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Mobile Bay National Estuary Program

# EASTERN SHORE WATERSHED MANAGEMENT PLAN

Stakeholder Workshop

December 9, 2021





# Team

- Thompson Engineering, Inc.
- ESA
- Barry Vittor & Associates
- M&R Solutions



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# What is a Watershed Management Plan(WMP)?

- Coordinate and collect information from stakeholders and community members
- Assess the quality of the watershed with its current inputs
- Improve and sustain water quality
- Provide guidance to resource managers and policy managers



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# Watershed Management Planning Process

- Outreach and Education
- Soliciting Watershed Knowledge
- Collecting Data
- Obtaining Community Buy-In
- Plan Implementation



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Mullet Point Park

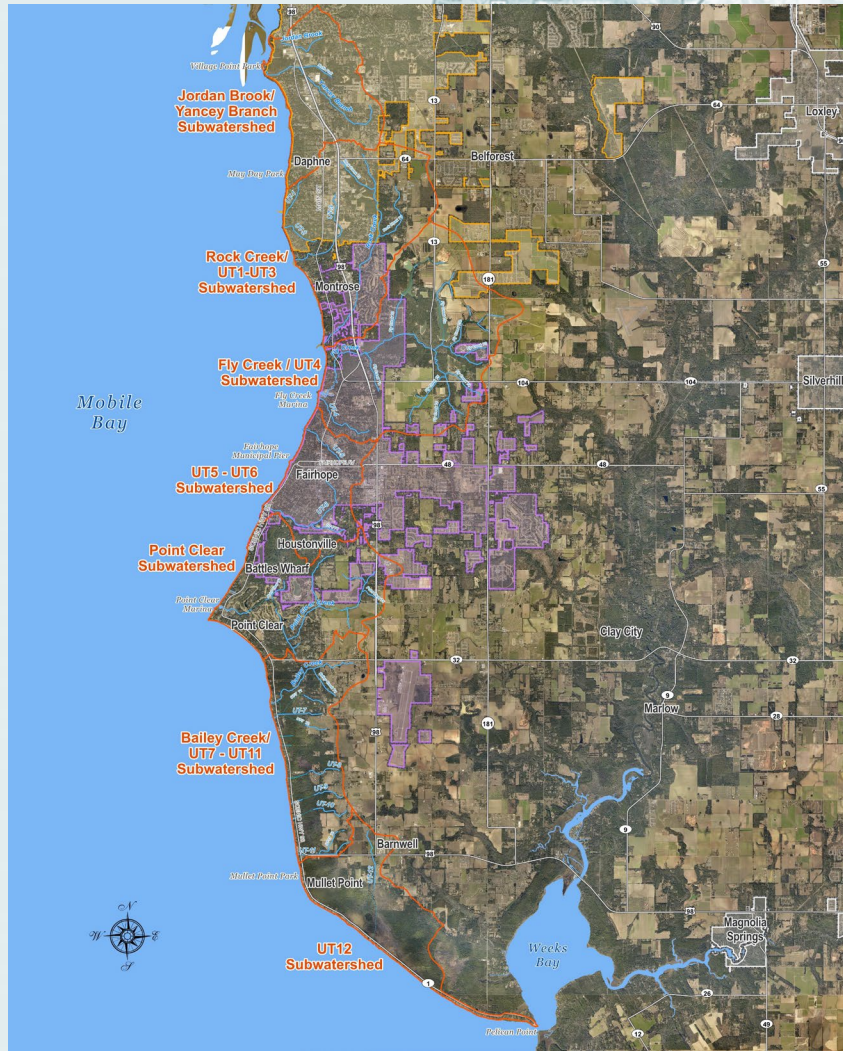
Weeks Bay

Pelican Point





# Subwatershed Map



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# Seven Subwatersheds

- Jordan Brook/Yancy Branch: 3.8 Sq.Mi.
- Rock Creek / UT1-UT3: 6.5 Sq.Mi.
- Fly Creek / UT-4: 8.48 Sq.Mi.
- UT5 – UT6 (City of Fairhope core): 2.86 Sq.Mi.
- Point Clear: 5.28 Sq.Mi.
- Bailey Creek / UT7-UT11: 4.45 Sq.Mi.
- UT12: 3.62 Sq.Mi.

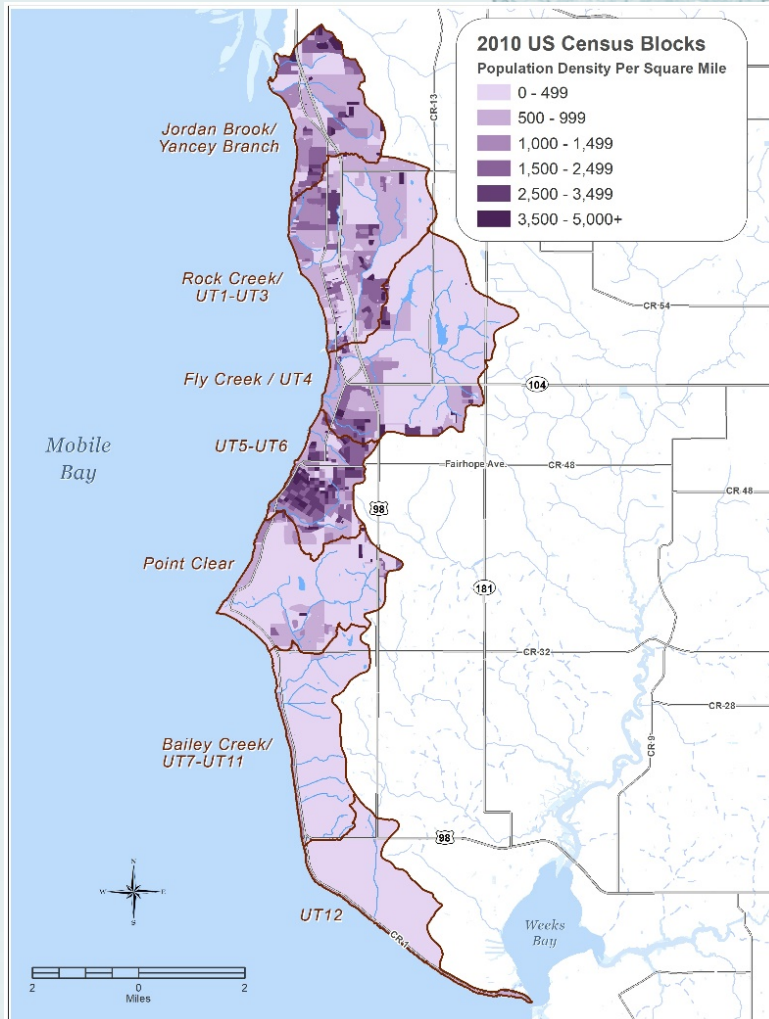


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# Population Density: 2010 Census



