

Presentation Notes

Louisiana Trustee Implementation Group

2021 Annual Public Meeting

October 27, 2021

This document is intended to accompany the Louisiana Trustee Implementation Group's presentation slides from their October 27, 2021 Public Meeting webinar.

Slide 1:

Hello. I'd like to welcome you to the Deepwater Horizon Natural Resource Damage Assessment Louisiana Trustee Implementation Group public meeting. Thank you for your interest and attendance. My name is Stephen Heverly, I'm a contractor with NOAA, supporting the Louisiana TIG to help facilitate the webinar today. I'll be going over the agenda and some preliminary information.

Slide 2:

First, we will go over some webinar logistics. Next, Mel Landry with the National Oceanic & Atmospheric Administration will briefly talk to you about three DWH funding sources and explain our focus on the Natural Resource Damage Assessment Process. Then, Mel will provide an overview of the DWH NRDA settlement dollars and the allocation of those dollars. After that, Maury Chatellier with the Louisiana Coastal Protection & Restoration Authority will provide an overview of restoration implementation. After the presentation you will be able to provide input to the LA TIG via the process I'll now outline.

Slide 3:

Hopefully everyone's logged in to the webinar by now. You should be able to see the control panel on the right-hand side of your screen. If you're using a phone for audio, you should all be dialing in using the phone number provided by GoToWebinar—that's the number and access code listed under "Audio" in the control panel. Please note that only presenters will be heard over the phone during the webinar; attendees will be muted. Take a look at the "Questions" box at the bottom of the control panel (shown on this slide). If you have a comment you would like to share with the Trustees please type it into this box and we will read as many comments as we can in the time allotted.

Slide 4:

All the meeting materials will be available at la-dwh.com as well as the Trustee website [Gulf Spill Restoration dot NOAA dot gov](http://GulfSpillRestoration.dot.NOAA.dot.gov). And now I'll turn it over to Mel Landy from NOAA to continue the presentation.

Slide 5:

Hi, I'm Mel Landry and I'm the Trustee representative for the National Oceanic and Atmospheric Administration. I'll walk you through the Deepwater Horizon Natural Resource Damage Assessment Planning Process and then hand the presentation over to Maury Chatellier with CPRA to provide an implementation update.

Slide 6:

There are three different sources of DWH funding that we work with in Louisiana. Tonight, we are here to talk about a portion of the NRDA funding. In addition to NRDA the BP settlement also awarded funds through the Clean Water Act Civil and Criminal penalties. NRDA – Oil Pollution Act (for damage oil caused to the environment): NRDA is a legal process under OPA whereby state and federal Trustees are designated to represent the public interest to ensure that natural resources injured in an oil spill are restored. This process includes the assessment of oil spill impacts on natural resources (2010-2015) and the restoration needed to compensate the public for the impacts to these natural resources (2012-ongoing). RESTORE Act – Clean Water Act Civil Penalties (penalty for spilling oil) creates a Gulf Coast Restoration Trust Fund (RTF), which will receive eighty percent of any Clean Water Act (CWA) civil and administrative penalties paid by BP and other companies responsible for DWH. Funds from GC RTF are divided amount five different “pots” of money; Pot 1: Direct component – thirty five percent; Pot 2: GCER Council (Gulf Coast Ecosystem Restoration Council) – thirty percent; Pot 3: Spill Impact Component – thirty percent; Pot 4: Restoration Science Program – two and a half percent; Pot 5: Centers of Excellence – two and a half percent. National Fish and Wildlife Foundation (NFWF) - Criminal Plea Agreements go toward: Gulf Environmental Benefit Fund (Gulf Fund), and a fund established by NFWF. In accordance with the terms of two plea agreements that resolved certain criminal cases against BP and Transocean as a result of DWH, NFWF will administer and monitor \$2.544 billion in payments received over a five-year period as required under the plea agreements. Under the plea agreements, the GEBF has received \$1.272 billion for project expenditures in LA.

Slide 7:

As part of the 2016 settlement for the spill, the Louisiana Trustee Implementation Group will receive five billion dollars in funding through 2031. That money is being used to restore environmental damage caused by the Deepwater Horizon oil spill.

Slide 8:

Here is the breakdown of the funding dollars by state and region, and by categories. Obviously, this is hard to read... So, I'm going to highlight the details for you. Louisiana is getting the most, as you know: \$5 billion. Alabama is getting \$285.6 million, Florida \$680 million, Mississippi \$295.6 million, and Texas \$238.2 million. Next, we'll look at the makeup of the column highlighted here with the \$5 billion for Louisiana. The settlement also determines where funds will be spent. The funds are broken out first geographically—into restoration areas aligned by states, as well as funds for the region-wide and open ocean restoration areas. Then by each restoration type in those areas. I know this slide is difficult to read so we have the information for the Louisiana Restoration Area broken down in the following slides. You can also find a copy of this table on the Trustee's website.

