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Mobile Bay National Estuary Program

EASTERN SHORE

WATERSHED MANAGEMENT PLAN

Stakeholder Workshop
December 6, 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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Seven Subwatersheds

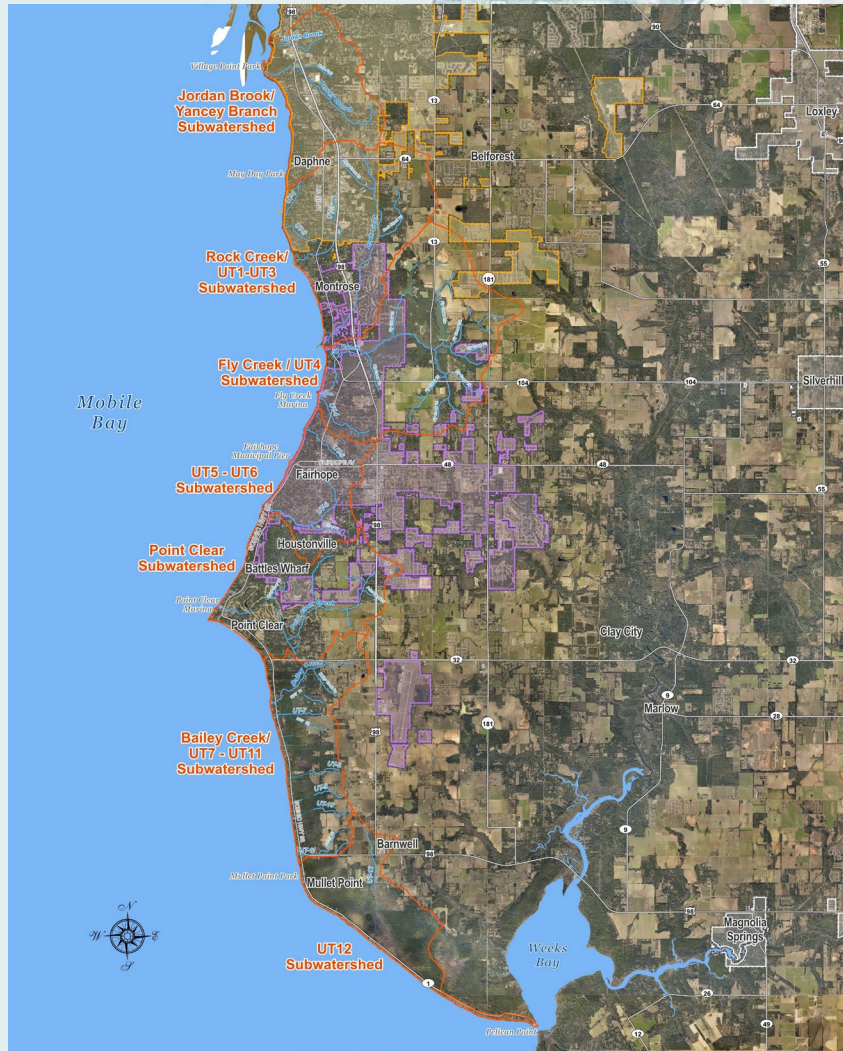
- Jordan Brook/Yancy Branch: 3.8 Sq.Mi.
- Rock Creek / UT1-UT3: 6.5 Sq.Mi.
- Fly Creek / UT-4: 8.48 Sq.Mi.
- UT5 – UT6 (City of Fairhope core): 2.86 Sq.Mi.
- Point Clear: 5.28 Sq.Mi.
- Bailey Creek / UT7-UT11: 4.45 Sq.Mi.
- UT12: 3.62 Sq.Mi.



