Deepwater Horizon NRDA
Open Ocean Restoration Area

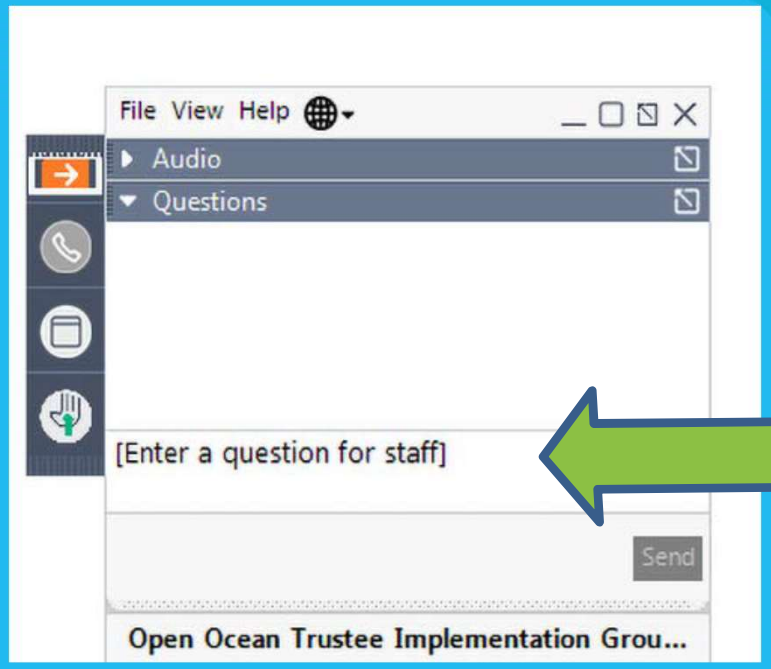
Draft Restoration Plan 2 and Environmental Assessment

Public Webinars

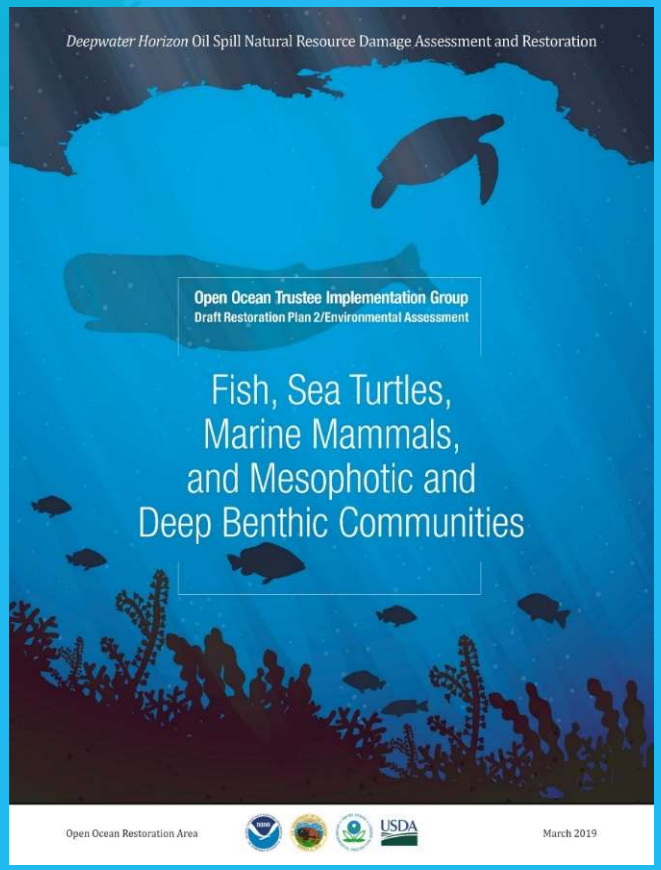
June 11, 2019
June 13, 2019

Webinar Participation

- If using a phone, turn off your computer microphone & speakers.
- When Q&A starts, use the “Questions” box to type questions for the Trustees.
- Following the Q&A, when the Public Comment session starts, use the “Questions” box to type your comment.
- Presentation will be posted on www.gulfspillrestoration.noaa.gov.



Webinar Agenda



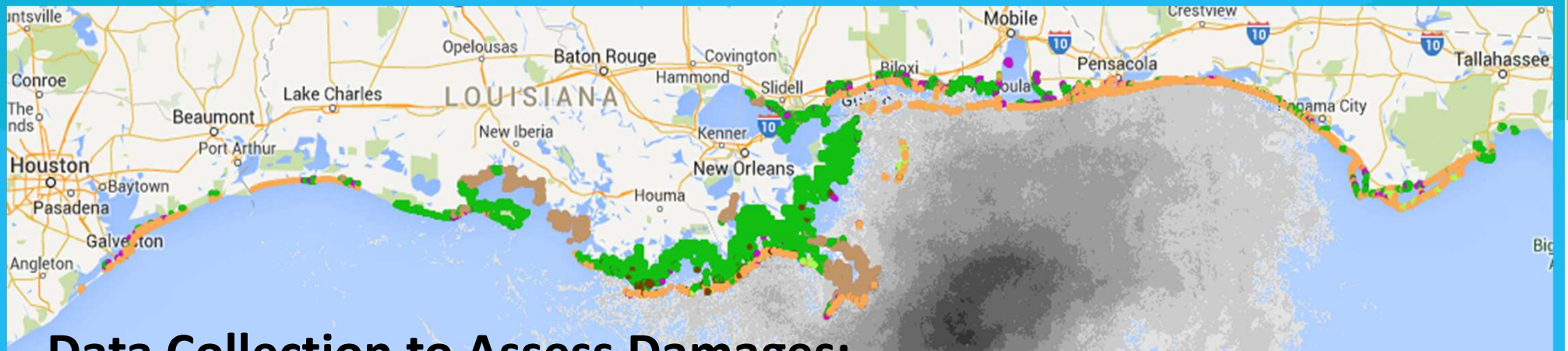
- Deepwater Horizon Natural Resource Damage Assessment and 2016 Settlement.
- Open Ocean Trustee Implementation Group.
- Draft Restoration Plan 2/Environmental Assessment.
- Open House Questions/Answers.
- Public Comment.
- Next Steps.

