point of delivery to the ocean inlet. During low rainfall periods, no pumping may be required; during high rainfall periods, continuous pumping may be conducted to provide a benthic layer of seawater for protection of seagrass beds. Avg project cost=$7,500/ac ; Restored Economic Benefit Value=$20,500/ac/yr Estimated Benefit::Cost Ratio= 2.73 Long term station operation and estuary management will be the responsibility of state and/or local government with a funding mechanism established by NRDA. Project success will be measured under the quality ranking process cooperatively established by NOAA and IMAR through the ASSETS software - Assessment of Estuarine Trophic State (http://www.eutro.org); and by annual comparison of standing seagrass acreage and blade density with pre-project conditions. These results will ultimately determine the quantity of environmental offsets achieved on behalf of the Deepwater Horizon Oil Spill damage assessment.	Trustee Portal	N	Y	N	N	N	N	N	N	N																			
Coastal Alabama Habitat Restoration - Portersville Bay Islands	357	Paul Looney	Coastal AL	8000000	Coastal Alabama has tremendous environmental beauty. From the fringing coastal saltwater marshes, to the tourist-filled beaches of Gulf shores and Orange Beach, Alabama contains tremendous natural resources. The Alabama Department of Conservation and Natural resources (ADCNR), State Lands Division (SLD) owns many acres of coastal Alabama habitat. The purpose for acquiring the coastal habitats was to protect the resource for future generations. The Deepwater horizon incident impacted many habitat types in the Gulf of Mexico and in coastal Alabama specifically. Timing for the incident coincided with the northern movement of neotropical migratory birds as well as the spawning of fish species (non-target and sport species). Shrimp, crabs and benthic macroinvertebrates in shallow coastal waters were adversely impacted by either the presence of oil or the presence of other Polycyclic aromatic hydrocarbons (PAH) components Aquatic birds, such as the pelican, gannet, and some shore birds, were negatively impacted by the presence of oil on the surface of the water, on shorelines, and in marshes. The proposed project is expected to address the restoration of habitats that support all of the impacted species. The impact to species is difficult to compensate in areas that were not heavily oiled. In some cases, the presence of the oil is now minimal. However, because the overall coastal ecosystem has been suffering from continuing environmental impact from natural (sea level rise, wave energy) and man-made (erosion from ship wakes) sources, the amount of suitable habitat for the recovery of the impacted species has been	Trustee Portal	N	N	Y	N	Y	N	N	N	N																			

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					compromised or has disappeared altogether. Many of the State-owned lands in the Mississippi Sound are in some state of environmental degradation. Due to the high energy wave environment many of the state-owned islands have suffered significant land loss due to coastal erosion and sea level rise. This type of land loss can be seen at all of the state-owned islands in the Portersville Bay and Grand Bay areas. The project being proposed is to concentrate on two specific islands owned by the ADCNR SLD in Mississippi sound. Coffee Island (also known as Isle aux Herbes) has endured shoreline erosion historically. A comparison of shoreline location between 1917 and the present present shows continuing and extensive shoreline erosion. In 1958 the island was breached and the two pieces were renamed in some GIS applications (Isle aux Herbes, and Terrapin Island). Some restoration work has been completed on this island but there is still more work required to complete the planned restoration and shoreline protection. This project will continue the planned restoration and shoreline protection work that was initiated. At this point, it appears that the south shore of the island would be the main emphasis. The project would provide new oyster reef habitat and increase finfish habitat in the Sound. Additionally, specific plantings on the island are proposed to help restore bird habitat. This would increase habitat for Neotropical migratory birds, including resting and foraging habitat. Additional vegetative manipulation is expected to provide a habitat conducive for the roosting and nesting habitat for many aquatic bird species. The southern part of Coffee Island has been given the name Terrapin Island. Specific work will be aimed at providing/increasing suitable habitat for the reproductive success and sustainability of the Mississippi diamondback terrapin. Where possible, mudflats and tidal creeks will be restored or created to increase habitat that can be used for an expanding terrapin population. Finally, throughout the Alabama coast, there are several plant species that have invaded natural communities. In the coastal environment, one of the most obnoxious invasive species is the common reed (Phragmites australis). The project proposes to address this and other identified invasive species in th e important habitats so that the restored ecosystem can provide full ecological value to the plant and animal species that constitute the community or depend on the plant community for food and shelter. The second island proposed for restoration is Marsh Island. There are two islands with this name in coastal Alabama. The island referenced here is in Portersville Bay. There are historic photographs of the island dating to 1917 which show the extensive erosion of the shoreline compared to the present shoreline of the island. Restoration of this island would include shoreline stabilization structures, backfilling to an agreed upon historic island profile and the planting of suitable plant communities to provide suitable habitat for the same species discussed above. Invasive species eradication and control is also proposed for this project.																												
Coastal Alabama Habitat Restoration -	358	Paul Looney	Mobile Bay	10000000	Gaillard Island is an approximately 1,500 acre manmade island in Mobile Bay that was created from dredge material from the construction and maintenance of the Theodore ship channel. While the main reason for creation of the island was to manage dredge material, one of the	Trustee Portal	N	N	Y	N	Y	N	N	N	N																		

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Mobile Bay Bird Islands					environmental benefits of the island creation has been that numerous coastal bird species, particularly the Brown Pelican use the island for roosting and nesting. The initial plans for this manmade island did not include provisions for bird rookery habitat. However, once the potential habitat was established through the construction of the island, it became apparent that an ecological niche had been filled. Subsequent efforts were aimed at improving and protecting habitat for birds using the island for rookery habitat as well as foraging and roosting habitat. Initial objections to the loss of productive water bottoms in the bay needed to be reconsidered in light of the spontaneous establishment of useful rookery habitat. The ecological result of this fortuitous development is the consideration that there is not enough available natural habitat within the bay ecosystem to provide for protected, undisturbed safe rookery habitat for coastal bird species. The proposed project is to establish other smaller islands in the Bay that could provide not only bird rookery habitat, but help to reestablish lost oyster reef habitat, fin fish habitat and possible sea grass habitat. The current lack of these habitats in the Bay limits the potential areas where the ecological value can be expressed. The conceived project meets several of the objectives contained in the Mobile Bay National Estuary Program Comprehensive Conservation Management Plan and a report released in 2009 (Prioritized Guide for Coastal Habitat Protection and Restoration in Mobile and Baldwin Counties). The Deepwater Horizon incident impacted many habitat types in the Gulf of Mexico and in coastal Alabama specifically. Timing for the i ncident coincided with the northern movement of neotropical migratory birds as well as the spawning of fish species (non-target and sport species). Shrimp, crabs and benthic macroinvertebrates in shallow coastal waters were adversely impacted by either the presence of oil or the presence of other polycyclic aromatic hydrocarbons (PAH). Aquatic birds, such as the pelican, gannets, and some shore birds, were negatively impacted by the presence of oil on the surface of the water, on shorelines, and in marshes. The proposed project is expected to address the restoration of habitats that support all of the impacted species. The impact to species is difficult to compensate in areas that were not heavily oiled. In some cases, the presence of the oil is now minimal. However, scientific investigations have concluded that the number of birds killed, and the number of bird species impacted are hard to know specifically. It has been estimated that for every oiled bird captured and rehabilitated, there could be as many as 10 others that were never found. Initial estimates, while imprecise, are that thousands of birds in hundreds of species were impacted by the incident. Mobile Bay, for the most part, did not get direct impact from oil released from the Deepwater horizon. However, due to past development trends, the amount of natural habitat available in Mobile Bay has been reduced by the construction of shoreline housing and shoreline armoring. Development of shoreline housing and the eventual armoring of the shoreline have resulted in a loss of fringing saltwater and brackish water wetland habitat, shallow mud flat habitat, and low elevation wet and fast land vegetation. A developed shoreline does not contain any marsh habitat, tidal creeks, or wooded wetland habitat which is present on																												

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					undeveloped shorelines in Mobile Bay. The environmental effects of an armored and developed shoreline has resulted din the loss of nearshore habitat and potential nesting and roo sting habitat inland. Upland habitat that used to provide trees and shrubs which served as resting and foraging habitat for migratory birds, have been reduced as landscaping has replaced natural species with introduced ornamental plant species with little ecological value. In some instances, escaped ornamental plants have replaced natural vegetation in otherwise undeveloped property. The proposed project would entail the construction of offshore islands that could replace lost habitat due to coastal development. The project islands would be developed to contain as much ecotonal variation as possible, with some upland habitat available. Source material could be recovered from the shallow waters of Mobile Bay or from existing stores of dredge material stored adjacent to Mobile Bay Similarly, beneficial use of dredge material could be pursued. Shoreline protection and stabilization would be customized to provide not only protection from wave and storm surge activity, it would be placed to permit the establishment of oyster reef habitat and SAV habitat within the protected waters. In accord with the 2009 report referenced above, this project will eliminate the requirement for land acquisition costs and allow for project costs to be directly applied to the construction of habitat. There are several reef locations in Mobiled Bay that are part of the Roads to Reefs Partnership which could be used ass initial locations fo rthese proposed islands. Additionally, a 100-1000: Restore Coastal Alabama Partnership proposes the placement of 100 miles of oyster reef habitat in Mobile Bay, this project could be used a part of this effort as well. The location of the islands is recommended to be in shallow sections of Mobile Bay and can include areas that could provide additional storm surge and wave protection for shorelines that are undergoing erosion. There are several locations at the northern end of Mobile Bay where the river deltas form a large freshwater habitat of marshland and mud flats. This area contains small exposed vegetation surrounded by mud flat habitat. These areas would not require additional fill to create additional wetland and upland habitat. The predominant water regime in these locations is amenable to freshwater marsh habitat creation. Additional ecological value in the upper Bay would be the creation of nesting and reproductive habitat for the Alabama Red-bellied turtle. Historic aerial photography can provide a basis for the eventual size of the project based on past erosion patterns. The general size for an individual island is envisioned to be over 20 acres and less than 200 acres. Lower in the Bay the created island habitat will support saltwater marsh habitat and marine floral and faunal communities. This project concept could be used to create or enhance islands in the Alabama waters of the Mississippi Sound.																												
Property Acquisitions for Protecting the Big Creek Lake/ Converse Reservoir	4083	Dwight McGough	Mobile County	4500000	The Big Creek Lake/Converse Reservoir Watershed covers approximately 103 square miles or 65,920 acres in western Mobile County, Alabama. This watershed system is the sole source of raw water for the two drinking water treatment plants for the City of Mobile's water distribution system along with one of two sources for industrial use. This water supply system is also currently a source of drinking water for the City's of Prichard, Chickasaw, and	Trustee Portal	N	Y	N	N	N	N	N	N	N																		

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					Spanish Fort. The Big Creek Lake/Converse Reservoir Watershed Management Program includes purchasing available properties and land use rights to prevent conditions from occurring that may adversely affect water quality within the watershed basin. Several properties within the watershed have been purchased by MAWSS over the years to ensure proper land management practices are followed for protecting the Big Creek Lake/Converse Reservoir water quality. As development continues to occur on the properties within the watershed that are neither owned nor controlled by the Mobile Area Water & Sewer System, the potential for detrimental effects to the water quality increases. Some examples of these conditions are drainage runoff containing nutrients from fertilizers or watercraft or naturally occurring residuals from erosion. The potential adverse effects of land development on raw water quality include runoff with increased amounts of sediment, chemicals and nutrients that promote the growth of algae. By owning the properties within the watershed, the implementation of proper land management programs by MAWSS can be assured for maintaining exceptional water quality for future generations.																												
Rehabilitation of Sanitary Sewer Mains - Foley, Alabama	342	Richard Peterson	Foley	1250000	The Utilities Board of the City of Foley (Riviera Utilities), in partnership with the City of Foley, desires to rehabilitate up to 8.6 miles of aged, deficient sanitary sewer mains within the City's sewer collection system. Most of the collection system in and around downtown Foley was constructed of vitrified clay pipe 40-70 years ago. Riviera Utilities has identified, inspected and cataloged these deficiencies during routine internal video inspections. Deficiencies in the clay pipe include broken pipes, offset joints, root intrusion, and active groundwater infiltration / stormwater inflow (I/I). Where possible, mains will be rehabilitated using trenchless construction methods such as pipe relining and pipe bursting to minimize construction costs. These areas fall within the watersheds of Wolf Bay and Bon Secour Bay/Oyster Bay. Treated effluent is discharged from Riviera's Wastewater Treatment Facility (WWTF) to Wolf Creek, which flows to Wolf Bay. Ultimately, flow from these watersheds enters the Intracoastal Waterway, Perdido Bay, Mobile Bay, and the Gulf. Wolf Bay is a pristine estuary designated by ADEM as an "Outstanding Alabama Water". Bon Secour Bay and Oyster Bay are popular locations for sport fishing and shellfish harvesting and are bordered by the Bon Secour National Wildlife Refuge. Both watersheds host very diverse habitats that do support or have historically supported several Federally listed species including bald eagles, Florida manatees, Kemp's Ridley sea turtles, Gulf sturgeons, American alligators, Alabama red-bellied turtles and Eastern indigo snakes. This project's goal is long-term improvement of water quality by the reduction of accidental discharges of untreated/partially-treated wastewater to these watersheds, surrounding waters, and the Gulf. Such discharges are detrimental to aquatic, estuarine, and upland habitats within these watersheds. Also, they can create public health hazards by making water bodies temporarily unsuitable for human contact, commercial/sport fishing, and recreational use. Project objectives are as follows: (1) Minimize possibility of wastewater discharges by (a) regaining hydraulic capacity lost in the collection system due to I/I and pipe deficiencies, and (b) correcting pipe	Trustee Portal	N	Y	N	N	N	N	N	N	N																		

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					deficiencies that can directly lead to a manhole overflow; (2) Prevent exfiltration of wastewater into groundwater; 3) Reduce WWTF peak flows during rain events so that treatment processes are not overloaded and high quality effluent is discharged to Wolf Creek.																												
Safe Harbour	54	Rosa Zirlott	Bayou La Batre	9000000	This proposal supports the Public Access Objective (Increase public access to water resources) and the Sustainable Land Use Planning Objective in the Mobile Bay NEP Comprehensive Conservation and Management Plan. The proposal also supports the coastal community Resiliency and Resource Management Priority Theme Area of the Mississippi-Alabama Sea Grant Consortium (NOAA) Strategic Plan. Commercial fishing along coastal Alabama began not long after the arrival of European settlers in the 1700's. Plenty of shore line was available for docking vessels and for shore side catch handling activities. Location of these activities changed as the markets and transportation changed. The biggest change, however, has occurred in the last 40 years because of the following three major developments. 1. During this period the per capita consumption of seafood in the United States more than doubled resulting in more and larger fishing vessels. The number and size of the seafood support industries also increased especially the ship building and repair sectors. Vessel construction converted from wood to steel. The industry grew to provide services to fishing industries from Maine to Alaska and to foreign operations and expanded its services to vessels that provide oil exploration support. Most of the growth of harbor facilities was random. An exception was the construction of a state dock in Bayou La Batre. The number of harbors used by the oystermen declined. This led to a conversion to using smaller craft with outboard motors that could be loaded onto trailers. Over 90 percent of these boats are towed back and forth from inland areas and the coast each day, a very inefficient and costly operation both economically and environmentally. 2. Population of the coastal area also more than doubled resulting in an increase in recreational fishing and use of shorelines by the recreation fishing industries such as charter boats and marinas. There also was a large growth in dev elopment of shorelines for tourists and coastal residential homes. 3. Offshore oil exploration expanded along with support industries also increasing demand on harbor facilities. The destruction caused by hurricane Katrina to the seafood industry was tremendous both to the fishing vessels, shore facilities and the local environment. A large number of vessels broke lose from their moorings. Some sunk in rivers, streams while some large vessels drifted as much as two to three miles inland primarily into fragile estuarine areas. The cost in dollars and in damage to the environment was excessive. Katrina also resulted in less harbor facilities. For example, the Bayou La Batre state docks were destroyed. These docks provided dockage for about 40 vessels depending on size and housed two seafood unloading facilities. Technology now provides cost effective methods to develop expanded harbor facilities that include adequate moorage for the fishing and other fleets and which will protect the environment from operations by providing efficient controls to mange such things as oil spills and waste disposal. Further, facilities can be constructed to provide vessel safety during a hurricane. Facilities can also be provided to store oyster boats and thus	Trustee Portal	N	N	N	N	N	N	Y	N	N																		

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					eliminate the current practice of towing them miles inland and back again each day. Commercial fishermen are self employed including crewmen on the larger boats. No economic infrastructure exists within the industry to even attempt to address the problem and implement a solution. Any resolution to the problem will either have to come from government or some other out side source. In order to build Safe Harbors for coastal Alabama, we request funding for professional study, design, and construction of facilities that can safely harbor fishing vessels and other craft in severe storms and that will also provide the necessary infrastructure to protect the environment.																														
The Renovation of Mobile, Alabama's Antiquated Storm Water Treatment Methods to Meet Modern EPA Standards	4072	Carol Adams-Davis	Mobile Bay		"The Renovation of Mobile, Alabama's Antiquated Storm Water Treatment Methods to Meet Modern EPA Standards" would be an excellent NRDA restoration project. Because Mobile County is located on Mobile Bay in a low-lying coastal community, storm water management should have a high priority. Mobile's problems associated with the drainage and flooding of an old fragile deteriorated storm water collection system are well know by its residents. Overloaded inadequate storm drains become clogged with leaves and trash, thus our frequent excess rainfall has nowhere to go, so water collects in low areas, causing flash flooding of our streets and sidewalks. All untreated runoff, containing hydrocarbons, trash, and other pollutants, eventually end up in our watersheds and Mobile Bay. Mobile's present Storm Water Management System is a natural target for a complete municipal storm water system retrofit. The Natural Resources Damage Assessment (NRDA) funds could create a contemporary storm water program for Mobile, which would improve the water quality of Mobile Bay Estuary, the fourth largest estuary in the United States. The design, construction, operation and maintenance of up-to-code storm water plan would incorporate a large budget including the following: Retrofitting Program, Monitoring Program, Best Management Practices, Pesticide, Herbicide and Fertilizer Programs, Used Oil & Toxic Materials, Street Maintenance Program, Spill Response and Clean Up, Program for Public Education and Reporting, Leakage and Cross Connections, Industrial Program, General Commercial and Residential Program, Illicit Construction and Illegal Dumping, Landfills and Other Waste Facilities, Combined Sewer Overflow Program, Groundwater & Wellhead Protection, Drinking Water Protection, Watershed Assessment & Total Maximum Daily Loads, Septic and Inflow & Infiltration Program, Consistent Street Sweeping Program Engineering & Planning: Design Criteria, Standards and Guidance, Field Data Collection, Mas ter Planning, Design, Field and Operations Engineering, Hazard Mitigation, Zoning Support, Multi-objective Planning Support, (GIS) Geospatial Information System and Database Management, Mapping, Land Use Planning & Controls Regulation and Enforcement: Code Development and Enforcement, General Permit Administration, Drainage System Inspection & Regulation, Zoning and Land Use Regulations, Inspection Programs, Low-Cost Flood Insurance Program, Multi-Objectives for Flood Management including Emergency Response, Erosion Control Program, Environmental Considerations, Water Quality Monitoring and Pollution Control Cooperation for Management of All Drainage Systems (all Watersheds). Polluted storm water runoff is the number	Trustee Portal	N	Y	N	N	N	N	N	N	N																		

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					one water quality issue in Mobile County watersheds. This project would help reduce hypoxic zones by improving storm water treatment and reducing the amount of fertilizers and pollutants leaching into our watersheds. In order for present and future Estuary Restoration Programs to succeed, EPA Standards and Codes of Storm Water Management must be in place.																													
Water Quality Monitoring for Protecting Fish and Shellfish Resources in South Mobile County	8114	Stan Wright	Mobile County	2620000	Federal and state budget reductions and available personnel are limiting the monitoring of water quality and fish/shellfish quality in our coastal waters. One method to supplement the state and federal efforts is to establish a network of water quality monitoring stations aimed at protecting near-shore shellfish spawning areas, oyster reefs, and fish habitat. This network of stations would be monitored weekly on a routine basis along with seasonal intensive studies to account for diurnal and varying meteorological effects as well as and man-made disasters that could occur (e.g., oil spills, marine accidents, etc.). Capabilities would also include a "strike team" to evaluate water quality and/or fish and shellfish quality on a short notice in response to any event capable of polluting the coastal area. A mobile and/or land-based laboratory capable of near real - time analyses for chemical and/or biological pollutants would be available for deployment on land or sea as the need arises and also utilized for the routine analyses, thus reducing commercial laboratory costs and delayed reporting associated with chemical and biological analyses. Data from the sampling events would be catalogued and evaluated continuously to determine any shift or trend in water or seafood quality. A quality assurance/quality control plan will be developed to provide plausibility of the data and a check and balance approach to lab methodology. Reports will be prepared in both a technical and non-technical format to inform those persons or organizations of the quality of Gulf Coast waters and seafood on a routine basis. Briefs will be prepared in the event of a disaster or other incident where water and/or seafood quality is questioned, along with an established website where data and other information can be disseminated continually. In the event of a critical water quality impairment (e.g., BP spill, hurricanes) associated with tropical weather, spills, etc., procedures will be in place to respond to these emergencies with initial mitigation of damages and remediation. As a result of the above efforts, stakeholders, government, and the public will have a near real-time assessment of water and seafood quality in the coastal waters of South Alabama.	Trustee Portal	N	N	N	N	N	N	N	N	Y																			
Eat Alabama Wild Seafood	2102	Rosa Zirlott	AL	1000000	Organized Seafood Association of Alabama has been marketing Alabama Wild Caught Seafood since 2002. The Deep Water Horizon Oil Spill created a major obstical in our marketing plan. Alabama fisherman were faced with public perception problems. Eight years of marketing Wild Caught Seafood were tainted overnight by the oil spill. Customers began to ask "Where is this product from?" and "if it is from the Gulf, we don't want it" One year after the spill, we are still being affected by negative public perception of the safety of the seafood from the Gulf. Organized Seafood Association of Alabama is funded by a check off on fuel program. Our funding is based on the number of gallons of deisel fuel purchased for commercial fishing (.0125 cents per gallon). During the spill, the fishing waters were closed and the	Trustee Portal	N	N	N	N	N	N	Y	N	N																			

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					boats were not allowed to fish. This led to considerable defunding to the Organized Seafood Assocation of Alabama because the fisherman were not buying fuel. This defunding happened at a time when it was needed most. We are requesting funding to continue our marketing program for the seafood industry. We have a great deal of work in educating the consumer about the safety of seafood from the Gulf of Mexico.																													
Develop Wildlife Recovery and Rehab within Coastal Alabama	4082	Lloyd A. Culp, Jr.	coastal AL		I. Background - Wildlife recovery within watershed consists presently of state and federal personnel, with a focus on endangered species. - Wildlife professionals have identified the need for a more reliable and analytical approach to recovery. - Wildlife rehab locations are presently limited to facilities in Florida and Mississippi. II. Concept - Obtain state and federal permits. - Develop financial support (non-government and government) to cover start-up and operating expenses. - Develop partnership that includes state and federal wildlife professionals, research and educational institutions, and local veterinarians to provide wildlife rehab services and analysis of wildlife mortality and injury. - Develop local facility that will house rehab services and provide educational programs on wildlife populations, habitat, and direct threats to wildlife health with the goal of mitigating long-term threats and preparing for natural and human-caused incidents that adversely affect wildlife. III. Benefits - Addresses an immediate need to provide sustainable and reliable wildlife recovery within the Mobile Bay watershed. - Provides an analytical approach to wildlife injury and mortality that will result in statistically valid baseline information on the health of wildlife populations. - Provide opportunities for biology students to gain practical field experience. - Provides marketing benefits to donors and cooperators. - Highlights the aesthetic and economic value of the natural resources of coastal Alabama. - Enhances the ability to maintain local control and management of future significant incidents that require wildlife recovery and rehab.	Trustee Portal	N	N	N	N	N	N	Y	N	N																			
Island Wildlife Habitat Enhancement	5090	Phillip West	Perdido Bay	150000	A. Install bird nesting platforms The loss of large mature pine trees used as nest sites to hurricanes will be temporarily offset by installation of 20 bird nesting platforms on Robinson, Gilchrest, and Walker Islands (the latter two after they are acquired from private interests). Most of the platforms would be placed on Robinson Island, where the largest amount of nesting has historically occurred. Great blue herons will be the primary target specie, although other wading bird species may also use the platforms. Construction would take place during the June-January timeframe to avoid bird nesting activities. Costs associated with this proposal include purchase of lumber, hardware, associated equipment; and to support city employees to carry out the work or supervise volunteers would be paid out of restoration project funds. Acquisition of a 27 ft. pontoon boat-motor would support this activity by providing a means to transport equipment and people from the mainland to the island worksites. This boat would also be vital is carrying out the other activities associated with this project. Platform sites would be selected based on the location of pine trees used for nesting prior to recent storms. Follow-on monitoring of bird use would be carried out for 10 years using volunteers. Colonial-nesting birds have been confined to three nesting sites in coastal Alabama according to officials with the Dauphin Island Sea Laboratory, one of	Trustee Portal	N	N	N	N	Y	N	N	N	N																			

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					which is Robinson Island. These islands were identified as one of 4 priority areas in collaboratory work by the Mobile Bay National Estuary Program and The Nature Conservancy in their 2006 report " Conserving Alabama's Coastal Habitats' Acquisition and Restoration Priorities of Mobile and Baldwin Counties." B. Install sand fencing enclosure to protect least tern/heron nesting areas. Least terns have nested on the ground on Robinson and Gilchrest Islands. Human activities and the episodic presence of dogs on the islands have restricted tern n esting or compromised its success. Herons have abandoned use of nest trees near human activity areas on Robinson Island. The project would construct and maintain a permanent sand fence enclosure around areas historically used by terns and herons for nesting. Approximately 1000 feet of fence would be installed. This should eliminate disturbance to nesting terns and herons, thereby help sustaining populations that have been suffering impacts from humans, particularly during the past 15 years. The acquisition of a boat-motor (as above) would help with this project by facilitating transport of materials, equipment, and personnel from the mainland to island construction areas. C. Install protective/interpretive signage and develop educational brochures Human behavior problems have adversely affected island environments for the past 25 years. Intrusions into bird nesting areas, widespread littering, free-roaming dogs, and incursion of motorized vessels into extremely sensitive sea grass beds have all contributed to declining environmental conditions. The proposal would support a comprehensive signage program involving the perimeter of the three islands as well as the perimeter of the sea grass beds that encircle these islands. The conspicuous signs would mark bird nesting areas, the perimeter of sea grass beds, and reminders about the need for animal control and litter removal from the islands when people depart. Additionally, at least four large educational type signs would be installed featuring information about the environmental features of the islands and the role/behavior of human conduct in sustaining island uses into the future. The grant would also support an educational "island care joint venture" with marinas, restaurants, boat rentals, and other commercial interests in the Perdido Pass, Terry Cove, Cotton Bayou, and Bayou St. John area, most, if not all of which depend (directly or indirectly) on the islands well-being to support their customer base.																													
Sustaining Alabama's Working Waterfront through Oyster Aquaculture	5105	Bill Walton	AL	12500000	Auburn University has partnered with Mississippi-Alabama Sea Grant Consortium and Alabama Cooperative Extension to launch off-bottom oyster farming in Alabama. Here we propose to expand this effort to include a large number of coastal residents, pursuing oyster farming both as environmentally and economically sustainable jobs as well as contributing significant numbers of oysters to restoration projects throughout the coastal waters of Alabama. 1. Enhancement of public oyster reefs by seeding with juvenile oysters Provide 50 million juvenile oysters per year (set on varying sizes of cultch) for seeding onto public oyster beds to enhance the public fisheries within Alabama, raised by local oyster farmers and in partnership with Alma Bryant High School's aquaculture program. Within 5 years, 250 million juvenile oysters will be added to public oyster beds in the region. For context, public	Trustee Portal	N	N	N	Y	N	N	N	N	N																		

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					reefs have a density of 2-5 oysters per square meter or 8,000-20,000 oysters per acre. The intent of this project is to assist state resource agencies in implementing existing oyster management strategies where a percent of the oysters on public reefs are harvested and the remainder provide critical fisheries habitat. Assuming 20% survival to market size, this stock enhancement could yield over 6,000 daily limits of eight sacks (AL limits) per year (with 200 market size oysters per sack), providing much needed income to the region, while also providing environmental services. The enhancement of natural oyster reef structure and oyster abundance will also will provide for critical ecosystem services through improved water quality, increased biodiversity and creation of more diverse habitat. In addition to educating high school students and creating jobs for watermen at nursery sites, the oyster seed produced at a state supported hatchery will be transitioned to the private sector. 2. Development of off-bottom oyster aquaculture in the region Establish 2 100-acre oyster aquacultur e parks in Alabama, where watermen are provided start-up grants to produce adult oysters for the food market and juvenile oysters to supplement oyster reef restoration. The two parks will support 40 independently operated 5-acre oyster farms capable of generating at least $2.5 million per year of combined income within 5 years through sales of premium oysters. These oysters command higher prices than those oysters traditionally produced from the oyster reefs in Alabama thereby providing greater income for the oyster producers and also reducing pressure on natural oyster resources. Initial research suggests that a 5-acre operation would allow an oyster farmer to raise 400,000 oysters per year; potentially yielding a gross annual income (with a conservative 80% survival) of over $80,000. This would be a significant increase in annual income for the typical oyster catcher who might currently earn $20,000/year. Regionalization We strongly encourage the implementation of these approaches throughout the Gulf region. Parallel efforts are currently underway in Louisiana where Louisiana Sea Grant has partnered with Louisiana State University. The proposed work has environmental benefits, is economically viable and culturally compatible.																												
Dauphin Island Causeway Habitation Restoration and Public Access	5107	LaDon Swann	Dauphin Island	9000000	A 9,000 linear foot section of the Dauphin Island Parkway will be protected through the creation of 36 acres of aquatic habitat including sandy beaches, oyster reefs, fishing reefs, and enhanced public access through the creation of a two 0.33-acre roadside pocket parks. This will be accomplished by installing 3,500 wave attenuation breakwaters deployed in a double row using an offset segmented design; installing approximately 12,000 cubic yards or oyster cultch (rock or cured oyster shell) shoreward of the breakwaters; and constructing two 0.33-acre pocket parks for public access. The two rows of breakwaters will consist of approximately 32 segments 200 ft. in length with gap widths of 50 feet. Wave energy transmitted through the gaps will be minimized by overlapping gaps with the additional row of breakwaters positioned approximately 20 feet seaward of each gap. The breakwaters will be constructed to the desired dimensions of 8(w)' x8 (w)' x8(w)'x4(h)'. The breakwaters will be placed at a water depth of approximately 3 feet to allow for potential settling and to ensure that the structure will protrude out of the water 6 to 12 inches at mean tide. The 12,000 cubic yards oyster cultch will	Trustee Portal	N	N	Y	N	N	N	N	N	N																			

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					be placed shoreward of breakwaters to provide hard substrate for setting of oyster larvae and to provide habitat for other marine vertebrates and invertebrates. The cultch will be deployed in an approximately 4,000 ft long by 50 ft wide strip at an average height of 9 inches to total 12,000 cubic yards of oyster habitat. A veneer of 6 million juvenile oysters (> 25 mm shell length) will be seeded on top of the created oyster reef. Two 0.33-acre pocket parks will be created. Each park will be 205 feet in length and 70 feet wide. A total of 8,000 cubic yards of earthen fill will be will be used to create the two pocket parks. The parks will be constructed in collaboration with the Department of Transportation to ensure proper engineering, construction, and traffic guidel ines are used. The parks will provide the public access to this restoration site to fish. Additional habitat will be added by planting of 15,000 Spartina alterniflora and Spartina patens transplants to stabilize the shoreline of the constructed pocket parks.																													
Robinson Island Restoration	5110	Phillip West	Perdido Bay	150000	A. Restore 250 feet of eroded shoreline on Robinson Island The northeastern tip of Robinson Island has experienced sustained erosion for many years. Recent storms have seriously aggravated the situation. Heron nest trees have been lost, and numerous others are currently threatened by shoreline retreat. The restoration proposal would support a project to restore the shoreline to its 1985 configuration, while protecting remaining trees and stabilizing the island's northeastern end. A U.S. Army Corps of Engineers permit would be obtained as well as necessary state authorizations to dredge a small amount of sand (estimated at 2500 cubic yards) from shoal areas in adjoining Terry Cove to reconstitute the island's northeast shoreline. Fabric protection would be installed and riprap of suitable size placed to protect the reconstituted shoreline. Project costs would be related to permit acquisition (including surveys), dredging and sand placement, fabric installation, and riprap placement. Permanent markers would be installed to facilitate monitoring of project effectiveness over time (10 years). Without this project, additional loss of Robinson Island will occur, including more nest trees. The outcome of this project would be the restoration of 250 linear feet of eroded shoreline. The northeast tip of Robinson Island has been seriously eroding for over 20 years. Numerous bird nest trees have been lost. This project would protect the northeast part of the island and restore shoreline integrity. The project would be limited to the area subject to severe erosion and would only stabilize the shoreline, not recapture lost upland area. Continuing erosion of this area would endanger many of the remaining bird nest trees found on the island. The work would involve a relatively small amount of dredging and 250 feet of shoreline refurbishment sufficient to protect the island's integrity. Use of experienced city employees and a marine contractor would help achieve the desired outc ome. B. Reestablish Native Island Vegetation The upland vegetation of Robinson Island has been severely affected by tropical storms and sea level rise. Natural re-vegetation has been slowly occurring. A significant number of pine trees on the islands previously used for bird nesting have been lost. The project would boost recovery of natural vegetation. The project would include planting native species such as sand pine, slash pine, salt bush, smooth cordgrass, and sea oats on the island. Some removal of	Trustee Portal	N	N	Y	N	N	N	N	N	N																			

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					exotic vegetation may be necessary to facilitate success of this planting program. A partnership with Gulf Shores High School would be developed to facilitate this part of the project. Two greenhouses would be constructed at Gulf Shores High School under supervision of Orange Beach city employees. Students/volunteers would gather seeds from native plants in the project area and raise the young plants at the greenhouse. When the seedlings are of suitable size, students and volunteers would plant them on the island. Monitoring, follow-up care, and replanting (to the degree necessary) would be conducted by students and volunteers.																												
Perdido Watershed Water Quality Improvement	10105	Billy Middleton	Perdido River and Bay	1500000	There are approximately 6,360 acres of wetlands in Loxley's Planning Area. The Town of Loxley is in the Perdido River Basin. Surface water within the Perdido River Basin flows through numerous unnamed tributaries to the Perdido River, by way of Dyas Creek, Hollinger Creek, Styx River, Blackwater River, Negro Creek, Sandy Creek, Miflin Creek, Perdido Bay, Wolf Bay, Bay La Launch, Arnica Bay and other coastal waters. Also, Loxley is located in two watershed areas, the Mobile Bay and the Perdido Watersheds. The Town is served by one wastewater treatment facility located at the southwest corner of the town on 5050 South Magnolia Street/County Road 49. This facility has a flow averaging 300,000 gallons per day. The proposed project will replace the Town's existing 27,500 linear foot, 8 inch public sewer outfall line that has a direct discharge to the Perdido River Basin with a more adequately sized 16 inch new PVC outfall line. Currently, the old undersized 8 inch line does not have the capacity to withstand inflow and infiltration that occurs during the areas frequent storm events. This results in sewer overflows at the wastewater treatment facility which causes health and environmental hazards. The implementation of this project will prevent future sanitary sewer overflows from occuring. This will improve the water quality in these watersheds and offset the damage caused by the BP oil spill.	Trustee Portal	N	Y	N	N	N	N	N	N	N																			
City of Spanish Fort Land Acquisition Project	10108	Mike McMillan	Spanish Fort	15000000	The City of Spanish Fort is located adjacent to the Blakeley River on the eastern side of the lower half of the Mobile-Tensaw Delta. There are several hundred acres of estuarine marsh in addition to hilly uplands which provide numerous ecologic benefits such as floodwater protection, water quality enhancement, and habitat for plants and animals. Oysters, shrimp, and blue crab are associated with this habitat. On the southeast corner of the convergence of the Bay Minette Basin and Bay Minette Creek there is a tract of land available (a.k.a Cypress Point Development). This tract has been destined for development, however, has been put on hold. There is an opportunity to acquire this 250-acre tract of pristine habitat in order to protect the tract and adjacent waterways from over-development. In addition to productive wetland and upland habitat, numerous historic resources exist on this property. This project would acquire this tract of land for conservation and protection and could be used to education the public on the importance and role of Spanish Fort's waterfront in coastal Alabama's ecology. Costs associated with this project consist of appraisal fees, legal fees, and acquisiton costs.	Trustee Portal	N	N	Y	N	N	N	N	N	N																			

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Dauphin Island Campground Expansion	11050	Sherry Cain	Dauphin Island		Expand the existing campground by adding 10 more sites with water, electric and sewer hookups to provide more camp sites for the public.	Trustee Portal	N	N	N	N	N	N	Y	N	N																		
Dauphin Island Park and Beach Board (Public Beach Parking)	11051	Sherry Cain	Dauphin Island		Expand the parking area of the Dauphin Island Park and Beach Board public beach, by adding gravel, parking bumpers to create more parking spaces for the public use.	Trustee Portal	N	N	N	N	N	N	Y	N	N																		
Magnolia Springs Habitat Restoration	2112	Charles Houser	Magnolia Springs	500000	The Town of Magnolia Springs incorporated in 2006 in large part to protect the river Magnolia River from rampant development that was occurring in south Baldwin County. Since that time the town council and it's cizitens have spent nearly $100,000.00 conducting studies to determine the source of sediment loading, conducting bacteria and chemistry sampling and developing oridinances to place stringent guidelines on stormwater discharge. The river was reclassified by ADEM as an Outstanding Alabama Water in December 2009 due to the results of sampling by citizens. It is also a tributary of Weeks Bay National Esturiane Reserve (WBNER). The river has a small watershed and is included in the watershed management plan as developed by WBNER. The major threat to this waterway is sediment loading. In 2008, a large bluff along the headwaters of the river collapsed into the river and that bed load sediment combined with sediment further upstream is threatening spawning habitat for the Striped Bass which concentrate each year around sandstone outcrops near deep spring fed holes at the headwaters. The upstream navigable sections of the river have filled approximately 6 feet in the last 10 years for a distance of approximately 2400 feet. An estimated 35,000 cubic yards of sediment needs to be dredged before the habitat is destroyed. This area is also widely used for recreation with thousands of residents going to the cold water springs to relax and cool off during warm months.	Trustee Portal	N	Y	N	N	N	N	N	N	N																		
Gulf Highlands/ Gulf Shores AL Public Beach	4053	Nick Wilmott	Fort Morgan	35000000	My family owns 113 acres located along the Alabama Gulf Coast, more specifically on the Fort Morgan Peninsula, with 2700 feet of beach. It is in the directly affected area of the BP Oil Spil of April 20, 2011. We are permitted for a 500 unit condominium complex but my proposal is in a different direction. This land contains endangered species such as the alabama beach mouse, turtles and different types of plant life, but can also be utilized for human use as well. This property is the largest privately held parcel along Alabama's small 36 mile coastline. I am proposing this property be purchased and turned into a public beach for generations of Alabama residents and tourists to enjoy. The footprint where the condominiums were going to be placed (approximately 20 acres), could be used as a parking lot (surface material can be decided upon by whomever is in control) for beach access and the remaining 80 acres can either be left as is for conservation and preservation Or possible nature trails can be carved through for people to enjoy watching wildlife. This will be a once in a lifetime opportunity to preserve this much land for the general public to use as well as protect generations of wildlife that call this place home. It is a perfect blend of human use and wildlife conservation, and is directly located in the affected area.	Trustee Portal	N	N	Y	N	N	N	N	N	N																		

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Integrated Approach to Wetland Damage Assessment, Vegetation Monitoring, and Restoration Tracking in the Gulf of Mexico	2103	William Bernard	coastal Gulf of Mexico	3000000	Problem Statement: Tidal wetlands bordering the Gulf of Mexico, including Federal wetlands in National Wildlife Refuge (NWR) areas, are at risk of being impacted by the oil that continues to wash ashore. A comprehensive and accurate determination of the impact over vast remote areas is not feasible with traditional survey methods. In order to identify and implement the most cost-effective solutions necessary for remediation/restoration; a unified, systematic approach using airborne remote sensing coupled with land-based restoration technologies can be implemented to 1) efficiently identify the extent of impacted wetlands, 2) effectively guide the remediation/restoration process from planning to completion, and 3) provide a calibrated measurement of the effectiveness of the remediation/restoration efforts over the long-term. Proposed Solution: SpecTIR proposes to provide comprehensive monitoring and restoration services along the Gulf coast using a proven combination of commercially available aerial remote sensing applications and innovative assessment and monitoring techniques that will promote program efficiency and cost-effectiveness. The team will use a scalable, phased approach that will identify impacted wetlands and allow for the prioritization, planning, and performance of restoration efforts. Additionally, the proposed methodology will provide a consistent and scientific means for accurate and quantitative post-restoration monitoring. The first phase of the proposed approach is to provide a baseline for restoration by collecting airborne hyperspectral imagery or, in the case of many Gulf coast NWR wetlands, assessment of the hyperspectral data already collected prior to impact from oil. Guided by initial analysis of the airborne data, groundtruthing verification and validation of the wetlands will then be performed. SpecTIR will provide the existing 2000 sq km of pre-oil, baseline hyperspectral data collected from Gulf coast NWR areas prior to th e oil entering the wetlands. The use of hyperspectral imagery for the discovery of hydrocarbons in the wetlands has been proven in the NASA funded VNIR study of an oil spill in Swanson Creek MD in 2000. The current instruments now include the SWIR portion of the spectra which brings an even higher degree of accuracy to the identification of the vegetative stress and community structure. Data and analysis will be collected into a GIS platform and be deseminated online to effectively guide restoration planning and implementation. Post restoration remote sensing monitoring will be performed to track changes in restoration success relative to the baseline data as well as coincidently identified non-impacted sites. This data will be supported with ground truthing, data verification, and sampling by qualified field teams. Once the levels of impact to the wetland vegetation has been ascertained and prioritized, the information can be used to assist in the formulation of remediation and restoration plans. Going forward, progress can be monitored with the identical methodologies and technologies used in the initial assessment.	Trustee Portal	N	N	N	N	N	N	N	N	Y																			
Montlimar Creek, Eslava Creek, Boltons Branch Repair/	2135	Nick Amberger	Mobile	3200000	This project will address the need for maintenance of existing major draiange way (Montlimar Creek) and two of its major tributaries. Items include bank stablization, ditch cleaning, sediment removal, and riprap placement.	Trustee Portal	N	Y	N	N	N	N	N	N	N																			

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Maintenance																																	
Bandalong Litter Traps in the Dog River Watershed of Mobile, Alabama	2137	BJ Smith	Mobile	450000	The Dog River Clearwater Revival has been trapping trash for over five years now, using nets and booms stretched across the smaller tributaries of the Dog River. Now we are working on a program to trap the trash using the Bandalong Litter Trap device. The first trap will be installed on the Montlimar Canal and is three quarters funded. By trapping the trash upstream where it is concentrated into the trap, it is easier to remove and dispose of properly. Litter and silt are the major sources of polution for the Dog River located in Mobile, Alabama. The City of Mobile estimates the need for at least six devices. This request is for three devices.	Trustee Portal	N	Y	N	N	N	N	N	N	N																			
Reconstruct Us 98 (Springhill Ave.) I-65 To Broad St. (Multiple Sections)	2141	Nick Amberger	Mobile	26900000	This IS A MAJOR U.S. ROUTE THAT IS IN AN ADVANCED DETERIORATED STATE (DRAINAGE, ACCESS, GREEN SPACE, PEDESTRIAN FEATURES) ARE ALL IN POOR CONDITION. PROJECT WOULD CONSIST OF REPLACING ALLDETERIORATED INFRASTRUCTURE AND ENHANCINGJPEDESTRIAN FACILITIES. THIS PROJECT WOULD ENCOURAGE REDEVELOPMENT IN THE IMMEDIATE COMMUNITY & ENHANCE WATER QUALITY. OTHER BENEFITS INCLUDE IMPROVED ACCESS MANAGEMENT, IMPROVED USE DURING RAIN EVENTS AND IMPROVED GREEN SPACE.	Trustee Portal	N	N	N	N	N	N	N	N	N																			
Reconstruct US 90 (Government Street) Multiple Sections 1) 0.53 miles - Pinehill to Dauphin Island Pkwy, 2) 1.42 miles - West St. to Broad St., 3) 0.93 miles Broad St. to Water St.	2142	Nick Amberger	Mobile	16000000	This is a major US Route through the City of Mobile that is in as advanced deteriorated state (drainage, access, green space, pedestrain features) are all in poor condition. Direct project benefits include improved access management, improved use during rain events, encourage redevelopment, improve green space and pedestrian features.	Trustee Portal	N	Y	N	N	N	N	N	N	N																			
Spring Creek Drainage Repair/ Upgrade additional phases	2143	Nick Amberger	Mobile	12000000	Major drainage route with highly erodible soil. Stabilization will reduce sediment load to Dog River and maintain stream bank green space. Reduce/eliminate flooding in several neighborhoods.	Trustee Portal	N	Y	N	N	N	N	N	N	N																			
Florida St. Drainage Repair/ Upgrade additional phases	2145	Nick Amberger	Mobile	4500000	Major drainage route with numerous areas of local flooding. Project would reduce/eliminate flooding in several neighborhoods.	Trustee Portal	N	Y	N	N	N	N	N	N	N																			
Eco Restoration/	2146	Nick Amberger	Mobile	8000000	This is a major outfall for multiple watersheds; this project has the ability to improve water quality, aquatic habitat and recreational use.	Trustee Portal	N	Y	N	N	N	N	N	N	N																			

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Dredging of Langan Park Lake (Municipal Park)																																
Eco Restoration/ Dredging of Dog River and Tributaries	2147	Nick Amberger	Mobile	30000000	This is a major outfall for multiple watersheds, this project has the ablility to improve water quality, aquatic habitat, recreational use and property value (this tax revenue).	Trustee Portal	N	Y	N	N	N	N	N	N	N																		
Drainage Improve-ments in the Southern Drain Watershed	2148	Nick Amberger	Mobile	4000000	This project would address areas of high flooding frequency. This project would benefit the environment by identifing illicit discharges of sanitary sewer into the City's MS4 system, thereby decreasing health risks to the community and improving water quality.	Trustee Portal	N	Y	N	N	N	N	N	N	N																		
Reconstruct Old Shell Road Multiple Phases 1) East of I-65 to Catherine Street; 2) West of I-65 to Unversity Blvd.	2149	Nick Amberger	Mobile	12400000	This east/west cross-town connector route is in an advanced deteriorated state (drainage, access, pedestrain access, and utilities are all in extremely poor condition). Project would consist of replacing all deteriorated infrastructure items and enhancing pedestrian facilities. This project would encourage redevelopment in the immediate community & increase water quality. Project benefits include improved access management, safer use during rain events and improved green space.	Trustee Portal	N	Y	N	N	N	N	N	N	N																		
Response and recovery of the periphyton in the near-shore habitats of the Gulf of Mexico	4070	Barry Rosen	Gulf of Mexico	850000	Periphyton play an important ecological role on seagrass leaves: 1) as primary producers in a seagrass system; 2) as sources of food for consumers; 3) as a source of sediments (calcareous algae); 4) as an indicator of environmental indicator of water quality; and 5) as a `UV-B filter for the seagrass leaves. This research will focus on the response of periphyton on seagrass leaves in by looking at physiological characteristics (short-term response) of the algal community and taxonomic shifts or losses in the community (long-term) in areas that have been impacted versus unimpacted areas throughout the Gulf of Mexico. Several stressors on seagrass communities have lead to their worldwide decline, including an increase in nutrients, higher salinity, and increased wave energy. A new threat came from the weathered oil and chemical dispersants from the Deepwater Horizon oil spill thatcould be impacting seagrass in coastal areas. Although entire seagrass beds may have been completely lost or their density may have been reduced, it is also important to understand that periphyton associated with the seagrass is a vital component of the seagrass ecosystem. The periphyton may buffer the seagrass from some of the moderate effects on the seagrass community. The various single-celled organisms that are part of the periphyton may also serve as sentry organisms; their physiological response to stress can signal an early warning of more substantial impacts to the ecosystem or that recovery is underway. Standardized protocols for sampling seagrass leaves will be used (such as certain distance for the growing tip) for sample collection. The number of replicates and the number of locations will be determined in	Trustee Portal	N	N	N	N	N	N	N	N	Y																		

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					coordination with work being performed by other researchers. A database will be created that identifies the organisms (images of species), physiological status, and community structure indices at key locations. This information will be collected across seasons to understand natural variability, and through time, to determine the impacts to the ecosystem.																												
Little Stickney Drainage Repair/ Upgrade	4076	Nick Amberger	Mobile	2000000	Construct drainage system in residential and commercial area of city with history of flooding. This project would reduce/eliminate flooding in a neighborhood with a growing medical and commercial businesses. Existing drainage system is aged, deteriorating, and undersized. City has performed previous improvements downstream for this drainage basin. Funds would be utilized to continue the replacement of the aged culvert structure and acompanying draiange structures.	Trustee Portal	N	Y	N	N	N	N	N	N	N																		
Carlisle Area Drainage Repair/ Upgrade additional phases	4081	Nick Amberger	Mobile	1000000	Major drainage route with highly erodible soil. Stabilization will reduce sediment load to Three Mile Creek and maintain stream bank green space. Reduce/eliminate flooding in residential areas.	Trustee Portal	N	Y	N	N	N	N	N	N	N																		
Reconstruct Ann St. (Springhill Ave. to Kentucky St.)	4088	Nick Amberger	Mobile	6400000	This NORTH/SOUTH CROSS-TOWN CONNECTOR ROUTE IS IN AN ADVANCED DETERIORATED STATE (DRAINAGE, ACCESS, GREEN SPACE, PEDESTRIAN FEATURES) ARE ALL IN POOR CONDITION. PROJECT WOULD CONSIST OF REPLACING ALL DETERIORATED INFRASTRUCTURE AND ENHANCING PEDESTRIAN FACILITIES. THIS PROJECT WOULD ENCOURAGE REDEVELOPMENT IN THE IMMEDIATE COMMUNITY & ENHANCE WATER QUALITY. OTHER BENEFITS INCLUDE IMPROVED ACCESS MANAGEMENT, IMPROVED USE DURING RAIN EVENTS AND IMPROVED GREEN SPACE.	Trustee Portal	N	Y	N	N	N	N	N	N	N																		
Reconstruct Broad St. / Beauregard St. - U. S. 90 to Water St.	4090	Nick Amberger	Mobile	7700000	This IS A MAJOR U.S. ROUTE THAT IS IN AN ADVANCED DETERIORATED STATE (DRAINAGE, ACCESS, GREEN SPACE, PEDESTRIAN FEATURES) ARE ALL IN POOR CONDITION. PROJECT WOULD CONSIST OF REPLACING ALLDETERIORATED INFRASTRUCTURE AND ENHANCINGJPEDESTRIAN FACILITIES. THIS PROJECT WOULD ENCOURAGE REDEVELOPMENT IN THE IMMEDIATE COMMUNITY & ENHANCE WATER QUALITY. OTHER BENEFITS INCLUDE IMPROVED ACCESS MANAGEMENT, IMPROVED USE DURING RAIN EVENTS AND IMPROVED GREEN SPACE.	Trustee Portal	N	Y	N	N	N	N	N	N	N																		
Map City of Mobile Drainage Systems	4091	Nick Amberger	Mobile	2000000	Knowing what infrastructure is currently in place and being able to access it in a GIS/CADD environment.	Trustee Portal	N	N	N	N	N	N	N	N	Y																		
Construct new Public Works facility	4092	Nick Amberger	Mobile	20000000	This project would create an opportunity to modernize the City's Public Works. The current facility is extremely aged and requires continued maintenance. A new facility may allow the location of the current facility to be used for other municipal needs or a public park.	Trustee Portal	N	Y	N	N	N	N	N	N	N																		
City Wide Bridge/Culvert Maintenance Project	4093	Nick Amberger	Mobile	4700000	Maintenance and repair is needed on several decaying in-service bridges.	Trustee Portal	N	N	N	N	N	N	N	N	N																		

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Restoration of the Former Ziebach WWTF Property Near Mobile Bay	4098	Dwight McGough	Mobile	1000000	The Ziebach Wastewater Treatment Facility (WWTF) was removed from service in 2005. The former faciility property includes a total of approximately 32 acres located adjacent to Mobile Bay just north of the confluence of the Dog River in southeastern Mobile County, Alabama. Several above and below ground treatment facilitiy structures remain on the site. This project will include the demolition and removal of remaining treatment facility structures and restoring the property for beneficial use that would coincide with enhancing the environment and protection of the Mobile Bay habitat.	Trustee Portal	N	Y	N	N	N	N	N	N	N																		
Reconstruct Dauphin Street (Fulton street to Broad Street)	5053	Nick	Mobile	5500000	This eas/west cross-town connector route is in an advanced deteriorated state (drainage,access, pedestrian access, and utilities are all in poor condition). Project would consist of replacing all deteriorated infrastructure and enhancing pedestrian facilities. this project would encourage redevelopment in the immediate community & enhance water quality. Other project benefits include improved access management, improved use during rain events and improved green space.	Trustee Portal	N	N	N	N	N	N	N	N	N																		
Reconstruct Baltimore St.	5056	Nick Amberger	Mobile	2500000	This route is in an advanced deteriorated state (drainage, access, pedestrian access, and utilities are all in extremely poor condition).	Trustee Portal	N	N	N	N	N	N	N	N	N																		
Reconstruct/Repair 21 Fire Stations throughout the City of Mobile	5057	Nick Amberger	Mobile	42000000	These are facilities that house 1st responders, opportunity to modernize the facilities and reduce/eliminate maintenance/operational cost.	Trustee Portal	N	N	N	N	N	N	N	N	N																		
Construct new Police Headquarters	5059	Nick Amberger	Mobile	20000000	This is a facility that houses 1st responders, opportunity to modernize the facilities and reduce/eliminate maintenance/operational cost.	Trustee Portal	N	N	N	N	N	N	N	N	N																		
Construct a City of Mobile Regional Recycling Center	5060	Nick Amberger	Mobile	8000000	This project would create an opportunity to have a modern recycling center in the expanding West Mobile area. Its construction would reduce burdens on landfills and help to reduce improper disposal of materials.	Trustee Portal	N	N	N	N	N	N	Y	N	N																		
Renovaton of Mobile, Alabama's Storm Water Treatment Methods to Meet Modern EPA Standards	5068	Nick Amberger	Mobile	100,0000,000	Mobile County is located on Mobile Bay in a low-lying coastal community, storm water management should have a high priority. The City of Mobile has problems associated with the drainage and flooding of an old fragile deteriorated storm water collection system. Overloaded inadequate storm drains become clogged with leaves and trash, thus the frequent excess rainfall has nowhere to go, so water collects in low areas, causing flash flooding of the streets and sidewalks. All untreated runoff, containing hydrocarbons, trash, and other pollutants, eventually end up in our watersheds and Mobile Bay. Mobile's present Storm Water Management System is a natural target for a complete municipal storm water system retrofit. The Natural Resources Damage Assessment (NRDA) funds could create a contemporary storm water program for Mobile, which would improve the water quality of the Mobile Bay Estuary, the fourth largest estuary in the United States. The design, construction, operation and maintenance of an up-to-code storm water plan would incorporate a large budget including the following: Retrofitting Program, Monitoring Program, Best Management Practices, Pesticide, Herbicide and Fertilizer Programs, Used Oil & Toxic Materials, Street	Trustee Portal	N	Y	N	N	N	N	N	N	N																		

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					Maintenance Program, Spill Response and Clean Up, Program for Public Education and Reporting, Leakage and Cross Connections, Industrial Program, General Commercial and Residential Program, Illicit Construction and Illegal Dumping, Landfills and Other Waste Facilities, Combined Sewer Overflow Program, Groundwater & Wellhead Protection, Drinking Water Protection, Watershed Assessment & Total Maximum Daily Loads, Septic and Inflow & Infiltration Program, Consistent Street Sweeping Program Engineering & Planning: Design Criteria, Standards and Guidance, Field Data Collection, Master Planning, Design, Field and Operations Engineering, Hazard Mitigation, Zoning Support, Multi-objective Planning Support, (GIS) Geospatial Information System and Da tabase Management, Mapping, Land Use Planning & Controls Regulation and Enforcement: Code Development and Enforcement, General Permit Administration, Drainage System Inspection & Regulation, Zoning and Land Use Regulations, Inspection Programs, Low-Cost Flood Insurance Program, Multi-Objectives for Flood Management including Emergency Response, Erosion Control Program, Environmental Considerations, Water Quality Monitoring and Pollution Control, Cooperation for Management of All Drainage Systems (all Watersheds). Polluted storm water runoff is the number one water quality issue in Mobile County watersheds. This project would help reduce hypoxic zones by improving storm water treatment and reducing the amount of fertilizers and pollutants leaching into our watersheds. In order for present and future Estuary Restoration Programs to succeed, EPA Standards and Codes of Storm Water Management must be in place. "The Renovation of Mobile's Antiquated Storm Water Treatment Methods to Meet Modern EPA Standards" is necessary for a resilient ecosystem in Mobile Bay and the Gulf of Mexico.																													
Increased public access to City Docking facilities	8105	Stan Wright	Bayou La Batre	2500000	The City of Bayou La Batre owns and operates the city docks which is located at the mouth of Bayou La Batre as it opens into the Missssissippe Sound and Portersville Bay. this facility was the staging arena for the BP VOO program. Currently these facilities offer very limited access for local fishermen and the general public. Public access to these docking facilites was denied during the Deep Water Horizon incident due to the exclusive use of these facilities for the BP VOO program. There is an expressed need within the community for better docking facilities for local fishermen and recreational boaters. The city proposed to construct a substanial pier with boat slips that provide water and sewer services (connected to the municipal water and sanitary sewer systems) The pier would include additional boat launcing and storage facilities and fishing opportunities to increase the public's access and enjoyment of the waterfront. A boradwalk will be constructed along a portion of the bayou to provide passive recreation for the public as well.	Trustee Portal	N	N	N	N	N	N	Y	N	N																			
Acquisition of Wetlands for Habitat enhancement and public access for the City of Satsum	9061	William Stewart	Satsuma	3000000	This project requests NRDA funding to purchase land for conservation and public access in the city limits of the City of Satsuma in north Mobile County, Alabama.	Trustee Portal	N	N	N	N	N	N	Y	N	N																			

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Restore Our East End Beaches	10051	Sherry Cain	Dauphin Island		Restore the sand on the East End of Dauphin Island, plant sea oats, panic grass, etc. The East End of Dauphin Island is home to Historic Fort Gaines, Dauphin Island Sea Lab, Dauphin Island Campground, and Audubon Sanctuary. Dauphin Island is the first defense for the oyster beds, the marshes and the wetlands to the south and this barrier island helps protect the main land.	Trustee Portal	N	N	Y	N	N	N	N	N	N																		
Alabama Port and Heron Bay Sewer Improve-ments	10054	Joe Summers-gill	Mobile County	3500000	Although densely developed, southeastern Mobile County has no public sanitary sewer systems. Currently, most households and businesses within the MCWSFPA territory rely on individual on-site septic systems for sewer disposal. Unfortunately, these systems experience high failure rates due to sandy soil conditions and heavy rain events. There are 200 such homes and businesses located in the Heron Bay and Alabama Port communities that have been of concern for many years due to their ecological significance and proximity to the coastal waterways. According to the Mobile County Health Department, there is a high number of failing septic systems in this area, polluting the productive wetlands of Fowl River, Mississippi Sound and Mobile Bay. In addition, these septic tanks are installed at sea level adjacent to Cedar Point, the most productive oyster reefs in coastal Alabama. MCWSFPA proposes to construct a public sewer collection and treatment system in the Heron Bay and Alabama Port communities. This project will restore valuable coastal areas and will offset damage by the Deepwater Horizon Oil Spill as many of similar salt marshes were oiled during the event and were injured during response and recovery. For example, heavy equipment used to deploy boom impacted the natural hydrology of the wetlands. Removal of pollutants associated with on-site septic systems will improve water quality and will improve habitat for fish and wildlife. The result would be improved surface and ground-water quality and protection of oyster reefs and other ecologically sensitive marine life from pathogenic contaminants.	Trustee Portal	N	Y	N	N	N	N	N	N	N																		
City of Chickasaw Wetland Restoration and Water Quality Improvement Project	10107	Byron Pittman	Chickasaw	7500000	The Utilities Board of the City of Chickasaw currently owns and maintains two 26-acre wastewater stabilization lagoons that operate in parallel and are used to treat wastewater collected from the City of Chickasaw and the Port of Chickasaw. The lagoons drain directly into Chickasobogue Creek which subsequently drains into Mobile River to Mobile Bay. This lagoon treatment works was installed in the late 1960s to replace an aging mechanical primary treatment plant. The dual lagoon (52-acre) treatment works was designed for a flow of approximately 1,500,000 gallons per day to serve a population of 15,000 persons. Due to evolving management practices and changes in the treatment process, the lagoon treatment system serving the City of Chickasaw has recently failed to meet treatment standards. As a result, the Utilities Board of the City of Chickasaw has entered into a Consent Decree issued by the Alabama Department of Environmental Management (ADEM) on July 17, 2009. Although some minor impacts from the noncompliance have been mitigated, there is a critical need for an updated wastewater treatment facility, according to ADEM and consulting engineers. This facility would meet treatment standards and would enable the City of Chickasaw to restore wetlands in the former sewage lagoons. The lagoons that used to receive effluent will be redesigned into coastal wetlands in order to make the environment and public whole by restoring natural resources injured as a	Trustee Portal	N	Y	N	N	N	N	N	N	N																		

