



Deepwater Horizon Natural Resource Damage Assessment

Louisiana Trustee Implementation Group 2022 Annual Public Meeting



September 8, 2022

Agenda

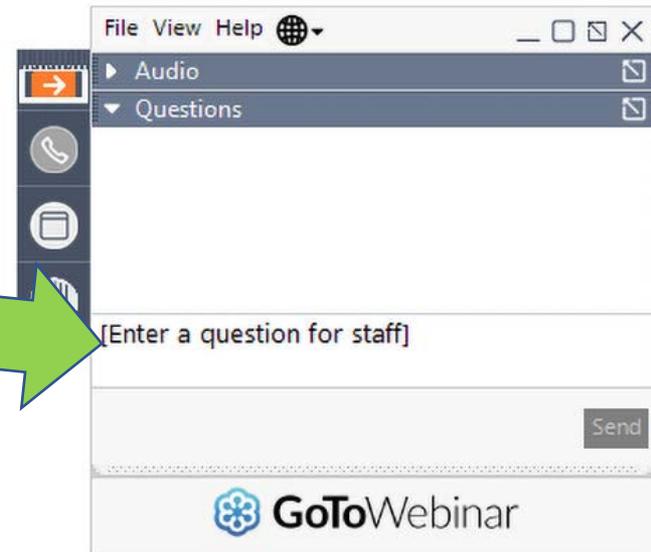
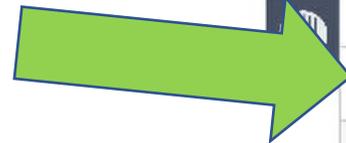


- Welcome & Instructions
- DWH Overview
- LA TIG Overview
- LA TIG Restoration Implementation and Planning Update
- Q&A Session and Your Comments

Webinar Participation



- If you're using a phone, turn off your computer's microphone and speakers.
- When the Comment session starts later, use the "Questions" box to type comments for Trustee staff.



Meeting Materials



All meeting materials will be available at:

<https://la-dwh.com/>

<https://www.gulfspillrestoration.noaa.gov/>



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Sources of DWH Oil Spill Funding



NRDA
(Natural Resource Damage Assessment)
Oil Pollution Act

RESTORE Act
(Resources and Ecosystems
Sustainability, Tourist Opportunities,
and Revived Economies)
CWA Civil

NFWF
(National Fish & Wildlife
Foundation)
CWA Criminal

DWH NRD Settlement



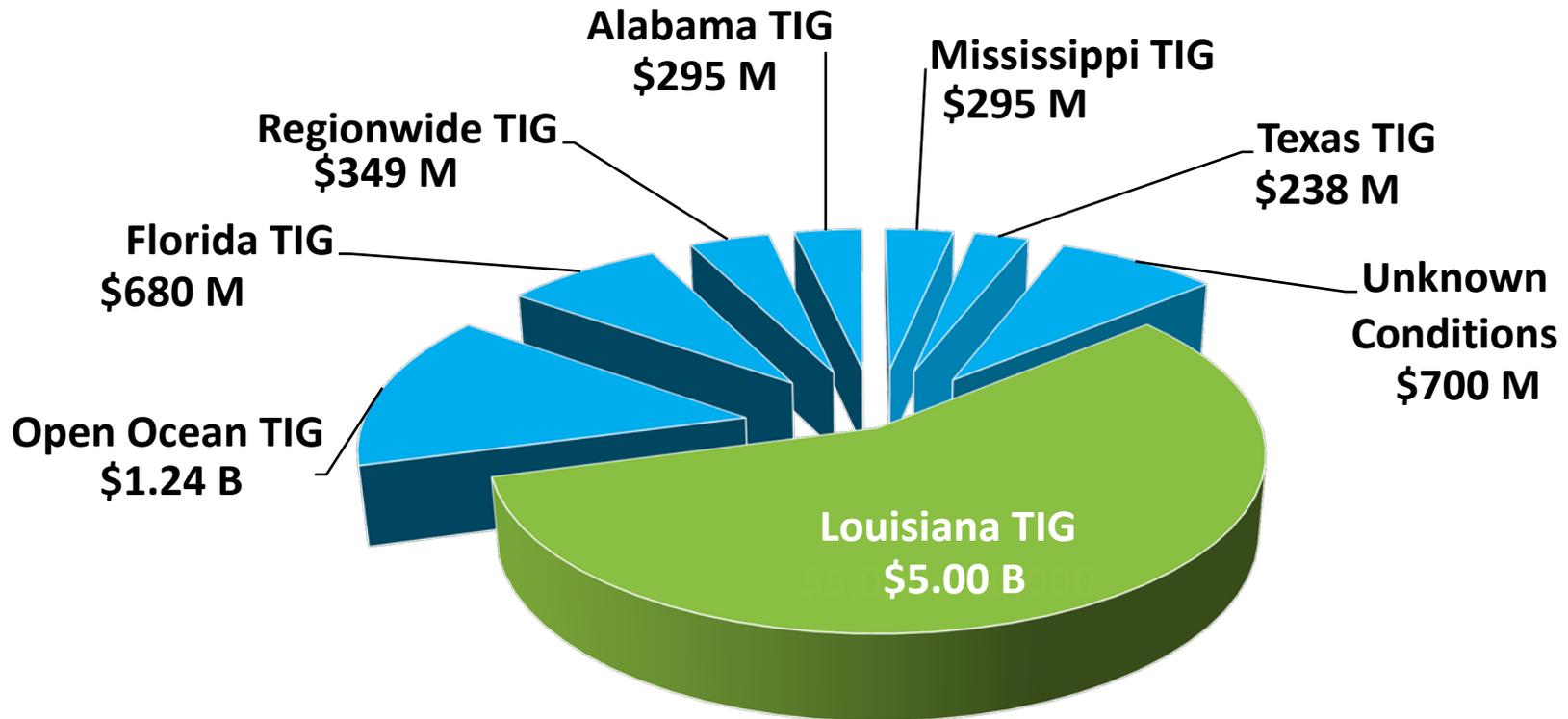
- LA TIG will receive \$5 billion for the Deepwater Horizon (DWH) oil spill Natural Resource Damages (NRD)
- Settlement funds to be paid by BP on or before April 4 of each year, beginning in 2017 through 2031
- Pursuant to the Oil Pollution Act (OPA), the natural resource trustees must use these funds to restore environmental damages caused by the DWH oil spill