Deepwater Horizon Incident

Source: U.S. Coast Guard.

- Tragic loss of 11 workers and largest marine oil spill in U.S. history.
- 3.19 million barrels (134 million gallons) of oil released into the ocean over 87 days.
- 43,300 square miles: Cumulative extent of surface slick during the spill—an area almost the size of Virginia.

A Massive Spill, a Massive Response



Data Collection to Assess Damages:

- 20,000 trips to the field to collect data.
- 100,000 environmental samples collected.
- 13 million records publically available.
- Sediment, air, water, tissue samples, carcasses, photos and videos, telemetry, aerial imagery, GPS data, observations.

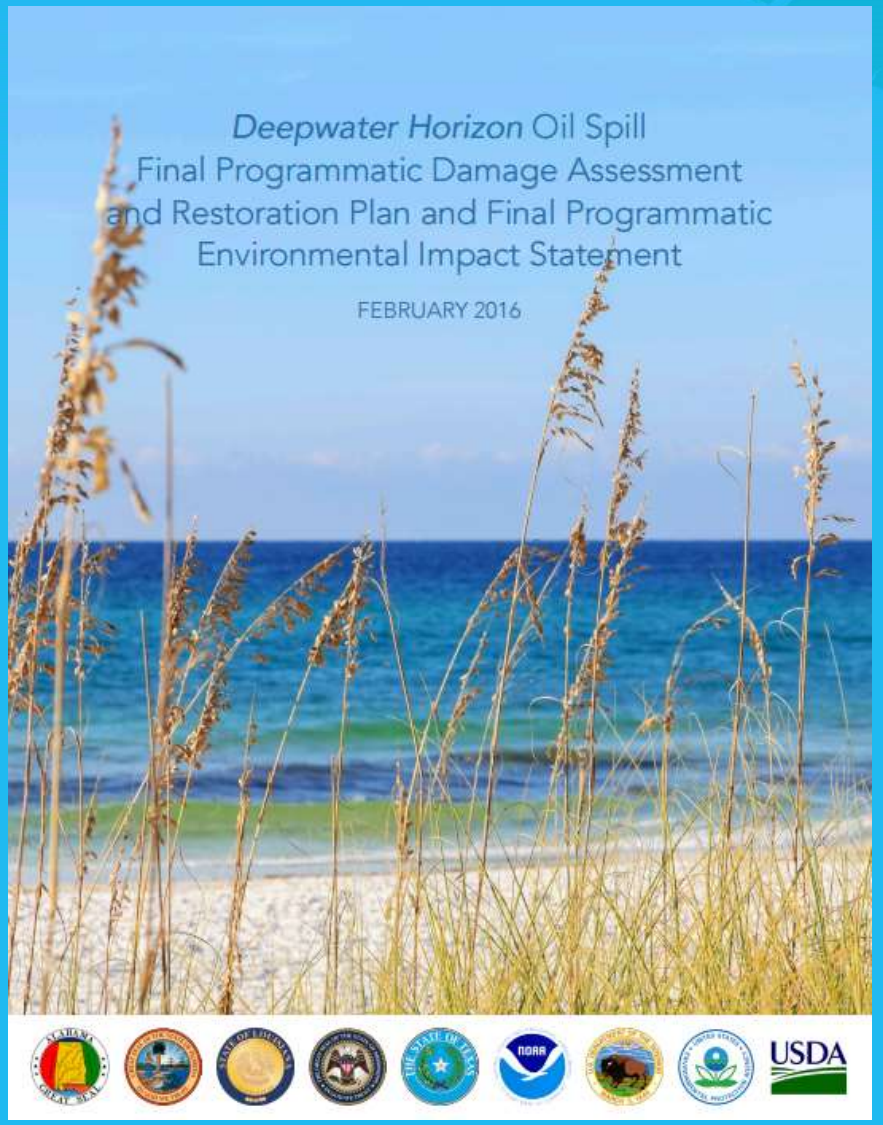
What is a Natural Resources Damage Assessment?

Natural Resource Damage Assessment (NRDA) is a legal process:

- Guided by the Oil Pollution Act (OPA).
- To make the environment and public whole for injuries to natural resources and services.

Trustees' Programmatic Restoration Plan

- **Damage assessment:** Injuries to natural resources and services.
- **Restoration:** Ecosystem approach and science-based adaptive management.
- **Governance:** Framework for future decision-making, including project selection & implementation.



Natural Resource Damage Assessment Settlement

A total $8.8 billion allocated to:

- Restore and Conserve Habitat: $4.7 billion.
- Replenish and Protect Living Coastal and Marine Resources: $1.8 billion.
- Restore Water Quality: $0.4 billion.
- Provide and Enhance Recreational Opportunities: $0.4 billion.
- Provide Monitoring, Adaptive Management, Administrative Oversight: $1.5 billion.
- Future Unknown Conditions: $0.7 billion.

