

A Case Study- Fowl River Watershed: Conserving A Way of Life for...



Mobile Bay National Estuary Program
Roberta Swann, Director

Clear Water Alabama, 2022

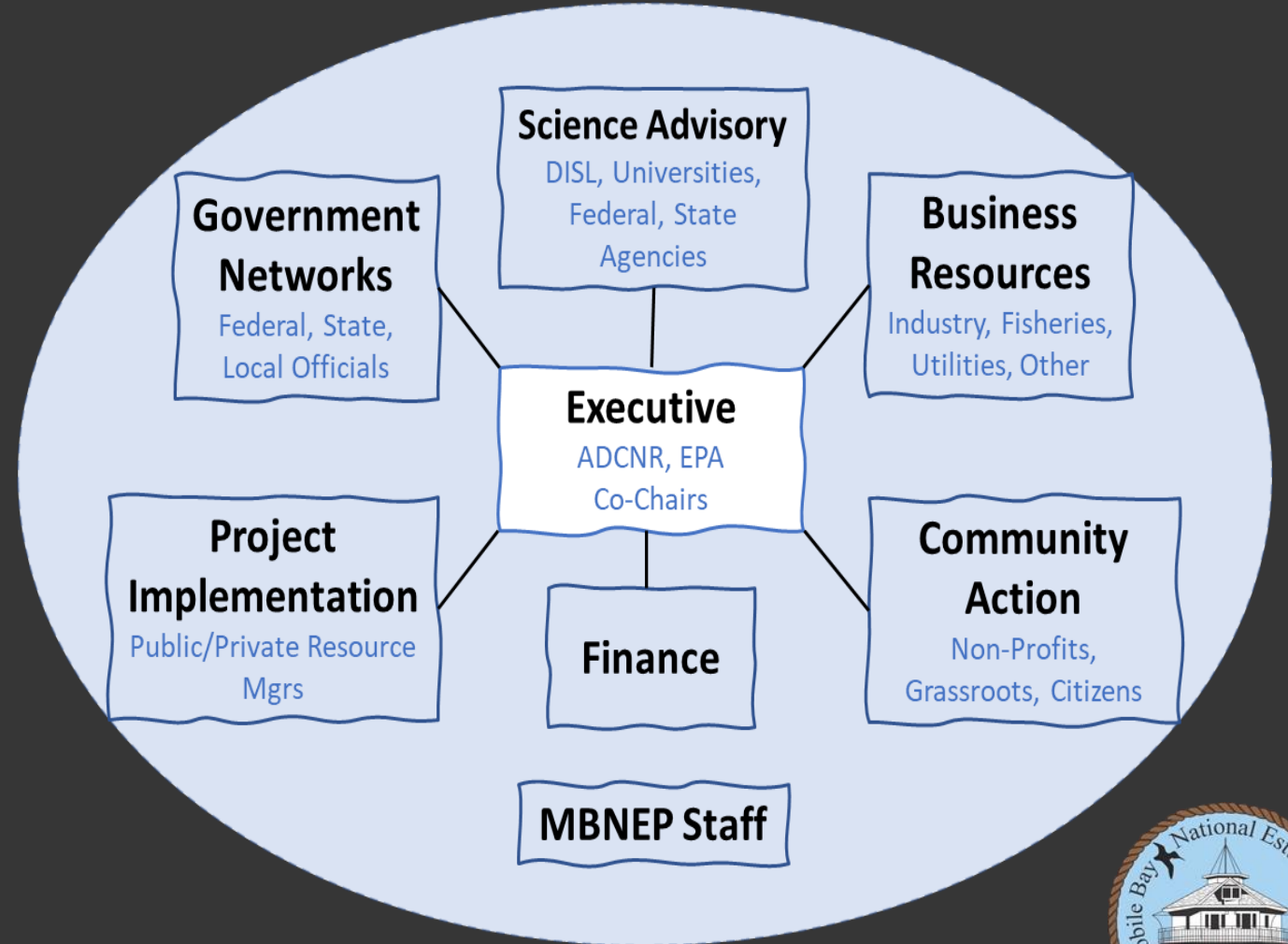
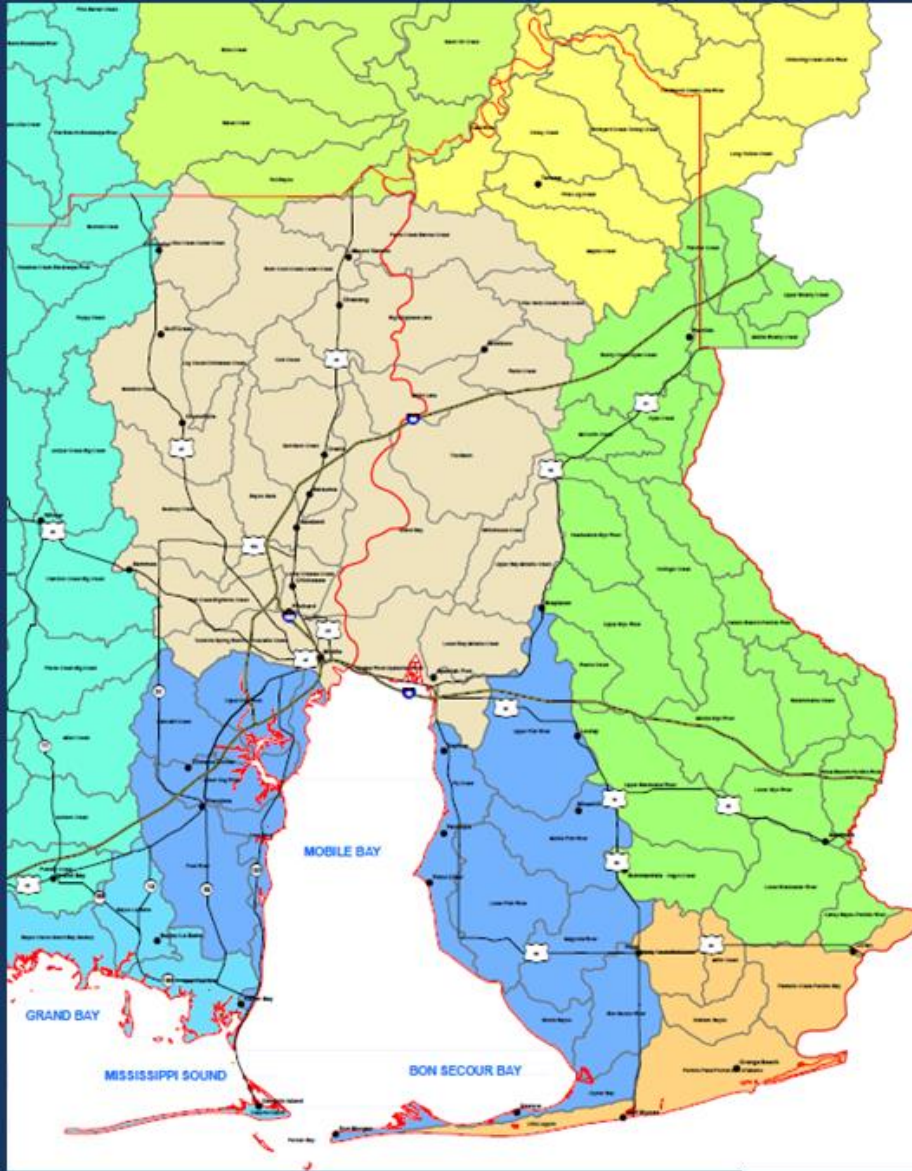


Critters

Crazies



MBNEP: Where we work, Who we are



MBNEP: How we achieve Collective Impact, Why?