Restoration Funding in Dollars

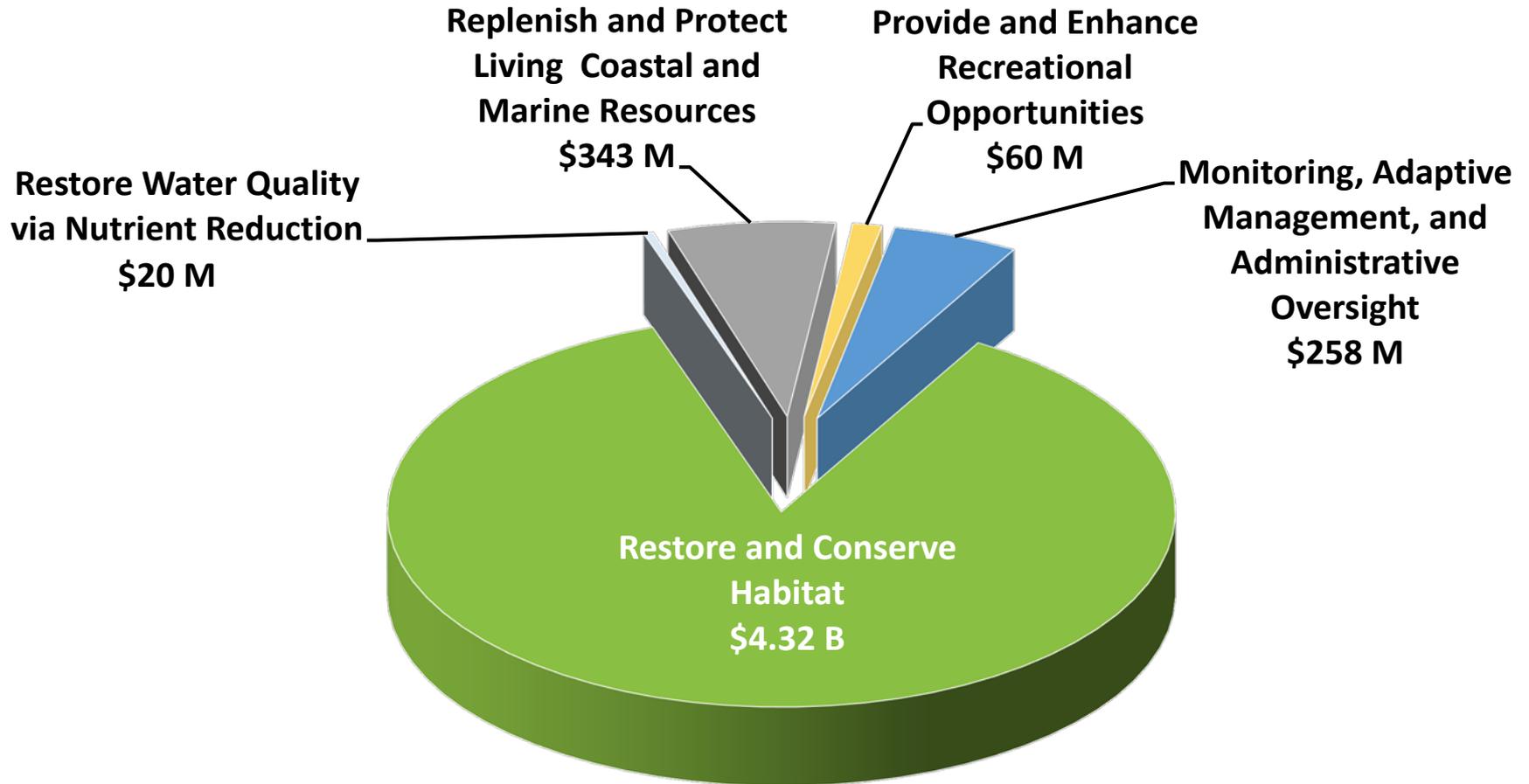
Major Restoration Categories	Unknown Conditions	Regionwide	Open Ocean	Alabama	Florida	LOUISIANA	Mississippi	Texas	Total Restoration Funding*
1. Restore and Conserve Habitat									
Wetlands, Coastal, and Nearshore Habitats				65,000,000	5,000,000	4,009,062,700	55,500,000	100,000,000	4,234,562,700
Habitat Projects on Federally Managed Lands				3,000,000	17,500,000	50,000,000	5,000,000		75,500,000
Early Restoration (through Phase IV)				28,110,000	15,629,367	259,625,700	80,000,000		383,365,067
2. Restore Water Quality									
Nutrient Reduction (Nonpoint Source)				5,000,000	35,000,000	20,000,000	27,500,000	22,500,000	110,000,000
Water Quality (e.g., Stormwater Treatments, Hydrologic Restoration, Reduction of Sedimentation, etc.)					300,000,000				300,000,000
3. Replenish and Protect Living Coastal and Marine Resources									
Fish and Water Column Invertebrates			380,000,000						380,000,000
Early Restoration Fish and Water Column Invertebrates			20,000,000						20,000,000
Sturgeon			15,000,000						15,000,000
Sea Turtles	60,000,000	55,000,000	5,500,000	20,000,000	10,000,000	5,000,000	7,500,000		163,000,000
Early Restoration Turtles	29,256,165						19,965,000		49,221,165
Submerged Aquatic Vegetation					22,000,000				22,000,000
Marine Mammals	19,000,000	55,000,000	5,000,000	5,000,000	50,000,000	10,000,000			144,000,000
Birds	70,400,000	70,000,000	30,000,000	40,000,000	148,500,000	25,000,000	20,000,000		403,900,000
Early Restoration Birds	1,823,100		145,000	2,835,000	71,937,300		20,603,770		97,344,170
Mesophotic and Deep Benthic Communities			273,300,000						273,300,000
Oysters	64,372,413			10,000,000	20,000,000	26,000,000	20,000,000	22,500,000	162,872,413
Early Restoration Oysters				3,329,000	5,370,596	14,874,300	13,600,000		37,173,896
4. Provide and Enhance Recreational Opportunities									
Provide and Enhance Recreational Opportunities				25,000,000	63,274,513	38,000,000	5,000,000		131,274,513
Early Restoration Recreational Opportunities			22,397,916	85,505,305	120,543,167	22,000,000	18,957,000	18,582,688	287,986,076
5. Monitoring, Adaptive Management, and Administrative Oversight									
Monitoring and Adaptive Management		65,000,000	200,000,000	10,000,000	10,000,000	225,000,000	7,500,000	2,500,000	520,000,000
Administrative Oversight and Comprehensive Planning		40,000,000	150,000,000	20,000,000	20,000,000	33,000,000	22,500,000	4,000,000	289,500,000
Adaptive Management NRD Payment for Unknown Conditions	700,000,000								700,000,000
Total NRD Funding	\$700,000,000	\$349,851,678	\$1,240,697,916	\$295,589,305	\$680,152,613	\$5,000,000,000	\$95,557,000	\$238,151,458	

