

# Pensacola & Perdido Bays Estuary Program

---

Donald Killorn

# What is an Estuary Program?

- Stakeholder driven, non-regulatory program
- Involves community in the decision-making process
- Develops measurable goals for environmental health
- Utilizes long-term strategic planning (CCMP) to prioritize action
- Science-based approach to developing and implementing the plan

# National Estuary Programs



# History of Pensacola & Perdido Bays EP

- 1989: Bay Area Resource Council (BARC) established
- 2000: 1<sup>st</sup> Annual Bay Day event
- 2010: Deepwater Horizon oil spill
- 2017: EPA calls for proposals to establish new estuary program
- August 2017: EPA announces selection of BARC's proposal of PPBEP
- September 2018: BARC officially transitions into PPBEP
  - Governing Parties: Baldwin, Escambia, Santa Rosa, & Okaloosa Counties, and the cities of Orange Beach, Pensacola, Gulf Breeze, Milton, Century





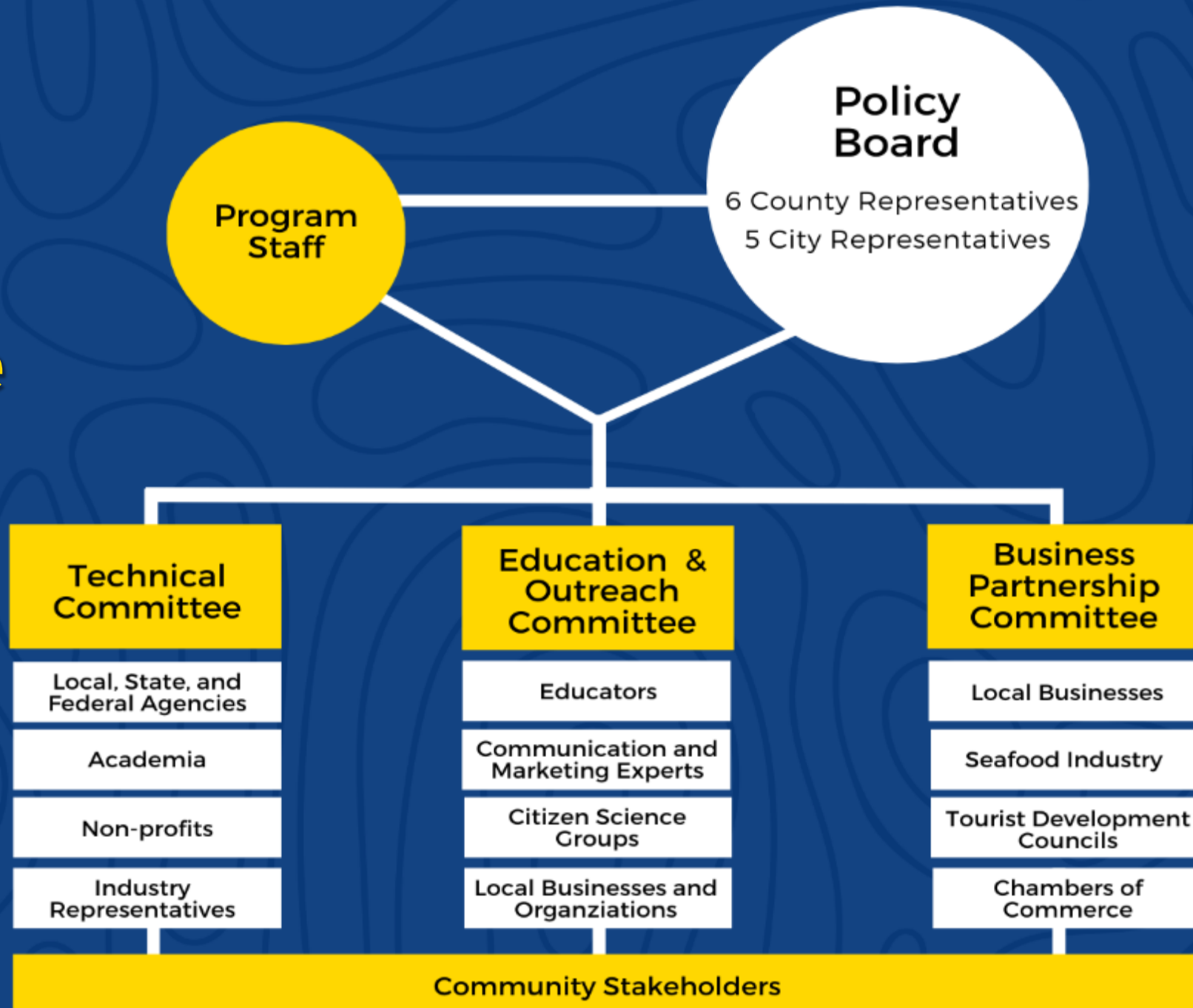
**\$2 million grant award from RESTORE Council and EPA**

# Our Mission

To restore and protect the water quality and natural resources of the Pensacola & Perdido Bays and watersheds through partnerships, using a community-based, scientifically-sound approach to enhance resilience.

