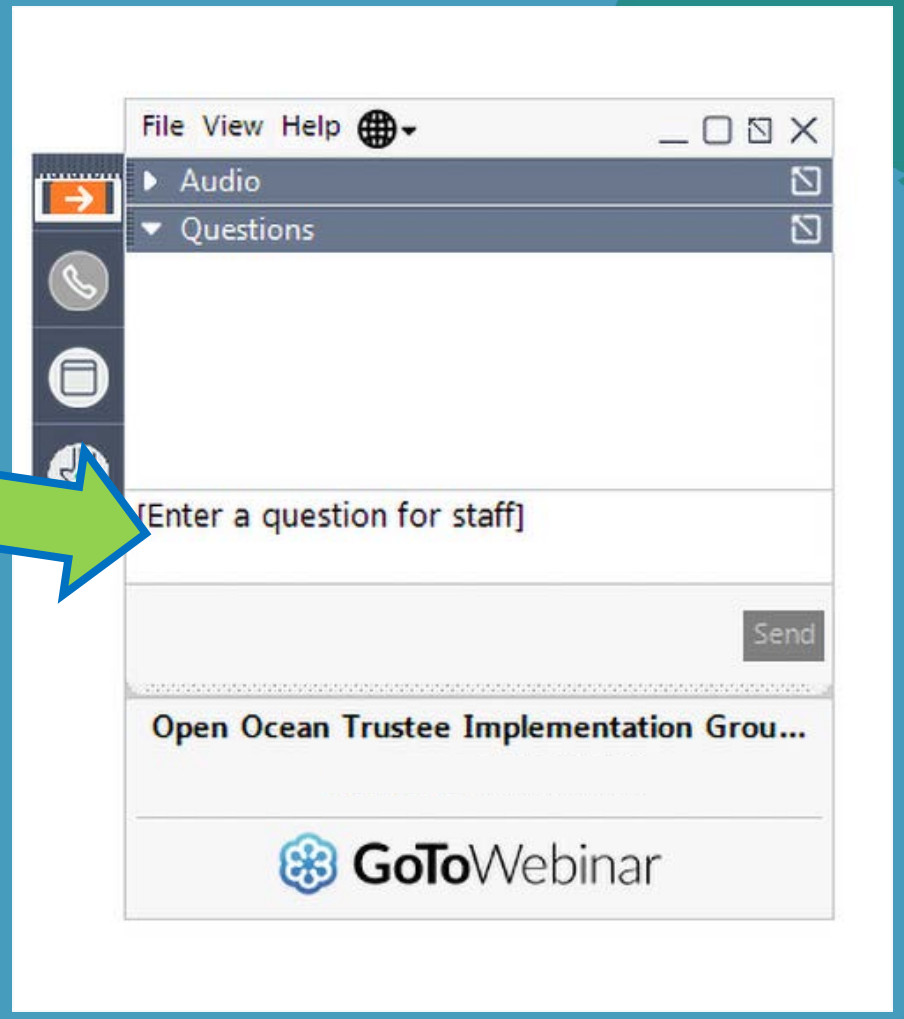
Open Ocean Restoration Area

Annual Meeting & Special Session
October 28, 2021

Webinar Participation

- If you're using a phone, turn off your computer's microphone and speakers
- Please use the "Questions" box to type questions for the Q&A session
- Presentation will be posted on www.gulfspillrestoration.noaa.gov
- Please see the chat box for a link to the Open Ocean Restoration Area webpage