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					result of the Deepwater Horizon Oil Spill. In addition to improving water quality standards, the restored wetland will provide habitat for fish and wildlife. The project includes costs associated with engineering, permitting, project management and construction of the wastewater treatment facility.																												
Bon Secour National Wildlife Refuge	10150	Ray Herndon	BSNWR		This project will permanently protect lands identified by the U. S. Fish & Wildlife Service as critical for acquisition and long-term management by the Bon Secour National Wildlife Refuge (NWR). It will add approximately 250 acres of sensitive coastal lands to the Little Point Clear Unit at this Refuge. It includes significant frontage along St. Andrews Bay and greater than 100 acres of salt and freshwater wetlands, as well as several tidal sloughs, and adjacent upland areas. This acreage shares several property borders with the FWS, and will immediately be managed for improved coastal habitat.	Trustee Portal	N	N	Y	N	N	N	N	N	N																		
Grand Bay National Wildlife Refuge	10151	Ray Herndon	GBNWR		This effort seeks to permanently protect lands identified by the U. S. Fish & Wildlife Service as critical for acquisition and long-term management by the Grand Bay National Wildlife Refuge (NWR). This project intends to add approximately 2,250 acres to the nearly 18,000 acres currently owned by the United States Fish & Wildlife Service and the Grand Bay National Estuarine Research Reserve, managed by the State of Mississippi. It will add critical coastal frontage to the Grand Bay NWR for permanent protection, and improved management of coastal wetlands, and adjacent upland areas.	Trustee Portal	N	N	Y	N	N	N	N	N	N																		
Headwaters Coastal Forest Protection - Baldwin County, AL & Escambia/ Santa Rosa Counties, FL	10153	Ray Herndon	Baldwin County		Protection of approximately 100,000 acres of working forested lands in the Mobile Bay/ Perdido/ Pensacola Bay Basins. The acquisition of a working forest easement over these lands would permanently protect the integrity of each of the respective estuarine systems through permanent protection of the water quality and avoidance of further sedimentation through land fragmentation and conversion. The protection from further fragmentation of this land base will ensure long-term timber management, which will continue to provide jobs for the region.	Trustee Portal	N	N	Y	N	N	N	N	N	N																		
Blowout Preventer Backup Safety System (2nd project-Oil Containment Barrier Boom I & II)	847	Paul J. Hubbell, Jr.	Gulf of Mexico	1000000	Copies of Utility patents pending available.	Trustee Portal																											
SIPHON	866	DELORES BOUNDS	Gulf of Mexico		As the dispersants were expected to sink oil sediments, I recommend using existing filtration systems with an adaptation to filter sea waters at its greatest depths.	Trustee Portal																											
Mitigation of Polluted Waters through Filtration by Mussel Clusters	867	Bruce Goodwin	Gulf of Mexico		This project consists of mitigation of polluted waters through filtration by mussel clusters.	Trustee Portal																											

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The Gulf Restoration Fund	887	Mark J. Spalding	Gulf of Mexico		The Gulf Restoration Fund supports organizations and individuals working on the restoration of the coastal and marine ecosystems of the Gulf of Mexico. The Gulf of Mexico is the ninth largest body of water in the world and home to over 15,000 different species of plants and animals. While the damages and impact of the BP Deepwater Horizon explosion and subsequent spill are still being assessed, this fund focuses on the other 80% of the Gulf that has been destroyed by decades of coastal development projects, agricultural runoff, overfishing and pollution.	Trustee Portal																												
Case Manager / Shrimper	440	Tuan Dang	Gulf of Mexico		Oil Clean-up	Trustee Portal																												
Bio-remediation of Estuaries and oil affected Intertidal areas	359	Bruce Goodwin	Gulf states		For more information, request resume. Project Type Mitigation of polluted waters through filtration by mussel clusters. Overview, Abstract My work and research in bioremediation began in a most unusual manner. (1987). Working alone in a remote area of SA's Eastern Wild Coast I noticed one day a group of naked African ladies clad only in panty hose. They had filled their leggings with crushed mussels, and stood waist deep in the surf, chatting merrily away. Periodically one would waddle up the beach with crayfish festooned and claw attached to the human bait bags. Into a bucket went the lobsters, and back serious to fishing went the Mammas. With my interest piqued I called for a beach meeting. Long and short of it, we began a Ladies Club to find ways of farming fresh vegetables, mussel and crayfish. The seaside area known as (Mbotyi) had become seriously over harvested. The impact caused by the subsistence family need for a rich protein source, and dumb tourists who'd buy undersized lobster, being main the contributing factors. Our implements consisted of old ropes and onion sacks clad over rocks. Ropes attached to coke bottle floats with brick anchors in the local estuary, and panty hose converted to lines, anchored in rocky dive holes became the tools of our industry. Naked panty hose fishing went on none the less. (It was a social thing, I guess). Our activity worked well until the Katima P oil tanker hit the bed rock bottom off the Mozambique Coast some 2000 miles north away. The warm south current had huge globs of crude disgorged all over our beach within days. Help from local authorities was a joke, uTata Mandela's release taking priority. On study of the oil debacle I noticed that tiny mussel spat on our rock covers, and on lines in the estuary had survived. In areas immediate to our farming, sea grasses and sea weeds seemed far less affected. Rocks with mussel cover cladding cleaned up oil rapidly in comparison with unclad intertidal areas. Reeds immedi ate to our lines in the estuary survived and flourished. Crab, prawn, mullet fry and sea worm proliferated in areas of mussel cluster. Our project continued, and until the violent political issues of the time intervened we made rustic strides in aquaculture, taking the project to a new level where crushed mussel shell fertilized home gardens, and steamed mussel meat fed poultry. Suffice to say, we eat well. Unbeknown to me then, I'd unwittingly pioneered an African subsistence food source methodology, and without due intention had made use of available junk, allowing a lifetime passion and study of filtration at work. Our project was of a highly rudimentary nature. The modern form of the activity is best explained by Swedish experts Odd Lindahl and Sven Kollberg at; http://www.bioscience-	Trustee Portal																												

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					explained.org/ENvol5_1/pdf/musseleng.pdf This natural process of mitigating your oil degraded ecosystems will prove slow, yet highly effective. There is no 'quick fix'. In an innovative and cost effective manner, bioremediation of petro carbons becomes a natural process through filtration, wherein nature is assisted, and allowed to do its work. Accordingly may I suggest a project with the involvement of the fantastically innovative ladies of (Matter Of Trust. Org), who have stock piles of nylon and a commendable panache for getting things done. (A copy of this mail is forwarded to them). I am happy to project manage the venture, being in a 'go to position', where my time and enthusiasm are at your disposal. My motto is "Shut up, Put up, and get the job done". The analogy being that as oil users, I am equally to blame. Project Suggestions A project name. Driven by an NGO. Under guidance and autonomy of NOAA. Suggested timeframe (three years). A series of projects in identified affected areas. A local community participation at project sites. Local area school project participation. School and community donations for items in kind. Requirements of the writer Assistance with a USA Volunteer Visa. Relocation to site. Basic living and travel stipend x project duration. Permission to undertake research. Vehicle. Camper trailer. Boat with outboard.																											
vessels of opportunity	365	John Eastlund	Gulf states		Hire local fishing boats to collect long-term data on the environmental impacts of the spill. Find out if the tar on the bottom is being digested by natural organisms and identify which ones. Figure out the rate that the tar and oil is biodegrading. Do definitive research on whether dispersants are safe for the environment or do they do more damage than the original spill? Do experiments on different types of bio-remediation on the beaches and in the wetlands to see whether they are effective. If they work use them on a large scale.	Trustee Portal																											
Ocean floor Recovery Project	466	Elder, Greg	Gulf of Mexico		Build large vacuum cleaners to pipe up the oil that is laying just below the ocean floor. The oil can be pumped and filtered into tankers. It's right there. Scoop it up it up. It's money in the bank. I don't want a dime. I would just like to give money made to 5 charity's and the people who clean up the gulf.	Trustee Portal																											
Enhancing Capacity for the Alabama Marine Mammal Stranding Network		DISL	AL BSE and Coastal waters	275000/year	The Marine Mammal Stranding Network (MMSN) was formalized by the 1992 Amendments to the Marine Mammal Protection Act (MMPA), and NOAA's NMFS was designated as the lead agency to coordinate related activities. Volunteer MMSNs exist throughout all coastal states to respond to marine mammal strandings. Volunteer MMSN organizations/participants must either be authorized under Section 112c (Stranding Agreements from the NMFS regional offices) or Section 109h (Federal, State or local government officials) of the MMPA to respond to and/or rehabilitate stranded marine mammals. The MMSN plays a critical role in understanding key causes of marine mammal morbidity and mortality, and also in the early detection and mitigation of anthropogenic or natural threats to marine mammals. The MMSN is also critical for monitoring the health of populations post DWH and during restotation activities. In Alabama, the only authorized Stranding Agreement holder responding to and investigating stranded marine mammals throughout the State is the Alabama Marine Mammal Stranding Network (AMMSN), operated out of the Dauphin Island Sea Lab on Dauphin Island,	?	Y	N	N	N	N	N	N	N																			

Project Information							Restoration Types Addressed											Programmatic Damage Assessment and Restoration Plan (PDARP) Criteria		Public Notice	Oil Pollution Act (OPA) Criteria (15 CFR 990.54)			Additional Criteria									
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					Alabama. On average, Alabama experiences ~29 cetacean (whale or dolphin) strandings each year. This project will enhance the capacity of the AMMSN to respond to, necropsy, and analyze samples collected from stranded marine mammals in Alabama waters to better understand causes of marine mammal illness and death. It will also support increased data consistency for information collected from stranded marine mammals by supporting the AMMSN to enter their data into a regional marine mammal health database (Gulf MAP). The information collected by the AMMSN from stranded marine mammals will enable managers to mitigate impacts to marine mammals from natural and anthropogenic threats and to monitor population recovery post-DWH. PDARP: Increase marine mammal survival through better understanding of causes of illness and death as well as early detection and intervention of anthropogenic and natural threats. Project benefit: This project will increase marine mammal survival through better understanding of causes of illness/mortality and early detection and intervention of anthropogenic and natural threats. This project will also increase data consistency and timeliness of data availability to managers to allow for rapid responses to emerging threats. Related to Portal Projects #66 and #11966.																												
Active Surveillance for Stranded Marine Mammals to Improve Mortality Estimates			AL BSE and Coastal waters	65,000/ YEAR	Marine mammal strandings are typically reported through opportunistic sightings of animals by the public, rather than through dedicated, consistent surveys for stranded animals. This passive surveillance for strandings makes it difficult to quantify stranding effort and to calculate mortality rates for populations. Thus, this project would develop rigorous active surveillance, such as boat based, aerial, or beach walk surveillance, to provide a standardized metric of marine mammal mortality in Alabama. It could include developing index areas within Alabama for carcass detection. Better understanding population mortality rates will help determine whether populations are declining or recovering post- DWH. PDARP: Increase marine mammal survival through better understanding of causes of illness and death as well as early detection and intervention of anthropogenic and natural threats. Project benefits: This project will increase understanding of marine mammal population mortality rates to help determine whether populations are declining or recovering post- DWH.	?	Y	N	N	N	N	N	N	N																			
Reduce Bottlenose Dolphin Bycatch in the Commercial Shrimp Trawl Fishery	67		AL BSE and Coastal waters	1200000	Marine mammal bycatch in fishing gear is a leading source of mortality among marine mammals and one of the main threats identified for bottlenose dolphins in the Gulf of Mexico (Phillips and Rosel 2014; Read et al. 2006). The mean annual bycatch mortality estimates for the Gulf of Mexico portion of the shrimp trawl otter fishery from 2010-2014 in the Alabama/Mississippi estuarine stock strata was 27 animals (CV 1.1; 95% CI: 0-150) (Soldevilla et al. 2016). These estimates are based on bycatch rates from nearshore waters as there has been no observer coverage, and hence no observed takes, in Alabama estuarine waters. However, shrimp fishery interactions in Alabama estuarine waters have been documented. In 2016, a commercial shrimp fisherman reported a lethal entanglement of a dolphin in the lazy line of the trawl in Alabama. Observer data in inshore Alabama waters is crucial to accurately determine the magnitude of bottlenose dolphin bycatch in the shrimp trawl fishery and additional information is needed to identify, test, and	Trustee Portal	Y	N	N	N	N	N	N	N																			

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					implement ways to reduce bycatch. Critical information is also needed to understand the shrimp trawl effort distribution in inshore waters as it relates to estuarine stocks of bottlenose dolphins. Therefore, this project will develop information needed to reduce the incidental bycatch of bottlenose dolphins in the skimmer and otter trawl shrimp fishery in Alabama state waters by: (1) enhancing observer coverage in Alabama inshore waters to achieve robust levels of observer coverage to accurately determine levels of bycatch (e.g. expand federal coverage into state waters, implement new observer program consistent with the federal program, etc); (2) characterizing and understanding the nature of dolphin interactions with both skimmer and otter trawl gear (e.g. use the DIDSON to characterize underwater interactions and surface observations per Hattaway and Foster 2015); (3) testing potential gear modifications (e.g. modify net and lazy line materials or configurations, etc) to reduce harmful interactions; and (4) directly monitoring stranding and observer data to measure effectiveness of bycatch reduction solutions. Enhancing observer coverage could include increasing coverage in inshore state waters, including non-federally permitted vessels and skimmer trawls to provide information on bycatch rates and estimate distribution of fishery effort (Soldevilla et al. 2015, 2016). Conducting research to better understand the risk factors/causes of dolphin entanglements and interactions in skimmer and otter trawls would help determine next steps to identify ways to reduce bycatch (Soldevilla et al. 2015; Hataway & Foster 2015). PDARP: Reduce commercial fishery bycatch through collaborative partnerships. Project benefits: enhance survivorship and resiliency of bottlenose dolphins in AL state waters by reducing lethal dolphin bycatch in shrimp trawl gear.																												
Assessement of Bottlenose Dolphin Estuarine Populations and Health			Mobile Bay, MS Sound, Perdido Bay, Coastal AL state waters	160,000-600,000	Certain data collection activities are crucial to offset critical data uncertainties and provide foundational information to inform future restoration projects within Alabama state waters. For example, updated bottlenose dolphin estuarine stock assessment work including population and health assessments inform and support both identification of future restoration needs as well as monitoring. Among other things, baseline population abundance estimates are necessary to determine sustainable levels of human-caused impacts or fisheries bycatch to a stock (e.g., per Soldevilla et al 2015, 2016). Therefore, this project will fill critical data uncertainties for estuarine stocks of bottlenose dolphins in Alabama state waters by determining updated population abundance estimates, understanding dolphin distribution in estuarine waters and seasonal movement patterns, and fecundity rates. This will be achieved by conducting systematic mark-recapture photo-identification surveys repeated over select time-frames and seasons. This project will also include additional state and federal collaborative photo-identification coverage in Alabama state waters to achieve consistent coverage throughout the year. This effort will further inform future restoration projects and increase dolphin survival by: (1) characterizing dolphin habitat and identifying potential local stressors affecting estuarine bottlenose dolphin stocks; (2) providing a field team for rapid response monitoring and support for entangled/entrapped/out-of-habitat dolphins to increase survival; and (3) providing support for standardizing data collection, analysis, and integration across stock assessments. Conducting systematic surveys to	related to AL portal 248	Y	N	N	N	N	N	N	N																			

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					determine population abundance and collaborative, consistent photo-identification coverage in state waters will collectively support future restoration planning efforts by establishing baseline information and identifying potential threats for further study. This project will also directly increase bottlenose dolphin survival by supporting implementation of rapid response teams for entangled/entrapped/out-of-habitat dolphins by providing local monitoring of at-risk dolphins. Finally, this project supports monitoring efforts by establishing baseline information before implementation of marine mammal projects, as well as other restoration projects with the potential to impact marine mammals. PDARP: Increase marine mammal survival through better understanding of causes of illness and death as well as early detection and intervention of anthropogenic and natural threats. Project benefits: Increased bottlenose dolphin survival through better understanding of BSE populations and threats.																												
Reduce Bottlenose Dolphin Bycatch in Commercial Gillnets			Mobile Bay, MS Sound, Perdido Bay, Coastal AL state waters	500,000	Marine mammal bycatch in fishing gear is a leading source of mortality among marine mammals and one of the main threats identified for bottlenose dolphins in the Gulf of Mexico (Phillips and Rosel 2014; Read et al. 2006). Dolphins are known to become incidentally entangled in gillnet gear resulting in mortality and serious injury. In 2012, federal observer coverage was initiated to better characterize fishing effort, catch, and bycatch and interactions with protected species on state-documented commercial gillnet vessels operating within Alabama, Mississippi, and Louisiana state waters (gillnetting is prohibited in Texas and Florida state waters) (Mathers et al. 2016). Although there have currently been no observed takes of bottlenose dolphins within Alabama state waters, dolphin interactions with gillnets were documented. In Alabama, 46% of observed gillnet sets had observations of bottlenose dolphins present during haul back, with dolphins feeding out of the net during 7% of sets and sometimes swimming into the circle of the strike net to feed (Mathers et al. 2016). Dolphins commonly depredate on gillnet gear and use nets as a foraging strategy, which leads to an increased risk of lethal entanglement. Recently, some strandings of bottlenose dolphins in Alabama where commercial gillnet effort is known to concentrate show lesions on the carcass that are characteristic of interactions with gillnet gear. Therefore, this project will develop information needed to further characterize and determine the extent and magnitude of dolphin interactions with gillnet gear operating in Alabama state waters by: (1) exploring the use of alternative observer coverage methods to overcome existing challenges and enhancing/expanding observer coverage on state-documented commercial gillnet vessels in Alabama state waters (e.g. enhance existing federal coverage, implement new observer program consistent with the federal program, etc). This information is needed to refine and enhance our understanding of fishing effort, catch, bycatch and interactions with bottlenose dolphins. (2) Conducting fine-scale behavioral observations of dolphins in areas where interactions are known to occur to further characterize the nature of their interactions will gillnets. This information will be used to identify, develop, test, and implement ways to prevent and reduce lethal interactions (e.g. testing gear and fishery practice modifications).	related to Trustee portal 67	Y	N	N	N	N	N	N	N																		
Reduce Injury and Mortality of Bottlenose			Mobile Bay, MS Sound, Perdido	400,000	Fishing interactions between hook-and-line (rod and reel) gear and bottlenose dolphins occur throughout the Gulf, including Alabama state waters, and are increasing (Powell & Wells 2011; Shippee et al. 2011). Rod and reel gear is used	?	Y	N	N	N	N	N	N	N																		

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Dolphins from Hook-and-Line Fishing Gear			Bay, Coastal AL state waters		by either for-hire fishing vessels (e.g. charter boats and head boats) and recreational anglers. Dolphin interactions with the gear largely result from dolphins taking the bait or catch directly off a hook (e.g., depredation) or eating discarded fish (e.g., scavenging) (Powell & Wells 2011; Read 2008; Zollett & Read 2006), as well as from illegal feeding that teaches dolphins to associate anglers with food. These interactions cause lethal injuries to dolphins from fishing gear entanglements and ingestions and related mortalities (e.g., fisher retaliation by shooting). Based on stranding data records from 2002-2015, five strandings of bottlenose dolphins with hook-and-line gear attached have occurred within Alabama state waters, all since 2011. Known stranding numbers may be up to three times higher because only a portion of animals strand and are detected and recovered (Peltier et al. 2012; Wells et al. 2015; Williams et al. 2011). There have also been federally investigated and prosecuted cases of fishermen retaliating against bottlenose dolphins out of frustration for the dolphin's depredation behaviors (Vail 2016; Department of Justice 2007). Therefore, the goal of this project is to reduce lethal impacts to dolphins from hook-and-line fishing related injuries known to occur within Alabama state waters through a phased project strategy, including: (1) Determining the scale, scope, and frequency of dolphin and hook-and-line gear interactions and characterizing the nature of these interactions (e.g., mapping fishery effort distribution, factors leading to dolphin interactions and entanglements/ingestion of gear, hot-spot sites, etc.). This will be accomplished by conducting systematic surveys of local recreational anglers and for-hire boat captains/owners and their patrons; and piloting observer programs on for-hire fishing vessels. (2) Conducting social science studies (e.g. surveys, focus groups, interviews) to characterize angler's and for-hire boat captains/owners attitudes and perceptions toward dolphins and fishing gear interactions, their likelihood to take various actions (both retaliatory and preventative), and their responses to various outreach messages and approaches. (3) Once the magnitude and frequency of interactions are determined and social science studies completed, we will work with stakeholders to identify, develop, and evaluate ways to reduce interactions (e.g. developing and researching potential gear or fishing practice modifications and/or safe and effective deterrence techniques, etc). (4) Lastly, we will partner with stakeholders to implement outcomes by widely distributing and communicating identified ways to reduce dolphin and hook-and-line gear interactions. Repeating systematic surveys, social science studies and evaluating stranding data may be used for project monitoring. PDARP: Reduce injury and mortality of bottlenose dolphins from hook-and-line fishing gear. Project benefit: enhance survivorship and resiliency of bottlenose dolphins in AL state waters by reducing lethal interactions of dolphins with hook and line gear.																													
Reduce Harmful and Lethal Impacts to Dolphins from Illegal Feeding Activities			AL BSE and Coastal waters	350,000-500,000	It has been well documented for more than 20 years that illegally feeding wild dolphins can lead to a variety of high risk situations that place both dolphins and people in danger (Cunningham-Smith et al., 2006; NMFS 1994; Orams et al., 2002; Samuels & Bejder, 2004). When dolphins learn to associate people with food, unnatural behaviors such as begging for handouts disrupt their natural foraging patterns and become an abnormal and detrimental feeding strategy (NMFS 1994; Powell & Wells, 2011). Fed dolphins approach boats more readily looking for	?	Y	N	N	N	N	N	N	N																				

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					handouts, thus increasing the animals' risk for boat strike or gear entanglement (Bechdel et al., 2009; Powell & Wells, 2011; Samuels & Bejder, 2004; Wells & Scott, 1997). Fed dolphins can also become targets for human acts of retaliation, often from fishers who become frustrated by dolphins begging, removing bait or catch from their lines, or scavenging on undersized throw-backs. Begging behaviors can be passed through a dolphin population via social learning, thus perpetuating and increasing the prevalence of the problem over time (Donoghue et al., 2002; Wells, 2003; Whitehead et al., 2004). Calves of provisioned mothers are at increased risk for compromised developmental and social learning skills, predation, and insufficient hunting experience due to neglect while mothers are seeking handouts from humans (Foroughirad & Mann, 2013; Mann & Barnett, 1999; Mann & Kemps, 2003). Areas within Alabama (e.g. Orange Beach) are known for illegally feeding wild dolphins by various water users (i.e. tourism vessels, commercial and recreational fishermen etc). Therefore, the goal of this project is to reduce lethal impacts to dolphins from illegal feeding activities known to occur within Alabama state waters by effectively changing human behaviors through a targeted outreach and education strategy in a phased approach. This can be achieved by the following phases: (1) designing and implementing social science studies (e.g. surveys, focus groups, interviews) to characterize the nature and extent of feeding wild dolphins in Alabama state waters by user group, the motivations/perceptions/attitudes of each user group, and the receptiveness to different outreach/education messages and tools/products designed to reduce illegal feeding; (2) based on the social science studies, develop a comprehensive and targeted outreach plan to effectively educate and inform target audiences about the harm of feeding wild dolphins and how to help promote dolphin conservation; and (3) partner with the state and local stakeholders to widely distribute and communicate educational tools and messages to reach targeted user groups throughout Alabama.																												
Reduce Harmful and Lethal Impacts to Dolphins from Illegal Harassment Activities from Vessel-Based Ecotourism Activities			AL BSE and Coastal waters	$300000-$500000	Vessel-based harrassment specifically by recreational and ecotourism vessels has been documented in Alabama waters, particularly around Perdido Bay. Dolphins are significantly affected by vessel-based harassment both at an individual and population level (Bejder et al., 2006a; Bejder et al., 2006b; Lusseau et al., 2006). Numerous studies examining the effects of viewing have shown that vessels disturb dolphins' natural behavior patterns, causing shifts in activity budgets, changes in group cohesion and group size, deviations in swim patterns, increased traveling behavior, and reductions in natural foraging and resting behaviors (Allen & Read, 2001; Bejder et al., 2006a; Bejder et al.,2006b; Constantine et al., 2004; Lusseau, 2003a; Lusseau, 2003b; Lusseau, 2005; Samuels & Bejder, 2004). These short-term behavioral changes can lead to long-term biological impacts for dolphin populations such as declines in reproductive health and permanent habitat displacement or abandonment (Bejder, 2005; Bejder et al., 2006b; Lusseau, 2006; Lusseau et al., 2006; Tyne et al., 2014). To help prevent harassment to dolphins, NOAA Fisheries promotes responsible viewing of wild dolphins by encouraging vessel operators to follow the Southeast Region Marine Mammal & Sea Turtle Viewing Guidelines (http://sero.nmfs.noaa.gov/protected_resources/outreach_and_education/documents/noaa_southeast_marinemammal_seaturtle_viewingguidelines_brochure.p	?	Y	N	N	N	N	N	N	N																			

Project Name	Proj No./ ID	Submitted By/ Primary Lead	Location	Cost	Project Description	Submitted via	Marine Mammals (Y/N)	Water Quality/ Nonpoint Source Nutrient Reduction (Y/N)	Wetland, Coastal, and Nearshore Habitat (Y / N)	Oyster Reef (Y / N)	Birds (Y / N)	Sea Turtles (Y / N)	Recreational Use (Y/N)	Habitat on Federal Lands (Y/N)	Monitoring, Adaptive Management, and Administrative Oversight to Support Restoration Implementation (Y/N)	Project is consistent with programmatic restoration goals (Y/N)	Project is considerate of strategic frameworks (Y/N/NA)	Project is consistent with criteria identified in the public notice (Y/N)	Project delivers benefits cost-effectively (+ / 0 / -)	Project meets Trustees' goals (+ / 0 / -)	Project has reasonable probability of success (+ / 0 / -)	Project prevents future and collateral injury to natural resources and services (+ / 0 / -)	Project benefits more than one natural resource and/or service (+ / 0 / -)	The effect of the project alternative on public health and safety (+ / 0 / -)	Project is not already required by existing regulations (Y/N)	Project complies with applicable laws and regulations (Y/N)	Project supports existing regional or local conservation plan or restoration effort (Y/N)	Project is not already fully funded (Y/N)	Project is technically feasible (+ / 0 / -)	Project readiness (+ / 0 / -)	Sustainability/Long-term Benefit of project (+ / 0 / -)	Project is time critical (+ / 0 / -)	Project offers opportunities for external funding & collaboration (+ / 0 / -)
Project Information							Restoration Types Addressed											Programmatic Damage Assessment and Restoration Plan (PDARP) Criteria		Public Notice	Oil Pollution Act (OPA) Criteria (15 CFR 990.54)			Additional Criteria									
					df). In Alabama, we partnered with the Alabama Department of Conservation and Natural Resources and MS/AL Sea Grant to implement educational programs in Alabama largely based on these viewing guidelines. However, there are no studies that evaluate the effectiveness of these guidelines in reducing harassment to wild dolphins. Furthermore, the existing viewing guidelines do not address emerging harassment concerns caused by more recent vessel-based viewing platforms and methods such as ecotourism vessels promoting dolphins jumping in their wake (i.e. wake-riding) and jet-ski dolphin tours. Therefore, the goal of this project is to reduce harmful impacts to dolphins from vessel-based ecotourism activities known to occur in Alabama by effectively changing human behaviors through a targeted and phased outreach and education strategy. This can be achieved by the following phases: (1) conducting field observations to evaluate existing viewing guidelines and modify/augment/update them to address emerging conservation concerns within Alabama; (2) implementing social science studies (e.g. surveys, focus groups, interviews) to characterize the perceptions, receptiveness, attitudes, and motivations of vessel-based ecotourism bussinesses and their patrons to determine the feasibility and potential effectiveness of revised outreach messages; (3) based on the social science studies, developing a comprehensive and targeted outreach plan to effectively educate and inform the ecotourism vessel owners and operators and their patrons on the importance of responsibly viewing and any revisions to existing guidelines; and (4) partner with the state and local stakeholders to widely distribute and communicate educational tools and messages to reach targered user groups throughout Alabama.																													
Reduce Marine Mammal Takes By Enhancing State Enforcement of the MMPA			Perdido Bay and coastal Alabama state waters	$200000-$500000	Enforcement is a crucial tool for reducing illegal activities known to cause harm to marine mammals in state waters. The Marine Mammal Protection Act (MMPA) strictly prohibits the "take" of marine mammals. Therefore, this approach would enhance state enforcement of the MMPA in Alabama state waters by: (1) increasing awareness and understanding of the MMPA to assist state enforcement efforts; and (2) increasing resources for state enforcement agencies to dedicate towards MMPA-related activities. We would work collaboratively with state and federal agencies including law enforcement to determine law enforcement training needs, how best to conduct consistent training, and identify specific training and educational needs/products. Training would be conducted and outreach products distributed by partnering with stakeholders. We would also work collaboratively with state and federal agencies including law enforcement to identify and prioritize hot-spot areas for potential MMPA violations and in need of increased and consistent enforcement efforts. Necessary resources and equipment to increase and sustain enforcement activities in identified hot-spot areas would be identified, and enforcement increased/enhanced in areas of need to reduce associated harm from illegal activities. A communication pathway between the state and federal agencies and law enforcement would also be established to continuously re-evaluate needs to ensure consistency in enforcement enhancement efforts.	?	Y	N	N	N	N	N	N	N																				
Assessing the vulnerability of sea turtle nests	12902	Matthew Ware	Baldwin County	$40,021	Sea level rise and coastal squeeze are predicted to increase the inundation frequency of sea turtle nests. Among the most popular strategies to mitigate this risk is nest relocation. However, the current literature is lacking in a complete	Trustee Portal	N	N	N	N	N	Y	N	Y	N																			

Project Information							Restoration Types Addressed											Programmatic Damage Assessment and Restoration Plan (PDARP) Criteria		Public Notice	Oil Pollution Act (OPA) Criteria (15 CFR 990.54)				Additional Criteria								
Project Name	Proj No./ ID	Submitted By/ Primary Lead	Location	Cost	Project Description	Submitted via	Marine Mammals (Y/N)	Water Quality/ Nonpoint Source Nutrient Reduction (Y/N)	Wetland, Coastal, and Nearshore Habitat (Y / N)	Oyster Reef (Y / N)	Birds (Y / N)	Sea Turtles (Y / N)	Recreational Use (Y/N)	Habitat on Federal Lands (Y/N)	Monitoring, Adaptive Management, and Administrative Oversight to Support Restoration Implementation (Y/N)	Project is consistent with programmatic restoration goals (Y/N)	Project is considerate of strategic frameworks (Y/N/NA)	Project is consistent with criteria identified in the public notice (Y/N)	Project delivers benefits cost-effectively (+ / 0 / -)	Project meets Trustees' goals (+ / 0 / -)	Project has reasonable probability of success (+ / 0 / -)	Project prevents future and collateral injury to natural resources and services (+ / 0 / -)	Project benefits more than one natural resource and/or service (+ / 0 / -)	The effect of the project alternative on public health and safety (+ / 0 / -)	Project is not already required by existing regulations (Y/N)	Project complies with applicable laws and regulations (Y/N)	Project supports existing regional or local conservation plan or restoration effort (Y/N)	Project is not already fully funded (Y/N)	Project is technically feasible (+ / 0 / -)	Project readiness (+ / 0 / -)	Sustainability/Long-term Benefit of project (+ / 0 / -)	Project is time critical (+ / 0 / -)	Project offers opportunities for external funding & collaboration (+ / 0 / -)
to inundation to improve management					description of sea turtle embryonic sensitivity to inundation, therefore, relocation decision criteria are not uniformly applied across sites. The 2008 Recovery Plan for the Northwest Atlantic Population of Loggerhead Sea Turtles states that management actions "should be carefully evaluated to determine their potential risks and conservation benefits" and performed in the "least manipulative [way] possible". More detailed information is required to meet the Recovery Plan's objectives including identifying high-risk inundation sites within nesting beaches, and high temporal resolution data relating inundation stress to nest productivity under natural conditions. To address this, the proposed project seeks to develop a model of inundation stress on sea turtle nests, and a description of the spatial distribution of inundation risk on a loggerhead nesting beach in the northern Gulf of Mexico. Sea turtles lay their eggs on sandy shores, which are at risk of groundwater inundation, wave wash-over, and erosion during their incubation. Inundation restricts gas exchange across the shell membrane, resulting in negative impacts to embryonic development and egg viability. Sea level rise and coastal squeeze are projected to exacerbate this problem. Nest relocation used as an inundation mitigation strategy may include unintended consequences (e.g. increased embryonic mortality, altered sexual development), therefore, it is used for nests most at-risk. To better protect nests and minimize nest manipulation, wave run-up modeling and in situ nest information is used to assess the vulnerability of sea turtle nests to inundation. A USGS wave run-up model currently in development will be used to identify sections of beach at significant risk of w ave exposure. This information will be integrated into a new management tool that accounts for a nest's distance to the high tide line, elevation, and exposure risk to maximize nest productivity while minimizing nest manipulation with respect to nest relocation in situ monitoring of nest inundation stress will be used to validate the model and help describe nest productivity. This project will take place in Fort Morgan, AL (including Bon Secour National Wildlife Refuge) and consist of 2 parts: wave run-up modeling and in situ nest monitoring. USGS is currently developing a model of wave run-up based on beach slope, elevation, and off-shore wave data from the NOAA Nearshore Wave Prediction System. This model describes the elevation maxima on the foreshore reached by 98% of waves. LiDAR surveys from 1998 – 2013 will be used to determine mean beach slope and width, variability of these factors, and create a standardized beach profile. The USGS wave model will be applied to 220 points spaced 100m apart on the standardized foreshore. Combinations of foreshore slope and distance to the high tide line will be compiled in a tool along with a map of at-risk areas to better inform nest management decisions. An elevation LiDAR survey of the present-day beach will be combined with in situ monitoring. Daily morning surveys will be conducted by UTV in coordination with USFWS personnel and Share the Beach volunteers to record nesting data from 1 May – 31 August 2017. Nests will receive a HOBO U20L-04 water level logger to monitor hourly groundwater stress. Nest inventories will be conducted to determine nest productivity as a function of inundation stress. Salary and Benefits: $13,820.00 - $6,910/year x 2 Travel and Per Diem: $2,179.20 - $1,089.6 mileage/housing/year x 2 Equipment/Supplies: $4,946 Other: $11,000 - $10,000 one-time beach elevation survey - $1,000																													

Project Information							Restoration Types Addressed											Programmatic Damage Assessment and Restoration Plan (PDARP) Criteria		Public Notice	Oil Pollution Act (OPA) Criteria (15 CFR 990.54)			Additional Criteria									
Project Name	Proj No./ ID	Submitted By/ Primary Lead	Location	Cost	Project Description	Submitted via	Marine Mammals (Y/N)	Water Quality/ Nonpoint Source Nutrient Reduction (Y/N)	Wetland, Coastal, and Nearshore Habitat (Y / N)	Oyster Reef (Y / N)	Birds (Y / N)	Sea Turtles (Y / N)	Recreational Use (Y/N)	Habitat on Federal Lands (Y/N)	Monitoring, Adaptive Management, and Administrative Oversight to Support Restoration Implementation (Y/N)	Project is consistent with programmatic restoration goals (Y/N)	Project is considerate of strategic frameworks (Y/N/NA)	Project is consistent with criteria identified in the public notice (Y/N)	Project delivers benefits cost-effectively (+ / 0 / -)	Project meets Trustees' goals (+ / 0 / -)	Project has reasonable probability of success (+ / 0 / -)	Project prevents future and collateral injury to natural resources and services (+ / 0 / -)	Project benefits more than one natural resource and/or service (+ / 0 / -)	The effect of the project alternative on public health and safety (+ / 0 / -)	Project is not already required by existing regulations (Y/N)	Project complies with applicable laws and regulations (Y/N)	Project supports existing regional or local conservation plan or restoration effort (Y/N)	Project is not already fully funded (Y/N)	Project is technically feasible (+ / 0 / -)	Project readiness (+ / 0 / -)	Sustainability/Long-term Benefit of project (+ / 0 / -)	Project is time critical (+ / 0 / -)	Project offers opportunities for external funding & collaboration (+ / 0 / -)
					publication and conference assistance Overhead off-campus rate 26%: $8,075.50 TOTAL PROJECT COST: $40,020.70																												
Improving Habitat Injured by Spill Response: Restoring the Night Sky in Alabama	12901	Dianne Ingram	Baldwin and Mobile Counties	$263003	This project will restore and improve coastal habitats at Bon Secour National Wildlife Refuge (BSNWR) damaged by the Deepwater Horizon spill by upgrading lighting materials and practices that presently trespass onto and pollute habitat on federally managed lands. Inefficient lighting casts light directly into areas adjacent to the intended lit space, and creates light domes over cities (sky glow). Sky glow affects environments tens of miles from city centers. Light pollution has been shown to significantly harm nesting sea turtles (Witherington and Martin 2014), beach mice (Bird et al. 2004), sea birds (Montevecchi 2006) and a diverse range of other marine and terrestrial species (Longcore and Rich 2004, Gaston et al. 2013). This project would provide a wide range of environmental benefits to federally managed habitat at BSNWR and incidentally to nearby coastal and marine habitats and inform other similarly affected areas in the spill zone. The project would be implemented by the National Park Service's Natural Sounds and Night Skies Division with US Fish and Wildlife oversight. The Deepwater Horizon event—and the aggressive response associated with it—injured coastal habitats that play important ecologic and economic roles in the region. Among many restoration options, reducing artificial light trespass offers the potential for immediate improvements in habitat. This project would conduct engineering assessments to quantify the most cost effective options for reducing light pollution in the vicinity of BSNWR and conduct trials of lighting options to elicit citizen evaluations and test wildlife responses. Some estimate of the eventual scale and benefits of the lighting retrofit can be estimated. Data from 32 American cities ranging from 26,000 to 2,800,000 people indicates there is roughly one streetlight for every ten citizens. For Gulf Shores, Orange Beach, and Dauphin Island, this implies there are about 1700 streetlights. Duriscoe et al (2014) modeled benefit s of improved lighting for four cities; they ranged from 42% to 88% reductions in sky glow. Networked controls that dim lights during late night hours with minimal activity could further reduce sky glow and energy consumption. The proposed engineering assessment will identify the most feasible, cost-effective options for reduction in light pollution. Solid state lighting also offers many options for regulating the spectrum of the lights. There are no environmental disadvantages and several advantages to minimizing short wavelength light: reduced sky glow, diminished impacts on most wildlife species, more limited penetration of stray light underwater. As reported by the American Medical Association's Council on Science and Public Health (2016), limiting blue light into municipal environments is a sensible precaution to avoid potential health risks. The trade-off is shorter wavelength solid state lighting improves energy efficiency and color rendition. Accordingly, this project will conduct local tests of human and wildlife responses to alternative luminaires to assess the benefits of different lighting levels and spectra. This project will produce an inventory of municipal lighting and use remote sensing and NPS data products to identify locations within these communities that disproportionately contribute to light pollution. It will evaluate the potential economic and environmental benefits of advanced lighting control options. Last, it will conduct pilot tests of alternative lighting systems to assess public and ecological responses to different lighting	Trustee Portal	N	N	N	N	N	Y	N	N	N																			

Project Information							Restoration Types Addressed											Programmatic Damage Assessment and Restoration Plan (PDARP) Criteria		Public Notice	Oil Pollution Act (OPA) Criteria (15 CFR 990.54)			Additional Criteria									
Project Name	Proj No./ ID	Submitted By/ Primary Lead	Location	Cost	Project Description	Submitted via	Marine Mammals (Y/N)	Water Quality/ Nonpoint Source Nutrient Reduction (Y/N)	Wetland, Coastal, and Nearshore Habitat (Y / N)	Oyster Reef (Y / N)	Birds (Y / N)	Sea Turtles (Y / N)	Recreational Use (Y/N)	Habitat on Federal Lands (Y/N)	Monitoring, Adaptive Management, and Administrative Oversight to Support Restoration Implementation (Y/N)	Project is consistent with programmatic restoration goals (Y/N)	Project is considerate of strategic frameworks (Y/N/NA)	Project is consistent with criteria identified in the public notice (Y/N)	Project delivers benefits cost-effectively (+ / 0 / -)	Project meets Trustees' goals (+ / 0 / -)	Project has reasonable probability of success (+ / 0 / -)	Project prevents future and collateral injury to natural resources and services (+ / 0 / -)	Project benefits more than one natural resource and/or service (+ / 0 / -)	The effect of the project alternative on public health and safety (+ / 0 / -)	Project is not already required by existing regulations (Y/N)	Project complies with applicable laws and regulations (Y/N)	Project supports existing regional or local conservation plan or restoration effort (Y/N)	Project is not already fully funded (Y/N)	Project is technically feasible (+ / 0 / -)	Project readiness (+ / 0 / -)	Sustainability/Long-term Benefit of project (+ / 0 / -)	Project is time critical (+ / 0 / -)	Project offers opportunities for external funding & collaboration (+ / 0 / -)
					options. DOI expenses for project planning, execution, and oversight: $44,253 Contract for lighting engineering services: $100,000 CESU cooperative research agreement for lighting trials: $58,750 NPS to conduct workshops for outreach/training for municipal code enforcement, technical draft ordinance writing: ($60,000) Total: $263,003 Proposed Allocation Category: Habitat Projects on Federally Managed Lands																													

Appendix B:

Restoration Type Screening Criteria

Proposed Screening Methodology for Bird Projects

The PDARP sets out three goals for bird restoration:

- Restore lost birds by facilitating additional production and/or reduced mortality of injured bird species.
- Restore or protect habitats on which injured birds rely.
- Restore injured birds by species where actions would provide the greatest benefits within geographic ranges that include the Gulf of Mexico.

The restoration approaches for birds include (1) restore and conserve bird nesting and foraging habitat; (2) create, restore, and enhance coastal wetlands; (3) restore and enhance dunes and beaches; (4) create, restore, and enhance barrier and coastal islands and headlands; (5) restore and enhance submerged aquatic vegetation; (6) protect and conserve marine, coastal, estuarine, and riparian habitats; (7) establish or re-establish breeding colonies; and (8) prevent incidental bird mortality.

A. Step 1—Eligibility Screening

As with all the restoration types, project selection begins with identification of projects that have been submitted by the public that have been initially categorized as potentially targeting the restoration type under consideration.

B. Step 2—Initial Project Screening Criteria

Using the set of projects identified as providing bird restoration benefits from the portal project sorting, conduct a general eligibility screening based the AL TIG's goals related to the PDARP restoration type and the following criteria.

1. Project focus is on (i) increased reproduction or decreased mortality for DWH injured species where restoration is not largely complete (wading birds and seabirds including brown pelicans, neotropical migrants); or (ii) filling important information/data gaps for birds in Alabama.
2. Project is more appropriately conducted by the AL TIG than by either the region-wide or open ocean TIGs.
3. Project has a reasonable likelihood of success.
4. Available information is sufficient to permit screening of the project.
5. Project does not fund activities required by local, state or federal law, order, or permit.
6. Project is not already fully funded.
7. Project is not duplicative of other projects on the list.

Projects that receive a "yes" for all the above criteria (1 through 7) would be carried forward to Step 3 below for more project specific consideration.

C. Step 3—Project Specific Screening Considerations

After developing a 'short list' based on the application of the above criteria, each project would be reviewed to evaluate the proposed scope in relation to a variety of project specific considerations. Among the considerations would be:

1. From a restoration or data gap perspective, how significant are the project benefits?
2. Can the project be implemented within the budget available for this restoration plan or is there a source of other funds that can be leveraged in conjunction with NRDA funds available to allow implementation?
3. Is the project cost-effective?
4. Can the project be implemented in a reasonable time frame?
5. Does the project have a significant potential to result in adverse environmental or human health impacts?
6. Are there any other impediments to carrying the project forward as part of the reasonable range of alternatives designated for more detailed OPA and NEPA analysis (e.g., compliance issues)?

Decisions of the AL TIG to move projects from Step 3 to the reasonable range of alternatives are based on a balancing of the considerations outlined above and in the context of the full suite of restoration alternatives being advanced for analysis in the restoration plan. As a result, a project considered in Step 3 may have received a generally favorable review but a decision was made not to move it to the reasonable range of alternatives for this plan. The reason or reasons a project has not been carried forward at this time will be documented in the restoration plan.

D. Step 4—Evaluation of Reasonable Range of Alternatives

Full OPA and NEPA analysis would be performed on the remaining initiatives that have been determined to comprise the reasonable range of alternatives for bird restoration projects. The OPA evaluation would address:

- The cost to carry out the alternative (e.g., cost to benefit).
- The extent to which each alternative is expected to meet the Trustees' goals and objectives in returning the injured natural resources and services to baseline and/or compensating for interim losses.
- The likelihood of success of each alternative.
- The extent to which each alternative will prevent future injury as a result of the incident and avoid collateral injury as a result of implementing the alternative.
- The extent to which each alternative benefits more than one natural resource and/or service.
- The effect of each alternative on public health and safety.

Full NEPA would be conducted for each of the projects that comprise the reasonable range.

Proposed Screening Methodology for Habitats on Federally Managed Lands

For Habitats on Federally Managed Lands (HFML), the PDARP sets our three restoration goals:

- Restore federally managed habitats that were affected by the oil spill and response actions through an integrated portfolio of restoration approaches across a variety of habitats.
- Restore for injuries to federally managed lands by targeting restoration on federal lands where the injuries occurred, while considering approaches that provide resiliency and sustainability.
- Ensure consistency with land management plans for each designated federal land and its purpose by identifying actions that account for the ecological needs of these habitats.

The PDARP highlights seven restoration approaches that are potentially applicable in Alabama for the HFML restoration type, depending upon the actual location of the federally managed lands in the state and the type of habitat where the injury occurred.

1. Create, restore and enhance coastal wetlands.
2. Restore oyster reef habitat.
3. Create, restore, and enhance barrier and coastal islands and headlands.
4. Restore and enhance dunes and beaches.
5. Restore and enhance submerged aquatic vegetation.
6. Protect and conserve marine, coastal, estuarine, and riparian habitats.
7. Promote environmental stewardship, education, and outreach.

Step 1—Eligibility Screening

As with all the restoration types, project selection begins with identification of projects that have been submitted by the public that have been initially categorized as potentially targeting the restoration types under consideration—HFML projects. These are projects located on or in an area that directly and significantly affects the quality of habitat on federally-managed coastal or estuarine lands.

Step 2—Initial Project Screening Criteria

Using the set of projects identified as providing HFML restoration benefits from the portal project sorting, conduct a general eligibility screening based the AL TIG's goals related to the PDARP restoration types and the following criteria.

1. Available information is sufficient to permit screening of the project.
2. Project constitutes an actual project or a specific action, as opposed to a recommendation for a restoration type (e.g., acquisition of a specific parcel of property vs. acquisition of lands in Baldwin County).
3. Project does not fund activities required by local, state or federal law, order, or permit.
4. Project is not already fully funded.
5. Project is not duplicative of other projects on the list.

Projects that receive a "yes" for all the above criteria (1 through 4) would be carried forward to Step 3 below for more project specific screening.

Step 3--Project Specific Screening Considerations

After developing a 'short list' based on the application of the above criteria, each project would be reviewed to evaluate the proposed scope in relation to a variety of project specific considerations. Among the considerations would be:

1. Do the project techniques have a reasonable likelihood of being implemented successfully?
2. Is the project adjacent to land uses that would pose a threat to the success of the project?
3. Is the project consistent with existing management plans (e.g., watershed management plans or species recovery plans) and/or other previous efforts completed by federal, state, local, NGO, or academic entities?
4. Can the project be implemented within the budget available for this restoration plan or is there a source of other funds that can be leveraged in conjunction with NRDA funds available to allow implementation?
5. Is the project cost-effective?
6. Can the project be implemented in a reasonable time frame?
7. Does the project have a significant potential to result in adverse environmental or human health impacts?
8. Are there any other impediments to carrying the project forward as part of the reasonable range of alternatives designated for more detailed OPA and NEPA analysis (e.g., compliance issues)?

Decisions of the AL TIG to move projects from Step 3 to the reasonable range of alternatives are based on a balancing of the considerations outlined above and in the context of the full suite of restoration alternatives being advanced for analysis in the restoration plan. As a result, a project considered in Step 3 may have received a generally favorable review but a decision was made not to move it to the reasonable range of alternatives for this plan. The reason or reasons a project has not been carried forward at this time will be documented in the restoration plan.

Step 4—Evaluation of Reasonable Range of Alternatives

Full OPA and NEPA analysis would be performed on the remaining initiatives that have been determined to comprise the reasonable range of alternatives HFML restoration projects. The OPA evaluation would address:

- The cost to carry out the alternative (e.g., cost to benefit).
- The extent to which each alternative is expected to meet the Trustees' goals and objectives in returning the injured natural resources and services to baseline and/or compensating for interim losses.
- The likelihood of success of each alternative.
- The extent to which each alternative will prevent future injury as a result of the incident and avoid collateral injury as a result of implementing the alternative.
- The extent to which each alternative benefits more than one natural resource and/or service.
- The effect of each alternative on public health and safety.

Full NEPA would be conducted for each of the projects that comprise the reasonable range.

Proposed Screening Methodology for Marine Mammal Projects

The PDARP sets out three goals for marine mammal restoration:

- Implement an integrated portfolio of restoration approaches to restore injured bay, sound and estuary, coastal, shelf, and oceanic marine mammals across the diverse habitats and geographic ranges they occupy.
- Identify and implement restoration activities that mitigate key stressors in order to support resilient populations. Collect and use monitoring information, such as population and health assessments and spatiotemporal distribution information.
- Identify and implement actions that support ecological needs of the stocks; improve resilience to natural stressors; and address direct human-caused threats such as bycatch in commercial fisheries, vessel collisions, noise, industrial activities, illegal feeding and harassment, and hook- and-line fishery interactions.

The PDARP notes that this "restoration portfolio includes approaches designed to decrease and mitigate interactions with commercial and recreational fishing gear, characterize and reduce impacts from noise, reduce harm from industrial activities, reduce illegal feeding and harassment, and increase understanding of causes of marine mammal illness and death."

A. Step 1—Eligibility Screening

As with all the restoration types, project selection begins with identification of projects that have been submitted by the public that have been initially categorized as potentially targeting the restoration type under consideration.

B. Step 2—Initial Project Screening Criteria

Using the set of projects identified as providing marine mammal restoration benefits from the portal project sorting, conduct a general eligibility screening based the AL TIG's goals related to the PDARP restoration type and the following criteria.

1. Project (i) makes direct contributions to reducing mortality or morbidity of Alabama marine mammal populations caused by direct anthropogenic stressors or threats; or (ii) reduces natural stressors or takes other actions that support the ecological needs of marine mammals resulting in increased resilience of Alabama populations; or (iii) plays a significant role in the collection and/or analysis of data that improves our ability to restore marine mammal populations.
2. Project is more appropriately conducted by the AL TIG than by the region-wide or open-ocean TIGs.
3. Project has a reasonable likelihood of success.
4. Available information is sufficient to permit screening of the project.
5. Project does not fund activities required by local, state or federal law, order, or permit.
6. Project is not already fully funded—confirm but generally removed under Step 1.
7. Project is not duplicative of other projects on the list.

Projects that receive a "yes" for all the above criteria (1 through 7) would be carried forward to Step 3 below for more project specific consideration.

C. Step 3--Project Specific Screening Considerations

After developing a 'short list' based on the application of the above criteria, each project would be reviewed to evaluate the proposed scope in relation to a variety of project specific considerations. Among the considerations would be:

1. Can the project be implemented within the budget available for this restoration plan or is there a source of other funds that can be leveraged in conjunction with NRDA funds available to allow implementation?
2. Is the project cost-effective?
3. Can the project be implemented in a reasonable time frame?
4. Does the project have a significant potential to result in adverse environmental or human health impacts?
5. Are there any other impediments to carrying the project forward as part of the reasonable range of alternatives designated for more detailed OPA and NEPA analysis (e.g., compliance issues)?

Decisions of the AL TIG to move projects from Step 3 to the reasonable range of alternatives are based on a balancing of the considerations outlined above and in the context of the full suite of restoration alternatives being advanced for analysis in the restoration plan. As a result, a project considered in Step 3 may have received a generally favorable review but a decision was made not to move it to the reasonable range of alternatives for this plan. The reason or reasons a project has not been carried forward at this time will be documented in the restoration plan.

D. Step 4—Evaluation of Reasonable Range of Alternatives

Full OPA and NEPA analysis would be performed on the remaining initiatives that have been determined to comprise the reasonable range of alternatives for marine mammal restoration projects. The OPA evaluation would address:

- The cost to carry out the alternative (e.g., cost to benefit).
- The extent to which each alternative is expected to meet the Trustees' goals and objectives in returning the injured natural resources and services to baseline and/or compensating for interim losses.
- The likelihood of success of each alternative.
- The extent to which each alternative will prevent future injury as a result of the incident and avoid collateral injury as a result of implementing the alternative.
- The extent to which each alternative benefits more than one natural resource and/or service.
- The effect of each alternative on public health and safety.

Full NEPA would be conducted for each of the projects that comprise the reasonable range.

Proposed Screening Methodology for Nutrient Reduction Projects

The PDARP sets out three goals for the nutrient reduction restoration type:

- Reduce nutrient loadings to Gulf Coast estuaries, habitats, and resources that are threatened by chronic eutrophication, hypoxia, or harmful algal blooms or that suffer habitat losses associated with water quality degradation.
- Where appropriate, co-locate nutrient load reduction projects with other restoration projects to enhance ecological services provided by other restoration approaches.
- Enhance ecosystem services of existing and restored Gulf Coast habitats.

The PDARP identifies agricultural conservation practices as a major potential restoration technique for reducing nutrient pollution; it also identifies an array of other restoration approaches including stormwater management practices, forestry management practices, creation and enhancement of wetlands, hydrologic restoration, and coastal and riparian conservation (PDARP, page 5-35). The PDARP states that "the Trustees will establish watershed selection criteria to inform site and project selection prior to implementing the restoration approach." The remainder of this note outlines the steps in the AL TIG's approach for selecting projects that meet the PDARP goals and objectives.

A. Step 1—Eligibility Screening

As with all the restoration types, project selection begins with identification of projects that have been submitted by the public that have been initially categorized as potentially targeting the restoration type under consideration.

Items to be considered:

- Projects address nutrient reduction resource concerns;
- Projects is not already funded; and
- Project is not duplicative of other projects on the list.

B. Step 2—Initial Project Screening Criteria

Using the set of projects identified as providing nutrient reduction benefits from the portal project sorting, conduct an initial project screening based the AL TIG's goals related to the PDARP restoration type and the following criteria.

Project is designed to make a significant direct contribution to reducing nutrients from agricultural or urban sources through implementation of **active**[1] measures to reduce nutrient loadings to coastal ecosystems injured by the DWH spill. These include:

1. agricultural conservation practices,
2. stormwater management practices,
3. forestry management practices,
4. creation and enhancement of wetlands, and
5. hydrologic restoration.

Note - Eliminated projects that addressed:

- Water Reuse
- Study/Assessment/ Data Collection/Monitoring (only)
- Drainage, streambank stabilization, and/or Creek channeling
- Sewer infrastructure
- Debris removal
- Heavy metal removal (water quality)
- Projects without a defined scope

C. Step 3—Project Specific Screening Considerations

After developing a 'short list' based on the application of the above criteria, each project would be reviewed to evaluate the proposed scope in relation to a variety of project specific considerations. Among the considerations would be:

1. Can the project be implemented within the budget available for this restoration plan or is there a source of other funds that can be leveraged in conjunction with NRDA funds available to allow implementation?
2. Is the project likely to be cost-effective?
3. Can the project be implemented in a reasonable time frame?
4. Does the project have a significant potential to result in adverse environmental or human health impacts?
5. Is the project funding activities required by local, state or federal law, order, or permit?
6. Are there any other impediments to carrying the project forward as part of the reasonable range of alternatives designated for more detailed OPA and NEPA analysis (e.g., compliance issues)?

[1] Non-Active measures would include conducting additional watershed planning

D. Step 4—Watershed(s) Considerations

Project occurs in the set of Alabama watersheds that (1) have completed watershed management plans,[2] (2) have large and well-documented sources of nutrients from agricultural lands and/or have substantial nutrient contributions from urban sources, and (3) are co-located or have synergistic benefits with other DWH restoration initiatives. Based on these criteria, projects in the following watersheds were identified for further consideration.

Mobile County

- Red Creek-Eightmile Creek
- Toulmins Spring Branch-Three Mile Creek
- Upper Dog River
- Lower Dog River
- Halls Mill Creek
- Fowl River
- Bayou La Batre
- West Fowl River

Baldwin County

- Upper Fish River
- Middle Fish River
- Lower Fish River
- Magnolia River
- Skunk Bayou
- Bon Secour River
- Oyster Bay
- D'Olive Creek (sub basin of the Tensaw River-Apalachee River)

Decisions of the AL TIG to move projects from Step 4 to the reasonable range of alternatives are based on a balancing of the considerations outlined above and in the context of the full suite of restoration alternatives being advanced for analysis in the restoration plan. As a result, a project considered in Step 4 may have received a generally favorable review but a decision was made not to move it to the reasonable range of alternatives for this plan. The reason or reasons a project has not been carried forward at this time will be documented in the restoration plan.

E. Step 5—OPA Evaluation

Full OPA and NEPA analysis would be performed on the remaining initiatives that have been determined to comprise the reasonable range of alternatives for nutrient reduction projects. The OPA evaluation would address:

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[2] Watershed management plans have either been completed or are expected to be completed by summer of 2017.

- The cost to carry out the alternative (e.g., cost to benefit).
- The extent to which each alternative is expected to meet the Trustees' goals and objectives in returning the injured natural resources and services to baseline and/or compensating for interim losses.
- The likelihood of success of each alternative.
- The extent to which each alternative will prevent future injury as a result of the incident and avoid collateral injury as a result of implementing the alternative.
- The extent to which each alternative benefits more than one natural resource and/or service.
- The effect of each alternative on public health and safety.

Full NEPA would be conducted for each of the projects that comprise the reasonable range.

Proposed Screening Methodology for Oyster Projects

The PDARP sets out three goals for oyster restoration:

- Restore oyster abundance and spawning stock to support a regional oyster larvae pool sufficient for healthy recruitment levels to subtidal and nearshore oyster reefs.
- Restore resilience to oyster populations that are supported by productive larval source reefs and sufficient substrate in larval sink areas to sustain reefs over time.
- Restore a diversity of oyster reef habitats that provide ecological functions for estuarine- dependent fish species, vegetated shoreline and marsh habitat, and nearshore benthic communities.

The PDARP notes that '[t]his restoration will be accomplished by directly restoring reef habitat, enhancing oyster reef productivity, and restoring regional oyster recruitment by increasing oyster spawning stock populations and, subsequently, the regional larval supply.'

A. Step 1--Eligibility Screening

As with all the restoration types, project selection begins with identification of projects that have been submitted by the public that have been initially categorized as potentially targeting the restoration type under consideration

B. Step 2-- Initial Project Screening Criteria

Using the set of projects identified as providing oyster restoration benefits from the portal project sorting, conduct a general eligibility screening based the AL TIG's goals related to the PDARP restoration type and the following criteria.

1. Project (i) makes direct contributions to solving long-term oyster survivorship problems in Alabama coastal waters, or (ii) plays an important role in filling major scientific information or data gaps for oysters or (iii) promotes effective stewardship of oyster resources in the state.
2. Project is more appropriately conducted by the AL TIG than by the region-wide TIG. Project has a reasonable likelihood of success (e.g., occurs in waters of appropriate conditions).
3. Available information is sufficient to permit screening of the project.
4. Project does not fund activities required by local, state or federal law, order, or permit.
5. Project is not already fully funded—confirm but generally removed under Step 1.
6. Project is not duplicative of other projects on the list.

C. Step 3--Project Specific Screening Considerations

After developing a 'short list' based on the application of the above criteria, each project would be reviewed to evaluate the proposed scope in relation to a variety of project specific considerations. Among the considerations would be:

1. Can the project be implemented within the budget available for this restoration plan or is there a source of other funds that can be leveraged in conjunction with NRDA funds available to allow implementation?
2. Is the project expected to yield significant public (i.e., non-commercial) benefits.
3. Is the project cost-effective?
4. Can the project be implemented in a reasonable time frame?
5. Does the project have a significant potential to result in adverse environmental or human health impacts?
6. Are there any other impediments to carrying the project forward as part of the reasonable range of alternatives designated for more detailed OPA and NEPA analysis (e.g., compliance issues)?