- Greatest population densities are associated with Daphne and Fairhope
- Areas with the lowest density are south of Fairhope in the Point Clear and Bailey Creek sub-watersheds



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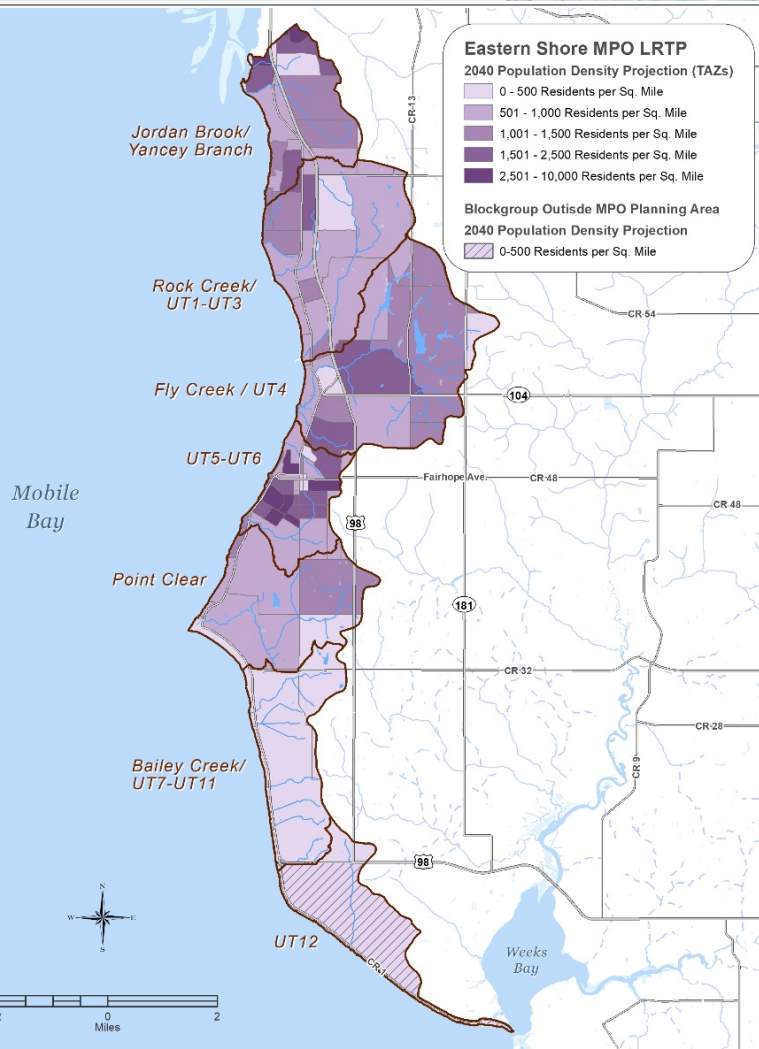


# 2040 Population Projections



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- Greatest population increases appear to be in headwater areas of the Fly Creek and Point Clear sub-watersheds
- Lesser but still significant increases in downstream areas of Point Clear sub-watershed and Fly Creek sub-watershed