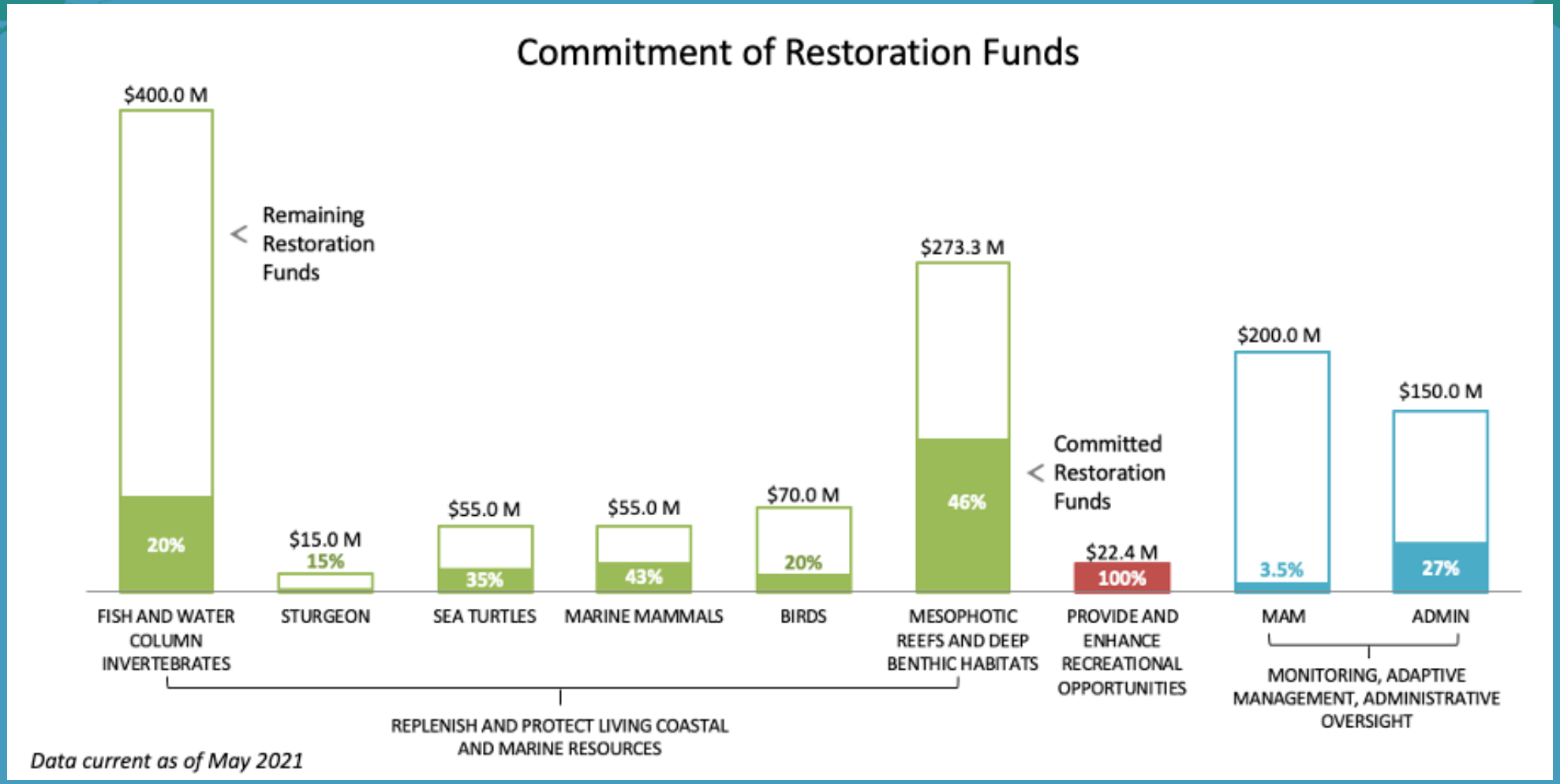
Webinar Overview

- Open Ocean Restoration Updates
- Restoration Highlights
- Question and Answer Session
- Special Session: Mesophotic and Deep Benthic Communities Restoration
- Question and Answer Session

Open Ocean Trustee Representatives

NOAA	USDA	EPA	DOI
Chris Doley	Ron Howard	Gale Bonanno	Mary Josie Blanchard
Laurie Rounds	Ben Battle	Treda Grayson	Ashley Mills

Open Ocean Restoration Area Funding



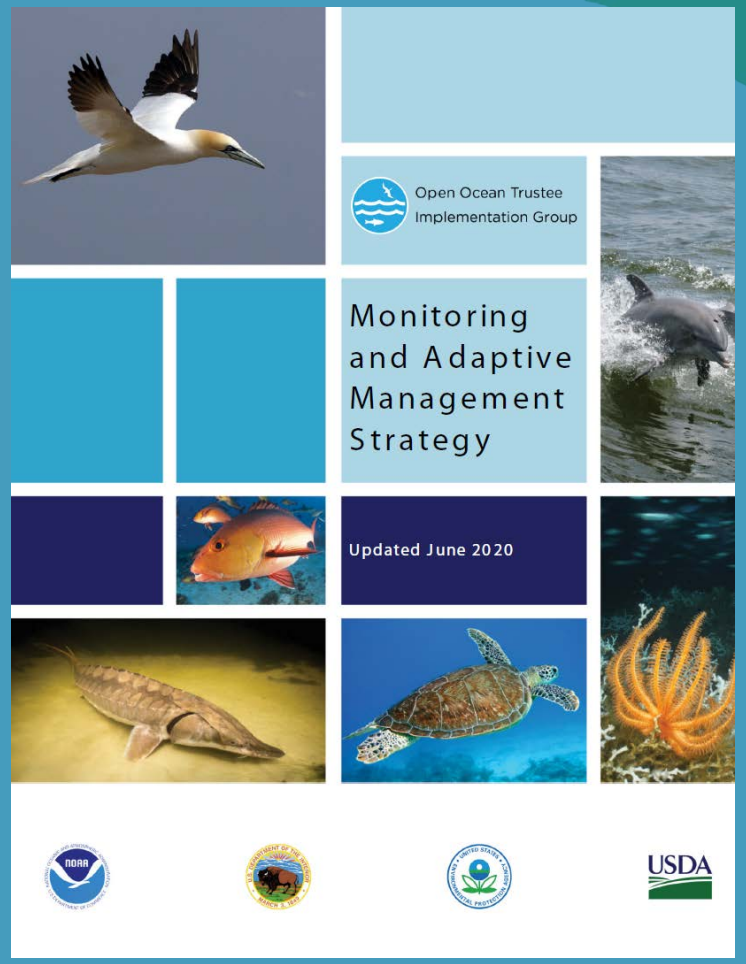
Over $ 290M for Open Ocean Restoration

- Completed 2 Early Restoration Projects
- Continuing to implement 3 Early Restoration Projects
- Implementing 21 restoration projects for all six resource types
- Implementing 3 Monitoring Activities