Common Agenda

The vision for change

Shared Measurement

Data collection, interpretation

Mutually Reinforcing Activities

Coordinated Actions, partners

Continuous Communication

Consistent and open communication

Backbone Support

Coordination of efforts



Access to Water and Open Spaces



**Coastlines
(Beaches and Other Shorelines)**



Fish & Wildlife



Heritage and Culture



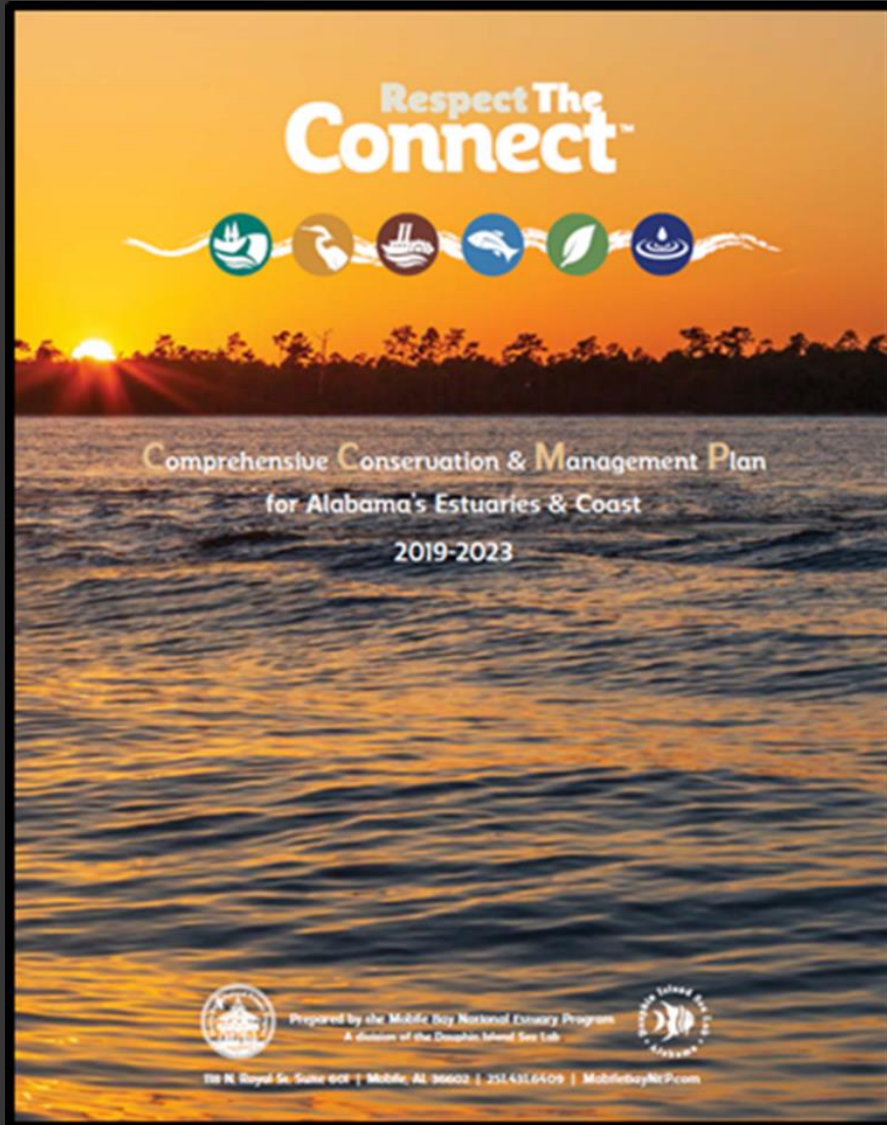
Environmental Health and Resilience



Water Quality



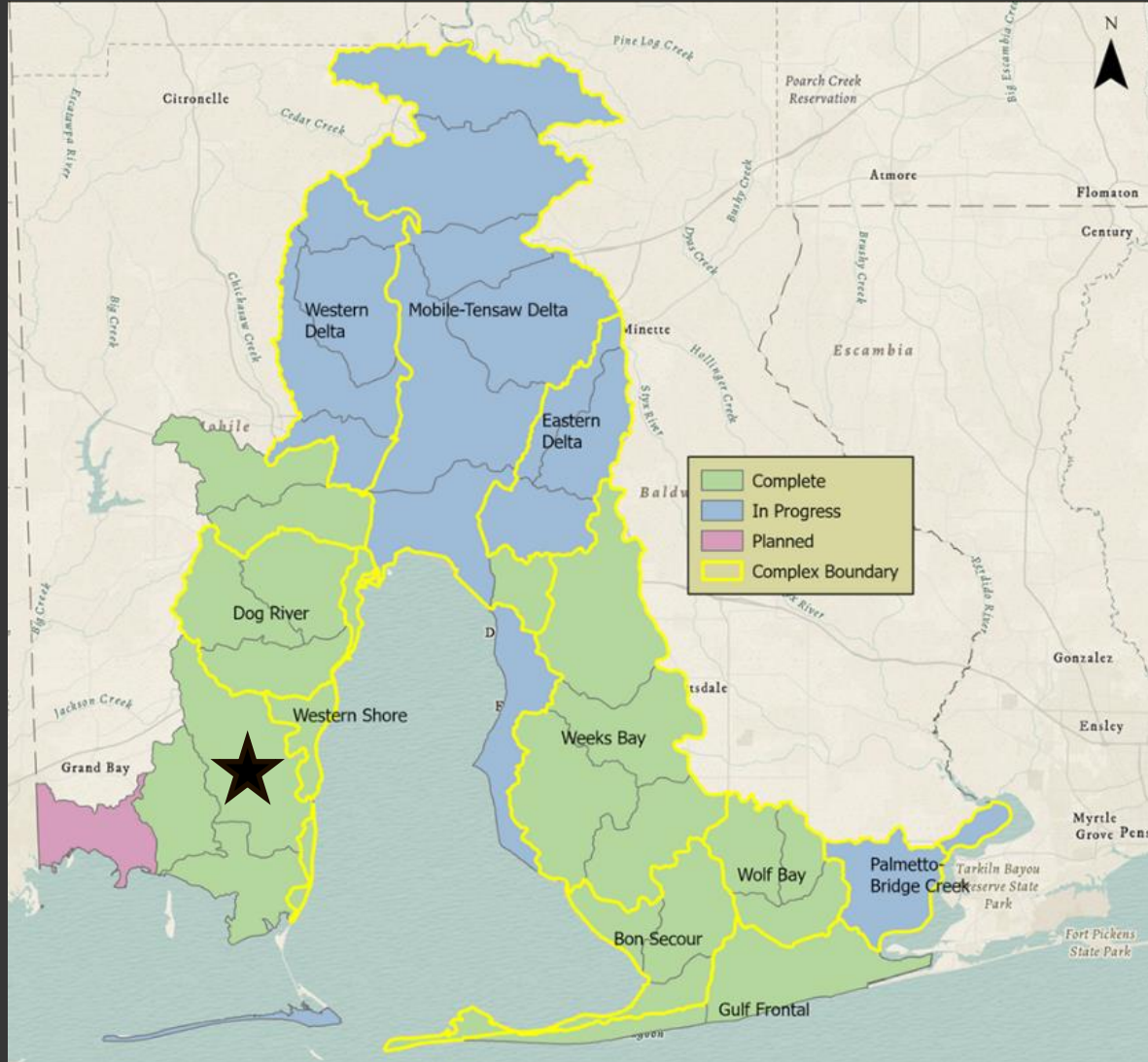
The Common Agenda



- Ecosystem Status and Trends
- Ecosystem Restoration and Protection
- Watershed Planning
- Community Capacity Building
- Education and Citizen Involvement



Watershed Planning Goals



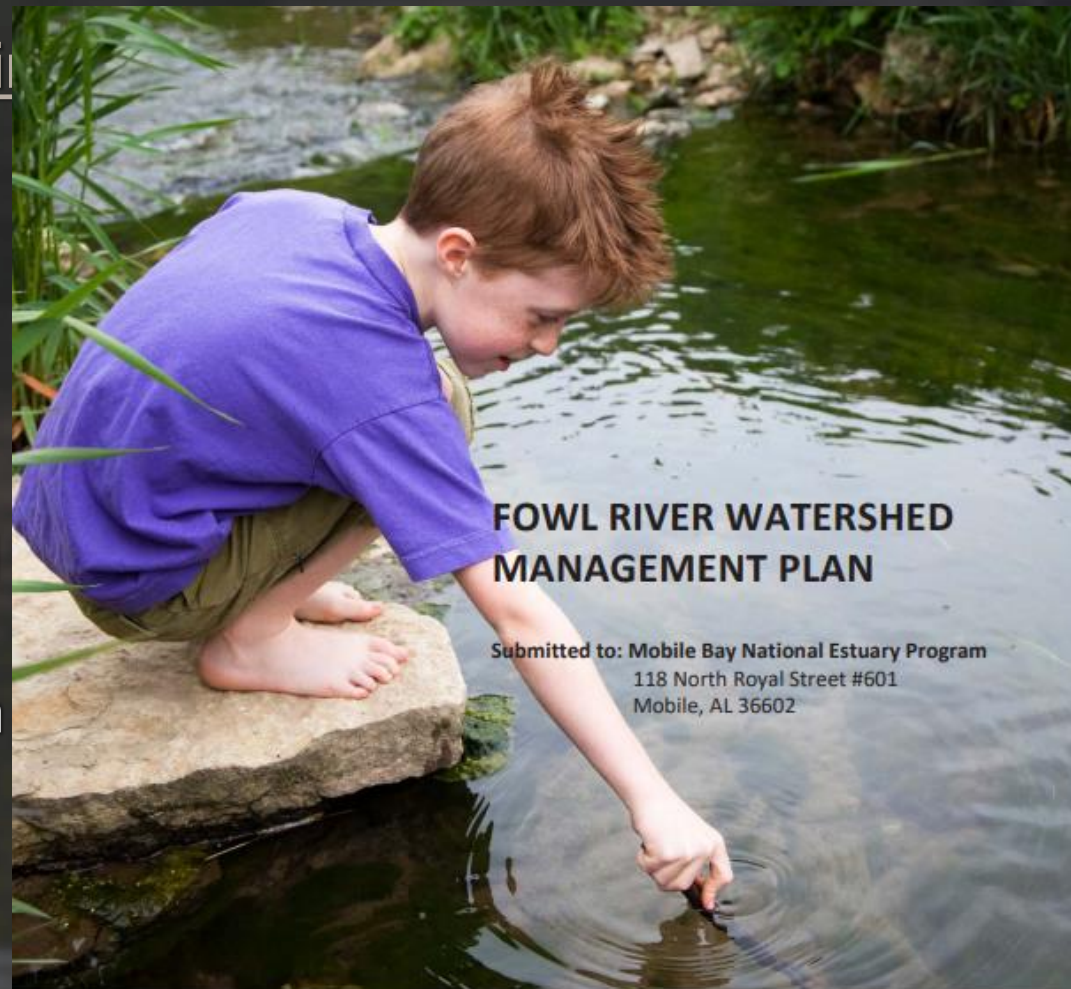
- Water Quality
- Habitats
- Customary Uses
- Community Resilience
- Access