* The total restoration funding allocation for the Early Restoration work; each restoration type; and monitoring, adaptive management, and administrative oversight is \$5.1 billion (plus up to an additional \$700 million for adaptive management and unknown conditions).

Total Allocation



LA TIG Allocation



Louisiana Restoration Area Representatives



Bren Haase

State of Louisiana

Sarah Clardy

Department of the Interior

Mel Landry

National Oceanic and Atmospheric Administration

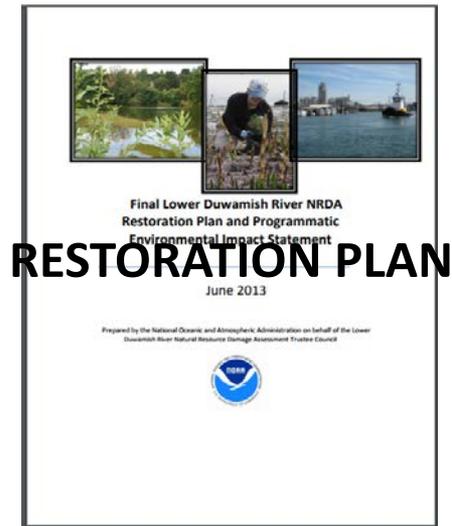
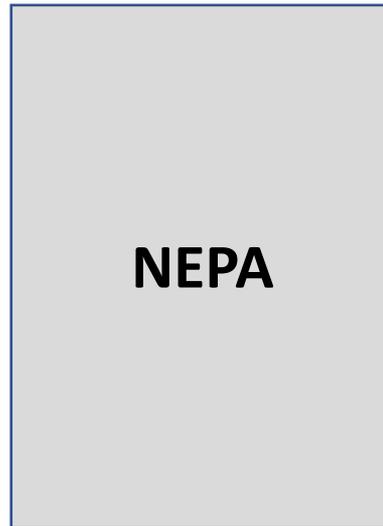
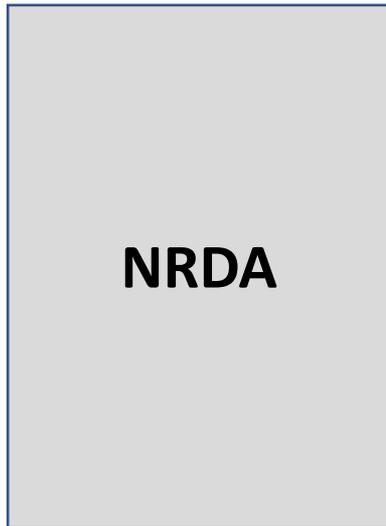
Doug Jacobson

U.S. Environmental Protection Agency

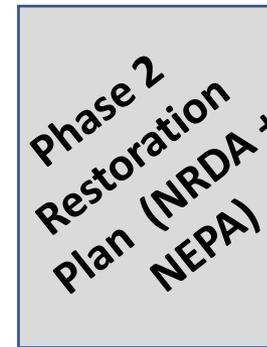
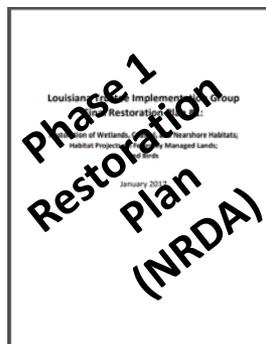
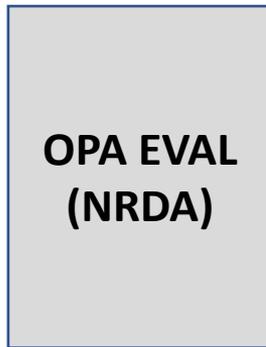
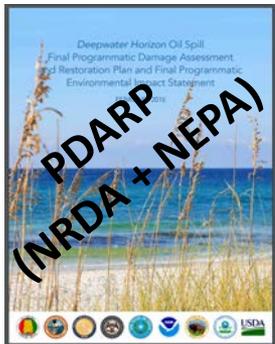
Ron Howard

U.S. Department of Agriculture

Typical NRDA & NEPA Process



DWH Phased NRDA & NEPA Process



Construction



Approaches /
Techniques

Solicitation of
Projects

Project
Type/Location
E&D Funding

Design Alts

Selection/
Construction
Funding

A background photograph showing a coastal restoration site. In the foreground, there is a large pile of brown earth and debris. A yellow CAT bulldozer is positioned on the left, and a yellow excavator is in the middle ground, working near a body of water. A large concrete pipe is visible in the lower left. The sky is overcast and grey.