NRDA Trustees' Governance Structure

Trustee Implementation Groups (TIGs)

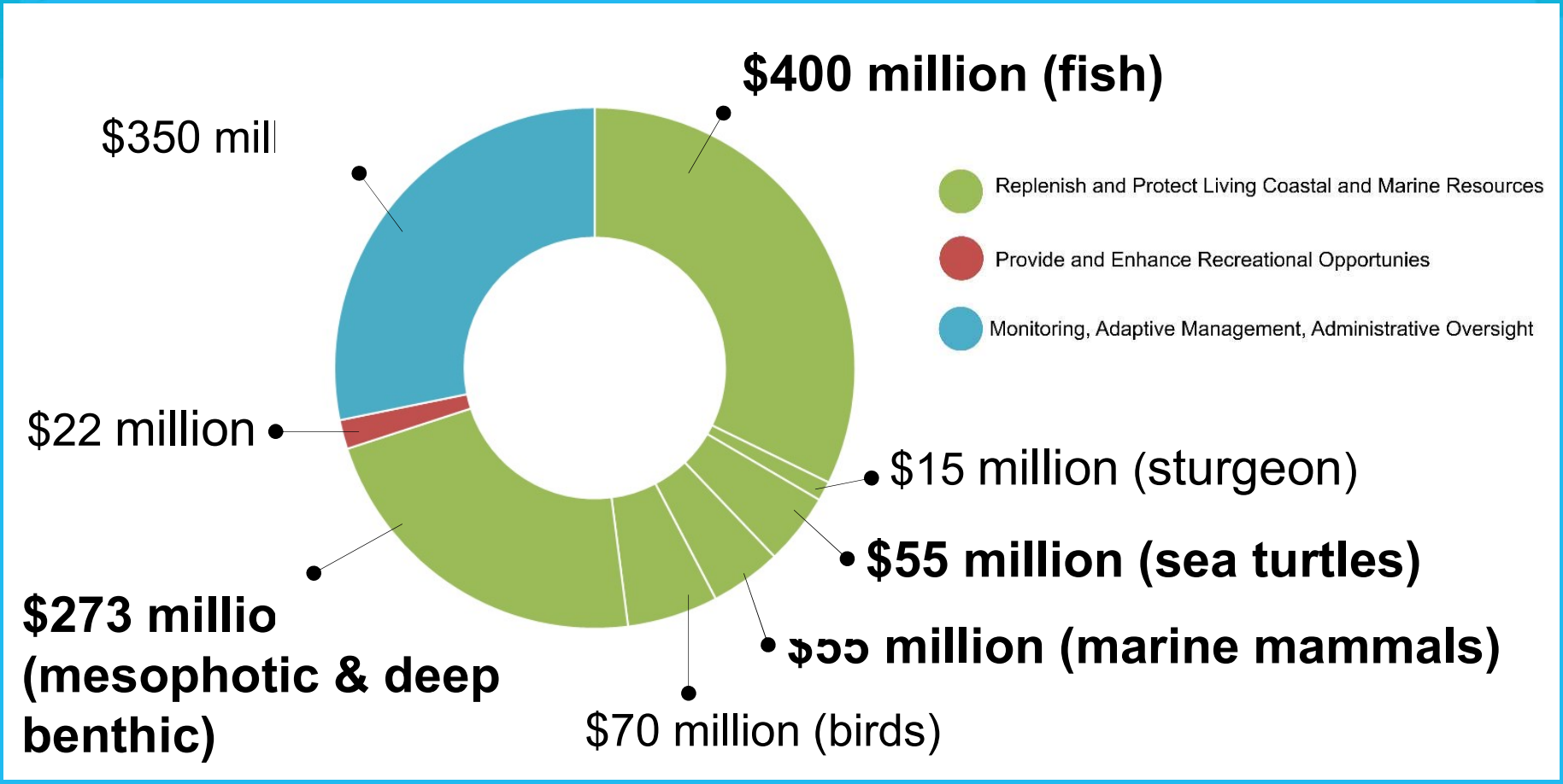
Texas	Louisiana	Mississippi	Alabama	Florida
Trustees for Texas Federal Trustees	*Trustees for Louisiana Federal Trustees*	*Trustees for Mississippi Federal Trustees*	*Trustees for Alabama Federal Trustees*	*Trustees for Florida Federal Trustees*

Regionwide	Open Ocean	Unknown Conditions and Adaptive Management
All Trustees	*Federal Trustees*	*All Trustees*