98 individual watersheds, 48 tidally influenced



Watershed Planning

Johnnie Adams
Kelley Barfoot
Richard Becker
Jack Boatman
Casi Callaway
Comm. Jerry Carl
Richard Craig
David & Elizabeth
Julius Foster
Frank Gardner
Ken Granger
Gene & Rose Gra
Steve Green
Rob Harris
Ted Henken



FOWL RIVER WATERSHED MANAGEMENT PLAN

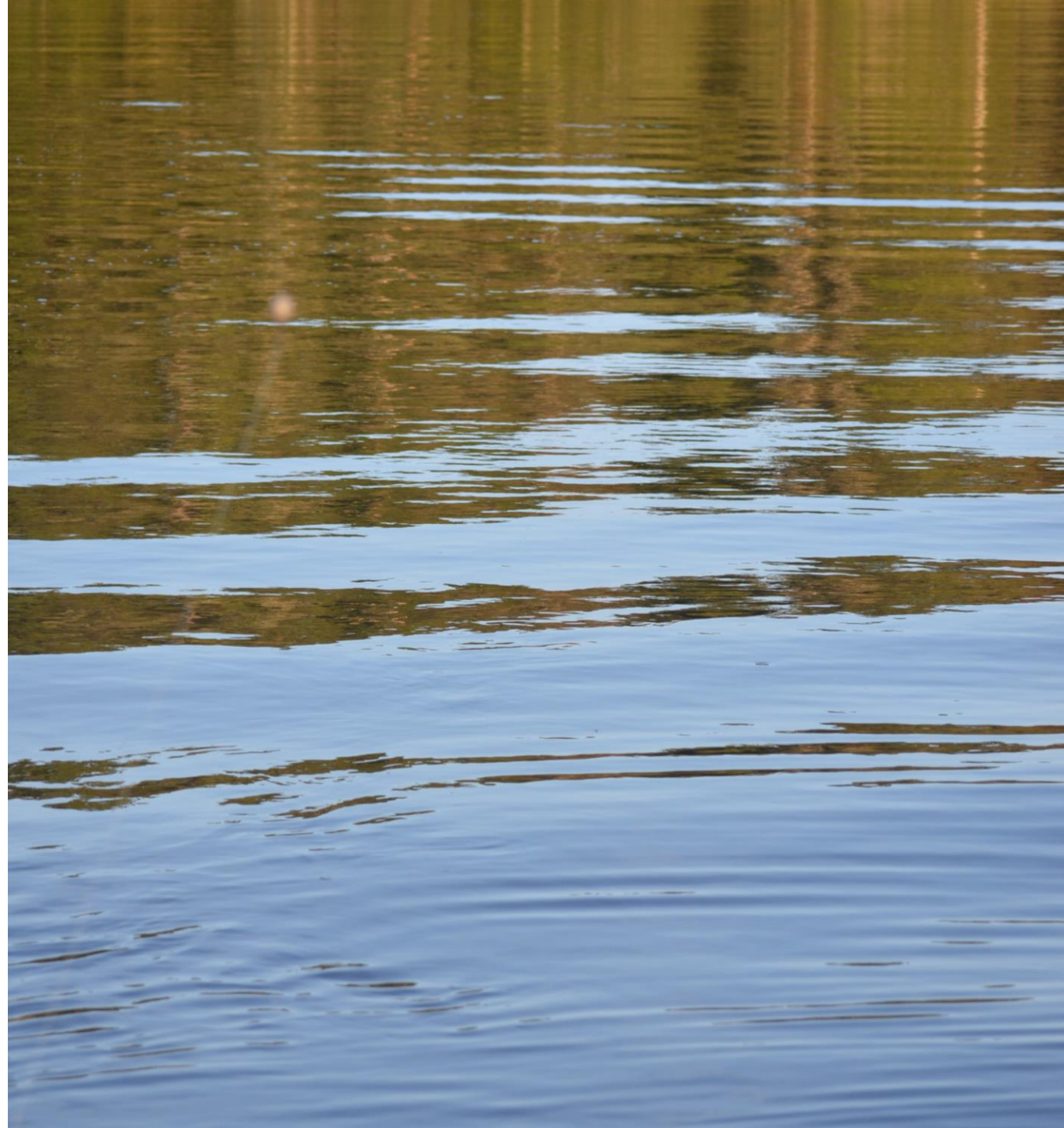
Submitted to: Mobile Bay National Estuary Program
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Mobile, AL 36602



Jon Porthouse
Ray Richardson
Ronald Rowell
Rep. David
Sessions
Randy Shaneyfelt
Sam St. John
Judy Stout
Roberta Swann
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Oliver Washington
Harold White
Bill Withers
Jenni Zimlich

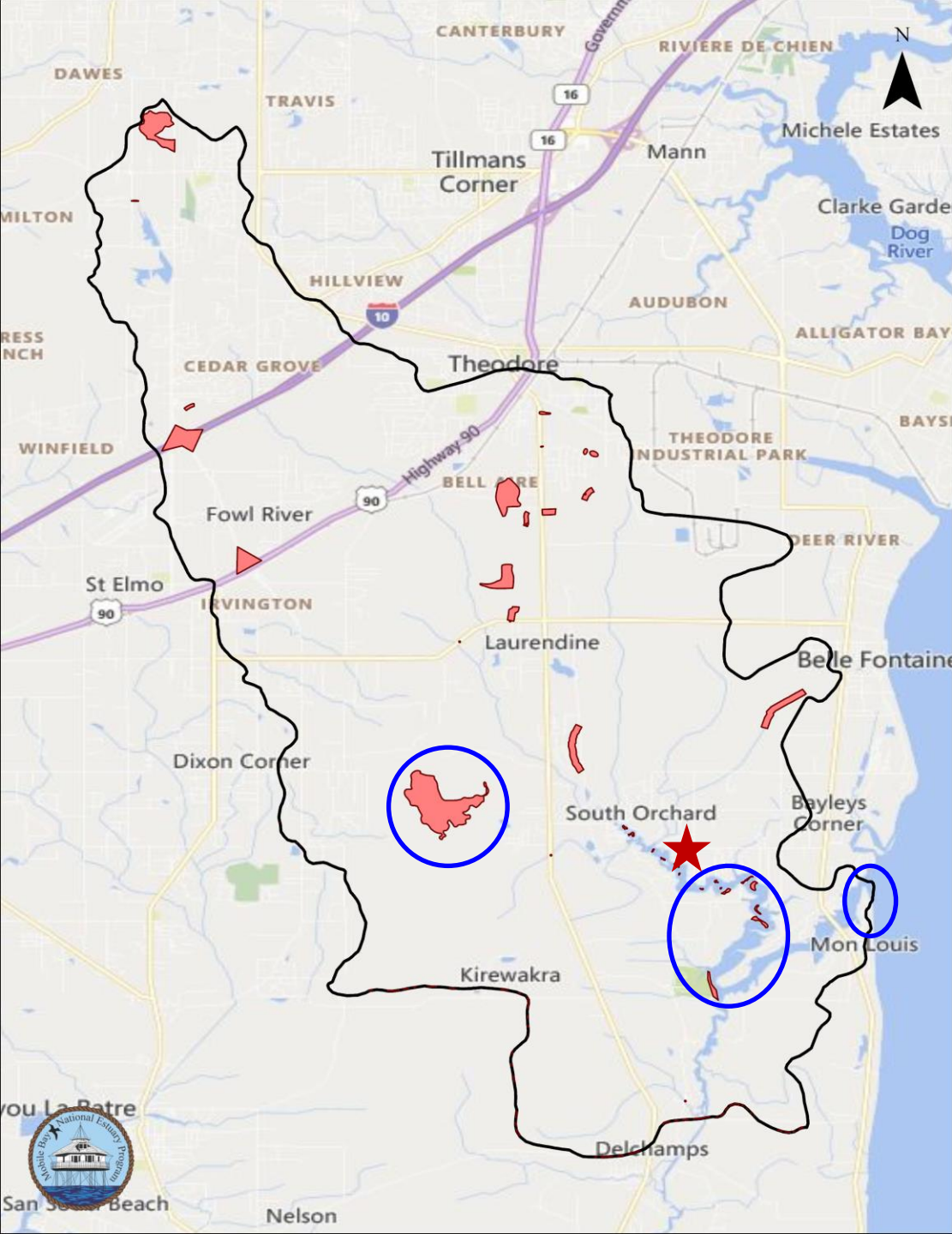
Fowl River Watershed Plan Goals

- **Improve habitats** for fish, shellfish, wildlife, and community resilience (*Critters and Crazyies*)
- **Maintain water quality** for fish, shellfish, wildlife, and traditional uses (*Critters and Crazyies*)
- **Expand opportunities for community stewardship** and access to the water
(*to see Critters and for Crazyies*)