Restoration Implementation Update

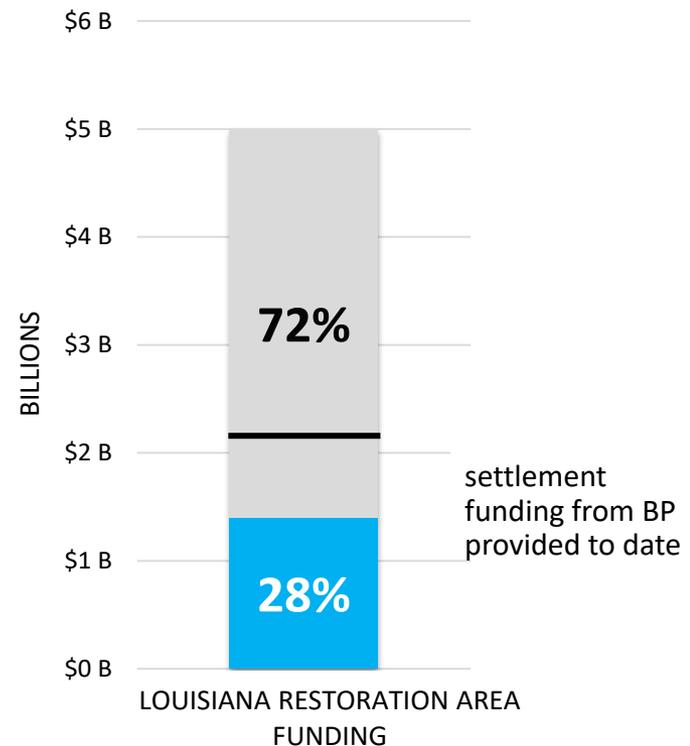
Louisiana Funding Update



- The total allocation for Louisiana is \$5 billion.
- We have received \$2.13 billion from BP to date.

\$1.4 billion

Approximate amount committed for projects and activities as of July 2022



Restore and Conserve Habitat



Wetlands, Coastal and Nearshore Habitats

Total Allocation: \$4.318 billion

Allocated so far: ~ \$1.110 billion

Thirteen projects

Wetlands, Coastal and Nearshore Habitats



Marsh Creation and Ridge Restoration,
Barrier Islands, Living Shorelines and
Hydraulic Restoration

Engineering and Design, Construction

11,168 acres



Large Scale Barataria Marsh Creation: Upper Barataria Component



Upper Barataria Marsh Creation



Anticipated benefits:

- Project is building up to 1,190 acres of wetlands in the Barataria Basin
- Create and/or restore interspersed and ecologically connected marshes in the upper Barataria Basin
- Increase vegetation and nekton productivity in the project area



Up to \$181 million

Total Project Cost

Upper Barataria Marsh Creation



Taken May 9, 2022
Patrick M. Quigley
www.gulfcoastairphoto.com
A SDAV owned small business.

Upper Barataria Marsh Creation



Where we are now:

- The construction of containment dikes began in February
- Construction of marsh creation areas began in August



Restore and Conserve Habitat



Habitat Projects on Federally Managed Lands

Total Allocation: \$50 million

Allocated so far: ~ \$22.8 million

Shoreline Protection at Jean Lafitte
National Historical Park and Preserve

Shoreline Protection at Jean Lafitte



Restore Water Quality



Nutrient Reduction (Nonpoint Source)

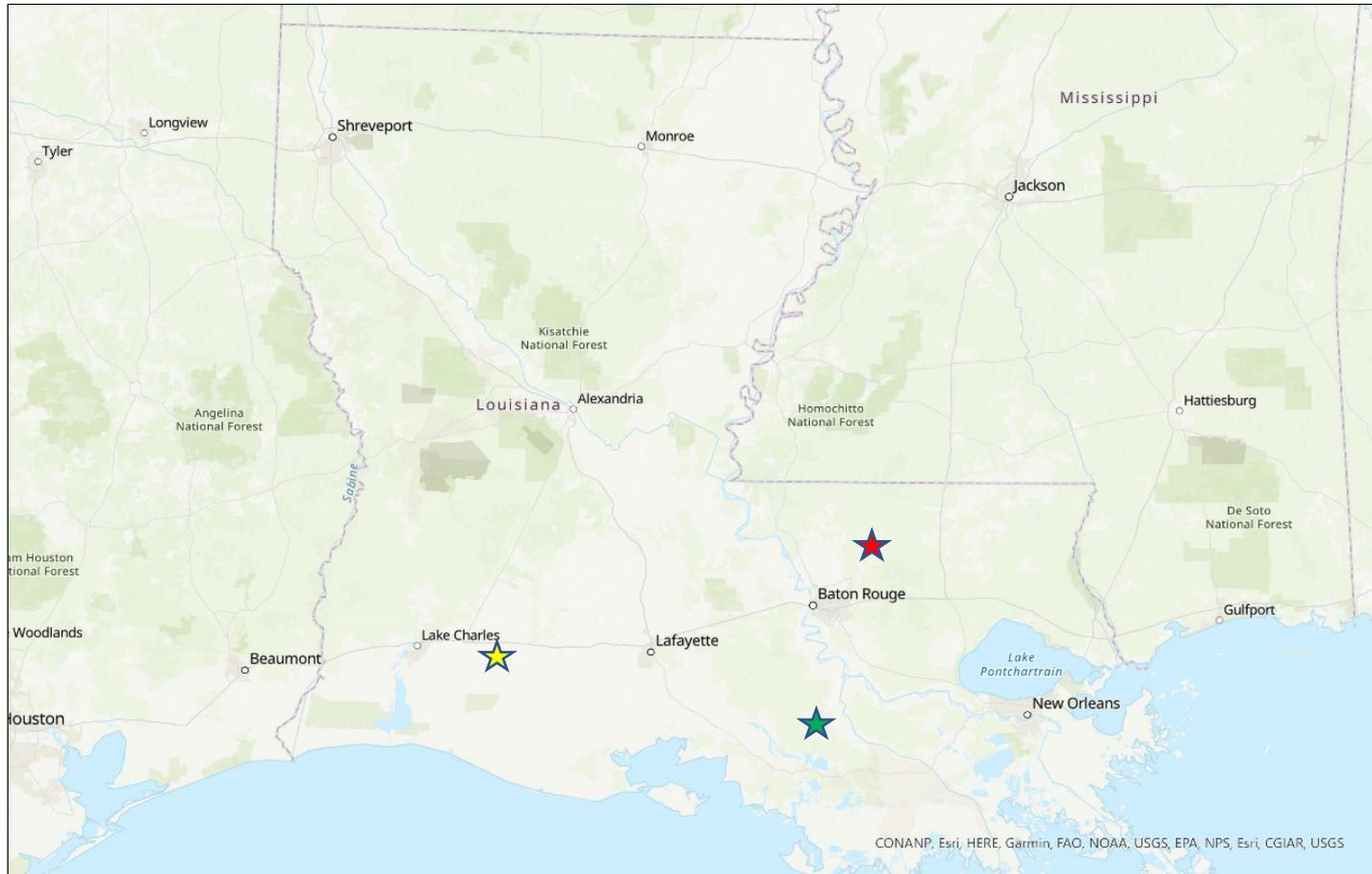
Total Allocation: \$20 million

Allocated so far: ~ \$9.7 million

Four projects funded

Guideline Development, Outreach and Education, Baseline water Quality monitoring, Landowner Coordination and Agreements, Plan Development, Site Specific Implementation and Post Implementation Monitoring.