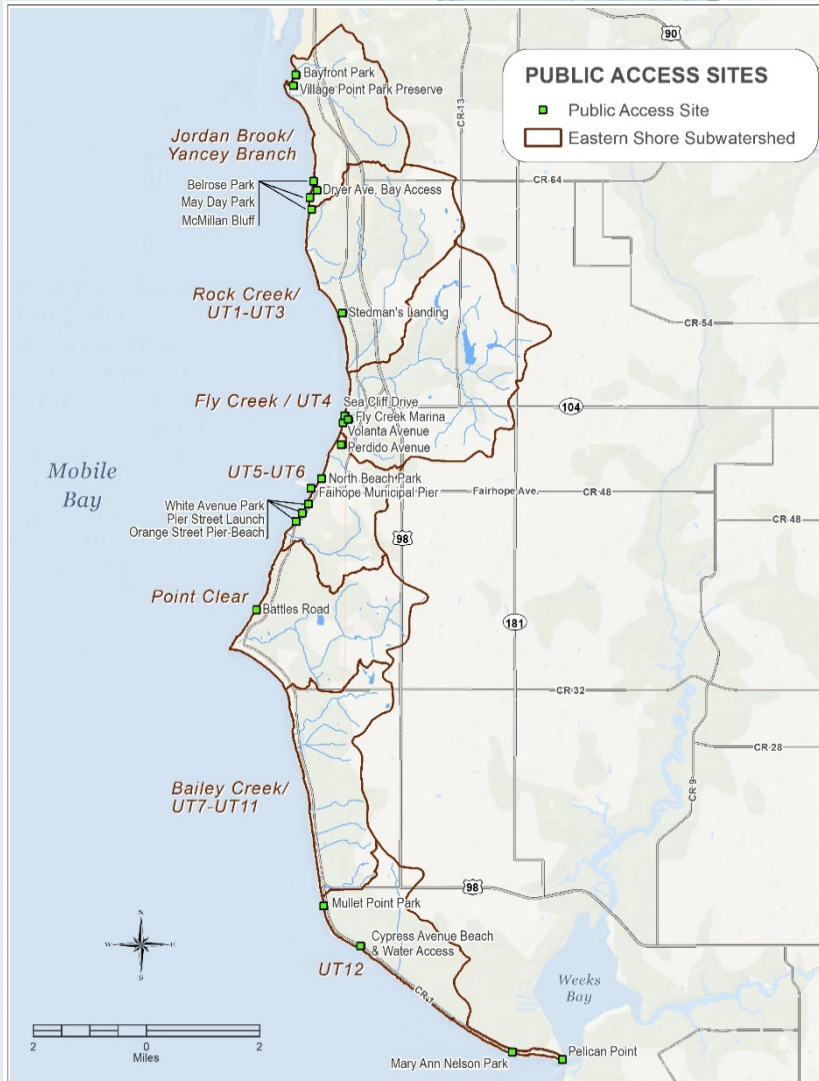




# Coastal Public Access



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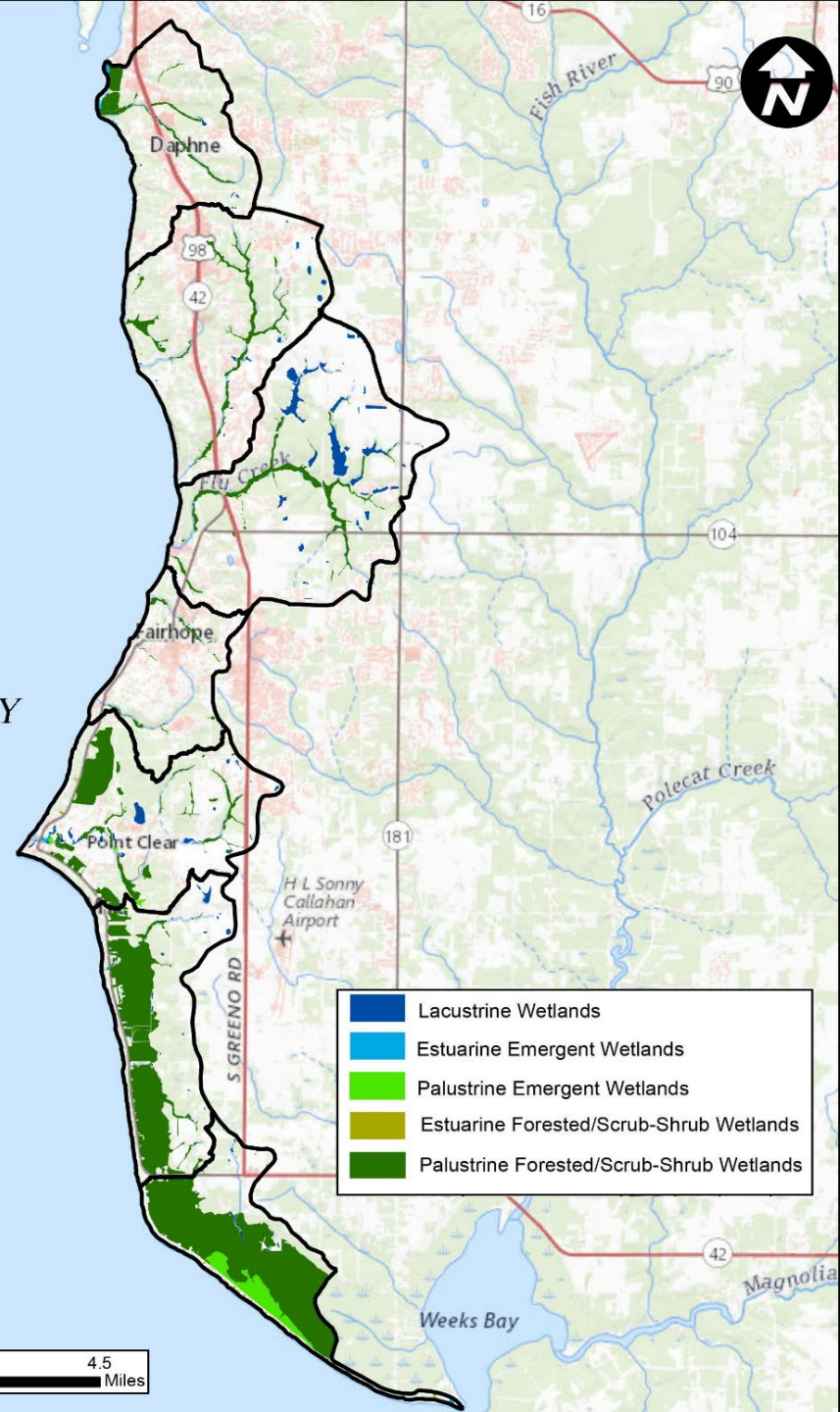
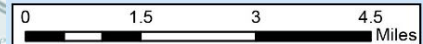




# Wetlands

Sub-Watershed	Total Acres
Jordan Brook-Yancy Branch	141.8
Rock Creek-UT1 to UT3	177.4
Fly Creek-UT4	377.1
UT5-UT6	30.8
Point Clear Creek	444.8
Bailey Creek-UT7 to UT11	903.5
UT12	1,422.5
Total	3,497.9