Slide 9:

This pie chart shows the allocation of funds between restoration areas. You can see that the Louisiana restoration area gets the largest allocation.

Slide 10:

With the Louisiana restoration area, the \$5 billion dollars is distributed between restoration categories. This chart breaks down the allocation between restoration categories within the Louisiana Restoration Area.

Slide 11:

The Louisiana TIG includes representation from five State and four Federal Trustees. The State Trustees are the Coastal Protection Restoration Authority, the Department of Wildlife & Fisheries, the Department of Environmental Quality, the Department of Natural Resources, and the Louisiana Oil Spill Coordinator's Office, all represented by Bren Haase. The Federal Trustees are the National Oceanic and Atmospheric Administration represented by myself, Mel Landry; the Department of Interior represented by Sarah Clardy, the Environmental Protection Agency represented today by Doug Jacobson, and the Department of Agriculture, represented today by Ron Howard.

Slide 12:

Due to the size and complexity of some projects, we have decided to phase restoration planning under certain circumstances. One example was the first LA TIG restoration plan, which included selection of six projects for Engineering & Design or E&D, three of which were over \$100 million each. The Strategic Restoration Plan for the Barataria Basin was also a Phase I plan. So much of our planning efforts have been the Phase II plans that evaluate the Engineering & Design approved in the Phase I plans to select the preferred projects for construction. I'll walk through the phased approach here. Typical NRDA (OPA or CERCLA) process integrates the NRDA evaluation with the NEPA evaluation into a single restoration plan.

Slide 13:

This is a phased restoration planning approach. The DWH PDARP is a Programmatic EIS and Restoration Plan. For phased restoration, in the first phase an OPA evaluation is conducted to selected projects to further develop, typically this means Engineering & Design. In most cases, E&D impacts are fully evaluated in the PDARP and incorporated in the Phase I plan, so no additional NEPA evaluation is required in the first phase. After E&D has progressed sufficiently, a Phase II plan (or plans) evaluates design alternatives under NEPA and OPA and selects a preferred design alt for construction funding. The Phase I plan is not an exhaustive evaluation of impacts. The Phase I Plan sets up a more robust analysis in the Phase II plan.

Slide 14:

Just as a quick review of our responsibilities: The Trustees are responsible for restoring the environment and compensating the public for natural resource injuries resulting from the Deepwater Horizon oil spill. We used a natural resource damage assessment to determine the extent of injuries to natural resources and to seek restoration or compensation from the parties responsible for those injuries. The goal is to restore injured natural resources—such as wetlands, fish, and birds—to the condition they would have been in had the spill not occurred. We are also responsible for addressing recreational uses—like boating and swimming—that were affected by the spill. I will now turn it over to Maury for details on the TIG accomplishments.

Slide 15:

Good evening everyone, my name is Maury Chatellier. My role tonight is to take you through the Trustee's accomplishments to date. Before we get into the specifics of the restoration efforts, I'd like to start with a brief financial update: To date, the Louisiana Trustees have received \$1.8 billion of the total \$5 billion in payments from BP. The Trustees have allocated \$1.395 billion of these dollars via resolutions and direct allocations that have funded restoration planning efforts as well as Monitoring and Adaptive Management and administrative funds through August of this year. That's about twenty eight percent of our total allocation of \$5 billion, but its seventy seven percent of the \$1.8 billion we've received to date. I think this shows the Trustees a moving forward to get these oil spill dollars on the ground quickly.

Slide 16:

So, for any of you who have attended the LA TIG's pervious annual meetings, this yearly implementation update was provided in chronological order, beginning with the early restoration effort and progressing through each restoration plan. Today, we'd like to try something a little different. What I'd like to do is provide this update on projects and expenditures based on the Goals and Types the state has funding for. Here is the breakdown of the funding dollars by state and region, and by categories across all TIGs that Mel presented previously. Let's take a look at a simplified version of this chart.

Slide 17:

The grey lines on this chart are the five overarching restoration goals as outlined in the Final Programmatic Damage Assessment and Restoration Plan or PDARP. These goals are the same for all the DWH TIGs. They are: Restore and Conserve Habitat; Restore Water Quality; Replenish and Protect Living Coastal and Marine Resources; Provide and Enhance Recreational Opportunities; and Provide for Monitoring, Adaptive Management, and Administrative Oversight to Support Restoration Implementation. The Final Programmatic Damage Assessment and Restoration Plan considers programmatic alternatives, composed of Restoration Types, to restore natural resources, ecological services, and recreational use services injured or lost as a result of the *Deepwater Horizon* oil spill incident. These goals work both independently and together to achieve necessary benefits to injured resources and services. On this chart, the restoration types are listed in the yellow color under each goal. It's these types that we will walk through to paint the picture of the Trustee's accomplishments to date.

