



**PENSACOLA
& PERDIDO BAYS
ESTUARY PROGRAM**

Technical Committee Meeting
November 12, 2024

Welcome our New Team Members!

Paige Lansky
Assistant Project Coordinator



Chloe Ray
Environmental Technician



Zach Schang
Project Coordinator



Honoring Casey Fulford



Committee Co-Chair Elections



Chair Responsibilities

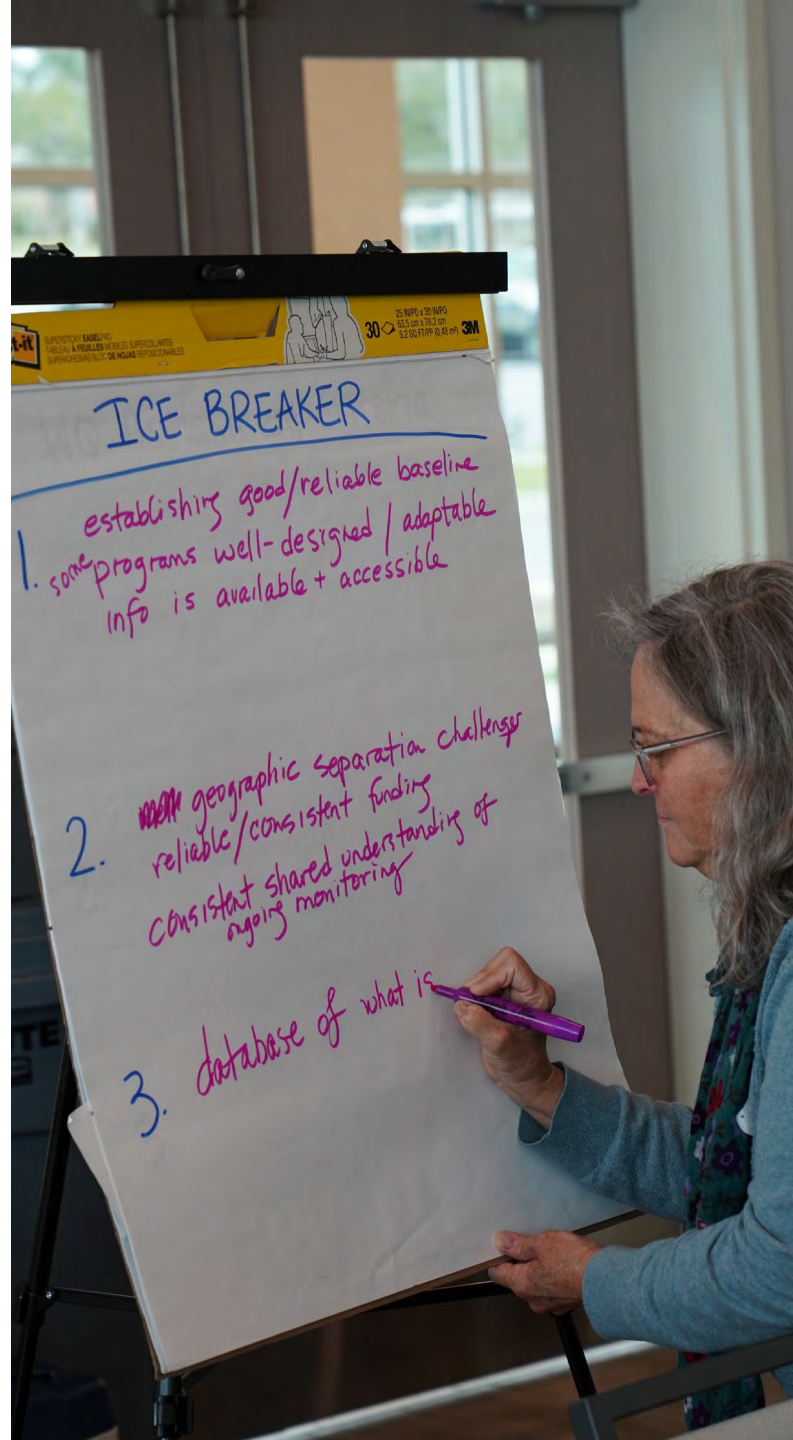
- Providing input on meeting agendas
- Assisting in leading quarterly meetings
(including a session at the spring Management Conference)
- Sharing committee updates at Board of Directors meetings
 - 6 regular meetings a year
- Serving as a reviewer for Community Grant applications
(unless submitting a proposal)