Monitoring & Adaptive Management

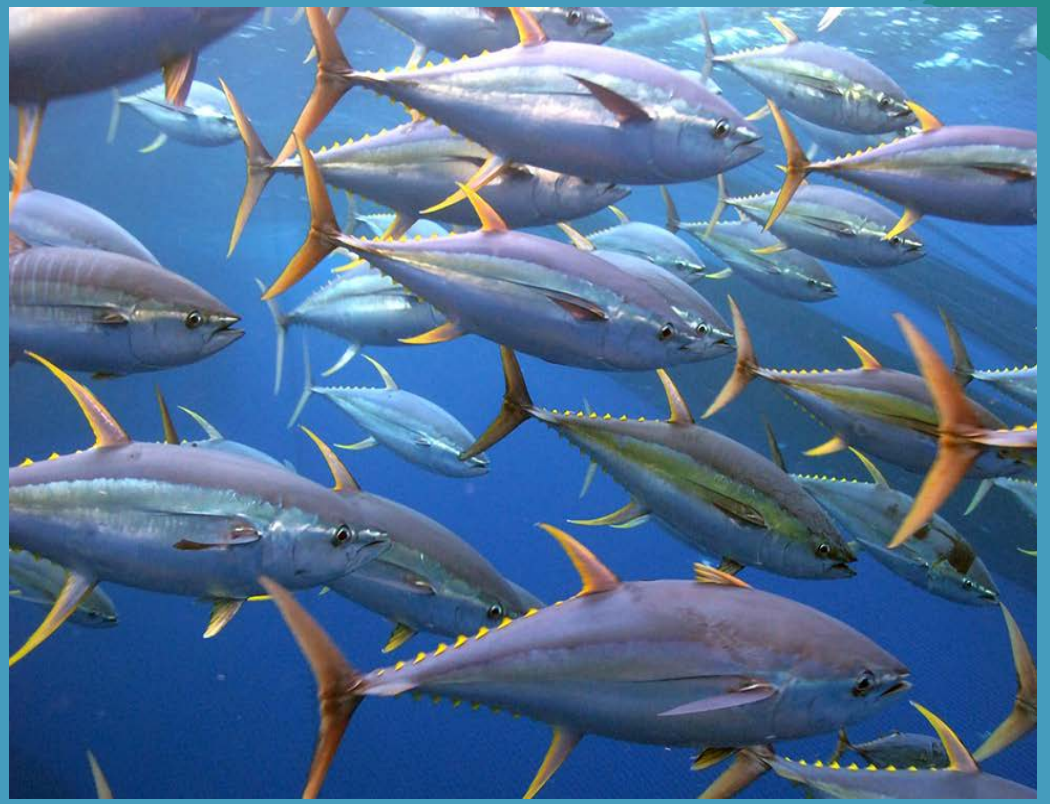
Open Ocean 2021 Monitoring and Adaptive Management Planning:

- Restoration objectives
- Indicators of progress
- Priority activities to address data needs



Strategic Planning for Fish Restoration

- Strategy for remaining $320 million allocation
- Prioritization of injury to hundreds of species
- Restoration objectives to meet overarching goals
- Stakeholder participation



Restoration Plan 3 Priorities

BIRDS

- Restore and conserve bird nesting and foraging habitat
- Establish or re-establish breeding colonies
- Prevent incidental bird mortality
- Target Seabird restoration

GULF STURGEON

- Restore sturgeon spawning habitat
- Reduce nutrient loads to coastal watersheds
- Protect and conserve marine, coastal, estuarine and riparian habitats (sturgeon)

Restoration Plan 3 Next Steps

- Review project ideas
- Develop restoration projects
- Release a draft restoration plan for public comments
- Hold a public meeting
- Consider public comments to finalize the restoration plan
- Implement selected projects

Open Ocean Project Highlights






Bike and Pedestrian Use Enhancements Project

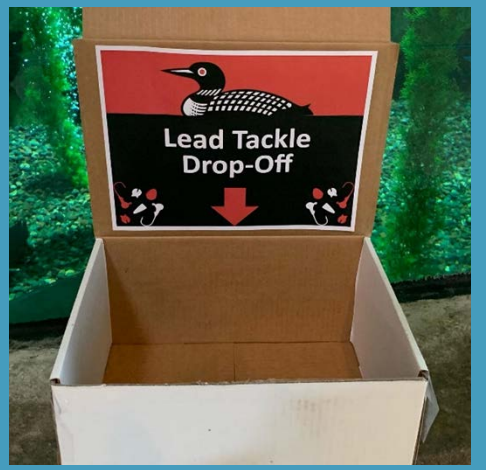
- The length of the road segment included in the project was reduced to meet budget constraints (from 2.2 to 1.8 miles)
- Design work completed in January 2021
- Construction contract awarded in August 2021
- Construction to begin November 2021

Restoring Common Loons

- Acquire and protect breeding habitat
- Provide artificial nesting platforms
- Engage lake associations to coordinate conservation activities

<u>Reduce exposure to lead-based fishing tackle</u>

- Outreach: schools, community events, Governor's Fishing Opener, youth fishing clinics
- Distribution of lead-free tackle kits and sample packs at summer camps, fishing events, parks departments
- Social media



Characterizing Gulf Sturgeon Spawning Habitat, Habitat Use and Origins of Juvenile Sturgeon in the Pearl and Pascagoula River Systems

- Rocky substrates are required for Gulf sturgeon spawning.
- Detection of substrate types in large, turbid rivers is challenging.
- One objective of this project is to map suitable spawning substrates throughout 1500 km of these rivers, helping determine whether habitat access is limited by barriers.