Decisions of the AL TIG to move projects from Step 3 to the reasonable range of alternatives are based on a balancing of the considerations outlined above and in the context of the full suite of restoration alternatives being advanced for analysis in the restoration plan. As a result, a project considered in Step 3 may have received a generally favorable review but a decision was made not to move it to the reasonable range of alternatives for this plan. The reason or reasons a project has not been carried forward at this time will be documented in the restoration plan.

D. Step 4—Evaluation of Reasonable Range of Alternatives

Full OPA and NEPA analysis would be performed on the remaining initiatives that have been determined to comprise the reasonable range of alternatives for oyster restoration projects. The OPA evaluation would address:

- The cost to carry out the alternative (e.g. cost to benefit).
- The extent to which each alternative is expected to meet the Trustees' goals and objectives in returning the injured natural resources and services to baseline and/or compensating for interim losses
- The likelihood of success of each alternative.
- The extent to which each alternative will prevent future injury as a result of the incident and avoid collateral injury as a result of implementing the alternative.
- The extent to which each alternative benefits more than one natural resource and/or service.
- The effect of each alternative on public health and safety.

Full NEPA would be conducted for each of the projects that comprise the reasonable range.

Proposed Screening Methodology for Sea Turtle Projects

The PDARP sets out four goals for sea turtle restoration:

- Implement an integrated portfolio of restoration approaches to address all injured life stages (hatchling, juvenile, and adult) and species of sea turtles.
- Restore injuries by addressing threats to sea turtles in the marine and terrestrial environment such as bycatch in commercial and recreational fisheries, acute environmental changes (e.g., cold water temperatures), loss or degradation of nesting beach habitat (e.g., coastal armoring and artificial lighting), and other anthropogenic threats.
- Restore sea turtles in the various geographic and temporal areas within the Gulf of Mexico that are relevant to injured species and life stages.
- Support existing conservation efforts by ensuring consistency with recovery plans and recovery goals for each of the sea turtle species.

The PDARP identifies a variety of approaches for sea turtle restoration. These involve (1) identifying and implementing measures to reduce bycatch in commercial and recreational fisheries; (2) enhancing sea turtle hatchling productivity and restoring and conserving nesting beach habitat; (3) enhancing state enforcement to improve compliance with existing requirements to reduce bycatch in commercial fisheries; (4) increasing sea turtle survival through enhanced mortality investigations and early detection of and response to anthropogenic threats and emergency events; and (5) reducing injury and mortality of sea turtles from vessel strikes.

In addition, the AL TIG will consider projects that fill knowledge and data gaps specific to sea turtles using Alabama's terrestrial and in-water habitats.

A. Step 1—Eligibility Screening

As with all the restoration types, project selection begins with identification of projects that have been submitted by the public that have been initially categorized as potentially targeting the restoration type under consideration.

B. Step 2—Initial Project Screening Criteria

Using the set of projects identified as providing sea turtle restoration benefits from the portal project sorting, conduct a general eligibility screening based the AL TIG's goals related to the PDARP restoration type and the following criteria.

1. Project (i) makes direct contributions to reducing sea turtle bycatch and vessel collision mortality or injury in Alabama coastal waters, or (ii) enhances hatchling productivity or restores/conserves nesting habitat; or (iii) enhances enforcement; or (iv) increases

survival through actions to investigate and respond to threats and emergency incidents; or (v) fills knowledge or data gaps specific to sea turtles and habitats in Alabama.

2. Project is more appropriately conducted by the AL TIG than by the region-wide or open ocean TIGs or can't be effectively scaled for only Alabama (e.g., projects that would not benefit from region-wide economies of scale or coordination). Examples include projects that increase capacity of share the beach programs in Alabama, acquire land to protect locally valuable nesting sites, or address direct threats to or data gaps for sea turtles in Alabama.
3. Project has a reasonable likelihood of success.
4. Available information is sufficient or can be made sufficient in reasonable amount of time to permit screening of the project.
5. Project does not fund activities required by local, state or federal law, order, or permit.
6. Project is not already fully funded.
7. Project is not duplicative of other projects on the list.

Projects that receive a "yes" for all the above criteria (1 through 7) would be carried forward to Step 3 below for more project specific consideration.

C. Step 3--Project Specific Screening Considerations

After developing a 'short list' based on the application of the above criteria, each project would be reviewed to evaluate the proposed scope in relation to a variety of project specific considerations. Among the considerations would be:

1. Can the project be implemented within the budget available for this restoration plan or is there a source of other funds that can be leveraged in conjunction with NRDA funds available to allow implementation?
2. Is the project cost-effective?
3. Can the project be implemented in a reasonable time frame?
4. Does the project have a significant potential to result in adverse environmental or human health impacts?
5. Are there any other impediments to carrying the project forward as part of the reasonable range of alternatives designated for more detailed OPA and NEPA analysis (e.g., compliance issues)?

Decisions of the AL TIG to move projects from Step 3 to the reasonable range of alternatives are based on a balancing of the considerations outlined above and in the context of the full suite of restoration alternatives being advanced for analysis in the restoration plan. As a result, a project considered in Step 3 may have received a generally favorable review but a decision was made not to move it to the reasonable range of alternatives for this plan. The reason or reasons a project has not been carried forward at this time will be documented in the restoration plan.

D. Step 4—Evaluation of Reasonable Range of Alternatives

Full OPA and NEPA analysis would be performed on the remaining initiatives that have been determined to comprise the reasonable range of alternatives for sea turtle restoration projects. The OPA evaluation would address:

- The cost to carry out the alternative (e.g., cost to benefit).
- The extent to which each alternative is expected to meet the Trustees' goals and objectives in returning the injured natural resources and services to baseline and/or compensating for interim losses.
- The likelihood of success of each alternative.
- The extent to which each alternative will prevent future injury as a result of the incident and avoid collateral injury as a result of implementing the alternative.
- The extent to which each alternative benefits more than one natural resource and/or service.
- The effect of each alternative on public health and safety.

Full NEPA would be conducted for each of the projects that comprise the reasonable range.

Proposed Screening Methodology for Wetlands, Coastal, and Nearshore Habitats

For the Wetlands, Coastal and Nearshore Habitats (WCNH), the PDARP sets out three goals for restoration:

- Restore a variety of interspersed and ecologically connected coastal habitats in each of the five Gulf states to maintain ecosystem diversity, with particular focus on maximizing ecological functions for the range of resources injured by the spill, such as oysters, estuarine-dependent fish species, birds, marine mammals, and nearshore benthic communities.

- Restore for injuries to habitats in the geographic areas where the injuries occurred, while considering approaches that provide resiliency and sustainability.

- While acknowledging the existing distribution of habitats throughout the Gulf of Mexico, restore habitats in appropriate combinations for any given geographic area. Consider design factors, such as connectivity, size, and distance between projects, to address injuries to the associated living coastal and marine resources and restore the ecological functions provided by those habitats.

The PDARP highlights six restoration approaches relevant to Alabama for WCNH.

1. Create, restore and enhance coastal wetlands.
2. Restore oyster reef habitat.
3. Create, restore, and enhance barrier and coastal islands and headlands.
4. Restore and enhance dunes and beaches.
5. Restore and enhance submerged aquatic vegetation.
6. Protect and conserve marine, coastal, estuarine, and riparian habitats.

Step 1—Eligibility Screening

As with all the restoration types, project selection begins with identification of projects that have been submitted by the public that have been initially categorized as potentially targeting the restoration types under consideration—WCNH projects.

Step 2—Initial Project Screening Criteria

Using the set of projects identified as providing WCNH restoration benefits from the portal project sorting, conduct a general eligibility screening based the AL TIG's goals related to the PDARP restoration types and the following criteria.

1. Project (i) is located in areas identified as high priority for WCNH restoration by the AL TIG – specifically the estuarine portions of Mississippi Sound and Grand Bay, and the Fowl River, Weeks Bay, and Perdido Bay/River watersheds.
2. Project constitutes an actual project or a specific action, as opposed to a recommendation for a restoration type (e.g., acquisition of a specific parcel of property vs. acquisition of lands in Baldwin County).

3. Project focus is on **active** measures to meet the PDARP goals as opposed to research or monitoring activities.
4. Project does not fund activities required by local, state or federal law, order, or permit.
5. Project is not already fully funded.
6. Project is not duplicative of other projects on the list.

Projects that receive a "yes" for all the above criteria (1 through 6) would be carried forward to Step 3 below for more project specific screening.

Step 3--Project Specific Screening Considerations

After developing a 'short list' based on the application of the above criteria, each project would be reviewed to evaluate the proposed scope in relation to a variety of project specific considerations. Among the considerations would be:

1. Do the project techniques have a reasonable likelihood of being implemented successfully?
2. To what extent does the project protect or restore a continuum of habitats (e.g., nearshore reef to salt marsh to coastal freshwater wetlands and adjacent upland buffer) within the nearshore ecosystem and therefore contribute to an integrated, connected food web?
3. Will the project contribute to habitat protection or restoration in the vicinity of other projects proposed for selection in this plan, thereby achieving a greater overall benefit to nearshore habitats?
4. Is the project adjacent to land uses that would pose a threat to the success of the project?
5. Is the project consistent with existing management plans (e.g., watershed management plans or species recovery plans) and/or other previous efforts completed by federal, state, local, NGO, or academic entities?
6. Can the project be implemented within the budget available for this restoration plan or is there a source of other funds that can be leveraged in conjunction with NRDA funds available to allow implementation?
7. Is the project cost-effective?
8. Can the project be implemented in a reasonable time frame?
9. Does the project have a significant potential to result in adverse environmental or human health impacts?
10. Are there any other impediments to carrying the project forward as part of the reasonable range of alternatives designated for more detailed OPA and NEPA analysis (e.g., compliance issues)?

Decisions of the AL TIG to move projects from Step 3 to the reasonable range of alternatives are based on a balancing of the considerations outlined above and in the context of the full suite of restoration alternatives being advanced for analysis in the restoration plan. As a result, a project considered in Step 3 may have received a generally favorable review but a decision was made not to move it to the reasonable range of alternatives for this plan. The reason or reasons a project has not been carried forward at this time will be documented in the restoration plan.

Step 4—Evaluation of Reasonable Range of Alternatives

Full OPA and NEPA analysis would be performed on the remaining initiatives that have been determined to comprise the reasonable range of alternatives for WCNH restoration projects. The OPA evaluation would address:

- The cost to carry out the alternative (e.g., cost to benefit).
- The extent to which each alternative is expected to meet the Trustees' goals and objectives in returning the injured natural resources and services to baseline and/or compensating for interim losses.
- The likelihood of success of each alternative.
- The extent to which each alternative will prevent future injury as a result of the incident and avoid collateral injury as a result of implementing the alternative.
- The extent to which each alternative benefits more than one natural resource and/or service.
- The effect of each alternative on public health and safety.

Full NEPA would be conducted for each of the projects that comprise the reasonable range.

Appendix C:

Federal Trustee Consistency Determinations

March 14, 2018

Scott Brown
Alabama Department of Environmental Management
Mobile Branch | Coastal Section
3664 Dauphin Street, Suite B
Mobile, Alabama 36608

RE: Proposed Restoration Projects in the Alabama Restoration Area

Dear Mr. Brown:

The Natural Resource Trustees for the Deepwater Horizon Oil Spill Alabama Trustee Implementation Group (Alabama TIG) have prepared a draft restoration plan, entitled, "Draft Restoration Plan II and Environmental Assessment: Restoration of Wetlands, Coastal, and Nearshore Habitats; Habitat Projects on Federally Managed Lands; Nutrient Reduction (Nonpoint Source); Sea Turtles; Marine Mammals; Birds and Oysters". This restoration plan, if approved by the Alabama TIG after consideration of public review and comment, would select for implementation 22 restoration projects within Alabama's coastal zone. The Alabama TIG includes two state trustee agencies and four federal trustee agencies: the Alabama Department of Conservation and Natural Resources (ADCNR); the Geological Survey of Alabama; the United States Department of Commerce, represented by the National Oceanic and Atmospheric Administration (NOAA); the United States Department of the Interior (DOI), represented by the United States Fish and Wildlife Service (USFWS), Bureau of Land Management (BLM), and National Park Service (NPS); the United States Department of Agriculture (USDA); and the United States Environmental Protection Agency (EPA) (collectively the AL TIG).

DOI, NOAA, USDA, and EPA (the "Federal Trustees") have reviewed the restoration plan and proposed projects for consistency with the Alabama Coastal Area Management Program (ACAMP) and have found that, as proposed, these restoration actions are consistent to the maximum extent practicable with the applicable, enforceable policies of the State's federally-approved ACAMP. This letter submits that determination for State review on behalf of all Federal Trustees.

Background

On April 20, 2010, the Deepwater Horizon (DWH) mobile drilling unit exploded, caught fire, and eventually sank in the Gulf of Mexico, resulting in a massive release of oil and other substances from British Petroleum’s (BP) Macondo well and causing loss of life and extensive natural resource injuries. Initial efforts to cap the well following the explosion were unsuccessful, and for 87 days after the explosion, the well continuously and uncontrollably discharged oil and natural gas into the northern Gulf of Mexico. Approximately 3.19 million barrels (134 million gallons) of oil were released into the ocean. Oil spread from the deep ocean to the surface and nearshore environment, from Texas to Florida. The oil came into contact with and injured natural resources as diverse as deep-sea coral, fish and shellfish, productive wetland habitats, sandy beaches, birds, endangered sea turtles, and protected marine life. The oil spill prevented people from fishing, going to the beach, and enjoying their typical recreational activities along the Gulf of Mexico. Extensive response actions, including cleanup activities and actions to try to prevent the oil from reaching sensitive resources, were undertaken to try to reduce harm to people and the environment. However, many of these response actions had collateral impacts on the environment and on natural resource services. The oil and other substances released from the well in combination with the extensive response actions together make up the DWH oil spill.

In accordance with the Final Programmatic Damage Assessment and Restoration Plan and Final Programmatic Environmental Impact Statement (Final PDARP/PEIS) and Record of Decision (ROD), the AL TIG has prepared a draft Restoration Plan/Environmental Assessment (RP II/EA), which simultaneously fulfills requirements under the Oil Pollution Act (OPA) and the National Environmental Policy Act (NEPA) and proposes a range of restoration alternatives to restore for losses to natural resources and services injured in Alabama as a result of the DWH oil spill. Specifically, the restoration alternatives proposed in the draft RP II/EA focus on the following resource topics: Wetlands, Coastal, and Nearshore Habitats; Habitat Projects on Federally Managed Lands; Nutrient Reduction (Nonpoint Source); Sea Turtles; Marine Mammals; Birds; and Oysters. OPA requires the Trustees to develop a restoration plan. NEPA requires federal agencies to conduct NEPA analysis, in this case an EA, for any "major federal action significantly affecting the quality of the human environment." The draft RP II/EA describes the restoration planning process and provides analysis focusing on project-specific issues in an integrated EA tiered from the Final PDARP/PEIS. The RPII/EA considers a total of 26 unique restoration projects, of which 22 unique projects have been identified as preferred alternatives or MAM funded to be carried forward for implementation. These projects are described below.

Proposed Alabama Restoration Projects:

The AL TIG proposes the following restoration actions for implementation in Alabama. Projects proposed for only engineering and design (E&D) at this time are noted as such:

1. Magnolia River Land Acquisition (Holmes Tract)

Project Summary. The Magnolia River Land Acquisition (Holmes Tract) project would acquire an 80-acre property through a fee simple purchase by the Weeks Bay Foundation (WBF) and transfer it into the permanent ownership of ADCNR with management by the Weeks Bay National Estuarine Research Reserve (Weeks Bay NERR). The Holmes Tract is located in Baldwin County off Keith Lane along the Magnolia River (PIN 287940, 65806, and portion of 20643) and includes about 80 acres. The property is one of the largest undeveloped tracts on Magnolia River that has not been timbered. It contains more than 1 mile of frontage on Magnolia River and Weeks Creek, including a perimeter of salt marsh and forested wetland fringe. WBF would protect the property in perpetuity and address restoration needs to ensure that it provides the best habitat for native and endemic species. Restoration activities proposed for the Holmes Tract could include invasive species control (prescribed fire or other methods), native vegetation planting, and minimal limited erosion control measures. This project would be accomplished with support from the town of Magnolia Springs and the Weeks Bay National Estuarine Research Reserve (NERR).

Project Implementation. The property would be purchased by WBF through a willing seller at or below the Yellow Book appraised value and transferred into the permanent ownership of the State. The acquisition of this property would include an appropriate land protection instrument (i.e., deed restriction or conservation easement placed on the property) to ensure that the purpose of restoration as described in this plan is maintained in perpetuity. In addition, WBF would work with the Weeks Bay NERR to create a management plan and prioritize restoration needs, including re-creating longleaf pine savannas, pitcher plant bogs, and marsh and swamp habitat (where appropriate).

***Project Timeline*.** Due diligence and acquisition would take approximately 6 months to 1 year to complete. Development of a restoration plan and associated restoration activities would be conducted over a 3- year period following acquisition.

2. Weeks Bay Land Acquisition (East Gateway Tract)

Project Summary. The Weeks Bay Land Acquisition (East Gateway Tract) project would fund the WBF to acquire the 175-acre East Gateway Tract through a fee simple purchase and transfer it into the permanent ownership of ADCNR with management by the Weeks Bay NERR. The East Gateway Tract is located in Baldwin County at the mouth of Weeks Bay and contains approximately 175 undeveloped acres. The project would protect the eastern shore of the mouth of Weeks Bay where a large salt marsh with an unnamed stream provides protected habitat and shelter for wading birds, duck species, and various indigenous marine life. This property contains more than 100 acres of wetlands, including estuarine intertidal marsh and freshwater forested wetlands. The bay front edge of the property is a popular place for anglers to anchor and angle for redfish and speckled trout.

Project Implementation. WBF would purchase the property from a willing seller at or below the Yellow Book appraised value. The acquisition of this property would include an appropriate land protection instrument (i.e., deed restriction or conservation easement) to ensure that the purpose of restoration as described in this plan is maintained in perpetuity. WBF would work with Weeks Bay NERR to create a management plan and prioritize restoration needs, including re-creating longleaf pine savannas, pitcher plant bogs, and marsh and swamp habitat (where appropriate). This project would also include E&D for the removal of a bulkhead on the waterfront point of the property that splits Weeks Bay and Mobile Bay. The bulkhead is contributing to shoreline scouring and erosion. A shoreline restoration plan would be developed as part of the bulkhead removal E&D.

Project Timeline. The total project timeframe is 4 years. Due diligence and land acquisition would take approximately 6 months to complete. Development of a shoreline restoration plan would take approximately 1 year to complete. Design and engineering of the bulkhead removal on the point would take approximately 18 months to complete following completion of the plan.

3. Weeks Bay Land Acquisition (Harrod Tract)

Project Summary. The proposed Weeks Bay Land Acquisition (Harrod Tract) project would fund WBF or the State of Alabama would acquire the 231-acre Harrod Tract and transfer it into the permanent ownership of ADCNR with management by the Weeks Bay NERR. The Weeks Bay Land Acquisition (Harrod Tract) project would protect approximately 231 acres in perpetuity to maintain its conservation value. The Harrod Tract is located in Baldwin County, Alabama, off Sherwood Highland Road (PIN 065600). The property is one of the largest remaining undeveloped parcels of cypress and gum swamp, marsh, and river shoreline in coastal Alabama and is the largest privately owned tract on the lower Fish River. Located adjacent to protected wetlands, it includes 7,600 feet of Fish River shoreline, as well as frontage along Turkey Branch and Waterhole Branch, two of Fish River's primary tributaries. Multiple smaller bayous (artificially constructed lakes) are also present on the property. The wetlands are composed of fringing salt marsh transitioning into hardwood cypress and gum swamp. The extensive marsh edge provides valuable nursery habitat for a host of estuarine organisms including shrimp, crabs, and fish. Hundreds of species of migratory birds use the habitat, more than a dozen resident species of shorebirds are found at the edges and within the property, along with a representative array of local wetland flora and fauna. The 231-acre property includes more than 100 acres of intact wetlands habitat.

Project Implementation. A restoration plan would be developed, and associated restoration activities would be conducted on the purchased property, which could include invasive species control (prescribed burning or other methods), native vegetation planting, and limited erosion control measures. WBF would purchase the property through a willing seller at or below the Yellow Book appraised value; as an accredited land trust, WBF would maintain the conservation value of the property and prohibit any future development. The acquisition of this property would include an appropriate land protection instrument (i.e., deed restriction or conservation easement) to ensure that the purpose of restoration as described in this plan is maintained in perpetuity.

Project Timeline. Acquisition would take approximately 6 months to complete. Restoration activities would be conducted over a 3-year period following acquisition. A monitoring plan would be developed and implemented as part of this project.

4. Lower Perdido Islands Restoration Phase I (E&D)

***Project Summary*.** In recent decades, the valuable habitats on the Perdido Islands complex have experienced sustained erosion and other ecological injuries resulting from storms, intense boat traffic in nearshore waters, and shoreline and upland recreational use. The Lower Perdido Islands Restoration Phase I project would fund The Nature Conservancy (TNC) to develop a proactive and unified strategy for protecting the ecological functions of the Perdido Islands complex while allowing for passive public recreation. The project area includes several islands at the intersections of Bayou Saint John, Terry Cove, Cotton Bayou, and Perdido Pass, all in proximity to Orange Beach, Alabama, within the lower Perdido River and Bay watershed. The total project area encompasses approximately 420 acres and includes Robinson Island (11 acres), Bird Island (15 acres), Walker Island (7 acres), Gilchrest Island (2 acres), Boggy Point (7 acres), and the surrounding estuarine and marine environment. The remaining portion of the project area includes open water and a variety of wetland types.

***Project Implementation*.** For Phase I of the Lower Perdido Islands Restoration Project, TNC would develop a conservation management plan to evaluate the most appropriate methods for minimizing adverse impacts on sensitive habitats, and conduct a sediment modeling study to provide information on erosion that would inform future habitat restoration activities on the islands. Project elements would include identifying and describing the issues (such as erosion) and evaluating and recommending shoreline protection and restoration, submerged aquatic vegetation (SAV) protection, and dune habitat protection strategies. Specific activities likely would include a habitat survey, baseline monitoring, recreational use monitoring/behavioral observations, preliminary permit and compliance investigations, stakeholder coordination, and identification of factors that may assist in restoration and improved conservation. Other interim habitat enhancement activities associated with the project would include the installation of signage on the islands alerting visitors to nesting bird habitat, tree plantings for bird nesting habitat, and marine debris monitoring. Aside from marine debris monitoring, which the City of Orange Beach would implement through its regular program, these activities would be implemented by TNC in close coordination with the City of Orange Beach.

***Project Timeline*.** This Phase I project is expected to take approximately 18 months to complete, including the development of a conservation management plan, sediment modeling study, and interim habitat enhancement activities. Baseline monitoring data would be collected as part of Phase I.

5. Southwestern Coffee Island Habitat Restoration Project-Phase I (E&D)

Project Summary. This project would support planning activities related to the restoration and creation of colonial nesting bird breeding habitat and tidal wetlands along the southwestern shoreline of Coffee Island, located in Mississippi Sound in south Mobile County, Alabama. Phase I proposes funding for two tasks—(1) a synthesis of colonial wading bird and shorebird nesting data, and (2) E&D and permitting for the restoration of habitat on Coffee Island to evaluate whether the project should be considered for further development in a later plan. The project site where E&D activities would occur is state-owned island (managed by ADCNR) located in the Portersville Bay section of eastern Mississippi Sound. The island currently supports a small (approximately 1.0 acre) breeding colony of wading birds, including snowy egrets, tricolor herons, little blue herons, cattle egrets, white ibis, and similar colonial nesting wading bird species. Additionally, adjacent to the colony, a small shelly beach (approximately 0.50 acre) provides nesting habitat for shorebirds such as black skimmers and American oystercatchers.

Project Implementation. This project includes E&D and analysis activities resulting from field studies, biological assessments, data synthesis, modeling, sediment source investigations, development of drawings and construction plans, and construction cost estimates as well as obtaining required permits. The project consists of two components. First, all colonial nesting bird habitat data in coastal Alabama would be compiled and analyzed, resulting in a Colonial Nesting Birds Data Synthesis and Assessment.

Findings from this assessment are expected to determine whether nesting habitat is a limiting resource for colonial wading birds and if this project would be designed to restore wetlands and/or bird nesting habitat. The second component would include conducting engineering, design, and regulatory compliance for the proposed restoration of wetlands and bird nesting habitats along the southwestern shoreline of Coffee Island.

Project Timeline. Planning, site investigations, data synthesis, and E&D would take approximately 12 to 18 months. Permitting would take 6 to 9 months, running concurrently with E&D.

6. Little Lagoon Living Shoreline

Project Summary**.** The Little Lagoon Living Shoreline project aims to restore a minimum of 2,200 feet of shoreline of Little Lagoon, on Bon Secour National Wildlife Refuge (BSNWR), to the west of Gulf Shores, Alabama. Little Lagoon is a shallow body of brackish water, 10 miles long and 0.5 mile wide, and the targeted length of shoreline is actively eroding, threatening the adjacent Pine Beach Road. Construction of a living shoreline would protect habitat on adjacent federal land by buffering the shoreline against erosion. The project would include planning, implementation, and monitoring of a living shoreline project that uses natural materials rather than hardened structures or barriers, strategically placed to provide protective erosion control management to restore natural habitat, functions, and processes.

Project Implementation**.** The Little Lagoon Preservation Society, Friends of BSNWR, and BSNWR would collaborate on implementation. USDOI would contract a qualified professional with living shoreline expertise to evaluate, plan, and implement the project. Depth surveys and measurements for project design such as wave energy would be provided in a desk top analysis. In general, one or two rows of biodegradable coconut fiber "coir" logs may then be placed along the eroding shoreline to stabilize vegetation and attenuate wave action, and grass plantings (e.g., *Spartina alterniflora* or *Juncus roemerianus*) may be placed between the logs and the eroded shoreline to jump start a vegetated buffer. Native mussels may also be seeded among the shoreline grasses. The specific restoration activities would be finalized during the evaluation and planning process.

Project Timeline**.** Once the contract is awarded to a qualified professional, planning, permitting, and project implementation should occur within approximately 10 to 12 months. Following installation, the monitoring surveys would be performed quarterly for 3 years by BSNWR staff or other designated individuals to evaluate erosion and vegetation recovery.

7. Restoring the Night Sky – Assessment, Training, and Outreach (E&D)

Project Summary**.** Past lighting assessments and documented sea turtle disorientations along the Alabama coast suggest that anthropogenic light pollution negatively affects Alabama's natural resources. The long-term goal of the Restoring the Night Sky—Assessment, Training, and Outreach (E&D) project is to reduce the impacts of light pollution on federally managed lands that disorients nesting sea turtles and hatchlings, disrupting their reproductive activities and reducing their reproductive success. The project would produce an Alabama coast-wide analysis of the impacts of light pollution on federally managed lands and nearshore waters in Baldwin and Mobile counties in Alabama, helping to guide future work to mitigate this issue. Specifically, the project would help restore coastal habitats at BSNWR injured by the DWH oil spill by producing an inventory of artificial light sources that affect the refuge. This project has three primary objectives: (1) use remote sensing and NPS data products to identify locations that disproportionately contribute to light pollution on the Alabama coast; (2) produce a detailed strategy to mitigate the identified problematic lighting; and (3) work with local governments to improve their understanding and capacity to address lighting concerns in the future. The assessment would detail the most problematic locations across the Alabama coast with respect to impacts on coastal wildlife, evaluate the most cost-effective options to reduce light pollution in coastal Alabama, and describe the best options to elicit public participation in reducing light pollution. The project would also include pilot tests of alternative lighting systems to assess public and ecological responses to different lighting options.

***Project Implementation*.** The project would help support lighting workshops and training for city code enforcement and staff, homeowners, and condominium and hotel owners in Alabama's coastal cities that wish to participate. These workshops would ensure that the technical nature of assessing and improving lighting for sea turtles is well understood by those in local government who are tasked with addressing problematic lighting. Further assistance may include developing meaningful ordinance language and reasonable solutions to any conflicts created by lighting. Once funded, USDOI would implement the project through the NPS's Natural Sounds and Night Skies Division, which has experience working throughout the country on light pollution mitigation projects. Local assistance would be provided by USFWS. This project would be performed largely through face-to-face meetings and training, data collection in the field, and computer modeling.

***Project Timeline*.** The timeline for this project would be determined based on the availability of funding.

8. Toulmins Spring Branch Engineering and Design (E&D)

Project Summary. The Toulmins Spring Branch project would fund E&D for a variety of non-structural and structural best management practices (BMPs) that would reduce nutrients and pollutants into Toulmins Spring Branch, a creek that is listed as having impaired water quality on Alabama's 303(d) list. The project location is at the headwaters of Toulmins Spring Branch, within the Three Mile Creek watershed and directly south of the Bessemer Hope VI multi-family and mixed use development in the City of Prichard, Alabama. This E&D project is intended to fill this critical funding gap and clear the way for the actual project to be implemented.

Project Implementation. The project would include a watershed assessment and a conceptual plan for the entire length of Toulmins Spring Branch that details opportunities for erosion and sedimentation reduction, nutrient and pathogen reduction, and flooding and stormwater management. E&D would be performed for an approximately 6-acre park, a 1-acre created wetland, approximately 600 linear feet of bioswales, and riparian buffers on vacant, abandoned urban parcels in the headwaters of Toulmins Spring Branch. These structural BMPs would have the combined purpose of reducing the input of sediment, nutrients, and pollutants into the creek via stormwater runoff. Non-structural BMPs would include public outreach, community education and training, and litter clean-ups, with the goal of reducing inputs from litter and other avoidable water pollutants. As a secondary benefit, additional features such as trails, footbridges, gazebos, and public gathering areas can be incorporated to create valuable public recreational and community amenities and increase public awareness for Toulmins Spring Branch and its restoration.

Project Timeline. The proposed E&D work is estimated to be completed in approximately 6 months.

9. Fowl River Nutrient Reduction

Project Summary. The Fowl River Nutrient Reduction project seeks to improve water quality in the Fowl River watershed through improved land management practices that reduce nutrient and sediment runoff. The watershed encompasses 52,782 acres, draining much of southern Mobile County, and is a significant contributor of freshwater flow into Mobile Bay. Land uses in the watershed are 21 percent urban, 15 percent agricultural, 63 percent forested, and 1 percent water/wetlands. Increasing development and continuing erosion and sedimentation threaten water and habitat quality. Improved land management practices using existing USDA-NRCS conservation practice standards (CPS) and their specifications, would be the primary tool used to reduce erosion and nutrient inputs in the watershed. Examples of such measures would include erosion and sediment control practices such as cover crops, conservation tillage, and field borders. Although cattle production is not the primary agricultural industry in the watershed, livestock exclusion from stream, wetlands, and drainage ways would be a priority conservation measure.

Ecosystem services that are provided by conservation practices include reducing nitrogen, phosphorus, and sediment runoff, which would improve water quality and mitigate chronic ecosystem threats (e.g., hypoxia, harmful algal blooms, and impaired recreational use). Improved water quality in the Fowl River watershed would ultimately benefit all estuarine and marine resources of coastal Alabama.

Project Implementation. The project is organized into four phases for implementation: (1) conservation planning (including landowner outreach and education) and environmental evaluation, (2) conservation practice engineering and design, (3) conservation practice implementation, and (4) water quality monitoring. Technical assistance would be provided to landowners through the development of conservation plans for their lands, which would identify water quality resource concerns. Financial assistance could be provided to landowners to implement site-specific conservation practices to address the resource concerns on their property. USDA-NRCS would implement the project in the Fowl River watershed to improve water quality by implementing conservation practices to reduce nutrient and sediment runoff. USDA-NRCS and its conservation partners would help voluntarily participating landowners by developing conservation plans that identify natural resource concerns and conservation practices that landowners can implement to reduce nutrient and sediment runoff. The conservation planning and implementation would be completed for the purpose of addressing nutrient and sediment loading concerns, with the goal of making and observing a measurable impact.

Project Timeline. The project would be implemented over a 4-year period with the first year consisting primarily of landowner outreach and planning. Implementation of the conservation plans would begin in year 2 and continue through year 4. Baseline data collection through instream water quality monitoring would be initiated in the targeted watersheds in year 1. Water quality monitoring would be continued after most of the conservation practices are implemented. More than one of the four phase as described above can be conducted simultaneously. The project would last no more than 5 years.

10. Weeks Bay Nutrient Reduction

Project Summary. The Weeks Bay Nutrient Reduction project seeks to improve water quality in the Weeks Bay watershed through improved land management practices that reduce nutrient and sediment runoff. The watershed encompasses approximately 130,000 acres in southwest Baldwin County, which flows into Weeks Bay, a shallow sub-estuary of Mobile Bay.

The implementation of land management practices using existing USDA-NRCS CPS and specifications would be the primary tool used to reduce erosion and nutrient inputs in the watershed. Examples of such measures would include erosion and sediment control measures such as cover crops, conservation tillage, and field borders. Ecosystem services that are provided by conservation practices include reducing nitrogen, phosphorus, and sediment runoff, which would improve water quality and mitigate chronic ecosystem threats (e.g., hypoxia, harmful algal blooms, and impaired recreational use). Improved water quality in Weeks Bay watershed would ultimately benefit all estuarine and marine resources of coastal Alabama.

Project Implementation. The Weeks Bay Nutrient Reduction project would focus on the middle Fish River, lower Fish River, and Magnolia River. Conservation planning would be conducted in all three of these watersheds; however, conservation implementation would only occur in two of the watersheds. The watersheds selected for implementation would be based on conservation opportunities on high-priority lands as ascertained from conservation planning efforts, and the phases of project implementation would be the same as described above for the Fowl River Nutrient Reduction project. Technical assistance would be provided to landowners through the development of conservation plans for their lands, which would identify water quality resource concerns.

Project Timeline. The project would be implemented over a 4-year period with the first year consisting primarily of landowner outreach and planning. Implementation of the conservation plans and identified land management practices would begin in year 2 and continue through year 4. Baseline data collection through instream water quality monitoring would be initiated in the targeted watersheds in year 1. Water quality monitoring would be continued after most of the conservation practices are implemented. More than one of the four phase as described above can be conducted simultaneously. The project would last no longer than 5 years.

11. CAST Conservation Program

Project Summary. The Coastal Alabama Sea Turtle (CAST) Conservation Program project is designed to support existing sea turtle programs in Alabama to strengthen efforts to protect nesting sea turtles and enhance the survival of sea turtle hatchlings in Alabama. The proposed project would provide funding for the continued operation, expansion, and enhancement of the existing Share the Beach Sea Turtle Nest Monitoring Program (Share the Beach), which as of January 2018 is proposed to be managed by the Alabama Coastal Foundation (ACF). ACF is an organization dedicated to environmental stewardship, with considerable experience in program management; fundraising; and volunteer recruitment, training, and management. ACF's administration of the program would allow for better overall program management, including better management, analysis, and reporting of data collected under the program. Previously, this program had been managed by Friends of BSNWR.

The CAST Conservation Program would expand and enhance ACF's Share the Beach program by providing funds to guide the Share the Beach program in actions necessary to support sea turtle restoration in Alabama, such as maintaining and implementing protocols for sea turtle nest monitoring activities and reducing threats on nesting beaches. Under this project, additional staff experienced in sea turtle nest monitoring protocol would be hired to work with Share the Beach. This project would also help support a greater emphasis on public education, focused on minimizing anthropogenic threats to sea turtles outlined in the Northwest Atlantic Loggerhead Recovery Plan (NMFS, et al., 2008), such as artificial lighting and nesting obstacles and promoting the region's potential for ecotourism while avoiding disturbance to or manipulation of sea turtle nests and hatchlings. This project would bring Alabama's sea turtle conservation program to a level of capacity similar to other states in the region by funding two full-time biologists, four seasonal team leaders annually, two summer interns annually, and an administrative position , as well as staff training, data collection and management, program equipment, and public education, among other activities.

Project Implementation. Under this project, ACF would provide management of the Share the Beach program, and administrative activities would occur out of ACF's Mobile office. ACF would manage program administration; volunteer contact information; and all files, equipment, and materials necessary to successfully administer the Share the Beach program. This project would fund staff time, additional program equipment, education, and travel expenses. No infrastructure or other proposed improvements would be funded with these proposed project funds. As part of program management, all current permits would be maintained, and ACF employees and volunteers would be trained by personnel with sea turtle expertise in nesting survey protocols and data management, in collaboration with USFWS. ACF would work with USFWS on the permitting process to revise Alabama sea turtle nest monitoring permit and permit holders as needed. Under the administration of ACF, the Share the Beach program would be reviewed annually to evaluate its effectiveness, including: (1) lessons learned from previous year, (2) consulting new scientific information about sea turtles, and (3) collaboration with USFWS to review sea turtle data collection, monitoring, and handling protocols. Additional activities that would be continued and expanded include continual recruitment and engagement of volunteers, volunteer training, nest monitoring and related data collection, outreach and education to residents and tourists, and data management.

Project Timeline. Management of Share the Beach and expansion of the program would occur over a 3-year period.

12. CAST Triage

Project Summary. The purpose of this project is to provide a new, appropriately equipped facility and program for the initial triage, treatment, release, and/or transfer of injured or ill sea turtles. Currently, there are no facilities in Alabama equipped for handling sea turtle strandings. The project would construct a new facility on property owned by the City of Orange Beach and establish a program that would be supported by the City of Orange Beach in the future. This facility would complement and enhance the current Alabama Sea Turtle Stranding and Salvage Network (ALSTSSN). This facility and associated program would allow sea turtles injured in Alabama and proximity in adjacent states to be treated and released faster and with less stress on the animal from handling and transport. The expectation is that faster intervention, along with shorter periods of captivity and minimized handling, would improve the outcomes for injured or ill turtles by decreasing the time to receive treatment and providing a local resource to contact for citizens to report injured or distressed turtles. The program would also work to educate the public about (1) anthropogenic threats to sea turtles treated at the facility, (2) current science on how best to address the threats, and (3) conservation for sea turtles in the wild. Educational materials would be coordinated with Alabama's Share the Beach Sea Turtle Nest Monitoring Program to create a consistent and unified message.

Project Implementation. The site for this proposed facility is located in Orange Beach, Alabama, on city-owned property adjacent to Cotton Bayou. A large portion of the proposed site was previously a fire station. The building slab, some of the parking lot and other features still exist. The remaining areas have all been disturbed/filled/excavated for the construction of the adjacent water tower, power substation, and the roadway. The project would occupy 1 to 3 acres of land, upon which would be built a 40-foot by 60-foot, wind-rated, light commercial metal structure on a concrete slab be built. Construction would include the following elements: base building; site/utilities; water supply (bore); pumps/filtration; tanks (1 large and 2 medium, miscellaneous small); HVAC (entire building) office/storage area; perimeter fence; concrete drives/apron; walk-in cooler/freezer; and enclosed triage/necropsy area. The building would be insulated, climate controlled, and equipped with a full bath, office/storage area, and walk-in cooler/freezer units. The budget includes funds for a variety of tank sizes to accommodate the different species/sizes of marine turtles and one large enough for pre-release assessment (this can be changed to any number of configurations). Each tank would be accessed by an overhead hoist or mobile gantry and would include an elevating floor platform as is appropriate in a rehabilitation tank. The primary water source would be achieved through an underground bore into Cotton Bayou. The proposed project would likely place four pipes underneath the roadway between Cotton Bayou and the project site. Two pipes would be for intake and two for discharge (primary and secondary). The primary discharge pipe would be the first pipe used for discharge. The secondary discharge pipe would be in place as a backup. The pipes would likely be 3 to 4 inches in diameter depending upon the terms of the permit, and they would be bored (horizontally drilled) in place. The final location of the pipe and its point of exchange with Cotton Bayou would be determined during the permitting process and informed by the regulatory process.

Construction methods would include common construction practices consistent with the adopted International Building Codes for steel buildings and associated items such as electrical, mechanical, plumbing, and fire/life safety. The parking lot would be constructed of pervious material such as crushed concrete. Estimated parking for 10 to 12 vehicles is possible at the site. The facility would be connected to the public sewer system, and waste water would be discharged to the sanitary sewer via grinder pump. Associated infrastructure would require both a domestic and saltwater source (both are nearby, but the saltwater requires a bore); electrical service (nearby); sewer line tap and grinder pump (nearby and included); and broadband network access (achieved via point-to-point microwave shot to nearby service provider access point). Effluent from the tanks would be discharged into Cotton Bayou in accordance with all required permits. Required permits may include United States Army Corps of Engineers (USACE) Section 10 and Section 404 permits as well as water quality and coastal zone management consistency certifications from the Alabama Department of Environmental Management (ADEM). Any necessary building permits would be obtained in accordance with local, state, and federal laws. Other permits such as National Pollutant Discharge Elimination System permits would be obtained if required and necessary.

Project Timeline. Planning could take from 60 to 120 days. Construction would require approximately 90 days and would include completion of the necessary regulatory and compliance process. The facility would operate under the ALSTSSN permit and would always remain a sub-permittee on the ALSTSSN permit. Additionally, the facility would need its own permits based on the treatment being performed and length of captivity. These facility permits are not in place but would be applied for at the appropriate time relative to the project because facilities and other program requirements must be in place at the time of application.

13. CAST Habitat Usage and Population Dynamics

Project Summary. The CAST Habitat Usage and Population Dynamics project would study migration patterns, habitat usage, and distribution patterns of sea turtles of the Alabama Coast. The project proposes to sample in-water sea turtles to initiate a long-term monitoring program designed to determine distribution and habitat use, vital rates (including survival rates), connectivity, and potential impacts of anthropogenic activities for sea turtles in coastal and nearshore waters of Alabama. The project objective is to inform the AL TIG and other state and federal initiatives about the locations and types of activities that would provide the most cost-effective means of reducing threats to sea turtles and increasing their populations in coastal Alabama.

Using biological, genetic and stable isotope analyses researchers can explain links among and within populations that can identify human actions that disrupt important population connections and cause environmental threats. Genetic analysis allows researchers to identify the connectivity of turtles using Alabama waters to larger populations, such as determining from which nesting beaches juvenile turtles using Alabama waters originated. The project would also fund the collection of sea turtle movement data in and around the Alabama coast. Analyses of these data would be used to characterize where sea turtles are foraging, migration patterns, habitat use, and life history parameters for sea turtles using Alabama waters.

Project Implementation. The methods proposed for collecting these data include genetic analyses, stable isotope analyses, mark-recapture, and habitat modeling (including anthropogenic threats). The sea turtles would be captured by hand or using dip nets and tangle (set) nets at several sites along the Alabama coast, including inshore waters (i.e., Perdido Bay, Bon Secour Bay, Mobile Bay, and the Mississippi Sound) and the nearshore waters of the Gulf of Mexico. Gulf of Mexico Marine Assessment Program for Protected Species would serve as a pilot study for this project. Data from that work would help to locate prime capture locations in Alabama waters and identify the most effective capture methods. In addition, funds from these projects can be leveraged to provide a region-wide assessment of juvenile turtles using waters of the northern Gulf of Mexico. Data sharing would follow standard Natural Resource Damage Assessment (NRDA), Bureau of Ocean Energy Management, and United State Geological Survey (USGS) protocols. In addition to direct capture, researchers may obtain sea turtles for study that are legally captured during relocation trawling by the USACE hopper dredging operations. Morphometric data, including size and weight, would be gathered from all sampled turtles, and a visual health assessment would be conducted. Biological samples, including blood, skin, and scute, would be gathered from each individual.

It is estimated that 100 turtles could be captured per year, with a minimum of 40 samples per species needed for genetic and vital rates analysis. For mark-recapture analysis, a minimum of 5 years of captures is necessary.

Project Timeline. Investigators currently hold a current, 5-year, renewable National Marine Fisheries Service (NMFS) permit (#17304-03) that allows these activities; therefore, capture, marking, and sampling for this project could be initiated immediately upon receipt of funds. The project is funded for 3 years.

14. CAST Protection: Enhancement and Education

Project Summary. Enforcement of existing Federal, state and local regulations and ordinances is a crucial tool for reducing activities and behaviors that cause harm to sea turtles in state waters. This project would enhance state enforcement of federal regulations and increase turtle protections in Alabama state waters by: (1) increasing awareness and understanding of the Endangered Species Act (ESA) and applicable regulations through education of state enforcement officers; (2) increasing resources for state enforcement agencies to more proactively dedicate efforts toward ESA-related activities; (3) taking steps to reduce fisheries bycatch (i.e., fishery and social science surveys, purchasing and distributing turtle excluder devices for the skimmer trawl fishery); and (4) taking steps to reduce impacts on nesting turtles, such as nest vandalism and lighting harassment.

Project Implementation. NMFS, USFWS, and ADCNR would work collaboratively with Marine Resources Division (AMRD) law enforcement and federal offices of law enforcement to determine law enforcement training needs, how best to conduct consistent training, and to identify specific training and educational needs/products. A full-time AMRD biologist would be hired to implement several elements in this project (i.e., enforcement training sessions, public education and outreach, stakeholder collaboration). Training of AMRD enforcement officers would be conducted and outreach products would be distributed to the public. NOAA NMFS protected resources staff, USFWS, and AMRD biologists would also work together to identify and prioritize hot spot areas for potential ESA violations and those areas that need increased and consistent enforcement efforts. Resources and equipment necessary to increase and sustain enforcement activities in identified hot spot areas would be identified, and state enforcement increased/enhanced in areas of need to reduce associated harm from illegal activities. A communication pathway between the state and federal agencies and law enforcement would also be established to continuously reevaluate needs to ensure consistency in enforcement enhancement efforts.

Project Timeline. This project would begin as soon as funding becomes available and is proposed for 4 years. Increased state enforcement around sea turtle nesting beaches would occur throughout the duration of the project. Year 1 would be used to hire and train a biologist, to develop initial partnerships with local and federal stakeholders, and coordinate with skimmer trawl owners for Turtle Excluder Device (TED) installation. Social science and fisheries surveys would be contracted by the end of year 2, and the results would be used to inform the targeting of public outreach materials. Training of AMRD law enforcement officers on sea turtles would likely occur in the winter of years 2, 3, and 4, with the bulk of training in year 2 and supplemental training of newly hired officers provided in years 3 and 4. In year 3, nest sites would be remotely monitored with game and/or surveillance cameras, and in years 3 and 4, outreach plans would be developed and targeted outreach and education would be implemented.

15. Enhancing Capacity for the Alabama Marine Mammal Stranding Network

Project Summary. This project would enhance the capacity of the Alabama Marine Mammal Stranding Network (ALMMSN) by providing funding for staff time, equipment and supplies, and sample analyses. ALMMSN is operated out of the Dauphin Island Sea Lab (DISL) on Dauphin Island, Alabama. This project would allow ALMMSN to use and expand on its existing infrastructure for cetacean stranding response and communications and data management to enhance the ALMMSN's operations. Information on dead or stranded cetaceans is obtained by collecting basic stranding data (Level A) and performing necropsies; however, ALMMSN has limited capacity for live cetacean stranding response. In addition, ALMMSN has limited resources to conduct in-depth analysis of causes of illness and mortality in stranded cetaceans. The project would allow ALMMSN to better respond to live or dead stranded cetaceans, to necropsy animals, and to analyze samples collected from cetaceans stranded in Alabama waters to better understand the causes of marine mammal illness and death. It would also support increased data consistency for information collected from stranded marine mammals by supporting ALMMSN to enter its data into a regional marine mammal health database (known as GulfMAP, hosted by NOAA). The information collected by ALMMSN from stranded cetaceans should enable managers to mitigate impacts on marine mammals from natural and anthropogenic threats and to monitor population recovery post-DWH oil spill. Accordingly, this project is expected to provide a better understanding of the causes of illness/mortality through the early detection and intervention of anthropogenic and natural threats. Additionally the project is expected to increase the survival of rescued animals and recovery of populations affected by the DWH oil spill by improving marine mammal stranding response, data collection, data analyses, and reporting for Alabama waters. By enhancing mutual aid and collaboration to augment overall response capability of NOAA's Marine Mammal Health and Stranding Response Program, this project would also increase data consistency and the timeliness of data availability to managers of marine mammals to allow for rapid responses to emerging threats.

Project Implementation. This project would continue ALMMSN's current data collection efforts and expand them by providing more in-depth data analysis provided by the ALMMSN staff in collaboration with the NMFS Southeast Regional Office and Southeast Fisheries Science Center. This increased collaboration would build capacity in the region by training ALMMSN to improve live stranding responses in the future. ALMMSN would also maintain its current reporting, databases, publications, and necropsy reports, and increase the number of metadata records relative to cetaceans responded to, necropsies conducted, and samples processed, as well as its number of publications.

Project Timeline. This effort is currently funded by NFWF-GEBF through 2019. The proposed timing of this project is January 1, 2020, to January 1, 2023, which includes all activities under this program

16. Assessment of Alabama Estuarine Bottlenose Dolphin Populations and Health

Project Summary. This project is aimed at defining common bottlenose dolphin distribution, abundance, and population structure within Alabama state waters to assess the status of bottlenose dolphins using Alabama waters by collecting data on dolphin distribution, habitat use, mortality rates, and feeding habits. The project is a data collection effort to: (1) investigate stock structure across Mobile Bay, Perdido Bay, and nearshore Alabama waters and the seasonal (summer/winter) abundance, distribution, and habitat use of common bottlenose dolphins on the Alabama coast using capture-mark-recapture and photo-ID surveys; and (2) assess dolphin condition following the DWH oil spill using field observation and remote biopsy sampling, both of which would inform future restoration planning. This data collection effort would provide valuable resource-level monitoring for bottlenose dolphins, a largely unstudied top predator in Alabama waters, informing pre restoration baselines and providing more effective restoration planning and implementation.

Project Implementation. With additional training and support from NOAA NMFS Southeast Fisheries Science Center, DISL has in place the infrastructure and staff necessary to manage the project, including coordinating fieldwork with collaborators, performing sample processing and analyses, and submitting annual reports to ADCNR. Data would be comparable to and transferable to inform Gulf-wide conservation efforts. Four remote biopsy surveys of bottlenose dolphins would be conducted in Mobile Bay, Perdido Bay, and adjacent coastal waters defined as more than 2 kilometers from the shoreline to the 20 meter contour line to obtain adequate seasonal sample sizes for genetic analysis. Each season, the goal would be to collect 40 samples within both Mobile Bay and Perdido Bay and 25 samples in the adjacent coastal waters (i.e., a total of 260 samples). Each seasonal remote biopsy survey would be conducted during a 42 day window using one boat staffed with four scientists. This survey window includes an average of 2 days for each full survey day required. Dolphin tissue samples would be stored at DISL, and analyses would include: (1) genetic analysis for stock structure, sex determination, species confirmation, and morphotype determination; (2) stable isotope and fatty acid analyses for diet assessment; (3) contaminant and harmful algal bloom toxin detection; and (4) mtDNA integrity and bioenergetics efficiency analysis. All samples (~260) would be analyzed for genetic structure, ~200 samples would be analyzed for diet assessment, and ~50 percent of samples would be randomly selected for contaminant analyses, depending on the quantity of sample available to accommodate the multiple analyses proposed and selected to represent each sampling location and time relative to sex and age class of the sampled population. Twelve seasonal (two per site per year) photo-ID mark-recapture surveys of dolphins would also be conducted at sites in Perdido Bay and Mobile Bay following established protocols outlined in Rosel et al 2011. Abundance estimates for Mobile Bay and Perdido Bay would follow established methods for photo-ID mark-recapture surveys. Mobile Bay surveys would require two boats staffed with three scientists each. Photos would be collected using high-resolution digital photography of dorsal fin and flanks of each animal.

Project Timeline. This project has a 4-year timeline. As proposed, identifying survey routes and selection and staff training would occur during spring 2019. Photo-ID surveys would begin during summer 2019 and repeated during summers 2020 and 2021, as well as winters 2019–2020 and 2021–2022. Remote biopsy surveys would be performed during winter 2019–2020 and summer 2020 and 2021. Tissue and data analysis would begin after the first surveys are completed and continue through the duration of the study. Final reporting is expected by winter 2022.

17. Alabama Estuarine Bottlenose Dolphin Protection: Enhancement and Education

Project Summary. This project would reduce injury and mortality in Alabama estuarine bottlenose dolphins. This would be accomplished by: (1) increasing resources for ADCNR AMRD to dedicate toward MMPA-related activities and increasing patrol hours; and (2) increasing awareness and understanding of the MMPA through education to assist state enforcement efforts; (3) conducting social science studies (e.g. interviews, focus groups, etc.) to help (a) characterize the nature and extent of the illegal feeding of dolphins, vessel-based harassment, and interactions of dolphins with hook and line fishing gear in Alabama and (b) understand attitudes and perceptions of these user groups; (4) conducting systematic fishery surveys to help characterize the nature and extent of dolphin interactions with commercial fishing vessels and hook-and-line gear in Alabama, and (5) developing and implementing a comprehensive and targeted outreach plan based on the results of these social science studies and systematic fishery surveys. Enforcement is a crucial tool for reducing activities known to cause harm to marine mammals in state waters, and enhancing state enforcement would provide a key component to aid in reducing injury and mortality in Alabama estuarine bottlenose dolphins. NMFS and ADCNR would work collaboratively with AMRD law enforcement and NOAA Office of Law Enforcement to determine law enforcement training needs and how best to conduct consistent training and to identify specific training and educational needs/products. AMRD would hire a biologist to implement training of enforcement officers on the MMPA and public outreach topics related to marine mammals. The biologist would coordinate with the NMFS Office of Protected Resources to receive and stay up-to-date on issues and information related to marine mammal protection.

Resources and equipment necessary to increase and sustain state enforcement activities in hotspot areas would be identified, and state enforcement would be increased/enhanced in areas of need to reduce harm from illegal activities. A communication pathway between the state and federal agencies and law enforcement would be established to reevaluate needs on an ongoing basis to ensure consistency in enforcement enhancement efforts.

This project would also enhance public knowledge of marine mammal protection and the MMPA by contracting with a company who would conduct a social science survey, which would inform the creation of a well-informed, targeted education and outreach program for the Alabama coast. This program would inform the public and vessel operators about the harmful effects of illegal feeding and harassment of marine mammals in the Gulf of Mexico. Additionally, this project would contract with a company to conduct a fisheries survey to characterize dolphin interactions with commercial and recreational fisheries, which would also inform the education and outreach program. Educational components could include how commercial and recreational fisheries could help prevent these impacts within Alabama state waters. The biologist would oversee the contracting for the surveys and the implementation of the education and outreach program for coastal Alabama.

Project Implementation. AMRD would hire a full-time biologist to implement the elements in this project (i.e., enforcement training sessions, targeted public education and outreach, stakeholder collaboration) and to work on the CAST Protection: Enhancement and Education project (i.e., the position would be funded 50 percent from this project budget. See Section 2.6.4.5. This biologist would specifically focus on (1) characterizing dolphin interactions with commercial and recreational fishing vessels; (2) developing practices to reduce harmful and/or lethal impacts on dolphins from hook-and-line fishing related injuries, illegal feeding activities, and vessel-based ecotourism activities; (3) implementing a public outreach and education program based on the results of the social science and fisheries surveys; and (4) training AMRD enforcement personnel.

To develop the outreach and education program, the AMRD biologist, in coordination with NMFS, would specifically focus on contracting with a company(ies): (1) to conduct a systematic fisheries science survey to characterize dolphin interactions with commercial and recreational fisheries; and (2) to conduct social science studies (e.g. interviews, focus groups) to characterize the nature and extent of illegal feeding and harassment activities in Alabama state waters by user group. Conducting the fishery surveys and social science studies would help inform the identification, development, and implementation of ways to reduce harmful interactions with dolphins, including outreach and education.

Project Timeline. This project is proposed to support 4 years of implementation. Year 1 would be used to (1) hire and train a biologist, (2) develop initial partnerships with local and federal stakeholders, and (3) develop and print enforcement training materials. Training AMRD law enforcement officers on the MMPA and safe marine mammal viewing practices would likely occur in the winter of years 2, 3, and 4, with the bulk of training in year 2 and supplemental training provided in years 3 and 4, as updates to viewing practices are added, and as potentially new harmful fisheries and viewing interactions are discovered. The biologist would contract with a company (or companies) to conduct social science and systematic fisheries surveys in years 2-3. These surveys would inform the development of a targeted outreach program, which would be developed and implemented by the biologist in years 3 and 4. Additional MMPA-related patrols would be conducted throughout the project life.

18. Colonial Nesting Wading Bird Tracking and Habitat Use Assessment – Two Species

Project Summary. This project would initiate monitoring studies expected to inform and enhance future restoration planning for key colonial nesting wading bird species along the Alabama coast that were injured by the DWH oil spill. The goals of the monitoring are to better understand the extent to which declines in colonial nesting wader populations result from habitat limitations versus other potential causes such as increased prevalence of predators or human disturbance. The proposed study would (1) determine daily and seasonal movements among nesting colonies at three important breeding areas—Mississippi Sound, Gaillard Island, and Perdido Bay; (2) determine seasonal and annual home ranges for birds marked at sites identified above and document fidelity to specific nesting colonies, dispersal timing, and regional dispersal among known breeding colonies within the study area; (3) document average foraging distances, time away from nests, and important foraging areas within the study area; and (4) determine weekly and seasonal habitat use within the study area. This project alternative would sample only two species to provide information that is of comparable value in characterizing colonial wading bird movements, habitat use and survival. The project would include 30 satellite tags per species (120 total) and 50 VHF per species (100 total)

Project Implementation. This project proposes a telemetry tracking study of the movements of two wading bird species breeding along the Alabama coast. Target species include tricolored heron and either little blue heron or white ibis, based on additional recommendations from Trustee bird experts. The proposed 4-year study would employ a combination of satellite and VHF transmitters in conjunction with color leg-banding to generate the monitoring data to help elucidate limiting habitat components for these species.

***Project Timeline*.** Banding permits and state/federal scientific permits are required to capture, handle, and mark birds. Researchers would be required to supply applicable Institutional Animal Care and Use Committee permits before work begins. Satellite tags are custom built and would take approximately 3 months upon receipt of funds for tags to be acquired for deployment. Bird captures would begin the first breeding season after project funding and mobilization.

19. Oyster Cultch Relief and Reef Configuration

Project Summary. The AMRD is proposing to investigate the merits of deploying different types of cultch material in various configurations to facilitate positive settlement and growth of oysters on selected reef areas in Mobile Bay, Alabama, building on work they previously conducted with DISL. This project has three primary objectives: (1) determine if there are differences in oyster settlement, growth, and survival on reefs of differing levels of relief and/or orientation relative to currents, (2) determine optimum reef material relief needed to restore oyster density on specific reefs within historical reef areas in which hydrology parameters such as oxygen and salinity and oyster recruitment and survival are highly variable, and (3) estimate the cost/benefits of deploying cultch in certain configurations as opposed to traditional cultch broadcast methods. AMRD experts expect this alternative would provide useful insights into improving methods for locating cultch sites in coastal Alabama similar to other studies that have been conducted (Gregalis et al., 2008), selecting appropriate cultch materials, and constructing reefs with the most effective degree of relief.

Project Implementation. The construction phase of the project would include the deployment of oyster shell, limestone rock, and fossilized oyster shell in three experimental configurations including mounding, elongated furrows, and control plots using typical cultch broadcasting methods. Within the designated area(s), nine mounds, six furrows, and six control plots would be created. Control plots would be created using traditional cultch broadcast methods at 100 percent 1-inch bottom coverage in the vicinity of experimental plots. Control plots would cover approximately the same area as the experimental plots. Final project site selection, cultch height, and reef area would be determined by the results of pre-monitoring surveys. For the purposes of this project, two sites have been tentatively selected for pre-monitoring surveys, including a 36-acre reef approximately 1 mile north-northeast of the mouth of East Fowl River, and Denton Reef (70 acres), located approximately 3 miles southeast of the mouth of East Fowl River. Physical conditions would determine which type of plot would be used in each project site. For example, previous physical data indicate dissolved oxygen at the benthic (bottom) interface at Denton Reef is consistently hypoxic (low oxygen) or anoxic (no oxygen) and not conducive to oyster growth. Therefore, using mounds at Denton Reef could place spat in areas of more suitable dissolved oxygen by elevating the oysters in the water column where dissolved oxygen is higher. Using this proposed design, nine mounds (three cultch treatments at three different depths and with three different cultch types) would be created at Denton Reef. Three control plots would be established at this site. The control plots would use traditional oyster shell cultch and broadcast methods.

On the proposed site near the mouth of Fowl River, six furrow sites would be created to evaluate the effects of relief, reef material, and orientation relative to currents on settlement, growth, and survivorship.

Three control plots using traditional cultch shell deployed in traditional 1-inch bottom coverage would be established at this site.

Following the construction phase these mounds and furrows and control plots would be monitored for oyster settlement and growth annually for 3 years. Individual mound construction including total area and maximum height would depend on the depth of the bottom in which it is placed to ensure compliance with the USACE authorized minimum clearance requirement depth. The area of the base of each mound would be calculated to support reef material to attain the desired relief. Length, height, and orientation of each furrow would also depend on depth and direction of currents at study site. It is anticipated that the width of each furrow would be approximately 2 feet wide, although the actual width would depend on the cascading effect of material deployed to a specific maximum height. Furrows would be planted a minimum of 2 feet apart.