Comprehensive Monitoring Workshop

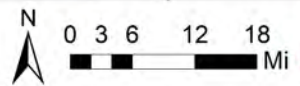
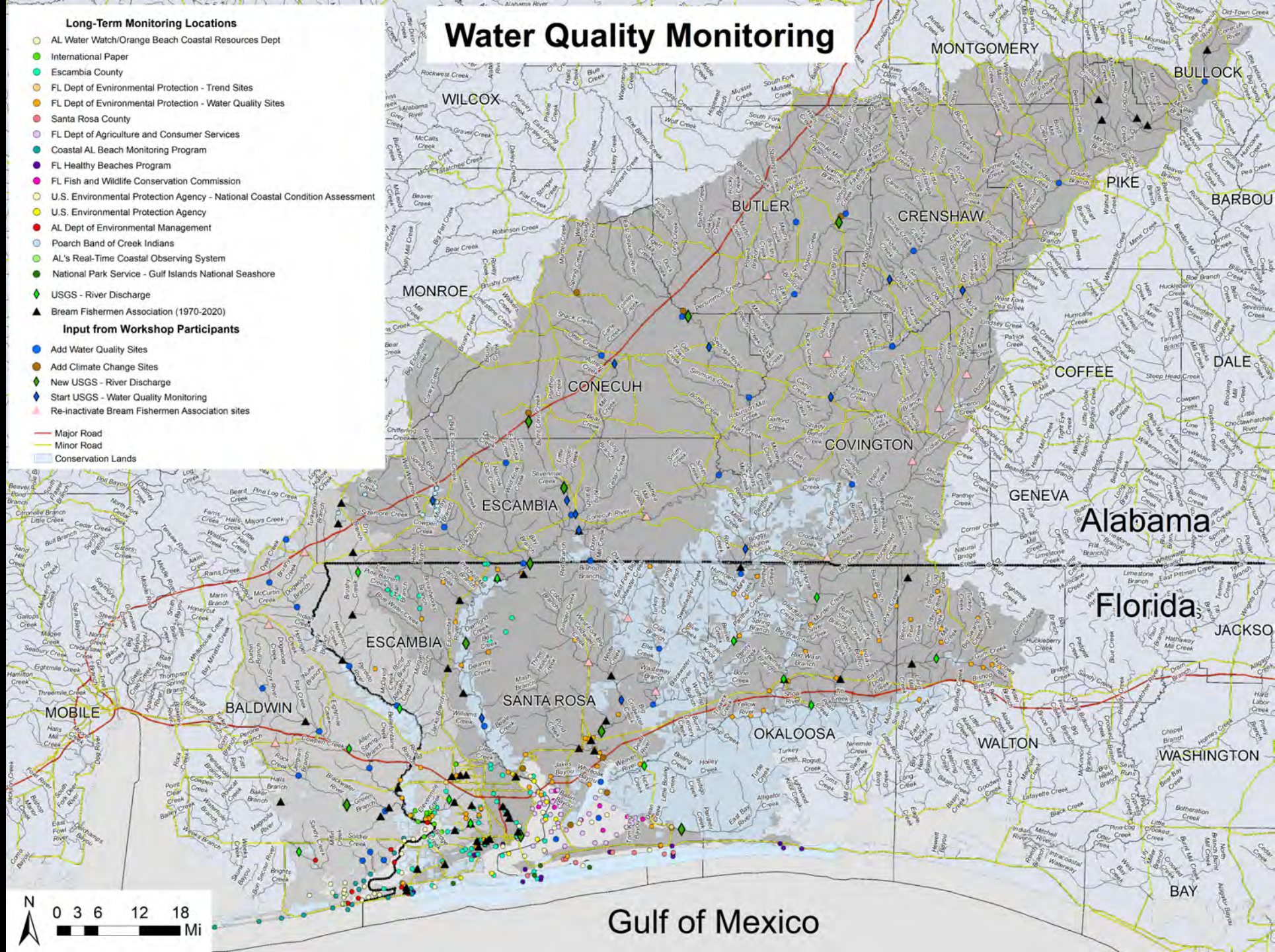
Over 60 participants from over 30 different organizations across Alabama and Florida





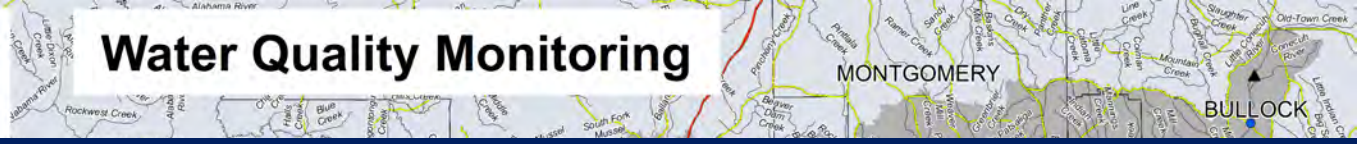
Water Quality Monitoring

- AL Water Watch/Orange Beach Coastal Resources Dept
 - International Paper
 - Escambia County
 - FL Dept of Environmental Protection - Trend Sites
 - FL Dept of Environmental Protection - Water Quality Sites
 - Santa Rosa County
 - FL Dept of Agriculture and Consumer Services
 - Coastal AL Beach Monitoring Program
 - FL Healthy Beaches Program
 - FL Fish and Wildlife Conservation Commission
 - U.S. Environmental Protection Agency - National Coastal Condition Assessment
 - U.S. Environmental Protection Agency
 - AL Dept of Environmental Management
 - Poarch Band of Creek Indians
 - AL's Real-Time Coastal Observing System
 - National Park Service - Gulf Islands National Seashore
 - ◆ USGS - River Discharge
 - ▲ Bream Fishermen Association (1970-2020)
- Input from Workshop Participants**
- Add Water Quality Sites
 - Add Climate Change Sites
 - ◆ New USGS - River Discharge
 - ◆ Start USGS - Water Quality Monitoring
 - ▲ Re-inactivate Bream Fishermen Association sites
- Major Road
— Minor Road
— Conservation Lands