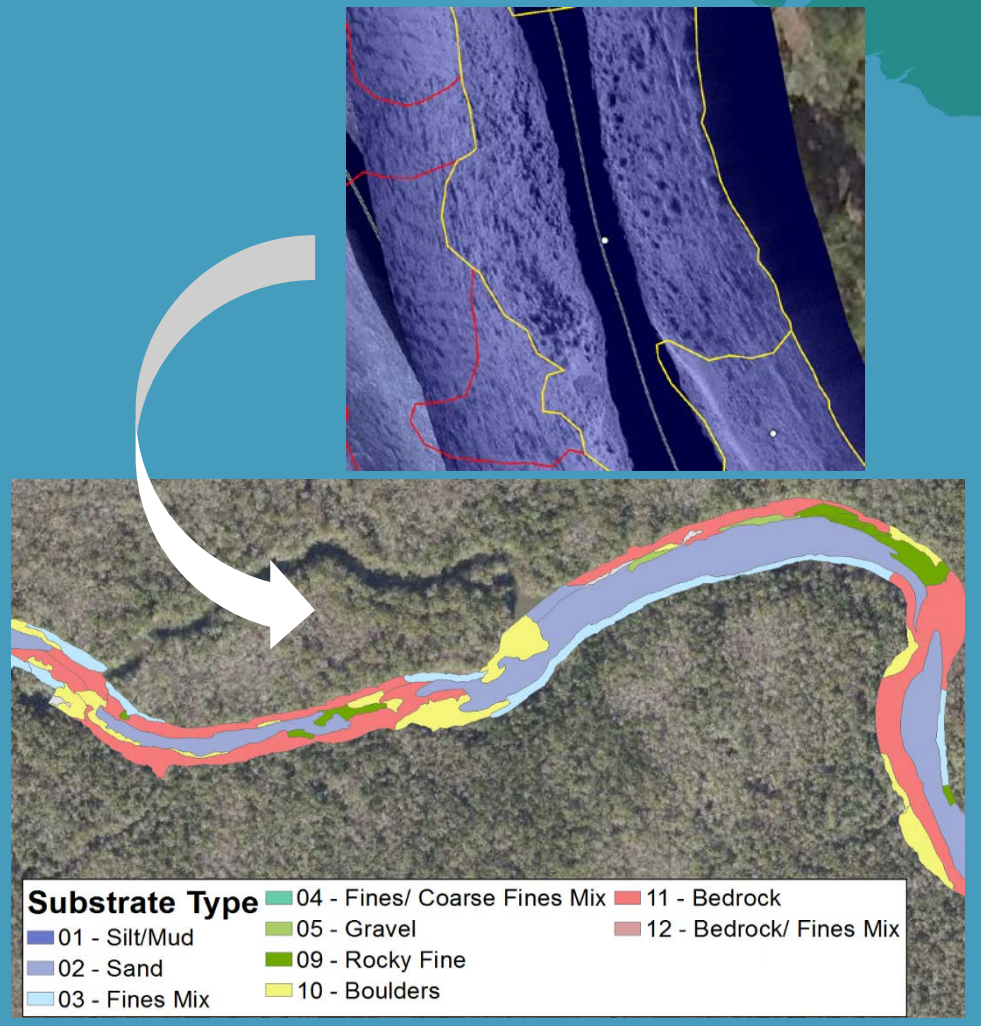
Lake Sturgeon spawning

Characterizing Gulf Sturgeon Spawning Habitat, Habitat Use and Origins of Juvenile Sturgeon in the Pearl and Pascagoula River Systems

Developing a machine-learning toolkit:

- To automate the mapping of substrates commonly found in SE rivers
- Embedded within free software that processes raw imagery into mosaic format

These tools and techniques represent landmark advances in the science and technology of landscape-level habitat mapping in navigable rivers.



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

Project Objective:

Restore for fish species by partnering with the Gulf of Mexico commercial shrimp fishery to reduce bycatch.

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

New BRD Criteria:

- Improve shrimp retention
- Simple to use
- Cost effective
- Improve bycatch reduction
- Voluntary

Tom's Fisheye (Australia)

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

Project Activities:

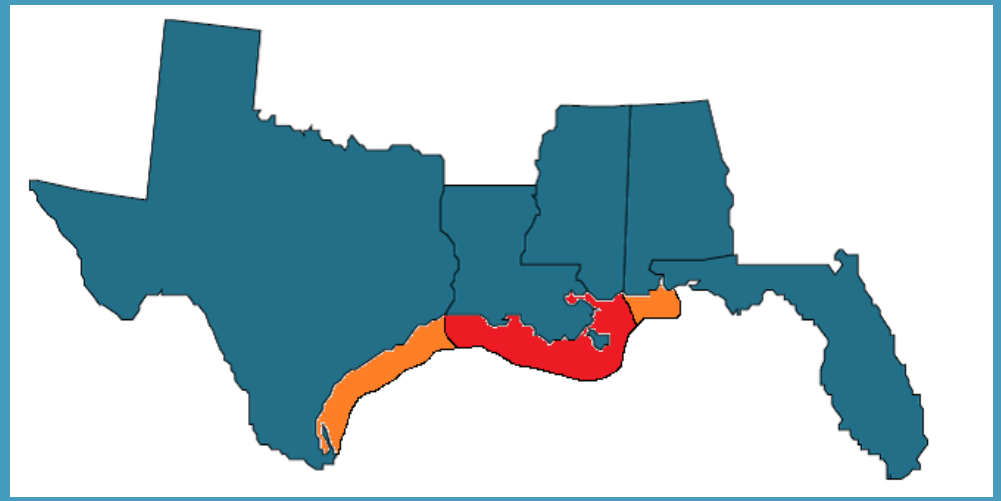
- Identify new advances in BRD technology
- Validate the effectiveness of these BRDs & certify for use in the Gulf
- Maximize the use of new BRDs through outreach & incentives
- Maximize benefits through dockside outreach & training

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

Background:

What is the fishery?

- A purse seine fishery that targets menhaden in the northern Gulf of Mexico.
- Operates from mid-April through November 1 in the bays and nearshore waters along the Gulf of Mexico coast, primarily off Louisiana and Mississippi.



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

Why are we doing this project?

- Restoring injured sea turtles by reducing the threat of bycatch in commercial fisheries.
- Sea turtles are known to utilize the same waters at the same times the fishery operates.
- There is a lack of information and effective methods to observe the level of interactions with sea turtles (and bottlenose dolphins) during fishing operations.

Photo Credit: Saltwater, Inc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Developing Methods to Observe Sea Turtle Interactions in the Gulf of Mexico Menhaden Purse Seine Fishery

Project Objectives:

- Work with the menhaden fishery to improve observer approaches for monitoring sea turtle interactions during fishing operations.
- Evaluate and test observer methodologies; implement a pilot monitoring program within the Gulf of Mexico menhaden purse seine fishery for sea turtle interactions.
- Recommend next steps to support efforts to reduce interactions in this fishery based on data collected.

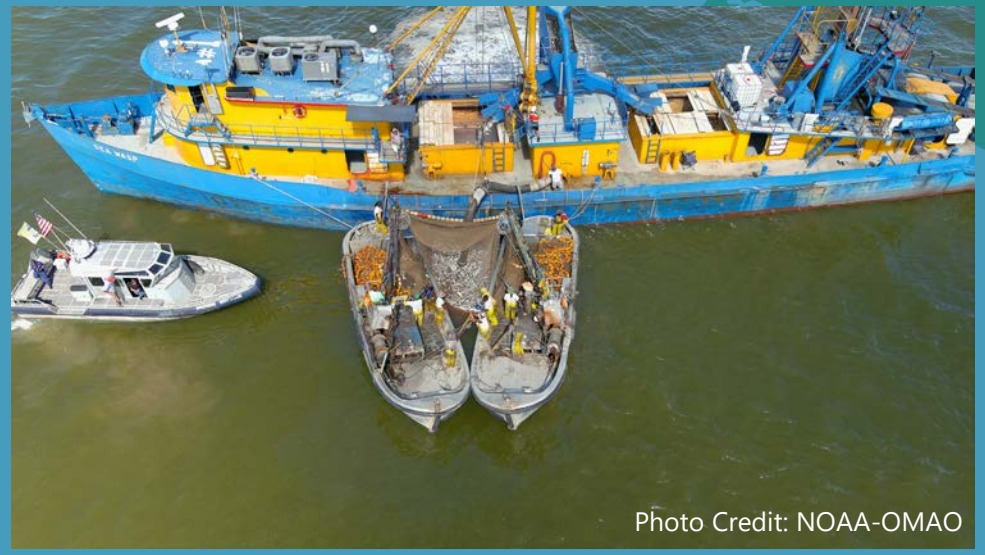


Photo Credit: NOAA-OMAO

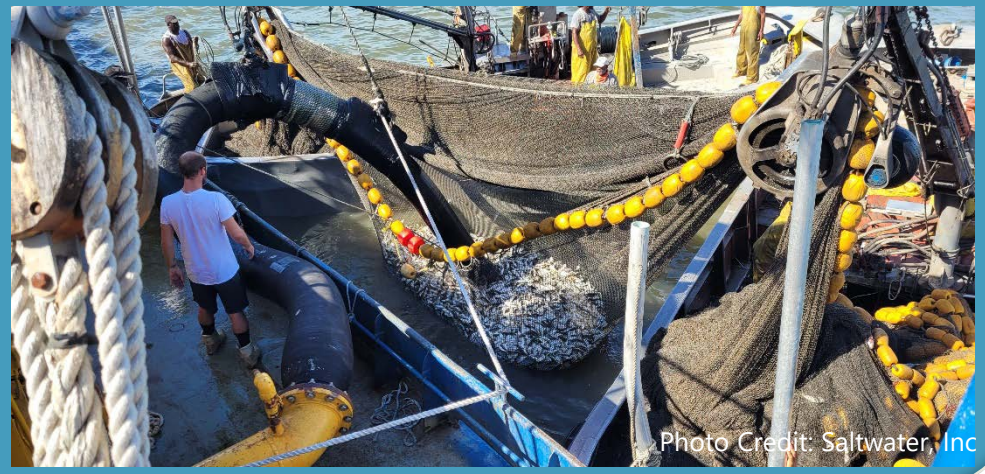


Photo Credit: Saltwater, Inc

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

Three Phases

- Planning and Industry Engagement
  - Project planning via a joint NOAA/Industry steering committee is ongoing
- Proof-of-Concept Testing
  - Completed the week of Oct. 11, 2021
- Pilot Observer Program
  - Targeted for next one or two fishing seasons (mid-April through November1, 2022 and 2023).