Project Timeline. Planning, pre-monitoring, and site selection are anticipated to take 3 months (January–March of project year). The invitation to bid and bid process is anticipated to take 1 month (March of project year). Construction is anticipated to take 1 month and conclude by May of the first year. Construction would include acquiring, transporting, and deploying cultch material on areas and in configurations as determined by AMRD staff. It is anticipated that those selected to do the work would transport cultch by push boat and barge to the site and deploy the material off the deck using skid steers, excavator shovels, or high pressure water hoses. High pressure water hoses may only be used to distribute shell onto control plots.

20. Side-scan Mapping of Mobile Bay Relic Oyster Reefs (E&D)

Project Summary. This project would use sonar technology to identify benthic areas of mid- to lower-Mobile Bay that are suitable to support cultch material for oyster reef restoration. Depending on the side-scan results, these areas could be used to reestablish oyster populations through initial efforts to seed reef areas with hatchery-raised, high-density oyster spat setting. The project would survey the current extent and conditions of the relic oyster reefs identified in the 1968 reef surveys contracted by AMRD and other water bottoms not surveyed. Approximately 8,847 acres of non-contiguous, state-owned water bottoms have been identified for side-scan mapping in mid- to lower Mobile Bay based on a survey of living and relic oyster reefs conducted in 1968. An additional 5,153 acres of oyster bottoms have been identified in upper Mobile Bay to quantify the location and extent of existing oyster resources that contribute to larval production and recruitment to lower Mobile Bay oyster reefs.

Project Implementation. Side-scanning activities may be performed by an entity with side-scan sonar capabilities, in addition to AMRD staff. To identify priority areas for side scanning and for contract specifications, grids comprising 2 kilometers by 2 kilometers would be superimposed on a map of historical oyster surveys within Mobile Bay. Side scanning and image processing would occur during the following 4 months. Once completed, AMRD staff would verify the data from random areas in mapped areas with high reflectance via hand dredge and pole to confirm the extent of bottom hardness and sediment burden. The gathered information would be used to prioritize areas for future oyster reef restoration.

Project Timeline. The surveys are expected to be completed within 1 year. Afterward, the next 4 months of the project would entail project planning and identification of target areas for side-scan mapping and contract development. Side scanning and image processing would occur during the next 4 months. The final 4 months would consist of ground-truthing mapped areas. The overall project would last approximately 2 years.

21. Oyster Hatchery at Claude Peteet Mariculture Center – High Spat Production with Study

Project Summary. The proposed project would construct an oyster hatchery at the existing Claude Peteet Mariculture Center in Gulf Shores and would provide operation and maintenance funding for the facility for a 4-year project period. Additionally the project would result in the deployment of cultch material, including spat on shell, to areas identified as suitable for oyster growth. The 45-acre Claude Peteet Mariculture Center complex is located on the north side of the Gulf Intracoastal Waterway. The oyster spat produced from this project would be used for oyster restoration projects in Mobile Bay, which has experienced reduced oyster production compared to the early 20th century. This project would use information gained from mapping relic oyster reefs identified in the late 1960s. Information from areas mapped with side-scan technology in previous efforts and as part of another proposed project in this Restoration Plan would be assessed to determine suitability (i.e., hardness of bottom, sediment burden) for spat deployment. Side-scan images would be produced of water bottoms in areas recognized as conditionally approved for oyster harvest, while other areas would be identified in conditionally restricted or restricted waters. Images would direct where spat deployment would occur during each year of operation. Spat produced in the proposed hatchery would be deployed to both areas as conditions allow. Cultch material could also be deployed as needed.

Additionally, a comprehensive oyster restoration plan would be developed for coastal Alabama and funded through this restoration plan. The purpose of the comprehensive oyster restoration plan is to develop a long-term strategy to develop and sustain stable and resilient oyster populations in coastal Alabama. The plan would characterize local oyster populations, including an understanding of larval transport and recruitment trends, as well as environmental factors that affect them. The plan would aim to restore oyster abundance and spawning stock to support a regional oyster larvae pool sufficient for healthy recruitment levels to subtidal and nearshore oyster reefs. The plan would analyze existing literature, pull together data from previous and ongoing projects (including side-scan sonar, larval transport studies, and habitat suitability index), develop overall restoration goals and priorities, and provide specific recommendations to meet overall restoration goals and objectives.

Project Implementation. The proposed project would create an oyster hatchery at the existing Claude Peteet Mariculture Center in Gulf Shores and provide operation and maintenance funding for the facility for 4-year project period. A new greenhouse building is proposed for protecting the oyster hatchery tanks and equipment. The greenhouse would be approximately 60 X 96 feet (5,750 ft3) and constructed with sidewalls, ventilation, and mechanical devices to maintain temperature within the structure. The proposed greenhouse structure would have two bays (adjoining rooms) and would replace two of four existing greenhouses of the same dimensions. The proposed greenhouse would be on the footprint of the existing structure. As part of this proposed hatchery project, broodstock holding and spawning tanks and larvae settlement tanks, water chillers/heaters, pumps, air blowers, and filtration systems would be purchased and installed within or adjacent to the new greenhouse.

Additionally, an existing concrete pad at the AMRD office on Dauphin Island would be expanded to approximately 70 x 25 feet, and a roof structure would be constructed over the pad. The covered pad would contain a total of four settlement tanks (three existing, one new), to which water would be supplied from Little Dauphin Island Bay. The concrete pad is approximately 60 feet from the water source.

<u>Oyster Culture</u>: The project would entail acquisition of wild oyster broodstock from local waters and maintaining that broodstock in existing ponds at the Claude Peteet Mariculture Center. Before spring spawning, oyster broodstock would be gathered from the ponds and held in tank systems (within the newly constructed hatchery which is described below) where the temperatures would be held at levels to prevent spawning but maintain adult oysters in pre-spawning ripe condition. As needed, small batches of oysters would be retrieved from the holding tanks and induced to spawn in smaller temperature-controlled systems. Released eggs and sperm would be combined to produce fertilized larvae, which would be

moved into culture systems and fed daily rations of paste algae. These larvae would remain in the culture system for approximately 14 to 20 days until they develop into pediveligers (footed larvae). Once the larvae have reached the pediveliger state, they would be transferred to setting tanks where they would be given approximately 10 to 14 days to set on the provided substrate. During the setting period, spat would be fed live algae sourced naturally from brackish water sources. After the setting period, the cultch material and spat would be removed from the tanks and placed on a contracted barge for transport to suitable areas in Mobile Bay and Mississippi Sound identified by AMRD staff.

<u>Hatchery Infrastructure</u>: The proposed hatchery would install a static water culture system. This static water culture system consists of broodstock holding and spawning tanks, larvae settlement tanks, water chillers/heaters, pumps, air blowers, and filtration systems. Once the static water culture system is installed, the proposed oyster hatchery is anticipated to produce up to approximately 65 million 10-day-old spat (24-day-old oysters) each year.

In addition to the oyster culture facility at the Claude Peteet Mariculture Center, an additional settlement tank and a simple structure to cover existing and proposed additional settlement tanks, are proposed at the AMRD office on Dauphin Island. The current 50 x 20-foot concrete pad would be expanded to 70 x 25 feet, and a simple roof structure would be constructed to cover the 70 x 25-foot structure and protect the settlement tanks. Currently, three settlement tanks are in place at the existing concrete pad. The dimensions of each tank are 30 feet long x 4 feet high x 3 feet wide. The volume is approximately 2,693 gallons. Each settlement tank holds 20 cultch cages. Each cultch cage holds 0.38 cubic yard of cultch. The existing water intake and effluent pipes would likely be reconfigured to accommodate the additional tank.

Project Timeline. Within the first few months of the project, AMRD would hire one full-time biologist to oversee purchasing of equipment and installation of tanks, pumps, and the heater/chiller. Three biologist aides would be hired within 6 months of the project start to assist with hatchery infrastructure installation and spawning, larvae, and spat production. During years 2–4, a biologist aide within existing AMRD biological staff would be used during the summer to assist with oyster spat care and deployment. In addition, a portion of the operating budget would be set aside to pay for electricity, maintenance, replacement of equipment, and algae paste for larval culture.

Design and construction of the proposed additional supplement tank and simple structure to cover existing and proposed settlement tanks would likely take 6 months and occur during the first winter (non-spawning season) the project is funded.

Contracts would be developed during the first 3 months of the project for the greenhouse structure at the Claude Peteet Mariculture Center and barge transport of spat. The greenhouse is anticipated to be installed within 6 months (June assuming a January start date) and barge contracting would be completed within 8 months (August) of the start of the project. The tanks, heater chillers, and filtration would be purchased during the first 6 months and installed 3 months after the installation of the greenhouse. Oyster broodstock would be acquired in months 9 to 12 (September–December), and the first spawning cycle would begin around the fourth month (April) of years 2 through 4. The barge would be contracted for deployment to occur 4 days per month or 20 days per season during years 2 through 4.

The comprehensive oyster restoration plan would be developed within the first year after project funding.

22. Oyster Grow-Out and Restoration Reef Placement

Project Summary. This project would establish up to three protected oyster gardening grow-out areas located in Grand Bay, Portersville Bay, and Bon Secour Bay, and use these adult sized oysters for restoration reef placement. The project, to be conducted and managed by the Alabama Cooperative Extension System in coordination with its other oyster gardening activities, would grow out oysters to at least 1 year old, place these oysters on existing reef sites, including existing complementary living shoreline sites in Mobile Bay and Mississippi Sound as well as cultched sites, and identify and prioritize future restoration reef locations (including nearshore living shorelines and intertidal reefs). Additionally, the project would include monitoring the success in terms of oyster survival and reproduction of both the grow-out areas and restoration sites to determine effective techniques to increase the sustainability of oyster populations in Alabama. This project would build on other efforts such as ACF's Oyster Shell Recycling Program and the Mobile Bay Oyster Gardening effort, which recently received approval to expand into Little Lagoon. It would also build on a recently completed NFWF-funded project that demonstrated successful plantings and subsequent spawning of advanced stock-sized oysters in Mobile Bay and Mississippi Sound can potentially reduce aggressive predation by oyster drills.

Project Implementation. Once the necessary permits are obtained, 12 to 20 pilings (12-inches diameter) would be pushed into the sediment, or if necessary, installed with a vibratory hammer. A wire or rope would connect the pilings, to which oyster baskets (cages) would be attached at regular intervals and hang, suspended in the water column. A single layer of oysters would be placed on the bottom of each oyster basket. Each site would occupy approximately 0.5 acre. The targeted volume of each grow-out site is 20,000–25,000 oysters using the Oyster Gardening program only, or 48,000–50,000 oysters per site when supplemented from the Auburn University Shellfish Lab hatchery.

Periodic maintenance may be necessary following severe weather events or other situations that would disturb the grow-out sites. If the structures were disturbed, they would need to be repaired and/or reinstalled. Further, the grow-out sites would be adaptively managed over time to retrofit the structures with the most effective predator controls.

Oysters would be grown at the selected grow-out sites for 1 year within suspended oyster baskets that would be installed on pilings. Each of the grow-out sites are on privately leased riparian areas and would be managed by the Auburn University Marine Extension and Research Center. Then, the cultch, live oysters, and spat on shell, would be transferred via boat from the grow-out sites to reefs, living shorelines, and intertidal areas that are located in waters classified as Conditionally Approved for oyster harvesting by the Alabama Department of Public Health: Seafood Division. The Alabama Cooperative Extension System would work with the AL TIG, AMRD, and other restoration practitioners to determine the need for additional locations for other oyster gardening program grow-out sites. If additional sites were needed, they would be identified in Mobile Bay, Bon Secour Bay, Mississippi Sound, and Perdido Bay.

Project Timeline. Planning and permitting is expected to take approximately 8 to 12 months. Installation and setup of the grow-out sites is expected to take approximately 6 months. Oysters would be grown at the selected grow-out sites for 1 year. Monitoring would be conducted for the duration of the project (approximately 5 years).

Summary of Coastal Zone Management Consistency Review for Proposed Projects:

The AL TIG's view of the principal enforceable policies of the ACAMP that are potentially applicable to the projects proposed in the RP II/EA and the basis of our determination of consistency with these policies is reflected in the following summaries:

1. Magnolia River Land Acquisition (Holmes Tract)

335-8-2-.01 General Rules Applicable to all Uses Subject to the ACAMP

Pursuant to Ala. Admin. Code r. 335-8-2-.01 (1), all uses subject to the ACAMP that are in violation with applicable state air and water quality standards shall not be permitted or certified to be in compliance with the ACAMP. Acquisition of the parcel would not violate any state air quality standards. The project would result in long-term beneficial impacts to water quality by preventing future development of the site.

Pursuant to Ala. Admin. Code r. 335-8-2-.01(2), uses subject to the ACAMP shall not have an adverse impact on historical, cultural or archeological resources, on wildlife and fisheries habitats (especially the critical habitat of endangered species listed pursuant to 16 U.S.C. §§ 1531-1543), or on public access to tidal and submerged lands, navigable waters, beaches and other public recreational resources. The project would not adversely affect these resources and would have long-term beneficial impacts on wildlife and fisheries habitats by preventing development and restoring native vegetation and habitats on the parcel.

Provisions of ACAMP Considered Inapplicable to the Magnolia River Land Acquisition (Holmes Tract) Project

The following additional elements of the ACAMP were considered but, based on our review, did not appear to be applicable to the Magnolia River Land Acquisition (Holmes Tract) project:

335-8-2-.02 Dredging and/or Filling
335-8-2-.03 Mitigation
335-8-2-.04 Marinas
335-8-2-.05 Piers, Docks, Boathouses, and Other Pile Supported Structures
335-8-2-.06 Shoreline Stabilization and Erosion Mitigation
335-8-2-.07 Canals, Ditches and Boatslips
335-8-2-.08 Construction and Other Activities on Gulf Beaches and Dunes
335-8-2-.09 Groundwater Extraction
335-8-2-.10 Siting, Construction and Operation of Energy Facilities
335-8-2-.11 Commercial and Residential Development
335-8-2-.12 Discharges to Coastal Waters (greater than 1 million gallons per day)

2. Weeks Bay Land Acquisition (East Gateway Tract)

335-8-2-.01 General Rules Applicable to all Uses Subject to the ACAMP

Pursuant to Ala. Admin. Code r. 335-8-2-.01 (1), all uses subject to the ACAMP that are in violation with applicable state air and water quality standards shall not be permitted or certified to be in compliance with the ACAMP. Acquisition of the parcel would not violate any state air quality standards. The project would result in long-term beneficial impacts to water quality by preventing future development of the site.

Pursuant to Ala. Admin. Code r. 335-8-2-.01(2), uses subject to the ACAMP shall not have an adverse impact on historical, cultural or archeological resources, on wildlife and fisheries habitats (especially the critical habitat of endangered species listed pursuant to 16 U.S.C. §§ 1531-1543), or on public access to tidal and submerged lands, navigable waters, beaches and other public recreational resources. The project would not adversely affect these resources and would have long-term beneficial impacts on wildlife and fisheries habitats by preventing development restoring native vegetation and habitats on the parcel.

Provisions of ACAMP Considered Inapplicable to the Weeks Bay Land Acquisition (East Gateway Tract) Project

The following additional elements of the ACAMP were considered but, based on our review, did not appear to be applicable to the Weeks Bay Land Acquisition (East Gateway Tract) project:

335-8-2-.02 Dredging and/or Filling
335-8-2-.03 Mitigation
335-8-2-.04 Marinas
335-8-2-.05 Piers, Docks, Boathouses, and Other Pile Supported Structures
335-8-2-.06 Shoreline Stabilization and Erosion Mitigation
335-8-2-.07 Canals, Ditches and Boatslips
335-8-2-.08 Construction and Other Activities on Gulf Beaches and Dunes
335-8-2-.09 Groundwater Extraction
335-8-2-.10 Siting, Construction and Operation of Energy Facilities
335-8-2-.11 Commercial and Residential Development
335-8-2-.12 Discharges to Coastal Waters (greater than 1 million gallons per day)

3. Weeks Bay Land Acquisition (Harrod Tract)

335-8-2-.01 General Rules Applicable to all Uses Subject to the ACAMP

Pursuant to Ala. Admin. Code r. 335-8-2-.01 (1), all uses subject to the ACAMP that are in violation with applicable state air and water quality standards shall not be permitted or certified to be in compliance with the ACAMP. Acquisition of the parcel would not violate any state air quality standards. The project would result in long-term beneficial impacts to water quality by preventing future development of the site.

Pursuant to Ala. Admin. Code r. 335-8-2-.01(2), uses subject to the ACAMP shall not have an adverse impact on historical, cultural or archeological resources, on wildlife and fisheries habitats (especially the critical habitat of endangered species listed pursuant to 16 U.S.C. §§ 1531-1543), or on public access to tidal and submerged lands, navigable waters, beaches and other public recreational resources. The project would not adversely affect these resources and would have long-term beneficial impacts on wildlife and fisheries habitats by preventing development restoring native vegetation and habitats on the parcel.

Provisions of ACAMP Considered Inapplicable to the Weeks Bay Land Acquisition (Harrod Tract) Project

The following additional elements of the ACAMP were considered but, based on our review, did not appear to be applicable to the Weeks Bay Land Acquisition (Harrod Tract) project:

335-8-2-.02 Dredging and/or Filling
335-8-2-.03 Mitigation
335-8-2-.04 Marinas
335-8-2-.05 Piers, Docks, Boathouses, and Other Pile Supported Structures
335-8-2-.06 Shoreline Stabilization and Erosion Mitigation
335-8-2-.07 Canals, Ditches and Boatslips
335-8-2-.08 Construction and Other Activities on Gulf Beaches and Dunes
335-8-2-.09 Groundwater Extraction
335-8-2-.10 Siting, Construction and Operation of Energy Facilities
335-8-2-.11 Commercial and Residential Development
335-8-2-.12 Discharges to Coastal Waters (greater than 1 million gallons per day)

4. Lower Perdido Islands Restoration Phase I (E&D)

335-8-2-.01 General Rules Applicable to all Uses Subject to the ACAMP

Pursuant to Ala. Admin. Code r. 335-8-2-.01 (1), all uses subject to the ACAMP that are in violation with applicable state air and water quality standards shall not be permitted or certified to be in compliance with the ACAMP. The project would not violate any state air and water quality standards because only engineering and design activities are proposed at this time.

Pursuant to Ala. Admin. Code r. 335-8-2-.01(2), uses subject to the ACAMP shall not have an adverse impact on historical, cultural or archeological resources, on wildlife and fisheries habitats (especially the critical habitat of endangered species listed pursuant to 16 U.S.C. §§ 1531-1543), or on public access to tidal and submerged lands, navigable waters, beaches and other public recreational resources. The project would not adversely affect these resources and would result in short- and long-term beneficial impacts to wildlife habitats during the interim by installing signage alerting visitors to nesting bird habitat and planting trees to enhance bird nesting habitat.

Provisions of ACAMP Considered Inapplicable to the Lower Perdido Islands Restoration Phase I (E&D) Project

The following additional elements of the ACAMP were considered but, based on our review, did not appear to be applicable to the Lower Perdido Islands Restoration Phase I (E&D) project:

335-8-2-.02 Dredging and/or Filling
335-8-2-.03 Mitigation
335-8-2-.04 Marinas
335-8-2-.05 Piers, Docks, Boathouses, and Other Pile Supported Structures
335-8-2-.06 Shoreline Stabilization and Erosion Mitigation
335-8-2-.07 Canals, Ditches and Boatslips
335-8-2-.08 Construction and Other Activities on Gulf Beaches and Dunes
335-8-2-.09 Groundwater Extraction
335-8-2-.10 Siting, Construction and Operation of Energy Facilities
335-8-2-.11 Commercial and Residential Development
335-8-2-.12 Discharges to Coastal Waters (greater than 1 million gallons per day)

5. Southwestern Coffee Island Habitat Restoration Project-Phase I (E&D)

335-8-2-.01 General Rules Applicable to all Uses Subject to the ACAMP

Pursuant to Ala. Admin. Code r. 335-8-2-.01 (1), all uses subject to the ACAMP that are in violation with applicable state air and water quality standards shall not be permitted or certified to be in compliance with the ACAMP. The project would not violate any state air and water quality standards because only engineering and design activities are proposed at this time.

Pursuant to Ala. Admin. Code r. 335-8-2-.01(2), uses subject to the ACAMP shall not have an adverse impact on historical, cultural or archeological resources, on wildlife and fisheries habitats (especially the critical habitat of endangered species listed pursuant to 16 U.S.C. §§ 1531-1543), or on public access to tidal and submerged lands, navigable waters, beaches and other public recreational resources. The project would not adversely affect these resources and may result in long-term beneficial impacts to wildlife habitat because data collected from the study are expected to provide useful insights that would allow the TIG to more effectively target future active restoration measures designed to benefit colonial nesting birds in Alabama.

Provisions of ACAMP Considered Inapplicable to the Southwestern Coffee Island Habitat Restoration Project- Phase I Project

The following additional elements of the ACAMP were considered but, based on our review, did not appear to be applicable to the Southwestern Coffee Island Habitat Restoration Project- Phase I project:

335-8-2-.02 Dredging and/or Filling
335-8-2-.03 Mitigation
335-8-2-.04 Marinas
335-8-2-.05 Piers, Docks, Boathouses, and Other Pile Supported Structures
335-8-2-.06 Shoreline Stabilization and Erosion Mitigation
335-8-2-.07 Canals, Ditches and Boatslips
335-8-2-.08 Construction and Other Activities on Gulf Beaches and Dunes
335-8-2-.09 Groundwater Extraction
335-8-2-.10 Siting, Construction and Operation of Energy Facilities
335-8-2-.11 Commercial and Residential Development
335-8-2-.12 Discharges to Coastal Waters (greater than 1 million gallons per day)

6. Little Lagoon Living Shoreline

335-8-2-.01 General Rules Applicable to all Uses Subject to the ACAMP

Pursuant to Ala. Admin. Code r. 335-8-2-.01 (1), all uses subject to the ACAMP that are in violation with applicable state air and water quality standards shall not be permitted or certified to be in compliance with the ACAMP. The use of criteria pollutant generating equipment, such as boats and motor vehicles during project implementation, would result in temporary adverse impacts on air quality, but these impacts would be negligible and would not violate any state air quality standards. Similarly, the project would cause short term adverse impacts to water quality resulting from increased turbidity during placement of coco coir logs and shoreline vegetation planting. However, any effects to water quality would be temporary and would not violate state water quality standards.

Pursuant to Ala. Admin. Code r. 335-8-2-.01(2), uses subject to the ACAMP shall not have an adverse impact on historical, cultural or archeological resources, on wildlife and fisheries habitats (especially the critical habitat of endangered species listed pursuant to 16 U.S.C. §§ 1531-1543), or on public access to tidal and submerged lands, navigable waters, beaches and other public recreational resources. The project would result in temporary adverse impacts on previously impacted shoreline and estuarine habitat due to noise, increased human traffic and other temporary disturbances. Following construction, long-term impacts on habitat resulting from the project would be beneficial and would include stabilization of at least 2,200 feet of shoreline along Little Lagoon. Best Management Practices (BMPs) would be implemented to ensure that adverse impacts to wildlife and protected species are avoided or minimized. The AL TIG is currently in consultation with the Alabama State Historic Preservation Office (SHPO) to ensure that impacts to any cultural or archeological resources that may be present in the project area are avoided.

335-8-2-.06 Shoreline Stabilization and Erosion Mitigation

Pursuant to Ala. Admin. Code r. 335-8-2-.06 (1), bulkheads, the placement of rip-rap, and other structural shoreline armament shall not adversely affect hydrology or function of wetlands or submerged aquatic vegetation beds. Although the project would result in result in temporary adverse impacts to wetlands due to increased turbidity and other disturbances during project implementation, the project is expected to result in long-term beneficial impacts to wetlands by reducing erosion, restoring natural hydrological processes, and enhancing shoreline vegetation. No filling of wetlands would occur.

Pursuant to Ala. Admin. Code r. 335-8-2-.06 (2), jetties, groins, breakwaters and like structures must protect an existing navigational channel or a use of regional benefit, and must not result in significant impacts to adjacent shorelines. The project would implement living shoreline techniques that use natural materials rather than hardened structures or barriers, strategically placed to provide protective erosion control management to restore natural habitat, functions, and processes.

Provisions of ACAMP Considered Inapplicable to the Little Lagoon Living Shoreline Project

The following additional elements of the ACAMP were considered but, based on our review, did not appear to be applicable to the Little Lagoon Living Shoreline project:

335-8-2-.02 Dredging and/or Filling
335-8-2-.03 Mitigation
335-8-2-.04 Marinas
335-8-2-.05 Piers, Docks, Boathouses, and Other Pile Supported Structures
335-8-2-.07 Canals, Ditches and Boatslips
335-8-2-.08 Construction and Other Activities on Gulf Beaches and Dunes
335-8-2-.09 Groundwater Extraction
335-8-2-.10 Siting, Construction and Operation of Energy Facilities
335-8-2-.11 Commercial and Residential Development
335-8-2-.12 Discharges to Coastal Waters (greater than 1 million gallons per day)

7. Restoring the Night Sky – Assessment, Training, and Outreach (E&D)

335-8-2-.01 General Rules Applicable to all Uses Subject to the ACAMP

Pursuant to Ala. Admin. Code r. 335-8-2-.01 (1), all uses subject to the ACAMP that are in violation with applicable state air and water quality standards shall not be permitted or certified to be in compliance with the ACAMP. The project would not violate any state air and water quality standards because it focuses on reducing light pollution on Alabama's sea turtle nesting beaches and does not include in-water work or the use of motorized equipment.

Pursuant to Ala. Admin. Code r. 335-8-2-.01(2), uses subject to the ACAMP shall not have an adverse impact on historical, cultural or archeological resources, on wildlife and fisheries habitats (especially the critical habitat of endangered species listed pursuant to 16 U.S.C. §§ 1531-1543), or on public access to tidal and submerged lands, navigable waters, beaches and other public recreational resources. The project would not adversely affect these resources and would have long-term beneficial impacts on loggerhead sea turtle critical nesting habitat on Alabama beaches by reducing light pollution, which can disorient nesting turtles and hatchlings.

Provisions of ACAMP Considered Inapplicable to the Restoring the Night Sky – Assessment, Training, and Outreach (E&D) Project

The following additional elements of the ACAMP were considered but, based on our review, did not appear to be applicable to the Restoring the Night Sky – Assessment, Training, and Outreach (E&D) project:

335-8-2-.02 Dredging and/or Filling
335-8-2-.03 Mitigation
335-8-2-.04 Marinas
335-8-2-.05 Piers, Docks, Boathouses, and Other Pile Supported Structures
335-8-2-.06 Shoreline Stabilization and Erosion Mitigation
335-8-2-.07 Canals, Ditches and Boatslips
335-8-2-.08 Construction and Other Activities on Gulf Beaches and Dunes

335-8-2-.09 Groundwater Extraction
335-8-2-.10 Siting, Construction and Operation of Energy Facilities
335-8-2-.11 Commercial and Residential Development
335-8-2-.12 Discharges to Coastal Waters (greater than 1 million gallons per day)

8. Toulmins Spring Branch Engineering and Design (E&D)

335-8-2-.01 General Rules Applicable to all Uses Subject to the ACAMP

Pursuant to Ala. Admin. Code r. 335-8-2-.01 (1), all uses subject to the ACAMP that are in violation with applicable state air and water quality standards shall not be permitted or certified to be in compliance with the ACAMP. The project would not violate any state air and water quality standards because only engineering and design activities are proposed at this time. The project is anticipated to result in long-term beneficial impacts to water quality because it would develop BMPs that would reduce nutrients and pollutants into Toulmins Spring.

Pursuant to Ala. Admin. Code r. 335-8-2-.01(2), uses subject to the ACAMP shall not have an adverse impact on historical, cultural or archeological resources, on wildlife and fisheries habitats (especially the critical habitat of endangered species listed pursuant to 16 U.S.C. §§ 1531-1543), or on public access to tidal and submerged lands, navigable waters, beaches and other public recreational resources. The project would not adversely affect these resources because only engineering and design activities are proposed at this time.

Provisions of ACAMP Considered Inapplicable to the Toulmins Spring Branch Engineering and Design Project

The following additional elements of the ACAMP were considered but, based on our review, did not appear to be applicable to the Toulmins Spring Branch Engineering and Design project:

335-8-2-.02 Dredging and/or Filling
335-8-2-.03 Mitigation
335-8-2-.04 Marinas
335-8-2-.05 Piers, Docks, Boathouses, and Other Pile Supported Structures
335-8-2-.06 Shoreline Stabilization and Erosion Mitigation
335-8-2-.07 Canals, Ditches and Boatslips
335-8-2-.08 Construction and Other Activities on Gulf Beaches and Dunes
335-8-2-.09 Groundwater Extraction
335-8-2-.10 Siting, Construction and Operation of Energy Facilities
335-8-2-.11 Commercial and Residential Development
335-8-2-.12 Discharges to Coastal Waters (greater than 1 million gallons per day)

9. Fowl River Nutrient Reduction

335-8-2-.01 General Rules Applicable to all Uses Subject to the ACAMP

Pursuant to Ala. Admin. Code r. 335-8-2-.01 (1), all uses subject to the ACAMP that are in violation with applicable state air and water quality standards shall not be permitted or certified to be in compliance with the ACAMP. The Fowl River Nutrient Reduction project would not violate any state air or water quality standards. The project would result in long-term beneficial impacts due to water quality in the Fowl River watershed through improved land management practices that reduce nutrient and sediment runoff.

Pursuant to Ala. Admin. Code r. 335-8-2-.01(2), uses subject to the ACAMP shall not have an adverse impact on historical, cultural or archeological resources, on wildlife and fisheries habitats (especially the critical habitat of endangered species listed pursuant to 16 U.S.C. §§ 1531-1543), or on public access to tidal and submerged lands, navigable waters, beaches and other public recreational resources. The project would not adversely affect these resources and would have long-term beneficial impacts on fisheries habitats due to reduced nutrient inputs, which are expected to improved water quality in the Fowl River watershed.

Provisions of ACAMP Considered Inapplicable to the Fowl River Nutrient Reduction Project

The following additional elements of the ACAMP were considered but, based on our review, did not appear to be applicable to the Fowl River Nutrient Reduction project:

335-8-2-.02 Dredging and/or Filling
335-8-2-.03 Mitigation
335-8-2-.04 Marinas
335-8-2-.05 Piers, Docks, Boathouses, and Other Pile Supported Structures
335-8-2-.06 Shoreline Stabilization and Erosion Mitigation
335-8-2-.07 Canals, Ditches and Boatslips
335-8-2-.08 Construction and Other Activities on Gulf Beaches and Dunes
335-8-2-.09 Groundwater Extraction
335-8-2-.10 Siting, Construction and Operation of Energy Facilities
335-8-2-.11 Commercial and Residential Development
335-8-2-.12 Discharges to Coastal Waters (greater than 1 million gallons per day)

10. Weeks Bay Nutrient Reduction

335-8-2-.01 General Rules Applicable to all Uses Subject to the ACAMP

Pursuant to Ala. Admin. Code r. 335-8-2-.01 (1), all uses subject to the ACAMP that are in violation with applicable state air and water quality standards shall not be permitted or certified to be in compliance with the ACAMP. The Weeks Bay Nutrient Reduction project would not violate any state air or water quality standards. The project would result in long-term beneficial impacts due to water quality in the Weeks Bay watershed through improved land management practices that reduce nutrient and sediment runoff.

Pursuant to Ala. Admin. Code r. 335-8-2-.01(2), uses subject to the ACAMP shall not have an adverse impact on historical, cultural or archeological resources, on wildlife and fisheries habitats (especially the critical habitat of endangered species listed pursuant to 16 U.S.C. §§ 1531-1543), or on public access to tidal and submerged lands, navigable waters, beaches and other public recreational resources. The project would not adversely affect these resources and would have long-term beneficial impacts on fisheries habitats due to reduced nutrient inputs, which are expected to improved water quality in the Weeks Bay watershed.

Provisions of ACAMP Considered Inapplicable to the Weeks Bay Nutrient Reduction Project

The following additional elements of the ACAMP were considered but, based on our review, did not appear to be applicable to the Weeks Bay Nutrient Reduction project:

335-8-2-.02 Dredging and/or Filling
335-8-2-.03 Mitigation
335-8-2-.04 Marinas
335-8-2-.05 Piers, Docks, Boathouses, and Other Pile Supported Structures
335-8-2-.06 Shoreline Stabilization and Erosion Mitigation
335-8-2-.07 Canals, Ditches and Boatslips
335-8-2-.08 Construction and Other Activities on Gulf Beaches and Dunes
335-8-2-.09 Groundwater Extraction

335-8-2-.10 Siting, Construction and Operation of Energy Facilities
335-8-2-.11 Commercial and Residential Development
335-8-2-.12 Discharges to Coastal Waters (greater than 1 million gallons per day)

11. CAST Conservation Program

335-8-2-.01 General Rules Applicable to all Uses Subject to the ACAMP

Pursuant to Ala. Admin. Code r. 335-8-2-.01 (1), all uses subject to the ACAMP that are in violation with applicable state air and water quality standards shall not be permitted or certified to be in compliance with the ACAMP. The project would not violate any state air or water quality standards because it consists of the continuation and expansion of Alabama's existing sea turtle conservation program.

Pursuant to Ala. Admin. Code r. 335-8-2-.01(2), uses subject to the ACAMP shall not have an adverse impact on historical, cultural or archeological resources, on wildlife and fisheries habitats (especially the critical habitat of endangered species listed pursuant to 16 U.S.C. §§ 1531-1543), or on public access to tidal and submerged lands, navigable waters, beaches and other public recreational resources. The project would not adversely affect these resources and would have long-term beneficial impacts on threatened and endangered sea turtles and their critical habitat on Alabama beaches because the existing sea turtle conservation program would be continued and expanded.

Provisions of ACAMP Considered Inapplicable to the CAST Conservation Program Project

The following additional elements of the ACAMP were considered but, based on our review, did not appear to be applicable to the CAST Conservation Program project:

335-8-2-.02 Dredging and/or Filling
335-8-2-.03 Mitigation
335-8-2-.04 Marinas
335-8-2-.05 Piers, Docks, Boathouses, and Other Pile Supported Structures
335-8-2-.06 Shoreline Stabilization and Erosion Mitigation
335-8-2-.07 Canals, Ditches and Boatslips
335-8-2-.08 Construction and Other Activities on Gulf Beaches and Dunes
335-8-2-.09 Groundwater Extraction
335-8-2-.10 Siting, Construction and Operation of Energy Facilities
335-8-2-.11 Commercial and Residential Development
335-8-2-.12 Discharges to Coastal Waters (greater than 1 million gallons per day)

12. CAST Triage

335-8-2-.01 General Rules Applicable to all Uses Subject to the ACAMP

Pursuant to Ala. Admin. Code r. 335-8-2-.01 (1), all uses subject to the ACAMP that are in violation with applicable state air and water quality standards shall not be permitted or certified to be in compliance with the ACAMP. The use of criteria pollutant generating equipment, such as excavators, dozers, loaders, trenchers, and dump trucks, would result in temporary adverse impacts on air quality, but these impacts would not violate any state air quality standards. The project could result in short-term adverse impacts to water quality in Cotton Bayou due to increased runoff during the initial stages of construction. BMPs would be implemented to ensure that impacts are minimized to the extent possible and violations of any state air or water quality standards are avoided.

Pursuant to Ala. Admin. Code r. 335-8-2-.01(2), uses subject to the ACAMP shall not have an adverse impact on historical, cultural or archeological resources, on wildlife and fisheries habitats (especially the critical habitat of endangered species listed pursuant to 16 U.S.C. §§ 1531-1543), or on public access to tidal and submerged lands, navigable waters, beaches and other public recreational resources. Although the project would result in short- and long-term adverse impacts to wildlife habitat within the project footprint, impacts would be minimal because the project would be located on a previously disturbed site that does not provide high quality wildlife habitat. The project area does not contain designated critical habitat for any endangered or threatened species. BMPs would be implemented to ensure that any adverse impacts to wildlife or fisheries habitats are minimized to the extent possible. The AL TIG is currently in consultation with the Alabama SHPO to ensure that impacts to any cultural or archeological resources that may be present in the project area are avoided.

Provisions of ACAMP Considered Inapplicable to the CAST Triage Project

The following additional elements of the ACAMP were considered but, based on our review, did not appear to be applicable to the CAST Triage project:

335-8-2-.02 Dredging and/or Filling
335-8-2-.03 Mitigation
335-8-2-.04 Marinas
335-8-2-.05 Piers, Docks, Boathouses, and Other Pile Supported Structures
335-8-2-.06 Shoreline Stabilization and Erosion Mitigation
335-8-2-.07 Canals, Ditches and Boatslips
335-8-2-.08 Construction and Other Activities on Gulf Beaches and Dunes
335-8-2-.09 Groundwater Extraction
335-8-2-.10 Siting, Construction and Operation of Energy Facilities
335-8-2-.11 Commercial and Residential Development
335-8-2-.12 Discharges to Coastal Waters (greater than 1 million gallons per day)

13. CAST Habitat Usage and Population Dynamics

335-8-2-.01 General Rules Applicable to all Uses Subject to the ACAMP

Pursuant to Ala. Admin. Code r. 335-8-2-.01 (1), all uses subject to the ACAMP that are in violation with applicable state air and water quality standards shall not be permitted or certified to be in compliance with the ACAMP. The use of criteria pollutant generating equipment, such as boats and motor vehicles during the study, would result in temporary adverse impacts on air quality, but these impacts would be negligible and would not violate any state air quality standards. This project would not result in any adverse impacts to water quality.

Pursuant to Ala. Admin. Code r. 335-8-2-.01(2), uses subject to the ACAMP shall not have an adverse impact on historical, cultural or archeological resources, on wildlife and fisheries habitats (especially the critical habitat of endangered species listed pursuant to 16 U.S.C. §§ 1531-1543), or on public access to tidal and submerged lands, navigable waters, beaches and other public recreational resources. The project would not adversely affect these resources because project activities would be limited to a study that would consist of mark and re-capture of sea turtles.

Provisions of ACAMP Considered Inapplicable to the CAST Habitat Usage and Population Dynamics

The following additional elements of the ACAMP were considered but, based on our review, did not appear to be applicable to the CAST Habitat Usage and Population Dynamics project:

335-8-2-.02 Dredging and/or Filling
335-8-2-.03 Mitigation
335-8-2-.04 Marinas

335-8-2-.05 Piers, Docks, Boathouses, and Other Pile Supported Structures
335-8-2-.06 Shoreline Stabilization and Erosion Mitigation
335-8-2-.07 Canals, Ditches and Boatslips
335-8-2-.08 Construction and Other Activities on Gulf Beaches and Dunes
335-8-2-.09 Groundwater Extraction
335-8-2-.10 Siting, Construction and Operation of Energy Facilities
335-8-2-.11 Commercial and Residential Development
335-8-2-.12 Discharges to Coastal Waters (greater than 1 million gallons per day)

14. CAST Protection: Enhancement and Education

335-8-2-.01 General Rules Applicable to all Uses Subject to the ACAMP

Pursuant to Ala. Admin. Code r. 335-8-2-.01 (1), all uses subject to the ACAMP that are in violation with applicable state air and water quality standards shall not be permitted or certified to be in compliance with the ACAMP. The use of criteria pollutant generating equipment, such as boats and motor vehicles associated with increased enforcement activities, would result in temporary adverse impacts on air quality, but these impacts would be negligible and would not violate any state air quality standards. This project would not result in any adverse impacts to water quality.

Pursuant to Ala. Admin. Code r. 335-8-2-.01(2), uses subject to the ACAMP shall not have an adverse impact on historical, cultural or archeological resources, on wildlife and fisheries habitats (especially the critical habitat of endangered species listed pursuant to 16 U.S.C. §§ 1531-1543), or on public access to tidal and submerged lands, navigable waters, beaches and other public recreational resources. The project would not adversely affect these resources because project activities would include increased enforcement and education and outreach programs. The project may result in long-term beneficial impacts to threatened and endangered sea turtles and their critical habitats in Alabama due to enhanced public awareness and increased enforcement.

Provisions of ACAMP Considered Inapplicable to the CAST Protection: Enhancement and Education Project

The following additional elements of the ACAMP were considered but, based on our review, did not appear to be applicable to the CAST Protection: Enhancement and Education project:

335-8-2-.02 Dredging and/or Filling
335-8-2-.03 Mitigation
335-8-2-.04 Marinas
335-8-2-.05 Piers, Docks, Boathouses, and Other Pile Supported Structures
335-8-2-.06 Shoreline Stabilization and Erosion Mitigation
335-8-2-.07 Canals, Ditches and Boatslips
335-8-2-.08 Construction and Other Activities on Gulf Beaches and Dunes
335-8-2-.09 Groundwater Extraction
335-8-2-.10 Siting, Construction and Operation of Energy Facilities
335-8-2-.11 Commercial and Residential Development
335-8-2-.12 Discharges to Coastal Waters (greater than 1 million gallons per day)

15. Enhancing Capacity for the Alabama Marine Mammal Stranding Network

335-8-2-.01 General Rules Applicable to all Uses Subject to the ACAMP

Pursuant to Ala. Admin. Code r. 335-8-2-.01 (1), all uses subject to the ACAMP that are in violation with applicable state air and water quality standards shall not be permitted or certified to be in compliance with the ACAMP. The use of criteria pollutant generating equipment, such as boats and motor vehicles associated with stranding response activities, would result in temporary adverse impacts on air quality, but these impacts would be negligible and would not violate any state air quality standards. This project would not result in any adverse impacts to water quality.

Pursuant to Ala. Admin. Code r. 335-8-2-.01(2), uses subject to the ACAMP shall not have an adverse impact on historical, cultural or archeological resources, on wildlife and fisheries habitats (especially the critical habitat of endangered species listed pursuant to 16 U.S.C. §§ 1531-1543), or on public access to tidal and submerged lands, navigable waters, beaches and other public recreational resources. The project could result in short-term adverse impacts on beaches or other coastal habitats where marine mammal strandings and associated response activities typically occur. All potential impacts would be temporary, resulting from boat traffic, noise, and human presence during stranding response, and conditions would quickly return to baseline upon completion of stranding response activities.

Provisions of ACAMP Considered Inapplicable to the Enhancing Capacity for the Alabama Marine Mammal Stranding Network Project

The following additional elements of the ACAMP were considered but, based on our review, did not appear to be applicable to the Enhancing Capacity for the Alabama Marine Mammal Stranding Network project:

335-8-2-.02 Dredging and/or Filling
335-8-2-.03 Mitigation
335-8-2-.04 Marinas
335-8-2-.05 Piers, Docks, Boathouses, and Other Pile Supported Structures
335-8-2-.06 Shoreline Stabilization and Erosion Mitigation
335-8-2-.07 Canals, Ditches and Boatslips
335-8-2-.08 Construction and Other Activities on Gulf Beaches and Dunes
335-8-2-.09 Groundwater Extraction
335-8-2-.10 Siting, Construction and Operation of Energy Facilities
335-8-2-.11 Commercial and Residential Development
335-8-2-.12 Discharges to Coastal Waters (greater than 1 million gallons per day)

16. Assessment of Alabama Estuarine Bottlenose Dolphin Populations and Health

335-8-2-.01 General Rules Applicable to all Uses Subject to the ACAMP

Pursuant to Ala. Admin. Code r. 335-8-2-.01 (1), all uses subject to the ACAMP that are in violation with applicable state air and water quality standards shall not be permitted or certified to be in compliance with the ACAMP. The use of criteria pollutant generating equipment, such as boats during sample collection activities, would result in temporary adverse impacts on air quality, but these impacts would be negligible and would not violate any state air quality standards. This project would not result in any adverse impacts to water quality.

Pursuant to Ala. Admin. Code r. 335-8-2-.01(2), uses subject to the ACAMP shall not have an adverse impact on historical, cultural or archeological resources, on wildlife and fisheries habitats (especially the critical habitat of endangered species listed pursuant to 16 U.S.C. §§ 1531-1543), or on public access to tidal and submerged lands, navigable waters, beaches and other public recreational resources. The project would not adversely affect these resources because project activities would be limited to sample collection and data analysis.

Provisions of ACAMP Considered Inapplicable to the Assessment of Alabama Estuarine Bottlenose Dolphin Populations and Health Project

The following additional elements of the ACAMP were considered but, based on our review, did not appear to be applicable to the Assessment of Alabama Estuarine Bottlenose Dolphin Populations and Health project:

335-8-2-.02 Dredging and/or Filling
335-8-2-.03 Mitigation
335-8-2-.04 Marinas
335-8-2-.05 Piers, Docks, Boathouses, and Other Pile Supported Structures
335-8-2-.06 Shoreline Stabilization and Erosion Mitigation
335-8-2-.07 Canals, Ditches and Boatslips
335-8-2-.08 Construction and Other Activities on Gulf Beaches and Dunes
335-8-2-.09 Groundwater Extraction
335-8-2-.10 Siting, Construction and Operation of Energy Facilities
335-8-2-.11 Commercial and Residential Development
335-8-2-.12 Discharges to Coastal Waters (greater than 1 million gallons per day)

17. Alabama Estuarine Bottlenose Dolphin Protection: Enhancement and Education

335-8-2-.01 General Rules Applicable to all Uses Subject to the ACAMP

Pursuant to Ala. Admin. Code r. 335-8-2-.01 (1), all uses subject to the ACAMP that are in violation with applicable state air and water quality standards shall not be permitted or certified to be in compliance with the ACAMP. The use of criteria pollutant generating equipment, such as boats and motor vehicles associated with increased enforcement activities, would result in temporary adverse impacts on air quality, but these impacts would be negligible and would not violate any state air quality standards. This project would not result in any adverse impacts to water quality.

Pursuant to Ala. Admin. Code r. 335-8-2-.01(2), uses subject to the ACAMP shall not have an adverse impact on historical, cultural or archeological resources, on wildlife and fisheries habitats (especially the critical habitat of endangered species listed pursuant to 16 U.S.C. §§ 1531-1543), or on public access to tidal and submerged lands, navigable waters, beaches and other public recreational resources. The project would not adversely affect these resources because project activities would include increased enforcement and education and outreach programs. The project may result in long-term beneficial impacts to bottlenose dolphins and their habitats in Alabama due to enhanced public awareness and increased enforcement.

Provisions of ACAMP Considered Inapplicable to the Alabama Estuarine Bottlenose Dolphin Protection: Enhancement and Education Project

The following additional elements of the ACAMP were considered but, based on our review, did not appear to be applicable to the Alabama Estuarine Bottlenose Dolphin Protection: Enhancement and Education project:

335-8-2-.02 Dredging and/or Filling
335-8-2-.03 Mitigation
335-8-2-.04 Marinas
335-8-2-.05 Piers, Docks, Boathouses, and Other Pile Supported Structures
335-8-2-.06 Shoreline Stabilization and Erosion Mitigation
335-8-2-.07 Canals, Ditches and Boatslips
335-8-2-.08 Construction and Other Activities on Gulf Beaches and Dunes
335-8-2-.09 Groundwater Extraction
335-8-2-.10 Siting, Construction and Operation of Energy Facilities
335-8-2-.11 Commercial and Residential Development

335-8-2-.12 Discharges to Coastal Waters (greater than 1 million gallons per day)

18. Colonial Nesting Wading Bird Tracking and Habitat Use Assessment – Two Species

335-8-2-.01 General Rules Applicable to all Uses Subject to the ACAMP

Pursuant to Ala. Admin. Code r. 335-8-2-.01 (1), all uses subject to the ACAMP that are in violation with applicable state air and water quality standards shall not be permitted or certified to be in compliance with the ACAMP. The use of criteria pollutant generating equipment, such as boats and motor vehicles during bird banding, satellite tagging, and other data collection activities, would result in temporary adverse impacts on air quality, but these impacts would be negligible and would not violate any state air quality standards. This project would not result in any adverse impacts to water quality.

Pursuant to Ala. Admin. Code r. 335-8-2-.01(2), uses subject to the ACAMP shall not have an adverse impact on historical, cultural or archeological resources, on wildlife and fisheries habitats (especially the critical habitat of endangered species listed pursuant to 16 U.S.C. §§ 1531-1543), or on public access to tidal and submerged lands, navigable waters, beaches and other public recreational resources. The project would not adversely affect these resources because project activities would be limited to data collection to better understand movement and habitat use among colonial nesting wading bird species in Alabama. Results from this project would assist the AL TIG in planning more effective restoration of bird species injured in the DWH spill in Alabama, potentially resulting in long-term beneficial impacts to their habitats.

Provisions of ACAMP Considered Inapplicable to the Colonial Nesting Wading Bird Tracking and Habitat Use Assessment – Two Species Project

The following additional elements of the ACAMP were considered but, based on our review, did not appear to be applicable to the Colonial Nesting Wading Bird Tracking and Habitat Use Assessment – Two Species project:

335-8-2-.02 Dredging and/or Filling
335-8-2-.03 Mitigation
335-8-2-.04 Marinas
335-8-2-.05 Piers, Docks, Boathouses, and Other Pile Supported Structures
335-8-2-.06 Shoreline Stabilization and Erosion Mitigation
335-8-2-.07 Canals, Ditches and Boatslips
335-8-2-.08 Construction and Other Activities on Gulf Beaches and Dunes
335-8-2-.09 Groundwater Extraction
335-8-2-.10 Siting, Construction and Operation of Energy Facilities
335-8-2-.11 Commercial and Residential Development
335-8-2-.12 Discharges to Coastal Waters (greater than 1 million gallons per day)

19. Oyster Cultch Relief and Reef Configuration

335-8-2-.01 General Rules Applicable to all Uses Subject to the ACAMP

Pursuant to Ala. Admin. Code r. 335-8-2-.01 (1), all uses subject to the ACAMP that are in violation with applicable state air and water quality standards shall not be permitted or certified to be in compliance with the ACAMP. The use of criteria pollutant generating equipment, such as boats, barges, skid steers and excavator shovels, would result in temporary adverse impacts on air quality, but these impacts would not violate any state air quality standards. The project would result in short-term adverse impacts to water quality due to increased turbidity during deployment of oyster cultch material. Turbidity would return to baseline levels following cultch placement. BMPs would be implemented to ensure that impacts are minimized to the extent possible and violations of any state air or water quality standards are avoided.

Pursuant to Ala. Admin. Code r. 335-8-2-.01(2), uses subject to the ACAMP shall not have an adverse impact on historical, cultural or archeological resources, on wildlife and fisheries habitats (especially the critical habitat of endangered species listed pursuant to 16 U.S.C. §§ 1531-1543), or on public access to tidal and submerged lands, navigable waters, beaches and other public recreational resources. The project would have short-term adverse impacts on fisheries and wildlife habitats due to noise and a temporary increase in turbidity during cultch deployment. However, the proposed project would be expected to result in long-term, beneficial impacts on wildlife and fisheries habitats because it would create or enhance oyster reef habitat in Mobile Bay. BMPs would be implemented to ensure that adverse impacts to wildlife and protected species are avoided or minimized. The AL TIG is currently in consultation with the Alabama SHPO to ensure that impacts to any cultural or archeological resources that may be present in the project area are avoided.

335-8-2-.02 Dredging and/or Filling

Ala. Admin Code r. 335-8-2-.02 contains a number of requirements for projects which include the dredging and filling of State water bottoms. The proposed Oyster Cultch Relief and Reef Configuration project would place oyster cultch material at two sites in Mobile Bay. Deployment of oyster cultch is an approved activity by USACE under a Nationwide Permit. Although the project may cause short term impacts to water quality resulting from increased turbidity, any effects to water quality will be temporary and the proposed project is not expected to adversely impact existing natural oyster reefs, submersed grassbeds, or wetlands. The project would enhance existing oyster reefs resulting in long term beneficial impacts to oysters and oyster reef habitats. Data collected from the project would help to inform the most productive and cost effective method(s) for conducting larger scale restoration of Alabama’s oyster reefs.

Provisions of ACAMP Considered Inapplicable to the Oyster Cultch Relief and Reef Configuration Project

The following additional elements of the ACAMP were considered but, based on our review, did not appear to be applicable to the Oyster Cultch Relief and Reef Configuration project:

335-8-2-.03 Mitigation
335-8-2-.04 Marinas
335-8-2-.05 Piers, Docks, Boathouses, and Other Pile Supported Structures
335-8-2-.06 Shoreline Stabilization and Erosion Mitigation
335-8-2-.07 Canals, Ditches and Boatslips
335-8-2-.08 Construction and Other Activities on Gulf Beaches and Dunes
335-8-2-.09 Groundwater Extraction
335-8-2-.10 Siting, Construction and Operation of Energy Facilities
335-8-2-.11 Commercial and Residential Development
335-8-2-.12 Discharges to Coastal Waters (greater than 1 million gallons per day)

20. Side-scan Mapping of Mobile Bay Relic Oyster Reefs (E&D)

335-8-2-.01 General Rules Applicable to all Uses Subject to the ACAMP

Pursuant to Ala. Admin. Code r. 335-8-2-.01 (1), all uses subject to the ACAMP that are in violation with applicable state air and water quality standards shall not be permitted or certified to be in compliance with the ACAMP. The use of boats during mapping and ground-truthing activities would result in temporary adverse impacts on air quality, but these impacts would not violate any state air quality standards. Hand dredge and cane pole sampling could result in short-term adverse impacts on water quality due to increased turbidity, but conditions would quickly return to baseline upon completion of sampling. The proposed project would not violate any state water quality standards.

Pursuant to Ala. Admin. Code r. 335-8-2-.01(2), uses subject to the ACAMP shall not have an adverse impact on historical, cultural or archeological resources, on wildlife and fisheries habitats (especially the critical habitat of endangered species listed pursuant to 16 U.S.C. §§ 1531-1543), or on public access to tidal and submerged lands, navigable waters, beaches and other public recreational resources. The project would have short-term adverse impacts on fisheries and wildlife habitats due to noise and a temporary increase in turbidity during sampling activities. BMPs would be implemented to ensure that adverse impacts to wildlife and protected species are avoided or minimized. The AL TIG is currently in consultation with the Alabama SHPO to ensure that impacts to any cultural or archeological resources that may be present in the project area are avoided.

Provisions of ACAMP Considered Inapplicable to the Side-scan Mapping of Mobile Bay Relic Oyster Reefs (E&D) Project

The following additional elements of the ACAMP were considered but, based on our review, did not appear to be applicable to the Side-scan Mapping of Mobile Bay Relic Oyster Reefs (E&D) project:

335-8-2-.02 Dredging and/or Filling
335-8-2-.03 Mitigation
335-8-2-.04 Marinas
335-8-2-.05 Piers, Docks, Boathouses, and Other Pile Supported Structures
335-8-2-.06 Shoreline Stabilization and Erosion Mitigation
335-8-2-.07 Canals, Ditches and Boatslips
335-8-2-.08 Construction and Other Activities on Gulf Beaches and Dunes
335-8-2-.09 Groundwater Extraction
335-8-2-.10 Siting, Construction and Operation of Energy Facilities
335-8-2-.11 Commercial and Residential Development
335-8-2-.12 Discharges to Coastal Waters (greater than 1 million gallons per day)

21. Oyster Hatchery at Claude Peteet Mariculture Center – High Spat Production with Study

335-8-2-.01 General Rules Applicable to all Uses Subject to the ACAMP

Pursuant to Ala. Admin. Code r. 335-8-2-.01 (1), all uses subject to the ACAMP that are in violation with applicable state air and water quality standards shall not be permitted or certified to be in compliance with the ACAMP. The use of criteria pollutant generating equipment, such as barges, vehicles, and other equipment, would result in temporary adverse impacts on air quality, but these impacts would not violate any state air quality standards. The project would be located in upland areas and would not adversely affect water quality. Waste from the hatchery tanks would be collected, and would not be discharged into surrounding waters.

Pursuant to Ala. Admin. Code r. 335-8-2-.01(2), uses subject to the ACAMP shall not have an adverse impact on historical, cultural or archeological resources, on wildlife and fisheries habitats (especially the critical habitat of endangered species listed pursuant to 16 U.S.C. §§ 1531-1543), or on public access to tidal and submerged lands, navigable waters, beaches and other public recreational resources. The project would not adversely affect these resources because it would be located in developed, unvegetated upland areas that do not provide suitable habitat for most native wildlife species, nor public access to recreational resources. The AL TIG is currently in consultation with the Alabama SHPO to ensure that impacts to any cultural or archeological resources that may be present in the project area are avoided.

335-8-2-.11 Commercial and Residential Development

Ala. Admin. Code r. 335-8-2-.11 contains requirements for coastal construction and development projects. This proposed project will be in compliance with the requirements of these regulations. New construction would be limited to a greenhouse facility to be located on the site of the existing Claude Peteet Mariculture Center and expansion of an existing concrete pad to a total area of 500 square feet. The project would have no effect on wetlands. Because new construction proposed under the project would not exceed five acres, a permit would not be required.

Provisions of ACAMP Considered Inapplicable to the Oyster Hatchery at Claude Peteet Mariculture Center – High Spat Production with Study Project

The following additional elements of the ACAMP were considered but, based on our review, did not appear to be applicable to the Oyster Hatchery at Claude Peteet Mariculture Center – High Spat Production with Study project:

335-8-2-.02 Dredging and/or Filling
335-8-2-.03 Mitigation
335-8-2-.04 Marinas
335-8-2-.05 Piers, Docks, Boathouses, and Other Pile Supported Structures
335-8-2-.06 Shoreline Stabilization and Erosion Mitigation
335-8-2-.07 Canals, Ditches and Boatslips
335-8-2-.08 Construction and Other Activities on Gulf Beaches and Dunes
335-8-2-.09 Groundwater Extraction
335-8-2-.10 Siting, Construction and Operation of Energy Facilities
335-8-2-.11 Commercial and Residential Development
335-8-2-.12 Discharges to Coastal Waters (greater than 1 million gallons per day)

22. Oyster Grow-Out and Restoration Reef Placement

335-8-2-.01 General Rules Applicable to all Uses Subject to the ACAMP

Pursuant to Ala. Admin. Code r. 335-8-2-.01 (1), all uses subject to the ACAMP that are in violation with applicable state air and water quality standards shall not be permitted or certified to be in compliance with the ACAMP. The use of criteria pollutant generating equipment, such as boats and barges, during project implementation and maintenance activities would result in temporary adverse impacts on air quality. The project would result in short-term adverse impacts to water quality due to increased turbidity during the installation of piles and oyster grow-out baskets, monitoring and maintenance activities, and deployment of oysters and cultch material on other restoration reef sites. BMPs would be implemented to ensure that impacts are minimized to the extent possible and violations of any state air or water quality standards are avoided.

Pursuant to Ala. Admin. Code r. 335-8-2-.01(2), uses subject to the ACAMP shall not have an adverse impact on historical, cultural or archeological resources, on wildlife and fisheries habitats (especially the critical habitat of endangered species listed pursuant to 16 U.S.C. §§ 1531-1543), or on public access to tidal and submerged lands, navigable waters, beaches and other public recreational resources. The proposed project would result in short-term adverse impacts to unvegetated soft-bottom fisheries habitats due to increased noise, vibration, increased turbidity, and visual disturbances during project construction, monitoring, and maintenance. BMPs would be implemented to ensure that adverse impacts to wildlife and protected species are avoided or minimized. The project would result in long-term, beneficial impacts on oyster reef habitat because oysters placed at the sites would enhance spat production, potentially increasing oyster abundance and recruitment in Alabama waters. The presence of the pile-supported grow-out structures would impose a small limitation on public access to tidal and submerged lands, but the restricted area would be minimal in comparison to the large amount of surrounding submerged lands accessible by the public. The AL TIG is currently in consultation with the Alabama SHPO to ensure that impacts to any cultural or archeological resources that may be present in the project area are avoided.

335-8-2-.02 Dredging and/or Filling

Ala. Admin Code r. 335-8-2-.02 contains a number of requirements for projects which include the dredging and filling of State water bottoms. The proposed Establishment of Protected Oyster Gardening Program Grow-Out Areas project would place oysters and oyster cultch material at various restoration reef sites in Alabama state waters. Deployment of oysters and oyster cultch is an approved activity by USACE under a Nationwide Permit. Although the project may cause short term impacts to water quality resulting from increased turbidity, any effects to water quality will be temporary and the proposed project is not expected to adversely impact existing natural oyster reefs, submersed grassbeds, or wetlands. The project would enhance existing oyster reefs resulting in long term beneficial impacts to oysters and oyster reef habitats.

335-8-2-.05 Piers, Docks, Boathouses, and Other Pile Supported Structures

Ala. Admin Code R. 335-8-2-.05 contains a number of requirements for projects which include piers, docks, boathouses, and other pile supported structures. The proposed project would construct oyster grow-out areas, consisting of suspended oyster baskets that would be installed on pilings, at up to three sites in Alabama state waters. At each grow-out site, pilings would be installed to support the suspended oyster baskets. Each grow out site is approximately 0.5 acres and 12-20 total pilings per site would need to be installed to support grow-out installation. The pile-supported oyster grow-out structures would not alter natural hydrology at the sites, and would not affect wetlands or submerged grassbeds.