Slide 18:

So, let's begin with the Goal of Restore and Conserve Habitat. The goal of restoring and conserving habitats recognizes that wetlands, barrier islands and coastal habitats are highly productive and serve as important nursery and foraging habitat for many living coastal and marine resources. Again, there are two restoration types that Louisiana received funding for under this goal– the first being WCNH. This restoration type has the largest allocation of DWH funds at over \$4.3 billion. \$1.11 billion allocated so far. To date, the Trustees have initiated or completed 13 WCNH projects.

Slide 19:

The projects under WCNH consist of large-scale marsh and ridge restoration projects, beach, dune and back barrier marsh on barrier islands, living shoreline features and large-scale hydraulic restoration. Construction on four of these projects have been completed with the remaining in construction or in engineering and design. When all completed these large-scale projects will account for over 11 thousand acres of created coastal habitat to offset the effects of the DWH spill.

Slide 20:

Here we would like to show a couple of the WCNH projects that have been initiated by the Trustees. The first is the Calliou Lake (Whiskey Island) barrier island project Terrebonne Parish. This project utilized over \$118 million of WCNH funds. Here you see a photo during construction with the beach and dune design template being filled from west to east. This is a good picture that shows the scale of the amount of material that was placed in front of the existing shore face.

Slide 21:

And here you see the completed project. This project dredged over 10 million cubic yards of material for beach, dune and back barrier marsh features. This project dredged over 10 million cubic yards of material for beach, dune and back barrier marsh features. The project created over 950 acres of new habitat.

Slide 22:

Another WCNH project is the West Grand Terre Island Restoration project located in Barataria Basin, just East of Grand Isle and home to Civil War Fort Livingston. The top image is a preconstruction photo of the project site (looking east). The project consists of hydraulically dredging offshore material to create and restore beach habitat, dune habitat, and intertidal marsh habitat and protect shoreline along Barataria Pass and Barataria Bay. The final cost of the project will be approximately \$92.5 million. A notice to proceed was issued to the dredge contractor in August of 2020 with actual construction beginning in February of this year. The abandoned facilities on the island have been removed from an earlier bid, and the dredging contractor is close to completing placement of the beach and dune fill. A tidbit on Fort Livingston which you can see in the lower photo: In the early 19th century, Grand Terre Island was the

home to pirates under the command of Captain Jean Lafitte. These pirates were forced to leave the island in 1814 so the U.S. government could build a coastal defense fort. This fort was also designed to control the entrance to Barataria Pass, and thereby guard New Orleans against naval attacks from the south of the city. Construction at the site began in 1834, but was halted with the start of the Civil War, and was never resumed. The fort was never fully completed.

Slide 23:

And here's a picture of a completed portion of the beach and dune. Just a note here - this photo was taken before Hurricane Ida. Ida came ashore near Port Fourchon just to the west of WGT and the island took considerable damage. I'll address hurricane Ida a little later in the presentation.

Slide 24:

The next restoration type under Restore and Conserve Habitat is habitat projects on federally managed lands. This restoration type will ultimately receive \$50 million by 2031. The Trustees have initiated one project under this restoration type for approximately \$22.8 million and that project is Shoreline Protection at Jean Lafitte National Historical Park and Preserve down in Jefferson Parish. This site protects the natural and cultural resources of Louisiana's Mississippi River Delta region. It is named after French pirate Jean Lafitte and consists of six separate sites and a park headquarters. The 1,855 acres Barataria area was added as a historic district on October 15, 1966.

Slide 25:

The Shoreline Protection at Jean Lafitte National Historical Park and Preserve Project was funded in Restoration Plan 1.3. After the Deepwater Horizon oil spill, fresh water was released into Lake Cataouatche in Jean Lafitte National Historical Park, and that resulted in the loss of submerged aquatic vegetation (SAV). This project will create favorable conditions for the re-establishment of at least 50 acres of SAV. The construction of a rock breakwater at the site will create the necessary conditions for SAV to establish itself while also protecting the shoreline from further erosion. The engineering and design has been completed and environmental clearance for the project is continuing.