Partners and Stakeholders

- NOAA, menhaden fishing industry, Saltwater, Inc., and the public

Photo Credit: Saltwater, Inc

Photo Credit: NOAA-OMAO

Reducing Impacts to Cetaceans during Disasters by Improving Response Activities

- Project change: Disaster Response Coordinator to work with partners during responses, including coastal/BSE stocks.
- Disaster Response Working Group: May 2021
  - Conduct an area specific disaster response gap analysis, risk assessment, and develop protocols to improve response capacity.
  - 17 experts from various backgrounds
  - Next meeting in March 2022
- Experts will continue to be engaged to address focal area needs.

Credit: FWCC

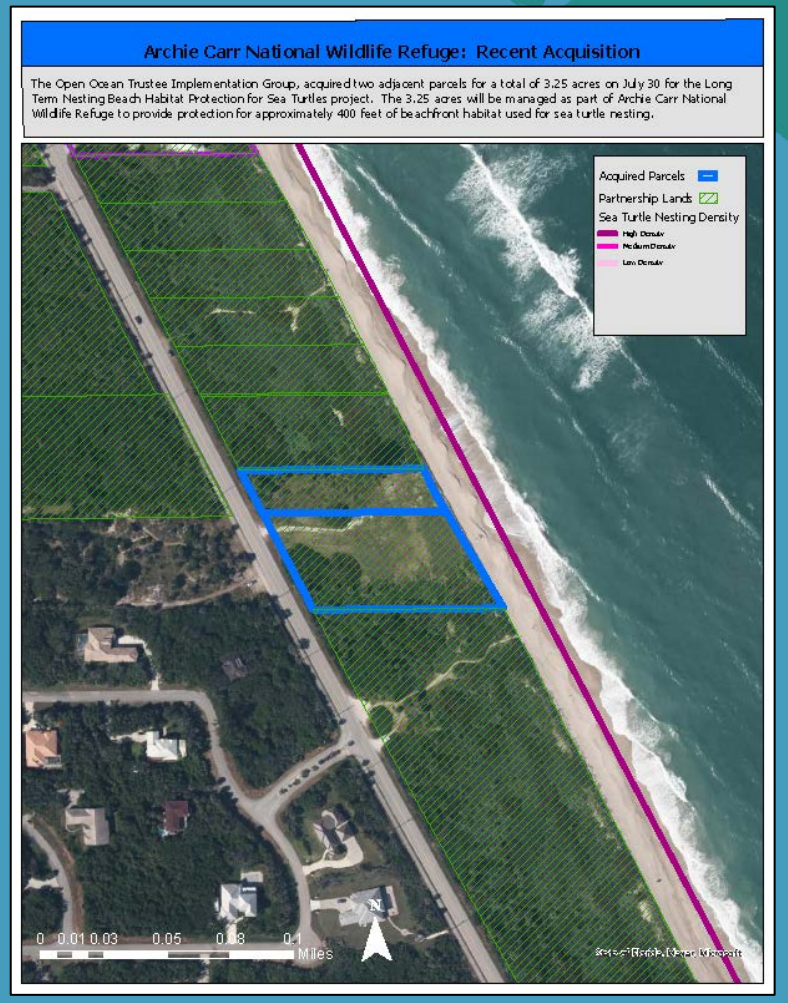
Studies to Improve Cetacean Disaster Response

- Data Gap 1 Study: Characterization of Risk Exposure during Cetacean Inhalation/ Aspiration in Surface Oil +/- Dispersant
- Phase 1a – Controlled setting
  - Dolphins being trained to breathe at station
  - John's Hopkins University built breath droplet analysis apparatus with high speed cameras to capture breathing events
- Phase 1b – laboratory setting
  - Beginning mid-2022
  - Construction of mimic blowhole apparatus for use in controlled oiled environment