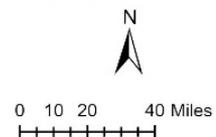
Restore Water Quality



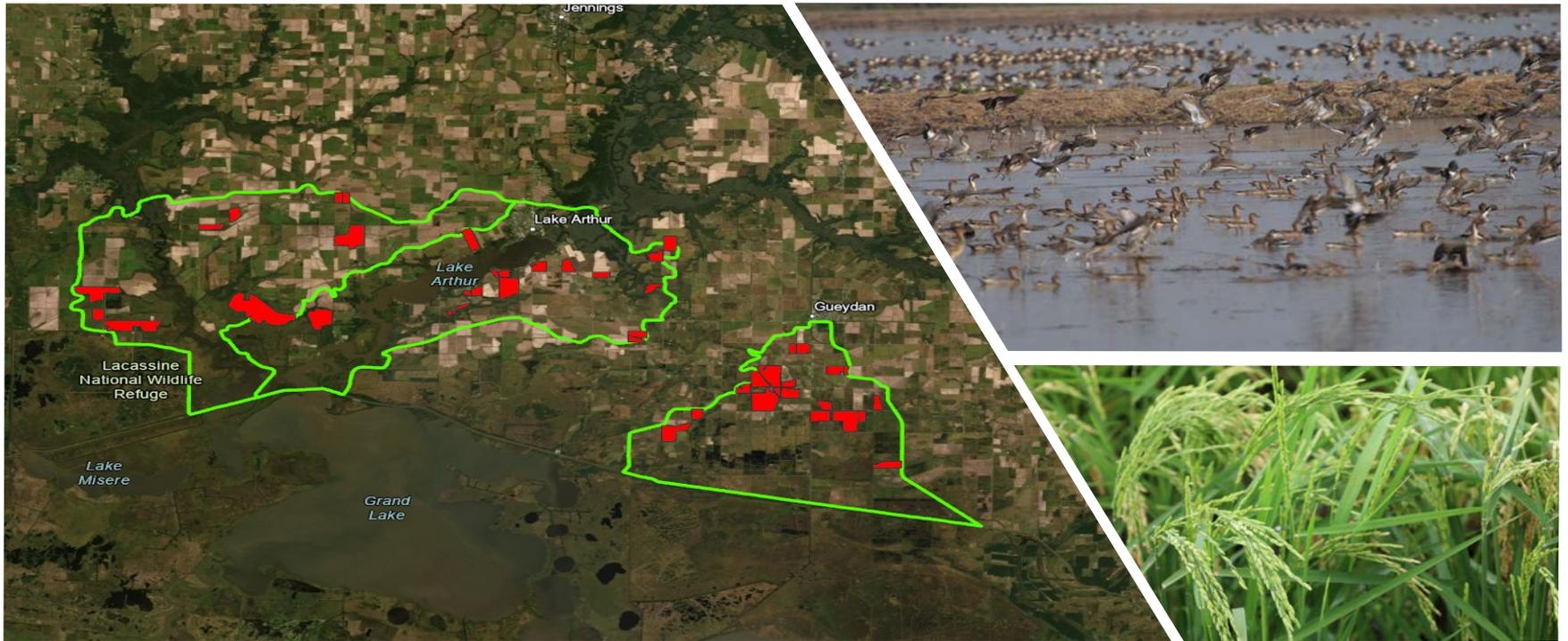
USDA NUTRIENT REDUCTION PROJECT LOCATIONS
LA TIG RP/EA #4
THEMES 1-3

Project Type

- ★ Dairy Farms
- ★ Grazing and Cropland
- ★ Winter Water Holding



Winter Water Holding/BMPs in Rice





Five Restoration Types

Sea Turtles - \$10,000,000

Submerged Aquatic Vegetation - \$22,000,000

Birds - \$220,437,300

Oysters - \$40,874,300

Marine Mammals - \$50,000,000

Replenish and Protect Living Coastal and Marine Resources



Birds

Total Allocation: \$148.5 million

Allocated so far: ~ 116 million

Eight projects

Strategic Bird Habitat Restoration

North Breton Island Restoration



North Breton Island Restoration





Oysters

Total Allocation: \$40.87 million

Allocated so far: \$40.87 million

Four projects

Clutch Placement, Hatchery-Based
Restoration, Brood Reefs

Enhancing Oyster Recovery Using Brood Reefs



Cultch Plant Oyster Restoration



Cultch Plant Oyster Restoration



3 months post-construction



6 months post-construction

Deepwater Horizon NRDA
Louisiana
Restoration Area

LA Marine Mammal Stranding Network



Marine Mammal Stranding Network



Jan 1 – June 30

- **28 Strandings**
 - 25 out of 28 were Bottlenose Dolphins (89%)
 - 18 of these reports were recovered on the same day, 2 were recovered the next day, and 8 were unrecoverable
- **2 Out of Habitat Dolphins (Ida) - currently monitoring**
 - The pair appear healthy, have plenty of food, and are in good salinity; therefore, we don't plan to intervene until the calf is older or if their health deteriorates.