**A healthy and sustainable  
environment, economy, and community**

# Program Structure

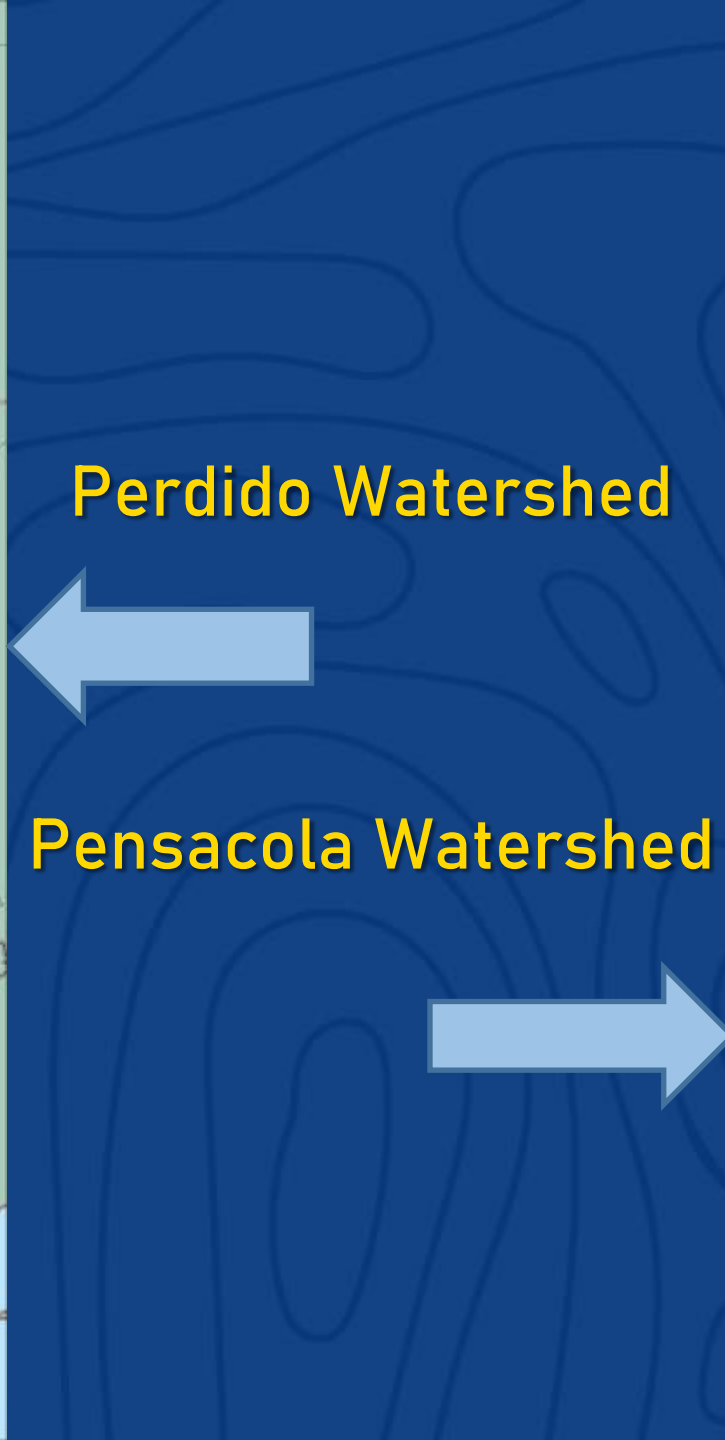