Provisions of ACAMP Considered Inapplicable to the Oyster Grow-Out and Restoration Reef Placement Project

The following additional elements of the ACAMP were considered but, based on our review, did not appear to be applicable to the Oyster Grow-Out and Restoration Reef Placement project:

335-8-2-.03 Mitigation
335-8-2-.04 Marinas
335-8-2-.06 Shoreline Stabilization and Erosion Mitigation
335-8-2-.07 Canals, Ditches and Boatslips
335-8-2-.08 Construction and Other Activities on Gulf Beaches and Dunes
335-8-2-.09 Groundwater Extraction
335-8-2-.10 Siting, Construction and Operation of Energy Facilities
335-8-2-.11 Commercial and Residential Development
335-8-2-.12 Discharges to Coastal Waters (greater than 1 million gallons per day)

Conclusion:

Based on this review, the Federal Trustees find the Draft RP II/EA to be consistent with the federally-approved ACAMP. This letter submits that determination for review by the State coincident with public review of this document.

The Federal Trustees are requesting and would deeply appreciate a response to this determination of consistency as soon as is practicable. We thank you in advance for your efforts to accommodate this request.

USDA, Natural Resources Conservation Service
7578 Old Canton Road, Madison, MS 39110
Voice 601.790.3753 Fax 844.325.7065

United States Department of Agriculture

Sincerely,

Dr. Homer L. Wilkes, Director
Gulf Coast Ecosystem Restoration Team

Appendix D:

Conservation Practices List

Practice Code	Practice Name	Fowl River	Bayou River	Weeks Bay
309	Agrichemical Handling Facility	X	X	X
314	Brush Management	X	X	X
315	Herbaceous Weed Control	X	X	X
327	**Conservation Cover**	**X**	**X**	**X**
328	Conservation Crop Rotation	X	X	X
338	Prescribed Burning	X	X	X
340	Cover Crop	X	X	X
342	Critical Area Planting	X	X	X
345	Residue and Tillage Management, Reduced Till	X	X	X
351	Well Decommissioning	X	X	X
356	Dike	X	X	X
362	Diversion	X	X	X
378	Pond	X	X	X
381	Silvopasture Establishment	X	X	X
382	Fence	X	X	X
383	Fuel Break	X	X	X
386	Field Border	X	X	X
391	Riparian Forest Buffer	X	X	X
393	**Filter Strip**	**X**	**X**	**X**
394	Firebreak	X	X	X
410	**Grade Stabilization Structure**	**X**	**X**	**X**
412	**Grassed Waterway**	**X**	**X**	**X**
422	Hedgerow Planting	X	X	X
460	Land Clearing	X	X	X
466	Land Smoothing	X	X	X
468	Lined Waterway or Outlet	X		
472	Access Control	X	X	X
484	Mulching	X	X	X
490	Tree/Shrub Site Preparation	X	X	X
512	Forage and Biomass Planting	X	X	X
516	Livestock Pipeline	X	X	X
528	Prescribed Grazing	X	X	X
533	Pumping Plant	X	X	X
558	Roof Runoff Structure	X		
560	Access Road	X	X	X
561	**Heavy Use Area Protection**	**X**	**X**	**X**
570	Stormwater Runoff Control	X	X	X
574	Spring Development	X	X	X
576	Livestock Shelter Structure	X	X	X
578	Stream Crossing	X	X	X
580	**Streambank and Shoreline Protection**	**X**	**X**	**X**
587	**Structure for Water Control**	**X**	**X**	**X**
590	**Nutrient Management**	**X**	**X**	**X**
595	Integrated Pest Management (IPM)	X	X	X
600	Terrace	X	X	X
612	Tree/Shrub Establishment	X	X	X
614	Watering Facility	X	X	X
620	Underground Outlet	X	X	X
638	Water and Sediment Control Basin	X	X	X
642	Water Well	X	X	X
645	Upland Wildlife Habitat Management	X	X	X
647	Early Successional Habitat Development/Management	X	X	X
649	Structures for Wildlife	X	X	X
655	Forest Trails and Landings	X	X	X
660	Tree/Shrub Pruning	X	X	X
666	Forest Stand Improvement	X	X	X
326	Clearing and Snagging	X	X	X
511	Forage Harvest Management	X	X	X
521	Pond Sealing or Lining, Soil Dispersant	X	X	X
584	Channel Bed Stabilization	X	X	X
643	Restoration and Management of Rare or Declining Habitats	X	X	X
644	Wetland Wildlife Habitat Management	X	X	X

Practice Code	Practice Name	Fowl River	Bayou River	Weeks Bay
327	Conservation Cover	X	X	X
393	Filter Strip	X	X	X
410	Grade Stabilization Structure	X	X	X
412	Grassed Waterway	X	X	X
590	Nutrient Management	X	X	X

Practice Code	Practice Name	Fowl River	Bayou River	Weeks Bay
410	Grade Stabilization Structure	X	X	X
412	Grassed Waterway	X	X	X
561	Heavy Use Area Protection	X	X	X
580	Streambank and Shoreline Protection	X	X	X
587	Structure for Water Control	X	X	X

Appendix E:

Environmental Evaluation Site-Specific Form

U.S. Department of Agriculture Natural Resources Conservation Service **ENVIRONMENTAL EVALUATION WORKSHEET**	NRCS-CPA-52 4/2013	**A. Client Name:**
D. Client's Objective(s) (purpose):		**B. Conservation Plan ID #** (as applicable): **Program Authority** (optional): **C. Identification #** (farm, tract, field #, etc. as required):

E. Need for Action:	**H. Alternatives**		
	No Action √ if RMS ☐	***Alternative 1*** √ if RMS ☐	***Alternative 2*** √ if RMS ☐

Resource Concerns

In Section "F" below, analyze, record, and address concerns identified through the Resources Inventory process.
(See FOTG Section III - Resource Planning Criteria for guidance).

F. Resource Concerns and Existing/ Benchmark Conditions (Analyze and record the existing/benchmark conditions for each identified concern)	**I. Effects of Alternatives**					
	No Action		***Alternative 1***		***Alternative 2***	
	Amount, Status, Description *(Document both short and long term impacts)*	**√ if does NOT meet PC**	**Amount, Status, Description** *(Document both short and long term impacts)*	**√ if does NOT meet PC**	**Amount, Status, Description** *(Document both short and long term impacts)*	**√ if does NOT meet PC**
SOIL: *EROSION*						
		☐ NOT meet PC		☐ NOT meet PC		☐ NOT meet PC
		☐ NOT meet PC		☐ NOT meet PC		☐ NOT meet PC
SOIL: *SOIL QUALITY DEGRADATION*						
		☐ NOT meet PC		☐ NOT meet PC		☐ NOT meet PC
		☐ NOT meet PC		☐ NOT meet PC		☐ NOT meet PC
WATER: *EXCESS / INSUFFICIENT WATER*						
		☐ NOT meet PC		☐ NOT meet PC		☐ NOT meet PC
WATER: *WATER QUALITY DEGRADATION*						
		☐ NOT meet PC		☐ NOT meet PC		☐ NOT meet PC
		☐ NOT meet PC		☐ NOT meet PC		☐ NOT meet PC

F. Resource Concerns and Existing/ Benchmark Conditions (Analyze and record the existing/benchmark conditions for each identified concern)	I. (continued)					
	No Action		***Alternative 1***		***Alternative 2***	
	Amount, Status, Description *(Document both short and long term impacts)*	**√ if does NOT meet PC**	**Amount, Status, Description** *(Document both short and long term impacts)*	**√ if does NOT meet PC**	**Amount, Status, Description** *(Document both short and long term impacts)*	**√ if does NOT meet PC**
AIR: *AIR QUALITY IMPACTS*						
		☐ NOT meet PC		☐ NOT meet PC		☐ NOT meet PC
		☐ NOT meet PC		☐ NOT meet PC		☐ NOT meet PC
PLANTS: *DEGRADED PLANT CONDITION*						
		☐ NOT meet PC		☐ NOT meet PC		☐ NOT meet PC
		☐ NOT meet PC		☐ NOT meet PC		☐ NOT meet PC
ANIMALS: *INADEQUATE HABITAT FOR FISH AND WILDLIFE*						
		☐ NOT meet PC		☐ NOT meet PC		☐ NOT meet PC
ANIMALS: *LIVESTOCK PRODUCTION LIMITATION*						
		☐ NOT meet PC		☐ NOT meet PC		☐ NOT meet PC
		☐ NOT meet PC		☐ NOT meet PC		☐ NOT meet PC
ENERGY: *INEFFICIENT ENERGY USE*						
		☐ NOT meet PC		☐ NOT meet PC		☐ NOT meet PC
		☐ NOT meet PC		☐ NOT meet PC		☐ NOT meet PC
HUMAN: *ECONOMIC AND SOCIAL CONSIDERATIONS*						

Special Environmental Concerns: Environmental Laws, Executive Orders, policies, etc.

In Section "G" complete and attach Environmental Procedures Guide Sheets for documentation as applicable. Items with a "●" may require a federal permit or consultation/coordination between the lead agency and another government agency. In these cases, effects may need to be determined in consultation with another agency. Planning and practice implementation may proceed for practices not involved in consultation.

G. Special Environmental Concerns (Document existing/ benchmark conditions)	**J. Impacts to Special Environmental Concerns**					
	No Action		***Alternative 1***		***Alternative 2***	
	Document all impacts (Attach Guide Sheets as applicable)	√ if needs further action	Document all impacts (Attach Guide Sheets as applicable)	√ if needs further action	Document all impacts (Attach Guide Sheets as applicable)	√ if needs further action
●Clean Air Act *Guide Sheet* *FS1* *FS-2*		☐		☐		☐
●Clean Water Act / Waters of the U.S. *Guide Sheet* *Fact Sheet*		☐		☐		☐
●Coastal Zone Management *Guide Sheet* *Fact Sheet*		☐		☐		☐
Coral Reefs *Guide Sheet* *Fact Sheet*		☐		☐		☐
●Cultural Resources / Historic Properties *Guide Sheet* *Fact Sheet*		☐		☐		☐
●Endangered and Threatened Species *Guide Sheet* *Fact Sheet*		☐		☐		☐
Environmental Justice *Guide Sheet* *Fact Sheet*		☐		☐		☐
●Essential Fish Habitat *Guide Sheet* *Fact Sheet*		☐		☐		☐
Floodplain Management *Guide Sheet* *Fact Sheet*		☐		☐		☐
Invasive Species *Guide Sheet* *Fact Sheet*		☐		☐		☐
●Migratory Birds/Bald and Golden Eagle Protection Act *Guide Sheet* *Fact Sheet*		☐		☐		☐
Natural Areas *Guide Sheet* *Fact Sheet*		☐		☐		☐
Prime and Unique Farmlands *Guide Sheet* *Fact Sheet*		☐		☐		☐
Riparian Area *Guide Sheet* *Fact Sheet*		☐		☐		☐
Scenic Beauty *Guide Sheet* *Fact Sheet*		☐		☐		☐

•Wetlands *Guide Sheet* *Fact Sheet*		☐		☐		☐
•Wild and Scenic Rivers *Guide Sheet* *Fact Sheet*		☐		☐		☐

K. Other Agencies and Broad Public Concerns	***No Action***	***Alternative 1***	***Alternative 2***
Easements, Permissions, Public Review, or Permits Required and Agencies Consulted.			
Cumulative Effects Narrative (Describe the cumulative impacts considered, including past, present and known future actions regardless of who performed the actions)			
L. Mitigation (Record actions to avoid, minimize, and compensate)			

M. Preferred Alternative				
	√ preferred alternative	☐	☐	☐
	Supporting reason			

N. Context (Record context of alternatives analysis)

The significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality.

O. Determination of Significance or Extraordinary Circumstances

Intensity: Refers to the severity of impact. Impacts may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

If you answer ANY of the below questions "yes" then contact the State Environmental Liaison as there may be extraordinary circumstances and significance issues to consider and a site specific NEPA analysis may be required.

Yes	No	
☐	☐	• Is the preferred alternative expected to cause significant effects on public health or safety?
☐	☐	• Is the preferred alternative expected to significantly affect unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas?
☐	☐	• Are the effects of the preferred alternative on the quality of the human environment likely to be highly controversial?
☐	☐	• Does the preferred alternative have highly uncertain effects or involve unique or unknown risks on the human environment?
☐	☐	• Does the preferred alternative establish a precedent for future actions with significant impacts or represent a decision in principle about a future consideration?
☐	☐	• Is the preferred alternative known or reasonably expected to have potentially significant environment impacts to the quality of the human environment either individually or cumulatively over time?
☐	☐	• Will the preferred alternative likely have a significant adverse effect on ANY of the special environmental concerns? Use the Evaluation Procedure Guide Sheets to assist in this determination. This includes, but is not limited to, concerns such as cultural or historical resources, endangered and threatened species, environmental justice, wetlands, floodplains, coastal zones, coral reefs, essential fish habitat, wild and scenic rivers, clean air, riparian areas, natural areas, and invasive species.
☐	☐	• Will the preferred alternative threaten a violation of Federal, State, or local law or requirements for the protection of the environment?

P. To the best of my knowledge, the data shown on this form is accurate and complete:

In the case where a non-NRCS person (e.g. another MS TIG Trustee) assists with planning they are to sign the first signature block and then NRCS is to sign the second block to verify the information's accuracy.

Signature (TSP if applicable)	**Title**	**Date**
Signature (NRCS)	**Title**	**Date**

If preferred alternative is not a federal action where NRCS has control or responsibility and this NRCS-CPA-52 is shared with someone other than the client then indicate to whom this is being provided.

The following sections are to be completed by the Responsible Federal Official (RFO)		
NRCS is the RFO if the action is lead federal agency for NRDA-funded actions planned by NRCS.		
Q. NEPA Compliance Finding (check one) **The preferred alternative:**		**Action required**
☐	1) is a federal action that has been sufficiently analyzed in an existing NEPA document to which this environmental evaluation is tiered because the expected effects are within the range of those described in the applicable NEPA document and there are no predicted significant adverse environmental effects or extraordinary circumstances.	Document in "R.1" below. No additional analysis is required.
☐	2) is a federal action that has **NOT** been sufficiently analyzed or may involve predicted significant adverse environmental effects or extraordinary circumstances and may require an EA or EIS.	Contact the State Environmental Liaison. Further NEPA analysis required.
R. Rationale Supporting the Finding		
R.1 Findings Documentation		

I have considered the effects of the alternatives on the Resource Concerns, Economic and Social Considerations, Special Environmental Concerns, and Extraordinary Circumstances as defined by Agency regulation and policy and based on that made the finding indicated above.

S. Signature of Responsible Federal Official:

Signature	**Title**	**Date**

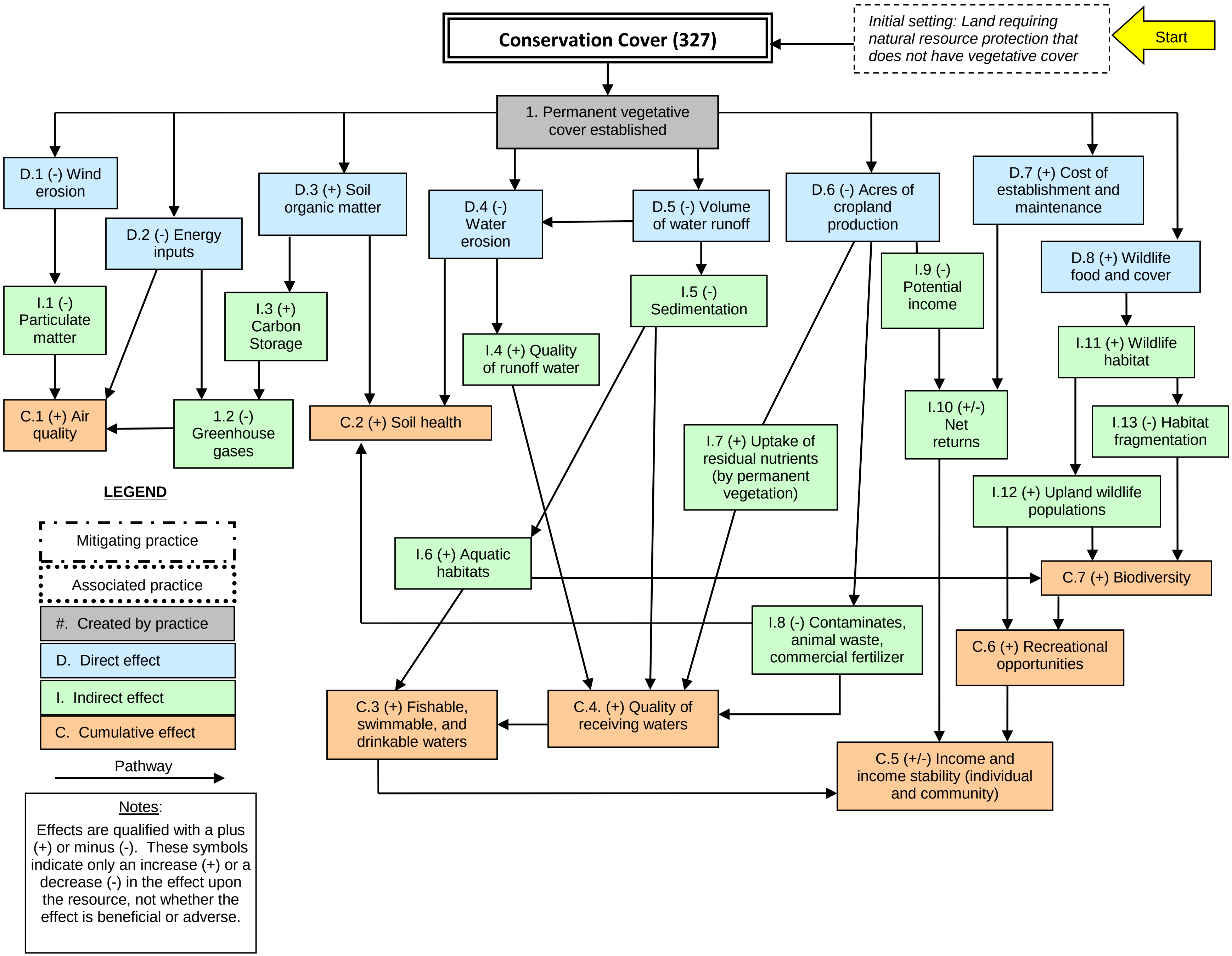
Additional notes

Appendix F:

Conservation Practice Network Effects Diagram

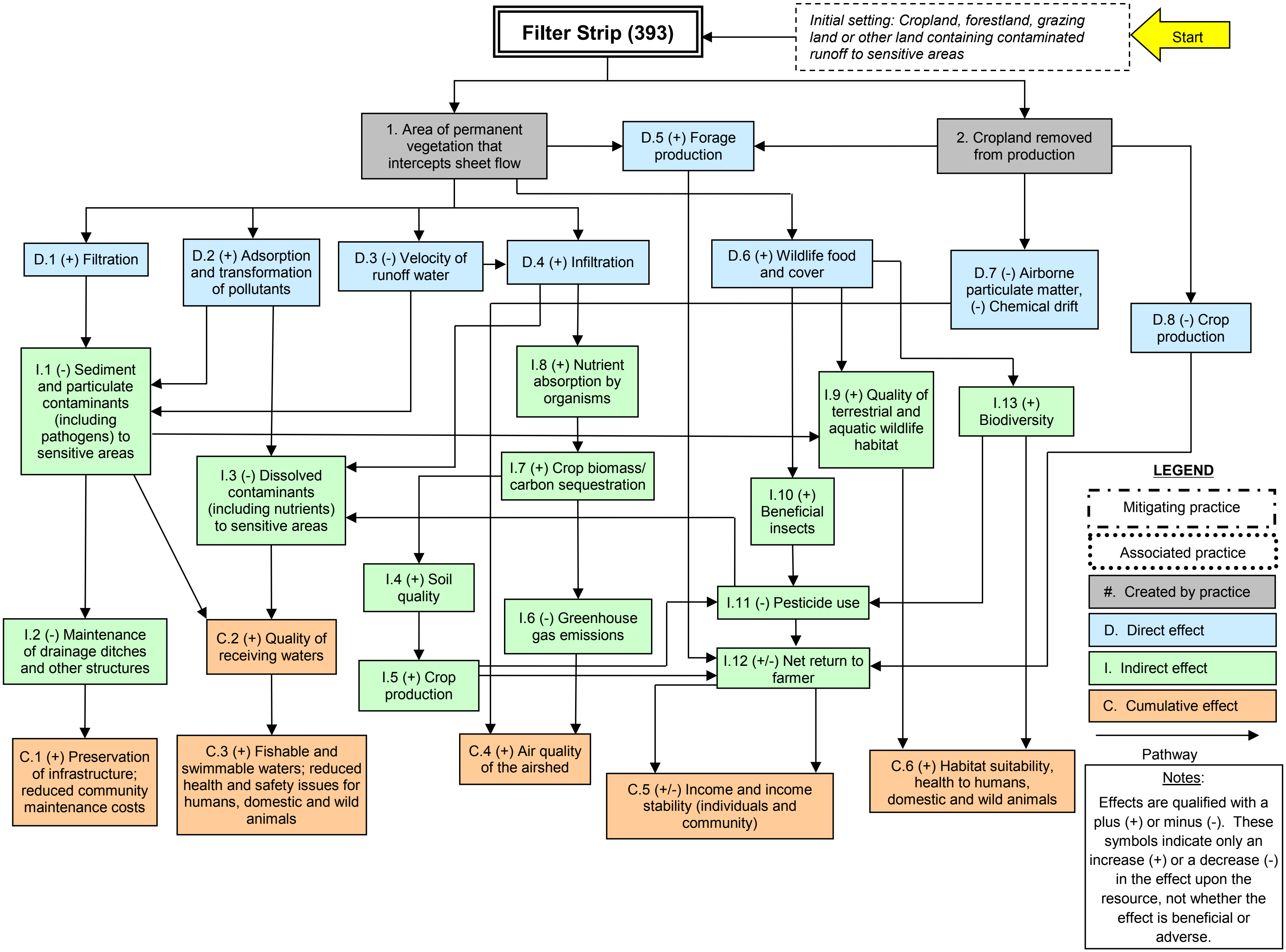
NRCS CONSERVATION PRACTICE EFFECTS- NETWORK DIAGRAM

September 2014



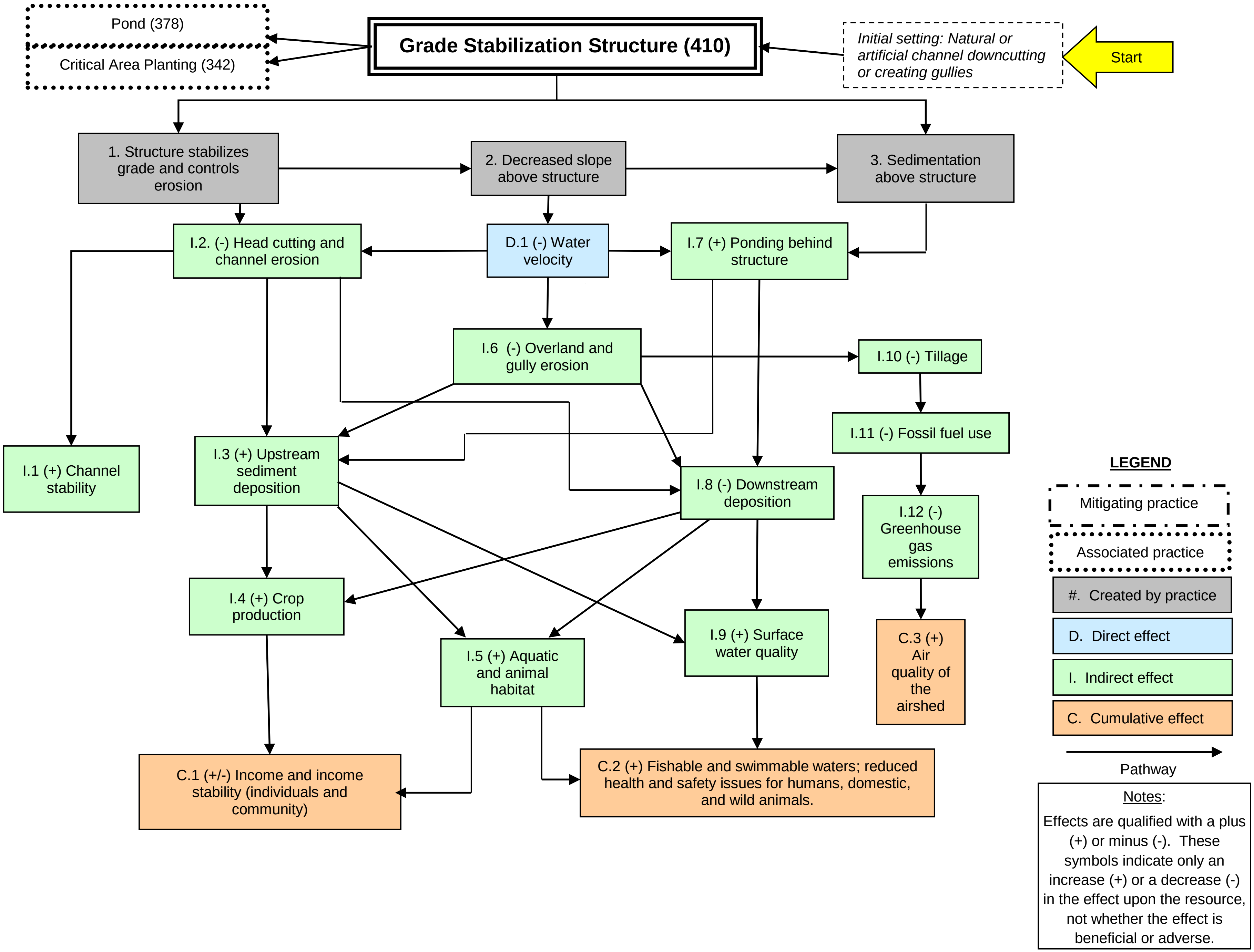
NRCS CONSERVATION PRACTICE EFFECTS - NETWORK DIAGRAM

September 2016



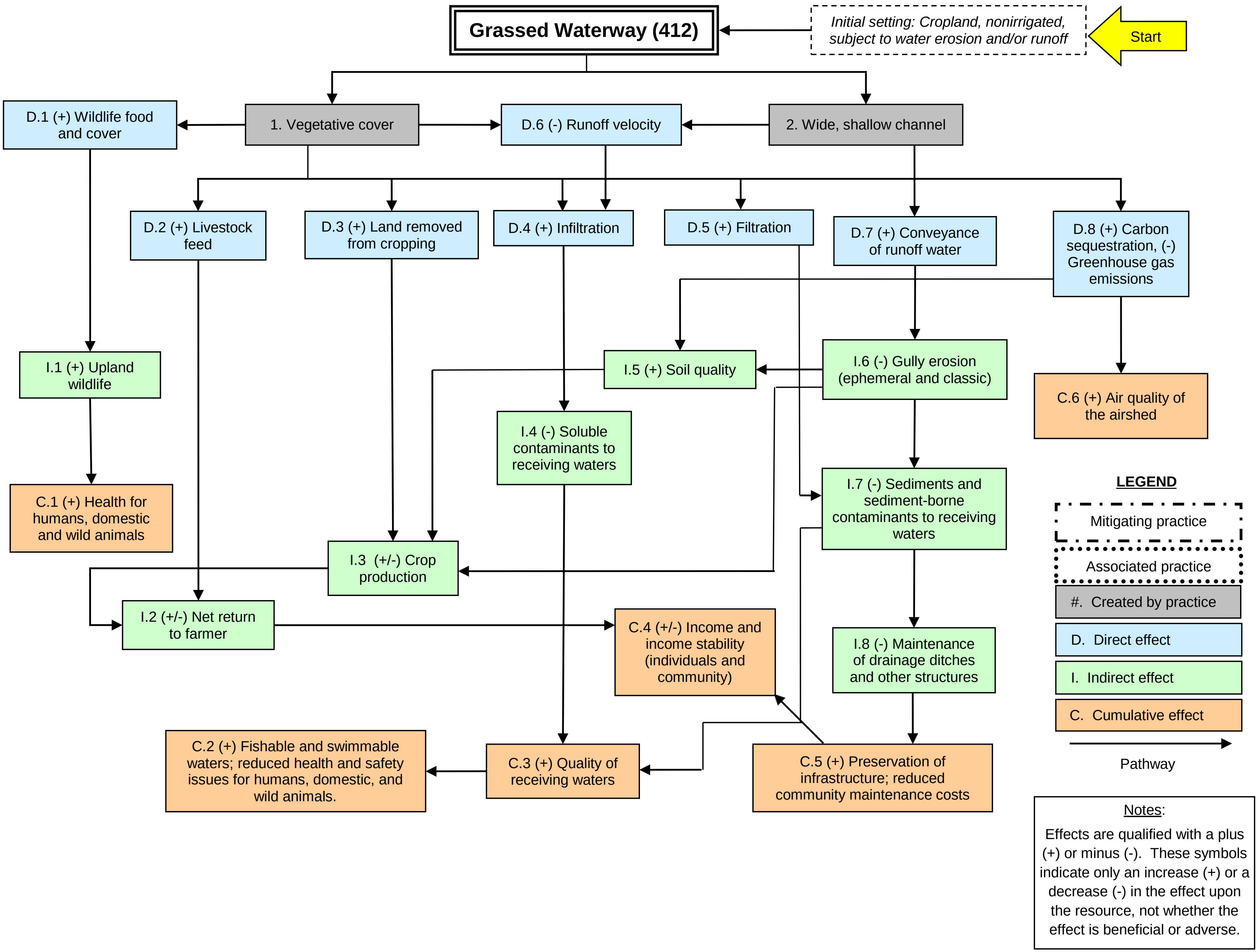
NRCS CONSERVATION PRACTICE EFFECTS - NETWORK DIAGRAM

September 2014



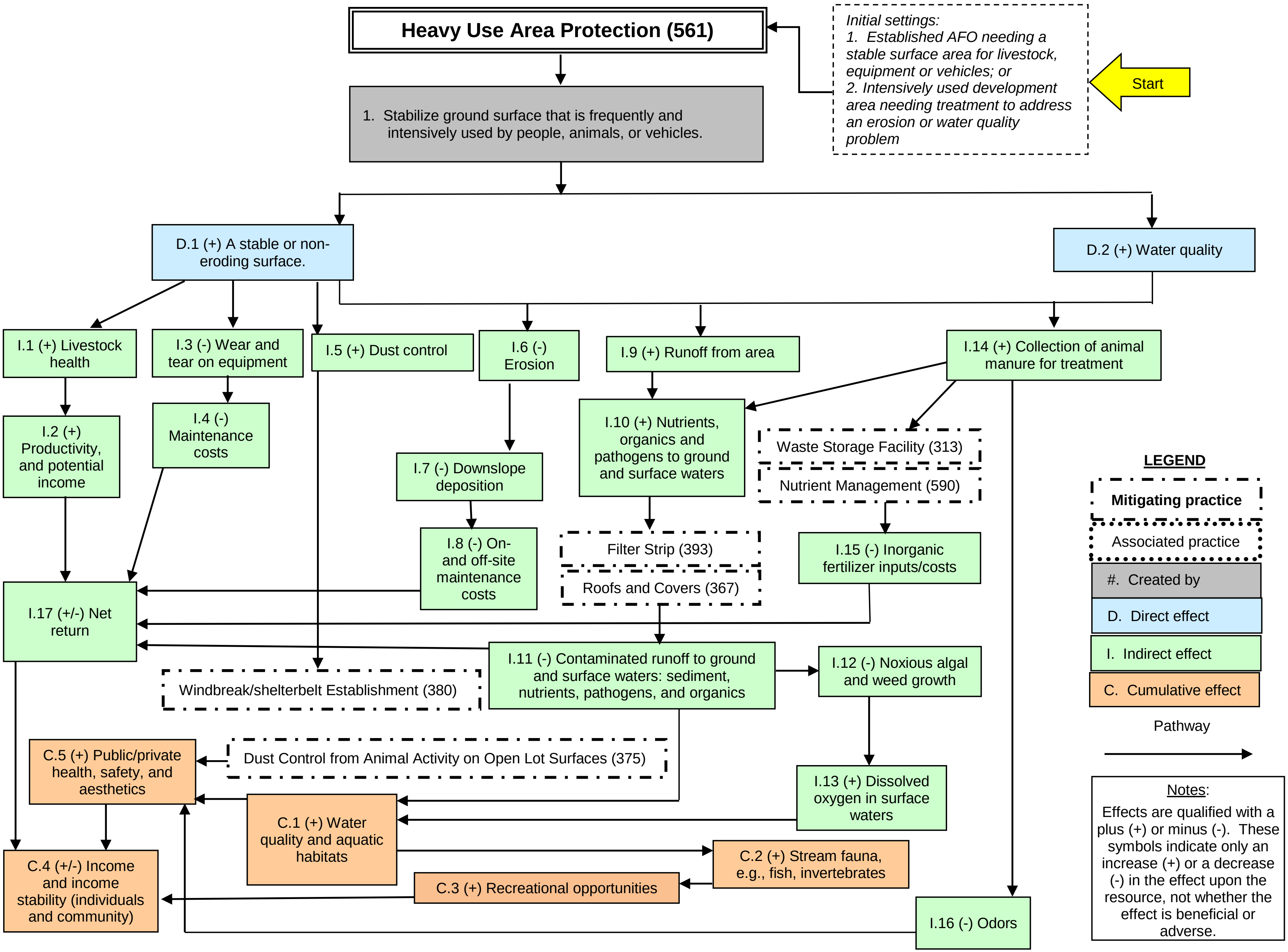
NRCS CONSERVATION PRACTICE EFFECTS - NETWORK DIAGRAM

September 2014



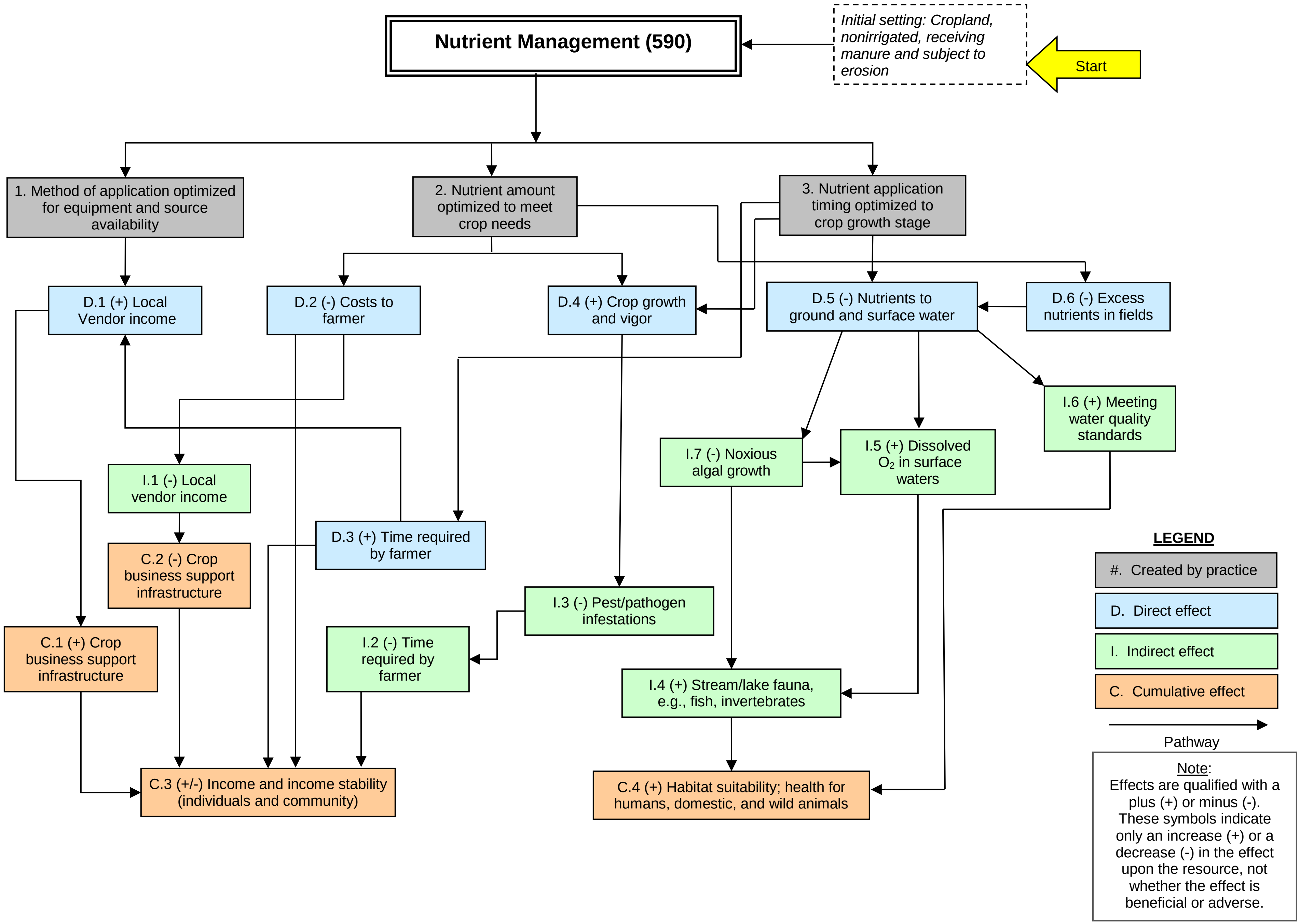
NRCS CONSERVATION PRACTICE EFFECTS - NETWORK DIAGRAM

September 2014



NRCS CONSERVATION PRACTICE EFFECTS - NETWORK DIAGRAM

March 2014



Appendix G:

Monitoring and Adaptive Management Plans

Implementation of Monitoring and Adaptive Management (MAM) was identified as one of the programmatic goals in the Deepwater Horizon (DWH) oil spill Final Programmatic Damage Assessment and Restoration Plan and Programmatic Environmental Impact Statement (PDARP/PEIS). The DWH natural resource damage assessment (NRDA) MAM Framework provides a flexible, science-based approach to effectively and efficiently implement restoration over several decades to provide long-term benefits to the resources and services injured by the DWH oil spill. The project MAM plans that follow in this appendix identify the monitoring needed to evaluate progress toward meeting project objectives and to support adaptive management of the restoration project. The plans identify key sources of uncertainty, incorporate monitoring data needs and decision points that address these uncertainties, and establish a decision-making process for making adjustments, if needed. MAM plans are living documents and will be updated as needed to reflect changing conditions and/or new information. For example, a MAM plan may need to be revised if the project design changes, if initial data analysis indicates that the sampling design is inadequate, or if any uncertainties are resolved or new uncertainties are identified during project implementation and monitoring. Any significant future revisions to MAM plans will be made publicly available through the Restoration Portal.

MAM are major responsibilities for the Alabama Trustee Implementation Group (AL TIG). As described in the Final PDARP/PEIS (section 7.5.1), TIGs are responsible for both resource- and project-level MAM activities. The AL TIG has developed and will implement MAM plans for all restoration projects consistent with guidance provided by the Trustee Council. Data generated through monitoring will provide the basis for annual project reporting that keeps the public fully informed about project progress and for adaptive management and corrective action decisions. Monitoring data will also be applied to improve the likelihood of success and benefits of future projects.

All of the projects in the draft Restoration Plan II/Environmental Assessment (RP II/EA), with the exception of projects that are solely for engineering and design activities, have an associated MAM plan that is included in this appendix. Many of the projects in the draft RP II/EA will be implemented in partnership with entities that have deep expertise in their fields; this collaborative approach will leverage and expand existing efforts and increase confidence in outcomes and approaches for future restoration work.

The content of each MAM plan depends on the type of project, the level of uncertainty, and the proposed activities.

Some of the projects in the draft RP II/EA propose to conduct activities associated with data gathering to fill critical information gaps that will reduce uncertainties and support the AL TIG in future work to develop and implement restoration projects successfully. Because the primary objective of these projects is to gain new knowledge, the associated MAM plans may or may not contain performance criteria or corrective actions. The AL TIG does not expect to conduct project-level adaptive management for these projects, but they are an integral component to the AL TIG's commitment to adaptive management at the program/resource level because the completion of these projects will provide important knowledge that will inform future restoration actions.

There are three primary purposes of the MAM Plans:

1. The first purpose is to identify how restoration managers will measure and track progress towards achieving restoration goals and objectives. This work is accomplished via monitoring specific parameters that, individually and collectively, help the AL TIG understand the extent to which a project is achieving its restoration objectives.

2. The second purpose is to increase the likelihood of successful implementation through identification, before a project begins, of potential corrective actions that could be undertaken if a project does not proceed as expected. This is accomplished by conceptually outlining the reasons why a project might fail to meet its objectives and responses by the AL TIG that might be undertaken to correct these problems. The focus is on restoration planning uncertainties for the project and how these uncertainties may be best addressed through project design and implementation decisions.
3. The third purpose is to capture, in a systematic way, lessons learned or new information acquired that can be incorporated into future project selection, design, and implementation. The evaluation section of each plan contains basic questions that the AL TIG will answer to help understand whether a project achieved its objectives and unanticipated issues were encountered during implementation and how such issues were addressed. Such information will provide insights for future project development. This section will be updated with additional information as monitoring methods are determined for each project. In the future, the AL TIG will work to identify ways to evaluate the overall success of the DWH restoration work by incorporating feedback from project-level evaluations into a larger resource-level framework to understand how projects could be expected to contribute collectively to restoration of injured resources and improved ecosystem conditions and function along the Alabama coast.

The Monitoring and Adaptive Management Procedures and Guidelines Manual Version 1.0 provides detailed information regarding the importance and use of adaptive management.

MONITORING AND ADAPTIVE MANAGEMENT PLAN

MAGNOLIA RIVER LAND ACQUISITION—HOLMES TRACT

PROJECT OVERVIEW

The Holmes Tract is located in Baldwin County off Keith Lane along the Magnolia River (PIN 287940, 65806, and portion of 20643) and includes approximately 80 acres. The property is one of the largest undeveloped tracts on Magnolia River that has not been timbered. It contains more than 1 mile of frontage on Magnolia River and Weeks Creek, including a perimeter of small marsh and forested wetland fringe. The uplands interior of the property contains Gopher Tortoise (*Gopherus polyphemus*) habitat.

The purpose of this project is to acquire the property through a fee simple purchase by the Weeks Bay Foundation (WBF) and transfer it into the permanent ownership of the Weeks Bay National Estuarine Research Reserve (Weeks Bay NERR). The acquisition of this property would include an appropriate land protection instrument (i.e., deed restriction or conservation easement placed on the property would ensure that the purpose of restoration as described in this plan is maintained in perpetuity. In addition, WBF would work with Weeks Bay NERR to create a management plan and prioritize restoration needs, including re-creating longleaf pine savannas, pitcher plant bogs, and marsh and swamp habitat (where appropriate). Restoration actions prioritized in the plan will then be implemented.

RESTORATION TYPE GOALS AND PROJECT RESTORATION OBJECTIVES

- Programmatic goal: Restore and Conserve Habitat
- Restoration type: Wetlands, Coastal and Nearshore Habitat
- Restoration type goal: Restore a variety of interspersed and ecologically connected coastal habitats with particular focus on maximizing ecological functions for the range of resources injured by the spill, such as oysters, estuarine-dependent fish species, birds, marine mammals, and nearshore benthic communities.
- Restoration approach: Protect and conserve marine, coastal, estuarine and riparian habitats.
- Restoration technique: Acquire lands for conservation

Objective 1: Restore and conserve coastal habitat along Magnolia River, protecting habitats and increasing habitat connectivity within the corridor.

Objective 2: Develop a management plan and prioritize restoration needs.

Objective 3: Conduct stewardship and management activities as needed to enhance the quality of habitat.

CONCEPTUAL SETTING AND ANTICIPATED OUTCOMES

As stated in the PDARP, coastal wetlands provide a wide range of ecological functions and services, including providing important habitat for fish and wildlife species, improving water quality, stabilizing shorelines, reducing storm-surge risk, and capturing and storing carbon in organic soils. The restoration approach utilized is to protect and conserve marine, coastal, estuarine, and riparian habitats. The specific technique under this restoration approach is to acquire lands for conservation. Conserving and protecting land parcels via acquisition or conservation easements can protect wetlands and other significant coastal, estuarine, and riparian habitats; create connections between protected areas;

remove direct threats of development; provide mechanisms for protected species management; provide nesting and foraging habitat for birds; protect critical freshwater inflows to estuaries; and improve coastal water quality.

The activities in this project include the acquisition of 80 acres of coastal habitat on the Magnolia River and subsequent placement of that acreage into conservation and active management, which will reduce stressors including urban development, habitat loss and alteration, fragmentation and erosion, leading to improved habitat conditions and quality as well as improved water quality. Long-term outcomes of the project include an increase in management of connected habitats and an overall enhancement of ecosystem services of Gulf Coast habitats and resources.

Sources of Uncertainty

The primary source of uncertainty for this project is related to the willingness of the seller for the purchase of the parcel. This uncertainty has been mitigated by working to find willing sellers as the project was developed. Additionally, restoration activities undertaken may be subject to environmental stressors or other conditions that could influence project outcomes. Other potential uncertainties that could influence project success include:

- Vegetation stress due to herbivory, disease and competition from invasive species
- Land use changes
- Sustaining optimal hydrologic conditions

These potential uncertainties will be addressed when specific restoration activities are identified and the MAM plan will be updated accordingly.

PROJECT MONITORING, PERFORMANCE CRITERIA AND POTENTIAL CORRECTIVE ACTIONS

The proposed monitoring plan for this restoration project was developed to evaluate project performance, key uncertainties, and the need for potential corrective actions, if needed.

Parameters that will be monitored for this project include:

- Acquisition of parcel
- Area
- Completed management plan
- Vegetation percent cover and composition

In future updates to this section, for each of the identified monitoring parameters, information will be provided on the intended purpose of each monitoring parameter (e.g. monitor progress toward meeting one or more of the restoration objectives, regulatory compliance, support adaptive management of the project), monitoring methods, timing and frequency, duration, sample size, and sites. This section will also describe performance criteria and potential corrective actions for project parameters associated with project objectives. The decision-making process requires a structured approach for incorporating new information gained from monitoring and evaluation. As specified in the NRDA regulations, performance criteria are used to determine restoration success or the need for corrective action (15 CFR 990.55(b)(1)(vii)). However, unanticipated consequences, previously unknown conditions or unanticipated environmental drivers uncovered during the evaluation step may also determine the need for corrective actions. The decision to implement a corrective action will holistically consider the overall outcomes of the restoration project by assessing the results of all monitoring parameters compiled in the evaluation step.

ADAPTIVE MANAGEMENT

As discussed in the PDARP/PEIS, adaptive management is a form of structured decision-making applied to the management of natural resources in the face of uncertainty (Pastorok et al. 1997; Williams 2011). It is an iterative process that integrates monitoring and evaluation of management actions with flexible decision-making, where adjustments are made to management approaches based on observed outcomes (NRC 2004). Within the context of ecological restoration, adaptive management addresses key uncertainties by linking science to restoration decision-making (Steyer and Llewellyn 2000). Although adaptive management is a critical component of the restoration plan as a whole, the need for adaptive management may vary on a project-by-project basis. Some projects may be well understood and not have uncertainties which warrant adaptive management. The monitoring and adaptive management framework may be more robust for elements of the restoration plan with high degrees of uncertainty or where numerous restoration projects are planned within a given geographic area and/or for the benefit of a particular resource (Trustees 2016, Appendix 5.E.1, PDARP/PEIS). Under OPA NRDA regulations, restoration projects clearly identify performance criteria that would be used to determine project success or the need for corrective action.

Although adaptive management is a critical component of the restoration plan as a whole, the need for adaptive management on specific conservation practices being implemented is not needed for this project due to the nature of the activities, the scale of the site and the robust understanding of the habitat enhancement activities that will be conducted. Additionally, the development of a management plan that contains prioritized restoration needs will assist in addressing and reducing uncertainties by identifying those activities most likely to be successful. Corrective actions may be undertaken on an as needed basis. Data, analysis and information obtained from this project would be used to help inform future Restoration Plan development, priorities and project selection.

EVALUATION

Evaluation of monitoring data is needed to assess the performance of the project in meeting its restoration objectives, resolving uncertainties to increase understanding, and determine whether corrective actions are needed.

As part of the larger decision-making context beyond the project scale, the evaluation of monitoring data from the individual projects would be compiled and assessed at the Restoration Type and TIG level, and the results would be used to update the knowledge base to inform decisions such as future TIG project prioritization and selection, implementation techniques, and the identification of critical uncertainties. The results of the analysis would be used to answer the following questions:

- Were the project restoration objectives achieved? If not, is there a reason why they were not met?
- Did acquisition of property increase the acreage of conserved habitat in the Weeks Bay Watershed?
- Did the restoration project produce unanticipated effects?
- Were there unanticipated events unrelated to the restoration project that potentially affected the monitoring results (e.g., hurricanes)?
- Were any of the uncertainties identified prior to project implementation resolved?

- Were any new uncertainties identified?

These questions will be answered and compiled in annual monitoring reports for the project and revision to the MAM plan be made if needed.

MONITORING SCHEDULE

The schedule for project monitoring is shown in Table G-1, separated by monitoring activity. Pre-execution monitoring will occur before project execution. Execution monitoring occurs when project has been fully executed as planned. Performance monitoring will occur in the year following initial project execution.

Table G-1

Monitoring Parameter	Pre-Execution Monitoring	As-Built (year 0)	Project Monitoring (Years 1-3)
Acquisition of parcel		X	
Completed management plan		X	
(Area) Extent of habitat acquired		X	
Vegetation Percent Cover and Composition	X	X	X

DATA MANAGEMENT

Data Description

To the extent practicable, all environmental and biological data generated during monitoring activities will be documented using standardized field datasheets. Electronic data files will be named with the date on which the file was created and will include a ReadMe file that describes when the file was created, and by whom, and any explanatory notes on the file contents. If a data file is revised, a new copy should be made and the original preserved. Relevant Project data that are handwritten on hardcopy datasheets or notebooks would be transcribed (entered) into Excel spreadsheets (or similar digital format). After transcription of the data, a second person not associated with data transcription would perform a verification of the data in the electronic data sheets against the original hardcopy datasheets and/or notebooks, and would make any corrections to transcription errors as appropriate before data are used for any analyses or distributed outside of the agency. Implementing Trustees will verify and validate monitoring data and information and would ensure that all data is entered or converted into agreed upon/commonly used digital format labeled with metadata.

Data Review and Clearance

All data will undergo proper QA/QC protocols and be reviewed and verified following the process outlined in Section 3 of the MAM.

Data Storage and Accessibility

Once all data has been verified by quality assurance/quality control procedures, it will be submitted to the Restoration Project Database that is maintained by DCNR.

Data Sharing

Data will be made publicly available, in accordance with the Federal Open Data Policy (Section 10.6.6 of SOP; DWH NRDA Trustees 2016b), through the DIVER Explorer Interface within a year of when the data collection occurred.

REPORTING

Once all data have been reviewed for accuracy and completeness, they will be submitted to the Restoration Project Database. Data will be made publicly available through the DIVER Explorer Interface.

ROLES AND RESPONSIBILITIES

ADCNR is the lead Trustee agency for this project and will ensure that the tract is acquired by the Weeks Bay Foundation.

WBF will purchase the property and transfer it into the permanent ownership of ADCNR, with management by the Weeks Bay NERR.

The Trustee Council facilitates consistency in monitoring and data management procedures to evaluate and report on progress towards meeting restoration goals articulated in the PDARP/PEIS.

REFERENCES

DWH NRDA Trustees

2016 Deepwater Horizon oil spill: final programmatic damage assessment and restoration plan (PDARP) and final programmatic environmental impact statement (PEIS)

DWH NRDA Trustees

2016b Trustee Council Standard Operating Procedures for Implementation of the Natural Resource Restoration for the *Deepwater Horizon* Oil Spill. Originally approved May 4, 2016; revised November 15, 2016.

National Research Council

2004 Adaptive Management for Water Resources Project Planning. Washington, DC: The National Academies Press.

Pastorok, R.A., A. MacDonald, J.R. Sampson, P. Wilber, D.J. Yozzo, and J.P. Titre

1997 An ecological decision framework for environmental restoration projects. Ecological Engineering, 9, 89-107.

Steyer, G.D., and D.W. Llewellyn

2000 Coastal Wetlands Planning, Protection and Restoration Act: A programmatic application of adaptive management. Ecological Engineering, 26, 27-39

Williams, B.K

2011 Adaptive management of natural resources - Framework and issues. Journal of Environmental Management, 92, 1346-1353.

MAM PLAN REVISION HISTORY

MONITORING AND ADAPTIVE MANAGEMENT PLAN
WEEKS BAY LAND ACQUISITION—EAST GATEWAY TRACT

PROJECT OVERVIEW

The proposed Weeks Bay Land Acquisition (East Gateway Tract) project would fund the Weeks Bay Foundation (WBF) to acquire the 175-acre East Gateway Tract through a fee simple purchase and transfer it into the permanent ownership of ADCNR with management by the Weeks Bay NERR. The East Gateway Tract is located in Baldwin County at the mouth of Weeks Bay and contains approximately 175 undeveloped acres. The project would protect the eastern shore of the mouth of Weeks Bay where a large salt marsh with an unnamed stream provides protected habitat and shelter for wading birds, duck species, and various indigenous marine life. This property contains more than 100 acres of wetlands, including estuarine intertidal marsh and freshwater-forested wetlands. The bay front edge of the property is a popular place for anglers to anchor and fish for speckled trout and redfish.

WBF would purchase the property from a willing seller at or below the Yellow Book appraised value. The acquisition of this property would include an appropriate land protection instrument (i.e., deed restriction or conservation easement) to ensure that the purpose of restoration as described in this plan is maintained in perpetuity. WBF would work with Weeks Bay NERR to create a management plan and prioritize restoration needs, including re-creating longleaf pine savannas, pitcher plant bogs, and marsh and swamp habitat (where appropriate). This project would also include E&D for the removal of a bulkhead on the waterfront point of the property that splits Weeks Bay and Mobile Bay. The bulkhead is contributing to shoreline scouring and erosion. A shoreline restoration plan would be developed as part of the bulkhead removal E&D.

RESTORATION TYPE GOALS AND PROJECT RESTORATION OBJECTIVES

- Programmatic goal: Restore and Conserve Habitat
- Restoration type: Wetlands, Coastal and Nearshore Habitat
- Restoration Type goal: Restore a variety of interspersed and ecologically connected coastal habitats with particular focus on maximizing ecological functions for the range of resources injured by the spill, such as oysters, estuarine-dependent fish species, birds, marine mammals, and nearshore benthic communities.
- Restoration approach: Protect and conserve marine, coastal, estuarine and riparian habitats.
- Restoration technique: Acquire lands for conservation.

Objective 1: Restore and conserve coastal habitat in the Weeks Bay watershed, protecting habitats and increasing habitat connectivity within the corridor.

Objective 2: Develop a management plan to prioritize restoration needs.

Objective 3: Conduct engineering and design for removal of a bulkhead and develop associated shoreline restoration plan.

CONCEPTUAL SETTING AND ANTICIPATED OUTCOMES

The activities in this project include the acquisition of 175 acres of coastal habitat on the Magnolia River and subsequent placement of that acreage into conservation and active management, which will reduce stressors including urban development, habitat loss and alteration, fragmentation and erosion, ultimately leading to improved habitat conditions and quality as well as improved water quality. This project meets the Trustees' wetlands, coastal, and nearshore habitats goals by permanently protecting, conserving, and restoring wetland and upland habitats that are directly connected ecologically to coastal and estuarine areas injured by the spill and that contribute to maximizing ecological functions in these areas. Long-term outcomes of the project increased an increase in management of connected habitats and an overall enhancement of ecosystem services of Gulf Coast habitats and resources.

As stated in the PDARP, coastal wetlands provide a wide range of ecological functions and services, including providing important habitat for fish and wildlife species, improving water quality, stabilizing shorelines, reducing storm-surge risk, and capturing and storing carbon in organic soils. The restoration approach utilized is to protect and conserve marine, coastal, estuarine, and riparian habitats. The specific technique under this restoration approach is to acquire lands for conservation. Conserving and protecting land parcels via acquisition or conservation easements can protect wetlands and other significant coastal, estuarine, and riparian habitats; create connections between protected areas; remove direct threats of development; provide mechanisms for protected species management; provide nesting and foraging habitat for birds; protect critical freshwater inflows to estuaries; and improve coastal water quality.

Sources of Uncertainty

The primary source of uncertainty for this project is related to the willingness of the seller and the purchase of the parcel. This uncertainty has been mitigated by working to find willing sellers as the project was developed. Additionally, restoration activities undertaken may be subject to environmental stressors or other conditions that could influence project outcomes. Other potential uncertainties that could influence project success include:

- Vegetation stress due to herbivory, disease and competition from invasive species
- Land use changes
- Sustaining optimal hydrologic conditions

These potential uncertainties will be addressed when specific restoration activities are identified and the MAM plan will be updated accordingly.

PROJECT MONITORING, PERFORMANCE CRITERIA AND POTENTIAL CORRECTIVE ACTIONS

The proposed monitoring plan for this restoration project was developed to evaluate project performance, key uncertainties, and the need for potential corrective actions, if needed.

Parameters that will be monitored for this project include:

- Acquisition of parcel
- Area
- Completed management plan
- Completion of bulkhead removal E&D

In future updates to this section, for each of the identified monitoring parameters, information will be provided on the intended purpose of each monitoring parameter (e.g. monitor progress toward meeting one or more of the restoration objectives, regulatory compliance, support adaptive management of the project), monitoring methods, timing and frequency, duration, sample size, and sites. This section will also describe performance criteria and potential corrective actions for project parameters associated with project objectives. The decision-making process requires a structured approach for incorporating new information gained from monitoring and evaluation. As specified in the NRDA regulations, performance criteria are used to determine restoration success or the need for corrective action (15 CFR 990.55(b)(1)(vii)). However, unanticipated consequences, previously unknown conditions or unanticipated environmental drivers uncovered during the evaluation step may also determine the need for corrective actions. The decision to implement a corrective action will holistically consider the overall outcomes of the restoration project by assessing the results of all monitoring parameters compiled in the evaluation step.

ADAPTIVE MANAGEMENT

As discussed in the PDARP/PEIS, adaptive management is a form of structured decision-making applied to the management of natural resources in the face of uncertainty (Pastorok et al. 1997; Williams 2011). It is an iterative process that integrates monitoring and evaluation of management actions with flexible decision-making, where adjustments are made to management approaches based on observed outcomes (NRC 2004). Within the context of ecological restoration, adaptive management addresses key uncertainties by linking science to restoration decision-making (Steyer and Llewellyn 2000). Although adaptive management is a critical component of the restoration plan as a whole, the need for adaptive management may vary on a project-by-project basis. Some projects may be well understood and not have uncertainties which warrant adaptive management. The monitoring and adaptive management framework may be more robust for elements of the restoration plan with high degrees of uncertainty or where numerous restoration projects are planned within a given geographic area and/or for the benefit of a particular resource (Trustees, 2016, Appendix 5.E.1, PDARP/PEIS). Under OPA NRDA regulations, restoration projects clearly identify performance criteria that would be used to determine project success or the need for corrective action.

Although adaptive management is a critical component of the restoration plan as a whole, the need for extensive adaptive management on specific conservation practices being implemented is not needed for this project due to the nature of the activities, the scale of the site and the robust understanding of the habitat enhancement activities that will be conducted. Additionally, the development of a management plan that contains prioritized restoration needs will assist in addressing and reducing uncertainties by identifying those activities most likely to be successful. Corrective actions may be undertaken on an as needed basis. Data, analysis and information obtained from this project would be used to help inform future restoration plan development, priorities, and project selection.

EVALUATION

Evaluation of monitoring data is needed to assess the performance of the project in meeting its restoration objectives, resolving uncertainties to increase understanding, and determine whether corrective actions are needed.

As part of the larger decision-making context beyond the project scale, the evaluation of monitoring data from the individual projects would be compiled and assessed at the Restoration Type and TIG level, and the results would be used to update the knowledge base to inform decisions such as future TIG project prioritization and selection, implementation techniques, and the identification of critical uncertainties. The results of the analysis would be used to answer the following questions:

- Were the project objectives achieved? If not, is there a reason why they were not met?
- Did acquisition of property increase the acreage of conserved habitat in the Weeks Bay Watershed?

- Was engineering and design for the bulkhead removal completed and was related shoreline restoration plan developed?
- Did the project produce unanticipated effects?
- Were there unanticipated events unrelated to the restoration project that potentially affected the monitoring results (e.g., hurricanes)?
- Were any of the uncertainties identified prior to project implementation resolved?
- Were any new uncertainties identified?

These questions will be answered and compiled in annual monitoring reports for the project and revision to the MAM plan be made if needed.

MONITORING SCHEDULE

The schedule for project monitoring is shown in Table G-2, separated by monitoring activity. Pre-execution monitoring will occur before project execution. Execution monitoring occurs when project has been fully executed as planned. Performance monitoring will occur in the year following initial project execution.