Gulf of Mexico

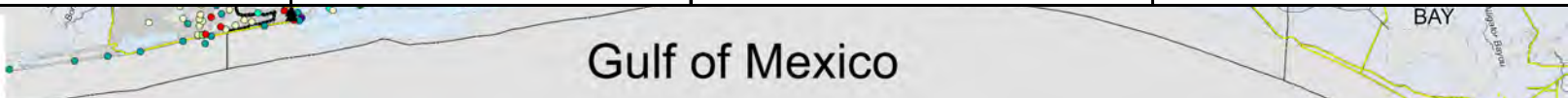
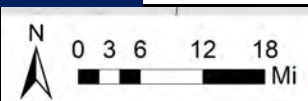
- Long-Term Monitoring Locations**
- AL Water Watch/Orange Beach Coastal Resources Dept
 - International Paper
 - Escambia County
 - FL Dept of Environmental Protection - Trend Sites



Water Quality Monitoring

Parameter Group

Priority	Water Quality	Sediment/Soils	Habitat	Fish and Wildlife
High	Dissolved Oxygen	Grain size	Seagrass acreage	Fish tissue contaminants - mercury
	Turbidity	Streambank erosion	Macroalgal presence/absence in seagrass beds	Fish tissue contaminants - metals other than mercury
	Water temperature	Benthic macroinvertebrates (abundance and composition)	Live oyster density/recruitment density	Fish tissue contaminants - PCBs and pesticides
	pH	Trace metals	Oyster reef areal dimension: total reef area	Fish tissue contaminants - lipids
	Conductance	Mercury	Oyster reef areal dimension: project footprint	Fish species composition
	Total Nitrogen	PAHs, PCBs, Pesticides	Oyster reef height	Diversity
	Total Phosphorus		Wetland acreage	Fish abundance
	Chlorophyll-a		Wetland vegetation composition	Total length
	Total Kjeldahl Nitrogen (TKN)		Shoreline accretion/erosion	Nekton
	Total Suspended Solids			
	Total depth			
	Ammonia			
	Nitrate-nitrite			
	<i>E. Coli</i>			
	Fecal Coliforms			
<i>Enterococcus</i>				
Streamflow				



NOAA RESTORE Science Program

Long Term Trends in the Gulf of Mexico

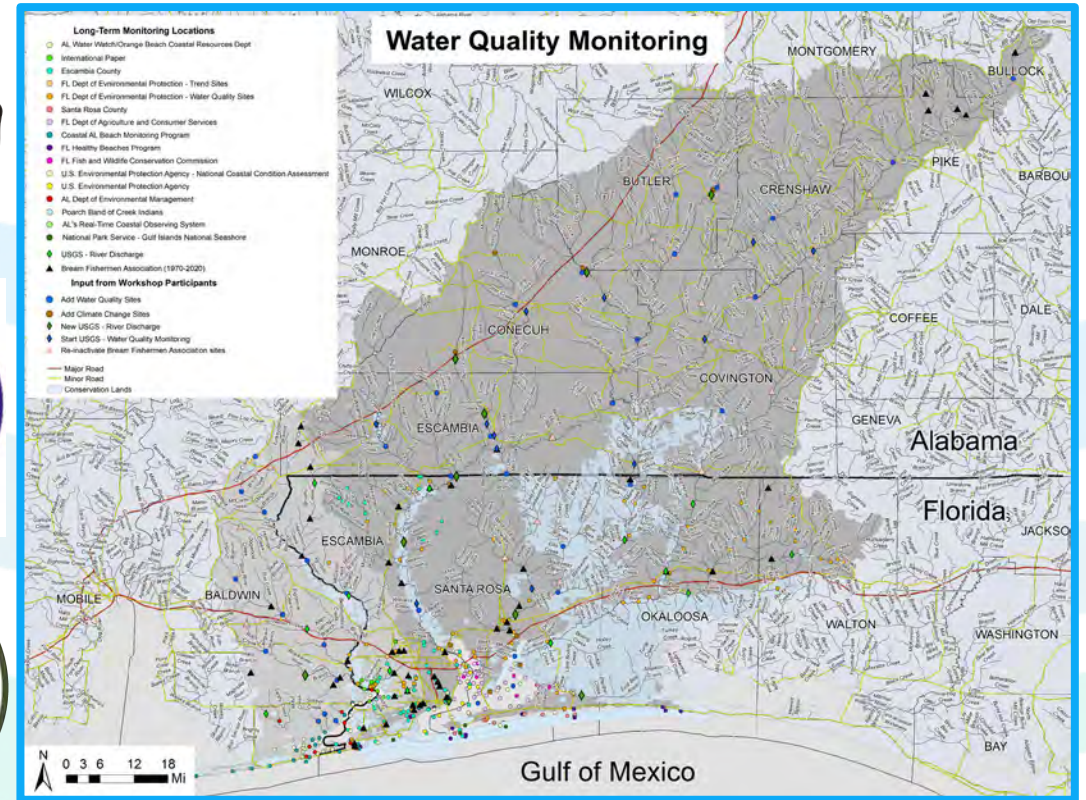
- Casting a Wider Net – Establishing a Long-term Fisheries Independent Monitoring Program to Inform Fisheries Management Data Gaps in NWFL Estuaries
- Requested: \$3.9M (2025-2030)
- **Strongly Encouraged** to submit proposal
 - 1 of 8 applicants (7%)
 - 112 LOIs submitted
 - Proposal submitted in August