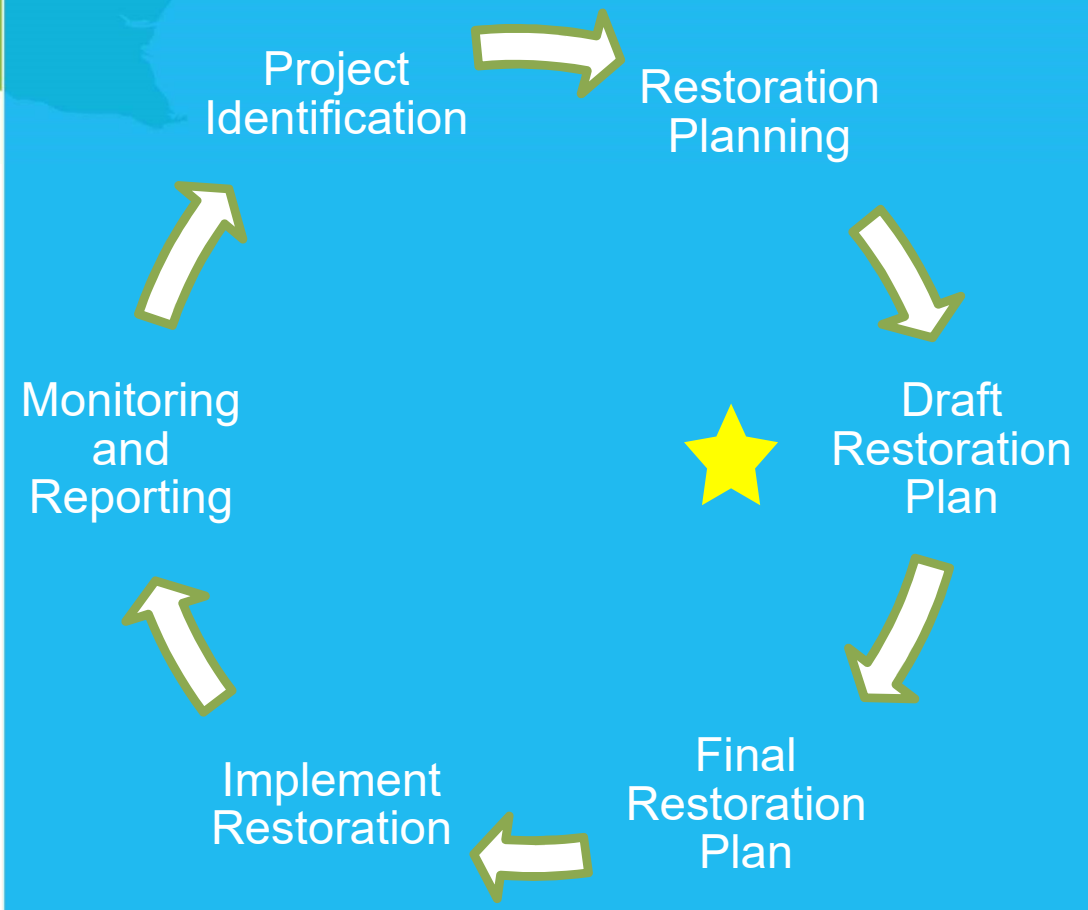
Open Ocean Trustee Implementation Group

NOAA	USDA	EPA	DOI
Chris Doley	Homer Wilkes	Gale Bonanno	Debora McClain
Laurie Rounds	Ron Howard Mark Defley	Treda Grayson	Ashley Mills

Open Ocean Funding Allocation



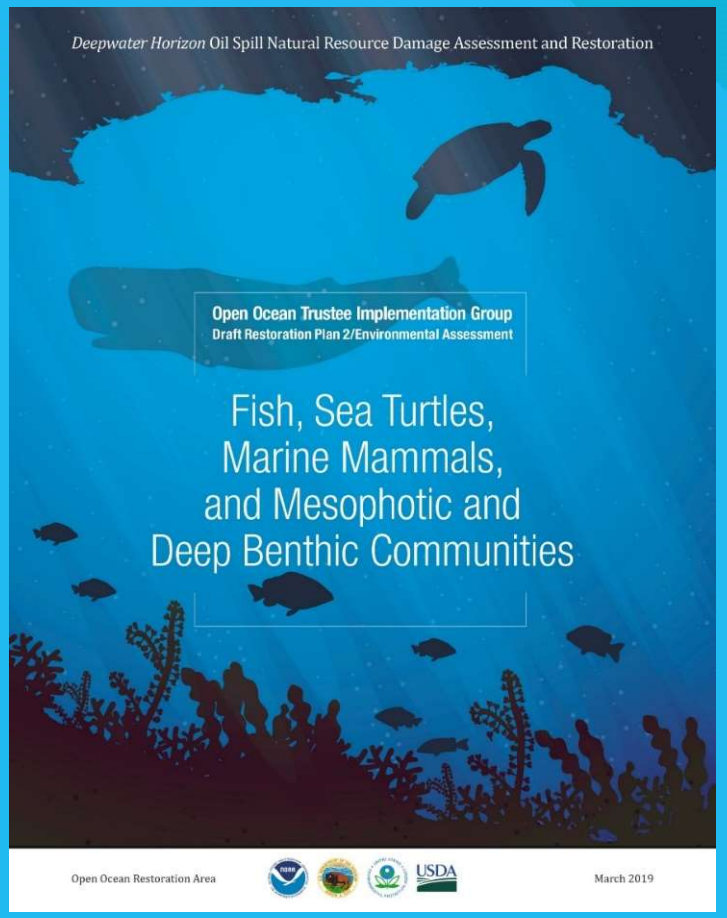
Restoration Planning Cycle



- ***March-May 2017:*** Called for Open Ocean project ideas.
- ***June – December 2017*:** Screened 1,600+ ideas .
- ***February 2018*:** Released notice to develop 2 plans.
- ***March 2019*:** Released Final Restoration Plan 1.
- ***May 2019:*** Released Draft Restoration Plan 2.