Provide and Enhance Recreational Opportunities



Provide and Enhance Recreational Opportunities



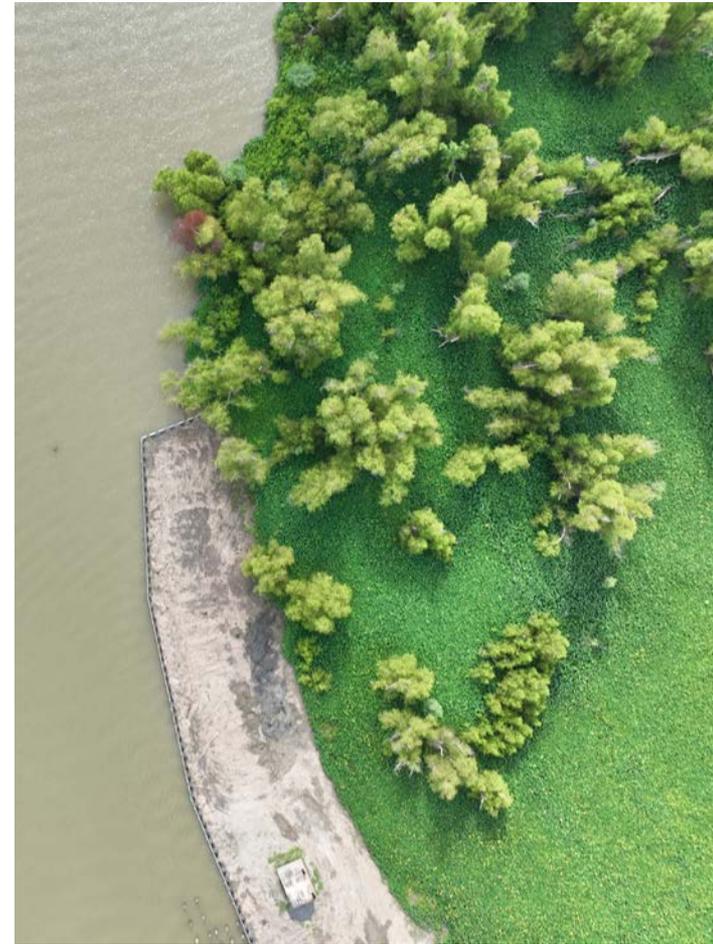
- **Total Allocation: \$60 million**
- Fishing Piers and Public Access Improvements, Boat Launches, Campground Improvements, Signage, Artificial Reefs, Activities and Education Facilities
- 23 projects:
 - located on State and Federal Parks, Wildlife Management Areas and Refuges, Parish Properties and Tribal Lands
 - 11 Complete
 - 6 in Construction
 - 6 in E&D (all will be in Construction in 2023)



Middle Pearl River WMA Boat Launch



Atchafalaya Delta WMA Campground Improvements



Cypremort Point State Park Improvements



Monitoring and Adaptive Management



Monitoring and Adaptive Management



Adaptive management is critical due to the unprecedented temporal, spatial, and funding scales of the restoration that will be undertaken. (PDARP/PEIS 5.E.2.2)

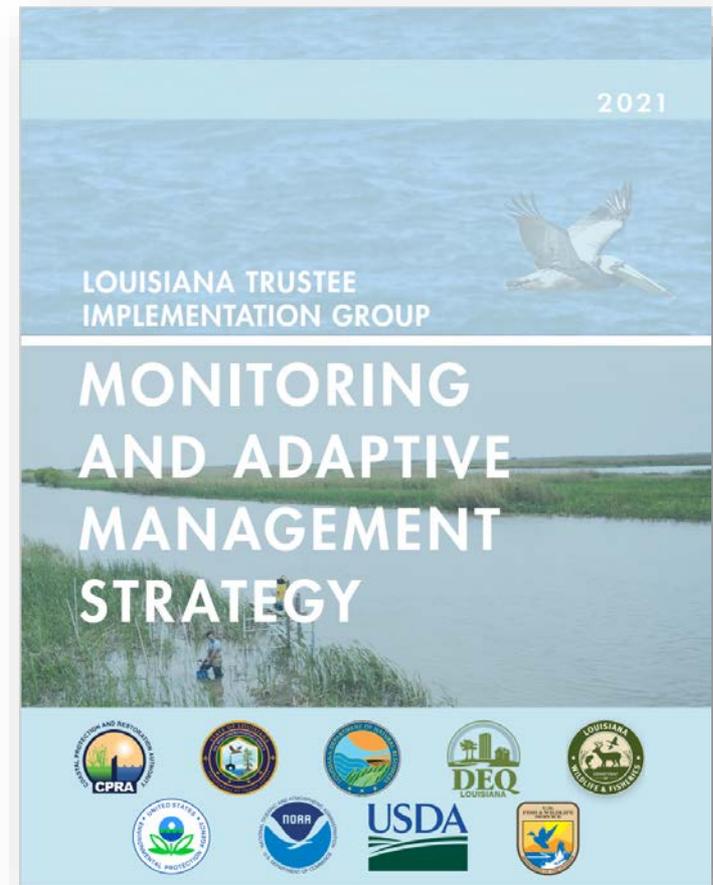
Adaptive management is a form of structured decision-making applied to the management of natural resources in the face of uncertainty (Pastorok et al. 1997; Williams 2011).

This process advances scientific understanding and provides critical feedback to inform future decision-making (Williams et al. 2007).

Monitoring and Adaptive Management



- **Completed Programmatic MAM Strategy – 2021**
- **Recommends:**
 - MAM Objectives
 - Process for decision making