EPA Gulf of Mexico Program

Understanding Water Quality Through Monitoring Activities

- Implement actions from Comprehensive Monitoring Workshop (Feb 2024)
- Harness partnerships to expand spatial and temporal coverage
- \$750K over 3 years
- Proposals due November 22
- Prioritized parameters of interest:
 - Physical (e.g., DO, pH, temp, etc.)
 - Nutrients (e.g., TN, TP, etc.)
 - Biological (e.g., bacteria, chl-a)



Gulf of Mexico Alliance

- GOMA expanding GOMOD to include publicly available data for EP and NERR estuaries
 - BIL 2 funded project
- Dashboard creation
- Webinar and discussion in December
- Workshop early 2025

Gulf of Mexico Open Data Platform

The GOMOD platform includes a comprehensive map of extent for priority habitats across the entire Gulf of Mexico, curated theme maps for key coastal and ocean management topics of interest to Gulf stakeholders, a data explorer where users can choose their own datasets of interest, and access to a suite of regional data tools developed by GOMA.

Theme Maps

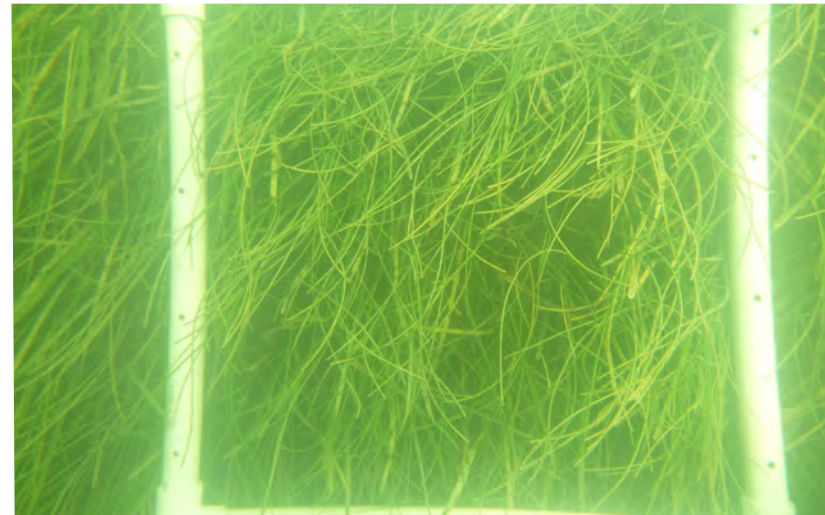
GOMOD theme maps represent key coastal and ocean management topics of interest to Gulf stakeholders. Each GOMOD theme map includes a curated collection of pre-selected data to discover and explore. Theme maps are not meant to be comprehensive and may not include all datasets on a particular topic.

- bathymetry
- community resilience
- offshore energy
- priority habitats
- living shoreline site suitability models
- restoration
- water quality
- regional sediment



Seagrass Monitoring

- Surveyed > 100 stations across Perdido and Pensacola Bay Systems
 - Urchins spotted in Santa Rosa Sound



Juvenile Fish Trawling Survey

➤ Annual survey completed in October



Living Shorelines Monitoring

- Quarterly monitoring at 10 sites across the Pensacola Bay System
- Continuing monitoring through 2025 – Q4 sampling next week!
- Collecting data on water quality, oysters, fauna, vegetation, soils, fish



Oyster Sub-Committee Meeting

- Partner presentations by:
 - T. Derbes – Farms for Aquaculture Research and Monitoring of Shellfish (FARMS)
 - Levi Blackmon (Santa Rosa County NRCS) – Sandy Hollow Gully Restoration Design
- Jacobs – Design lead for Pensacola Bay System Oyster Restoration Initiative
 - Overview of design process
 - Project schedule and engagements

Dressed to Impress on **Halloween!**



Co-Chairs Chris Verlinde (Santa Rosa County) and Thomas Derbes (UF/IFAS Sea Grant) re-elected!



Project Schedule



Paige Lansky

Living Shoreline Assistance and Oyster Shell Recycling Programs



PENSACOLA AND PERDIDO BAYS ESTUARY PROGRAM'S

EVENING FOR THE ESTUARIES

See photos on Flickr!

<https://flic.kr/s/aHBqjBTPC7>

Over \$28,000 Raised!

Save the Date: October 16, 2025

OCTOBER 17, 2024 AT 6:00 PM

COASTAL ARTS CENTER OF ORANGE BEACH

PLEASE JOIN US FOR AN EVENING OF LIVE MUSIC, DRINKS, HORS D'OEUVRES,
A SILENT AUCTION, AND GIVING BACK TO THE WATERS WE CALL HOME.

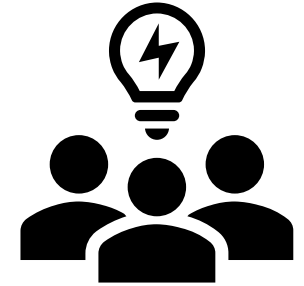
2025 Priorities

- PPBEP staff annual planning meeting in December!
- Data dashboard development
- 2025 State of the Bays report
- Research and monitoring
- Project development and design feedback
 - Perdido and Pensacola Infrastructure projects



2025 Partner Presentation Topics

- Drs. Jane Caffrey and Amanda Croteau (UWF)
 - Microbial Source Tracking – bacterial and water quality monitoring
- Gulf of Mexico Alliance projects
- Large-scale oyster restoration across the U.S.
- Floridatown Park Living Shoreline project update



Oyster Restoration Workshop



February 20-21, 2025

Day 1: February 20th | 11:00am - 4:00pm

**Lunch provided*

Day 2: February 21st | 9:00am - 12:00pm

**Coffee and pastries provided*



Bayview Community Center

2000 E. Lloyd St.

Pensacola, FL 32503



Help co-develop conceptual designs to shape the future of oyster restoration in Pensacola Bay!