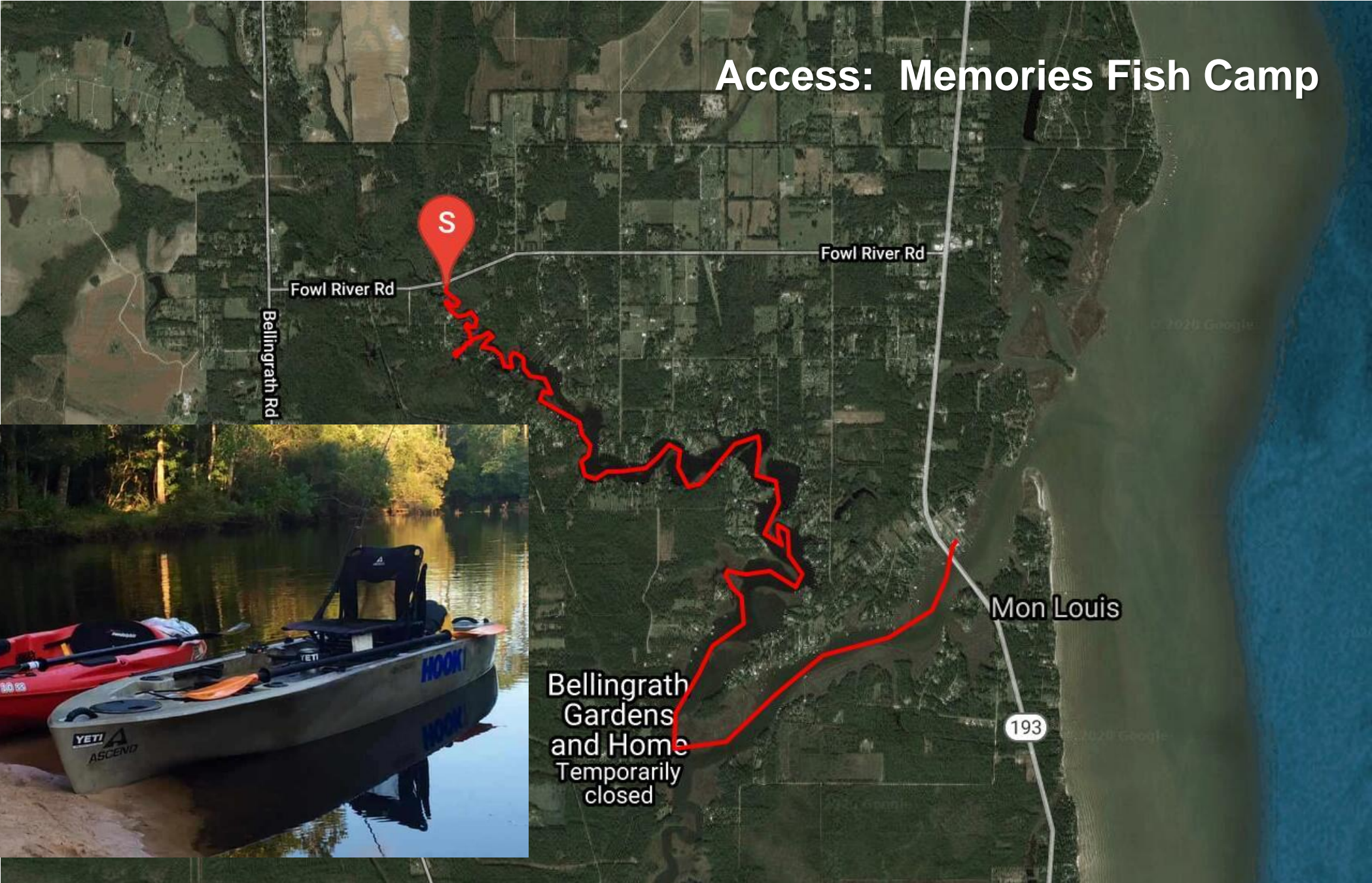
Fowl River Watershed Plan Objectives: Overall Status

Area	Action	In Progress
<i>Access</i>	Create one public access point	X
<i>Access</i>	Develop a boater education on Wakes, hazards	
<i>Fish and Wildlife</i>	Restore 13,500 linear feet of stream/riparian buffer	
<i>Resilience</i>	Stabilize 22,000 linear feet of shoreline	X
<i>Resilience</i>	Protect/enhance 35 acres of salt marsh	X
<i>Resilience</i>	Create one recycling drop off location	
<i>Water Quality</i>	Restore/enhance 500 acres of freshwater wetlands	X
<i>Water Quality</i>	Install agricultural best management practices	X
<i>Water Quality</i>	Improve stormwater mgt. subdivision regulations	
<i>Water Quality</i>	Reduce litter along roadsides by 75%	X
<i>Water Quality</i>	Create/sustain 10 volunteer water quality monitoring sites	X



1. Memories Fish Camp Access
2. Fowl River Spits Stabilization/Marsh Enhancement
3. Mon Louis Island Tip Stabilization/Marsh Creation
4. Cannon Property Wetlands Restoration
5. Trash Blows
6. Volunteer Water Quality Monitoring
7. The Future: Environmental Monitoring

Access: Memories Fish Camp



Bellingrath
Gardens
and Home
Temporarily
closed

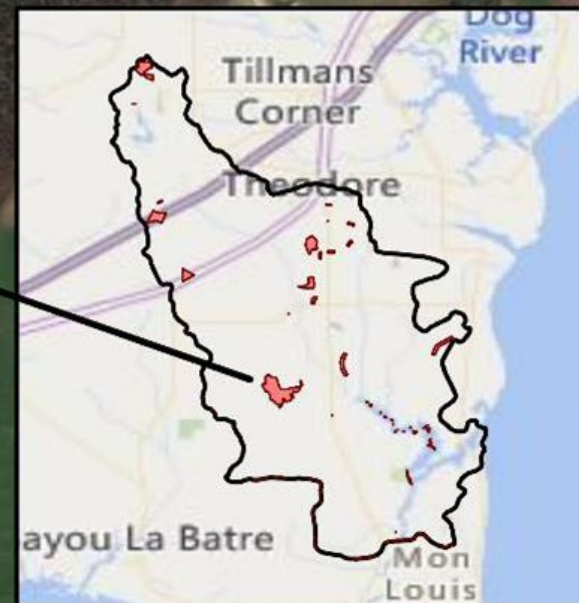
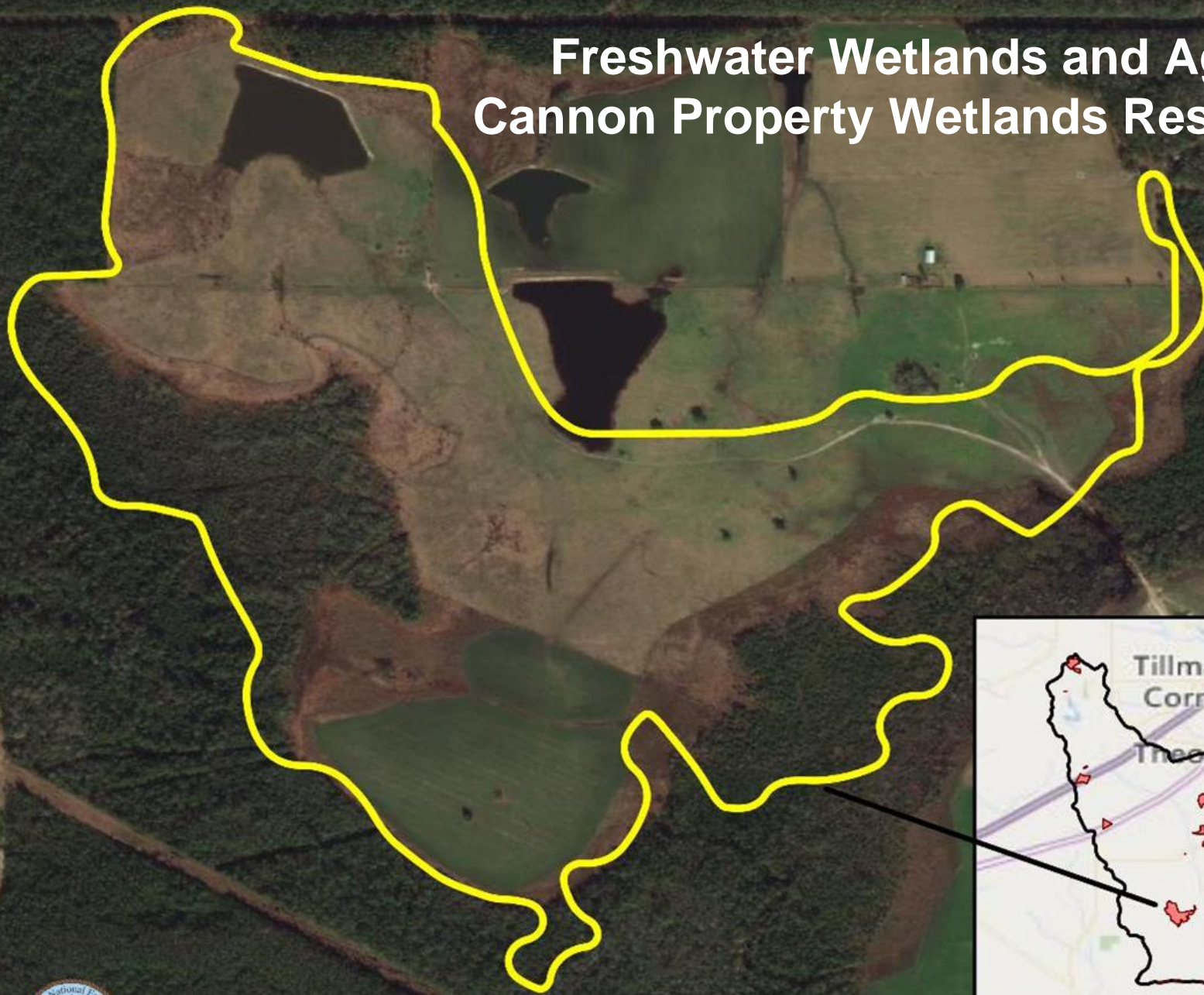