Slide 26:

The next overarching goal is Restore Water Quality. Nutrient pollution poses a significant threat to localized watersheds across the entire Gulf Coast and in Louisiana. 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. Nutrient reduction can enhance overall ecosystem health by benefitting the estuaries that are integral habitats providing food, shelter, and nursery grounds for many of the Gulf of Mexico's ecologically and economically important species. Nutrient reduction involves a suite of activities to reduce nutrient loadings, depending on the watershed and site characteristics. Agriculture and its associated land use practices (e.g., application of fertilizer and concentrated animal farm operations) is a principal source of elevated nutrient loads along the Gulf Coast, and in the state of Louisiana, agriculture accounts for approximately thirty eight percent of the land use. Louisiana will ultimately receive \$20 million for Nutrient Reduction projects. The Trustees have

approved \$9.7 million of these funds to date to initiate four individual projects. Each of these projects is being implemented by the US Department of Agriculture (USDA) in partnership with multiple agencies and environmental organizations. These projects will move through multiple phases of implementation including: Outreach and Education, Landowner Sign-up, Best Management Practice Implementation, and Water Quality Monitoring. After most of the site-specific best management practices are implemented, post execution water quality monitoring will be initiated to assess the impact of the best management practices on water quality.

Slide 27:

Three of the projects have begun on-the-ground implementation measures and you see them here: two landowner contracts to improve the functionality of dairy lagoons in St Helena and Tangi, seven landowner contracts in place in Vermillion and Cameron Parishes to install infrastructure to store water on cropland during the winter months for the purpose of filtering sediment and nutrients, and one landowner contract to reduce nutrient and sediment runoff from pastureland in Bayou Folse. Baseline water quality monitoring is underway on all the approved projects.

Slide 28:

Here you see techniques that will be utilized for project success. For the winter water holding project, the key is creating temporary wetlands to filter nutrients and sediments. The secondary benefit of this project is the creation of wildlife habitat for migratory bird and other species. For nutrient reduction on dairy farms: wastewater ponds/lagoons are some of the most simple and economical ways to treat wastewater. Overtime, the lagoons fill up with sludge or settled solids – making the system inefficient and even ineffective. USDA is partnering with a local company and dairy farmers to remove solids from lagoons to return the system to optimum operation. Nutrient management is a key component to reducing over saturation of nutrients in coastal watersheds. All of the LA TIG Nutrient Reduction projects are planned/designed to reduce nutrient and sediment loading in-stream.

Slide 29:

The next restoration goal is to Replenish and Protect Living Coastal and Marine Resources. There are five restoration types that were funded for Louisiana under this overarching goal and you see them here with the full funding allocation for each. As Mel noted earlier, BP payments are made annually through 2031, so the Trustees are prioritizing work across all of the seven Trustee Implementation Groups based on available funding, regional resource needs, capacity to implementation restoration. This means that restoration of some resource has not yet begun in some TIGs. The Louisiana TIG will continue to invest settlement funds in restoration as outlined in the allocation for each restoration type. The LA TIG is planning to evaluate projects to restore sea turtles and SAV in future restoration plans.

Slide 30:

The Trustees evaluated injuries to marine mammals as part of the DWH NRDA. That evaluation demonstrated spill-related effects to a vast number of marine mammal species across a wide geographic range. Contamination of habitat in the nearshore and offshore waters of the northern Gulf of Mexico

resulted in marine mammals inhaling, ingesting, aspirating, and possibly absorbing oil. As a result, thousands of animals have suffered physical injury and toxic effects to organs and tissues. Animals that experienced these adverse health effects contributed to the largest and longest marine mammal unusual mortality event (UME) on record in the Gulf of Mexico. Bottlenose dolphins were the most impacted species. One project approved in the plan will focus on increasing capacity to respond to marine mammal strandings. The total allocation for marine mammals will be \$50 million. The Trustees have approved a single marine mammal project for approximately \$3.57 million. A single marine mammal project has been initiated by the Trustees. This project will increase capacity and expand partnerships along the Louisiana coastline for marine mammal stranding response. Increased capacity will lead to improved rapid response to injured and dead dolphins and whales, and a better understanding of the causes of injury and/or death. A Louisiana-based stranding coordinator will build partnerships and conduct outreach for the project. Finally, the project will provide infrastructure, equipment, and supplies needed for stranding and rehabilitation. This project will be led by NOAA in partnership with other federal and state Trustees on the Louisiana TIG.