Agenda and supporting materials will be sent several weeks prior to workshop.



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Jacobs



Around the Room/Announcements



The Perdido Watershed Initiative

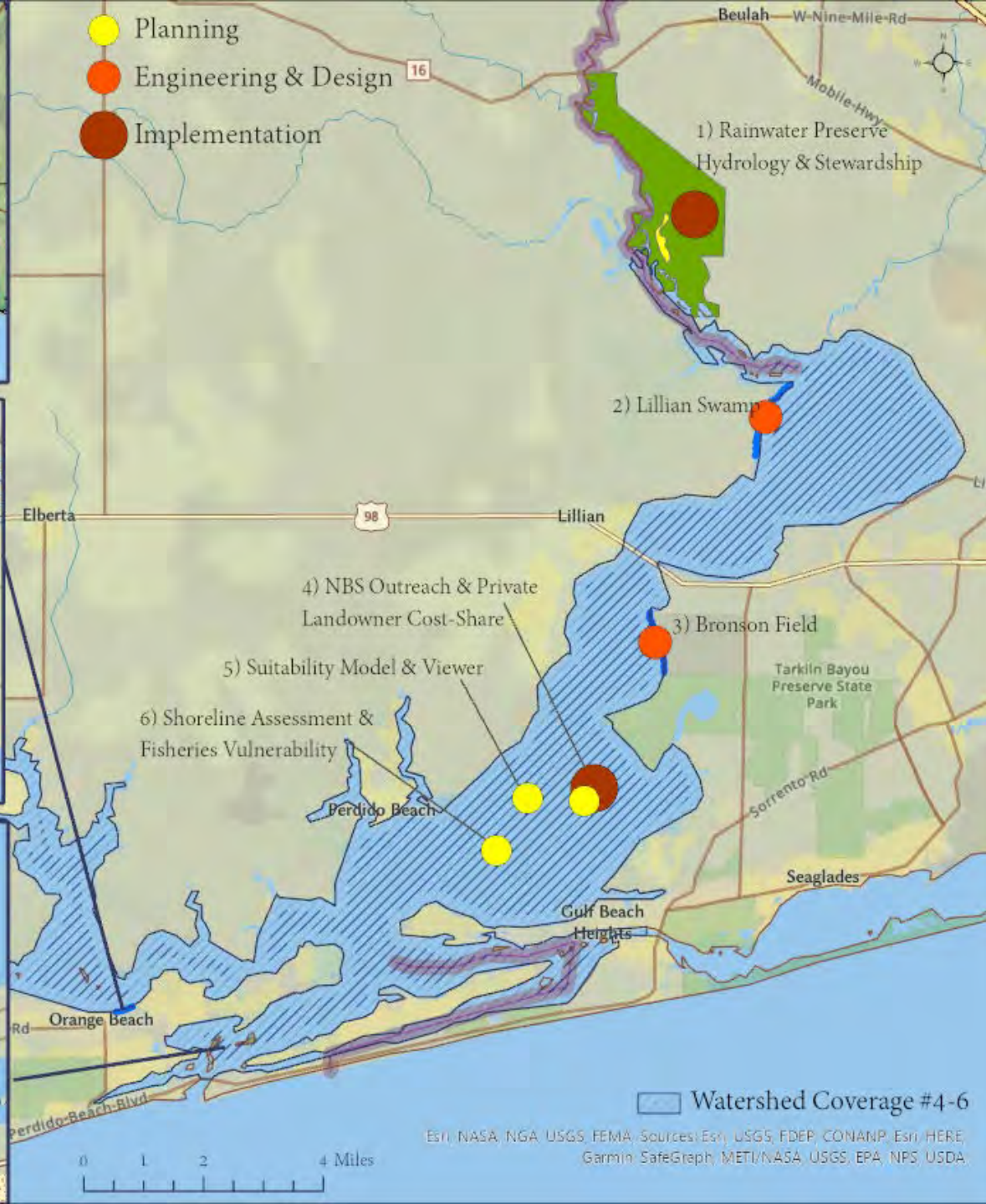
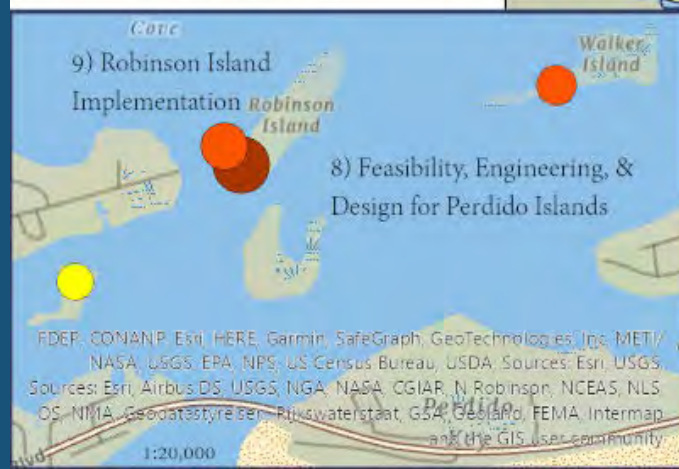
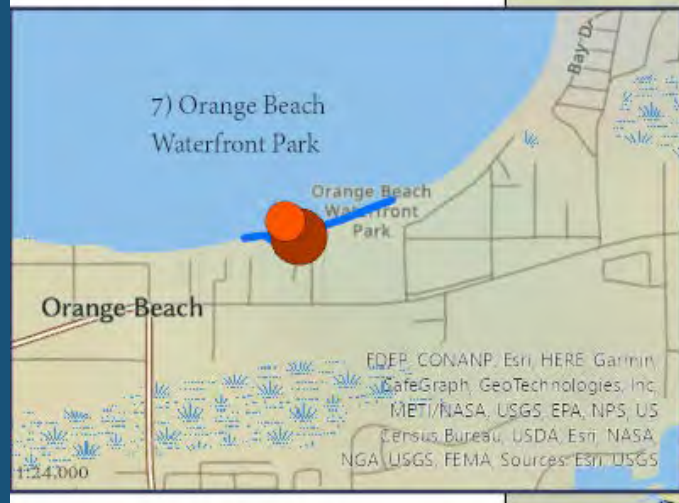
Integrating Innovative Approaches to Achieve Restoration at the Watershed Scale