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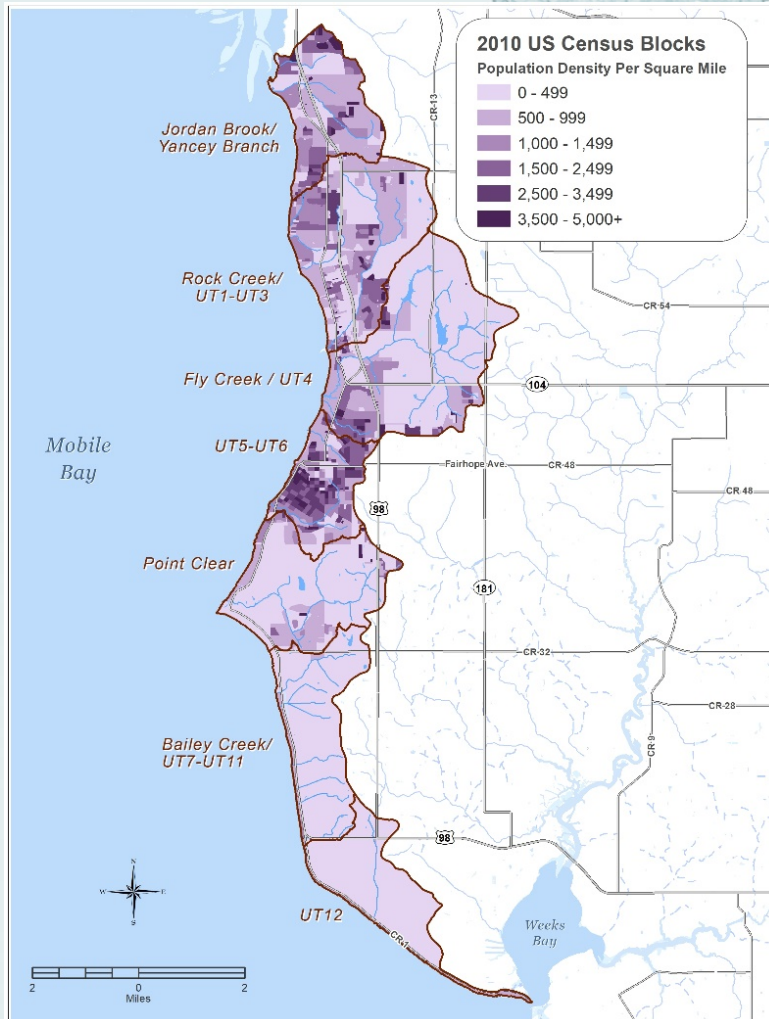
Subwatershed Map



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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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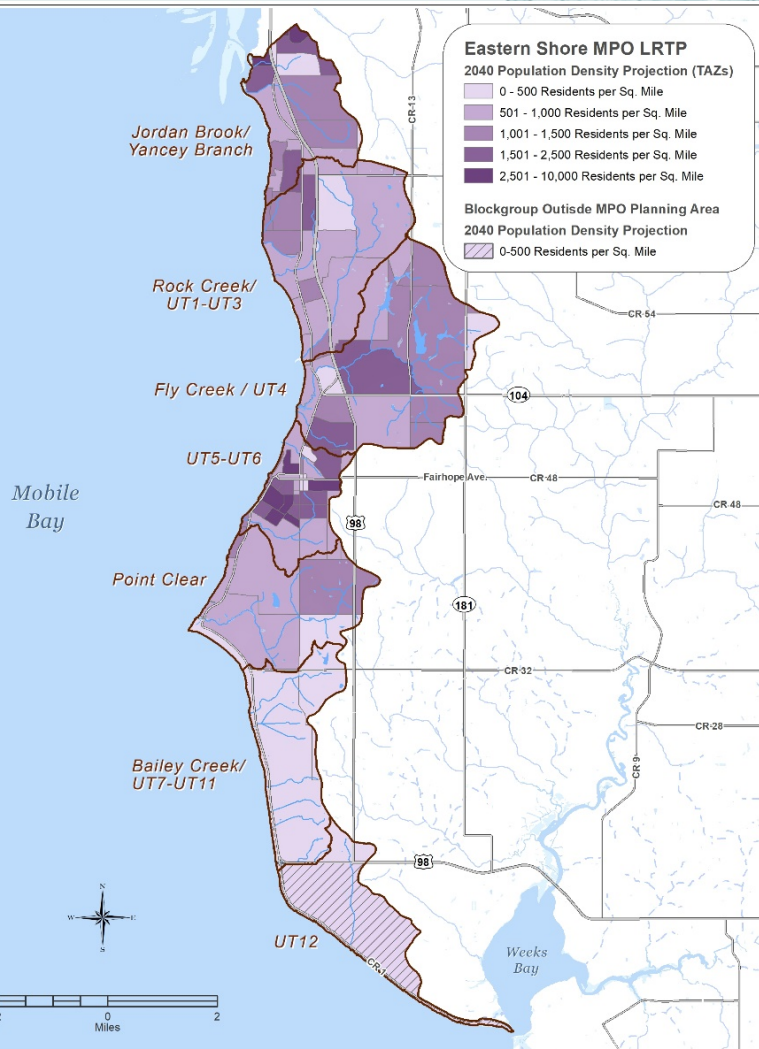