**Shorelines and Marsh:
Fowl River Spits**

Shorelines and Marsh: Mon Louis Island Tip



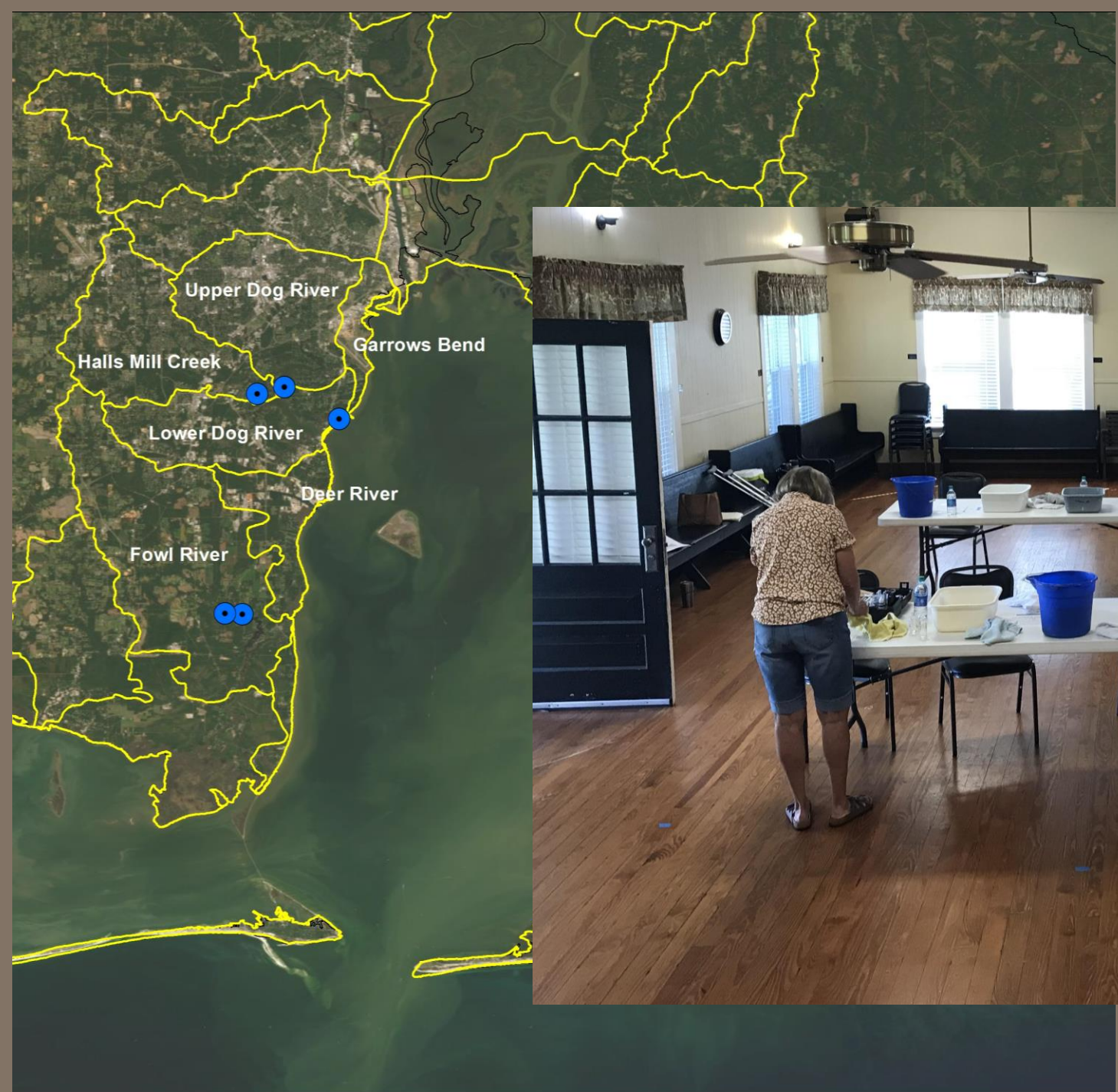
Freshwater Wetlands and Ag BMPs: Cannon Property Wetlands Restoration





Reduce Litter: Coastal Clean Up and Trash Blows

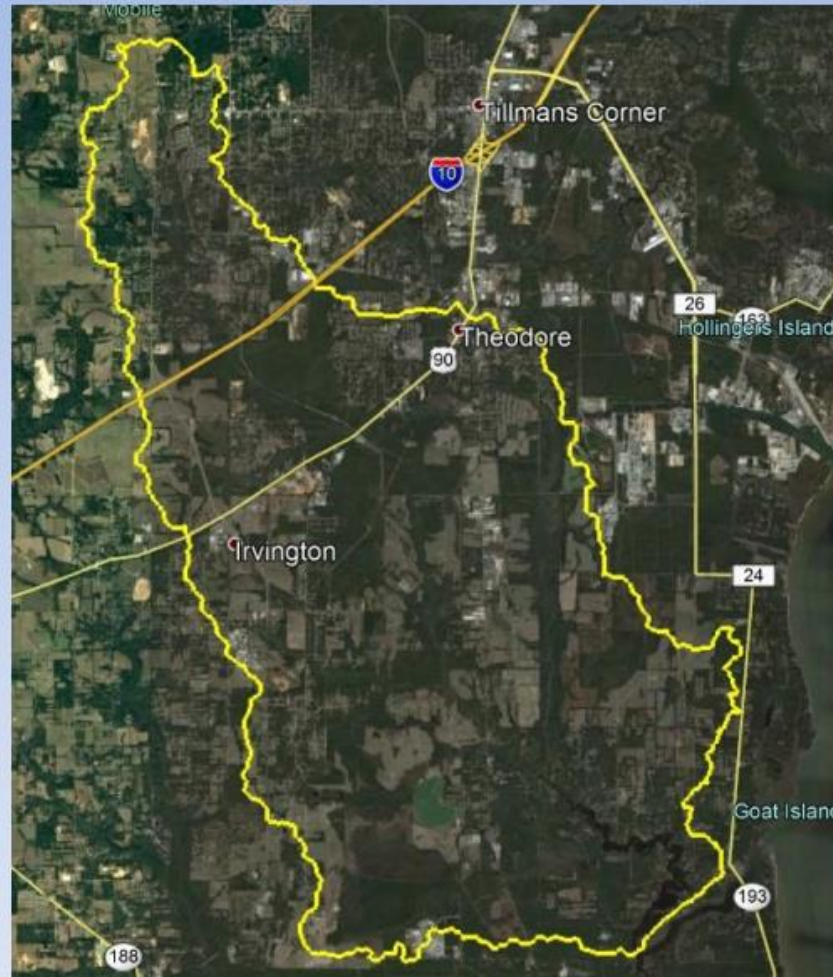
Volunteer Water Quality/Rainfall Monitoring



Hydrologic
Modeling:

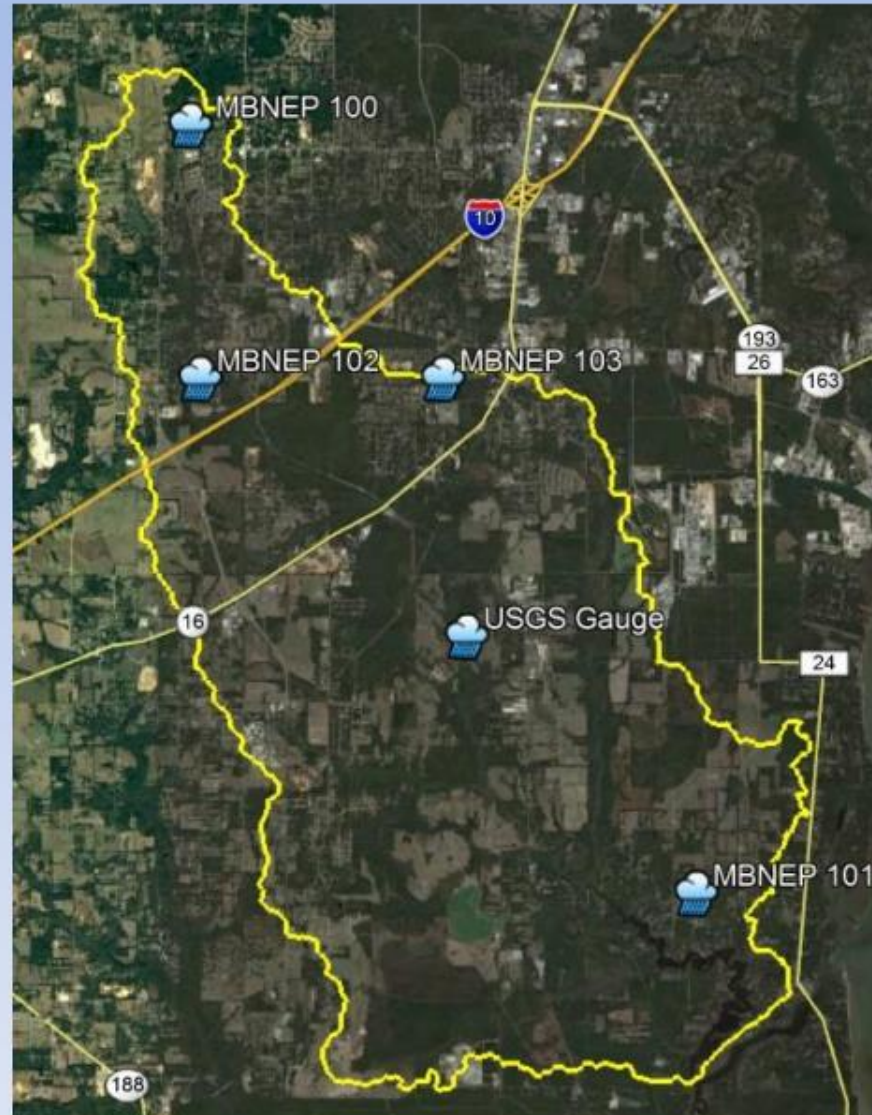
Another Tool in the
toolbox

Fowl River Watershed Study



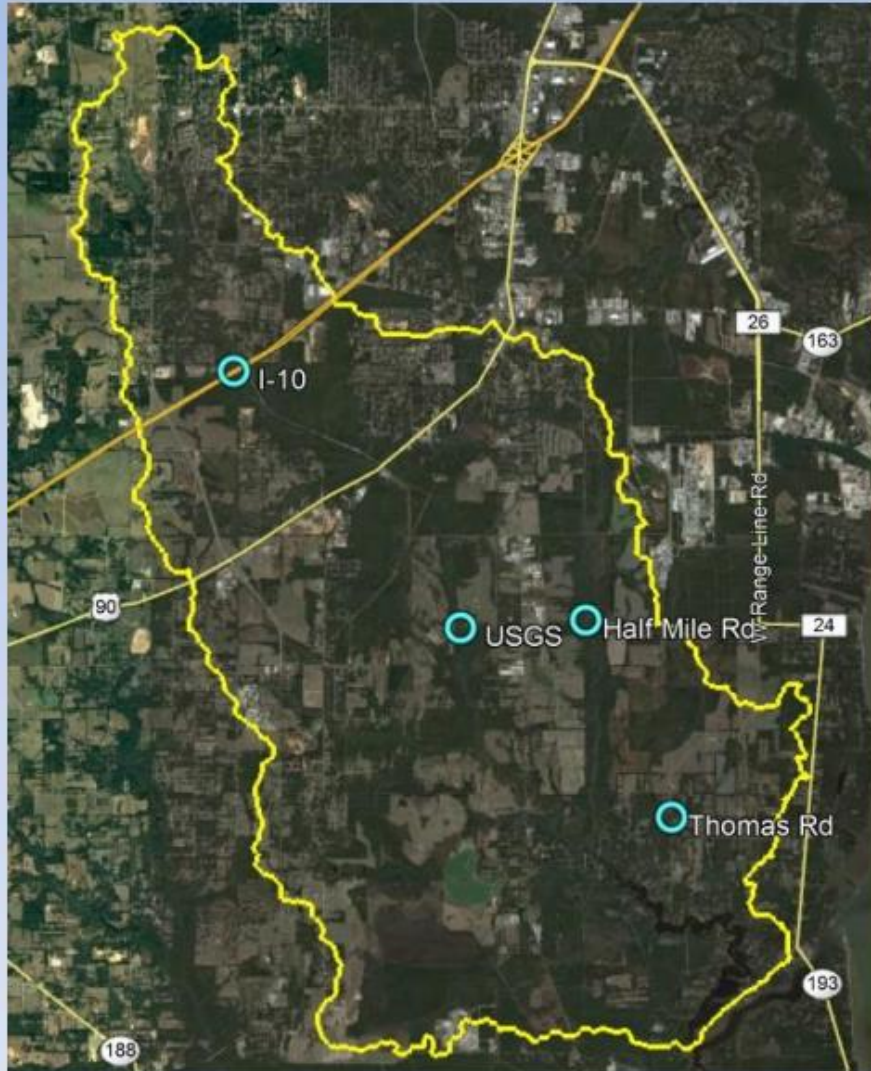
- Funded by NFWF-GEBF
- Fowl River Watershed Restoration
- Watershed model developed to inform restoration and stormwater management

Weather Station Locations



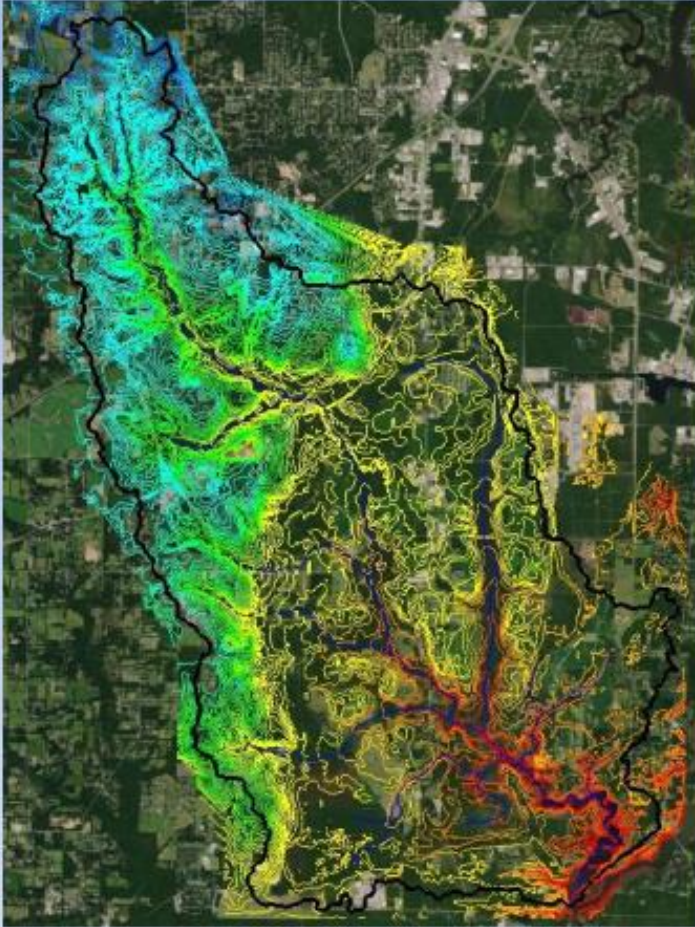
- Installed four (4) Davis Instruments Vantage Pro 2 Precision Weather Stations
- 1 USGS Gauge
- Collected rainfall, wind speed, humidity, temperature, and pressure

Stream Gauge Locations

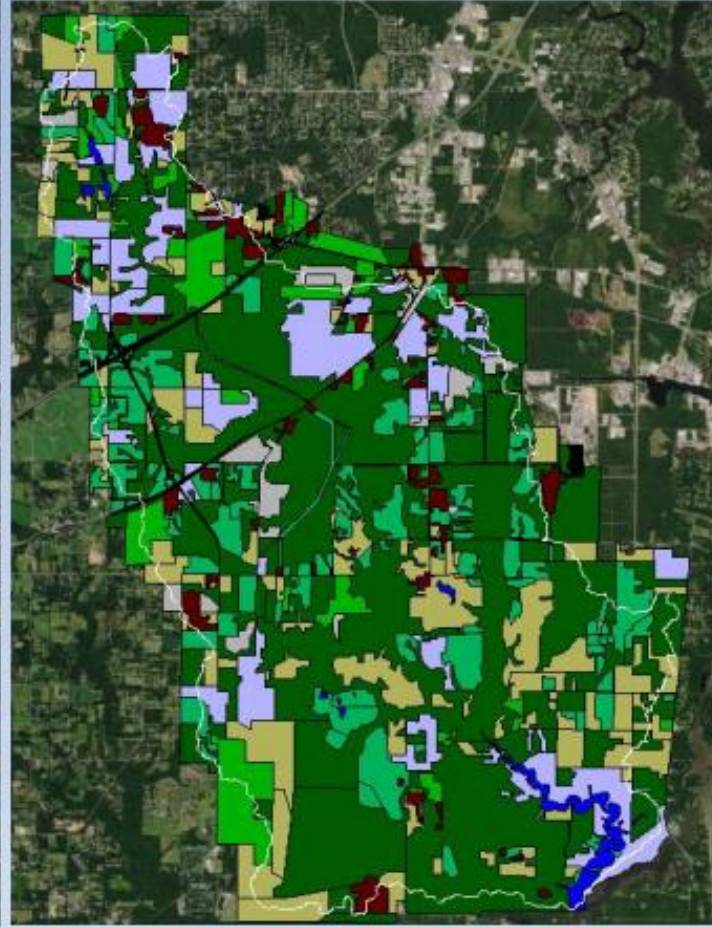


- Installed three (3) Trimble Telog RU-33 with Level Logger Gauges
- 1 USGS Gauge
- Collected stream stages during rainfall events