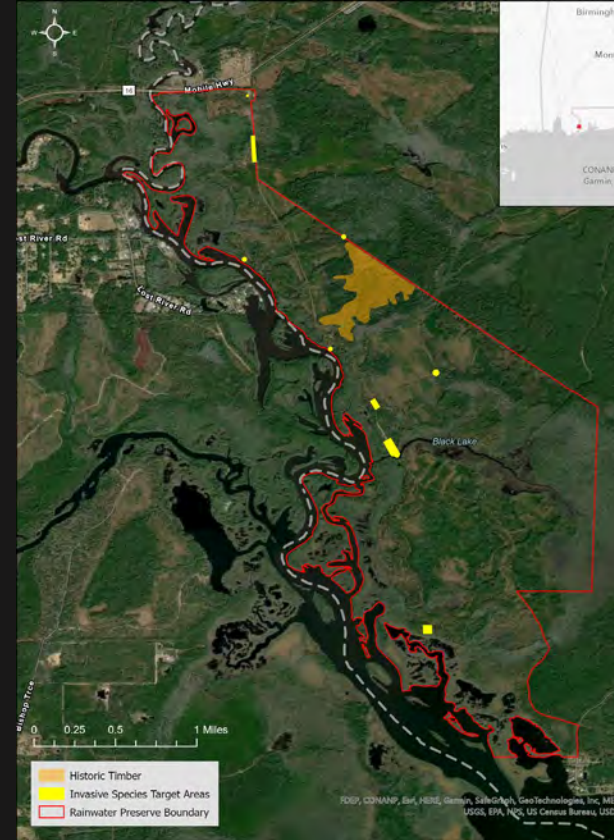
Katie Baltzer, TNC, Coastal Projects Manager

Kate Dawson, Moffatt & Nichol, Coastal Engineer and Project Manager

Perdido Watershed Initiative

- > \$12M NOAA Transformational Habitats (IIJA) funding
- 2023-2027
- Planning, E&D, & implementing shovel-ready projects





● Rainwater Preserve

TNC, Auburn

- Invasive species management
- Hydrologic restoration

● Lillian Swamp (AL)

TNC, ADCNR, MN



VEGETATED BARRIER ISLAND FEATURE

SCRUB SHRUB PLANTINGS
WOODY MATTRESS

MARSH MOUND FIELD

TIDAL CREEKS



- DAMPEN WAVE ENERGY
- ARREST EROSION AND PROMOTE ACCRETION
- ATTAIN DYNAMIC EQUILIBRIUM
- ENHANCE OVERALL PRODUCTIVITY OF ECOSYSTEM



DIAGRAMMATIC SECTION THROUGH FEATURE

● Bronson
Field (FL)
TNC, PPBEP, MN

UPGRADED KAYAK LAUNCH
↑

RE-USE MATERIALS

CELEBRATE THE
HISTORY OF SITE

CREATE SAFE ACCESS



HABITAT "GET-DOWN"