Slide 31:

The next restoration type under Replenish and Protect Living Coastal and Marine Resources is birds. The DWH oil spill exposed dozens of species of birds to oil in a variety of northern Gulf of Mexico habitats, including open water, island waterbird colonies, barrier islands, beaches, bays, and marshes. Birds were exposed to oil in several ways, including physical contact with oil in the environment; ingestion of external oil during preening; and ingestion of oil while foraging and consuming contaminated prey, water, or sediment. The LA TIG will ultimately receive \$148.5 million for this restoration type. To date, we've authorized approximately \$115.5 million or almost seventy eight percent of the total allocation for six projects. These projects have consisted of primarily restoring beach, dune and marsh habitat at key colony locations across the state. Two projects have been completed with the remaining projects either in construction or engineering and design.

Slide 32:

The project we'd like to highlight is Rabbit Island. The island, located in the southwest portion of Calcasieu Lake, is Southwest Louisiana's only brown pelican colony. Apart from subsidence and sea level rise, brown pelicans nesting on Rabbit Island have faced additional threats in recent years, losing approximately fifty percent of all nests to over-washing tides and storm surge between 2016 and 2018. In total, Louisiana has observed a loss of fifty four percent of all brown pelican colonies across coastal Louisiana. This image shows Rabbit Island in its pre-construction state. This project resulted in raising the elevation of the island to increase the abundance and quality of critical nesting habitat for a number of colonial nesting waterbirds including brown pelicans, wading birds, and terns. In 2020 and 2021, LDWF banded 322 brown pelicans on Rabbit Island with white leg bands, and many of those birds have returned and are nesting on the restored island today.

Slide 33:

The 102-acre restoration of Rabbit Island utilized sediment dredged from the Calcasieu Ship Channel. Vegetative plantings of grasses and shrubs further enhanced nesting habitat for brown pelicans, egrets, herons, ibis, terns, and other colonial nesting water birds. Here we see the nearly completed island.

Slide 34:

In this photo we see the completed vegetative plantings on the island and hay bales that were placed to retain windborne sediment and to provide nesting material.

Slide 35:

And, finally, you see brown pelicans and laughing gulls nesting together in a row with nests made predominantly from the hay bales. The vegetative plantings were completed on April 6th and the first brown pelican nests were observed on the restored portion of the island on May 11, just over a month later. Rabbit Island's first nesting season following restoration far exceeded expectations. Experts expected approximately 370 nests the first year, however, it was observed that more than 6,100 nests on the island, including 1,150 brown pelican nests. On March 16, 2021, LDWF documented the island's first brown pelican nest of the 2021 season within the island's unrestored historic nesting habitat. However, following subsequent overwash events over a 2-month timeframe, brown pelican eventually relocated their nesting activities to the northern portions of Cell 1 and 2 which had been recently restored. On May 6, 2021, LDWF documented several completed brown pelican nests with eggs and more under construction on top or adjacent to provided hay bales within Cells 1 & 2 as seen in this image. Rabbit Island's first nesting season immediately following restoration far exceeded initial nesting estimates. In total, over 11,600 colonial waterbird nests of which 561 were brown pelican nests were noted. This information was generated as part of the Regionwide TIG's ongoing MAM activity.

Slide 36:

The next restoration type I'd like to discuss is restoration for oysters. Injuries to oysters were evaluated as part of the DWH NRDA. That evaluation demonstrated substantial spill- and response action-related impacts on intertidal and subtidal oysters in the northern Gulf. More specifically, the combined effects of reduced spawning stock, larval production, spat settlement, and spat substrate availability have compromised the sustainability of nearshore and subtidal oysters throughout the north-central Gulf of Mexico. The Trustees have allocated the entirety of DWH oyster recovery funds at just under \$40.9 million. This includes \$20 million in settlement funds and \$20.9 million in early restoration funds. Four projects have been implemented by the Trustees under the oyster restoration type. A single, multi-component oyster project was initiated with early restoration funds and three oyster projects were approved in Restoration Plan #5 with the purpose to restore oyster population damaged by the DWH spill: enhancing oyster recovery using brood reefs, cultch plant oyster restoration and hatchery-based oyster restoration.

Slide 37:

I'd like to briefly highlight an oyster project that was funded with early restoration funds. The Louisiana Oyster Cultch Project involved the placement of oyster cultch onto approximately 850 acres of public oyster seed grounds throughout coastal Louisiana and the construction of an oyster hatchery facility that is serving to improve existing oyster hatchery operations and produce supplemental larvae and seed. Here you see the Oyster Cultch Placement in Sister Lake southwest of Dulac Louisiana. In general, cultch material consists of limestone rock, crushed concrete, oyster shell, and other similar material that, when placed in oyster spawning areas, provides a substrate on which free swimming oyster larvae can attach and grow into oysters. The material is barged to the site and high-pressure water is used to disperse the material overboard at the designated location. This cultch planting approach had been utilized by LDWF since 1917. RP/EA #5 approved two additional oyster cultch sites at Grand Banks and Drum Bay, and four brood reef sites. The plan allowed for future cultch plants and brood reefs sites under a programmatic approach.