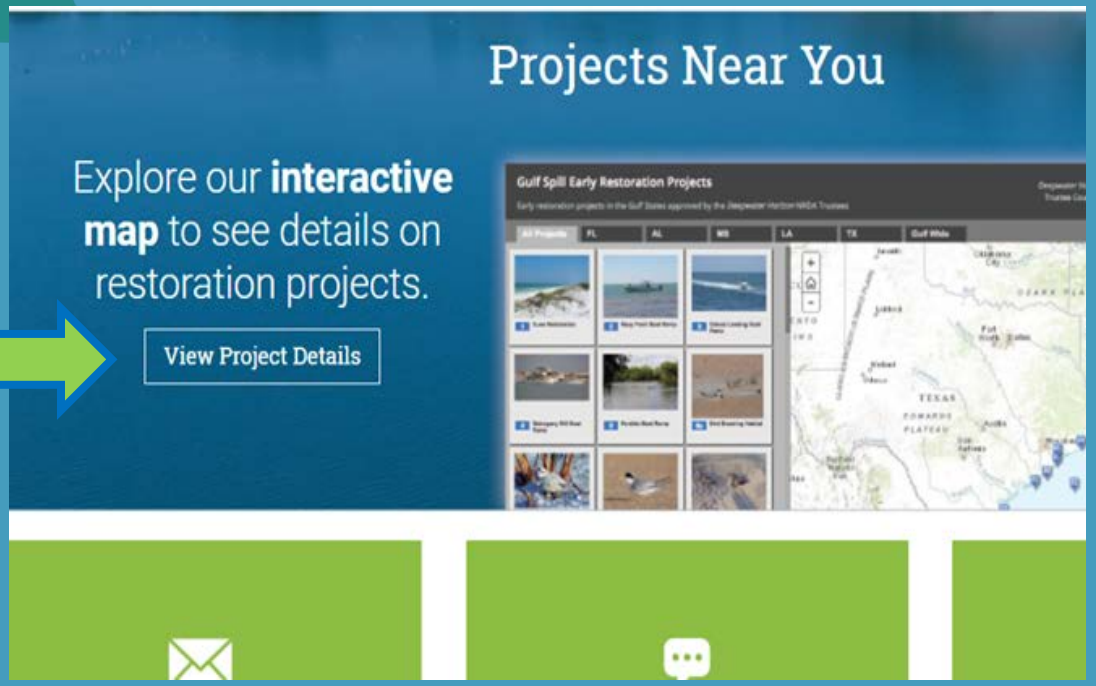
Open Ocean Partnerships

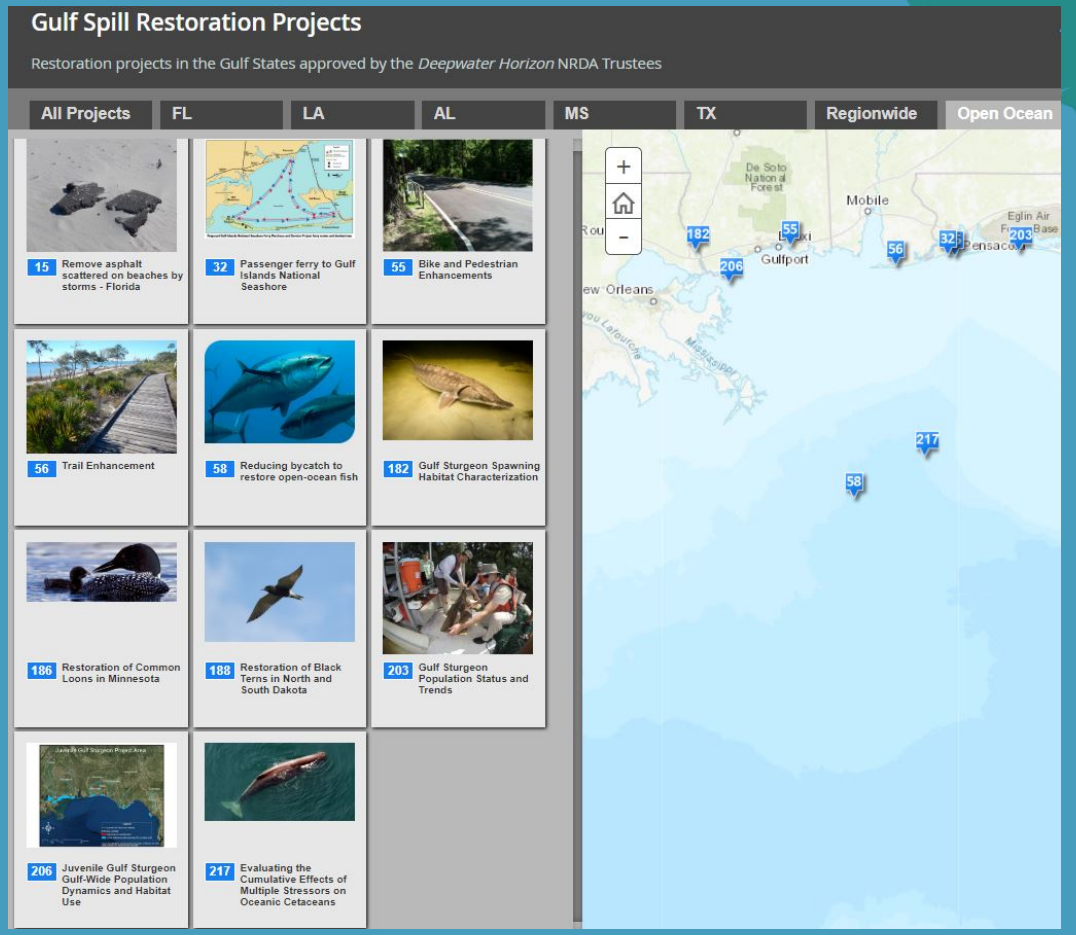
Long-term Nesting Beach Habitat Protection for Sea Turtles

- The U.S. Fish and Wildlife Service, in partnership with The Conservation Fund, completed an acquisition in July 2021.
- Parcel will be managed for sea turtle nesting habitat by the Archie Carr National Wildlife Refuge Partnership, which includes the Service, the State of Florida, as well as Indian River and Brevard Counties.
- This parcel includes approximately 400 feet of beachfront and helps protect approximately 2,050 linear feet of continuous beachfront nesting habitat.
- This project works alongside a Gulf Environmental Benefit Fund project in Florida.