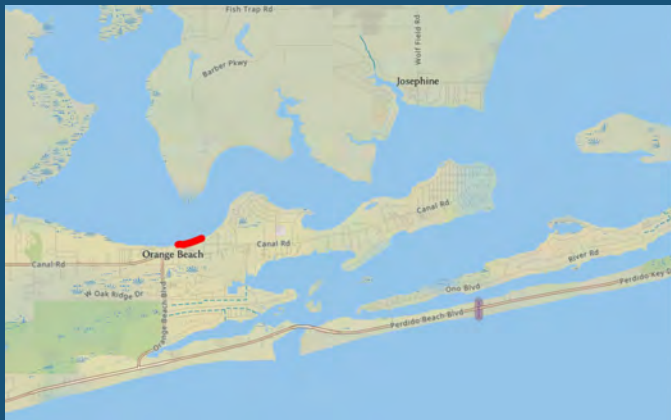
VIGNETTE OF COMBINED RECREATION
AND RESTORATION OPPORTUNITIES



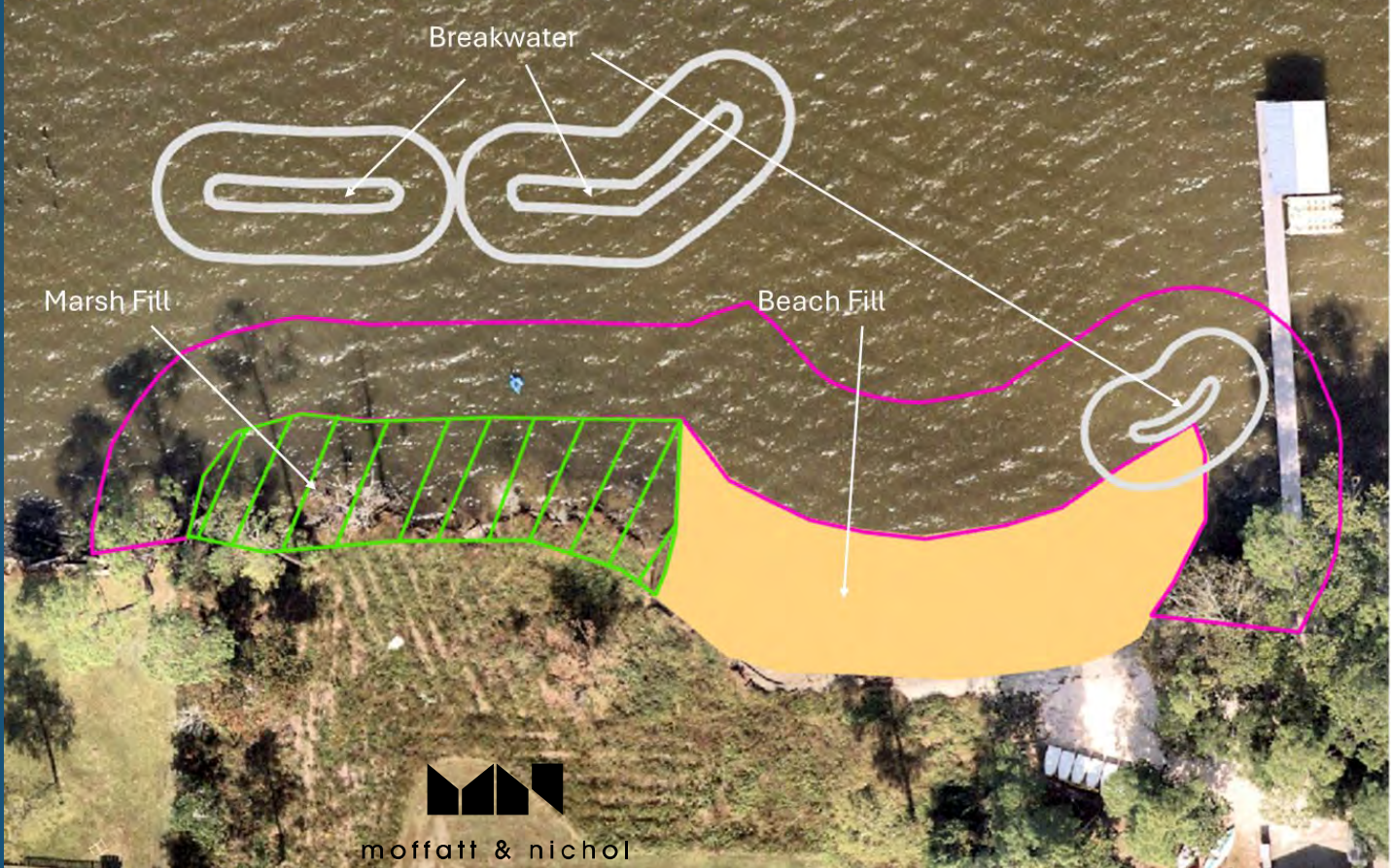
Waterfront Park

TNC, USA, Orange Beach, MN

- Partnership with USA graduate & undergraduate students
- Design shoreline protection and habitat enhancements



Beach Fill with Marsh and Breakwater (Recommended)