<https://la-dwh.com/wp-content/uploads/2021/09/MAM-strategy.pdf>

Monitoring and Adaptive Management

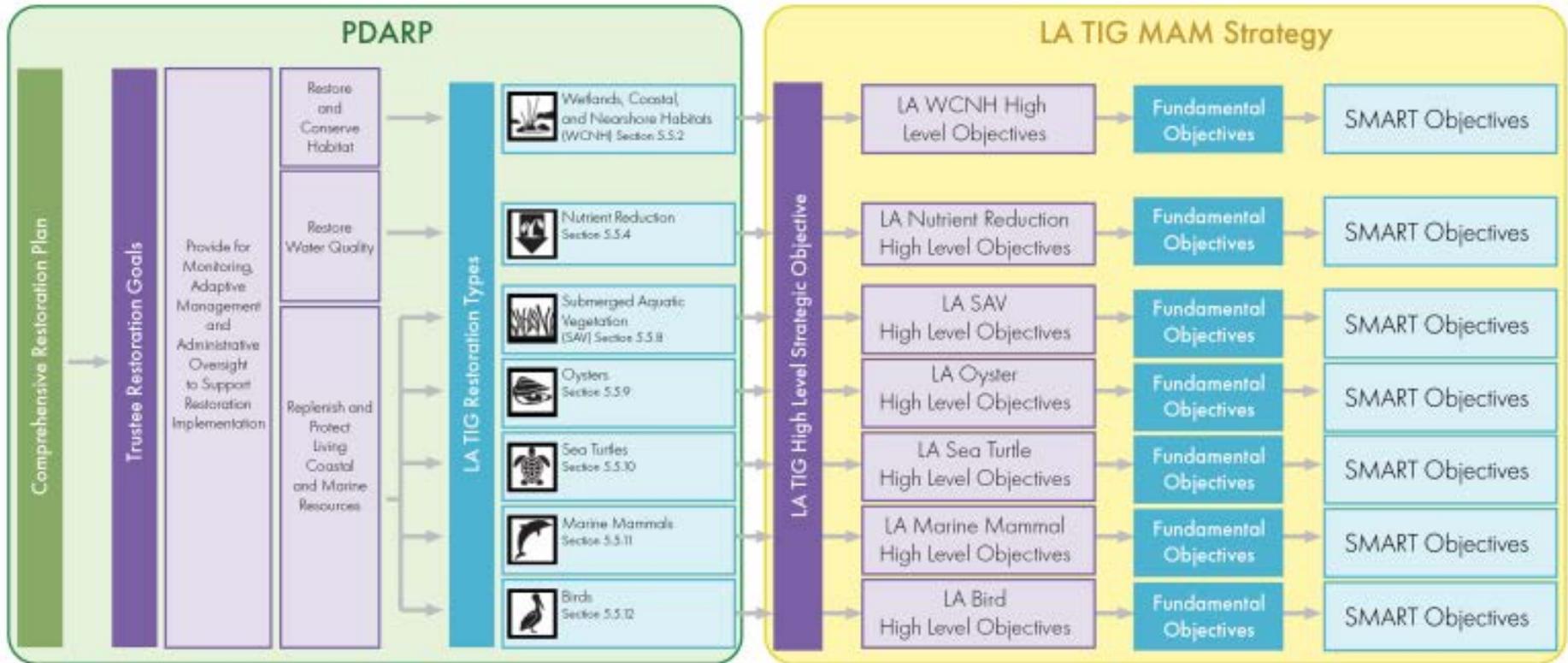


Figure 5. Framework for building the LA TIG MAM Strategy from the foundation provided in the PDARP. The LA TIG High Level Strategic Objective was synthesized from information and goals of the PDARP specific to the DWH injured resources in Louisiana. High Level Objectives, Fundamental Objectives, and SMART Objectives were then developed for each Louisiana Restoration Type. Modified from Figure 5.4-1 (PDARP/PEIS; DWH NRDA Trustees, 2016b).

Monitoring and Adaptive Management



Balance growth of population on NRDA-environmental reefs with ecologically harvesting

High Level Objective

Maintain abundance on managed seed grounds of public

Fundamental Objective

SMART Objective:

- specific
- measurable
- achievable
- relevant
- program-appropriate timeline

coastal Louisiana POSGs and oyster reefs is at least 20 seed (1m or larger) per square meter annually sampling within each window following pr

Monitoring and Adaptive Management

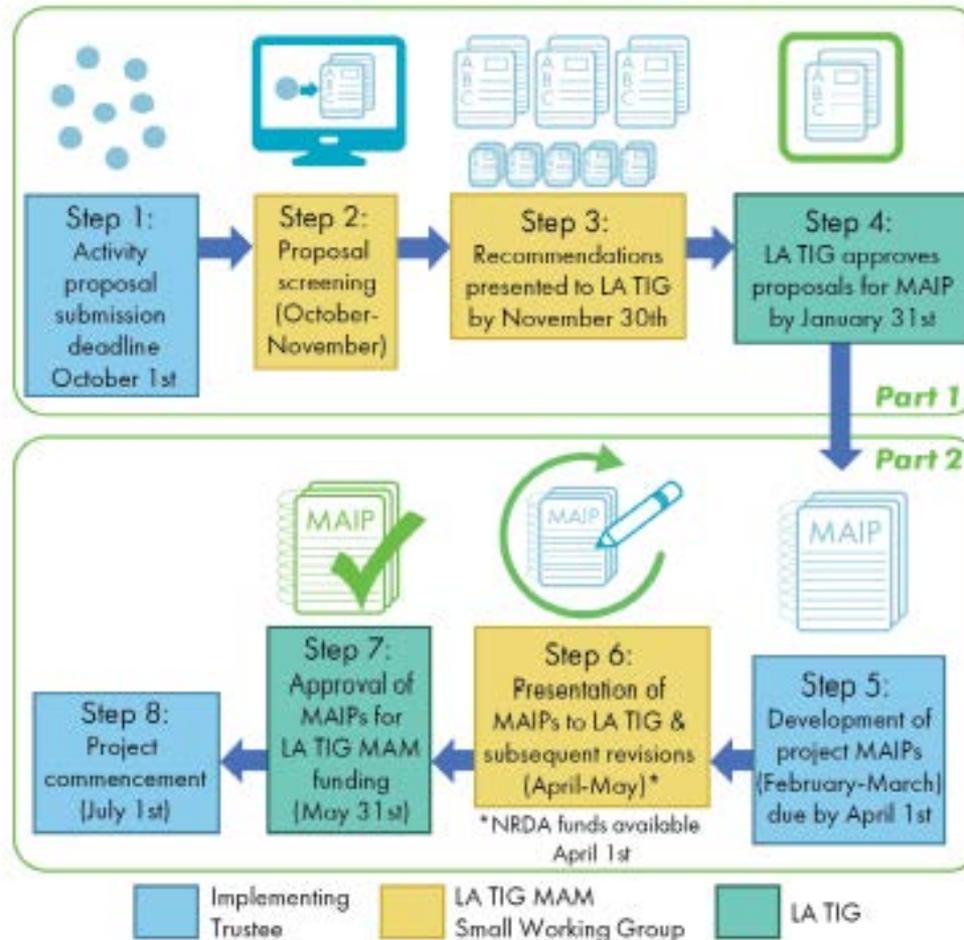
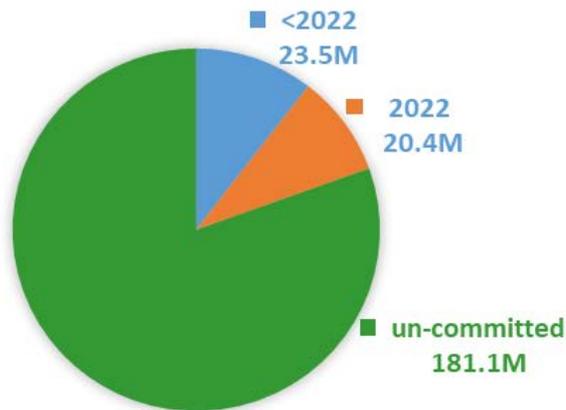