Table G-2

Monitoring Parameter	Pre-Execution Monitoring	As-Built (year 0)	Project Monitoring (Years 1-4)
Acquisition of parcel		X	
Completed management plan			X
(Area) Extent of habitat acquired		X	
Completion of bulkhead removal E&D			X

DATA MANAGEMENT

Data Description

To the extent practicable, all environmental and biological data generated during monitoring activities will be documented using standardized field datasheets. Electronic data files will be named with the date on which the file was created and will include a ReadMe file that describes when the file was created, and by whom, and any explanatory notes on the file contents. If a data file is revised, a new copy should be made and the original preserved. Relevant Project data that are handwritten on hardcopy datasheets or notebooks would be transcribed (entered) into Excel spreadsheets (or similar digital format). After transcription of the data, a second person not associated with data transcription would perform a verification of the data in the electronic data sheets against the original hardcopy datasheets and/or notebooks, and would make any corrections to transcription errors as appropriate before data are used for any analyses or distributed outside of the agency. Implementing Trustees will verify and validate monitoring data and information and would ensure that all data is entered or converted into agreed upon/commonly used digital format labeled with metadata.

Data Review and Clearance

All data will undergo proper QAQC protocols and be reviewed and verified following the process outlined in Section 3 of the MAM Manual.

Data Storage and Accessibility

Once all data has been verified by quality assurance/quality control procedures, it will be submitted to the Restoration Project Database that is maintained by DCNR.

Data Sharing

Data will be made publicly available, in accordance with the Federal Open Data Policy (Section 10.6.6 of SOP; DWH NRDA Trustees 2016b), through the DIVER Explorer Interface within a year of when the data collection occurred.

REPORTING

Once all data have been reviewed for accuracy and completeness, they will be submitted to the Restoration Project Database. Data will be made publicly available through the DIVER Explorer Interface.

ROLES AND RESPONSIBILITIES

ADCNR is the lead Trustee agency for this project and will ensure that the tract is acquired.

WBF will purchase the property and transfer it into the permanent ownership of ADCNR with management by the Weeks Bay NERR.

The Trustee Council facilitates consistency in monitoring and data management procedures to evaluate and report on progress towards meeting restoration goals articulated in the PDARP/PEIS.

REFERENCES

DWH NRDA Trustees

2016 Deepwater Horizon oil spill: final programmatic damage assessment and restoration plan (PDARP) and final programmatic environmental impact statement (PEIS)

DWH NRDA Trustees

2016b Trustee Council Standard Operating Procedures for Implementation of the Natural Resource Restoration for the *Deepwater Horizon* Oil Spill. Originally approved May 4, 2016; revised November 15, 2016.

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2004 Adaptive Management for Water Resources Project Planning. Washington, DC: The National Academies Press.

Pastorok, R.A., A. MacDonald, J.R. Sampson, P. Wilber, D.J. Yozzo, and J.P. Titre

1997 An ecological decision framework for environmental restoration projects. Ecological Engineering, 9, 89-107.

Steyer, G.D., and D.W. Llewellyn

2000 Coastal Wetlands Planning, Protection and Restoration Act: A programmatic application of adaptive management. Ecological Engineering, 26, 27-39.

Williams, B.K

2011 Adaptive management of natural resources - Framework and issues. Journal of Environmental Management, 92, 1346-1353.

MAM PLAN REVISION HISTORY

MONITORING AND ADAPTIVE MANAGEMENT PLAN

WEEKS BAY LAND ACQUISITION—HARROD TRACT

PROJECT OVERVIEW

The Harrod Tract is located in Baldwin County, Alabama off of Sherwood Highland Road (PIN 065600). It is located along the Fish River near where Fish River meets Weeks Bay. The Harrod property contains a total of 231 acres, including over 100 acres of intact wetlands (marsh) habitat. The property is one of the largest remaining undeveloped parcels of swamp, marsh and river shoreline in coastal Alabama and is the largest privately-owned tract in the lower part of Fish River. The property is adjacent to protected wetlands and includes 7,600 feet of Fish River shoreline, including frontage along Turkey Branch and Waterhole Branch, two of Fish River's primary tributaries.

The proposed Weeks Bay Land Acquisition (Harrod Tract) project would fund WBF or the State of Alabama to acquire the 231-acre Harrod Tract through a fee simple purchase, and transfer it into the permanent ownership of ADCNR with management by the Weeks Bay NERR. The Weeks Bay Land Acquisition (Harrod Tract) project would protect approximately 231 acres in perpetuity to maintain its conservation value. A restoration plan would be developed, and associated restoration activities would be conducted on the purchased property, which could include invasive species control (prescribed burning or other methods), native vegetation planting, and limited erosion control measures.

RESTORATION TYPE GOALS AND PROJECT RESTORATION OBJECTIVES

- Programmatic goal: Restore and Conserve Habitat
- Restoration type: Wetlands, Coastal and Nearshore Habitat
- Restoration type goal: Restore a variety of interspersed and ecologically connected coastal habitats with particular focus on maximizing ecological functions for the range of resources injured by the spill, such as oysters, estuarine-dependent fish species, birds, marine mammals, and nearshore benthic communities. The project also meets Trustee goals for wetlands, coastal, and nearshore habitats restoration through the inclusion of funds for invasive species control, native species planting, and erosion control, as well as through the provision of funding for future restoration planning to determine the feasibility of reestablishing longleaf pine savannahs and other historic landscapes.
- Restoration approach: Protect and conserve marine, coastal, estuarine and riparian habitats.
- Restoration technique: Acquire lands for conservation

Objective 1: Restore and conserve coastal habitat in the Weeks Bay watershed.

Objective 2: Develop a management plan to prioritize restoration needs.

Objective 3: Conduct stewardship and management activities as needed to enhance the quality of habitat.

CONCEPTUAL SETTING AND ANTICIPATED OUTCOMES

As stated in the PDARP, coastal wetlands provide a wide range of ecological functions and services, including providing important habitat for fish and wildlife species, improving water quality, stabilizing shorelines, reducing storm-surge risk, and capturing and storing carbon in organic soils. The restoration approach utilized is to protect and conserve marine, coastal, estuarine, and riparian habitats. The specific technique under this restoration approach is to acquire lands for conservation. Conserving and protecting land parcels via acquisition or conservation easements can protect wetlands and other significant coastal, estuarine, and riparian habitats; create connections between protected areas; remove direct threats of development; provide mechanisms for protected species management; provide nesting and foraging habitat for birds; protect critical freshwater inflows to estuaries; and improve coastal water quality.

The activities in this project include the acquisition of 231 acres of coastal habitat and subsequent placement of that acreage into conservation and active management, which will reduce stressors including urban development, habitat loss and alteration, fragmentation and erosion, ultimately leading to improved habitat conditions and quality as well as improved water quality. Long-term outcomes of the project increased an increase in management of connected habitats and an overall enhancement of ecosystem services of Gulf Coast habitats and resources.

Sources of Uncertainty

The primary source of uncertainty for this project is related to the willingness of the seller for the purchase of the parcel, although the property owner has indicated they are willing to sell. If for any reason the State is unable to purchase the property, another parcel will be sought. Other potential uncertainties that could influence project success include:

- Vegetation stress due to herbivory, disease and competition from invasive species
- Land use changes
- Sustaining optimal hydrologic conditions

These potential uncertainties will be addressed when specific restoration activities are identified and the MAM plan will be updated accordingly.

PROJECT MONITORING, PERFORMANCE CRITERIA AND POTENTIAL CORRECTIVE ACTIONS

The proposed monitoring plan for this restoration project was developed to evaluate project performance, key uncertainties, and the need for potential corrective actions, if needed.

Parameters that will be monitored for this project include:

- Acquisition of parcel
- Area
- Completed management plan
- Vegetation percent cover and composition

In future updates to this section, for each of the identified monitoring parameters, information will be provided on the intended purpose of each monitoring parameter (e.g. monitor progress toward meeting one or more of the restoration objectives, regulatory compliance, support adaptive management of the project), monitoring methods, timing and frequency, duration, sample size, and sites. This section will also describe performance criteria and potential corrective actions for project parameters associated with project objectives. The decision-making process requires a structured approach for incorporating new information gained from monitoring and evaluation. As specified in the NRDA regulations, performance criteria are used to determine restoration success or the need for corrective action (15 CFR 990.55(b)(1)(vii)). However, unanticipated consequences, previously unknown conditions or unanticipated environmental drivers uncovered during the evaluation step may also determine the need for corrective actions. The decision to implement a corrective action will holistically consider the overall outcomes of the restoration project by assessing the results of all monitoring parameters compiled in the evaluation step.

ADAPTIVE MANAGEMENT

As discussed in the PDARP/PEIS, adaptive management is a form of structured decision-making applied to the management of natural resources in the face of uncertainty (Pastorok et al. 1997; Williams 2011). It is an iterative process that integrates monitoring and evaluation of management actions with flexible decision-making, where adjustments are made to management approaches based on observed outcomes (NRC 2004). Within the context of ecological restoration, adaptive management addresses key uncertainties by linking science to restoration decision-making (Steyer and Llewellyn 2000). Although adaptive management is a critical component of the restoration plan as a whole, the need for adaptive management may vary on a project-by-project basis. Some projects may be well understood and not have uncertainties which warrant adaptive management. The monitoring and adaptive management framework may be more robust for elements of the restoration plan with high degrees of uncertainty or where numerous restoration projects are planned within a given geographic area and/or for the benefit of a particular resource (Trustees 2016, Appendix 5.E.1, PDARP/PEIS). Under OPA NRDA regulations, restoration projects clearly identify performance criteria that would be used to determine project success or the need for corrective action.

Although adaptive management is a critical component of the restoration plan as a whole, the need for adaptive management on specific conservation practices being implemented is not needed for this project due to the nature of the activities, the scale of the site and the robust understanding of the habitat enhancement activities that will be conducted. Additionally, the development of a management plan that contains prioritized restoration needs will assist in addressing and reducing uncertainties by identifying those activities most likely to be successful. Corrective actions may be undertaken on an as needed basis. Data, analysis and information obtained from this project would be used to help inform future Restoration Plan development, priorities and project selection.

EVALUATION

Evaluation of monitoring data is needed to assess the performance of the project in meeting its restoration objectives, resolving uncertainties to increase understanding, and determine whether corrective actions are needed.

As part of the larger decision-making context beyond the project scale, the evaluation of monitoring data from the individual projects would be compiled and assessed at the Restoration Type and TIG level, and the results would be used to update the knowledge base to inform decisions such as future TIG project prioritization and selection, implementation techniques, and the identification of critical uncertainties. The results of the analysis would be used to answer the following questions:

- Were the project restoration objectives achieved? If not, is there a reason why they were not met?
- Did acquisition of property increase the acreage of conserved habitat in the Weeks Bay Watershed?
- Did the restoration project produce unanticipated effects?
- Were there unanticipated events unrelated to the restoration project that potentially affected the monitoring results (e.g., hurricanes)?

- Were any of the uncertainties identified prior to project implementation resolved?
- Were any new uncertainties identified?

These questions will be answered and compiled in annual monitoring reports for the project and revision to the MAM plan be made if needed.

MONITORING SCHEDULE

The schedule for project monitoring is shown in Table G-3, separated by monitoring activity. Pre-execution monitoring will occur before project execution. Execution monitoring occurs when project has been fully executed as planned. Performance monitoring will occur in the year following initial project execution.

Table G-3

Monitoring Parameter	Pre-Execution Monitoring	As-Built (year 0)	Project Monitoring (Years 1-3)
Acquisition of parcel		X	
Area		X	
Vegetation Percent Cover and Composition	X	X	X

DATA MANAGEMENT

Data Description

To the extent practicable, all environmental and biological data generated during monitoring activities will be documented using standardized field datasheets. Electronic data files will be named with the date on which the file was created and will include a ReadMe file that describes when the file was created, and by whom, and any explanatory notes on the file contents. If a data file is revised, a new copy should be made and the original preserved. Relevant Project data that are handwritten on hardcopy datasheets or notebooks would be transcribed (entered) into Excel spreadsheets (or similar digital format). After transcription of the data, a second person not associated with data transcription would perform a verification of the data in the electronic data sheets against the original hardcopy datasheets and/or notebooks, and would make any corrections to transcription errors as appropriate before data are used for any analyses or distributed outside of the agency. Implementing Trustees will verify and validate monitoring data and information and would ensure that all data is entered or converted into agreed upon/commonly used digital format labeled with metadata.

Data Review and Clearance

All data will undergo proper QAQC protocols, be reviewed and verified following the process outlined in Section 3 of the MAM Manual.

Data Storage and Accessibility

Once all data has been verified by quality assurance/quality control procedures, it will be submitted to the Restoration Project Database that is maintained by DCNR.

Data Sharing

Data will be made publicly available, in accordance with the Federal Open Data Policy (Section 10.6.6 of SOP; DWH NRDA Trustees 2016b), through the DIVER Explorer Interface within a year of when the data collection occurred.

REPORTING

Once all data have been reviewed for accuracy and completeness, they will be submitted to the Restoration Project Database. Data will be made publicly available through the DIVER Explorer Interface.

ROLES AND RESPONSIBILITIES

ADCNR is the lead Trustee agency for this project and will ensure that the tract is acquired by the WBF.

WBF will purchase the property and transfer it into the permanent ownership of ADCNR with management by the Weeks Bay NERR.

The Trustee Council facilitates consistency in monitoring and data management procedures to evaluate and report on progress towards meeting restoration goals articulated in the PDARP/PEIS.

REFERENCES

DWH NRDA Trustees

2016 Deepwater Horizon oil spill: final programmatic damage assessment and restoration plan (PDARP) and final programmatic environmental impact statement (PEIS)

DWH NRDA Trustees

2016b Trustee Council Standard Operating Procedures for Implementation of the Natural Resource Restoration for the *Deepwater Horizon* Oil Spill. Originally approved May 4, 2016; revised November 15, 2016.

National Research Council

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1997 An ecological decision framework for environmental restoration projects. Ecological Engineering, 9, 89-107.

Steyer, G.D., and D.W. Llewellyn

2000 Coastal Wetlands Planning, Protection and Restoration Act: A programmatic application of adaptive management. Ecological Engineering, 26, 27-39.

Williams, B.K

2011 Adaptive management of natural resources - Framework and issues. Journal of Environmental Management, 92, 1346-1353.

MAM PLAN REVISION HISTORY

MONITORING AND ADAPTIVE MANAGEMENT PLAN

LITTLE LAGOON LIVING SHORELINE ALTERNATIVE

PROJECT OVERVIEW

This project is located in Little Lagoon, Gulf Shores, Alabama, and it aims to restore a minimum of 2,200 feet of shoreline adjacent to Bon Secour National Wildlife Refuge (BSNWR). The project would include evaluation, planning, implementation, and monitoring and adaptive management of a living shoreline project. Little Lagoon is a shallow body of water, 10 miles long and 0.5-mile-wide on the north side of the Gulf of Mexico on the Alabama coast. Its brackish water is a mix of overflow from the mostly fresh water Lake Shelby and salt water from the Gulf of Mexico that enters through the Little Lagoon Pass in Gulf Shores, Alabama.

Construction of a living shoreline would protect habitat on adjacent federal land by buffering the shoreline against erosion. The project would include planning, implementation, and monitoring of a living shoreline project that uses natural materials rather than hardened structures or barriers, strategically placed to provide protective erosion control management to restore natural habitat, functions, and processes. USDOI would be the implementing Trustee for this project.

One or two rows of biodegradable coconut fiber “coir” logs may be placed along the eroding shoreline to stabilize vegetation and attenuate wave action, and grass plantings may (e.g., *Spartina alterniflora* or *Juncus roemerianus*) be placed between the logs and the eroded shoreline to jump start a vegetated buffer. Native mussels may also be seeded among the shoreline grasses. The specific restoration activities would be finalized during the evaluation and planning process.

RESTORATION TYPE GOALS AND PROJECT RESTORATION OBJECTIVES

Project Type: Wetlands, Coastal and Nearshore Habitats

- Programmatic goal: Restore and Conserve Habitat
- Restoration type: Habitat Projects on Federally Managed Lands
- Restoration type goal: Restore federally managed habitats that were affected by the oil spill and response actions through an integrated portfolio of restoration approaches across a variety of habitats.
- Restoration approach: Protect and conserve marine, coastal, estuarine and riparian habitats
- Restoration technique: Construct breakwaters

Objective 1: Construct a living shoreline restoration project to restore a minimum of 2,200 feet of shoreline.

CONCEPTUAL SETTING AND ANTICIPATED OUTCOMES

The conceptual model, described below, forms the basis of this monitoring plan, and includes a summary of the project activities, the expected product or output of those activities and the desired project outcomes. Constructing a breakwater will help reduce stressors including erosion and habitat loss, ultimately improving ecosystem function, and/or biological capacity. The construction of a living shoreline will result in reduction of erosion of shoreline protecting adjacent beach mouse habitat and will also increase the amount of biologically productive shoreline habitat. Planting vegetation will stabilize sediment and the shoreline, reduce erosion, encourage sediment deposition and contribute to ecosystem function.

Sources of Uncertainty

One source of uncertainty for this project is related to the construction of the living shoreline as designed, on schedule and on budget. Other uncertainties include impact from potential storms, as well as the longevity and effectiveness of the materials used to construct the living shoreline. The materials proposed to be utilized have proven effective in other areas, reducing the likelihood of project failure. Other uncertainties include:

- stress on planted vegetation due to herbivory, disease or competition
- maintenance of optimal hydrologic conditions for the sustainability of restored areas
- natural variability in ecological and physical processes

PROJECT MONITORING, PERFORMANCE CRITERIA AND POTENTIAL CORRECTIVE ACTIONS

The proposed monitoring plan for this restoration project was developed to evaluate project performance, key uncertainties, and the need for potential corrective actions, if needed.

Parameters to be considered for monitoring include:

- Spatial extent
- Vegetation Percent Cover and Composition
- Shoreline Position

In future updates to this section, for each of the identified monitoring parameters, information will be provided on the intended purpose of each monitoring parameter (e.g. monitor progress toward meeting one or more of the restoration objectives, regulatory compliance, support adaptive management of the project), monitoring methods, timing and frequency, duration, sample size, and sites. This section will also describe performance criteria and potential corrective actions for project parameters associated with project objectives. The decision-making process requires a structured approach for incorporating new information gained from monitoring and evaluation. As specified in the NRDA regulations, performance criteria are used to determine restoration success or the need for corrective action (15 CFR 990.55(b)(1)(vii)). However, unanticipated consequences, previously unknown conditions or unanticipated environmental drivers uncovered during the evaluation step may also determine the need for corrective actions. The decision to implement a corrective action will holistically consider the overall outcomes of the restoration project by assessing the results of all monitoring parameters compiled in the evaluation step.

ADAPTIVE MANAGEMENT

As discussed in the PDARP/PEIS, adaptive management is a form of structured decision-making applied to the management of natural resources in the face of uncertainty (Pastorok et al. 1997; Williams 2011). It is an iterative process that integrates monitoring and evaluation of management actions with flexible decision-making, where adjustments are made to management approaches based on observed outcomes (NRC 2004). Within the context of ecological restoration, adaptive management addresses key uncertainties by linking science to restoration decision-making (Steyer and Llewellyn 2000). Although adaptive management is a critical component of the restoration plan as a whole, the need for adaptive management may vary on a project-by-project basis. Some projects may be well understood and not have uncertainties which warrant adaptive management. The monitoring and adaptive management framework may be more robust for elements of the restoration plan with high degrees of uncertainty or where numerous restoration projects are planned within a given geographic area and/or for the benefit of a particular resource (Trustees, 2016, Appendix 5.E.1, PDARP/PEIS). Under OPA NRDA regulations, restoration projects clearly identify performance criteria that would be used to determine project success or the need for corrective action.

Although adaptive management is a critical component of the restoration plan as a whole, the need for extensive adaptive management on specific conservation practices being implemented is not expected to be extensive for this project due to the nature of the activities, the scale of the site and the robust understanding of the habitat enhancement activities that will be conducted. Data, analysis and information obtained from this project would be used to help inform future Restoration Plan development, priorities and project selection. Periodic maintenance may be necessary following severe weather events or other situations that would increase erosion potential. Contingencies would include an additional row of coir logs or bagged oyster shells in front of or on top of the initial row of coir logs if they were placed too low or degrade too quickly.

EVALUATION

Evaluation of monitoring data is needed to assess the performance of the project in meeting its restoration objectives, resolving uncertainties to increase understanding, and determine whether corrective actions are needed.

As part of the larger decision-making context beyond the project scale, the evaluation of monitoring data from the individual projects would be compiled and assessed at the Restoration Type and TIG level, and the results would be used to update the knowledge base to inform decisions such as future TIG project prioritization and selection, implementation techniques, and the identification of critical uncertainties. The results of the analysis would be used to answer the following questions:

- Were the project restoration objectives achieved? If not, is there a reason why they were not met?
- Was project constructed as designed?
- Did planted vegetation establish successfully?
- Has erosion been reduced?
- Did the restoration project produce unanticipated effects?
- Were there unanticipated events unrelated to the restoration project that potentially affected the monitoring results (e.g., hurricanes)?
- Were any of the uncertainties identified prior to project implementation resolved?
- Were any new uncertainties identified?
- Have data been summarized and characterized in a way that allows for a clear understanding of results?
- What broader insights might be gained from implementation/monitoring of this project?

These questions will be answered and compiled in annual monitoring reports for the project and revision to the MAM plan be made if needed.

MONITORING SCHEDULE

The schedule for project monitoring is shown in Table G-4, separated by monitoring activity. Pre-execution monitoring will occur before project execution. Execution monitoring occurs when project has been fully executed as planned. Performance monitoring will occur in the year following initial project execution.

Table G-4

Monitoring Parameter	Pre-Execution Monitoring	As-Built (year 0)	Post-Execution Monitoring (Years 1, 2)
Area		X	X
Vegetation Percent Cover and Composition	X	X	X
Shoreline Position	X	X	X

DATA MANAGEMENT

Data Description

To the extent practicable, all environmental and biological data generated during monitoring activities will be documented using standardized field datasheets. Electronic data files will be named with the date on which the file was created and will include a ReadMe file that describes when the file was created, and by whom, and any explanatory notes on the file contents. If a data file is revised, a new copy should be made and the original preserved. Relevant Project data that are handwritten on hardcopy datasheets or notebooks would be transcribed (entered) into Excel spreadsheets (or similar digital format). After transcription of the data, a second person not associated with data transcription would perform a verification of the data in the electronic data sheets against the original hardcopy datasheets and/or notebooks, and would make any corrections to transcription errors as appropriate before data are used for any analyses or distributed outside of the agency. Implementing Trustees will verify and validate monitoring data and information and would ensure that all data is entered or converted into agreed upon/commonly used digital format labeled with metadata.

Data Review and Clearance

All data will undergo proper QAQC protocols, be reviewed, and verified following the process outlined in Section 3 of the MAM Manual.

Data Storage and Accessibility

Once all data has been verified by quality assurance/quality control procedures, it will be submitted to the Restoration Project Database that is maintained by DCNR.

Data Sharing

Data will be made publicly available, in accordance with the Federal Open Data Policy (Section 10.6.6 of SOP; DWH NRDA Trustees 2016b), through the DIVER Explorer Interface within a year of when the data collection occurred.

REPORTING

Once all data have been reviewed for accuracy and completeness, they will be submitted to the Restoration Project Database. Data will be made publicly available through the DIVER Explorer Interface.

ROLES AND RESPONSIBILITIES

DOI is the lead Trustee agency for this project and will ensure that the project is implemented.

The Trustee Council facilitates consistency in monitoring and data management procedures to evaluate and report on progress towards meeting restoration goals articulated in the PDARP/PEIS.

REFERENCES

DWH NRDA Trustees

2016 Deepwater Horizon oil spill: final programmatic damage assessment and restoration plan (PDARP) and final programmatic environmental impact statement (PEIS)

DWH NRDA Trustees

2016b Trustee Council Standard Operating Procedures for Implementation of the Natural Resource Restoration for the *Deepwater Horizon* Oil Spill. Originally approved May 4, 2016; revised November 15, 2016.

National Research Council

2004 Adaptive Management for Water Resources Project Planning. Washington, DC: The National Academies Press.

Pastorok, R.A., A. MacDonald, J.R. Sampson, P. Wilber, D.J. Yozzo, and J.P. Titre

1997 An ecological decision framework for environmental restoration projects. Ecological Engineering, 9, 89-107.

Steyer, G.D., and D.W. Llewellyn

2000 Coastal Wetlands Planning, Protection and Restoration Act: A programmatic application of adaptive management. Ecological Engineering, 26, 27-39.

Williams, B.K

2011 Adaptive management of natural resources - Framework and issues. Journal of Environmental Management, 92, 1346-1353.

MAM PLAN REVISION HISTORY

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MONITORING AND ADAPTIVE MANAGEMENT PLAN

FOWL RIVER NUTRIENT REDUCTION PROJECT

PROJECT OVERVIEW

This project will restore resources injured by the *DWH* oil spill as outlined in the *DWH* PDARP/PEIS following the Natural Resource Damage Assessment process. The Fowl River Nutrient Reduction project would restore water quality through implementation of improved land management practices that reduce nutrient and sediment loadings to Mobile Bay. The implementation of land management practices using existing USDA-NRCS conservation practice standards and specifications would be the primary tool for reducing erosion and nutrient inputs in the watershed.

Excessive nutrient enrichment, or eutrophication, of Gulf Coast estuaries and their watersheds is a chronic threat that can lead to hypoxia (low oxygen levels), harmful algal blooms, habitat loss, and fish kills (PDARP/PEIS, section 5.5.4). This project would restore and enhance the ecological and hydrological integrity of water resources, including improving water quality and ensuring natural water quantity levels to coastal rivers and streams and coastal bays and estuaries. Toward this end, the objective of this project is to reduce rural nonpoint source pollution through the implementation of conservation practices on agricultural lands.

The primary goal for the nutrient reduction project is water quality improvement through nutrient and sediment reduction. The health of the Gulf of Mexico depends on the health of its estuaries, and the health of those coastal waters is influenced by land uses in the watersheds of its tributaries. In the five Gulf States, more than 80 percent of the acreage is in private ownership (USDA-NRCS 2014) and is used for forestry and agriculture.

Given the success of USDA NRCS Farm Bill programs and their strong acceptance by private landowners, there is a significant opportunity to implement conservation practices on private lands. The USDA-NRCS would provide outreach and technical assistance to voluntary participants (landowners), especially on the most vulnerable acres in the watersheds, to develop conservation plans and would use all available conservation practices typically planned and funded by USDA-NRCS programs. The project proposes to implement clusters of projects within the smallest watershed, to the extent practicable, with the goal of making a discernable difference in local water quality. While this targeted and concentrated approach is desired, the projects proponents understand the voluntary nature of conservation implementation and will strive to reach the critical sources within the watershed. The proposed conservation practices would reduce nutrient losses from the landscape; reduce nutrient loads to streams and downstream receiving waters; and reduce water quality degradation in watersheds that could provide benefits to marine resources and benefits to coastal watersheds.

RESTORATION TYPE GOALS AND PROJECT RESTORATION OBJECTIVES

- Programmatic goal: Restore Water Quality
- Restoration type: Nutrient Reduction (Nonpoint source)
- Restoration approach: Reduce nutrient loads to coastal watersheds
- Restoration technique: Agricultural conservation practices

- Restoration Type Goal: Reduce nutrient loadings to Gulf Coast estuaries, habitats, and resources that are threatened by chronic eutrophication, hypoxia, or harmful algal blooms or that suffer habitat losses associated with water quality degradation.

Objective 1: Reduce sediment, phosphorous and nitrogen loads during storm events leaving private lands in the watershed.

The monitoring or project parameters are dependent upon the voluntary participation by landowners to implement conservation practices on their land. Implemented conservation practices may or may not be located in the same subwatershed, therefore sampling efforts may vary in scale at different watershed levels. The proposed conservation practices will reduce nutrient losses from the landscape, reduce nutrient loads to streams and downstream receiving waters, and reduce water quality degradation in watershed that would provide benefits to marine resources and coastal watersheds.

CONCEPTUAL SETTING AND ANTICIPATED OUTCOMES

A conceptual model forms the basis of this monitoring plan, and includes a summary of the restoration project and the desired project outcomes. For this project, the specific stressors addressed include nutrient and sediment loading, agricultural activities and land cover conversion. This project will reduce those stressors by implementing conservation practices on private agricultural lands that will reduce sedimentation and nutrients that make their way into local waterbodies, resulting in improved water quality.

Table G-5: Conceptual Model

Activity	Output	Short-term Outcome	Long-term Outcome
• Implement conservation practices to reduce nutrient and sediment loading into receiving waters	• Reduced nutrient and sediment loading into the system	• Decrease in nutrient and sediment loadings in targeted watersheds	• Enhancement of ecosystem services of Gulf coast habitats and marine resources

Sources of Uncertainty

Critical uncertainties are defined as those that have the potential to impact or impede the decision-making process and the ability to achieve the restoration objective(s). Although many types of scientific and other uncertainties exist, the focus of uncertainty in this context is the uncertainty that affects the decisions being made for this project. Monitoring to resolve critical uncertainties affecting these decisions can allow for more effective expenditure of resources into the future as learning takes place.

The following uncertainties could potentially influence the success of the project. Efforts will be made in the planning and implementation phases to reduce and/or eliminate these uncertainties.

- Willingness of landowners to participate. Strategy to resolve: identify other willing landowners.
- Conservation practices may not result in measurable change in the receiving waters. Strategy to resolve: Conduct targeted in-stream monitoring at locations upstream and

downstream of the implementation area. Monitoring data will be used to refine future management actions.

PROJECT MONITORING, PERFORMANCE CRITERIA AND POTENTIAL CORRECTIVE ACTIONS

The proposed monitoring for this project, outlined below, is organized by project objective, with one or more monitoring parameters for each objective. For each of the identified monitoring parameters information is provided on the monitoring methods, timing and frequency, sample size and sites. In addition, performance criteria for each parameter are identified (if applicable), including example corrective actions that could be taken if the performance criteria are not met. The parameters listed below may or may not be tied to performance criteria and/or corrective actions. These parameters will be monitored at the project site, in adjacent streams, and may also be monitored at appropriate reference and/or control sites to demonstrate how the project is trending toward the performance criteria.

The decision-making process requires a structured approach for incorporating new information gained from monitoring and evaluation. As specified in the NRDA regulations, performance criteria would be used to determine restoration success or the need for corrective action (15 CFR 990.55(b)(1)(vii)). However, unanticipated consequences, previously unknown conditions or unanticipated environmental drivers uncovered during the evaluation step may also determine the need for corrective actions. Information below does not include all possible options; rather, it includes a list of potential adaptive management actions for each individual parameter to be considered. The decision to implement a corrective action should holistically consider the overall outcomes of the restoration project by assessing the results of all monitoring parameters compiled in the evaluation step.

This MAM Plan will be revised and updated as specific activities are identified.

Objective 1: Reduce sediment, phosphorous and nitrogen loads during storm events leaving private lands in the watershed.

- Were sediment, nitrogen and phosphorous loads to downstream waterbodies reduced?

Parameter: Number of water quality improvement practices implemented

- Method: Count number of projects implemented
- Timing and Frequency: Annual
- Sample size: All projects implemented
- Sites: All sites
- Performance criteria: Number of projects implemented by end of project period

Parameter: Discharge (m^3/s or cfs)

- Method: Per MAM Manual
- Timing and frequency: Ten measurements per year would be taken at one or more sets of one upstream and two downstream stations that bracket portions of the watershed where conservation practices are being implemented.
- Sample size: The total number of sites is not yet determined and will be dependent on the amount and location of conservation practices in the watershed. It is anticipated that 10

samples would be collected per year at each station. Samples would be taken at baseflow conditions when possible. Sites: Will be determined when sites are identified.

Parameter: Total Suspended Solids (TSS) (mg/L or ppm) and Turbidity

- Method: In-stream. Fixed station parameter reading using a data sonde, under baseflow conditions when possible, using standard monitoring protocols would occur at appropriately located upstream and downstream stations that bracket portions of watersheds with conservation practices.
- Timing and frequency: Ten samples per year would be collected at one or more sets of one upstream and two downstream stations that bracket portions of the watershed where conservation practices are being implemented.
- Sample size: The total number of sites is not yet determined and will be dependent on the amount and location of conservation practices in the watershed. It is anticipated that a total of 10 samples would be collected per year at each station. Samples would be taken at baseflow conditions when possible.
- Sites: Conservation practice implementation will be dependent on the participation of landowners in the target watersheds described above. Locations will be updated in the monitoring plan when landowners sign participation agreements with the NRCS. The geographic scope of the in-stream monitoring design will depend on the location of lands enrolled in the conservation program. Where a large number of acres are co-located in a small watershed (e.g. HUC 12), the design will likely include one upstream station (could be optional depending on upstream conditions) and one or more downstream stations depending on the location of the cluster of conservation practices.
- Performance criteria: Change in the quantity of in-stream sediment over time.
- Corrective Action: Actions would vary depending on the type of conservation practice implemented. Some conservation practices may require inspection and maintenance.

Parameter: Total Phosphorous (TP) (mg/L)

- Method: In-stream. Sample collection using standard monitoring protocols would occur at appropriately located upstream and downstream stations that bracket portions of the area with conservation practices.
- Timing and frequency: Ten samples per year would be collected at one or more sets of one upstream and two downstream stations that bracket implementation areas.
- Sample size: The total number of sites is not yet determined and will be dependent on the number and location of conservation practices in the watershed. It is anticipated that a total of 10 samples would be collected per year at each station. Samples would be taken at baseflow conditions when possible.
- Sites: Conservation practice implementation will be dependent on the participation of landowners in the target watersheds described above. Locations will be updated in the monitoring plan when landowners sign participation agreements with the NRCS. The geographic scope of the in-stream monitoring design will depend on the location of lands enrolled in the conservation program. Where a large number of acres are co-located in a small watershed (e.g. HUC 12), the design will likely include one upstream station (could be

optional depending on upstream conditions) and one or more downstream stations depending on the location of the cluster of conservation practices.

- Performance criteria: Change in the quantity of in-stream phosphorous over time.
- Corrective Action: Actions would vary depending on the type of conservation practice implemented. Some conservation practices may require inspection and maintenance.

Parameter: Total Nitrogen (TN) (mg/L)

- Method: Sample collection using standard monitoring protocols will occur at appropriately located upstream and downstream stations that bracket portions of areas where conservation activities are being implemented.
- Timing and frequency: Ten samples per year will be collected at one or more sets of one upstream and two downstream stations that bracket portions of the watershed where conservation activities are being implemented.
- Sample size: The total number of sites is not yet determined and will be dependent on the amount and location of conservation practices in the watershed. It is anticipated that a total of 10 samples would be collected per year at each station. Samples would be taken at baseflow conditions when possible.
- Sites: Conservation practice implementation will be dependent on the participation of landowners in the target watersheds described above. Locations will be updated in the monitoring plan when landowners sign participation agreements with the NRCS. The geographic scope of the in-stream monitoring design will depend on the location of lands enrolled in the conservation program. Where a large number of acres are co-located in a small watershed (e.g. HUC 12), the design will likely include one upstream station (could be optional depending on upstream conditions) and one or more downstream stations depending on the location of the cluster of conservation practices.
- Performance criteria: Change in the quantity of in-stream nitrogen over time.
- Corrective Action: Actions would vary depending on the type of conservation practice implemented. Some conservation practices may require inspection and maintenance.

Corrective actions that may be necessary include, but are not limited to, regrading/removing water control structures, planting/replanting desirable vegetation, and/or removing nuisance vegetation. Corrective actions will likely occur after implementation, but within the five-year time frame for this project. Corrective actions will be identified by USDA based on site evaluations and performance monitoring data and reports. Costs for addressing the corrective action will be evaluated by USDA to determine feasibility.

ADAPTIVE MANAGEMENT

Implementation of the conservation practices, monitoring and adaptive management would utilize standardized actions using accepted tools and protocols at specific locations.

As discussed in the PDARP/PEIS, adaptive management is a form of structured decision-making applied to the management of natural resources in the face of uncertainty (Pastorok et al. 1997; Williams 2011). It is an iterative process that integrates monitoring and evaluation of management actions with flexible decision-making, where adjustments are made to management approaches based on observed outcomes (NRC 2004). Within the context of ecological restoration, adaptive management addresses key uncertainties by linking science to restoration decision-making (Steyer and Llewellyn 2000). Although adaptive management is a critical component of the restoration plan as a whole, the need for adaptive management may vary on a project-by-project basis. Some projects may be well understood and not have uncertainties which warrant adaptive management. The monitoring and adaptive management framework may be more robust for elements of the restoration plan with high degrees of uncertainty or where numerous restoration projects are planned within a given geographic area and/or for the benefit of a particular resource (Trustees 2016, Appendix 5.E.1, PDARP/PEIS). Under OPA NRDA regulations, restoration projects clearly identify performance criteria that would be used to determine project success or the need for corrective action. The need for adaptive management on specific conservation practices being implemented is not needed for this project due to the nature of the sampling approaches, the objectives of the project and the scales of the sites in which the data will be collected, and an understanding of the conservation practices that will be applied. Data, analysis and information obtained from this project will be used to help inform future Restoration Plan development, priorities and project selection and implementation.

EVALUATION

Evaluation of monitoring data is needed to assess the performance of the project in meeting its restoration objectives, resolving uncertainties to increase understanding, and determine whether corrective actions are needed.

As part of the larger decision-making context beyond the project scale, the evaluation of monitoring data from the individual projects would be compiled and assessed at the Restoration Type and TIG level, and the results would be used to update the knowledge base to inform decisions such as future TIG project prioritization and selection, implementation techniques, and the identification of critical uncertainties. The results of the analysis would be used to answer the following questions:

- Were the project restoration objectives achieved? If not, is there a reason why they were not met?
- Were sediment, nitrogen and phosphorous loads to downstream waterbodies reduced?
- Did the restoration project produce unanticipated effects?
- Were there unanticipated events unrelated to the restoration project that potentially affected the monitoring results (e.g., hurricanes)?
- Were any of the uncertainties identified prior to project implementation resolved?
- Were any new uncertainties identified?

The analysis methods would be applied to all monitoring parameters as follows:

Water Quality Data

Standard analytical techniques would be used to document water quality improvements between upstream and downstream stations that bracket areas with conservation systems, following guidance in Alabama's Quality Assurance Project Plan (QAPP). The QAPP is developed in accordance with ADEM SOP #8302, "Preparation, Review, Approval, Distribution, and Archival of Quality Assurance Program/Project Plans (QAPPs) and EPA Requirements for Quality Assurance Project Plans" (EPA QA/R-5, 2001).

PROJECT-LEVEL DECISIONS: PERFORMANCE CRITERIA AND POTENTIAL CORRECTIVE ACTIONS

Conservation practices will be implemented according to well-established USDA standards, specifications, engineering design, and performance criteria. Regular construction monitoring is a standard element of cooperator contracts. Contracts also have standard provisions for operation and maintenance, including replacement of failed practice elements as corrective actions.

MONITORING SCHEDULE

The schedule for project monitoring is shown in Table G-6, separated by monitoring activity. Pre-execution monitoring will occur before project execution. Execution monitoring occurs when project has been fully executed as planned. Performance monitoring will occur in the year following initial project execution.

Table G-6

Monitoring Parameter	Pre-Execution Monitoring	As-Built (year 0)	Post-Execution Monitoring (Years 1-4)
Number of projects implemented			X
Discharge			X
TSS	X	X	X
TP	X	X	X
TN	X	X	X

DATA MANAGEMENT

Data Description

To the extent practicable, all environmental and biological data generated during monitoring activities will be documented using standardized field datasheets. Electronic data files will be named with the date on which the file was created and will include a ReadMe file that describes when the file was created, and by whom, and any explanatory notes on the file contents. If a data file is revised, a new copy should be made and the original preserved. Relevant Project data that are handwritten on hardcopy datasheets or notebooks would be transcribed (entered) into Excel spreadsheets (or similar digital format). After transcription of the data, a second person not associated with data transcription would perform a verification of the data in the electronic data sheets against the original hardcopy datasheets and/or notebooks, and would make any corrections to transcription errors as appropriate before data are used for any analyses or distributed outside of the agency. Implementing Trustees will verify and validate monitoring data and information and would ensure that all data is entered or converted into agreed upon/commonly used digital format labeled with metadata.

Data Review and Clearance

All data will undergo proper QAQC protocols, be reviewed and verified following the process outlined in Section 3 of the MAM.

Data Storage and Accessibility

Once all data has been verified by quality assurance/quality control procedures, it will be submitted to the Restoration Project Database that is maintained by DCNR.

Data Sharing

Data will be made publicly available, in accordance with the Federal Open Data Policy (Section 10.6.6 of SOP; DWH NRDA Trustees 2016b), through the DIVER Explorer Interface within a year of when the data collection occurred.

REPORTING

Once all data have been reviewed for accuracy and completeness, they will be submitted to the Restoration Project Database. Data will be made publicly available through the DIVER Explorer Interface.

ROLES AND RESPONSIBILITIES

ADCNR is the lead Trustee agency for this project and will ensure that the project is completed.

USDA-NRCS is the implementing Trustee.

The Trustee Council facilitates consistency in monitoring and data management procedures to evaluate and report on progress towards meeting restoration goals articulated in the PDARP/PEIS.

REFERENCES

DWH NRDA Trustees

2016 Deepwater Horizon oil spill: final programmatic damage assessment and restoration plan (PDARP) and final programmatic environmental impact statement (PEIS)

DWH NRDA Trustees

2016b Trustee Council Standard Operating Procedures for Implementation of the Natural Resource Restoration for the *Deepwater Horizon* Oil Spill. Originally approved May 4, 2016; revised November 15, 2016.

National Research Council

2004 Adaptive Management for Water Resources Project Planning. Washington, DC: The National Academies Press.

Pastorok, R.A., A. MacDonald, J.R. Sampson, P. Wilber, D.J. Yozzo, and J.P. Titre

1997 An ecological decision framework for environmental restoration projects. Ecological Engineering, 9, 89-107.

Steyer, G.D., and D.W. Llewellyn

2000 Coastal Wetlands Planning, Protection and Restoration Act: A programmatic application of adaptive management. Ecological Engineering, 26, 27-39.

Williams, B.K

2011 Adaptive management of natural resources - Framework and issues. Journal of Environmental Management, 92, 1346-1353.

MAM PLAN REVISION HISTORY

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MONITORING AND ADAPTIVE MANAGEMENT PLAN

WEEKS BAY NUTRIENT REDUCTION PROJECT

PROJECT OVERVIEW

This project will restore resources injured by the *DWH* oil spill as outlined in the *DWH* PDARP/PEIS following the Natural Resource Damage Assessment process. The Weeks Bay Nutrient Reduction project would restore water quality through implementation of improved land management practices that reduce nutrient and sediment loadings to Weeks and Mobile Bays. The implementation of land management practices using existing USDA-NRCS conservation practice standards and specifications would be the primary tool for reducing erosion and nutrient inputs in the watershed.

Excessive nutrient enrichment, or eutrophication, of Gulf Coast estuaries and their watersheds is a chronic threat that can lead to hypoxia (low oxygen levels), harmful algal blooms, habitat loss, and fish kills (PDARP/PEIS, section 5.5.4). This project would restore and enhance the ecological and hydrological integrity of water resources, including improving water quality and ensuring natural water quantity levels to coastal rivers and streams and coastal bays and estuaries. Toward this end, the objective of this project is to reduce rural nonpoint source pollution through the implementation of conservation practices on agricultural lands.

The primary goal for the nutrient reduction project is water quality improvement through nutrient and sediment reduction. The health of the Gulf of Mexico depends on the health of its estuaries, and the health of those coastal waters is influenced by land uses in the watersheds of its tributaries. In the five Gulf States, more than 80 percent of the acreage is in private ownership (USDA-NRCS 2014) and is used for forestry and agriculture.

Given the success of USDA NRCS Farm Bill programs and their strong acceptance by private landowners, there is a significant opportunity to implement conservation practices on private lands. The USDA-NRCS would provide outreach and technical assistance to voluntary participants (landowners), especially on the most vulnerable acres in the watersheds, to develop conservation plans and would use all available conservation practices typically planned and funded by USDA-NRCS programs. The project proposes to implement clusters of projects within the smallest watershed, to the extent practicable, with the goal of making a discernable difference in local water quality. While this targeted and concentrated approach is desired, the projects' proponents understand the voluntary nature of conservation implementation and will strive to reach the critical sources within the watershed. The proposed conservation practices would reduce nutrient losses from the landscape; reduce nutrient loads to streams and downstream receiving waters; and reduce water quality degradation in watersheds that could provide benefits to marine resources and benefits to coastal watersheds.

RESTORATION TYPE GOALS AND PROJECT RESTORATION OBJECTIVES

- Programmatic goal: Restore Water Quality
- Restoration type: Nutrient Reduction (Nonpoint source)
- Restoration approach: Reduce nutrient loads to coastal watersheds
- Restoration technique: Agricultural conservation practices

- Restoration Type Goal: Reduce nutrient loadings to Gulf Coast estuaries, habitats, and resources that are threatened by chronic eutrophication, hypoxia, or harmful algal blooms or that suffer habitat losses associated with water quality degradation.

Objective 1: Reduce sediment, phosphorous and nitrogen loads during storm events leaving private lands in the watershed.

The monitoring or project parameters are dependent upon the voluntary participation by landowners to implement conservation practices on their land. Implemented conservation practices may or may not be located in the same subwatershed, therefore sampling efforts may vary in scale at different watershed levels. The proposed conservation practices will reduce nutrient losses from the landscape, reduce nutrient loads to streams and downstream receiving waters, and reduce water quality degradation in watershed that would provide benefits to marine resources and coastal watersheds.

CONCEPTUAL SETTING AND ANTICIPATED OUTCOMES

A conceptual model forms the basis of this monitoring plan, and includes a summary of the restoration project and the desired project outcomes. For this project, the specific stressors addressed include nutrient and sediment loading, agricultural activities and land cover conversion. This project will reduce those stressors by implementing conservation practices on private agricultural lands that will reduce sedimentation and nutrients that make their way into local waterbodies, resulting in improved water quality.

Table 7: Conceptual Model

Activity	Output	Short-term Outcome	Long-term Outcome
• Implement conservation practices to reduce nutrient and sediment loading into receiving waters	• Reduced nutrient and sediment loading into the system	• Decrease in nutrient and sediment loadings in targeted watersheds	• Enhancement of ecosystem services of Gulf coast habitats and living marine resources

Sources of Uncertainty

Critical uncertainties are defined as those that have the potential to impact or impede the decision-making process and the ability to achieve the restoration objective(s). Although many types of scientific and other uncertainties exist, the focus of uncertainty in this context is the uncertainty that affects the decisions being made for this project. Monitoring to resolve critical uncertainties affecting these decisions can allow for more effective expenditure of resources into the future as learning takes place.

The following uncertainties could potentially influence the success of the project. Efforts will be made in the planning and implementation phases to reduce and/or eliminate these uncertainties.

- Willingness of landowners to participate. Strategy to resolve: identify other willing landowners.

- Conservation practices may not result in measurable change in the receiving waters. Strategy to resolve: Conduct targeted in-stream monitoring at locations upstream and downstream of the implementation area. Monitoring data will be used to refine future management actions.

PROJECT MONITORING, PERFORMANCE CRITERIA AND POTENTIAL CORRECTIVE ACTIONS

The proposed monitoring for this project, outlined below, is organized by project objective, with one or more monitoring parameters for each objective. For each of the identified monitoring parameters information is provided on the monitoring methods, timing and frequency, sample size and sites. In addition, performance criteria for each parameter are identified (if applicable), including example corrective actions that could be taken if the performance criteria are not met. The parameters listed below may or may not be tied to performance criteria and/or corrective actions. These parameters will be monitored at the project site, in adjacent streams, and may be monitored at appropriate reference and/or control sites to demonstrate how the project is trending toward the performance criteria.

The decision-making process requires a structured approach for incorporating new information gained from monitoring and evaluation. As specified in the NRDA regulations, performance criteria would be used to determine restoration success or the need for corrective action (15 CFR 990.55(b)(1)(vii)). However, unanticipated consequences, previously unknown conditions or unanticipated environmental drivers uncovered during the evaluation step may also determine the need for corrective actions. Information below does not include all possible options; rather, it includes a list of potential adaptive management actions for each individual parameter to be considered. The decision to implement a corrective action should holistically consider the overall outcomes of the restoration project by assessing the results of all monitoring parameters compiled in the evaluation step.

This MAM Plan will be revised and updated as specific activities are identified.

Objective 1: Reduce sediment, phosphorous and nitrogen loads during storm events leaving private lands in the watershed.

- Were sediment, nitrogen and phosphorous loads to downstream waterbodies reduced?

Parameter: Number of water quality improvement practices implemented

- Method: Count number of projects implemented
- Timing and Frequency: Annual
- Sample size: All projects implemented
- Sites: All sites
- Performance criteria: Number of projects implemented by end of project period

Parameter: Discharge (m^3/s or cfs)

- Method: Per MAM Manual
- Timing and frequency: Ten measurements per year would be taken at one or more sets of one upstream and two downstream stations that bracket portions of the watershed where conservation practices are being implemented.
- Sample size: The total number of sites is not yet determined and will be dependent on the amount and location of conservation practices in the watershed. It is anticipated that 10

samples would be collected per year at each station. Samples would be taken at baseflow conditions when possible.

- Sites: Will be determined when sites are identified.

Parameter: Total Suspended Solids (TSS) (mg/L or ppm) and Turbidity

- Method: In-stream. Fixed station parameter reading using a data sonde, under baseflow conditions when possible, using standard monitoring protocols would occur at appropriately located upstream and downstream stations that bracket portions of watersheds with conservation practices.
- Timing and frequency: Ten samples per year would be collected at one or more sets of one upstream and two downstream stations that bracket portions of the watershed where conservation practices are being implemented.
- Sample size: The total number of sites is not yet determined and will be dependent on the amount and location of conservation practices in the watershed. It is anticipated that 10 samples would be collected per year at each station. Samples would be taken at baseflow conditions when possible.
- Sites: Conservation practice implementation will be dependent on the participation of landowners in the target watersheds described above. Locations will be updated in the monitoring plan when landowners sign participation agreements with the NRCS. The geographic scope of the in-stream monitoring design will depend on the location of lands enrolled in the conservation program. Where a large number of acres are co-located in a small watershed (e.g. HUC 12), the design will likely include one upstream station (could be optional depending on upstream conditions) and one or more downstream stations depending on the location of the cluster of conservation practices.
- Performance criteria: Change in the quantity of in-stream sediment over time.
- Corrective Action: Actions would vary depending on the type of conservation practice implemented. Some conservation practices may require inspection and maintenance.

Parameter: Total Phosphorous (TP) (mg/L)

- Method: In-stream. Sample collection using standard monitoring protocols would occur at appropriately located upstream and downstream stations that bracket portions of the area with conservation practices.
- Timing and frequency: Ten samples per year would be collected at one or more sets of one upstream and two downstream stations that bracket implementation areas.
- Sample size: The total number of sites is not yet determined and will be dependent on the number and location of conservation practices in the watershed. It is anticipated that 10 samples would be collected per year at each station. Samples would be taken at baseflow conditions when possible.
- Sites: Conservation practice implementation will be dependent on the participation of landowners in the target watersheds described above. Locations will be updated in the monitoring plan when landowners sign participation agreements with the NRCS. The geographic scope of the in-stream monitoring design will depend on the location of lands enrolled in the conservation program. Where a large number of acres are co-located in a

small watershed (e.g. HUC 12), the design will likely include one upstream station (could be optional depending on upstream conditions) and one or more downstream stations depending on the location of the cluster of conservation practices.

- Performance criteria: Change in the quantity of in-stream phosphorous over time.
- Corrective Action: Actions would vary depending on the type of conservation practice implemented. Some conservation practices may require inspection and maintenance.

Parameter: Total Nitrogen (TN) (mg/L)

- Method: Sample collection using standard monitoring protocols will occur at appropriately located upstream and downstream stations that bracket portions of areas where conservation activities are being implemented.
- Timing and frequency: Ten samples per year will be collected at one or more sets of one upstream and two downstream stations that bracket portions of the watershed where conservation activities are being implemented.
- Sample size: The total number of sites is not yet determined and will be dependent on the amount and location of conservation practices in the watershed. It is anticipated that 10 samples would be collected per year at each station. Samples would be taken at baseflow conditions when possible.
- Sites: Conservation practice implementation will be dependent on the participation of landowners in the target watersheds described above. Locations will be updated in the monitoring plan when landowners sign participation agreements with the NRCS. The geographic scope of the in-stream monitoring design will depend on the location of lands enrolled in the conservation program. Where a large number of acres are co-located in a small watershed (e.g. HUC 12), the design will likely include one upstream station (could be optional depending on upstream conditions) and one or more downstream stations depending on the location of the cluster of conservation practices.
- Performance criteria: Change in the quantity of in-stream nitrogen over time.
- Corrective Action: Actions would vary depending on the type of conservation practice implemented. Some conservation practices may require inspection and maintenance.
- Corrective actions that may be necessary include, but are not limited to, regrading/removing water control structures, planting/replanting desirable vegetation, and/or removing nuisance vegetation. Corrective actions will likely occur after implementation, but within the five-year period for this project. Corrective actions will be identified by USDA based on site evaluations and performance monitoring data and reports. Costs for addressing the corrective action will be evaluated by USDA to determine feasibility.

ADAPTIVE MANAGEMENT

Implementation of the conservation practices, monitoring and adaptive management would utilize standardized actions using accepted tools and protocols at specific locations.

As discussed in the PDARP/PEIS, adaptive management is a form of structured decision-making applied to the management of natural resources in the face of uncertainty (Pastorok et al. 1997; Williams 2011). It is an iterative process that integrates monitoring and evaluation of management actions with flexible decision-making, where adjustments are made to management approaches based on observed outcomes (NRC 2004). Within the context of ecological restoration, adaptive management addresses key uncertainties by linking science to restoration decision-making (Steyer and Llewellyn 2000). Although adaptive management is a critical component of the restoration plan as a whole, the need for adaptive management may vary on a project-by-project basis. Some projects may be well understood and not have uncertainties which warrant adaptive management. The monitoring and adaptive management framework may be more robust for elements of the restoration plan with high degrees of uncertainty or where numerous restoration projects are planned within a given geographic area and/or for the benefit of a particular resource (Trustees 2016,

Appendix 5.E.1, PDARP/PEIS). Under OPA NRDA regulations, restoration projects clearly identify performance criteria that would be used to determine project success or the need for corrective action. The need for adaptive management on specific conservation practices being implemented is not needed for this project due to the nature of the sampling approaches, the objectives of the project and the scales of the sites in which the data will be collected, and an understanding of the conservation practices that will be applied. Data, analysis and information obtained from this project will be used to help inform future Restoration Plan development, priorities and project selection and implementation.

EVALUATION

Evaluation of monitoring data is needed to assess the performance of the project in meeting its restoration objectives, resolving uncertainties to increase understanding, and determine whether corrective actions are needed.

As part of the larger decision-making context beyond the project scale, the evaluation of monitoring data from the individual projects would be compiled and assessed at the Restoration Type and TIG level, and the results would be used to update the knowledge base to inform decisions such as future TIG project prioritization and selection, implementation techniques, and the identification of critical uncertainties. The results of the analysis would be used to answer the following questions:

- Were the project restoration objectives achieved? If not, is there a reason why they were not met?
- Were sediment, nitrogen and phosphorous loads to downstream waterbodies reduced?
- Did the restoration project produce unanticipated effects?
- Were there unanticipated events unrelated to the restoration project that potentially affected the monitoring results (e.g., hurricanes)?
- Were any of the uncertainties identified prior to project implementation resolved?
- Were any new uncertainties identified?

The analysis methods would be applied to all monitoring parameters as follows:

Water Quality Data

Standard analytical techniques would be used to document water quality improvements between upstream and downstream stations that bracket areas with conservation systems, following guidance in Alabama's Quality Assurance Project Plan (QAPP). The QAPP is developed in accordance with ADEM SOP #8302, "Preparation, Review, Approval, Distribution, and Archival of Quality Assurance Program/Project Plans (QAPPs) and EPA Requirements for Quality Assurance Project Plans" (EPA QA/R-5, 2001).

PROJECT-LEVEL DECISIONS: PERFORMANCE CRITERIA AND POTENTIAL CORRECTIVE ACTIONS

Conservation practices will be implemented according to well-established USDA standards, specifications, engineering design, and performance criteria. Regular construction monitoring is a standard element of cooperator contracts. Contracts also have standard provisions for operation and maintenance, including replacement of failed practice elements as corrective actions.

MONITORING SCHEDULE

The schedule for project monitoring is shown in Table G-8, separated by monitoring activity. Pre-execution monitoring will occur before project execution. Execution monitoring occurs when project has been fully executed as planned. Performance monitoring will occur in the year following initial project execution.

Table G-8

Monitoring Parameter	Pre-Execution Monitoring	As-Built (year 0)	Post-Execution Monitoring (Years 1-4)
Number of projects implemented			X
Discharge			X
TSS	X	X	X
TP	X	X	X
TN	X	X	X

DATA MANAGEMENT

Data Description

To the extent practicable, all environmental and biological data generated during monitoring activities will be documented using standardized field datasheets. Electronic data files will be named with the date on which the file was created and will include a ReadMe file that describes when the file was created, and by whom, and any explanatory notes on the file contents. If a data file is revised, a new copy should be made and the original preserved. Relevant Project data that are handwritten on hardcopy datasheets or notebooks would be transcribed (entered) into Excel spreadsheets (or similar digital format). After transcription of the data, a second person not associated with data transcription would perform a verification of the data in the electronic data sheets against the original hardcopy datasheets and/or notebooks, and would make any corrections to transcription errors as appropriate before data are used for any analyses or distributed outside of the agency. Implementing Trustees will verify and validate monitoring data and information and would ensure that all data is entered or converted into agreed upon/commonly used digital format labeled with metadata.

Data Review and Clearance

All data will undergo proper QAQC protocols, be reviewed and verified following the process outlined in Section 3 of the MAM.

Data Storage and Accessibility

Once all data has been verified by quality assurance/quality control procedures, it will be submitted to the Restoration Project Database that is maintained by DCNR.

Data Sharing

Data will be made publicly available, in accordance with the Federal Open Data Policy (Section 10.6.6 of SOP; DWH NRDA Trustees 2016b), through the DIVER Explorer Interface within a year of when the data collection occurred.

REPORTING

Once all data have been reviewed for accuracy and completeness, they will be submitted to the Restoration Project Database. Data will be made publicly available through the DIVER Explorer Interface.

Reporting will occur annually.

ROLES AND RESPONSIBILITIES

ADCNR is the lead Trustee agency for this project and will ensure that the project is completed.

USDA-NRCS is the implementing Trustee.

The Trustee Council facilitates consistency in monitoring and data management procedures to evaluate and report on progress towards meeting restoration goals articulated in the PDARP/PEIS.

REFERENCES

DWH NRDA Trustees

2016 Deepwater Horizon oil spill: final programmatic damage assessment and restoration plan (PDARP) and final programmatic environmental impact statement (PEIS)

DWH NRDA Trustees

2016b Trustee Council Standard Operating Procedures for Implementation of the Natural Resource Restoration for the *Deepwater Horizon* Oil Spill. Originally approved May 4, 2016; revised November 15, 2016.

National Research Council

2004 Adaptive Management for Water Resources Project Planning. Washington, DC: The National Academies Press.

Pastorok, R.A., A. MacDonald, J.R. Sampson, P. Wilber, D.J. Yozzo, and J.P. Titre

1997 An ecological decision framework for environmental restoration projects. Ecological Engineering, 9, 89-107.

Steyer, G.D., and D.W. Llewellyn

2000 Coastal Wetlands Planning, Protection and Restoration Act: A programmatic application of adaptive management. Ecological Engineering, 26, 27-39.

Williams, B.K

2011 Adaptive management of natural resources - Framework and issues. Journal of Environmental Management, 92, 1346-1353.

MAM PLAN REVISION HISTORY

MONITORING AND ADAPTIVE MANAGEMENT PLAN

COASTAL ALABAMA SEA TURTLE CONSERVATION (CAST) (SHARE THE BEACH)

PROJECT OVERVIEW

The proposed Coastal Alabama Sea Turtle (CAST) Conservation Program project is designed to support existing sea turtle programs in Alabama in order to strengthen efforts to protect nesting sea turtles and enhance the survival of sea turtle hatchlings in Alabama. The proposed project would provide funding for the continued operation, expansion, and enhancement of the existing Share the Beach Sea Turtle Nest Monitoring Program ("Share the Beach"), which as of January 2018 is proposed to be managed by the Alabama Coastal Foundation (ACF). ACF is an organization dedicated to environmental stewardship, and has considerable experience in in both program management, fundraising, and volunteer recruitment, training, and management. ACF's administration of the program would allow better overall project expenditures (e.g.), to manage, analyze, and report data collected under the program. Previously this program has been managed by Friends of Bon Secour National Wildlife Refuge.