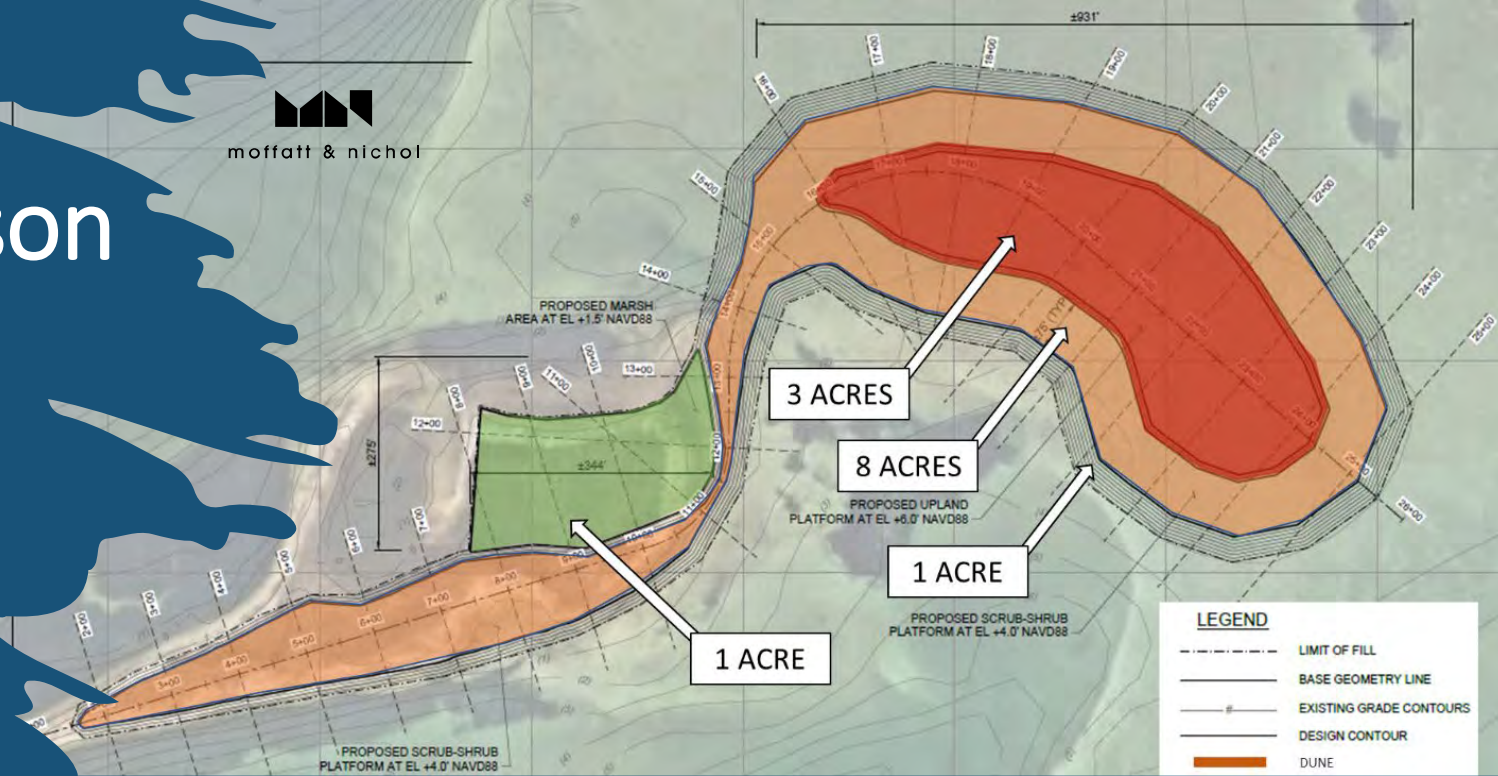


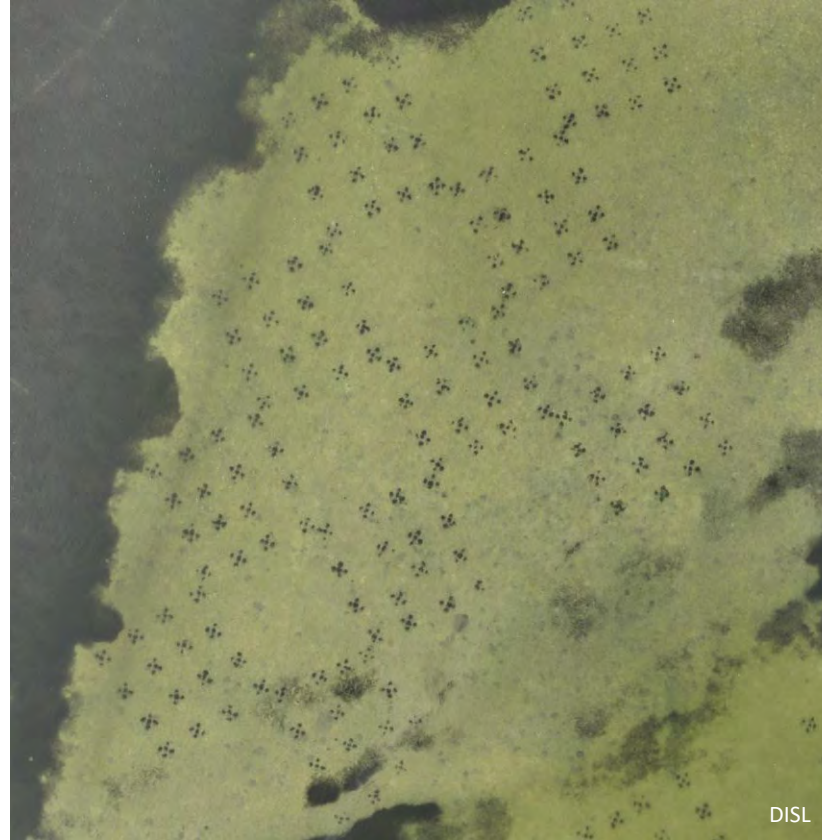
Restoration of Robinson & Walker Islands

TNC, USA, Orange Beach, MN

- IJA & NRDA funding
- Balancing humans and habitats
- Complex habitat types
- Construction in early 2025

moffatt & nichol





● Seagrass
Transplanting
TNC, CSA, DISL,
EVERYBODY!

- *Halodule wrightii*
- 4,640 sods
- 1.59 ac (exceeds 2:1 required mitigation ratio)
- >40 volunteers & staff

Partnerships



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moffatt & nichol



Thank you!

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