Open Ocean Draft Restoration Plan 2 Overview

- Proposes restoration for Fish, Sea Turtles, Marine Mammals, and Mesophotic & Deep Benthic Communities.
- Evaluates 23 restoration projects identified through robust screening.
- Proposes 18 projects for funding for an estimated cost of $225,680,700.
- Public Comments: May 15 to July 1, 2019.



Project Screening Process

Stage of Screening	Criteria Considered
Initial Screening	Project ideas removed that: • Had insufficient information for evaluation. • Were already required under local, state or federal law. • Had already been funded. • Duplicated other project ideas.
Consistency Screening	Project ideas moved forward if consistent with: • One or more PDARP Programmatic Goals. • One or more restoration type goals. • Sea Turtle or Marine Mammal Strategic Framework.

Project Screening Process

Stage of Screening	Criteria Considered
Additional Open Ocean TIG Criteria	• Consistent with priorities identified in the public notice. • Meets the PDARP/PEIS goals with an innovative approach or technique. • Complies with applicable laws and regulations. • Supports existing long-term management objectives or species management plans.
Oil Pollution Act Screening Criteria	• Cost. • Meets Trustees' goals and objectives of returning injured natural resources and services to baseline and/or compensating for interim losses. • Likelihood of success. • Prevents future injury and avoids collateral injury. • Benefits more than one natural resource and/or service. • Effect on public health and safety.

Summary of Screening Process

Fish:

189 projects ➡ 5 alternatives ➡ 4 preferred

Sea Turtles:

134 projects ➡ 8 alternatives ➡ 6 preferred

Marine Mammals:

112 projects ➡ 5 alternatives ➡ 4 preferred

Mesophotic & Deep Benthic:

102 projects ➡ 5 alternatives ➡ 4 preferred

Deepwater Horizon NRDA
Open Ocean Restoration Area

Preferred Alternatives: Fish and Water Column Invertebrates

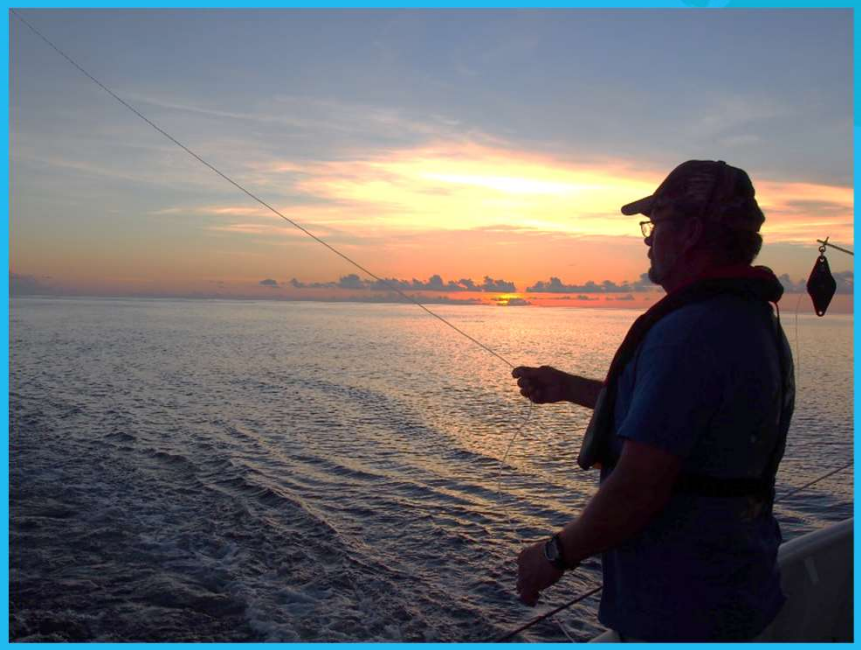
Dr. Jamie Reinhardt
Fish Restoration Coordinator
NOAA Restoration Center

Injury to Fish and Water Column Invertebrates

- Hundreds of species were injured.
- All levels of the food chain impacted.
- Resources include shrimp and crabs, drum, snappers, Mahi and tuna.

Restoration Goals for Fish and Water Column Invertebrates

- Restore injured species across the range of coastal and oceanic zones by reducing direct sources of mortality.
- Increase the health of fisheries by providing fishing communities with methods and incentives to reduce impacts to fishery resources.



Initial Restoration Priorities: Reef fish, highly migratory species (other than sharks), coastal migratory pelagic species.

Fish & Water Column Invertebrates: Four Preferred Alternatives - $57.7M

Reduction of Post-Release Mortality from Barotrauma in Gulf of Mexico Reef Fish Recreational Fisheries

Estimated Duration: 7 years

Estimated Budget: $ 30,011,000

Better Bycatch Reduction Devices for the Gulf of Mexico Commercial Shrimp Trawl Fishery

Estimated Duration: 7 years

Estimated Budget: $ 17,171,000

Fish & Water Column Invertebrates: Four Preferred Alternatives - $57.7M

Communication Networks and Mapping Tools to Reduce Bycatch—Phase 1

Estimated Duration: 5 years
Estimated Budget: $ 4,416,000

Restoring for Bluefin Tuna via Fishing Depth Optimization

Estimated Duration: 10 years
Estimated Budget: $ 6,175,000

Preferred Alternatives: Sea Turtles

Sara Wissmann
Sea Turtle Ecologist
NOAA's Office Of Protected Resources

Injury to Sea Turtles

- All five sea turtle species were injured across the open ocean, continental shelf waters, and on beaches.
- Spill response also directly injured sea turtles and affected nesting.
- Injury was quantified for loggerhead, Kemp's ridley, green, and hawksbill sea turtles.