2040 Population Projections



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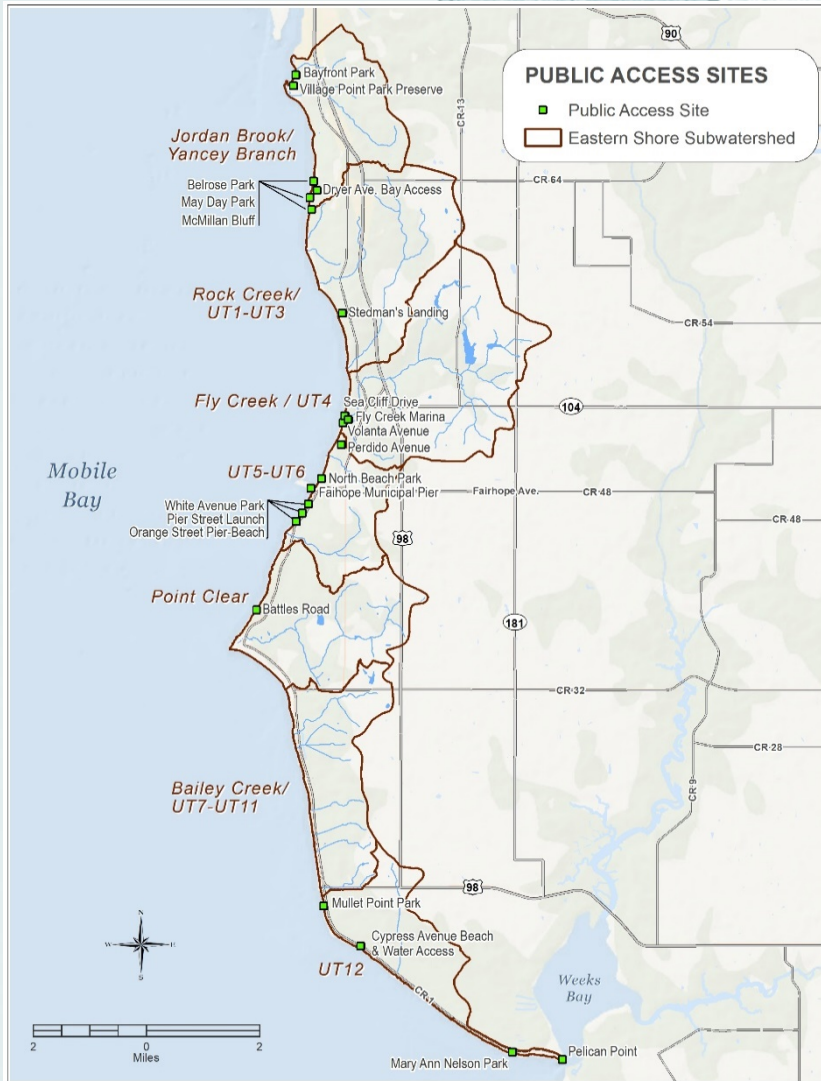
- Greatest population increases appear to be in headwater areas of the Fly Creek and Point Clear sub-watersheds
- Lesser but still significant increases in downstream areas of Point Clear sub-watershed and Fly Creek sub-watershed