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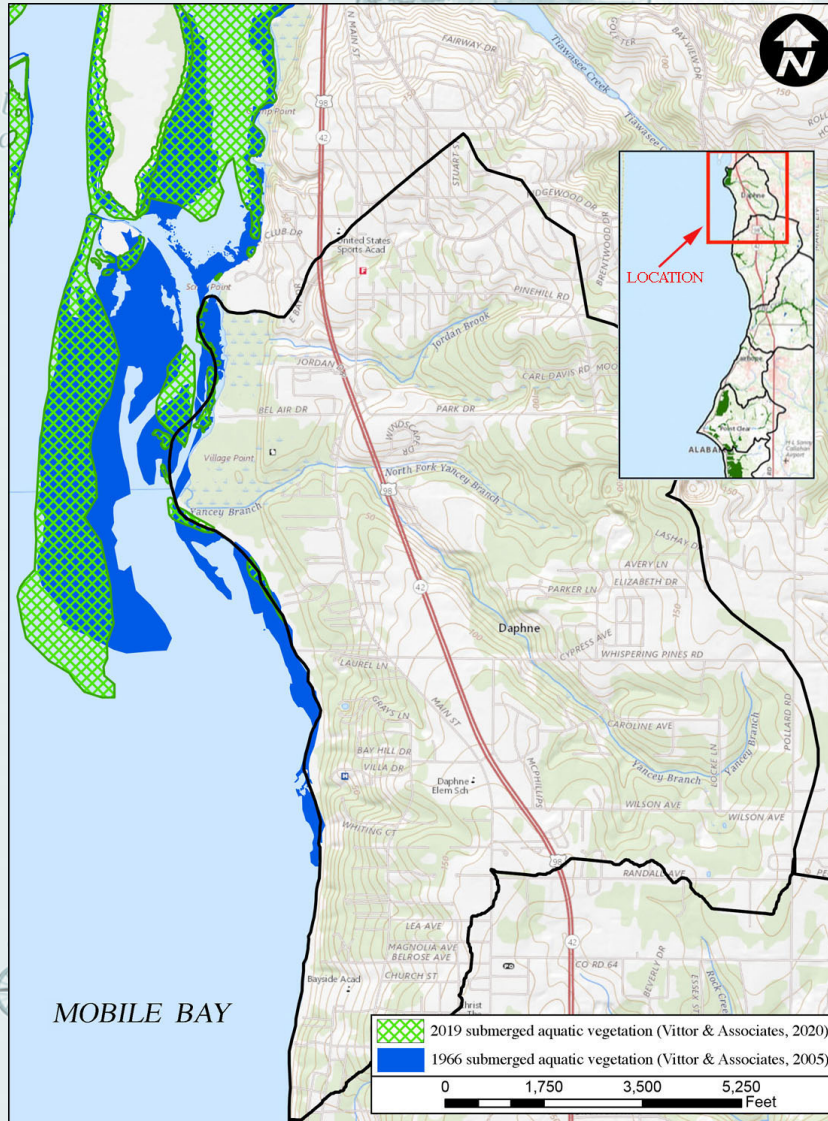




# Submerged Aquatic Vegetation



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# Riparian Buffers



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Sub-Watershed	100-ft Buffer		50-ft Buffer	
	Natural	Altered	Natural	Altered
Jordan Brook, Yancy Branch	78%	22%	81%	19%
Rock Creek, UT1 to UT3	74%	26%	75%	25%
Fly Creek, UT4	73%	27%	74%	26%
UT5, UT6	59%	41%	61%	39%
Point Clear Creek	61%	39%	66%	34%
Bailey Creek, UT7 to UT11	71%	29%	72%	28%
UT12	58%	42%	58%	42%

Natural – Forested Upland, Wetland, Water  
Altered – Urban, Barren, Ag, Shrub, Grassland