The CAST Conservation Program would expand and enhance ACF's Share the Beach program by providing funds to expand the Share the Beach program and continue actions necessary to support sea turtle restoration in Alabama, such as conducting nest monitoring and reducing threats on nesting beaches. Under this project, additional staff experienced in sea turtle nest monitoring protocol would be hired to work with Share the Beach. This project would also help support a greater emphasis on public education, focused on minimizing anthropogenic threats to sea turtles, such as artificial lighting and nesting obstacles, and promoting the region's potential for ecotourism while avoiding disturbance to or manipulation of sea turtle nests and hatchlings.

TYPE GOALS AND PROJECT RESTORATION OBJECTIVES

- Programmatic Goal: Replenish and Protect Living Coastal and Marine Resources
- Restoration Type: Sea Turtles
- Restoration Type Goal – Restore injuries by addressing primary threats to sea turtles in the marine and terrestrial environment such as bycatch in commercial and recreational fisheries, acute environmental changes (e.g., cold water temperatures), loss or degradation of nesting beach habitat (e.g., coastal armoring and artificial lighting), and other anthropogenic threats.
- Restoration Approach - Enhance sea turtle hatchling productivity, and restore and conserve nesting beach habitat.

Objective 1: Enhance hatchling productivity by expanding the Share the Beach program.

Objective 2: Minimize anthropogenic threats to sea turtles by conducting education and outreach activities.

Objective 3: Increase understanding of Alabama sea turtle populations via data collection related to anthropogenic threats (lighting disorientation, nesting obstacle interactions, depredation, vandalism).

CONCEPTUAL SETTING AND ANTICIPATED OUTCOMES

A conceptual model forms the basis of this monitoring plan, and includes a summary of the project activities, the expected product or output of those activities and the desired project outcomes. Activities that will be conducted include volunteer training, sea turtle nest monitoring and protection and outreach and education activities. These proposed activities will address a number of stressors that affect hatchling success, including predation and anthropogenic impacts. Together, the activities will result in increased nesting and hatchling productivity as well as increased understanding by the public regarding the negative impacts of anthropogenic stressors on sea turtles.

Sources of Uncertainty

The program is already operating successfully by the Friends of the Bon Secour National Wildlife Refuge and the transfer to ACF would help enhance the active volunteer recruitment and oversight and also ensure its continued operation of the program, which otherwise cannot be guaranteed. There is some uncertainty around the successful recruitment, training and retention of volunteers sufficient to patrol and monitor the extent of sea turtle nesting habitat in Alabama. However, the strategy to resolve this uncertainty has been addressed in the selection of the program operator: ACF staff have the expertise and experience to fully implement the activities proposed under the program since they actively run other volunteer efforts in the region (e.g. the Alabama oyster shell recycling program, the Mobile Bay Estuary Corps, and the "Eco-Team")—including training activities, oversight of public volunteers, and education and outreach. As part of this project, the ACF will hire a biologist that has experience with the collection and management of sea turtle nesting data. Long-term funding for the program is an uncertainty, though ACF has committed to funding the continuation of the program after this project period. Finally, hatchling productivity can vary from year to year, if for example, nests are inundated for extended periods, causing mortality.

PROJECT MONITORING, PERFORMANCE CRITERIA AND POTENTIAL CORRECTIVE ACTIONS

The proposed monitoring plan for this restoration project was developed to evaluate project performance, key uncertainties, and the need for potential corrective actions, if needed.

Parameters that will be monitored for this project include:

- Number of volunteer hours
- Number of nests identified and protected
- Number of patrols conducted
- Miles of shoreline patrolled
- Number of hatchlings
- Number of outreach and education materials developed
- Number of outreach materials distributed
- Enhanced staff capacity

In future updates to this section, for each of the identified monitoring parameters, information will be provided on the intended purpose of each monitoring parameter (e.g. monitor progress toward meeting one or more of the restoration objectives, regulatory compliance, support adaptive management of the project), monitoring methods, timing and frequency, duration, sample size, and sites. This section will also describe performance criteria and potential corrective actions for project parameters associated with project objectives. The decision-making process requires a structured approach for incorporating new information gained from monitoring and evaluation. As specified in the NRDA regulations, performance criteria are used to determine restoration success or the need for corrective action (15 CFR

990.55(b)(1)(vii)). However, unanticipated consequences, previously unknown conditions or unanticipated environmental drivers uncovered during the evaluation step may also determine the need for corrective actions. The decision to implement a corrective action will holistically consider the overall outcomes of the restoration project by assessing the results of all monitoring parameters compiled in the evaluation step.

ADAPTIVE MANAGEMENT

As discussed in the PDARP/PEIS, adaptive management is a form of structured decision-making applied to the management of natural resources in the face of uncertainty (Pastorok et al. 1997; Williams 2011). It is an iterative process that integrates monitoring and evaluation of management actions with flexible decision-making, where adjustments are made to management approaches based on observed outcomes (NRC 2004). Within the context of ecological restoration, adaptive management addresses key uncertainties by linking science to restoration decision-making (Steyer and Llewellyn 2000). Although adaptive management is a critical component of the restoration plan as a whole, the need for adaptive management may vary on a project-by-project basis. Some projects may be well understood and not have uncertainties which warrant adaptive management. The monitoring and adaptive management framework may be more robust for elements of the restoration plan with high degrees of uncertainty or where numerous restoration projects are planned within a given geographic area and/or for the benefit of a particular resource (Trustees, 2016, Appendix 5.E.1, PDARP/PEIS). Under OPA NRDA regulations, restoration projects clearly identify performance criteria that would be used to determine project success or the need for corrective action. This project is based on an existing project with a 15-year history. Although corrective actions will be undertaken as needed, extensive project-level adaptive management activities are not expected.

Under the administration of ACF, the Share the Beach program would be reviewed annually to evaluate its effectiveness, including: (1) lessons learned from the previous year; (2) consulting on new scientific information about sea turtles in order to update educational and training materials; and (3) collaboration with USFWS to review sea turtle data collection, monitoring, and handling protocols. Additional activities that would be continued and expanded include continual recruitment and engagement of volunteers, volunteer training, nest monitoring and related data collection, outreach and education to residents and tourists, and data management.

EVALUATION

Evaluation of monitoring data is needed to assess the performance of the project in meeting its restoration objectives, resolving uncertainties to increase understanding, and determine whether corrective actions are needed.

As part of the larger decision-making context beyond the project scale, the evaluation of monitoring data from the individual projects would be compiled and assessed at the Restoration Type and TIG level, and the results would be used to update the knowledge base to inform decisions such as future TIG project prioritization and selection, implementation techniques, and the identification of critical uncertainties. The results of the analysis would be used to answer the following questions:

- Were the project restoration objectives achieved? If not, is there a reason why they were not met?
- Did the restoration project produce unanticipated effects?
- Were there unanticipated events unrelated to the restoration project that potentially affected the monitoring results (e.g., hurricanes)?

- Were any of the uncertainties identified prior to project implementation resolved?
- Were any new uncertainties identified?

These questions will be answered and compiled in annual monitoring reports for the project and revision to the MAM plan be made if needed.

MONITORING SCHEDULE

The schedule for project monitoring is shown in Table G-9, separated by monitoring activity. Pre-execution monitoring will occur before project execution. Execution monitoring occurs when project has been fully executed as planned. Performance monitoring will occur in the year following initial project execution.

Table G-9

Monitoring Parameter	Pre-Execution Monitoring	As-Built (year 0)	Project Monitoring (Years 1-3)
Number of Volunteer Hours	X		X
Number of nests identified and protected	X		X
Number of patrols conducted	X		X
Miles of shoreline patrolled	X		X
Number of Hatchlings	X	X	X
Nesting data and protocols		X	X
Number of outreach materials distributed	X	X	X
Number of people reached via outreach and education			X
Enhanced staff capacity			X

DATA MANAGEMENT

Data Description

To the extent practicable, all environmental and biological data generated during monitoring activities will be documented using standardized field datasheets. Electronic data files will be named with the date on which the file was created and will include a ReadMe file that describes when the file was created, and by whom, and any explanatory notes on the file contents. If a data file is revised, a new copy should be made and the original preserved. Relevant Project data that are handwritten on hardcopy datasheets or notebooks would be transcribed (entered) into Excel spreadsheets (or similar digital format). After transcription of the data, a second person not associated with data transcription would perform a verification of the data in the electronic data sheets against the original hardcopy datasheets and/or notebooks, and would make any corrections to transcription errors as appropriate before data are used for any analyses or distributed outside of the agency. Implementing Trustees will verify and validate monitoring data and information and would ensure that all data is entered or converted into agreed upon/commonly used digital format labeled with metadata.

Data Review and Clearance

All data will undergo proper QAQC protocols, be reviewed and verified following the process outlined in Section 3 of the MAM Manual.

Data Storage and Accessibility

Data will be made publicly available, in accordance with the Federal Open Data Policy (Section 10.6.6 of SOP; DWH NRDA Trustees 2016b), through the DIVER Explorer Interface within a year of when the data collection occurred.

Data Sharing

Data will be made publicly available, in accordance with the Open Data Policy, through the DIVER Explorer Interface within a year of when the data collection occurred.

REPORTING

Once all data have been reviewed for accuracy and completeness, they will be submitted to the Restoration Project Database. Data will be made publicly available through the DIVER Explorer Interface.

ROLES AND RESPONSIBILITIES

ADCNR is the lead Trustee agency for this project and will ensure that the project is completed.

ACF will administer the program and be responsible for the timely submission of reports to the TIG.

DOI will consult.

The Trustee Council facilitates consistency in monitoring and data management procedures to evaluate and report on progress towards meeting restoration goals articulated in the PDARP/PEIS.

REFERENCES

DWH NRDA Trustees

2016 Deepwater Horizon oil spill: final programmatic damage assessment and restoration plan (PDARP) and final programmatic environmental impact statement (PEIS)

DWH NRDA Trustees

2016b Trustee Council Standard Operating Procedures for Implementation of the Natural Resource Restoration for the *Deepwater Horizon* Oil Spill. Originally approved May 4, 2016; revised November 15, 2016.

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Pastorok, R.A., A. MacDonald, J.R. Sampson, P. Wilber, D.J. Yozzo, and J.P. Titre

1997 An ecological decision framework for environmental restoration projects. Ecological Engineering, 9, 89-107.

Steyer, G.D., and D.W. Llewellyn

2000 Coastal Wetlands Planning, Protection and Restoration Act: A programmatic application of adaptive management. Ecological Engineering, 26, 27-39.

Williams, B.K

2011 Adaptive management of natural resources - Framework and issues. Journal of Environmental Management, 92, 1346-1353.

MAM PLAN REVISION HISTORY

MONITORING AND ADAPTIVE MANAGEMENT PLAN

COASTAL ALABAMA SEA TURTLE (CAST) TRIAGE

PROJECT OVERVIEW

The CAST Triage project would provide a new, appropriately equipped facility and program for the initial triage, treatment, release, and/or transfer of injured or ill sea turtles. Currently, there are no facilities in Alabama equipped for handling sea turtle strandings. The project would construct a new facility on property owned by the City of Orange Beach and establish a program that would be supported by the City of Orange Beach in the future. Funding would not be provided for staff, which would be provided by the City of Orange Beach. This facility would complement and enhance the current Alabama Sea Turtle Stranding and Salvage Network (ALSTSSN).

This facility and associated program would allow sea turtles injured in AL and proximity in adjacent states to be treated and released faster and with less stress on the animal from handling and transport. The expectation is that faster intervention, along with shorter periods of captivity and minimized handling, would improve the outcomes for injured or ill turtles by decreasing the time to receive treatment and providing a local resource to contact for citizens to report injured or distressed turtles. The program would also work to educate the public about (1) anthropogenic threats to sea turtles treated at the facility, (2) current science on how best to address the threats, and (3) conservation for sea turtles in the wild. Educational materials would be coordinated with Alabama's Share the Beach Sea Turtle Nest Monitoring Program to create a consistent and unified message. Project funding is expected to fully support the program for 5 years. The City of Orange Beach would incur operational costs into the future.

RESTORATION TYPE GOALS AND PROJECT RESTORATION OBJECTIVES

Project Type: Sea Turtles

- Programmatic Goal: Replenish and Protect Living Coastal and Marine Resources
- Restoration Type Goal: Restore injuries by addressing primary threats to sea turtles in the marine and terrestrial environment such as bycatch in commercial and recreational fisheries, acute environmental changes (e.g., cold water temperatures), loss or degradation of nesting beach habitat (e.g., coastal armoring and artificial lighting), and other anthropogenic threats.
- Restoration Approach: Increase sea turtle survival through enhanced mortality investigation, and early detection of and response to anthropogenic threats and emergency events.

Objective 1: Construct facility to provide for initial triage and treatment of injured or ill sea turtles.

Objective 2: Increase sea turtle survival through enhanced local triage, treatment, release and/or transfer of injured or ill sea turtles.

Objective 3: Conduct public education and outreach about conservation of sea turtles and how to reduce anthropogenic threats.

CONCEPTUAL SETTING AND ANTICIPATED OUTCOMES

A conceptual model forms the basis of this monitoring plan, and includes a summary of the project activities, the expected product or output of those activities and the desired project outcomes. This project will treat impacts to sea turtles from a number of stressors, which could include vessel strikes, fishing activities and bycatch. This project will reduce mortality associated with those stressors by providing enhanced capability to triage, treat, release or transfer injured or ill sea turtles. Together, the activities will result in decreased mortality as well as increased understanding by the public regarding the negative impacts of anthropogenic stressors on sea turtles.

Sources of Uncertainty

The primary source of uncertainty for this project is related to the construction of the facility as designed, on schedule and on budget. Additionally, long-term funding sustainability for the project is a potential uncertainty. The City of Orange Beach would incur operational costs into the future. The facility will track illness, injury type, transfer and release information over time—this information can be utilized to understand the causes of injury, illness and mortality in order to take actions to reduce those threats over time, including informing future restoration projects.

PROJECT MONITORING, PERFORMANCE CRITERIA AND POTENTIAL CORRECTIVE ACTIONS

The proposed monitoring plan for this restoration project was developed to evaluate project performance, key uncertainties, and the need for potential corrective actions, if needed.

Parameters that will be monitored for this project include:

- Level of construction to terms of contract and permit requirements
- Baseline data on injury/illness type rates and outcomes
- Number of sea turtles entering facility
- Illness/Injury type
- Release, recovery and mortality rates
- Number of outreach materials created
- Number of outreach materials distributed

In future updates to this section, for each of the identified monitoring parameters, information will be provided on the intended purpose of each monitoring parameter (e.g. monitor progress toward meeting one or more of the restoration objectives, regulatory compliance, support adaptive management of the project), monitoring methods, timing and frequency, duration, sample size, and sites. This section will also describe performance criteria and potential corrective actions for project parameters associated with project objectives. The decision-making process requires a structured approach for incorporating new information gained from monitoring and evaluation. As specified in the NRDA regulations, performance criteria are used to determine restoration success or the need for corrective action (15 CFR 990.55(b)(1)(vii)). However, unanticipated consequences, previously unknown conditions or unanticipated environmental drivers uncovered during the evaluation step may also determine the need for corrective actions. The decision to implement a corrective action will holistically consider the overall outcomes of the restoration project by assessing the results of all monitoring parameters compiled in the evaluation step.

ADAPTIVE MANAGEMENT

As discussed in the PDARP/PEIS, adaptive management is a form of structured decision-making applied to the management of natural resources in the face of uncertainty (Pastorok et al. 1997; Williams 2011).

It is an iterative process that integrates monitoring and evaluation of management actions with flexible decision-making, where adjustments are made to management approaches based on observed outcomes (NRC 2004). Within the context of ecological restoration, adaptive management addresses key uncertainties by linking science to restoration decision-making (Steyer and Llewellyn 2000). Although adaptive management is a critical component of the restoration plan as a whole, the need for adaptive management may vary on a project-by-project basis. Some projects may be well understood and not have uncertainties which warrant adaptive management. The monitoring and adaptive management framework may be more robust for elements of the restoration plan with high degrees of uncertainty or where numerous restoration projects are planned within a given geographic area and/or for the benefit of a particular resource (Trustees 2016, Appendix 5.E.1, PDARP/PEIS). Under OPA NRDA regulations, restoration projects clearly identify performance criteria that would be used to determine project success or the need for corrective action.

In addition to allowing more animals to be treated and released more quickly and with less stress on the animal, this project will contribute important information regarding the most frequent types of injury and illness for sea turtles, which can be utilized to understand the most frequent causes of injury, illness and mortality in order to take actions to reduce those threats over time, and inform future restoration projects.

EVALUATION

Evaluation of monitoring data is needed to assess the performance of the project in meeting its restoration objectives, resolving uncertainties to increase understanding, and determine whether corrective actions are needed.

As part of the larger decision-making context beyond the project scale, the evaluation of monitoring data from the individual projects would be compiled and assessed at the Restoration Type and TIG level, and the results would be used to update the knowledge base to inform decisions such as future TIG project prioritization and selection, implementation techniques, and the identification of critical uncertainties. The results of the analysis would be used to answer the following questions:

- Were the project restoration objectives achieved? If not, is there a reason why they were not met?
- Did the restoration project produce unanticipated effects?
- Were there unanticipated events unrelated to the restoration project that potentially affected the monitoring results (e.g., hurricanes)?
- Were any of the uncertainties identified prior to project implementation resolved?
- Were any new uncertainties identified?
- Have data been summarized and characterized in a way that allows for a clear understanding of results?
- Have any trends or patterns been identified, and if so, how can they be characterized? What broader insights might be gained from implementation/monitoring of this project?

These questions will be answered and compiled in annual monitoring reports for the project and revision to the MAM plan be made if needed.

MONITORING SCHEDULE

The schedule for project monitoring is shown in Table G-10, separated by monitoring activity. Pre-execution monitoring will occur before project execution. Execution monitoring occurs when project has been fully executed as planned. Performance monitoring will occur in the year following initial project execution.

Table G-10

Monitoring Parameter	Pre-Execution Monitoring	As-Built (year 0)	Post-Execution Monitoring (Years 1-5)
Level of construction to terms of contract and permit requirements			X
Baseline data on injury/illness type rates and outcomes	X		
Illness/Injury type			X
Number of sea turtles entering facility			X
Release/recovery/mortality rates			X
Number of outreach materials created			X
Number of outreach materials distributed			X

DATA MANAGEMENT

Data Description

To the extent practicable, all environmental and biological data generated during monitoring activities will be documented using standardized field datasheets. Electronic data files will be named with the date on which the file was created and will include a ReadMe file that describes when the file was created, and by whom, and any explanatory notes on the file contents. If a data file is revised, a new copy should be made and the original preserved. Relevant Project data that are handwritten on hardcopy datasheets or notebooks would be transcribed (entered) into Excel spreadsheets (or similar digital format). After transcription of the data, a second person not associated with data transcription would perform a verification of the data in the electronic data sheets against the original hardcopy datasheets and/or notebooks, and would make any corrections to transcription errors as appropriate before data are used for any analyses or distributed outside of the agency. Implementing Trustees will verify and validate monitoring data and information and would ensure that all data is entered or converted into agreed upon/commonly used digital format labeled with metadata.

Data Review and Clearance

Data will be made publicly available, in accordance with the Federal Open Data Policy (Section 10.6.6 of SOP; DWH NRDA Trustees 2016b), through the DIVER Explorer Interface within a year of when the data collection occurred.

Data Storage and Accessibility

Once all data has been verified by quality assurance/quality control procedures, it will be submitted to the Restoration Project Database that is maintained by DCNR.

Data Sharing

Data will be made publicly available, in accordance with the Open Data Policy, through the DIVER Explorer Interface within a year of when the data collection occurred.

REPORTING

Once all data have been reviewed for accuracy and completeness, they will be submitted to the Restoration Project Database. Data will be made publicly available through the DIVER Explorer Interface.

ROLES AND RESPONSIBILITIES

ADCNR is the lead Trustee agency for this project and will ensure that the project is implemented.

The City of Orange Beach will maintain the facility.

The Trustee Council facilitates consistency in monitoring and data management procedures to evaluate and report on progress towards meeting restoration goals articulated in the PDARP/PEIS.

REFERENCES

DWH NRDA Trustees

2016 Deepwater Horizon oil spill: final programmatic damage assessment and restoration plan (PDARP) and final programmatic environmental impact statement (PEIS)

DWH NRDA Trustees

2016b Trustee Council Standard Operating Procedures for Implementation of the Natural Resource Restoration for the *Deepwater Horizon* Oil Spill. Originally approved May 4, 2016; revised November 15, 2016.

National Research Council

2004 Adaptive Management for Water Resources Project Planning. Washington, DC: The National Academies Press.

Pastorok, R.A., A. MacDonald, J.R. Sampson, P. Wilber, D.J. Yozzo, and J.P. Titre

1997 An ecological decision framework for environmental restoration projects. Ecological Engineering, 9, 89-107.

Steyer, G.D., and D.W. Llewellyn

2000 Coastal Wetlands Planning, Protection and Restoration Act: A programmatic application of adaptive management. Ecological Engineering, 26, 27-39.

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MONITORING AND ADAPTIVE MANAGEMENT PLAN
CAST HABITAT USAGE AND POPULATION DYNAMICS

PROJECT OVERVIEW

The CAST Habitat Usage and Population Dynamics project would study migration patterns, habitat use, and distribution patterns of sea turtles along the Alabama Coast. The project proposes to sample in-water sea turtles to initiate a long-term monitoring program designed to determine distribution and habitat use, vital rates (including survival rates), connectivity, and potential impacts of anthropogenic activities for sea turtles in coastal and nearshore waters of Alabama. The project objective is to inform the AL TIG and other state and federal initiatives about the locations and types of activities that would provide the most cost-effective means of reducing threats to sea turtles and increasing their populations in coastal Alabama. The investigators on this proposal are currently collaborating with the Bureau of Ocean and Energy Management and the NPS on complementary projects in the northern Gulf of Mexico. The funds from those projects will provide satellite tags, and resources such as housing. Leveraging funds from these projects allows the AL TIG to do more with the limited funds available.

RESTORATION TYPE GOALS AND PROJECT RESTORATION OBJECTIVES

Project Type: Sea Turtles

- Programmatic Goal: Replenish and Protect Living Coastal and Marine Resources
- Restoration Type Goal: Implement an integrated portfolio of restoration approaches to address all injured life states (hatchling, juvenile, and adult) and species of sea turtles.
- Restoration Approach: Increase sea turtle survival through enhanced mortality investigation and early detection of and response to anthrophonic threats and emergency events
- PDARP MAM Objective: The Trustees may also perform targeted resource level monitoring and scientific support activities for those Restoration Types with substantial gaps in scientific understanding, which limit restoration planning, implementation, evaluation, and/or understanding of resource recovery status (PDARP page 5-88).

Objective 1: Gather data related to sea turtle population genetics, vital rates, anthropogenic threats, and population connectivity to inform AL TIG and other state and federal initiatives about the locations and types of activities that would provide the most cost-effective means of reducing threats to sea turtles and increasing their populations in coastal Alabama.

CONCEPTUAL MODEL, ANTICIPATED OUTCOMES AND FUTURE ACTIVITIES

This project furthers the Trustees’ Sea Turtle restoration goals by filling critical knowledge gaps about the population dynamics of and habitat usage by sea turtles in Alabama. This lack of knowledge currently constrains the effectiveness of restoration planning and implementation in nearshore and coastal Alabama. Although nest counts and limited stranding data exist for sea turtles in Alabama, little else is known about in-water activities in comparison with neighboring Gulf of Mexico states. A more complete understanding of current numbers of sea turtles by species using Alabama waters, coupled with an ongoing monitoring program, would provide more concrete reference points against which to measure the recovery of turtle populations over time. Improved understanding of the distribution of sea turtle populations and their annual movements in Alabama coastal waters could help improve the geographic and temporal focus of restoration and recovery activities, as well as marine enforcement and compliance programs designed to reduce bycatch mortality. Better knowledge of habitat use by turtles potentially also could allow greater targeting of programs such as Share the Beach and Restore the Night Sky, which are designed to minimize human interference with nesting turtles and their hatchlings. Overall, collection of the data proposed in this project is expected to improve the AL TIG's ability to successfully implement all four of the substantive sea turtle restoration goals that it has set for itself.

Sources of Uncertainty

The proposed research methods are well tested and accepted in the peer-reviewed scientific literature. Over time, the sample sizes are expected to be large enough to yield statistically meaningful results. This project will reduce uncertainty in future sea turtle restoration projects by filling knowledge gaps. There is uncertainty related to the ability of researchers to obtain the desired number of turtles, but this risk is low due to the experience of project implementers.

PROJECT MONITORING/DATA TO BE COLLECTED

The proposed monitoring plan for this restoration project was developed to evaluate project performance, key uncertainties, and the need for potential corrective actions, if needed.

Parameters that will be monitored for this project include:

- Submission of annual report
- Number of turtles tagged
- Number of trips conducted
- Number of samples analyzed
- QAQC performed
- Completion of analysis
- Data made publicly available

In future updates to this section, for each of the identified monitoring parameters, information will be provided on the intended purpose of each monitoring parameter (e.g. monitor progress toward meeting one or more of the restoration objectives, regulatory compliance, support adaptive management of the project), monitoring methods, timing and frequency, duration, sample size, and sites. This section will also describe performance criteria and potential corrective actions for project parameters associated with project objectives. The decision-making process requires a structured approach for incorporating new information gained from monitoring and evaluation. As specified in the NRDA regulations, performance criteria are used to determine restoration success or the need for corrective action (15 CFR 990.55(b)(1)(vii)). However, unanticipated consequences, previously unknown conditions or unanticipated environmental drivers uncovered during the evaluation step may also determine the need for corrective actions. The decision to implement a corrective action will holistically consider the overall outcomes of the restoration project by assessing the results of all monitoring parameters compiled in the evaluation step.

PROJECT IMPLEMENTATION

The methods proposed for collecting these data include genetic analyses, stable isotope analyses, mark-recapture, and habitat modeling (including anthropogenic threats). The sea turtles would be captured by hand or using dip nets and tangle (set) nets at several sites along the Alabama coast, including inshore waters (i.e., Perdido Bay, Bon Secour Bay, Mobile Bay, and the Mississippi Sound) and the nearshore waters of the Gulf of Mexico. Gulf of Mexico Marine Assessment Program for Protected Species (GoMMAPPS) would serve as a pilot study for this project. Data from that work will help to locate prime capture locations in Alabama waters and identify the most effective capture methods. In addition, funds from these projects can be leveraged to provide a region-wide assessment of juvenile turtles using waters of the northern Gulf of Mexico. Data sharing would follow standard NRDA, BOEM, and USGS protocols. Morphometric data, including size and weight, would be gathered from all sampled turtles, and a visual health assessment would be conducted. Biological samples, including blood, skin, and scute, would be gathered from each individual.

It is estimated 100 turtles could be captured per year, with a minimum of 40 samples per species is needed for genetic and vital rates analysis. For mark-recapture analysis, a minimum of 5 years of captures is necessary. Investigators currently hold a current, 5-year, renewable National Marine Fisheries Service (NMFS) permit (#17304-03) that allows these activities; therefore, capture, marking, and sampling for this project could be initiated immediately upon receipt of funds. The project is funded for 3 years.

ADAPTIVE MANAGEMENT

Because this project entails the collection of data utilizing established methods, project-level adaptive management is not expected to be extensive. If target sample numbers are not being met, Trustees will evaluate capture methods and timing of trips to recommend modifications to the sampling plan as needed. This project supports a larger commitment to adaptive management at the program level as the data generated as a result of this project will help reduce future uncertainties regarding the siting and success of future sea turtle restoration projects.

In future planning efforts, the ALTIG will review the data generated from this project as an important element towards developing restoration options for sea turtles in addition to utilizing other information including scientific literature, other restoration projects and consultation with experts.

Project activities will increase the understanding of sea turtles. Although specific adaptive management techniques will not be applied at the project-level, this project will provide important knowledge and data that will be utilized to plan and implement future sea turtle restoration projects.

EVALUATION

Evaluation of monitoring data is needed to assess the performance of the project in meeting its restoration objectives, resolving uncertainties to increase understanding, and determine whether corrective actions are needed to meet project goals.

As part of the larger decision-making context beyond the project scale, the evaluation of monitoring data from the individual projects would be compiled and assessed at the Restoration Type and TIG level, and the results would be used to update the knowledge base to inform decisions such as future TIG project prioritization and selection, implementation techniques, and the identification of critical uncertainties. The results of the analysis would be used to answer the following questions:

- Were the project objectives achieved? If not, is there a reason why they were not met?
- Was data collected and synthesized to better understand population distribution, habitat usage, vital rates, connectivity and potential impacts of anthropogenic impacts?
- Did the project produce unanticipated effects?

- Were there unanticipated events unrelated to the project that potentially affected the monitoring results (e.g., hurricanes)?
- Were any of the uncertainties identified prior to project implementation resolved?
- Were any new uncertainties identified?
- Have data been summarized and characterized in a way that allows for a clear understanding of results?
- Have any trends or patterns been identified, and if so, how can they be characterized?
- What broader insights might be gained from implementation/monitoring of this project?

MONITORING SCHEDULE

The schedule for project monitoring is shown in Table G-11, separated by monitoring activity. Execution monitoring occurs when project has been fully executed as planned. Performance monitoring will occur in the year following initial project execution.

Table G-11

Monitoring Parameter	Pre-Execution Monitoring	As-Built (year 0)	Project Monitoring (Years 1-3)
Submission of annual report			X
Number of turtles tagged			X
Number of samples analyzed			X
Number of trips conducted			X
QAQC Performed			X
Completion of analysis			X
Data made publicly available			X

DATA MANAGEMENT

Data Description

To the extent practicable, all environmental and biological data generated during monitoring activities will be documented using standardized field datasheets. Electronic data files will be named with the date on which the file was created and will include a ReadMe file that describes when the file was created, and by whom, and any explanatory notes on the file contents. If a data file is revised, a new copy should be made and the original preserved. Relevant Project data that are handwritten on hardcopy datasheets or notebooks would be transcribed (entered) into Excel spreadsheets (or similar digital format). After transcription of the data, a second person not associated with data transcription would perform a verification of the data in the electronic data sheets against the original hardcopy datasheets and/or notebooks, and would make any corrections to transcription errors as appropriate before data are used for any analyses or distributed outside of the agency. Implementing Trustees will verify and validate monitoring data and information and would ensure that all data is entered or converted into agreed upon/commonly used digital format labeled with metadata.

Data Review and Clearance

All data will undergo proper QAQC protocols, be reviewed and verified following the process outlined in Section 3 of the MAM Manual.

Data Storage and Accessibility

Once all data has been verified by quality assurance/quality control procedures, it will be submitted to the Restoration Project Database that is maintained by DCNR.

Data Sharing

Data will be made publicly available, in accordance with the Open Data Policy, through the DIVER Explorer Interface within a year of when the data collection occurred. Data sharing would follow standard NRDA, BOEM, and USGS protocols.

REPORTING

Once all data have been reviewed for accuracy and completeness, they will be submitted to the Restoration Project Database. Data will be made publicly available through the DIVER Explorer Interface.

ROLES AND RESPONSIBILITIES

USDOI is the lead Trustee agency for this project and will ensure that the project is completed, in collaboration with ADCNR.

Work will be conducted by USGS.

The Trustee Council facilitates consistency in monitoring and data management procedures to evaluate and report on progress towards meeting restoration goals articulated in the PDARP/PEIS.

REFERENCES

DWH NRDA Trustees

2016 Deepwater Horizon oil spill: final programmatic damage assessment and restoration plan (PDARP) and final programmatic environmental impact statement (PEIS)

DWH NRDA Trustees

2016b Trustee Council Standard Operating Procedures for Implementation of the Natural Resource Restoration for the *Deepwater Horizon* Oil Spill. Originally approved May 4, 2016; revised November 15, 2016.

MAM PLAN REVISION HISTORY

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MONITORING AND ADAPTIVE MANAGEMENT PLAN

CAST PROTECTION: ENHANCEMENT AND EDUCATION

PROJECT OVERVIEW

The CAST Protection: Enhancement and Education project would enhance state enforcement of federal regulations and increase turtle protections in Alabama state waters by: (1) increasing awareness and understanding of the ESA and applicable regulations through education of state enforcement officers; (2) increasing resources for state enforcement agencies to more proactively dedicate efforts toward ESA-related activities (i.e., patrols, public education, enforcement hours); (3) taking steps to reduce fisheries bycatch (i.e., conduct social science surveys, which would likely involve focus groups, and through purchasing and distributing turtle excluder devices for the skimmer trawl fishery); and (4) taking steps to reduce impacts on nesting turtles, such as reducing nest vandalism and lighting harassment.

RESTORATION TYPE GOALS AND PROJECT RESTORATION OBJECTIVES

Project Type: Sea Turtles

- Programmatic Goal: Replenish and Protect Living Coastal and Marine Resources
- Restoration Type Goal: Restore injuries by addressing primary threats to sea turtles in the marine and terrestrial environment such as bycatch in commercial and recreational fisheries, acute environmental changes (For example: cold water temperatures), loss or degradation of nesting beach habitat (For example: coastal armoring and artificial lighting), and other anthropogenic threats.
- Restoration Approach - Reduce sea turtle bycatch in commercial fisheries through identification (ID) and implementation of conservation measures.
- Restoration Approach - Reduce sea turtle bycatch in commercial fisheries through enhanced training and outreach to the fishing communities.
- Approach - Reduce sea turtle bycatch in Recreational Fisheries through Development and Implementation of Conservation Measures
- Approach - Reduce sea turtle bycatch in commercial fisheries through enhanced state enforcement efforts to improve compliance with existing sea turtle conservation requirements.

Objective 1: Reduce interactions with sea turtles in Alabama state waters by (1) increasing awareness and understanding of the ESA through education to assist state enforcement efforts, and (2) increasing resources for state enforcement agencies to more proactively dedicate efforts towards ESA-related activities.

Objective 2: Conduct social science study to characterize attitudes and perceptions of vessel-based eco-tourism and their patrons regarding harmful interactions with sea turtles.

Objective 3: Develop a public education and outreach campaign based on the social science study.

CONCEPTUAL SETTING AND ANTICIPATED OUTCOMES

A conceptual model forms the basis of this monitoring plan, and includes a summary of the project activities, the expected product or output of those activities and the desired project outcomes. Vessel strikes, fishing activities and bycatch are critical stressors for sea turtles. The prosed activities for this project include increased enforcement capacity and increased targeted outreach and education, which will work to reduce the occurrence of these stressors in coastal Alabama by enhancing state enforcement of the ESA and sustaining activities in hot-spot areas, which will result in a decreased number of interactions between vessels and sea turtles.

Sources of Uncertainty

Uncertainties related to this project include ability of enforcement officers to document and prevent negative interactions. Additional uncertainties exist as to whether outreach and education will result in changed behaviors. Strategy to resolve: by conducting a social science study prior to the development of outreach and education activities, targeted outreach materials can be developed that are directly responsive to current attitudes and perceptions.

PROJECT MONITORING, PERFORMANCE CRITERIA AND POTENTIAL CORRECTIVE ACTIONS

The proposed monitoring plan for this restoration project was developed to evaluate project performance, key uncertainties, and the need for potential corrective actions, if needed.

Parameters that will be monitored for this project include:

- Number of gear modifications
- Number of sites assessed
- Number of participants in surveys/focus groups
- Number of outreach materials distributed
- Number of individuals trained per year
- Number of individuals receiving continuing enforcement education
- Number of days ESA dedicated patrol
- Number of outreach materials created
- Number of outreach materials distributed
- Number of interactions encountered and stopped by MRD law enforcement officers

In future updates to this section, for each of the identified monitoring parameters, information will be provided on the intended purpose of each monitoring parameter (e.g. monitor progress toward meeting one or more of the restoration objectives, regulatory compliance, support adaptive management of the project), monitoring methods, timing and frequency, duration, sample size, and sites. This section will also describe performance criteria and potential corrective actions for project parameters associated with project objectives. The decision-making process requires a structured approach for incorporating new information gained from monitoring and evaluation. As specified in the NRDA regulations, performance criteria are used to determine restoration success or the need for corrective action (15 CFR 990.55(b)(1)(vii)). However, unanticipated consequences, previously unknown conditions or unanticipated environmental drivers uncovered during the evaluation step may also determine the need for corrective actions. The decision to implement a corrective action will holistically consider the overall outcomes of the restoration project by assessing the results of all monitoring parameters compiled in the evaluation step.

ADAPTIVE MANAGEMENT

As discussed in the PDARP/PEIS, adaptive management is a form of structured decision-making applied to the management of natural resources in the face of uncertainty (Pastorok et al. 1997; Williams 2011). It is an iterative process that integrates monitoring and evaluation of management actions with flexible decision-making, where adjustments are made to management approaches based on observed outcomes (NRC 2004). Within the context of ecological restoration, adaptive management addresses key uncertainties by linking science to restoration decision-making (Steyer and Llewellyn 2000). Although adaptive management is a critical component of the restoration plan as a whole, the need for adaptive management may vary on a project-by-project basis. Some projects may be well understood and not have uncertainties which warrant adaptive management. The monitoring and adaptive management framework may be more robust for elements of the restoration plan with high degrees of uncertainty or where numerous restoration projects are planned within a given geographic area and/or for the benefit of a particular resource (Trustees 2016, Appendix 5.E.1, PDARP/PEIS). Under OPA NRDA regulations, restoration projects clearly identify performance criteria that would be used to determine project success or the need for corrective action.

NMFS, USFWS, and ADCNR would work collaboratively with ADCNR Marine Resources Division (AMRD) law enforcement and federal offices of law enforcement to determine law enforcement training needs, how best to conduct consistent training, and to identify specific training and educational needs/products. A communication pathway between the state and federal agencies and law enforcement would also be established to continuously reevaluate needs to ensure consistency in enforcement enhancement efforts.

This project would fund the completion of a social science study to characterize attitudes and perceptions of vessel-based ecotourism and sea turtle interactions. The results of this study will inform the creation of targeted outreach materials. Additionally, project managers will seek to identify targeted hot spot areas in order to maximize the benefits of patrol hours in places where negative interactions are most likely to occur. These project elements will increase the likelihood of success of the project by targeting activities based on local data.

EVALUATION

Evaluation of monitoring data is needed to assess the performance of the project in meeting its restoration objectives, resolving uncertainties to increase understanding, and determine whether corrective actions are needed.

As part of the larger decision-making context beyond the project scale, the evaluation of monitoring data from the individual projects would be compiled and assessed at the Restoration Type and TIG level, and the results would be used to update the knowledge base to inform decisions such as future TIG project prioritization and selection, implementation techniques, and the identification of critical uncertainties. The results of the analysis would be used to answer the following questions:

- Were interactions between sea turtles and the public characterized and methods to reduce interactions identified?
- Are causes of harmful interactions addressed in education and outreach materials?
- Was enforcement enhanced?
- Were the project objectives achieved? If not, is there a reason why they were not met?
- Did the project produce unanticipated effects?

- Were there unanticipated events unrelated to the project that potentially affected the monitoring results (e.g., hurricanes)?
- Were any of the uncertainties identified prior to project implementation resolved?
- Were any new uncertainties identified?
- Have data been summarized and characterized in a way that allows for a clear understanding of results?
- Have any trends or patterns been identified, and if so, how can they be characterized?

These questions will be answered and compiled in annual monitoring reports for the project and revision to the MAM plan be made if needed.

MONITORING SCHEDULE

The schedule for project monitoring is shown in Table G-12, separated by monitoring activity. Pre-execution monitoring will occur before project execution. Execution monitoring occurs when project has been fully executed as planned. Performance monitoring will occur in the year following initial project execution.

Table G-12

Monitoring Parameter	Pre-Execution Monitoring	As-Built (year 0)	Project Monitoring (Years 1-4)
Number of gear modifications		X	X
Number of sites assessed	X	X	X
Number of participants in surveys/focus groups		X	X
Number of outreach materials distributed			X
Number of individuals trained per year			X
Number of individuals receiving continuing enforcement education			X
Number of days ESA dedicated patrol			X
Number of outreach materials created			X
Number of outreach materials distributed			X
Number of interactions encountered and stopped by MRD law enforcement officers	X		X

DATA MANAGEMENT

Data Description

To the extent practicable, all environmental and biological data generated during monitoring activities will be documented using standardized field datasheets. Electronic data files will be named with the date on which the file was created and will include a ReadMe file that describes when the file was created, and by whom, and any explanatory notes on the file contents. If a data file is revised, a new copy should be made and the original preserved. Relevant Project data that are handwritten on hardcopy datasheets or notebooks would be transcribed (entered) into Excel spreadsheets (or similar digital format). After transcription of the data, a second person not associated with data transcription would perform a verification of the data in the electronic data sheets against the original hardcopy datasheets and/or notebooks, and would make any corrections to transcription errors as appropriate before data are used for any analyses or distributed outside of the agency. Implementing Trustees will verify and validate monitoring data and information and would ensure that all data is entered or converted into agreed upon/commonly used digital format labeled with metadata.

Data Review and Clearance

All data will undergo proper QAQC protocols, be reviewed and verified following the process outlined in Section 3 of the MAM Manual.

Data Storage and Accessibility

Once all data has been verified by quality assurance/quality control procedures, it will be submitted to the Restoration Project Database that is maintained by DCNR.

Data Sharing

Data will be made publicly available, in accordance with the Federal Open Data Policy (Section 10.6.6 of SOP; DWH NRDA Trustees 2016b), through the DIVER Explorer Interface within a year of when the data collection occurred.

REPORTING

Once all data have been reviewed for accuracy and completeness, they will be submitted to the Restoration Project Database. Data will be made publicly available through the DIVER Explorer Interface.

ROLES AND RESPONSIBILITIES

ADCNR is the lead Trustee agency for this project and will ensure that the project is completed.

NOAA will consult.

The Trustee Council facilitates consistency in monitoring and data management procedures to evaluate and report on progress towards meeting restoration goals articulated in the PDARP/PEIS.

REFERENCES

DWH NRDA Trustees

2016 Deepwater Horizon oil spill: final programmatic damage assessment and restoration plan (PDARP) and final programmatic environmental impact statement (PEIS)

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2016b Trustee Council Standard Operating Procedures for Implementation of the Natural Resource Restoration for the *Deepwater Horizon* Oil Spill. Originally approved May 4, 2016; revised November 15, 2016.

National Research Council

2004 Adaptive Management for Water Resources Project Planning. Washington, DC: The National Academies Press.

Pastorok, R.A., A. MacDonald, J.R. Sampson, P. Wilber, D.J. Yozzo, and J.P. Titre

1997 An ecological decision framework for environmental restoration projects. Ecological Engineering, 9, 89-107.

Steyer, G.D., and D.W. Llewellyn

2000 Coastal Wetlands Planning, Protection and Restoration Act: A programmatic application of adaptive management. Ecological Engineering, 26, 27-39.

Williams, B.K

2011 Adaptive management of natural resources - Framework and issues. Journal of Environmental Management, 92, 1346-1353.

MAM PLAN REVISION HISTORY

MONITORING AND ADAPTIVE MANAGEMENT PLAN

ENHANCING CAPACITY FOR THE ALABAMA MARINE MAMMAL STRANDING NETWORK

PROJECT OVERVIEW

The Enhancing Capacity for the Alabama Marine Mammal Stranding Network (ALMMSN) project would enhance the capacity of the ALMMSN by providing funding for staff time, equipment and supplies, and sample analyses and would address the ending of the current funding source through NFWF-GEBF. ALMMSN is operated out of the Dauphin Island Sea Lab (DISL) on Dauphin Island, Alabama. This project would allow ALMMSN to use and expand on its existing infrastructure for cetacean stranding response, and communications and data management in order to enhance the ALMMSN's operations. The project would allow ALMMSN to better respond to live or dead stranded cetaceans, to necropsy animals, and to analyze samples collected from cetaceans stranded in Alabama waters in order to better understand the causes of marine mammal illness and death. It would also support increased data consistency for information collected from stranded marine mammals by supporting ALMMSN to enter its data into a regional marine mammal health database (known as GulfMAP, hosted by NOAA). The project is expected to increase survival of rescued animals and recovery of populations affected by the DWH oil spill by improving marine mammal stranding response, data collection, data analyses, and reporting for Alabama waters, through better understanding of the causes of illness/mortality and through the early detection and intervention of anthropogenic and natural threats.

RESTORATION TYPE GOALS AND PROJECT RESTORATION OBJECTIVES

Project Type: Marine Mammals

Programmatic Goal: Replenish and Protect Living Coastal and Marine Resources

Restoration Type Goal: Identify and implement actions that support ecological needs of the stocks; improve resilience to natural stressors; and address direct human-caused threats such as bycatch in commercial fisheries, vessel collisions, noise, industrial activities, illegal feeding and harassment, and hook-and-line fishery interactions.

Restoration Approach: Increase marine mammal survival through better understanding of the causes of illness and death, as well as early detection and intervention for anthropogenic and natural threats.

Objective 1: Increase trained staff capacity of ALMMSN

Objective 2: Maintain and/or decrease average reporting time and/or response time

Objective 3: Collect additional data to increase understanding of marine mammal population.

CONCEPTUAL SETTING AND ANTICIPATED OUTCOMES

Funding the ALMMSN will better fill gaps in stranding coverage, reduce stranding response time, improve quantity, quality and consistency of reporting and Level A, B, and C data for marine mammals, increase the number of personnel trained for stranding response in the region, increase the number of biological samples analyzed to determine causes of death and population status, expand community awareness, and provide long-term data sharing, storage and retrieval capacity. These efforts will reduce marine mammal mortality in Alabama waters, better define the specific causes of serious injury and death among stranded marine mammals, and establish baseline conditions or shifts from previous conditions for comparison to immediate and longer-term threats to marine mammals. This project will meet the immediate need to provide data to assess the DWHOS as well as build capacity for collecting scientifically rigorous data for other sources of serious injury and mortality to marine mammals in the future.

In the longer term, these efforts will increase the abundance and stability of marine mammal populations in the region, identify larger patterns in stranding data that will inform managers and policy makers to define and focus management and conservation efforts, provide reliable stranding datasets that can be compared to environmental data to identify and define boundaries for essential habitat, improve knowledge of and response to future environmental emergencies like the DWHOS or longer term effects such as climate change and habitat loss, and potentially reduce the likelihood of future unusual or mass mortality events. These benefits are possible because the ability to predict, prepare for, respond to, and prevent strandings depends on quality data. These outcomes will necessarily feedback to further support the health and stability of marine mammal populations and achieve optimum sustainable populations within the carrying capacity of the system. The enhanced collaborations with network responders and local researchers will, in turn, foster development of future collaborative work, and provide opportunities for synergistic research, training, and educational activities.

Sources of Uncertainty

The sources of uncertainty that could influence the success of this project include the number of strandings and their state of decomposition (limiting samples collected), emerging threats and diseases, the ability to hire qualified personnel, and the incorporation of data collected into marine mammal management activities. This project has a high likelihood of successfully strengthening and growing Alabama's marine mammal populations. The program is already operating successfully and funding of this effort would ensure its continued operation, which otherwise cannot be guaranteed, and its enhancement and expansion. The proposed expansion and enhancement of the program under its existing manager, DISL, is expected to be a success. DISL staff have the expertise and experience to implement the activities proposed under the program—including sample collection, necropsies, sample analysis, and data management.

PROJECT MONITORING, PERFORMANCE CRITERIA AND POTENTIAL CORRECTIVE ACTIONS

The proposed monitoring plan for this restoration project was developed to evaluate project performance, key uncertainties, and the need for potential corrective actions, if needed.

Parameters that will be monitored for this project include:

- Increased staff capacity
- Average response time
- Number of successful responses
- Collection of data to increase understanding of population
- Number of biological samples analyzed
- Number of necropsies conducted
- Metadata records created

In future updates to this section, for each of the identified monitoring parameters, information will be provided on the intended purpose of each monitoring parameter (e.g. monitor progress toward meeting one or more of the restoration objectives, regulatory compliance, support adaptive management of the project), monitoring methods, timing and frequency, duration, sample size, and sites. This section will also describe performance criteria and potential corrective actions for project parameters associated with project objectives. The decision-making process requires a structured approach for incorporating new information gained from monitoring and evaluation. As specified in the NRDA regulations, performance criteria are used to determine restoration success or the need for corrective action (15 CFR 990.55(b)(1)(vii)). However, unanticipated consequences, previously unknown conditions or unanticipated environmental drivers uncovered during the evaluation step may also determine the need for corrective actions. The decision to implement a corrective action will holistically consider the overall outcomes of the restoration project by assessing the results of all monitoring parameters compiled in the evaluation step.

ADAPTIVE MANAGEMENT

As discussed in the PDARP/PEIS, adaptive management is a form of structured decision-making applied to the management of natural resources in the face of uncertainty (Pastorok et al. 1997; Williams 2011). It is an iterative process that integrates monitoring and evaluation of management actions with flexible decision-making, where adjustments are made to management approaches based on observed outcomes (NRC 2004). Within the context of ecological restoration, adaptive management addresses key uncertainties by linking science to restoration decision-making (Steyer and Llewellyn 2000). Although adaptive management is a critical component of the restoration plan as a whole, the need for adaptive management may vary on a project-by-project basis. Some projects may be well understood and not have uncertainties which warrant adaptive management. The monitoring and adaptive management framework may be more robust for elements of the restoration plan with high degrees of uncertainty or where numerous restoration projects are planned within a given geographic area and/or for the benefit of a particular resource (Appendix 5.E.1, PDARP/PEIS). Under OPA NRDA regulations, restoration projects clearly identify performance criteria that would be used to determine project success or the need for corrective action.

The activities proposed in this project are well-established and known to be effective and the program activities have been underway at DISL for several years. The information collected by ALMMSN from stranded cetaceans should would enable managers to mitigate impacts to marine mammals from natural and anthropogenic threats and to monitor population recovery post-DWH. Although extensive adaptive management activities are not expected to be necessary for this project, information gained will be useful in planning future restoration efforts for marine mammals.

EVALUATION

Evaluation of monitoring data is needed to assess the performance of the project in meeting its restoration objectives, resolving uncertainties to increase understanding, and determine whether corrective actions are needed.

As part of the larger decision-making context beyond the project scale, the evaluation of monitoring data from the individual projects would be compiled and assessed at the Restoration Type and TIG level, and the results would be used to update the knowledge base to inform decisions such as future TIG project prioritization and selection, implementation techniques, and the identification of critical uncertainties. The results of the analysis would be used to answer the following questions:

- Were the project objectives achieved? If not, is there a reason why they were not met?
- Did the project produce unanticipated effects?

- Were there unanticipated events unrelated to the project that potentially affected the monitoring results (e.g., hurricanes)?
- Were any of the uncertainties identified prior to project implementation resolved?
- Were any new uncertainties identified?
- Have data been summarized and characterized in a way that allows for a clear understanding of results?
- Have any trends or patterns been identified, and if so, how can they be characterized?
- What broader insights might be gained from implementation/monitoring of this project?
- These questions will be answered and compiled in annual monitoring reports for the project and revision to the MAM plan be made if needed.

MONITORING SCHEDULE

The schedule for project monitoring is shown in Table G-13, separated by monitoring activity. Pre-execution monitoring will occur before project execution. Execution monitoring occurs when project has been fully executed as planned. Performance monitoring will occur in the year following initial project execution.

Table G-13: Monitoring Schedule

Monitoring Parameter	Pre-Execution Monitoring	As-Built (year 0)	Project Monitoring (Years 1-4)
Staffing	X		X
Necropsies conducted	X		X
Metadata records created	X		X
Data collection/sharing	X		X
Average Reporting Time	X	X	X
Number of samples analyzed	X	X	X
Number of responses	X	X	X

DATA MANAGEMENT

Data Description

To the extent practicable, all environmental and biological data generated during monitoring activities will be documented using standardized field datasheets. Electronic data files will be named with the date on which the file was created and will include a ReadMe file that describes when the file was created, and by whom, and any explanatory notes on the file contents. If a data file is revised, a new copy should be made and the original preserved. Relevant Project data that are handwritten on hardcopy datasheets or notebooks would be transcribed (entered) into Excel spreadsheets (or similar digital format). After transcription of the data, a second person not associated with data transcription would perform a verification of the data in the electronic data sheets against the original hardcopy datasheets and/or notebooks, and would make any corrections to transcription errors as appropriate before data are used for any analyses or distributed outside of the agency. Implementing Trustees will verify and validate monitoring data and information and would ensure that all data is entered or converted into agreed upon/commonly used digital format labeled with metadata.

Data Review and Clearance

All data will undergo proper QAQC protocols, be reviewed and verified following the process outlined in Section 3 of the MAM.

Data Storage and Accessibility

Once all data has been verified by quality assurance/quality control procedures, it will be submitted to the Restoration Project Database as well as Gulf MAP and GoMDIS.

Data Sharing

Data will be made publicly available, in accordance with the Federal Open Data Policy (Section 10.6.6 of SOP; DWH NRDA Trustees 2016b), through the DIVER Explorer Interface within a year of when the data collection occurred.

All stranding data is submitted to GulfMAP as well as GoMDIS to ensure data sharing and collaboration among neighboring GOM networks. Additionally, with any strandings showing evidence of human interaction, the data is forwarded to the NMFS Office of Protected Resources Bottlenose Dolphin Conservation Coordinator.

REPORTING

Once all data have been reviewed for accuracy and completeness, they will be submitted to the Restoration Project Database. Data will be made publicly available through the DIVER Explorer Interface.

ALMMSN would maintain ADCNR reporting, metadata publications, MMHSRP reporting, and necropsy reports, but also increase the number of metadata records relative to the samples processed for manatee and dolphin (~10; estimated at 1-2 additional metadata records per year), increase necropsy reporting consistent with a greater number of animals sampled, and increase the number of publications (~3 total due to increased research capacity), plus share up to 2 newsletter articles per year (~10 total).

ROLES AND RESPONSIBILITIES

ADCNR is the lead Trustee agency for this project and will ensure that the project is completed.

The Trustee Council facilitates consistency in monitoring and data management procedures to evaluate and report on progress towards meeting restoration goals articulated in the PDARP/PEIS.

REFERENCES

DWH NRDA Trustees

2016 Deepwater Horizon oil spill: final programmatic damage assessment and restoration plan (PDARP) and final programmatic environmental impact statement (PEIS)

DWH NRDA Trustees

2016b Trustee Council Standard Operating Procedures for Implementation of the Natural Resource Restoration for the *Deepwater Horizon* Oil Spill. Originally approved May 4, 2016; revised November 15, 2016.

National Research Council

2004 Adaptive Management for Water Resources Project Planning. Washington, DC: The National Academies Press.

Pastorok, R.A., A. MacDonald, J.R. Sampson, P. Wilber, D.J. Yozzo, and J.P. Titre

1997 An ecological decision framework for environmental restoration projects. Ecological Engineering, 9, 89-107.

Steyer, G.D., and D.W. Llewellyn

2000 Coastal Wetlands Planning, Protection and Restoration Act: A programmatic application of adaptive management. Ecological Engineering, 26, 27-39.

Williams, B.K

2011 Adaptive management of natural resources - Framework and issues. Journal of Environmental Management, 92, 1346-1353.

MAM PLAN REVISION HISTORY

MONITORING AND ADAPTIVE MANAGEMENT PLAN

ASSESSMENT OF ALABAMA ESTUARINE COMMON BOTTLENOSE DOLPHIN POPULATIONS AND HEALTH

PROJECT OVERVIEW

This project is aimed at defining common bottlenose dolphin distribution, abundance, and population structure within Alabama state waters to assess the status of bottlenose dolphins using Alabama waters by collecting data on dolphin distribution, habitat use, mortality rates, and feeding habits. The project is a data collection effort to: (1) investigate stock structure across Mobile Bay, Perdido Bay, and nearshore AL waters and the seasonal (summer/winter) abundance, distribution, and habitat use of common bottlenose dolphins on the Alabama coast by utilizing capture-mark-recapture and photo-ID surveys; and (2) assess dolphin condition following the DWH Oil Spill using field observation and remote biopsy sampling, both of which would inform future restoration planning. This data collection effort would provide valuable resource-level monitoring for bottlenose dolphins, a largely unstudied top predator in Alabama waters, informing pre-restoration baselines and providing more effective restoration planning and implementation. ADCNR would be the implementing trustee.

RESTORATION TYPE GOALS AND PROJECT RESTORATION OBJECTIVES

Project Type: Marine Mammals

Programmatic Goal: Replenish and Protect Living Coastal and Marine Resources

Restoration Type Goal: Identify and implement restoration activities that mitigate key stressors to support resilient populations. Collect and use monitoring information, such as population and health assessments and spatiotemporal distribution information.

Objective 1: Determine abundance and distribution of bottlenose dolphin populations of Perdido Bay, Mobile Bay and adjacent coastal waters.

Objective 2: Conduct 4 remote biopsy surveys (two per site) for genetic stock structure analysis, body condition and toxicology assessments, and dietary analysis.

ANTICIPATED OUTCOMES AND FUTURE ACTIVITIES

For this project, the specific stressors addressed include toxic chemical loading as well as gaps in knowledge about Alabama's bottlenose dolphin population. This project will contribute to a greater understanding of Alabama's bottlenose dolphin populations, and will ultimately be utilized to improve management activities associated with the protection of this marine mammal species. The completion of this project will result in the availability of data that will support the development of future marine mammal restoration projects. This project plays an important role in filling major scientific information or data gaps for marine mammal abundance, distribution and population structure, which in the longer term will feed directly into the AL TIG's efforts to address marine mammal impacts. Data will be comparable and transferable to inform Gulf-wide research and conservation efforts. Most importantly, research will provide valuable post-spill data for bottlenose dolphins, a largely unstudied top predator in Alabama waters.

Sources of Uncertainty

This project utilizes existing standards and protocols that have proven effective. The likelihood of success is high. Some uncertainty exists regarding the ability of researchers to meet target sample numbers. Weather may cause delays in sampling trips. The ability to accommodate the multiple analysis proposed and selected to represent each sampling location and time relative to sex and age class of the sampled population depend on the quality of the samples obtained. Approximately 50% of the samples collected will be randomly selected for contaminant analysis, so a sufficient number of quality samples should be able to be obtained from the total number collected. This project will reduce uncertainty in future marine mammal restoration projects by filling knowledge gaps.

PROJECT MONITORING

The proposed monitoring plan for this restoration project was developed to evaluate project performance, key uncertainties, and the need for potential corrective actions, if needed.

Parameters that will be monitored for this project include:

- Submission of annual report
- Number of remote biopsies taken
- Number of samples analyzed
- Number of photo-id surveys
- Number of trips
- Completion of analysis
- QAQC performed
- Data made publicly available

In future updates to this section, for each of the identified monitoring parameters, information will be provided on the intended purpose of each monitoring parameter (e.g. monitor progress toward meeting one or more of the restoration objectives, regulatory compliance, support adaptive management of the project), monitoring methods, timing and frequency, duration, sample size, and sites. This section will also describe performance criteria and potential corrective actions for project parameters associated with project objectives. The decision-making process requires a structured approach for incorporating new information gained from monitoring and evaluation. As specified in the NRDA regulations, performance criteria are used to determine restoration success or the need for corrective action (15 CFR 990.55(b)(1)(vii)). However, unanticipated consequences, previously unknown conditions or unanticipated environmental drivers uncovered during the evaluation step may also determine the need for corrective actions. The decision to implement a corrective action will holistically consider the overall outcomes of the restoration project by assessing the results of all monitoring parameters compiled in the evaluation step.

PROJECT IMPLEMENTATION

Trustees propose to measure seasonal (summer/winter) dolphin abundance, distribution and habitat use, and assess condition (based on observation and biopsy sampling) after the DWHOS. DISL will conduct the proposed surveys, biopsy sampling, sample analyses, and data analyses, and write reports and publications with assistance and guidance from NOAA NMFS Mississippi Laboratories. A benefit of this proposal is that it will build capacity for research in the region because staff from NOAA NMFS

Mississippi Laboratories will provide new training for DISL personnel in biopsy sampling techniques and enhance existing knowledge in photo-id techniques. With support from NOAA NMFS Mississippi Laboratories, DISL has in place the infrastructure and staff necessary to manage the project, including coordinating fieldwork with collaborators, performing sample processing and analyses, and submitting annual reports to ADCNR.

This project has a 4-year timeline. As proposed, identifying survey routes selection and staff training would occur during spring 2019. Photo-ID surveys would begin during summer 2019 and repeated during summers 2020 and 2021, as well as winters 2019-2020 and 2021-2022. Remote biopsy surveys would be performed during winter 2019/20 and summer 2020 and 2021. Tissue and data analysis would begin after the first surveys are completed and continue through the duration of the study. Final reporting is expected by winter 2022. Data would be stored in compliance with Trustee's Standard Operating Procedures.

ADAPTIVE MANAGEMENT

As discussed in the PDARP/PEIS, adaptive management is a form of structured decision-making applied to the management of natural resources in the face of uncertainty (Pastorok et al. 1997; Williams 2011). It is an iterative process that integrates monitoring and evaluation of management actions with flexible decision-making, where adjustments are made to management approaches based on observed outcomes (NRC 2004). Within the context of ecological restoration, adaptive management addresses key uncertainties by linking science to restoration decision-making (Steyer and Llewellyn 2000). Although adaptive management is a critical component of the restoration plan as a whole, the need for adaptive management may vary on a project-by-project basis. Some projects may be well understood and not have uncertainties which warrant adaptive management. The monitoring and adaptive management framework may be more robust for elements of the restoration plan with high degrees of uncertainty or where numerous restoration projects are planned within a given geographic area and/or for the benefit of a particular resource (Trustees 2016, Appendix 5.E.1, PDARP/PEIS). Under OPA NRDA regulations, restoration projects clearly identify performance criteria that would be used to determine project success or the need for corrective action.