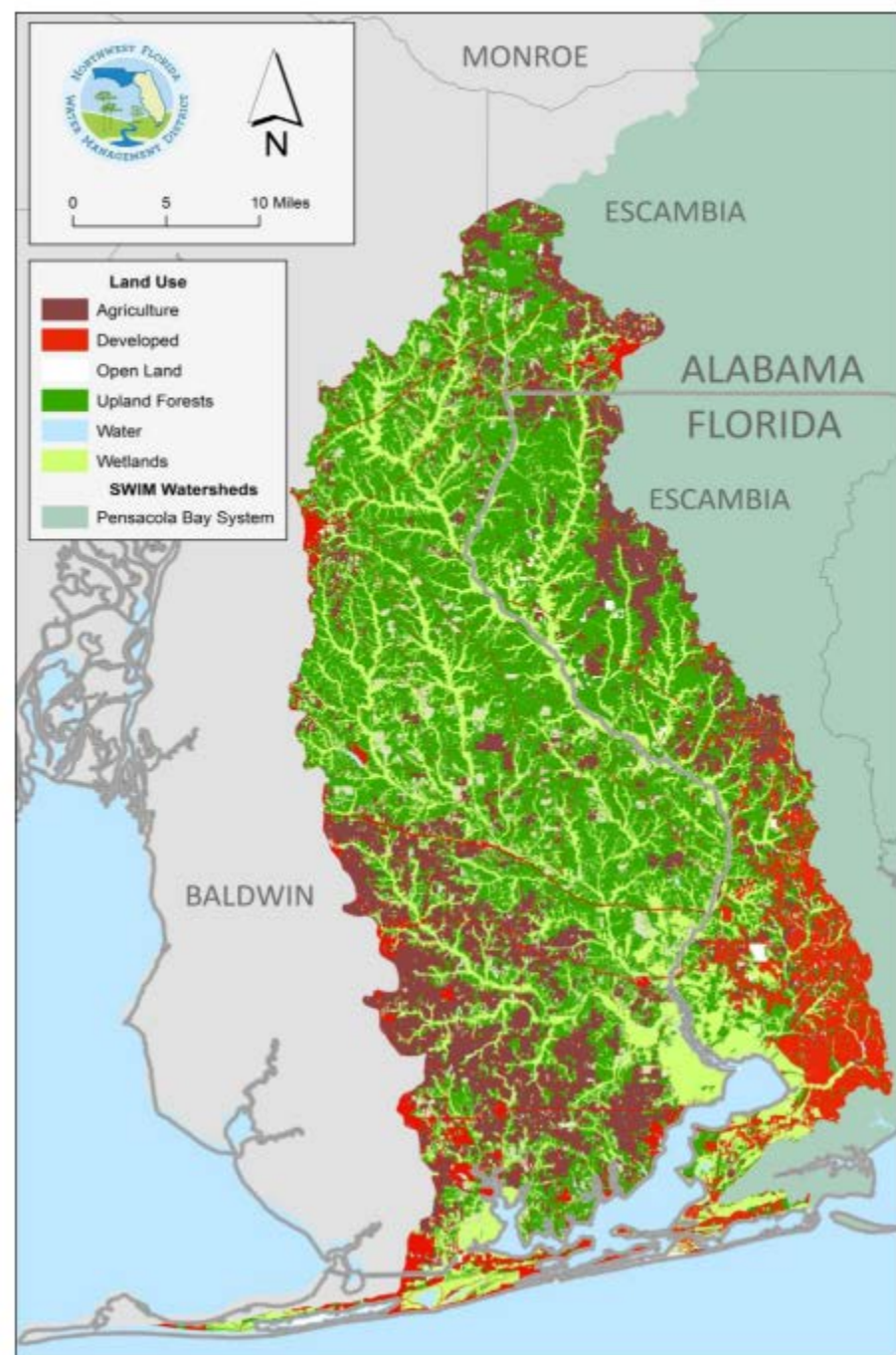
# PPBEP's Coverage











# Land Use

## Perdido Watershed

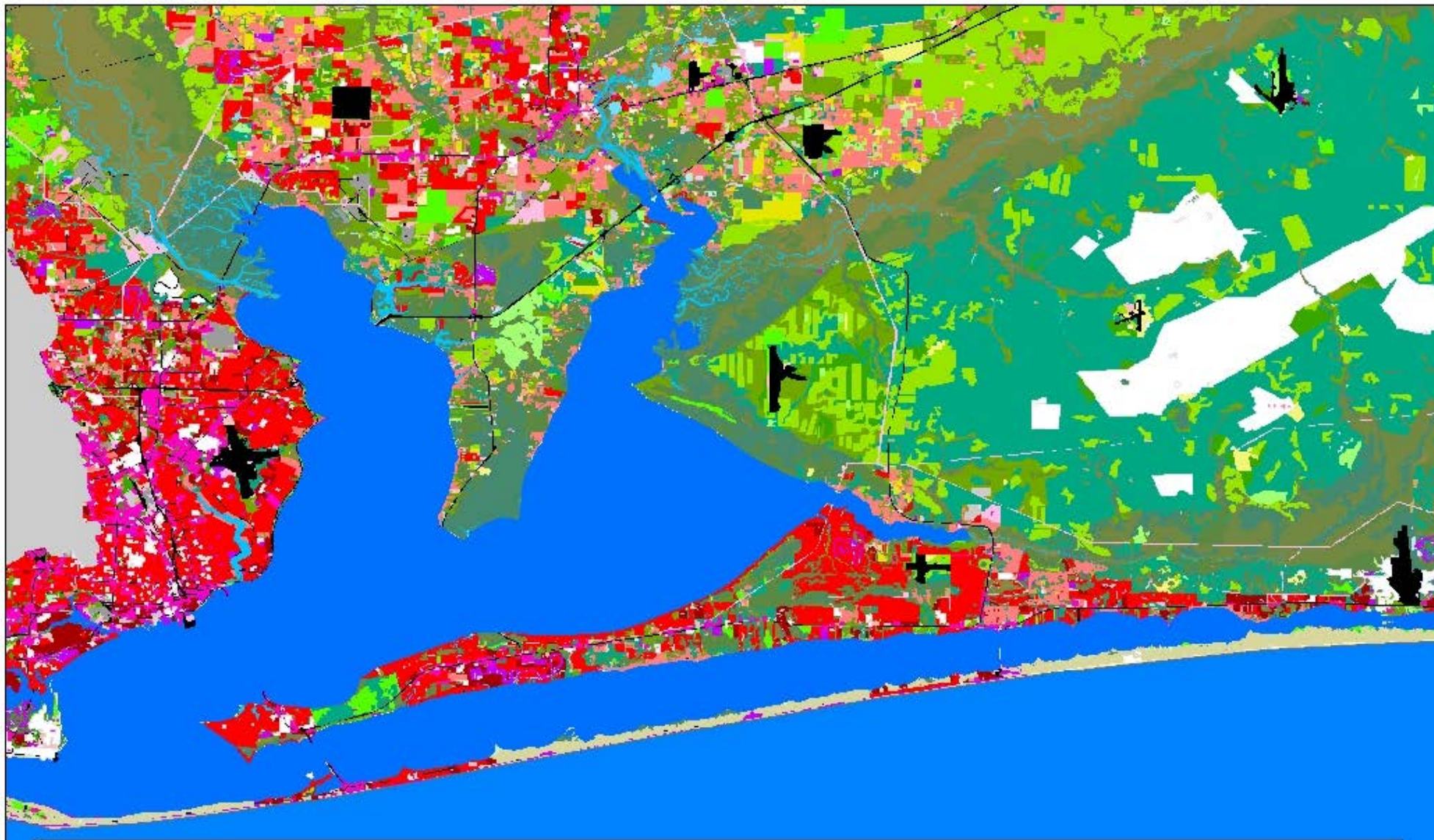