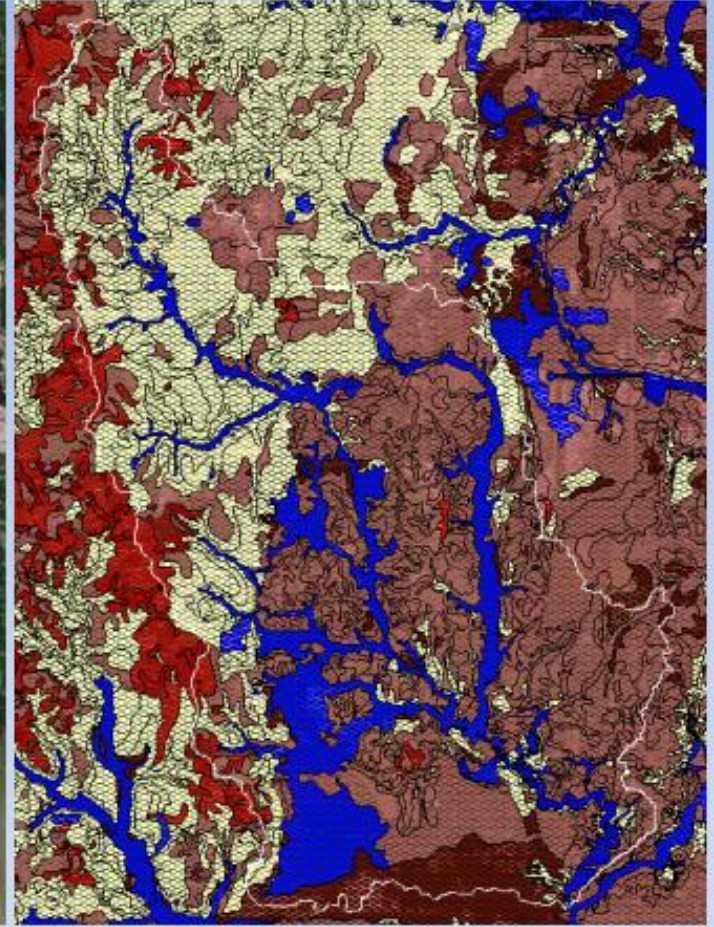
GSSHA Model Information



Elevation Data

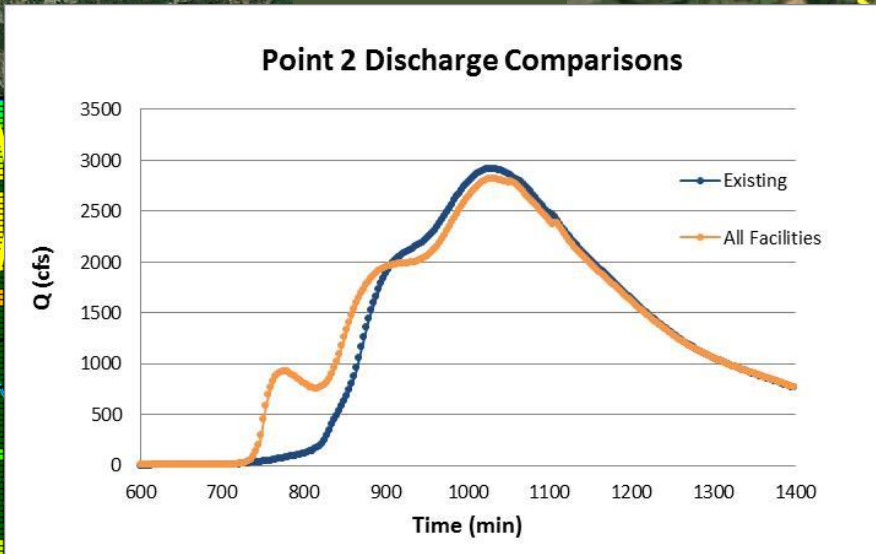
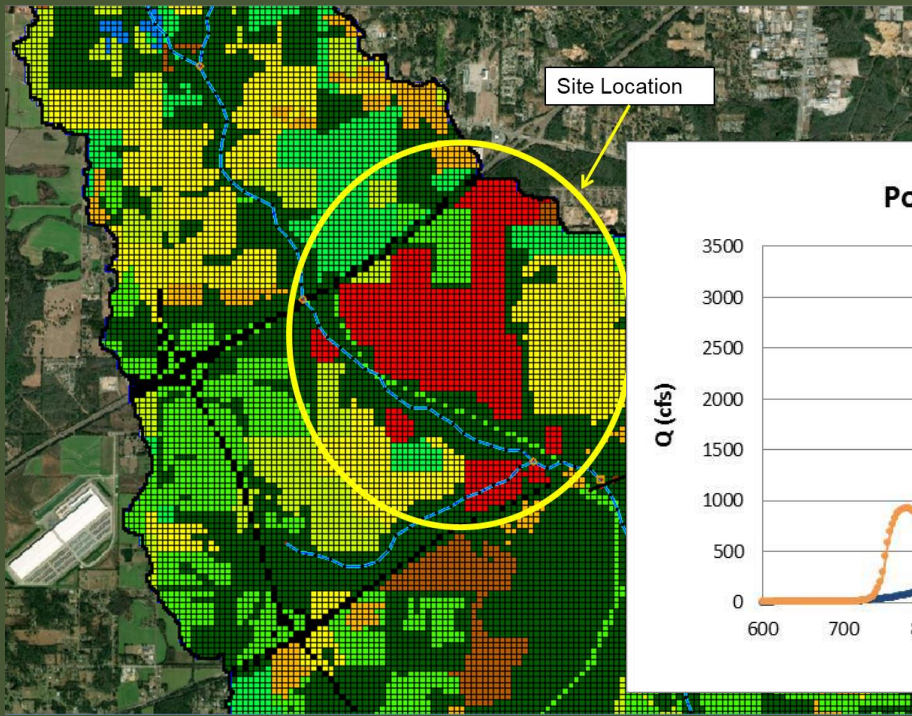
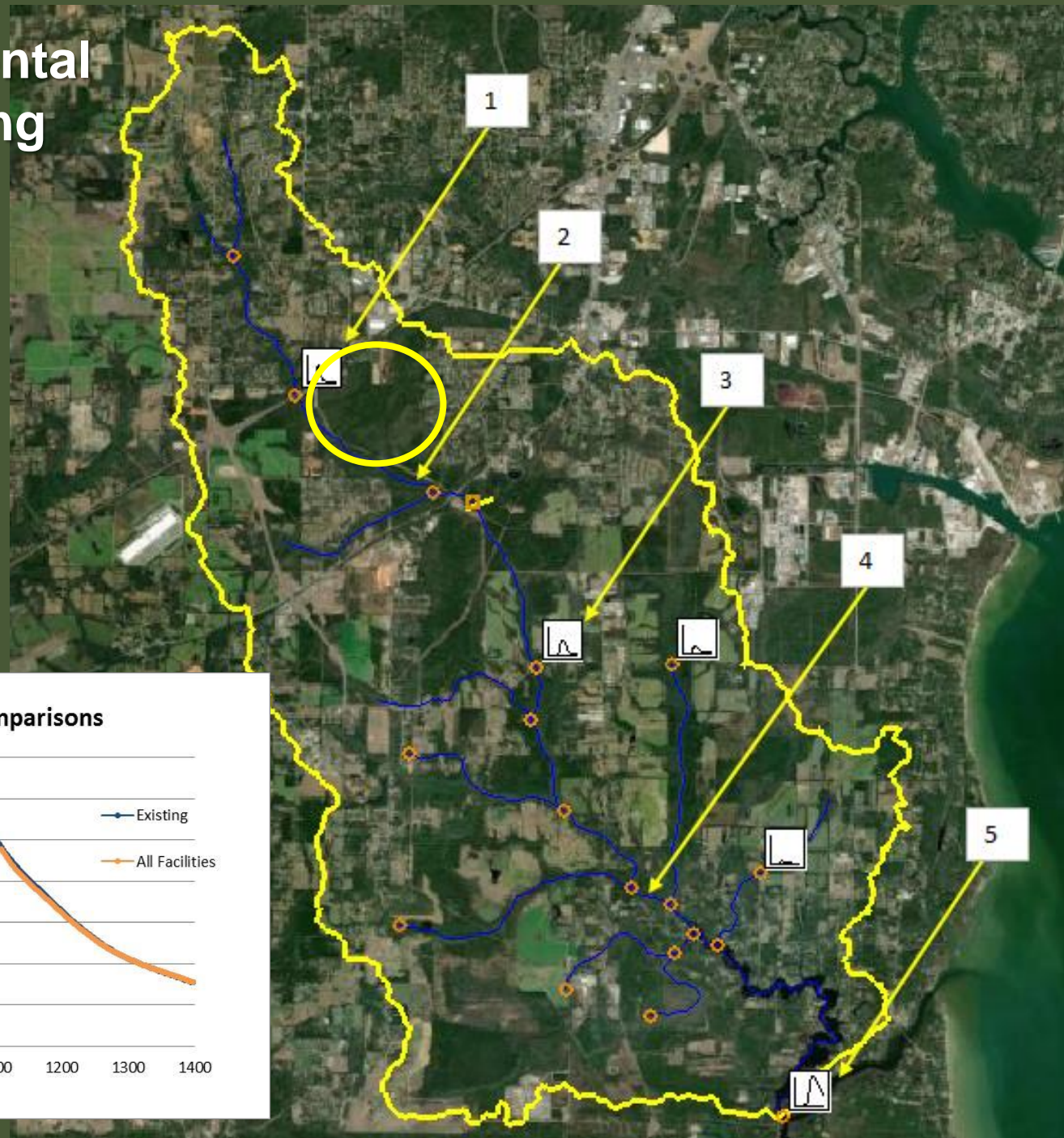
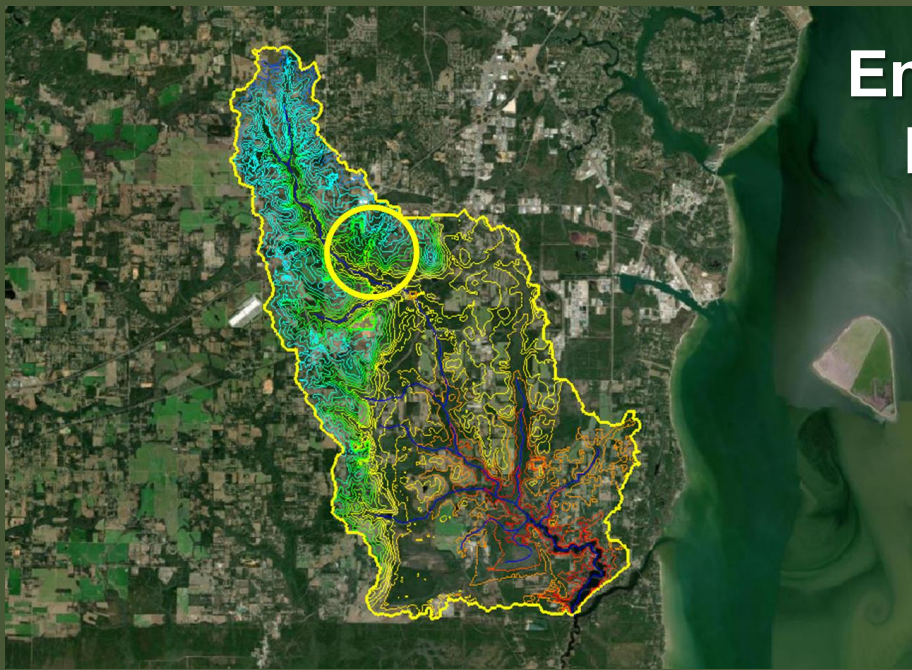