How to Access Open Ocean Project Information





www.gulfspillrestoration.noaa.gov

Stay Connected to Open Ocean Restoration

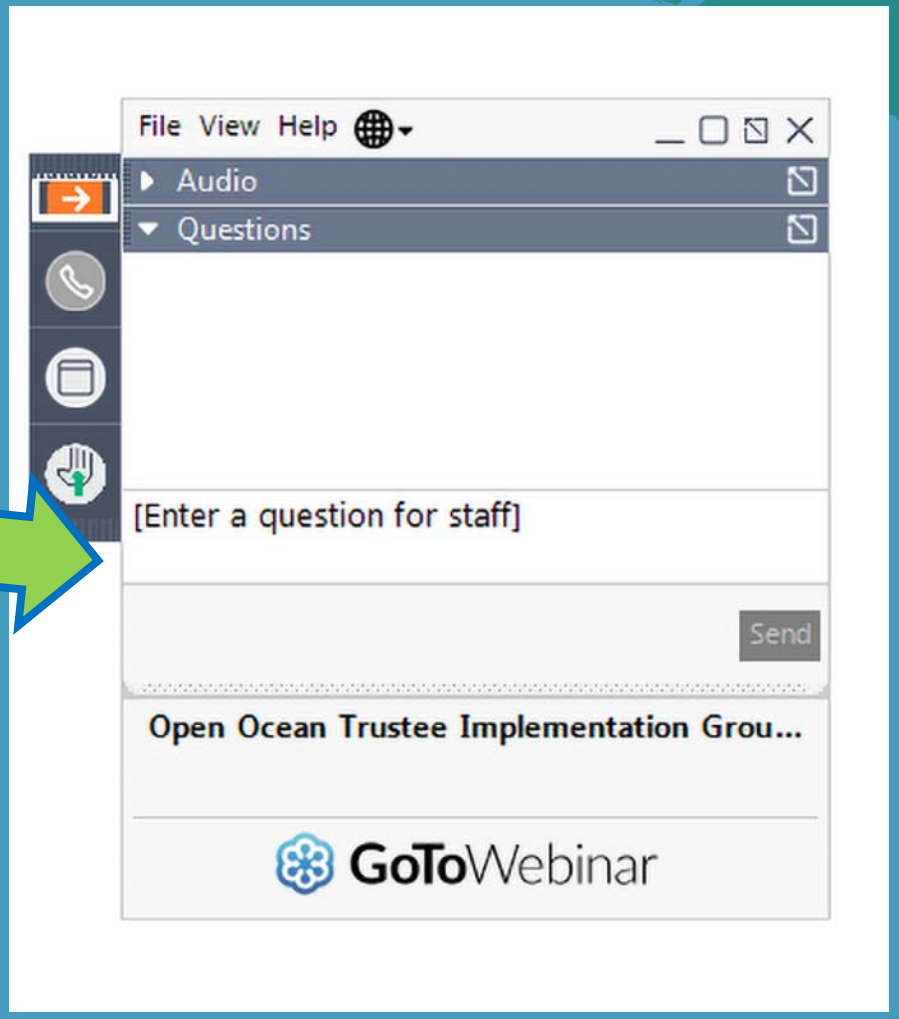
- Redesigned Open Ocean Restoration Area webpage.
- Find restoration news and information about Open Ocean planning and restoration projects.

www.gulfspillrestoration.noaa.gov/restoration-areas/open-ocean

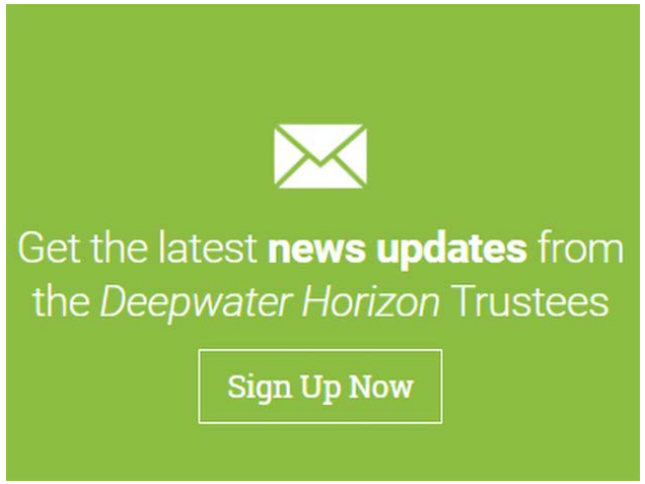
Questions?

Questions

- Please type your questions in the “Questions” box.
- We’ll do our best to get to as many as possible.
- Remember to take a look at the Open webpage linked in the chat.



Thank You



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