Figure 8. The LA TIG MAM activity planning process occurs in eight steps, starting from activity proposal submission in October to project commencement in July. Implementing Trustees, the LA TIG MAM Small Working Group, and the LA TIG play key roles throughout this process.

Monitoring and Adaptive Management



LA TIG MONITORING AND ADAPTIVE MANAGEMENT SETTLEMENT



Total LA TIG
MAM Allocation:
\$225 million

9 new projects were funded this year (FY2023)
15 projects (total) have been funded with MAM
allocation to date

\$43.9 million | Approved for MAM projects to date

Monitoring and Adaptive Management



MAM Activities approved to begin in May 2022

	MAM Activity	Lead
1	<i>Barrier Island Comprehensive Monitoring (BICM)</i>	CPRA
2	<i>Characterizing Barrier Island geomorphic state</i>	DOI
3	<i>Barrier Island System Management Program</i>	CPRA
4	<i>Monitoring the Effects of Coastal Wetland Restoration on Fish and Invertebrates</i>	NOAA
5	<i>Quantifying changes in wetland area and habitat types</i>	DOI
6	<i>Sea Turtle habitat use and abundance in eastern Louisiana Waters</i>	NOAA
7	<i>Monitoring Approaches for Bottlenose Dolphin Restoration in Louisiana</i>	NOAA
8	<i>Modeling to Inform Sustainable Oyster Population in Louisiana Estuaries</i>	LDWF
9	<i>Louisiana Interactive Lessons Learned Database</i>	CPRA

More information for each activity is available in DIVER

<https://www.diver.orr.noaa.gov/>

A black turtle, likely a Kemp's Ridley, is shown resting on a sandy beach. The turtle is positioned in the lower half of the frame, facing right. Its shell is dark and has a distinct scaly pattern. The sand is light-colored and textured. In the background, there are decorative wavy lines in shades of blue and grey, suggesting a coastal or marine environment. The text "Ongoing Efforts" is overlaid in white, centered over the turtle's shell.

Ongoing Efforts

Restoration Plans in Development



Restoration Plans	Proposed Project Budget
Draft Restoration Plan and Environmental Assessment #3.2 – Mid Barataria Sediment Diversion	Approximately \$2,000,000,000
Draft Restoration Plan and Environmental Assessment #7.1 – Birds	TBD (Fall 2022)

Takeaways



- Louisiana will ultimately have \$5.0B available through NRDA allocated through the Louisiana TIG.
- \$1.4B allocated to date.
- Fourteen Comprehensive Restoration Plans completed or underway
- 63 projects initiated or completed.

Meeting Materials



All meeting materials will be available at:

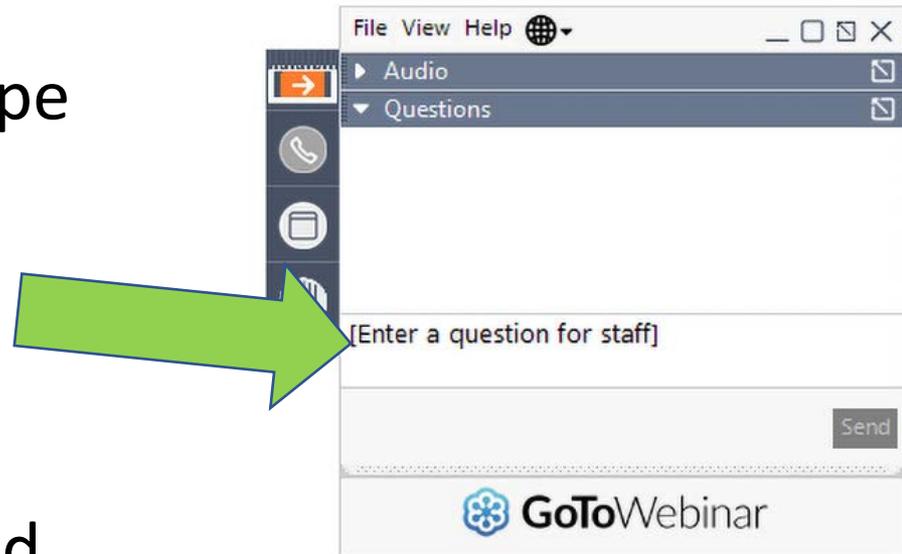
<https://la-dwh.com/>

<https://www.gulfspillrestoration.noaa.gov/>

Comments and Questions



- Please use the “Questions” box to type comments or ask questions for Trustee staff
- Comments will be read aloud, and questions answered, as time allows



Meeting Materials



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A black turtle, likely a Kemp's ridley, is shown resting on a sandy beach. The turtle is positioned in the lower half of the frame, facing right. Its shell is dark and has a distinct scaly pattern. The sand is light-colored and textured. Overlaid on the turtle's shell is the text "Thank You" in a large, white, sans-serif font. The top of the image features a white background with a blue and grey wave-like graphic element on the right side.

Thank You