Restoration Goals for Sea Turtles

- Address all injured life stages and species.
- Address primary threats in the marine and terrestrial environments.
- Restore sea turtles in areas important to the injured species.
- Support existing conservation efforts.

Sea Turtles:
Six Preferred Alternatives - $18.8M

Gulf of Mexico Sea Turtle Atlas

Estimated Duration: 15 years
Estimated Budget: $5,700,000

Identifying Methods to Reduce Sea Turtle Bycatch in the Reef Fish Bottom Longline Fishery

Estimated Duration: 2 years
Estimated Budget: $290,000

Sea Turtles:
Six Preferred Alternatives - $18.8M

Developing a Gulf-wide Comprehensive Plan for In-water Sea Turtle Data Collection

Estimated Duration: 2 years
Estimated Budget: $655,000

Developing Methods to Observe Sea Turtle Interactions in the Gulf of Mexico Menhaden Purse Seine Fishery

Estimated Duration: 4 years
Estimated Budget: $3,000,000

Sea Turtles:
Six Preferred Alternatives - $18.8M

Reducing Juvenile Sea Turtle Bycatch through Development of Reduced Bar Spacing in TEDs

Estimated Duration: 4 years
Estimated Budget: $2,153,000

Long-term Nesting Beach Habitat Protection for Sea Turtles

Estimated Duration: 3 years
Estimated Budget: $7,000,000

Preferred Alternatives: Marine Mammals

Laura Engleby
Chief, Marine Mammal Branch
NOAA Fisheries Southeast Region

Injury to Marine Mammals

- There are 21 whale and dolphin species found in the northern Gulf of Mexico.
- Most of the marine mammal species that overlapped with the *Deepwater Horizon* oil spill footprint were injured resulting in adverse health effects.

Cetaceans (whales and dolphins) are marine mammals that inhabit a broad range of habitats in the marine environment.

Restoration Goals for Marine Mammals

- Restore injured species across diverse habitats and geographic range.
- Mitigate key stressors to support resilient populations.
- Support ecological needs of the stocks; improve resilience to natural stressors; and address direct human-caused threats.

Initial restoration priorities:

Continental shelf and oceanic stocks in the Gulf of Mexico.

Marine Mammals: Four Preferred Alternatives - $23M

Reducing Impacts to Cetaceans During Disasters by Improving Response Activities

Estimated Duration: 10 years
Estimated Budget: $4,287,000

Reduce Impacts of Anthropogenic Noise on Cetaceans

Estimated Duration: 6 years
Estimated Budget: $8,992,000

Marine Mammals: Four Preferred Alternatives - $23M

Compilation of Environmental, Threats, and Animal data for Cetacean Population Health Analyses (CETACEAN) Platform

Estimated Duration: 5 years
Estimated Budget: $5,808,000

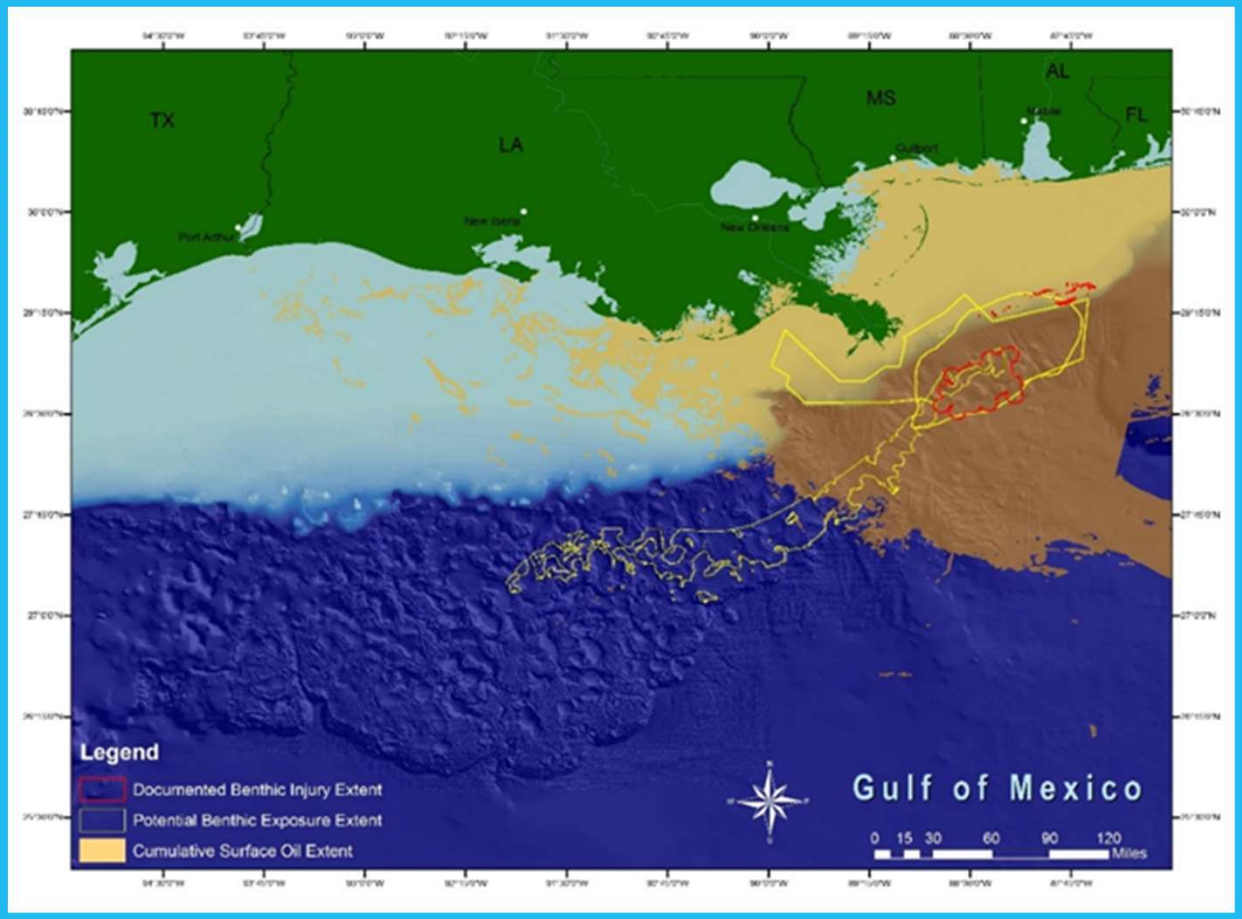
Reduce and Mitigate Vessel Strike Mortality of Cetaceans