Because there are current gaps in scientific understanding regarding these species, this project supports an adaptive management approach to marine mammal restoration by conducting this work to reduce key uncertainties and conduct analyses that will inform the selection, design and optimization of future project portfolios. The effective use of project funds to support addressing uncertainties will inform restoration planning, implementation and evaluation of marine mammal restoration projects in Alabama. This approach may evolve over time as Trustees gain new insight and knowledge from restoration activities.

Because this project entails the collection of data utilizing established methods, project-level adaptive management will be minimal. However, this project supports a larger commitment to adaptive management at the program level as the data generated as a result of this project will reduce future uncertainties regarding the siting and success of future marine mammal restoration projects.

EVALUATION

Evaluation of monitoring data is needed to assess the performance of the project in meeting its restoration objectives, resolving uncertainties to increase understanding, and determine whether corrective actions are needed.

As part of the larger decision-making context beyond the project scale, the evaluation of monitoring data from the individual projects would be compiled and assessed at the Restoration Type and TIG level, and the results would be used to update the knowledge base to inform decisions such as future TIG project prioritization and selection, implementation techniques, and the identification of critical uncertainties. The results of the analysis would be used to answer the following questions:

- Were the project restoration objectives achieved? If not, is there a reason why they were not met?
- Did the restoration project produce unanticipated effects?
- Were there unanticipated events unrelated to the restoration project that potentially affected the monitoring results (e.g., hurricanes)?
- Were any of the uncertainties identified prior to project implementation resolved?
- Were any new uncertainties identified?
- Have data been summarized and characterized in a way that allows for a clear understanding of results?
- Have any trends or patterns been identified, and if so, how can they be characterized?
- What broader insights might be gained from implementation/monitoring of this project?

MONITORING SCHEDULE

The schedule for project monitoring is shown in Table G-14, separated by monitoring activity. Execution monitoring occurs when project has been fully executed as planned. Performance monitoring will occur in the year following initial project execution.

Table G-14

Monitoring Parameter	Pre-Execution Monitoring	As-Built (year 0)	Post-Execution Monitoring (Years 1-4)
Annual Report			X
Number of remote biopsies taken			X
Number of samples analyzed			X
Number of photo-id surveys			X
Number of trips			X
Completion of analysis			X
QAQC performed			X
Data made publically available			X

DATA MANAGEMENT

Data Description

To the extent practicable, all environmental and biological data generated during monitoring activities will be documented using standardized field datasheets. Electronic data files will be named with the date on which the file was created and will include a ReadMe file that describes when the file was created, and by whom, and any explanatory notes on the file contents. If a data file is revised, a new copy should be made and the original preserved. Relevant Project data that are handwritten on hardcopy datasheets or notebooks would be transcribed (entered) into Excel spreadsheets (or similar digital format). After transcription of the data, a second person not associated with data transcription would perform a verification of the data in the electronic data sheets against the original hardcopy datasheets and/or notebooks, and would make any corrections to transcription errors as appropriate before data are used for any analyses or distributed outside of the agency. Implementing Trustees will verify and validate monitoring data and information and would ensure that all data is entered or converted into agreed upon/commonly used digital format labeled with metadata.

Data Review and Clearance

All data will undergo proper QAQC protocols, be reviewed and verified following the process outlined in Section 3 of the MAM Manual.

Data Storage and Accessibility

Once all data has been verified by quality assurance/quality control procedures, it will be submitted to the Restoration Project Database that is maintained by DCNR.

Data Sharing

Data will be made publicly available, in accordance with the Federal Open Data Policy (Section 10.6.6 of SOP; DWH NRDA Trustees 2016b), through the DIVER Explorer Interface within a year of when the data collection occurred.

Once all data have been reviewed for accuracy and completeness, they will be submitted to the Restoration Project Database. Data will be made publicly available through the DIVER Explorer Interface.

REPORTING

Once all data have been reviewed for accuracy and completeness, they will be submitted to the Restoration Project Database. Data will be made publicly available through the DIVER Explorer Interface.

ROLES AND RESPONSIBILITIES

ADCNR is the lead Trustee agency for this project and will ensure that the project is completed.

The project would be implemented by the DISL in collaboration with NOAA NMFS Mississippi Laboratories Southeast Fisheries Science Center.

The Trustee Council facilitates consistency in monitoring and data management procedures to evaluate and report on progress towards meeting restoration goals articulated in the PDARP/PEIS.

REFERENCES

DWH NRDA Trustees

2016 Deepwater Horizon oil spill: final programmatic damage assessment and restoration plan (PDARP) and final programmatic environmental impact statement (PEIS)

DWH NRDA Trustees

2016b Trustee Council Standard Operating Procedures for Implementation of the Natural Resource Restoration for the *Deepwater Horizon* Oil Spill. Originally approved May 4, 2016; revised November 15, 2016.

National Research Council

2004 Adaptive Management for Water Resources Project Planning. Washington, DC: The National Academies Press.

Pastorok, R.A., A. MacDonald, J.R. Sampson, P. Wilber, D.J. Yozzo, and J.P. Titre

1997 An ecological decision framework for environmental restoration projects. Ecological Engineering, 9, 89-107.

Steyer, G.D., and D.W. Llewellyn

2000 Coastal Wetlands Planning, Protection and Restoration Act: A programmatic application of adaptive management. Ecological Engineering, 26, 27-39.

Williams, B.K

2011 Adaptive management of natural resources - Framework and issues. Journal of Environmental Management, 92, 1346-1353.

MAM PLAN REVISION HISTORY

MONITORING AND ADAPTIVE MANAGEMENT PLAN

ALABAMA ESTUARINE BOTTLENOSE DOLPHIN PROTECTION: ENHANCEMENT AND EDUCATION

PROJECT OVERVIEW

This project would reduce injury and mortality in Alabama estuarine bottlenose dolphins. This would be accomplished by: (1) increasing resources for ADCNR AMRD to dedicate toward MMPA-related activities and increasing patrol hours; and (2) increasing awareness and understanding of the MMPA through education to assist state enforcement efforts. Enforcement is a crucial tool for reducing activities known to cause harm to marine mammals in state waters, and enhancing state enforcement would provide a key component to aid in reducing injury and mortality in Alabama estuarine bottlenose dolphins. NMFS and ADCNR would work collaboratively with AMRD law enforcement and NOAA Office of Law Enforcement to determine law enforcement training needs and how best to conduct consistent training and to identify specific training and educational needs/products. AMRD would hire a biologist to implement training of enforcement officers on the MMPA and public outreach topics related to marine mammals. The biologist would coordinate with the NMFS Office of Protected Resources to receive and stay up-to-date on issues and information related to marine mammal protection.

RESTORATION TYPE GOALS AND PROJECT RESTORATION OBJECTIVES

Project Type: Marine Mammals

Programmatic Goal: Replenish and Protect Living Coastal and Marine Resources

Restoration Type Goal: Identify and implement actions that support ecological needs of the stocks; improve resilience to natural stressors; and address direct human-caused threats such as bycatch in commercial fisheries, vessel collisions, noise, industrial activities, illegal feeding and harassment, and hook-and-line fishery interactions.

Restoration Approaches:

- Reduce commercial fishery bycatch through collaborative partnerships
- Reduce injury and mortality to bottlenose dolphins from hook-and-line fishing gear
- Reduce injury, harm, and mortality to bottlenose dolphins by reducing illegal feeding and harassment activities
- Reduce marine mammal takes through enhanced state enforcement related to the MMPA

Objective 1: Characterize dolphin interactions with commercial vessels operating in Alabama state waters.

Objective 2: Reduce lethal impacts to dolphins from illegal feeding and harassment activities and fishing interactions known to occur within Alabama state waters by effectively changing human behaviors through a targeted outreach and education strategy in a phased approach.

Objective 3: Reduce activities known to cause harm to marine mammals by enhancing state enforcement of the Marine Mammal Protection Act in Alabama state waters.

CONCEPTUAL SETTING AND ANTICIPATED OUTCOMES

For this project, the specific stressors addressed include impacts from fishing activities, boating interactions, harassment and other anthropogenic stressors to marine mammals. This project will reduce those stressors by reducing related impacts through development of needed information to conduct a targeted outreach and education strategy, and by enhancing state law enforcement, to reduce activities known to cause harm to marine mammals.

Sources of Uncertainty

There is uncertainty around whether people who receive education subsequently change their behavior, and whether those behavioral changes result in decreased interactions and/or mortality. However, the activities described in the project narrative are generally known to be effective and have been implemented successfully in other coastal locations. Hot spot locations for potential MMPA violations and areas that need increased and consistent enforcement efforts will be prioritized in order to reduce uncertainty regarding the ability of officers to witness and halt interactions.

PROJECT MONITORING, PERFORMANCE CRITERIA AND POTENTIAL CORRECTIVE ACTIONS

The proposed monitoring plan for this restoration project was developed to evaluate project performance, key uncertainties, and the need for potential corrective actions, if needed.

Parameters that will be monitored for this project include:

- Number of patrons, fishermen and business owners reached and educated regarding safe viewing and interaction practices
- Number of participants in surveys/focus groups
- Number of fishermen voluntarily adopting recommended gear modifications and best practices
- Number of outreach documents developed
- Number of outreach documents distributed
- Number of interactions encountered and stopped by MRD law enforcement officers
- Number days dedicated MMPA patrol
- Completion of social science study
- Completion of fisheries science survey

In future updates to this section, for each of the identified monitoring parameters, information will be provided on the intended purpose of each monitoring parameter (e.g. monitor progress toward meeting one or more of the restoration objectives, regulatory compliance, support adaptive management of the project), monitoring methods, timing and frequency, duration, sample size, and sites. This section will also describe performance criteria and potential corrective actions for project parameters associated with project objectives. The decision-making process requires a structured approach for incorporating new information gained from monitoring and evaluation. As specified in the NRDA regulations, performance criteria are used to determine restoration success or the need for corrective action (15 CFR 990.55(b)(1)(vii)). However, unanticipated consequences, previously unknown conditions or unanticipated environmental drivers uncovered during the evaluation step may also determine the need for corrective actions. The decision to implement a corrective action will holistically consider the overall outcomes of the restoration project by assessing the results of all monitoring parameters compiled in the evaluation step.

ADAPTIVE MANAGEMENT

As discussed in the PDARP/PEIS, adaptive management is a form of structured decision-making applied to the management of natural resources in the face of uncertainty (Pastorok et al. 1997; Williams 2011). It is an iterative process that integrates monitoring and evaluation of management actions with flexible decision-making, where adjustments are made to management approaches based on observed outcomes (NRC 2004). Within the context of ecological restoration, adaptive management addresses key uncertainties by linking science to restoration decision-making (Steyer and Llewellyn 2000). Although adaptive management is a critical component of the restoration plan as a whole, the need for adaptive management may vary on a project-by-project basis. Some projects may be well understood and not have uncertainties which warrant adaptive management. The monitoring and adaptive management framework may be more robust for elements of the restoration plan with high degrees of uncertainty or where numerous restoration projects are planned within a given geographic area and/or for the benefit of a particular resource (Trustees, 2016, Appendix 5.E.1, PDARP/PEIS). Under OPA NRDA regulations, restoration projects clearly identify performance criteria that would be used to determine project success or the need for corrective action.

Training of AMRD enforcement officers, in collaboration with NMFS, would be conducted and outreach products to aid enforcement's efforts produced and distributed by partnering with local, state, and federal stakeholders. NMFS, NOAA OLE, and AMRD biologists would also work together to identify and prioritize hotspot areas for potential MMPA violations and areas that need increased and consistent enforcement efforts, maximizing available resources.

Enhancing capacity for enforcement may result in an initial increase in the documentation of interactions, but this number should decline over time as education and outreach activities contribute to better public understanding and reduced negative interactions. If the numbers of interactions or survey responses indicate that education and outreach is not as effective as planned, then revisions and reassessment may be required.

EVALUATION

Evaluation of monitoring data is needed to assess the performance of the project in meeting its restoration objectives, resolving uncertainties to increase understanding, and determine whether corrective actions are needed.

As part of the larger decision-making context beyond the project scale, the evaluation of monitoring data from the individual projects would be compiled and assessed at the Restoration Type and TIG level, and the results would be used to update the knowledge base to inform decisions such as future TIG project prioritization and selection, implementation techniques, and the identification of critical uncertainties. The results of the analysis would be used to answer the following questions:

- Were interactions between dolphins and the public characterized and methods to reduce interactions identified?
- Are causes of harmful interactions addressed in education and outreach materials? Was enforcement enhanced?
- Were the project restoration objectives achieved? If not, is there a reason why they were not met?

- Did the restoration project produce unanticipated effects?
- Were there unanticipated events unrelated to the restoration project that potentially affected the monitoring results (e.g., hurricanes)?
- Were any of the uncertainties identified prior to project implementation resolved?
- Were any new uncertainties identified?

These questions will be answered and compiled in annual monitoring reports for the project and revision to the MAM plan be made if needed.

MONITORING SCHEDULE

The schedule for project monitoring is shown in Table G-15, separated by monitoring activity. Pre-execution monitoring will occur before project execution. Execution monitoring occurs when project has been fully executed as planned. Performance monitoring will occur in the year following initial project execution.

Table G-15: Monitoring Schedule

Monitoring Parameter	Pre-Execution Monitoring	As-Built (year 0)	Project Monitoring (Years 1-5)
Number of participants in surveys/focus groups		X	X
Number of interactions encountered and stopped by MRD law enforcement officers	X	X	X
Number of patrons and business owners reached and educated regarding safe viewing and interaction practices			X
Number of fishermen voluntarily adopting recommended gear modifications and best practices			X
Number of outreach documents developed			X
Number of outreach documents distributed			X
Number days dedicated MMPA patrol		X	X
Completion of social science study			X
Completion of fisheries science survey			X

DATA MANAGEMENT

Data Description

To the extent practicable, all environmental and biological data generated during monitoring activities will be documented using standardized field datasheets. Electronic data files will be named with the date on which the file was created and will include a ReadMe file that describes when the file was created, and by whom, and any explanatory notes on the file contents. If a data file is revised, a new copy should be made and the original preserved. Relevant Project data that are handwritten on hardcopy datasheets or notebooks would be transcribed (entered) into Excel spreadsheets (or similar digital format). After transcription of the data, a second person not associated with data transcription would perform a verification of the data in the electronic data sheets against the original hardcopy datasheets and/or notebooks, and would make any corrections to transcription errors as appropriate before data are used for any analyses or distributed outside of the agency. Implementing Trustees will verify and validate monitoring data and information and would ensure that all data is entered or converted into agreed upon/commonly used digital format labeled with metadata.

Data Review and Clearance

All data will undergo proper QAQC protocols, be reviewed and verified following the process outlined in Section 3 of the MAM.

Data Storage and Accessibility

Once all data has been verified by quality assurance/quality control procedures, it will be submitted to the Restoration Project Database that is maintained by DCNR.

Data Sharing

Data will be made publicly available, in accordance with the Federal Open Data Policy (Section 10.6.6 of SOP; DWH NRDA Trustees 2016b), through the DIVER Explorer Interface within a year of when the data collection occurred.

REPORTING

Once all data have been reviewed for accuracy and completeness, they will be submitted to the Restoration Project Database. Data will be made publicly available through the DIVER Explorer Interface.

ROLES AND RESPONSIBILITIES

ADCNR is the lead Trustee agency for this project and will ensure that the project is completed.

AMRD would also work collaboratively with NMFS to develop the education and outreach program for the public and commercial businesses.

The Trustee Council facilitates consistency in monitoring and data management procedures to evaluate and report on progress towards meeting restoration goals articulated in the PDARP/PEIS.

REFERENCES

DWH NRDA Trustees

2016 Deepwater Horizon oil spill: final programmatic damage assessment and restoration plan (PDARP) and final programmatic environmental impact statement (PEIS)

DWH NRDA Trustees

2016b Trustee Council Standard Operating Procedures for Implementation of the Natural Resource Restoration for the *Deepwater Horizon* Oil Spill. Originally approved May 4, 2016; revised November 15, 2016.

National Research Council

2004 Adaptive Management for Water Resources Project Planning. Washington, DC: The National Academies Press.

Pastorok, R.A., A. MacDonald, J.R. Sampson, P. Wilber, D.J. Yozzo, and J.P. Titre

1997 An ecological decision framework for environmental restoration projects. Ecological Engineering, 9, 89-107.

Steyer, G.D., and D.W. Llewellyn

2000 Coastal Wetlands Planning, Protection and Restoration Act: A programmatic application of adaptive management. Ecological Engineering, 26, 27-39.

Williams, B.K

2011 Adaptive management of natural resources - Framework and issues. Journal of Environmental Management, 92, 1346-1353.

MAM PLAN REVISION HISTORY

MONITORING AND ADAPTIVE MANAGEMENT PLAN

COLONIAL NESTING WADING BIRD TRACKING AND HABITAT USE ASSESSMENT-2 SPECIES

PROJECT OVERVIEW

Several environmental factors may affect wading bird productivity in the northern Gulf of Mexico (GOMAMN 2018). Key drivers include presence of predators, creation and destruction of suitable foraging and nesting habitat, and production and availability of prey during nesting. This project would initiate monitoring studies expected to inform and enhance future restoration planning for key colonial nesting wading bird species along the Alabama coast that were injured by the DWH oil spill. The goals of the monitoring are to better understand the extent to which declines in colonial nesting wading bird populations result from habitat limitations versus other potential causes such as increased prevalence of predators or human disturbance.

This project proposes a telemetry tracking study of the movements of two wading bird species breeding along the Alabama coast, to be selected from the group that includes tri-colored heron and either the little blue heron or the white ibis, based on additional input from Trustee bird experts. The proposed study would (1) determine daily and seasonal movements among nesting colonies at three important breeding areas—Mississippi Sound, Gaillard Island, and Perdido Bay; (2) determine seasonal and annual home ranges for birds marked at sites identified above and document fidelity to specific nesting colonies, as well as dispersal timing and regional dispersal among known breeding colonies within the study area; (3) document average foraging distances, time away from nests, and identification of important foraging areas within the study area; and (4) determine weekly and seasonal habitat use within the study area.

RESTORATION TYPE GOALS AND PROJECT RESTORATION OBJECTIVES

- Programmatic Goal: Replenish and Protect Living Coastal and Marine Resources
- Restoration Type Goal: Restore injured birds by species where actions would provide the greatest benefits within the geographic ranges that include the Gulf of Mexico.
- Project Goal: Generate information to better target restoration projects that will provide the maximum benefits to wading birds in coastal Alabama.
- PDARP MAM Objective: The Trustees may also perform targeted resource level monitoring and scientific support activities for those restoration types with substantial gaps in scientific understanding, which limit restoration planning, implementation, evaluation, and/or understanding of resource recovery status (PDARP page 5-88).

Objective 1: Determine daily and seasonal movements among nesting colonies at three important breeding areas--Mississippi Sound, Gaillard Island, and Perdido Bay.

Objective 2: Determine seasonal and annual home ranges for birds marked at sites identified above and document fidelity to specific nesting colonies, as well as dispersal timing and regional dispersal among known breeding colonies within the study area.

Objective 3: Document average foraging distances, time away from nests, and identification of important foraging areas within the study area.

Objective 4: Determine weekly and seasonal habitat use within the study area.

CONCEPTUAL MODEL, ANTICIPATED OUTCOMES AND FUTURE ACTIVITIES

Currently, the AL TIG is unable to effectively weigh the relative merits of creating or restoring new nesting habitat relative to other potential restoration measures for these species (e.g., greater emphasis on predator controls or actions to increase the availability of forage resources).

A number of potentially competing hypotheses have been posed for declines of coastal wading birds and beach-birds, nesting shore- and seabirds in the Gulf of Mexico both pre- and post DWH oil spill. Results from this effort should allow simultaneous evaluation of this issue and other potentially competing hypotheses (e.g., predator access to nesting habitat and lack of foraging habitat) (Lebreton et al., 1992) (Newton, 1998). The data collected from this project are expected to provide useful insights into these questions and would assist the AL TIG in planning more effective restoration of bird species injured by the DWH oil spill.

Sources of Uncertainty

The intent of the proposed project is to reduce uncertainty to allow the Trustees to better focus restoration by addressing the primary drivers of wading bird productivity.

The proposed research plan is well-documented and clear. The approaches are well-tested in the field and accepted in the peer-reviewed literature, and project implementers are experienced with the proposed activities. The sample sizes are expected to be large enough to yield statistically significant results. This project will reduce uncertainty in future bird restoration projects by filling knowledge gaps. Some uncertainty exists regarding the ability of the researches to tag the desired number of birds, but additional trips can be made as needed.

PROJECT MONITORING

The proposed monitoring plan for this restoration project was developed to evaluate project performance, key uncertainties, and the need for potential corrective actions, if needed.

Parameters that will be monitored for this project include:

- Number of birds tagged
- Number of trips
- Data analysis made publicly available
- QAQC completed

In future updates to this section, for each of the identified monitoring parameters, information will be provided on the intended purpose of each monitoring parameter (e.g. monitor progress toward meeting one or more of the restoration objectives, regulatory compliance, support adaptive management of the project), monitoring methods, timing and frequency, duration, sample size, and sites. This section will also describe performance criteria and potential corrective actions for project parameters associated with project objectives. The decision-making process requires a structured approach for incorporating new information gained from monitoring and evaluation. As specified in the NRDA regulations, performance criteria are used to determine restoration success or the need for corrective action (15 CFR 990.55(b)(1)(vii)). However, unanticipated consequences, previously unknown conditions or unanticipated environmental drivers uncovered during the evaluation step may also determine the need for corrective actions. The decision to implement a corrective action will holistically consider the overall outcomes of the restoration project by assessing the results of all monitoring parameters compiled in the evaluation step.

PROJECT IMPLEMENTATION

The project would collect additional monitoring data needed to address critical information gaps that currently act as impediments to restoration planning for these species in Alabama. Monitored species would be selected from the group that includes tricolored heron and either the little blue heron or the white ibis, based on additional recommendations from Trustee bird experts.

The proposed 4-year study would employ a combination of satellite and VHF transmitters in conjunction with color leg-banding to generate the monitoring data to help elucidate limiting habitat components for these species. Females would be captured either during the pre-incubation stage or during incubation using modified noose mats near nests. This data would help provide information on important foraging areas, inter- and intra-annual movements, home range size, nest site fidelity, and dispersal. This project would potentially involve the USFWS, USGS, ALDCNR, ADEM, DISL, and target universities as collaborators.

ADAPTIVE MANAGEMENT

Because there are current gaps in scientific understanding regarding these species, this project supports an adaptive management approach to bird restoration by conducting a habitat use assessment to reduce key uncertainties and conduct analyses that will inform the selection, design and optimization of future project portfolios. The effective use of project funds to support addressing uncertainties will inform restoration planning, implementation and evaluation of bird restoration projects in Alabama. This approach may evolve over time as Trustees gain new insight and knowledge from restoration activities.

EVALUATION

Evaluation of monitoring data is needed to assess the performance of the project in meeting its restoration objectives, resolving uncertainties to increase understanding, and determine whether corrective actions are needed.

As part of the larger decision-making context beyond the project scale, the evaluation of monitoring data from the individual projects would be compiled and assessed at the Restoration Type and TIG level, and the results would be used to update the knowledge base to inform decisions such as future TIG project prioritization and selection, implementation techniques, and the identification of critical uncertainties. The results of the analysis would be used to answer the following questions:

- Were the project objectives achieved? If not, is there a reason why they were not met?
- Did the project produce unanticipated effects?
- Were there unanticipated events unrelated to the project that potentially affected the monitoring results (e.g., hurricanes)?
- Were any of the uncertainties identified prior to project implementation resolved?
- Were any new uncertainties identified?
- Have data been summarized and characterized in a way that allows for a clear understanding of results?
- Have any trends or patterns been identified, and if so, how can they be characterized?
- What broader insights might be gained from implementation/monitoring of this project?

MONITORING SCHEDULE

The schedule for project monitoring is shown in Table G-16, separated by monitoring activity. Execution monitoring occurs when project has been fully executed as planned. Performance monitoring will occur in the year following initial project execution.

Table G-16

Monitoring Parameter	Pre-Execution Monitoring	As-Built (year 0)	Project Monitoring (Years 1-4)
Number of birds tagged			X
Number of trips			X
Data analysis made publicly available			X
QAQC completed			X

DATA MANAGEMENT

Data Description

To the extent practicable, all environmental and biological data generated during monitoring activities will be documented using standardized field datasheets. Electronic data files will be named with the date on which the file was created and will include a ReadMe file that describes when the file was created, and by whom, and any explanatory notes on the file contents. If a data file is revised, a new copy should be made and the original preserved. Relevant Project data that are handwritten on hardcopy datasheets or notebooks would be transcribed (entered) into Excel spreadsheets (or similar digital format). After transcription of the data, a second person not associated with data transcription would perform a verification of the data in the electronic data sheets against the original hardcopy datasheets and/or notebooks, and would make any corrections to transcription errors as appropriate before data are used for any analyses or distributed outside of the agency. Implementing Trustees will verify and validate monitoring data and information and would ensure that all data is entered or converted into agreed upon/commonly used digital format labeled with metadata.

Data Review and Clearance

All data will undergo proper QAQC protocols, be reviewed and verified following the process outlined in Section 3 of the MAM Manual.

Data Storage and Accessibility

Once all data has been verified by quality assurance/quality control procedures, it will be submitted to the Restoration Project Database that is maintained by DCNR.

Data Sharing

Data will be made publicly available, in accordance with the Federal Open Data Policy (Section 10.6.6 of SOP; DWH NRDA Trustees 2016b), through the DIVER Explorer Interface within a year of when the data collection occurred.

REPORTING

Once all data have been reviewed for accuracy and completeness, they will be submitted to the Restoration Project Database. Data will be made publicly available through the DIVER Explorer Interface.

ROLES AND RESPONSIBILITIES

USDOI is the lead Trustee agency for this project and will ensure that the project is completed.

Work will be conducted by contractor or cooperative agreement with university or other entity. The Trustee Council facilitates consistency in monitoring and data management procedures to evaluate and report on progress towards meeting restoration goals articulated in the PDARP/PEIS.

REFERENCES

DWH NRDA Trustees

2016 Deepwater Horizon oil spill: final programmatic damage assessment and restoration plan (PDARP) and final programmatic environmental impact statement (PEIS)

DWH NRDA Trustees

2016b Trustee Council Standard Operating Procedures for Implementation of the Natural Resource Restoration for the *Deepwater Horizon* Oil Spill. Originally approved May 4, 2016; revised November 15, 2016.

GOMAMN

2018 GOMAMN Decision Support Tool – Ecological Processes, Wading Bird Taxa Group Summary.

Lebreton, J.-D., K. P. Burnham, J. Clobert, and D. R. Anderson

1992 Modeling survival and testing biological hypotheses using marked animals: a unified approach with case studies. Ecological Monographs 62:67-118.

Newton, I

1998 Population limitation in birds. Academic Press, San Diego, CA, USA.

MAM PLAN REVISION HISTORY

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MONITORING AND ADAPTIVE MANAGEMENT PLAN

OYSTER CULTCH RELIEF AND REEF CONFIGURATION

PROJECT OVERVIEW

The Oyster Cultch Relief and Reef Configuration project would deploy different types of cultch material in various configurations to facilitate positive settlement and growth of oysters on selected reef areas in Mobile Bay, Alabama. Since 2005, the oyster density on publicly harvested reefs has been in decline, due to damage and silting associated with hurricanes Ivan and Katrina and drought conditions. This has caused the proliferation of the predatory oyster drill on historically productive reefs. AMRD is proposing to investigate the merit of deploying different types of cultch material in various configurations to enhance settlement and growth of oysters on selected reef areas in Mobile Bay. In addition to the direct goal of restoring the reefs selected for project implementation, the project has three additional study objectives: (1) determine if there are differences in oyster settlement, growth, and survival on reefs of differing levels of relief and/or orientation relative to currents; (2) determine optimum reef material relief needed to restore oyster density on specific reefs within historical reef areas in which hydrology parameters such as oxygen and salinity and oyster recruitment and survival are highly variable; and (3) estimate the cost/benefits of deploying cultch in configurations differing from traditional cultch broadcast methods. The broader goal is to inform and increase the success of future oyster reef restoration activities. For project implementation, two sites have been tentatively selected for pre-monitoring surveys--a 36-acre reef approximately 1 mile north-northeast of the mouth of East Fowl River and Denton Reef (70 acres) located approximately 3 miles southeast of the mouth of East Fowl River.

RESTORATION TYPE GOALS AND PROJECT RESTORATION OBJECTIVES

Project Type: Oysters

Programmatic Goal: Replenish and Protect Living Coastal and Marine Resources

Restoration Type Goal: Restore a diversity of oyster reef habitats that provide ecological functions for estuarine-dependent fish species, vegetated shoreline and marsh habitats, and nearshore benthic communities.

Restoration Approach: Restore or create oyster reefs through placement of cultch in nearshore and subtidal habitats.

Objective 1: Restore subtidal reef habitats in various configurations along a salinity gradient.

Objective 2: Determine if there are differences in oyster settlement, growth, and survival on reefs of differing levels of relief and/or orientation relative to currents.

Objective 3: Determine optimum reef material relief needed to restore oyster density on specific reefs within historical reef areas in which hydrology parameters such as oxygen and salinity and oyster recruitment and survival are highly variable

Objective 4: Estimate the cost/benefits of deploying cultch in certain configurations as opposed to traditional cultch broadcast methods.

Sources of Uncertainty

Weather-related events may necessitate the maintenance of the cultch mounds and furrows including the deployment of additional cultch. This project is a study, designed to increase certainty around which restoration methods are most likely to lead to meet performance objectives for oysters. AMRD experts expect this alternative would provide useful insights into improved methods for locating cultch sites in coastal Alabama similar to other studies that have been conducted, selecting appropriate cultch materials, and constructing reefs with the most effective degree of relief. The project design takes into account the key factors that are known to affect the success of settlement and growth of oysters. Through systematic variation of these factors, it is expected that improved cultch materials and placement methods can be identified. Where these methods prove successful, the project would also result in productive restored oyster reef.

CONCEPTUAL MODEL, ANTICIPATED OUTCOMES AND FUTURE ACTIVITIES

The completion of this project will result in a better understanding of what reef configurations and deployment techniques are best suited for successful restoration of oysters in Alabama.

Stressors negatively affect habitat condition and habitat relationships, resulting in loss of habitat, function or capacity. For this project, the specific stressors addressed include habitat loss and fragmentation, and changes in local conditions that historically supported oysters. Predation and changes in water quality also affect oyster resources. The purpose of this project is to identify ideal techniques and configurations for reef restoration activities, which will result in reduced uncertainties for future restoration projects. This project plays an important role in filling information gaps for oyster restoration through the identification of what reef configurations, salinity gradients, deployment configurations and other factors are best suited to support oysters, which in the longer term would feed directly into the AL TIG's efforts to mitigate oyster survivorship in Alabama coastal waters. This project will increase oyster survival and reproduction by identifying effective methods and conditions for oyster reef restoration.

ADAPTIVE MANAGEMENT

As discussed in the PDARP/PEIS, adaptive management is a form of structured decision-making applied to the management of natural resources in the face of uncertainty (Pastorok et al. 1997; Williams 2011). It is an iterative process that integrates monitoring and evaluation of management actions with flexible decision-making, where adjustments are made to management approaches based on observed outcomes (NRC 2004). Within the context of ecological restoration, adaptive management addresses key uncertainties by linking science to restoration decision-making (Steyer and Llewellyn 2000). Although adaptive management is a critical component of the restoration plan as a whole, the need for adaptive management may vary on a project-by-project basis. Some projects may be well understood and not have uncertainties which warrant adaptive management. The monitoring and adaptive management framework may be more robust for elements of the restoration plan with high degrees of uncertainty or where numerous restoration projects are planned within a given geographic area and/or for the benefit of a particular resource (Trustees 2016, Appendix 5.E.1, PDARP/PEIS). Under OPA NRDA regulations, restoration projects clearly identify performance criteria that would be used to determine project success or the need for corrective action.

The project design takes into account the key factors that are known to affect the success of settlement and growth of oysters. Through systematic variation of these factors, it is expected that improved cultch materials and placement methods can be identified. Final project site selection, cultch height, and reef area would be determined by the results of pre-monitoring surveys. Physical conditions would determine which type of plot would be used in each project site.

This project supports a larger commitment to adaptive management at the program level as the data generated as a result of this project will reduce future uncertainties regarding the siting and success of future oyster reef restoration projects.

In future planning efforts, the ALTIG will review the data generated from this project in developing restoration options for oysters in addition to utilizing other information including scientific literature, other restoration projects and consultation with experts.

PROJECT IMPLEMENTATION

Site selection and pre-monitoring may include the use of side-scan sonar imaging, hand dredging, cane-pole sounding, and/or SCUBA quadrat sampling. Baseline data would be collected at each study site prior to project deployment, including an estimate of juvenile and adult oysters as well as an evaluation of existing cultch at each site (oyster shell, limestone rock, and fossilized shell). Although not included in this project budget, side-scan sonar imaging of each test area would be performed after cultch deployment. For construction, a contractor would be hired to transport and deploy cultch material by push boat or barge. The cultch would be deployed off the deck using skid steers and excavator shovels. High-pressure water hoses would be used to distribute the cultch into three experimental configurations including mounding, elongated furrows, and control plots utilizing typical cultch broadcasting methods. Within the designated area(s) a total of nine mounds, six furrows, and six control plots would be created. The size and each mound’s area and height would depend on the depth of the bottom in which it is placed and would comply with the United States Army Corps of Engineers (USACE)-authorized minimum clearance requirement depth. Length, height, and orientation of each furrow would also depend on the depth and direction of currents at the study site. It is anticipated that the width of each furrow would be approximately 2 feet wide, although the actual width would depend on the material deployed. Maintenance of the cultch mounds and furrows, including the deployment of additional cultch, may be needed in the event of a disaster such as a hurricane or tropical storm. Deployment of oyster cultch is an approved activity by USACE under a Nationwide Permit. Post-construction monitoring of sites may include the use of hand dredging, cane pole sounding, and/or SCUBA quadrat sampling.

Planning, pre-monitoring, and site selection are anticipated to take 3 months (January–March of project year). The invitation to bid and contractor bid process is anticipated to take 1 month (March of project year). Construction is anticipated to take 1 month and conclude by May of the first year.

PROJECT MONITORING

The proposed monitoring plan for this restoration project was developed to evaluate project performance, key uncertainties, and the need for potential corrective actions, if needed.

Parameters that will be monitored for this project include:

- Reef Dimension
- Oyster Mortality
- Oyster Density and Size Class Distribution
- Settlement
- Water Temperature

- Salinity
- Dissolved Oxygen

In future updates to this section, for each of the identified monitoring parameters, information will be provided on the intended purpose of each monitoring parameter (e.g. monitor progress toward meeting one or more of the restoration objectives, regulatory compliance, support adaptive management of the project), monitoring methods, timing and frequency, duration, sample size, and sites. This section will also describe performance criteria and potential corrective actions for project parameters associated with project objectives. The decision-making process requires a structured approach for incorporating new information gained from monitoring and evaluation. As specified in the NRDA regulations, performance criteria are used to determine restoration success or the need for corrective action (15 CFR 990.55(b)(1)(vii)). However, unanticipated consequences, previously unknown conditions or unanticipated environmental drivers uncovered during the evaluation step may also determine the need for corrective actions. The decision to implement a corrective action will holistically consider the overall outcomes of the restoration project by assessing the results of all monitoring parameters compiled in the evaluation step.

EVALUATION

Evaluation of monitoring data is needed to assess the performance of the project in meeting its restoration objectives, resolving uncertainties to increase understanding, and determine whether corrective actions are needed.

As part of the larger decision-making context beyond the project scale, the evaluation of monitoring data from the individual projects would be compiled and assessed at the Restoration Type and TIG level, and the results would be used to update the knowledge base to inform decisions such as future TIG project prioritization and selection, implementation techniques, and the identification of critical uncertainties. The results of the analysis would be used to answer the following questions:

- Were the project restoration objectives achieved? If not, is there a reason why they were not met?
- Were effective techniques and methods identified? If so, how can they be utilized in future projects?
- Did the restoration project produce unanticipated effects?
- Were there unanticipated events unrelated to the restoration project that potentially affected the monitoring results (e.g., hurricanes)?
- Were any of the uncertainties identified prior to project implementation resolved?
- Have data been summarized and characterized in a way that allows for a clear understanding of results?
- Have any trends or patterns been identified, and if so, how can they be characterized?
- What broader insights might be gained from implementation/monitoring of this project?
- Were any new uncertainties identified?

MONITORING SCHEDULE

The schedule for project monitoring is shown in Table G-17, separated by monitoring activity. Pre-execution monitoring will occur before project execution. Execution monitoring occurs when project has been fully executed as planned. Performance monitoring will occur in the year following initial project execution.

Table G-17: Monitoring Schedule

Monitoring Parameter	Pre-Execution Monitoring	As-Built (year 0)	Post-Execution Monitoring (Years 1-5)
Oyster Density and size class distribution	X	X	X
Reef Dimension	X	X	X
Settlement	X	X	X
Oyster Mortality	X	X	X
Water Temp	X	X	X
Salinity	X	X	X
DO	X	X	X

DATA MANAGEMENT

Data Description

To the extent practicable, all environmental and biological data generated during monitoring activities will be documented using standardized field datasheets. Electronic data files will be named with the date on which the file was created and will include a ReadMe file that describes when the file was created, and by whom, and any explanatory notes on the file contents. If a data file is revised, a new copy should be made and the original preserved. Relevant Project data that are handwritten on hardcopy datasheets or notebooks would be transcribed (entered) into Excel spreadsheets (or similar digital format). After transcription of the data, a second person not associated with data transcription would perform a verification of the data in the electronic data sheets against the original hardcopy datasheets and/or notebooks, and would make any corrections to transcription errors as appropriate before data are used for any analyses or distributed outside of the agency. Implementing Trustees will verify and validate monitoring data and information and would ensure that all data is entered or converted into agreed upon/commonly used digital format labeled with metadata.

Data Review and Clearance

All data will undergo proper QAQC protocols, be reviewed and verified following the process outlined in Section 3 of the MAM Manual.

Data Storage and Accessibility

Once all data has been verified by quality assurance/quality control procedures, it will be submitted to the Restoration Project Database that is maintained by DCNR.

Data Sharing

Data will be made publicly available, in accordance with the Federal Open Data Policy (Section 10.6.6 of SOP; DWH NRDA Trustees 2016b), through the DIVER Explorer Interface within a year of when the data collection occurred.

REPORTING

Once all data have been reviewed for accuracy and completeness, they will be submitted to the Restoration Project Database. Data will be made publicly available through the DIVER Explorer Interface.

ROLES AND RESPONSIBILITIES

ADCNR is the lead Trustee agency for this project and will ensure that the project is completed.

The Trustee Council facilitates consistency in monitoring and data management procedures to evaluate and report on progress towards meeting restoration goals articulated in the PDARP/PEIS.

REFERENCES

DWH NRDA Trustees

2016 Deepwater Horizon oil spill: final programmatic damage assessment and restoration plan (PDARP) and final programmatic environmental impact statement (PEIS)

DWH NRDA Trustees

2016b Trustee Council Standard Operating Procedures for Implementation of the Natural Resource Restoration for the *Deepwater Horizon* Oil Spill. Originally approved May 4, 2016; revised November 15, 2016.

National Research Council

2004 Adaptive Management for Water Resources Project Planning. Washington, DC: The National Academies Press.

Pastorok, R.A., A. MacDonald, J.R. Sampson, P. Wilber, D.J. Yozzo, and J.P. Titre

1997 An ecological decision framework for environmental restoration projects. Ecological Engineering, 9, 89-107.

Steyer, G.D., and D.W. Llewellyn

2000 Coastal Wetlands Planning, Protection and Restoration Act: A programmatic application of adaptive management. Ecological Engineering, 26, 27-39.

Williams, B.K.

2011 Adaptive management of natural resources - Framework and issues. Journal of Environmental Management, 92, 1346-1353.

MAM PLAN REVISION HISTORY

MONITORING AND ADAPTIVE MANAGEMENT PLAN
OYSTER HATCHERY AT CLAUDE PETEET MARICULTURE CENTER

PROJECT OVERVIEW

The Alabama Marine Resources Division (AMRD) is proposing to construct an oyster hatchery at AMRD's Claude Peteet Mariculture Center (CPMC) in Gulf Shores and operate the facility within a four-year project period. The oyster spat produced as a result of this project will be used to encourage oyster recruitment in portions of Mobile Bay which has experienced reduced oyster production compared to the early 20th century. The objectives of this project are to produce spat to be used for oyster restoration projects in Alabama and to develop a comprehensive oyster restoration plan for coastal Alabama. Project components would also include remote setting and deployment from the MRD facility at Dauphin Island. Additionally, the project would result in the deployment of cultch material, including spat on shell, to areas identified as suitable for oyster growth. Together, these activities aim to restore oyster abundance and spawning stock to support a regional oyster larvae pool sufficient for healthy recruitment levels to subtidal and nearshore oyster reefs.

RESTORATION TYPE GOALS AND PROJECT RESTORATION OBJECTIVES

Project Type: Oysters

Programmatic Goal: Replenish and Protect Living Coastal and Marine Resources

Restoration Type Goal: Restore oyster abundance and spawning stock to support a regional oyster larvae pool sufficient for healthy recruitment levels to subtidal and nearshore oyster reefs.

Restoration Approach: Enhancement of regional hatchery capacity and remote setting facilities

Objective 1: Construct an oyster hatchery to produce spat that will be used to encourage oyster recruitment in portions of Mobile Bay that have experienced reduced oyster populations.

Objective 2: Deploy spat in in portions of Mobile Bay that have experienced reduced oyster production compared to the early 20th century

Objective 3: Develop a comprehensive oyster restoration plan for coastal Alabama.

CONCEPTUAL SETTING AND ANTICIPATED OUTCOMES

A conceptual model forms the basis of this monitoring plan, and includes a summary of the project activities, the expected product or output of those activities and the desired project outcomes. Project activities include the construction of a hatchery facility and the subsequent deployment of spat to restore the larval pool in coastal Alabama. This project addresses losses in oyster production, and will result in increased oyster survival and reproduction in Alabama. In addition, the development of an oyster restoration plan will result in an increased understanding of local oyster populations, including larval transport and recruitment trends, as well as environmental factors that affect them. This information will be utilized in future restoration activities.

Sources of Uncertainty

Natural variability in ecological or physical processes have the potential to affect oyster survival. Whether the project is constructed as designed, on time and on budget is one source of uncertainty. Long-term funding for maintenance and operation of the facility is another source of uncertainty. The deployment of spat and subsequent attachment depend on the placement of spat in areas that are conducive to oyster survival. The proposed approach is well documented and has been successfully implemented previously.[1] In conjunction with the other potential initiatives under consideration by the TIG that would identify optimal locations and methods for ensuring recruitment, the project has a strong likelihood of contributing towards the AL TIG's broad goal of increasing survivorship of oysters in Mobile Bay and Mississippi Sound. ADCNR's commitment to fund continuing operation and maintenance at the facility after the funding for this project ends will further enhance the long-term benefits of the project.

PROJECT MONITORING, PERFORMANCE CRITERIA AND POTENTIAL CORRECTIVE ACTIONS

The proposed monitoring plan for this restoration project was developed to evaluate project performance, key uncertainties, and the need for potential corrective actions, if needed.

Parameters that will be monitored for this project include:

- Construction of facility as designed
- Reef Dimension
- Completion of Oyster Management Plan
- Hatchery Production
- Oyster Mortality
- Oyster Density and Size Class Distribution
- Water Temperature
- Salinity
- Dissolved Oxygen

In future updates to this section, for each of the identified monitoring parameters, information will be provided on the intended purpose of each monitoring parameter (e.g. monitor progress toward meeting one or more of the restoration objectives, regulatory compliance, support adaptive management of the project), monitoring methods, timing and frequency, duration, sample size, and sites. This section will also describe performance criteria and potential corrective actions for project parameters associated with project objectives. The decision-making process requires a structured approach for incorporating new information gained from monitoring and evaluation. As specified in the NRDA regulations, performance criteria are used to determine restoration success or the need for corrective action (15 CFR 990.55(b)(1)(vii)). However, unanticipated consequences, previously unknown conditions or unanticipated environmental drivers uncovered during the evaluation step may also determine the need for corrective actions. The decision to implement a corrective action will holistically consider the overall outcomes of the restoration project by assessing the results of all monitoring parameters compiled in the evaluation step.

ADAPTIVE MANAGEMENT

As discussed in the PDARP/PEIS, adaptive management is a form of structured decision-making applied to the management of natural resources in the face of uncertainty (Pastorok et al. 1997; Williams 2011). It is an iterative process that integrates monitoring and evaluation of management actions with flexible decision-making, where adjustments are made to management approaches based on observed

[1] See http://www.aces.edu/dept/fisheries/aumerc/AuburnUniversityShellfishLaboratory_000.php

outcomes (NRC 2004). Within the context of ecological restoration, adaptive management addresses key uncertainties by linking science to restoration decision-making (Steyer and Llewellyn 2000). Although adaptive management is a critical component of the restoration plan as a whole, the need for adaptive management may vary on a project-by-project basis. Some projects may be well understood and not have uncertainties which warrant adaptive management. The monitoring and adaptive management framework may be more robust for elements of the restoration plan with high degrees of uncertainty or where numerous restoration projects are planned within a given geographic area and/or for the benefit of a particular resource (Trustees 2016, Appendix 5.E.1, PDARP/PEIS). Under OPA NRDA regulations, restoration projects clearly identify performance criteria that would be used to determine project success or the need for corrective action.

To increase the likelihood of successful deployment, this project would use information gained from mapping relic oyster reefs identified in the late 1960s as described in the Side-scan Mapping of Mobile Bay Relic Oyster Reefs Project. Information from areas mapped with side-scan technology in previous efforts and as part of another proposed project in this Restoration Plan would be assessed to determine suitability (i.e., hardness of bottom, sediment burden) for spat deployment. Side-scan images would be used to identify water bottoms suitable for cultch and spat placement in areas recognized as conditionally approved for oyster harvest, while other areas would be identified in conditionally restricted or restricted waters. Spat produced in the proposed hatchery would be deployed to both areas as conditions allow. Cultch material could also be deployed as needed.

If hatchery is not producing sufficient numbers of spat, methods will be evaluated and amended as needed. As stated above, the proposed approach is well documented and has been successfully implemented previously.

Additionally, this project would fund the development of comprehensive oyster restoration plan for Coastal Alabama. The plan would analyze existing literature, pull together data from previous and ongoing projects (including side-scan sonar, larval transport studies, and habitat suitability index), develop overall restoration goals and priorities, and provide specific recommendations to meet overall restoration goals and objectives.

EVALUATION

Evaluation of monitoring data is needed to assess the performance of the project in meeting its restoration objectives, resolving uncertainties to increase understanding, and determine whether corrective actions are needed.

As part of the larger decision-making context beyond the project scale, the evaluation of monitoring data from the individual projects would be compiled and assessed at the Restoration Type and TIG level, and the results would be used to update the knowledge base to inform decisions such as future TIG project prioritization and selection, implementation techniques, and the identification of critical uncertainties. The results of the analysis would be used to answer the following questions:

- Were the project restoration objectives achieved? If not, is there a reason why they were not met?
- Did the restoration project produce unanticipated effects?
- Were there unanticipated events unrelated to the restoration project that potentially affected the monitoring results (e.g., hurricanes)?
- Were any of the uncertainties identified prior to project implementation resolved?

- Were any new uncertainties identified?
- Have data been summarized and characterized in a way that allows for a clear understanding of results?
- Have any trends or patterns been identified, and if so, how can they be characterized?
- What broader insights might be gained from implementation/monitoring of this project?

MONITORING SCHEDULE

The schedule for project monitoring is shown in Table G-18, separated by monitoring activity. Pre-execution monitoring will occur before project execution. Execution monitoring occurs when project has been fully executed as planned. Performance monitoring will occur in the year following initial project execution.

Table G-18: Monitoring Schedule

Monitoring Parameter	Pre-Execution Monitoring	As-Built (year 0)	Post-Execution Monitoring (Years 1-4)
Construction of facility as designed		X	X
Reef Dimension		X	X
Hatchery Production			X
Oyster mortality			X
Oyster Density and Size Class Distribution	X		X
Water Temp	X	X	X
Salinity	X	X	X
Dissolved Oxygen	X	X	X
Completion of Plan			X

DATA MANAGEMENT

Data Description

To the extent practicable, all environmental and biological data generated during monitoring activities will be documented using standardized field datasheets. Electronic data files will be named with the date on which the file was created and will include a ReadMe file that describes when the file was created, and by whom, and any explanatory notes on the file contents. If a data file is revised, a new copy should be made and the original preserved. Relevant Project data that are handwritten on hardcopy datasheets or notebooks would be transcribed (entered) into Excel spreadsheets (or similar digital format). After transcription of the data, a second person not associated with data transcription would perform a verification of the data in the electronic data sheets against the original hardcopy datasheets and/or notebooks, and would make any corrections to transcription errors as appropriate before data are used for any analyses or distributed outside of the agency. Implementing Trustees will verify and validate monitoring data and information and would ensure that all data is entered or converted into agreed upon/commonly used digital format labeled with metadata.

Data Review and Clearance

All data will undergo proper QAQC protocols, be reviewed and verified following the process outlined in Section 3 of the MAM.

Data Storage and Accessibility

Once all data has been verified by quality assurance/quality control procedures, it will be submitted to the Restoration Project Database that is maintained by DCNR.

Data Sharing

Data will be made publicly available, in accordance with the Federal Open Data Policy (Section 10.6.6 of SOP; DWH NRDA Trustees 2016b), through the DIVER Explorer Interface within a year of when the data collection occurred.

REPORTING

Once all data have been reviewed for accuracy and completeness, they will be submitted to the Restoration Project Database. Data will be made publicly available through the DIVER Explorer Interface.

ROLES AND RESPONSIBILITIES

ADCNR is the lead Trustee agency for this project and will ensure that the project is completed.

The Trustee Council facilitates consistency in monitoring and data management procedures and report on progress towards meeting restoration goals articulated in the PDARP/PEIS.

REFERENCES

DWH NRDA Trustees

2016 Deepwater Horizon oil spill: final programmatic damage assessment and restoration plan (PDARP) and final programmatic environmental impact statement (PEIS)

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2016b Trustee Council Standard Operating Procedures for Implementation of the Natural Resource Restoration for the *Deepwater Horizon* Oil Spill. Originally approved May 4, 2016; revised November 15, 2016.

National Research Council

2004 Adaptive Management for Water Resources Project Planning. Washington, DC: The National Academies Press.

Pastorok, R.A., A. MacDonald, J.R. Sampson, P. Wilber, D.J. Yozzo, and J.P. Titre

1997 An ecological decision framework for environmental restoration projects. Ecological Engineering, 9, 89-107.

Steyer, G.D., and D.W. Llewellyn

2000 Coastal Wetlands Planning, Protection and Restoration Act: A programmatic application of adaptive management. Ecological Engineering, 26, 27-39.

Williams, B.K.

2011 Adaptive management of natural resources - Framework and issues. Journal of Environmental Management, 92, 1346-1353.

MAM PLAN REVISION HISTORY

MONITORING AND ADAPTIVE MANAGEMENT PLAN

OYSTER GROW-OUT AND RESTORATION REEF PLACEMENT

PROJECT OVERVIEW

This project would establish up to three protected oyster gardening program grow-out areas located in Grand Bay, Portersville Bay, and Bon Secour Bay and use these adult sized oysters for restoration reef placement. The project, to be conducted and managed by the Alabama Cooperative Extension System (ACES) in coordination with its other oyster gardening activities, would grow out oysters to at least 1 year old, place these oysters on existing reef sites, including existing complementary living shoreline sites in Mobile Bay and Mississippi Sound as well as clutched sites, and identify and prioritize future restoration reef locations (including nearshore living shorelines and intertidal reefs). Additionally, the project would include including monitoring the success in terms of oyster survival and reproduction of both the grow-out areas and restoration sites to determine effective techniques to increase the sustainability of oyster populations in Alabama.

RESTORATION TYPE GOALS AND PROJECT RESTORATION OBJECTIVES

- Programmatic goal: Replenish and Protect Living Coastal and Marine Resources.
- Restoration type goal: Restore oyster abundance and spawning stock to support a regional oyster larvae pool sufficient for healthy recruitment levels to subtidal and nearshore oyster reefs.
- Restoration approach: Restore oyster reef habitat.
- Restoration technique: Enhance Oyster Reef Productivity through Spawning Stock Enhancement Projects Such as Planting Hatchery-Raised Oysters, Relocating Wild Oysters to Restoration Sites, Oyster Gardening Programs, and Other Similar Projects.

Objective 1: Create up to three protected oyster gardening program grow-out areas.

Objective 2: Grow out oysters to one year old and place on existing reef sites.

Objective 3: identify and prioritize future restoration reef locations (including nearshore living shorelines and intertidal reefs).

CONCEPTUAL SETTING AND ANTICIPATED OUTCOMES

A conceptual model forms the basis of this monitoring plan, and includes a summary of the project activities, the expected product or output of those activities and the desired project outcomes. Stressors negatively impact habitat condition and habitat relationships, resulting in loss of habitat, function or capacity. For this project, the specific stressors addressed include predation, loss of habitat and poor spat recruitment. Activities including the placement of spat in designated grow out areas and placement of grow out oysters on reefs will result in increased settlement in grow-out areas, and an increase in abundance or larger class size oysters, as well as anticipated reduced predation by the oyster drill.

Sources of Uncertainty

Stressors like storms and changes in water quality may negatively impact the success of this project by disturbing grow-out structures. Predation is also a concern. Previous efforts have demonstrated that oysters can be successfully grown "off-bottom," although not using the specific techniques proposed by this project.[2] The proposed initiative would further test the salinity and other environmental conditions under which grow-out can take place. The project would also provide a better understanding of the economics of these grow-out approaches. Additionally, the project would monitor the success of the grow-out areas at increasing the oyster larval pool nearby. Since this technique has not been used previously, the likelihood of success is unknown; however, in areas that currently have low densities of oyster larvae, such as Bon Secour Bay, it is likely that a dense aggregation of living, spawning age oysters will enhance the larval pool.

PROJECT MONITORING, PERFORMANCE CRITERIA AND POTENTIAL CORRECTIVE ACTIONS

The proposed monitoring plan for this restoration project was developed to evaluate project performance, key uncertainties, and the need for potential corrective actions, if needed.

Parameters that will be monitored for this project include:

- Project Footprint
- Number of oysters at grow-out site
- Oyster Mortality (grow-out and placement sites)
- Oyster Density and Size Class Distribution (grow-out and placement sites)
- Spat Settlement
- Water Temperature
- Salinity
- Dissolved Oxygen

In future updates to this section, for each of the identified monitoring parameters, information will be provided on the intended purpose of each monitoring parameter (e.g. monitor progress toward meeting one or more of the restoration objectives, regulatory compliance, support adaptive management of the project), monitoring methods, timing and frequency, duration, sample size, and sites. This section will also describe performance criteria and potential corrective actions for project parameters associated with project objectives. The decision-making process requires a structured approach for incorporating new information gained from monitoring and evaluation. As specified in the NRDA regulations, performance criteria are used to determine restoration success or the need for corrective action (15 CFR 990.55(b)(1)(vii)). However, unanticipated consequences, previously unknown conditions or unanticipated environmental drivers uncovered during the evaluation step may also determine the need for corrective actions. The decision to implement a corrective action will holistically consider the overall outcomes of the restoration project by assessing the results of all monitoring parameters compiled in the evaluation step.

ADAPTIVE MANAGEMENT

As discussed in the PDARP/PEIS, adaptive management is a form of structured decision-making applied to the management of natural resources in the face of uncertainty (Pastorok et al. 1997; Williams 2011). It is an iterative process that integrates monitoring and evaluation of management actions with flexible decision-making, where adjustments are made to management approaches based on observed

[2]See http://www.aces.edu/pubs/docs/A/ANR-1207/index2.tmpl

outcomes (NRC 2004). Within the context of ecological restoration, adaptive management addresses key uncertainties by linking science to restoration decision-making (Steyer and Llewellyn 2000). Although adaptive management is a critical component of the restoration plan as a whole, the need for adaptive management may vary on a project-by-project basis. Some projects may be well understood and not have uncertainties which warrant adaptive management. The monitoring and adaptive management framework may be more robust for elements of the restoration plan with high degrees of uncertainty or where numerous restoration projects are planned within a given geographic area and/or for the benefit of a particular resource (Trustees 2016, Appendix 5.E.1, PDARP/PEIS). Under OPA NRDA regulations, restoration projects clearly identify performance criteria that would be used to determine project success or the need for corrective action.

Periodic maintenance may be necessary following severe weather events or other situations that would disturb the grow-out sites. If the structures were disturbed, they would need to be repaired and/or reinstalled. Further, the grow-out sites would be adaptively managed over time to retrofit the structures with the most effective predator controls. ACES would work with the AL TIG, AMRD, and other restoration practitioners to determine the need for additional locations for other oyster gardening program grow-out sites if needed.

This project consists of a feasibility assessment of an alternative approach to restoring oyster resources. This project would fill an important data gap by determining how best to reduce predation on oyster populations in Alabama, which would provide information that is easily transferrable to other northern Gulf States and decrease uncertainties for future implementation activities. If the alternative is successful, it could lead to the development of new restoration methods.

EVALUATION

Evaluation of monitoring data is needed to assess the performance of the project in meeting its restoration objectives, resolving uncertainties to increase understanding, and determine whether corrective actions are needed.

As part of the larger decision-making context beyond the project scale, the evaluation of monitoring data from the individual projects would be compiled and assessed at the Restoration Type and TIG level, and the results would be used to update the knowledge base to inform decisions such as future TIG project prioritization and selection, implementation techniques, and the identification of critical uncertainties. The results of the analysis would be used to answer the following questions:

- Were the project restoration objectives achieved? If not, is there a reason why they were not met?
- Were effective techniques to increase the sustainability of oyster populations in Alabama identified?
- Did the restoration project produce unanticipated effects?
- Were there unanticipated events unrelated to the restoration project that potentially affected the monitoring results (e.g., hurricanes)?
- Were any of the uncertainties identified prior to project implementation resolved?
- Were any new uncertainties identified?
- Have data been summarized and characterized in a way that allows for a clear understanding of results?

- Have any trends or patterns been identified, and if so, how can they be characterized?
- What broader insights might be gained from implementation/monitoring of this project?

MONITORING SCHEDULE

The schedule for project monitoring is shown in Table G-19, separated by monitoring activity. Performance monitoring will begin with baseline monitoring (as built, Year 0) and continue through Year 5. This schedule may be revised as needed depending on changing site conditions over time.

Table G-19: Monitoring Schedule

Monitoring Parameter	As-Built (year 0)	Year 1	Year 2	Year 3	Year 4	Year 5
Project footprint	X	X	X	X	X	X
Oyster density	X	X	X	X	X	X
Oyster mortality	X	X	X	X	X	X
Size frequency distribution	X	X	X	X	X	X
Spat Settlement	X	X	X	X	X	X
Water temperature	X	X	X	X	X	X
Salinity	X	X	X	X	X	X
Dissolved Oxygen	X	X	X	X	X	X

DATA MANAGEMENT

Data Description

To the extent practicable, all environmental and biological data generated during monitoring activities will be documented using standardized field datasheets. Electronic data files will be named with the date on which the file was created and will include a ReadMe file that describes when the file was created, and by whom, and any explanatory notes on the file contents. If a data file is revised, a new copy should be made and the original preserved. Relevant Project data that are handwritten on hardcopy datasheets or notebooks would be transcribed (entered) into Excel spreadsheets (or similar digital format). After transcription of the data, a second person not associated with data transcription would perform a verification of the data in the electronic data sheets against the original hardcopy datasheets and/or notebooks, and would make any corrections to transcription errors as appropriate before data are used for any analyses or distributed outside of the agency. Implementing Trustees will verify and validate monitoring data and information and would ensure that all data is entered or converted into agreed upon/commonly used digital format labeled with metadata.

Data Review and Clearance

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Data Storage and Accessibility

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Data Sharing

Data will be made publicly available, in accordance with the Federal Open Data Policy (Section 10.6.6 of SOP; DWH NRDA Trustees 2016b), through the DIVER Explorer Interface within a year of when the data collection occurred.

REPORTING

Once all data have been reviewed for accuracy and completeness, they will be submitted to the Restoration Project Database. Data will be made publicly available through the DIVER Explorer Interface.

ROLES AND RESPONSIBILITIES

ADCNR is the lead Trustee agency for this project and will ensure that the project is completed.

The project would be conducted and managed by the Alabama Cooperative Extension System (ACES).

The Trustee Council facilitates consistency in monitoring and data management procedures to evaluate and report on progress towards meeting restoration goals articulated in the PDARP/PEIS.

REFERENCES

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MAM PLAN REVISION HISTORY