## Pensacola Watershed



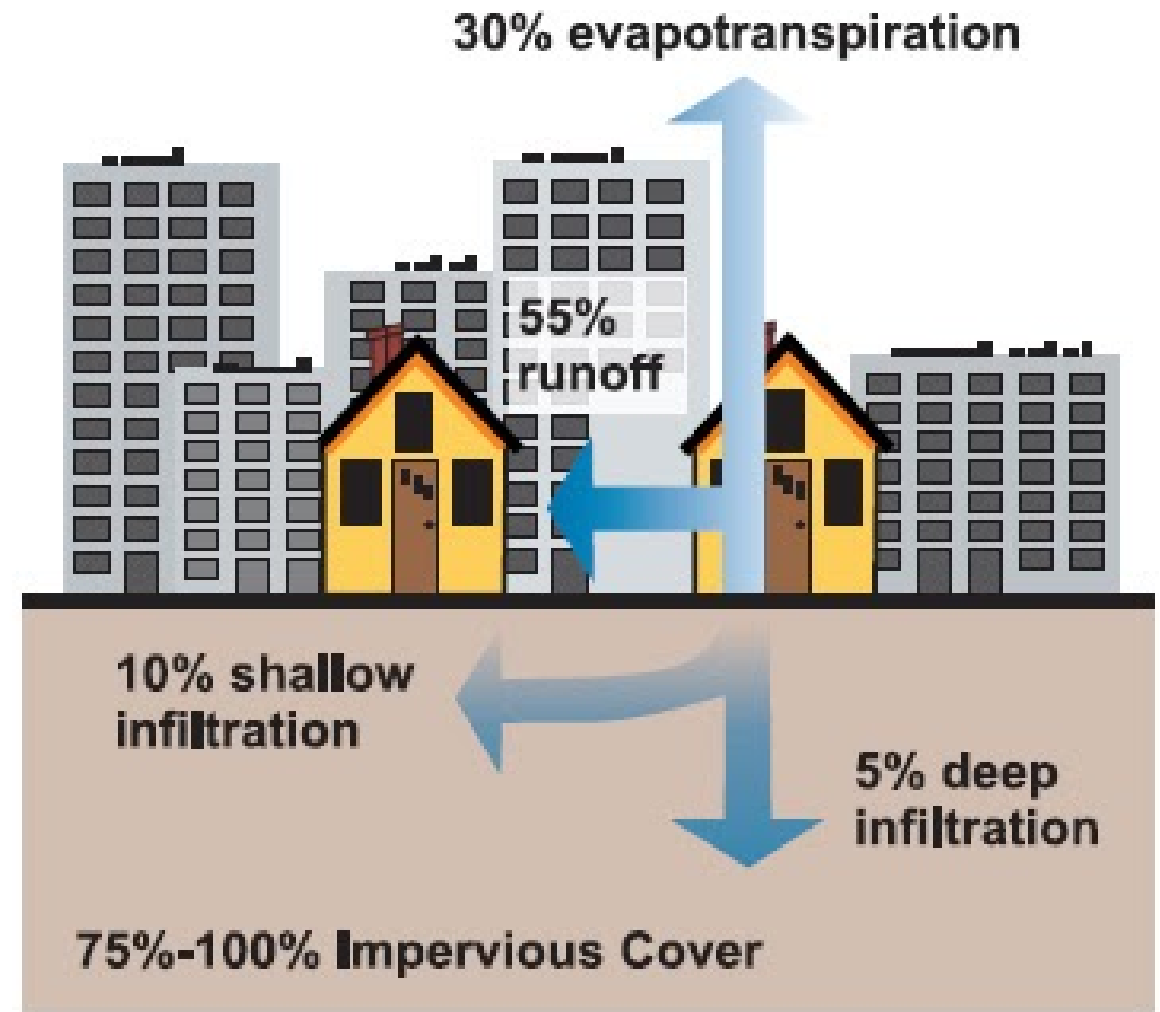
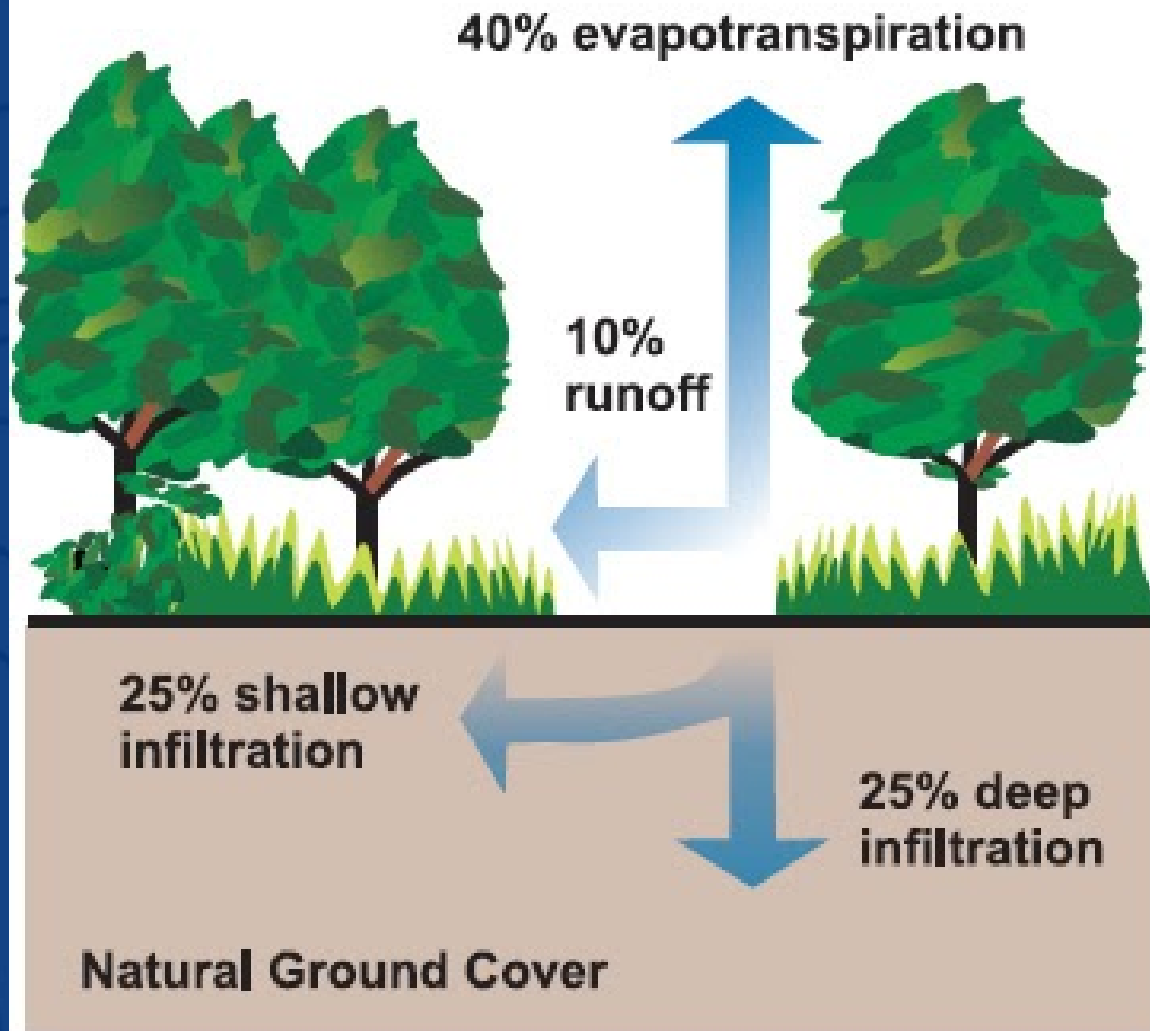