Land Use Data

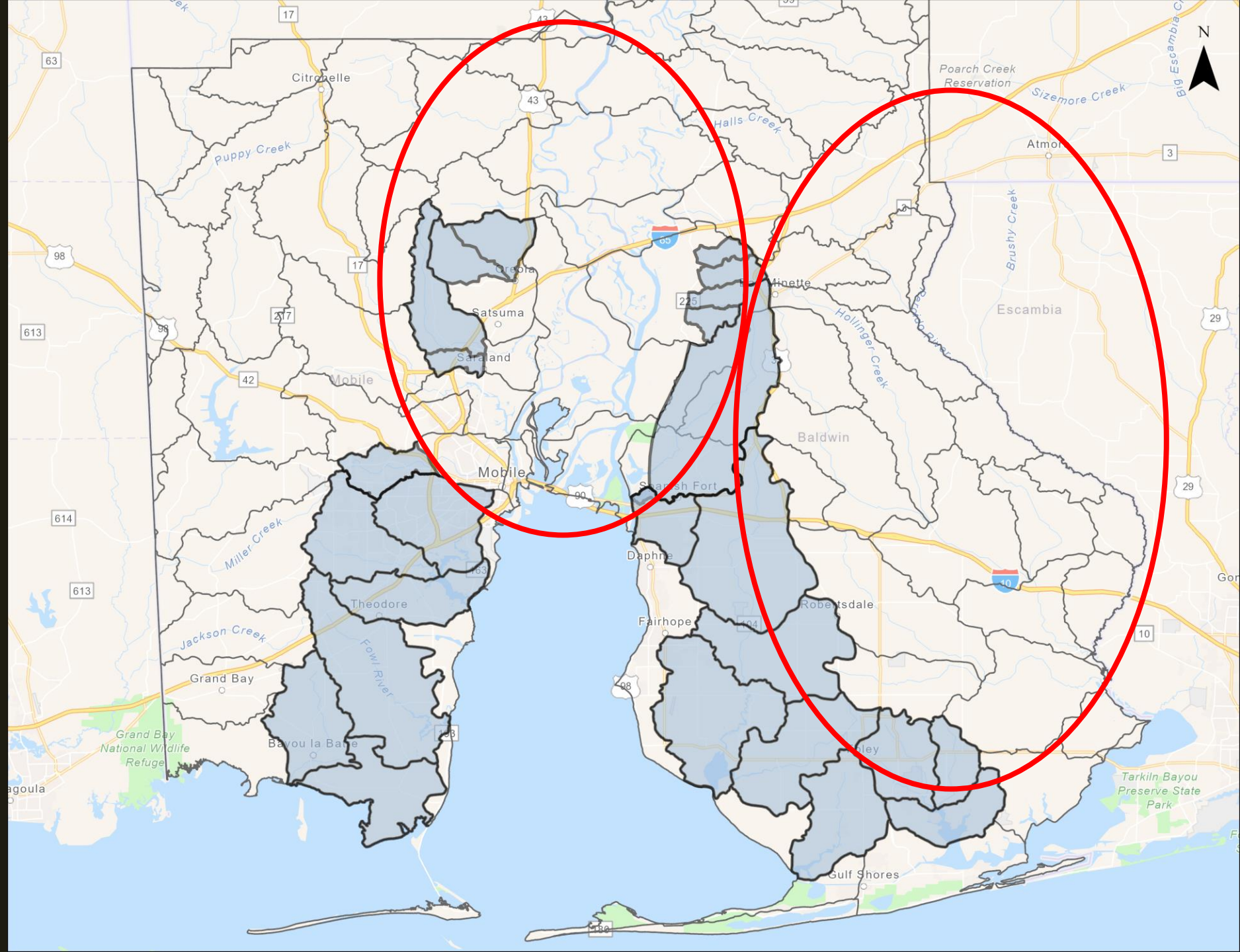


Soil Data

Environmental Monitoring

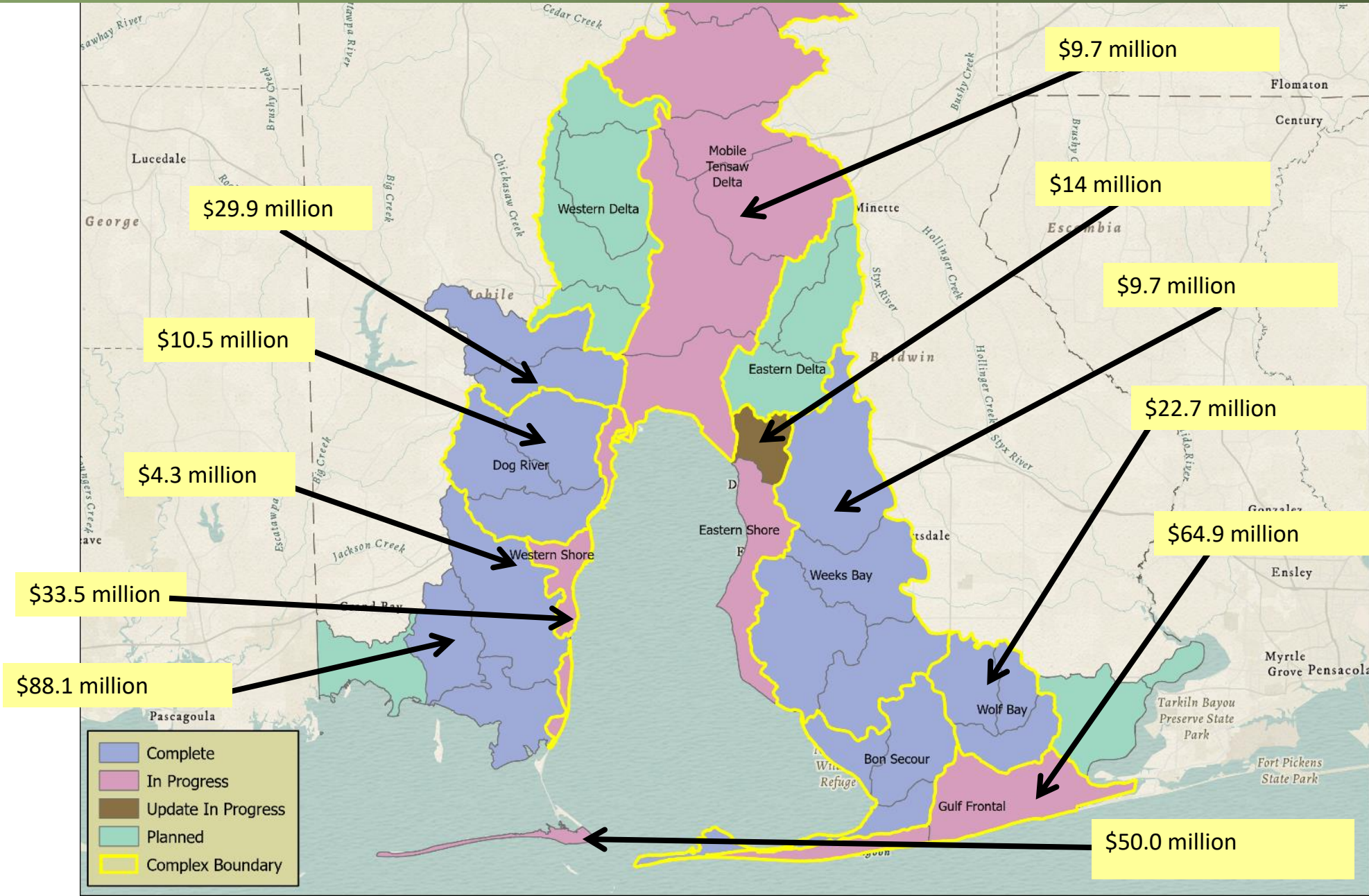


Hydrologic Modeling Landscape



Why do we plan?

To collectively and continuously improve environmental management across the Alabama coast



What keeps the MBNEP up at night...

- Design of projects to address stresses
- Adaptive Management until full maturity
- Institutionalize the use of green infrastructure
- **How do we create a sustainable funding mechanism for environmental monitoring?**



*And into the forest I go,
to lose my mind and
find my soul. John Muir*

*The Mobile Bay National Estuary Program
looks forward to sustaining the long-term
health of Alabama's estuaries and coast for
the Critters and in partnership with the
Crazies.*



Thank you.