# Fly Creek Subwatershed 100-ft Riparian Buffer

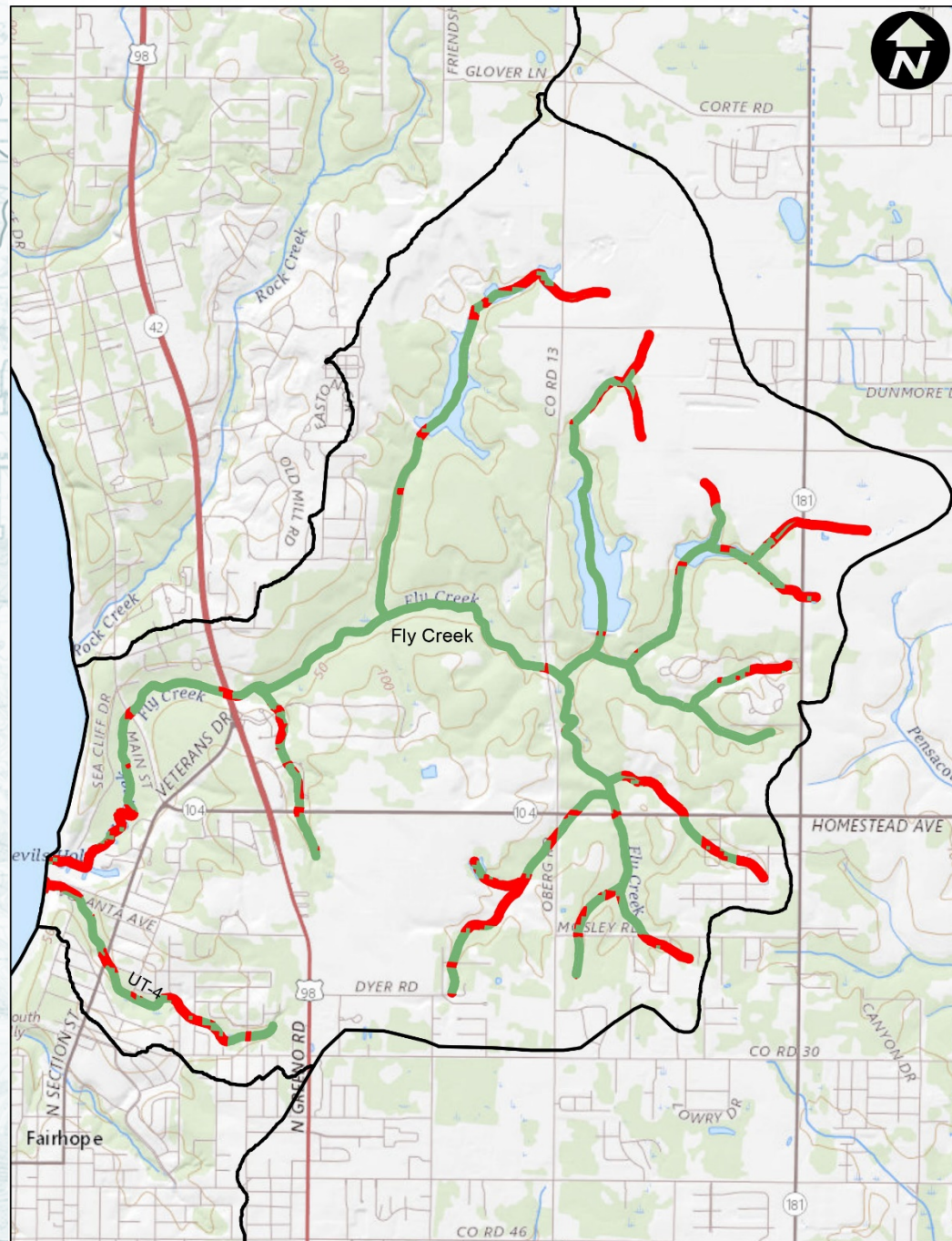
Mobile Bay

Marina

Mullet Point Park



	NLCD Category	Acreage
Unnatural	Developed	49.2
	Barren	0.1
	Shrub	0.6
	Grassland	3.1
	Agriculture	57.8
Natural	Wetland	123.2
	Forest	115.5
	Water	53.6



Pelican

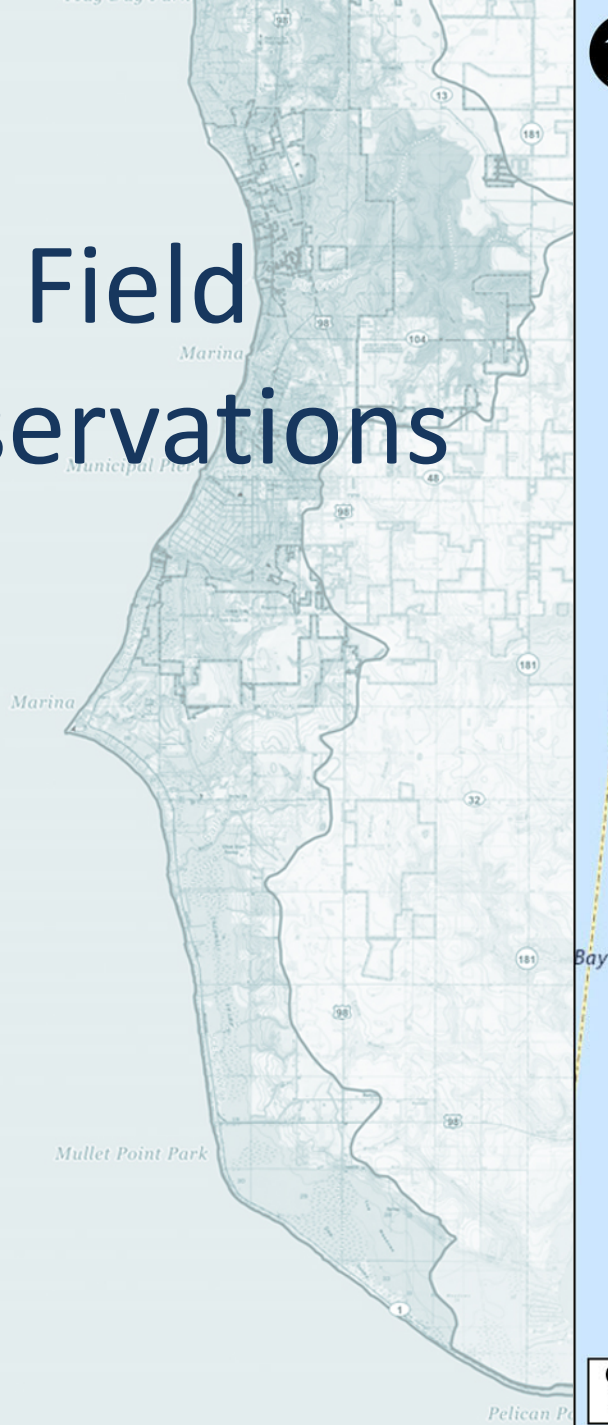
Wetland or Forested Upland

Altered Land

0 0.4 0.8 1.2 Miles

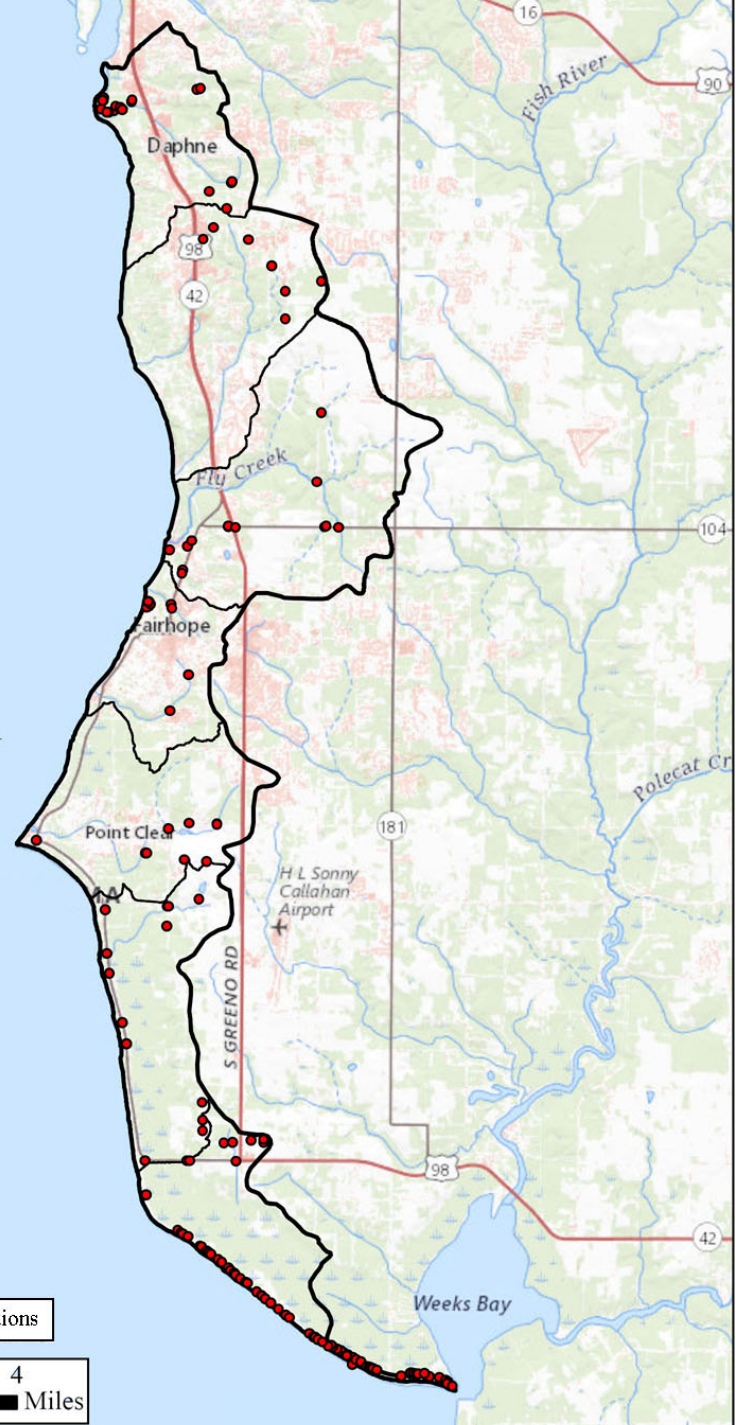
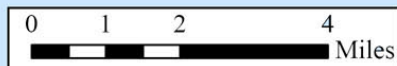