Slide 38:

The Michael C. Voisin Oyster Hatchery in Grand Isle was constructed using early restoration funds. This facility serves to improve existing oyster hatchery operations and help facilitate and expedite success of the cultch placement. Funding for operations was approved with some early restoration funds, and again in RP/EA #5. The objective of the Hatchery-based Oyster Restoration project is to enhance Louisiana oyster reef productivity and spawning stock, offsetting impacts resulting from exposure to DWH oil, dispersant, and response activities. Spawning stock enhancement projects include hatchery production of oyster larvae, planting hatchery-raised oysters, and relocating oysters to restoration sites.

Slide 39:

In addition to raising oyster larvae, the hatchery also produces live marine microalgae to feed oyster larvae and provide supplemental feed for brood stock held in conditioning/holding systems. The Algae Production Room (APR) houses 144 hanging algal bags, that can produce approximately 2,000 litres of algae feed per day. Enough to feed all the larval tanks and brood stock holding systems.

Slide 40:

Here we have the restoration type provide and enhance recreational opportunities. The Gulf of Mexico is a popular destination for many types of recreation. The DWH oil spill resulted in losses to the public's use of natural resources for outdoor recreation, such as boating, fishing, and going to the beach. These spill impacts in the Gulf of Mexico started in May 2010 and lasted through November 2011. The Trustees conducted a number of studies to measure the lost recreational value to the public due to the spill. The Trustees estimated the public lost over 16 million user days of boating, fishing, and beach-going experiences. Louisiana has been allocated \$60 million for recreational use improvements. These funds have been fully allocated. The Trustees have completed or begun implementation of 23 individual projects. These projects are being implemented on State and Federal Parks, Wildlife Management Areas and Refuges, Parish Properties and Tribal Lands and include fishing piers and public access improvements, boat launches, campground improvements, signage, artificial reefs, activities and education facilities. I'd like to highlight a couple of these projects for you.

Slide 41:

The first is the Island Road Fishing Piers and Boat Launch improvements. An existing boat launch was renovated as part of a project that also includes five fishing pier sites and parking along Island Road in Terrebonne Parish, a 2.5-mile stretch between Louisiana Highway 665 and Isle de Jean Charles that allows access to Pointe-aux-Chenes Wildlife Management Area. Here you see the newly renovated boat launch with a wider backdown and increased parking.

Slide 42:

In this picture, you'll see one of the reconstructed, ADA-compliant fishing piers. These provide a much safer experience than the roadside access that was previously available.

Slide 43:

And we wanted to get this slide in of this young lady enjoying her time crabbing on one of the new structures.

Slide 44:

And here you see one of the Pointe-aux-Chenes structures. The Pointe-aux-Chenes Wildlife Management Area (WMA) Enhancement Project includes seven boat access fishing piers as well as a pirogue launch, renovated boat launch and pirogue pullover. Many of these structures provide the public access to areas of the WMA not previously available.

Slide 45:

So, as we stated earlier, we wanted to discuss the effects of Hurricane Ida. Hurricane Ida made landfall near Port Fourchon around 11:15 AM on September 29th. Most of the completed projects had very minimal damage that we can tell from initial aerial photos and site visits. Grand Isle State Park project received heavy damage to the pier and construction has been paused at this time. One of our highlighted projects today was WGT. Project is under construction. Had fairly significant damage from the storm. Much of the beach and dune material was over washed. With barrier island projects such as this, it's important to give the projects time to establish an equilibrium of sediment movement before we go out and resurvey to determine the losses. We will know more in the coming weeks as to what corrective action we will take. It is important to note that will hurricanes do take a toll on our barrier island system, the reconstruction and preservation of these islands is paramount as they are our first line of defense for hurricane protection. And while sediment on these islands may be redistributed because of wind and wave action, much of the sediment remains in the system and provides a direct benefit to the longevity and functionality of the barrier islands. But, project site inspections are continuing and we'll know more in time of the condition of all our NRD funded projects. At this time, I'd like to ask Courtney Schupp with NOAA to step to the plate and highlight our monitoring and adaptive management successes. Courtney, I'll turn it over to you.