# Land Use





# Urbanization

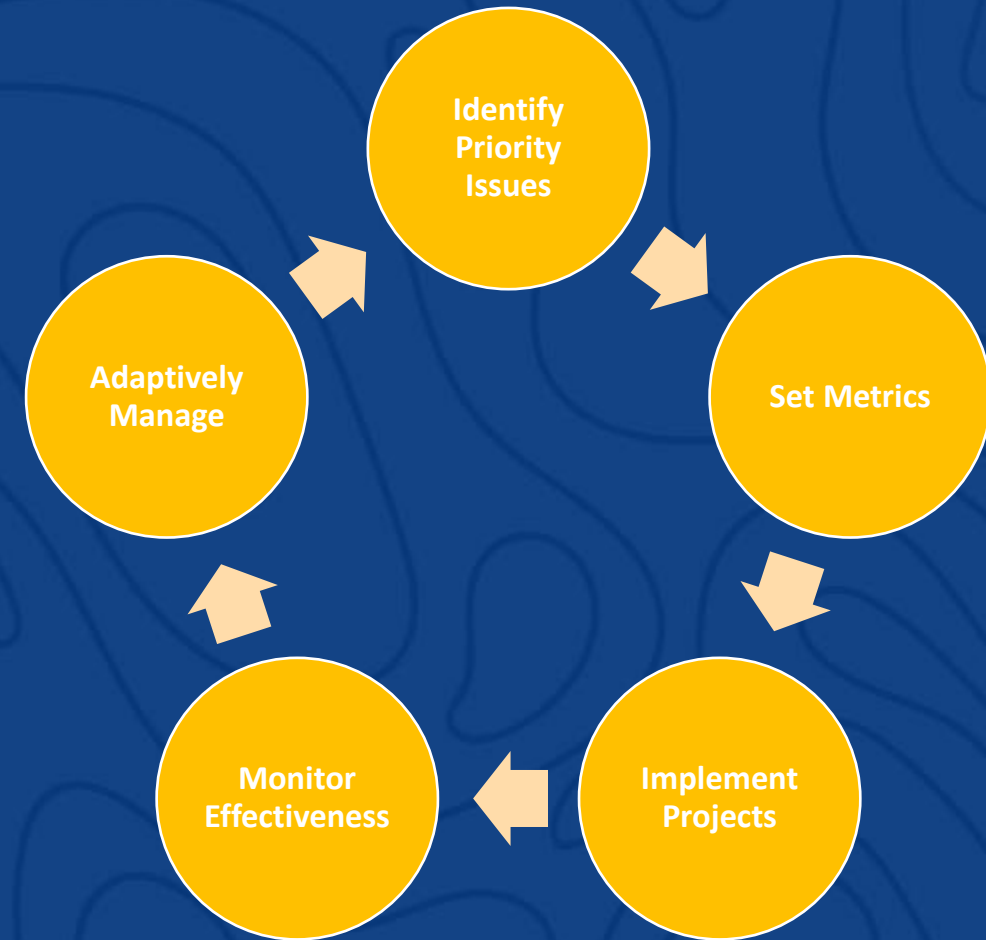


# What is a CCMP? Why is it important?



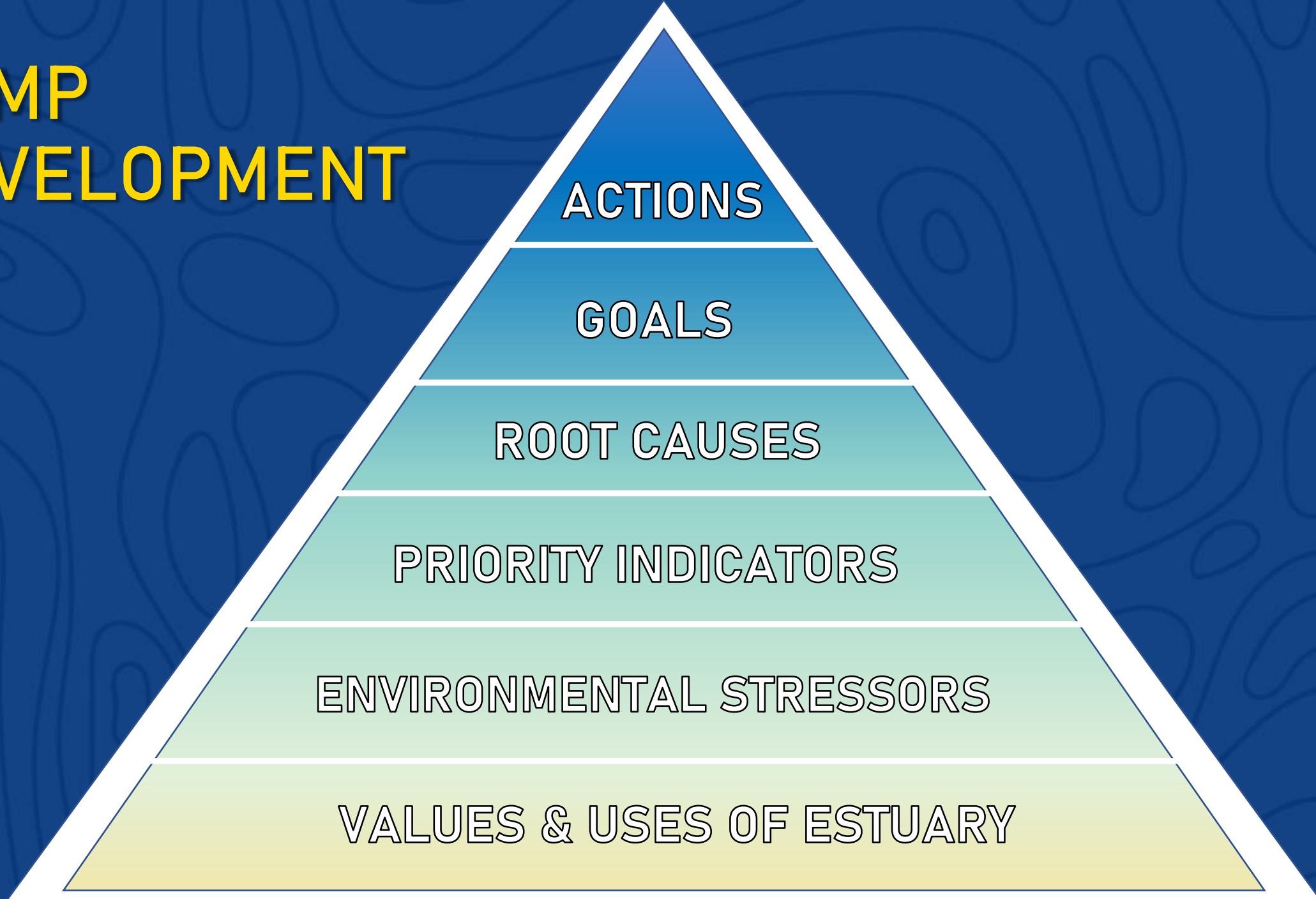
# Benefits of CCMP

- Watershed Coordination
- Community Outreach & Education
- Comprehensive Monitoring
- Address Priority Issues:
  - Stormwater management
  - Land use change
  - Pathogens, nutrients, sedimentation, & legacy pollutants
  - Domestic & Industrial Wastewater
  - Agriculture BMPs





# CCMP DEVELOPMENT





# to Success: Collaborative Problem Solving

## NCCA Addtl Indicators

3.11 TC mtg

provide frame of reference for public (stoplight by them)  
• key to imp, role of plays into ecosystem

• Dissolved Oxygen - included (6)

• Seagrass + Oyster dist (% in SAV)

• Color + turbidity (5)

• Pesticides + TSS (9)

• Invasives (3)

• # of swimming closures @ sp. waterbodies  
↳ bacteria alerts

• Nutrient data (7)

• Bathymetry data + climate vulnerability (8)

• % imperv surface  
• % canopy cover

↳ factors that affect WS's (9)

## Addtl Indicators 3.11 TC mtg

• Armored Shorelines (5)

• Wildlife sightings + popltn trends / dynamics

• EC Marine Reserves Marine Life List

• Manatees / Blue Crab / Mullet

• Fisheries Indpnt Monitoring

• Abundance / Density of Key Species (10)

• Microplastics (11)

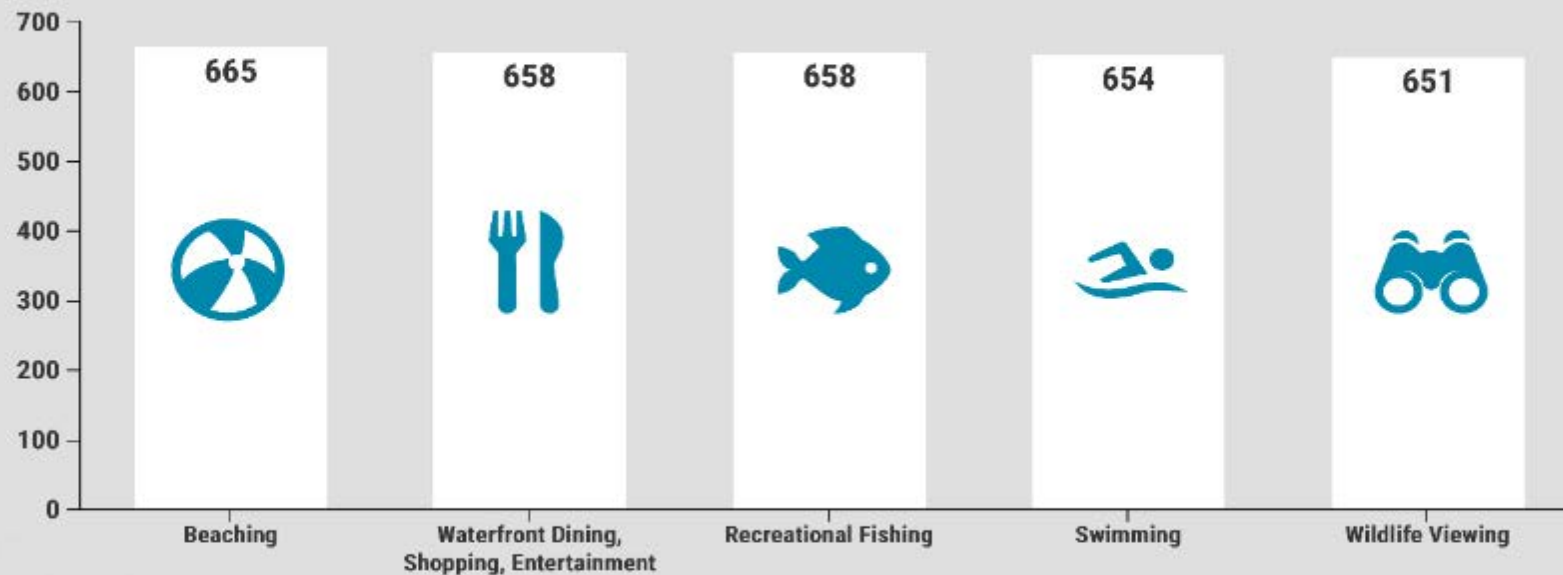
• Sediment Toxicity → expand? (12)

• Protected Species - Sea Turtles, Shorebirds, Bch M (13)  
Show trends; along w/ current conditions etc.

↳ Maps + geographic context (↑, ↓, -)  
• Cover changes over time (14)

# COMMUNITY SURVEY

## Top 5 Activities Pensacola Bay Watershed





# COMMUNITY SURVEY

---

In your opinion, how important are each of the following for healthy watersheds?