Estimated Duration: 6 years
Estimated Budget: $3,834,000

Preferred Alternatives: Mesophotic & Deep Benthic Communities

Kristopher Benson
MDBC Coordinator
NOAA Restoration Center

Injury to Mesophotic & Deep Benthic Communities

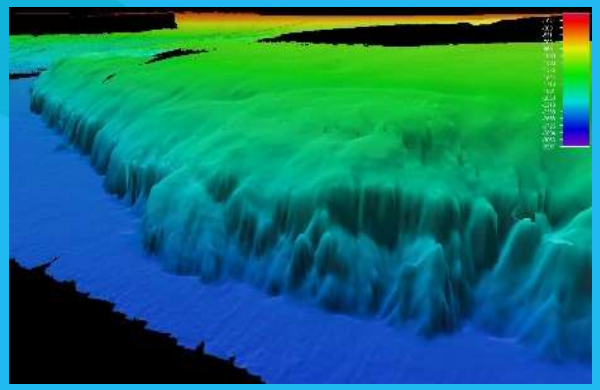


Quantified injury to over 2,000 km^2 of injured benthic habitat and substantial losses to resident corals and fish.

Restoration Goals for Mesophotic & Deep Benthic Communities

- Restore mesophotic and deep benthic invertebrate and fish abundance and biomass.
- Actively manage these communities to protect against threats.
- Improve understanding to better inform management and ensure resiliency.

Mesophotic & Deep Benthic Communities: Four Preferred Alternatives - $125.5M



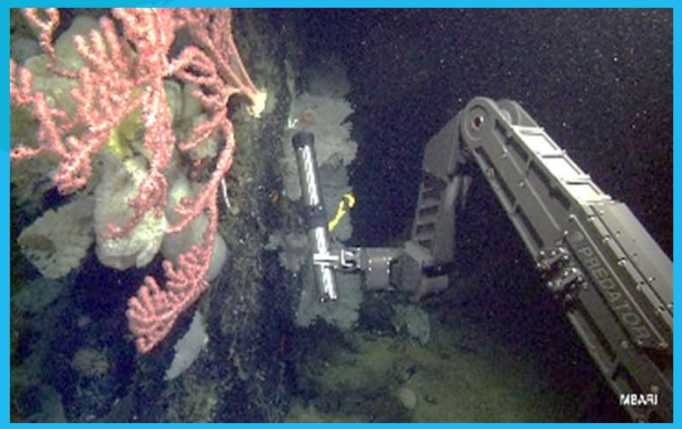
Mapping, Ground-Truthing, and Predictive Habitat Modeling