Slide 46:

Thanks Maury. I'm Courtney Schupp, I'm a contractor to NOAA supporting the Louisiana TIG and will be providing updates on our monitoring and adaptive management efforts over the past year. Monitoring is repeated data collection that allows us to notice changes and trends in a project or an ecosystem. This allows us to measure project success and our progress towards meeting the DWH restoration goals. Adaptive management is a process of learning from past projects and monitoring data and improved scientific understanding, and then applying this new understanding to improve design and implementation of both the restoration projects and the entire restoration program over time. The process creates an expanding base of knowledge that supports current and future restoration decision-making, such as which restoration approaches are most effective for different resources and environmental settings. Adaptive management allows an integrated and flexible approach to restoration by using solutions that incorporate changing and uncertain conditions, knowing that we will learn and then refine our approaches over time. Louisiana will ultimately be allocated \$225 million for Monitoring and Adaptive Management. To date, the Trustees have approved approximately \$23.5 million. This year, the LA TIG made progress on seven DWH Monitoring and Adaptive Management projects and an additional monitoring project that was funded under the Birds Restoration Type allocation. Types of projects include short, targeted data collection efforts; partial support for long-term monitoring programs; and developing a strategy at the programmatic level. I'll describe each of these on the next slides.

Slide 47:

In August, the Trustee agencies, facilitated by the Water Institute of the Gulf, finalized the LA TIG Programmatic MAM Strategy. The document describes the TIG's objectives, processes, and priorities to support restoration planning, implementation, and evaluation through monitoring and adaptive management activities. The LA TIG funded a new project this year to develop a plan to sample and characterize life in the Barataria estuary's lower trophic levels—organisms that form the base of the food web. Activities will include: Identifying and synthesizing existing data, finalizing key ecosystem modeling questions, identifying data gaps, developing a sampling design, and, developing a sampling and analysis protocol to complement existing data and to characterize baseline conditions. This project is being led by NOAA in partnership with The Water Institute of the Gulf. \$785,000 in MAM funding was awarded in July 2021. This one-year project began this month (September 2021). The TIG is developing Avian Habitat Restoration and Monitoring Guidance, which integrates coastal processes and avian ecology requirements with potential coastal engineering and construction specifications within representative individual coastal habitats/regions. Guidance will focus on three main bird groups: ground nesting birds, shrub nesting birds, and marsh nesting birds. So far, the project has: Identified relevant project features for avian habitat, synthesized literature, data, and professional judgement related to the three groups of birds, and completed a full draft of the core guidance document. This was funded with the Birds Restoration Type allocation for \$554,882. It is being implemented by DOI, LDWF, and CPRA, and is facilitated by The Water Institute of the Gulf. The LA TIG is also funding two projects related to marine mammal abundance, distribution, density, and response to low salinity exposure. This effort supports the understanding of baseline population conditions that will be used to evaluate the effects of implementing DWH Natural Resource Damage Assessment and other restoration projects. This year, the project produced multiple publications, including a technical memorandum. NOAA is implementing these projects with \$402,183 in MAM funds and \$249,272 in Marine Mammals funds.

Slide 48:

We are surveying secretive marsh birds (they hide when you try to count them) such as Common Gallinules, Least Bitterns, Clapper Rails, King Rails. This four-year project will address significant information needs including overall population numbers, predictive habitat relationships, benefits to secretive marsh birds provided by coastal restoration projects, and key features that could be added to coastal restoration projects to benefit secretive marsh birds. In FY20, the project: identified sampling sites, completed sampling protocols and monitoring plan, hired and trained five technicians, and conducted four rounds of surveys (March – June 2021) in five areas: Mississippi River Delta, Barataria, Breton Sound, Pontchartrain, and Terrebonne). Upcoming activities will include vegetation sampling, data analysis, evaluate remote sensing imagery, and test survey methods using other vessels (such as air boats) to improve marsh access. The LA TIG authorized \$1,441,421 in MAM funds for the secretive marsh bird work in June 2019. It is being implemented by CPRA and LDWF. We are also surveying colonial water birds (these include brown pelicans, royal terns, black skimmers, and gulls) using aerial images in order to quantify the current populations of avian species, so that we can document the avian benefits generated by DWH restoration projects; evaluate project performance criteria and; potentially implementing adaptive management measures, as needed; and assess project design and success in an adaptive manner and assist in future DWH project selection (for birds, other living coastal and marine resources, and habitats). This project was funded with \$430,287 in MAM funds in May 2018. This year, the Trustees continued to partially support the ongoing Louisiana coast-wide Fisheries-Independent Monitoring Program (FIMP), which since 1967 has provided valuable data for the nearshore habitats and resources targeted for NRDA restoration, including oysters, nekton, and prey resources (e.g., shrimps, crab, and fishes.) The LA TIG can use the data provided by the coastwide FIMP to assess changes in the fish, shellfish, and their associated habitats in the basins over time, allowing for assessment of the influence of coastwide restoration efforts. The LA TIG will provide \$3,951,192 in MAM funds over a three-year period (July 2020-June 2023). The LA TIG also continued to partially support the Coastwide Reference Monitoring System (CRMS). Datasets from this monitoring program include site-specific hydrology, vegetation, soils and elevation change data; and coastwide aerial photography, vegetation cover, and elevation. We use the data to monitor the effectiveness of restoration actions at multiple scales from individual projects to the influence of projects on the entire coastal landscape. The Trustees will support this effort with \$11,722,399 in MAM funds over a three-year period that began in October 2020.