Coastal Public Access



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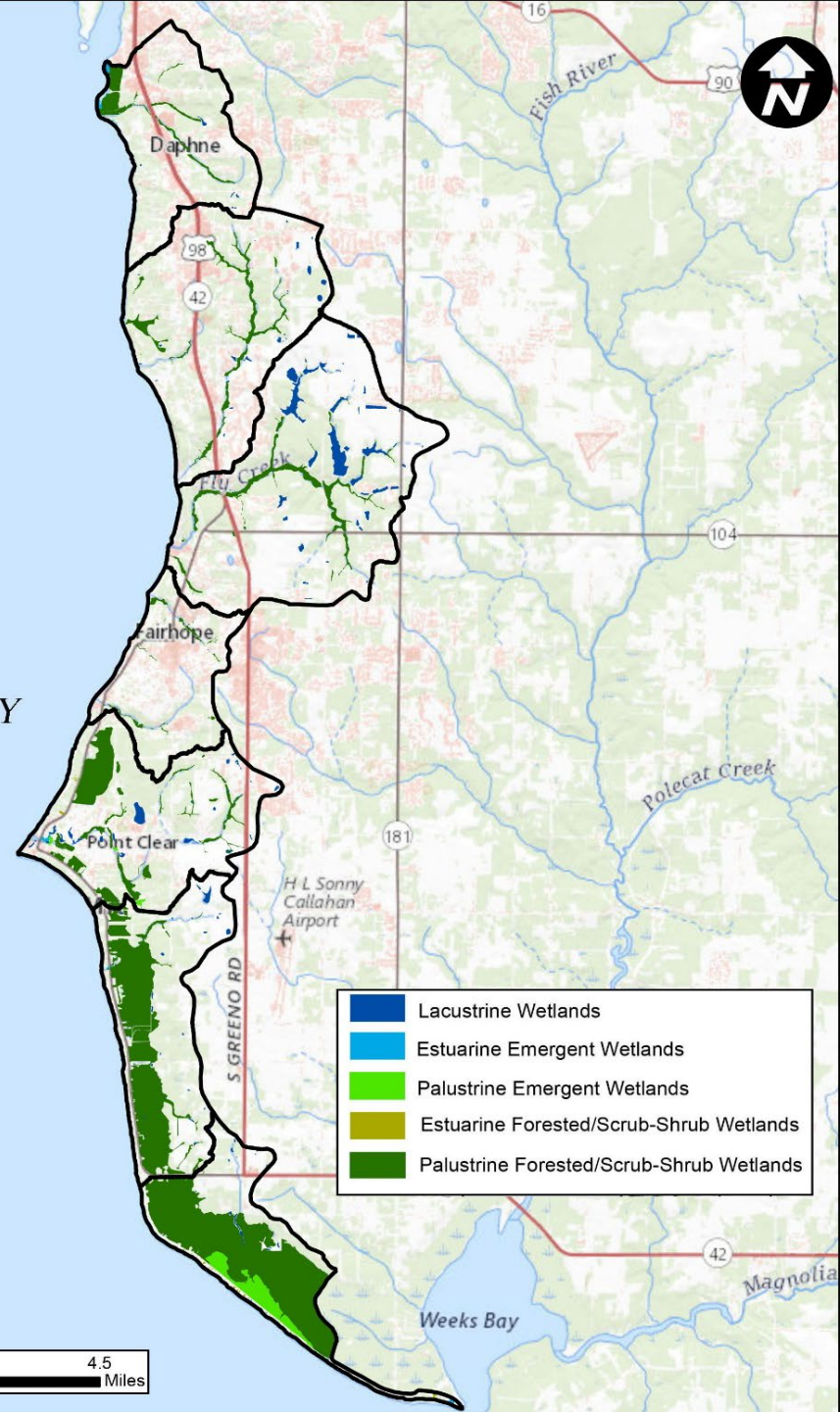