---

## Top 5 Items Perceived as "Very Important"



Trash free land  
and water



Healthy Habitats



Wildlife  
Abundance



Wildlife Diversity

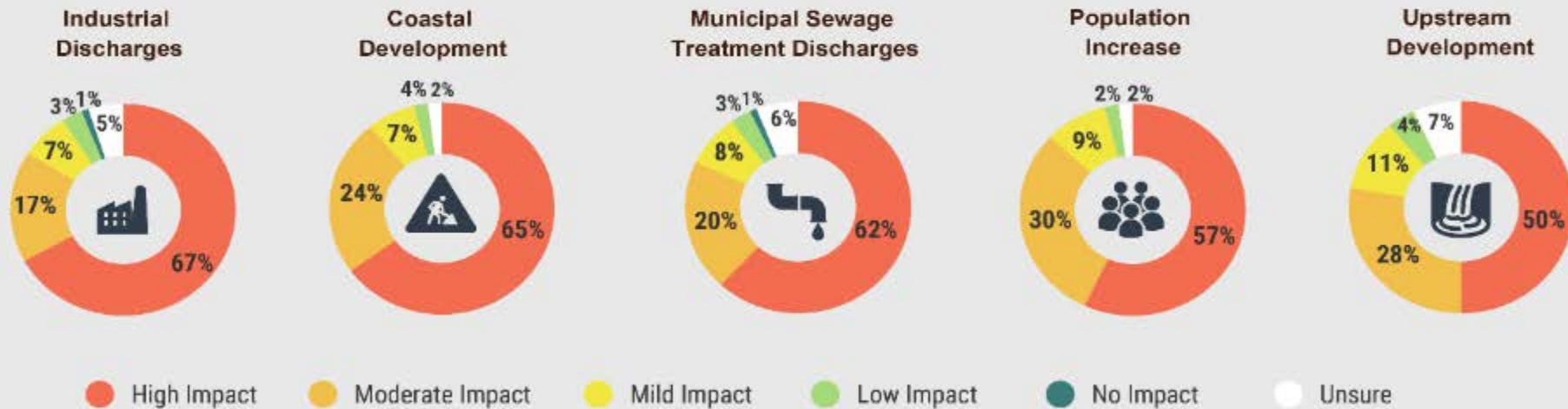


Natural  
Riverbank and  
Shorelines

---

# COMMUNITY SURVEY

## Top 5 Perceived Environmental Impacts: Pensacola Bay Watershed

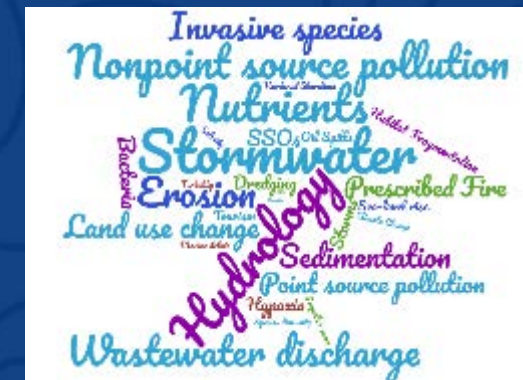




# Technical Committee

A screenshot of a Zoom meeting grid showing 12 participants in a 4x3 layout. The participants are:

- Row 1: Mike Jackson, David, Lisa, and Jeff.
- Row 2: Bob, Sarah, Lisa, and a shelf with figurines.
- Row 3: Kristin, Sarah, a man with a bookshelf, and a man with a piano.
- Row 4: Bob, Kristin, Kristin giving a thumbs up, and Kristin's name.







Gone Virtual!

# Workshop Series

## Technical Committee

### Focus Areas

Water  
Quality/Quantity

Habitat

Sediment  
Quality/Quantity

Fish & Wildlife

### Prioritized Stressors

- Pathogens
- Nutrients; Eutrophication
- Land-use change
  - Flooding
  - Urbanization
  - Construction
  - Impervious surfaces
- Infrastructure
  - Sanitary sewer
  - Stormwater

- Water quality
- Altered hydrology
- Development
  - Land-use change
  - Shoreline hardening
- Improper habitat management
  - Boating practices
  - Old growth forest loss

- Land-use change
  - Impervious surfaces
  - Agriculture
- Sedimentation
- Contaminants
  - PCBs
  - Heavy metals
  - Industrial discharge
- Erosion
  - Sea-level rise

- Water quality/quantity
  - Turbidity
  - Stormwater
  - Salinity
  - Pollutants
- Invasive species
- Urbanization
- Habitat
  - Fragmentation
  - Conversion



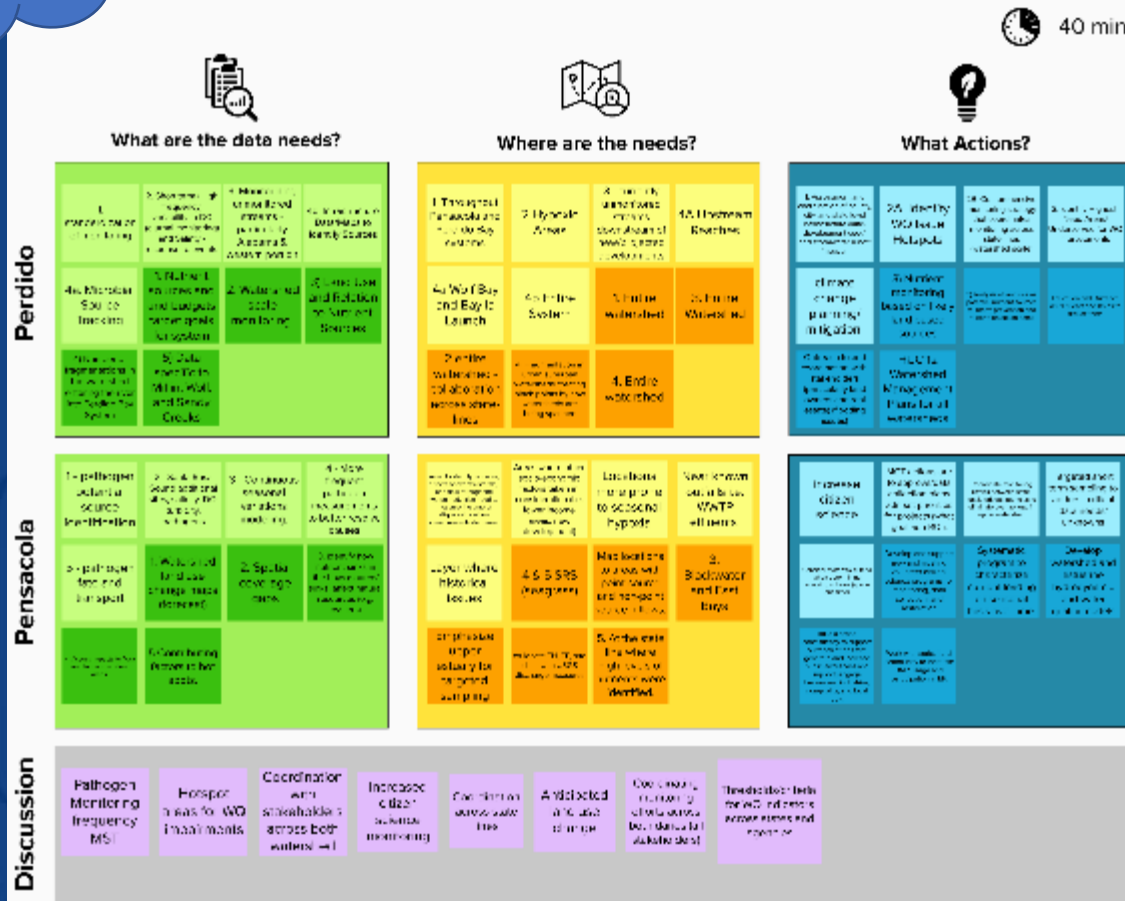
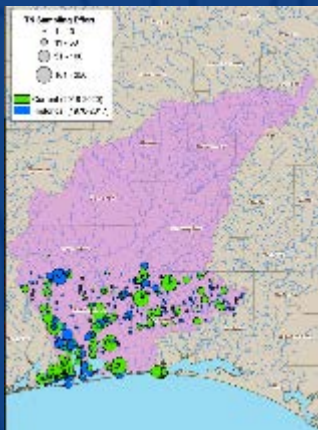
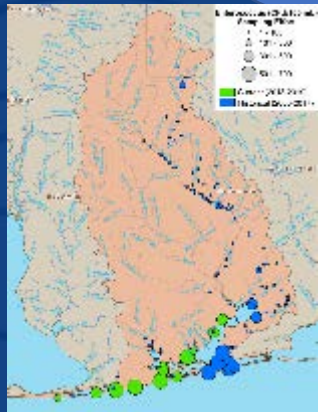


Gone Virtual!