# Field Observations



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● Field Observation Locations





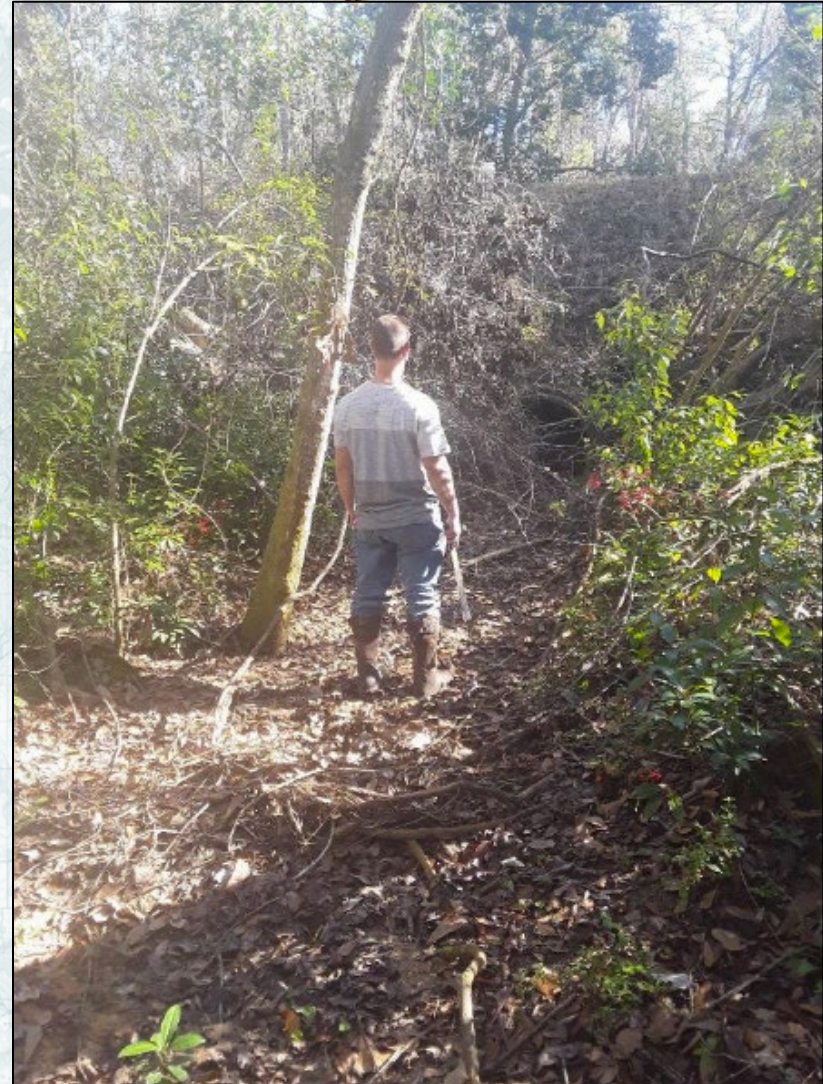
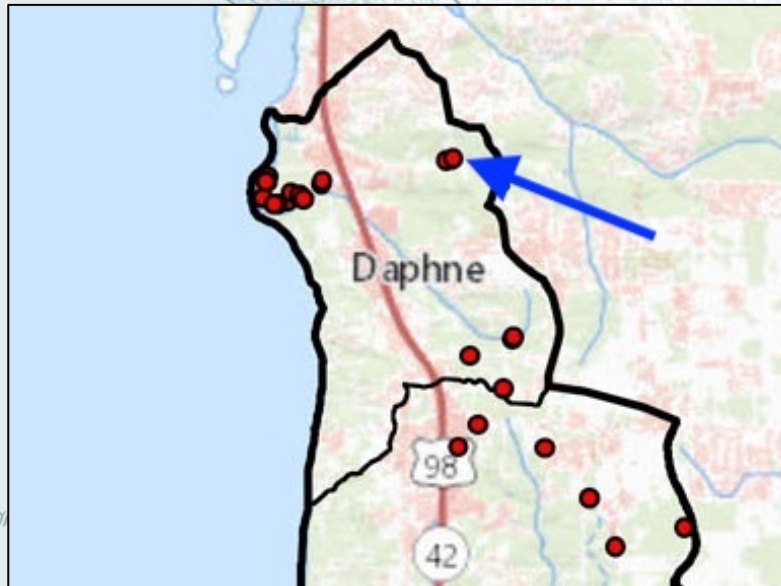
# Field Observations