Estimated Duration: 7-8 years
Estimated Budget: $35,909,000

Habitat Assessment and Evaluation

Estimated Duration: 7-8 years
Estimated Budget: $52,639,000

Mesophotic & Deep Benthic Communities: Four Preferred Alternatives - $125.5M



Coral Propagation Technique Development

Estimated Duration: 7-8 years
Estimated Budget: $16,951,000

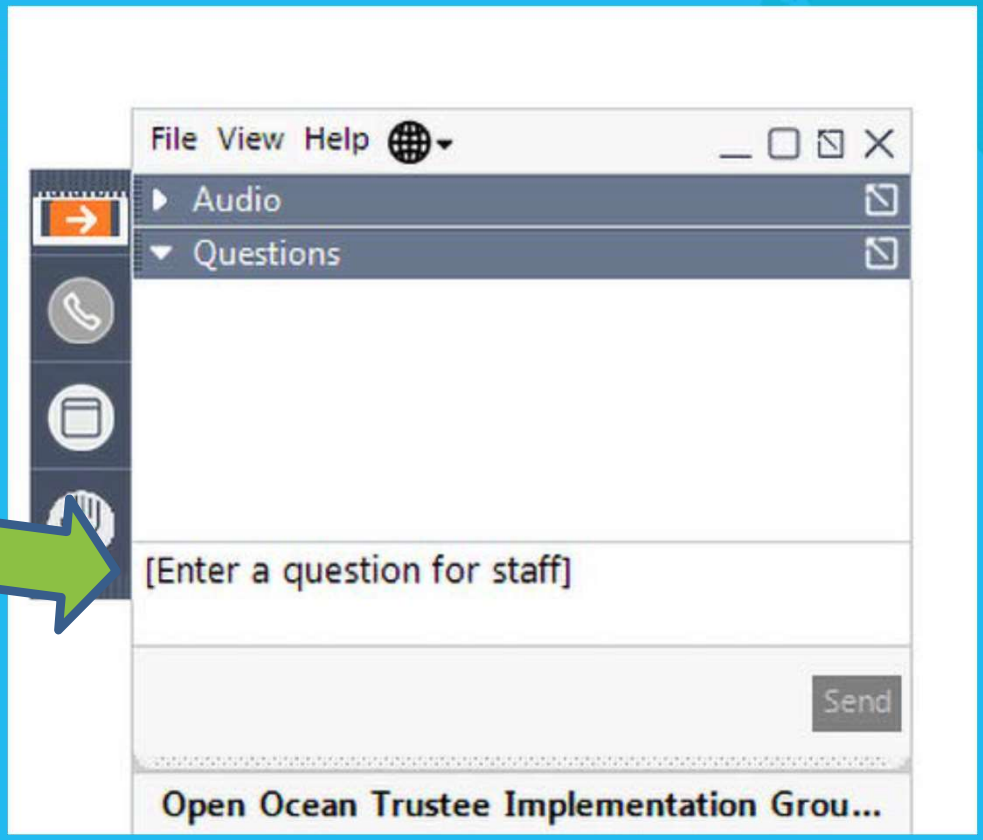
Active Management and Protection

Estimated Duration: 7-8 years
Estimated Budget: $20,689,000

Open House: Questions/Answers

Questions

- Please type in your questions to the "Questions" box.
- We may not get to them all.



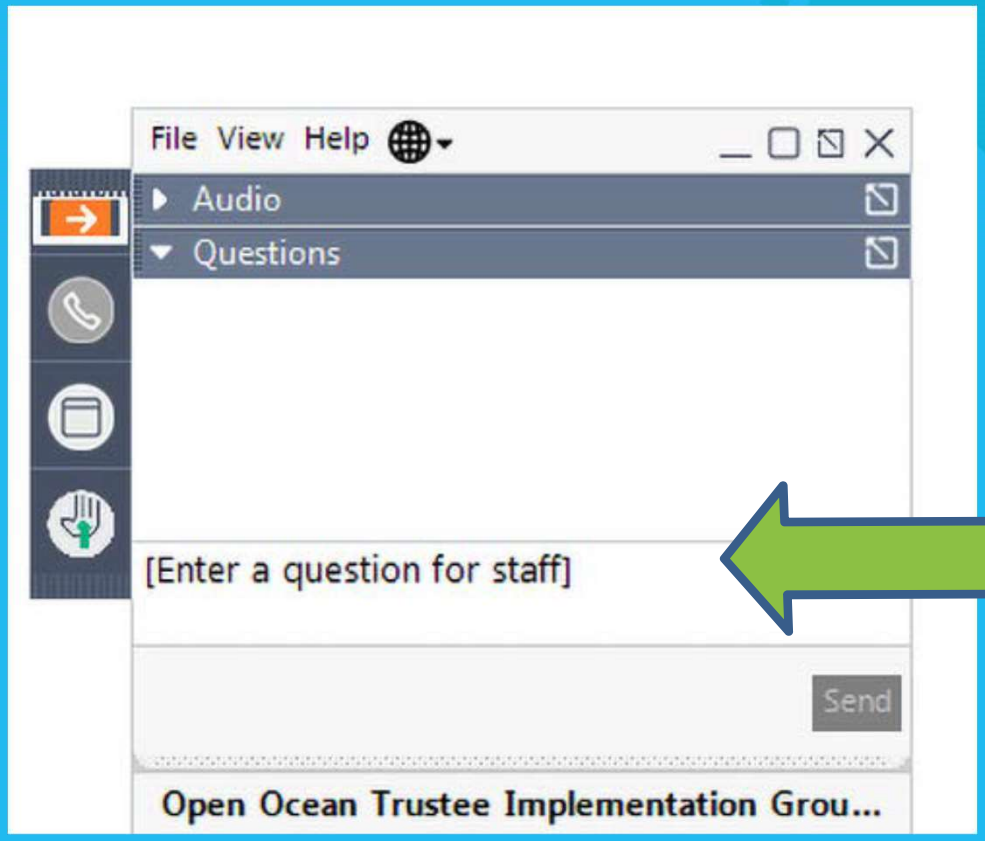
Please note: formal public comments will be taken at a later time during the webinar. Please only enter questions at this time.

Public Comments

Laurie Rounds, NOAA
Ashley Mills, DOI
Treda Grayson, EPA
Mark Defley, USDA

Public Comments

- Please type your Comment in the “Questions” box.
- We may not be able to repeat all the comments received on the webinar.



Comments can also be submitted online at http://parkplanning.nps.gov/OOTIGRP2

Next Steps

How to Submit Comments

- **Online: http://parkplanning.nps.gov/OOTIGRP2**
- **By mail (hard copy), addressed to:**

  U.S. Fish and Wildlife Service
  P.O. Box 29649
  Atlanta, GA 30345

- **For more information:**
  www.gulfspillrestoration.noaa.gov

Comment deadline is July 1, 2019

Public Meetings

June 4: Held Public Meeting

June 11: Public Webinar- 12:00 p.m. CT

June 13: Public Webinar- 6:00 p.m. CT

Thank you

For More Information: www.gulfspillrestoration.noaa.gov