# Workshop Series

Focus Area Indicators: Water Quality/Quantity

Technical Committee

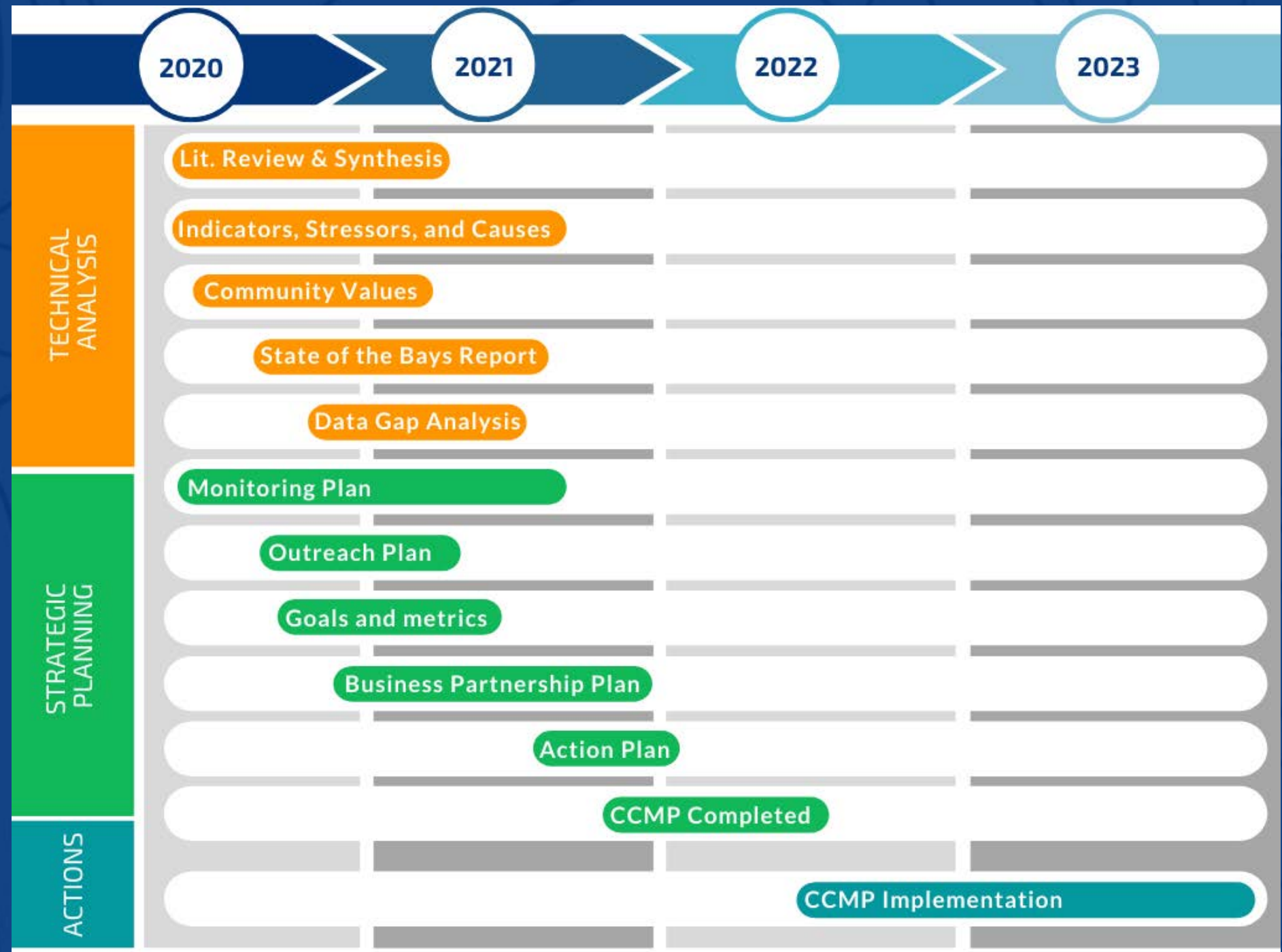






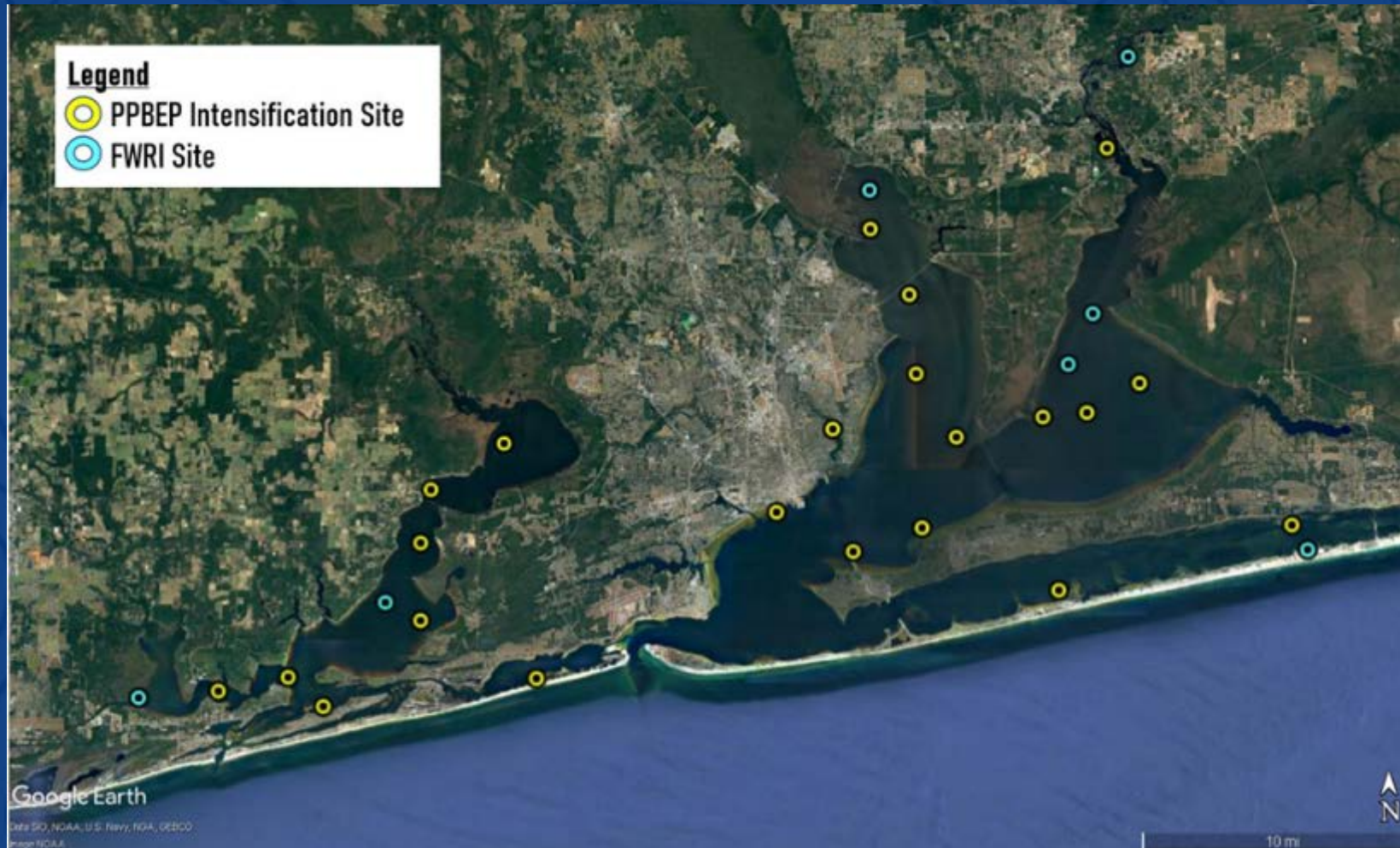


# CCMP Timeline



# National Coastal Condition Assessment

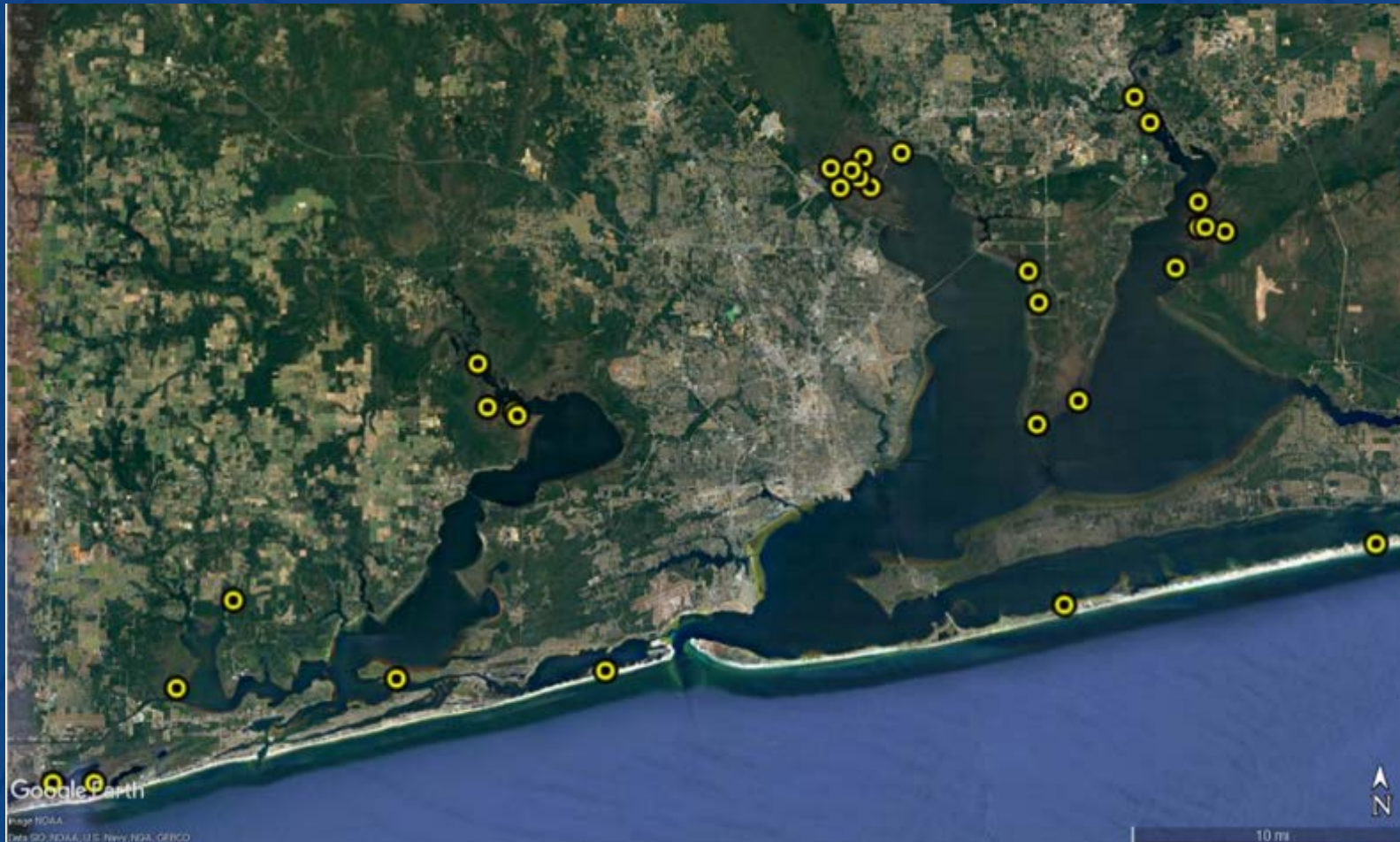
## ➤ EPA Survey Intensifications: National Coastal Condition Assessment





# National Coastal Wetland Assessment

- EPA Survey Intensifications: National Coastal Wetland Assessment





# Trash Free Waters

- Trash removal and mitigation in Jones & Carpenter Creek



*Carpenter's  
Creek*  
**TRASH FREE  
WATERS PROJECT**



*volunteer*

*Help  
restore*