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As you can see, the Louisiana TIG has made great progress to date. We've told you about what we've done, and now we'll hand it back to Maury to talk a bit about what we have planned.

Slide 50:

So, moving forward, The Trustees are working on two Restoration Plans: Draft Restoration Plan and Environmental Assessment #3.2 – Mid Barataria Sediment Diversion. The draft version of this plan was released for public comment on March 5th of this year. The comment period has closed and the Trustees are continuing to review the comments and prepare a final restoration plan. Because we are still working through the comments provided by the public during the comment period, we will not be responding to comments or questions regarding RP3.2 or the Mid-Barataria Sediment Diversion during this meeting. The LA TIG is currently working on Draft RP #8 which will focus on the WCNH restoration

type. The Trustees are looking at the universe of projects and considering new design starts as well as projects ready for construction. The current schedule has a draft plan out for public comment in the first quarter of next year.

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So, takeaways from the DWH LA TIG NRDA undertaking include: as we stated before, Louisiana will receive \$5.0 billion in restoration dollars through NRDA through 2031. This is specific to the LA TIG, and does not include NRD dollars that may come to the state through the RW or Open Ocean TIGs. The Trustees have allocated over \$1.39 billion for projects and activities to compensate for damages from the DWH oil spill. This figure represents seventy seven percent of the funds available to the state through this year. Inclusive of Phase 1 (project design) and Phase 2 (project construction) plans, the TIG has initiated or completed thirteen individual restoration plans to date with 60 individual projects either initiated or completed. I hope these efforts show that the Trustees take their responsibility very seriously for the expenditure of the DWH funds. We have made many great accomplishments already with many more to come.

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This ends the implementation portion of the presentation. As a reminder, the meeting materials can be found online at these websites. At this time, I'd like to turn it back over to Stephen for the public comment portion of tonight's meeting.

Slide 53:

Thanks Maury. It's now time for the comment portion of the webinar, if you haven't already, please use the Questions box on the right side of your screen to enter a comment for Trustee staff. Comments will be read aloud, and questions answered, as time allows. We'll pause for a minute to wait for comments to come in. We will also summarize the comments we received today and post the summary to the TIG website. [See questions and answers at the end of this document.] Thank you all for your comments, I'll now turn it back to Maury Chatellier to wrap up the webinar.

Slide 54:

On behalf of the Louisiana Trustee Implementation Group, I want to thank you all for attending our 2021 Annual Louisiana Trustee Implementation Group Public Meeting. We hope that you found the information helpful and informative. We also appreciate your interest in our ongoing efforts to restore for the natural resource damages caused by the historic DWH oil spill. We will continue with our restoration efforts and continue to keep you updated as we make progress. You can find the materials for today's meeting on these websites where you will also find useful information about our progress and ongoing efforts.

Question and Answer Period:

Q: What is the schedule for planning and implementation of additional restoration projects for marine mammals?

A: Thank you for your question. The LA TIG and NOAA is using the previously approved marine mammal stranding network enhancement project to refine our understanding on marine mammal stressors in LA in order to maximize the effectiveness of future investments in marine mammal restoration. We don't currently have a specified timeline for the next restoration plan for marine mammals.

Q: Can you provide an update on the status of the Mid-Barataria Sediment Diversion project? Also, are studies underway to provide pre-construction information on the abundance and health of marine mammals that are expected to be affected by operation of the Mid-Barataria Sediment Diversion?

A: The LA TIG is currently reviewing input received during the public comment period on the MBSD EIS and Restoration Plan. We'd like to use our time this evening to focus on all of the other undertakings of the LA TIG, so we won't be responding to questions or comments related to the MBSD. The draft MAM plan released with the MBSD draft EIS and RP contains additional info on proposed marine mammal monitoring.

Q: Does the LA TIG plan to fund bird stewardship since the Regionwide TIG did not include the LA coast as part of the RW project?

A: The LA TIG has an allocation of funds for bird restoration. Some of those funds have already been invested in habitat restoration such as Queen Bess and Rabbit Island. The TIG will continue to make investments based on the ability of projects to meet bird restoration goals until the entire allocation has been committed.