Mobile

Upper Jordan Brook

- Heavily silted watercourse
- Functionally not a wetland





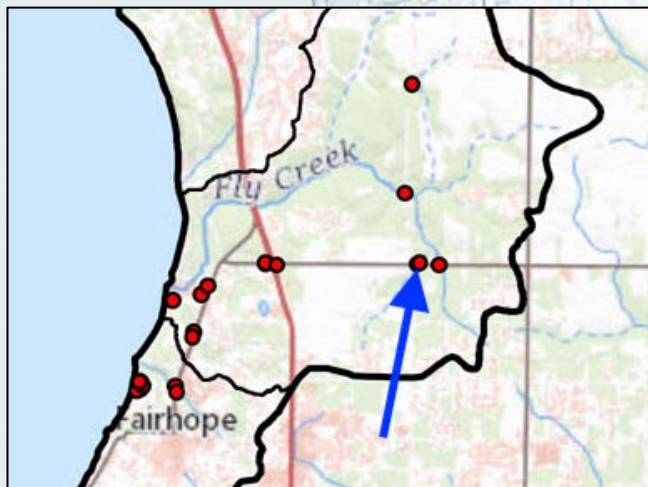
# Field Observations



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## Fly Creek Tributary at CR 104

- Highly incised watercourse
- No wetlands
- Significant erosion and headcutting



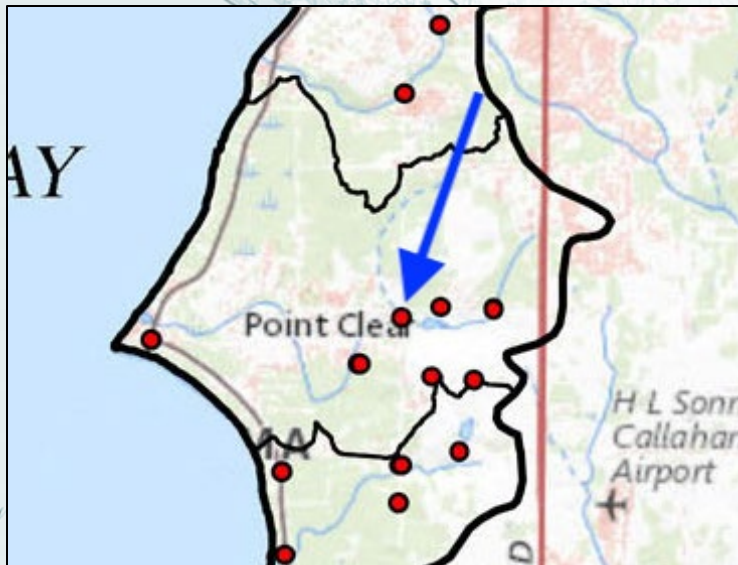


# Field Observations



## Point Clear Creek

- No wetlands
- Eroded watercourse
- Headcutting drain





# Invasive Plants



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Exotic pale yellow iris (*Iris pseudacorus*)  
at Fairhope Pier Park

Numerous exotic species at  
nearly every field location  
visited, including in  
wetlands.

Camphor tree, Chinese  
privet, and Japanese  
climbing fern were  
documented at nearly all  
stops.





***And the Survey says...***



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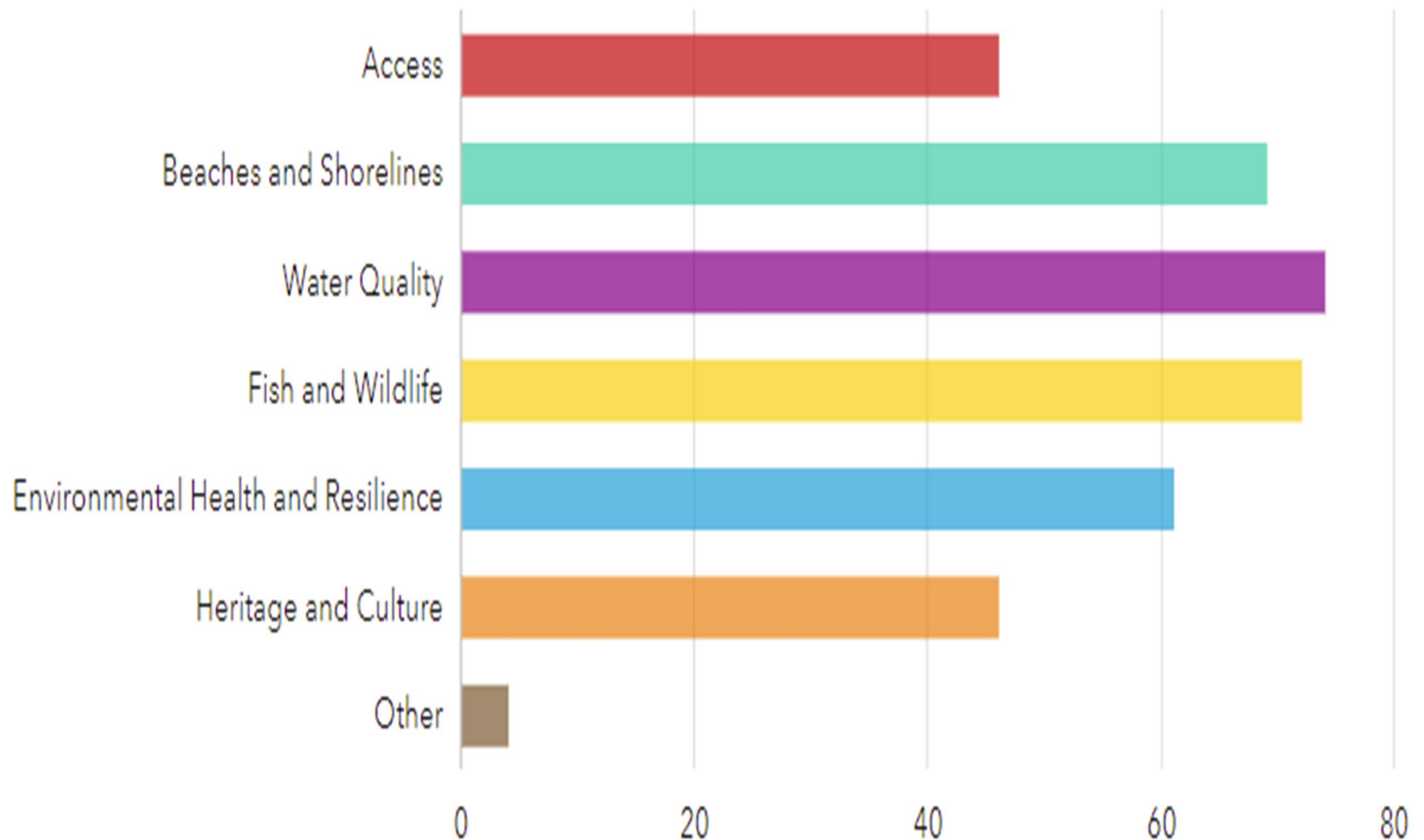