*Pensacola's  
hidden gem*



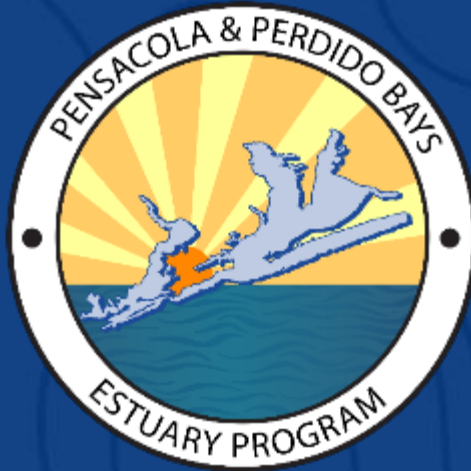
*Your Role:*

Assist with Cleanups  
Monitor Litter Capture Devices  
Collect Data

*Contact:*

Emerson Cheney  
edcheney@myescambia.com  
Trash Free Waters  
Volunteer Coordinator  
PPBEP.org

# CONTACT US!



[www.ppbeb.org](http://www.ppbeb.org)



**Donald Killorn**  
Executive Director  
[dkillorn@myescambia.com](mailto:dkillorn@myescambia.com)



**Whitney Scheffel**  
Senior Scientist  
[wascheffel@myescambia.com](mailto:wascheffel@myescambia.com)



**Logan McDonald**  
Community Outreach Coordinator  
[lmcdonald@myescambia.com](mailto:lmcdonald@myescambia.com)