## The strength is most related to:

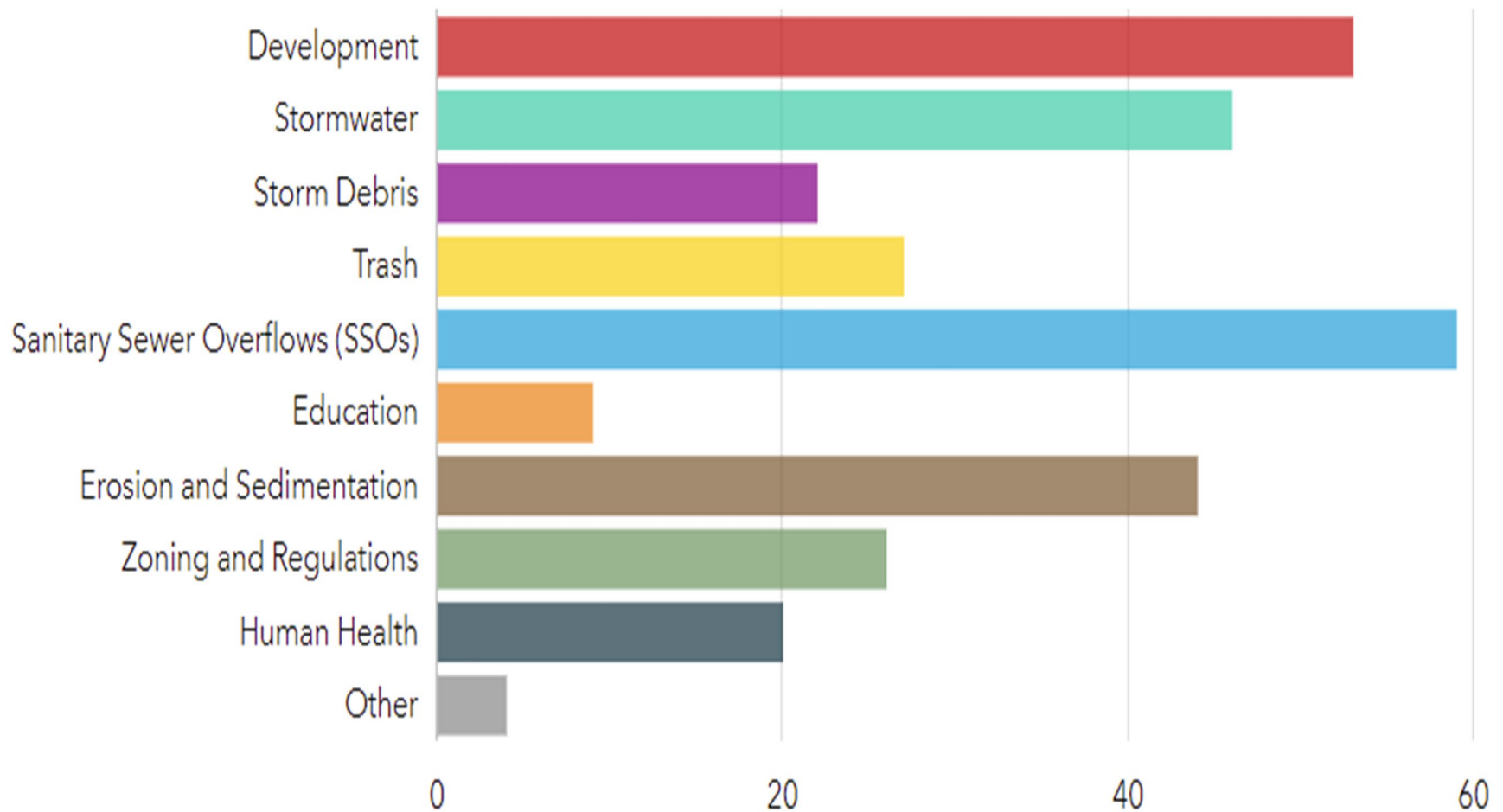








## Threats are most related to:





# Critical Issues

- Development
- Water Quality
- Erosion/Sedimentation and Shoreline Loss
- Habitat Loss
- Human Health and Wellbeing
- Litter and storm debris



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# Activity

- Breakout groups
  - **Development** – zoning, regulations, ordinances, LIDs, etc.
  - **Water Quality** – SSO's, stormwater runoff, etc.
  - **Erosion/Sedimentation** – shoreline loss, etc.
  - **Litter** – post-storm debris, pollution, etc.
  - **Human Health/Wellbeing** – public access, walking/biking trails, etc.
  - **Habitat loss** – oysters, fish, trees, etc.



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# Activity (continued)

1. What are the biggest concerns within the category?
2. What are some possible solutions to address those concerns?
3. What are the challenges/obstacles to implementing those solutions?



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# Ground Rules

- This is a public discussion, not a debate.
- Everyone is encouraged to participate.
- No one or two individuals should dominate a discussion.
- One person speaks at a time.
- Listen to and respect other points of view.
- Do your best to understand the pros and cons of every option
- Seek first to understand, not to be understood. Ask questions to seek clarification when you don't understand the meaning of someone's comments.



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