Wetlands

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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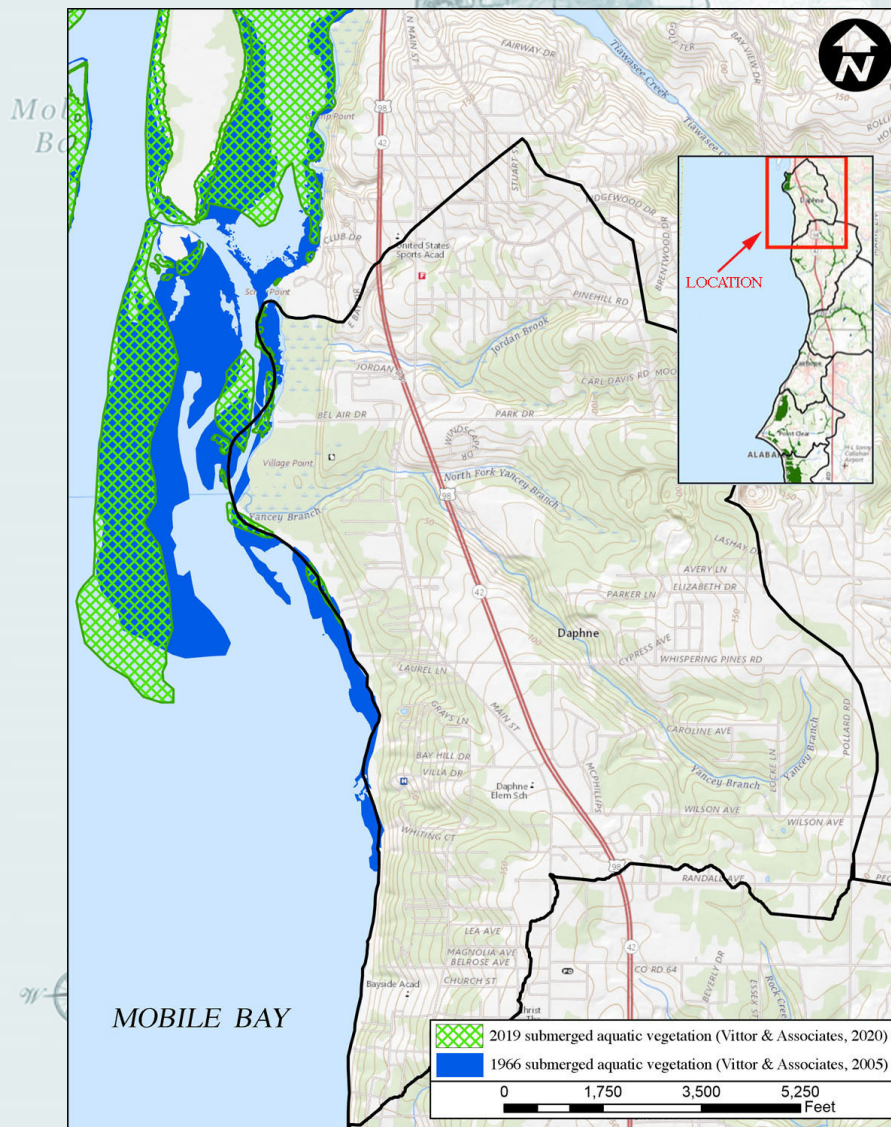
- Lacustrine Wetlands
- Estuarine Emergent Wetlands
- Palustrine Emergent Wetlands
- Estuarine Forested/Scrub-Shrub Wetlands
- Palustrine Forested/Scrub-Shrub Wetlands



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

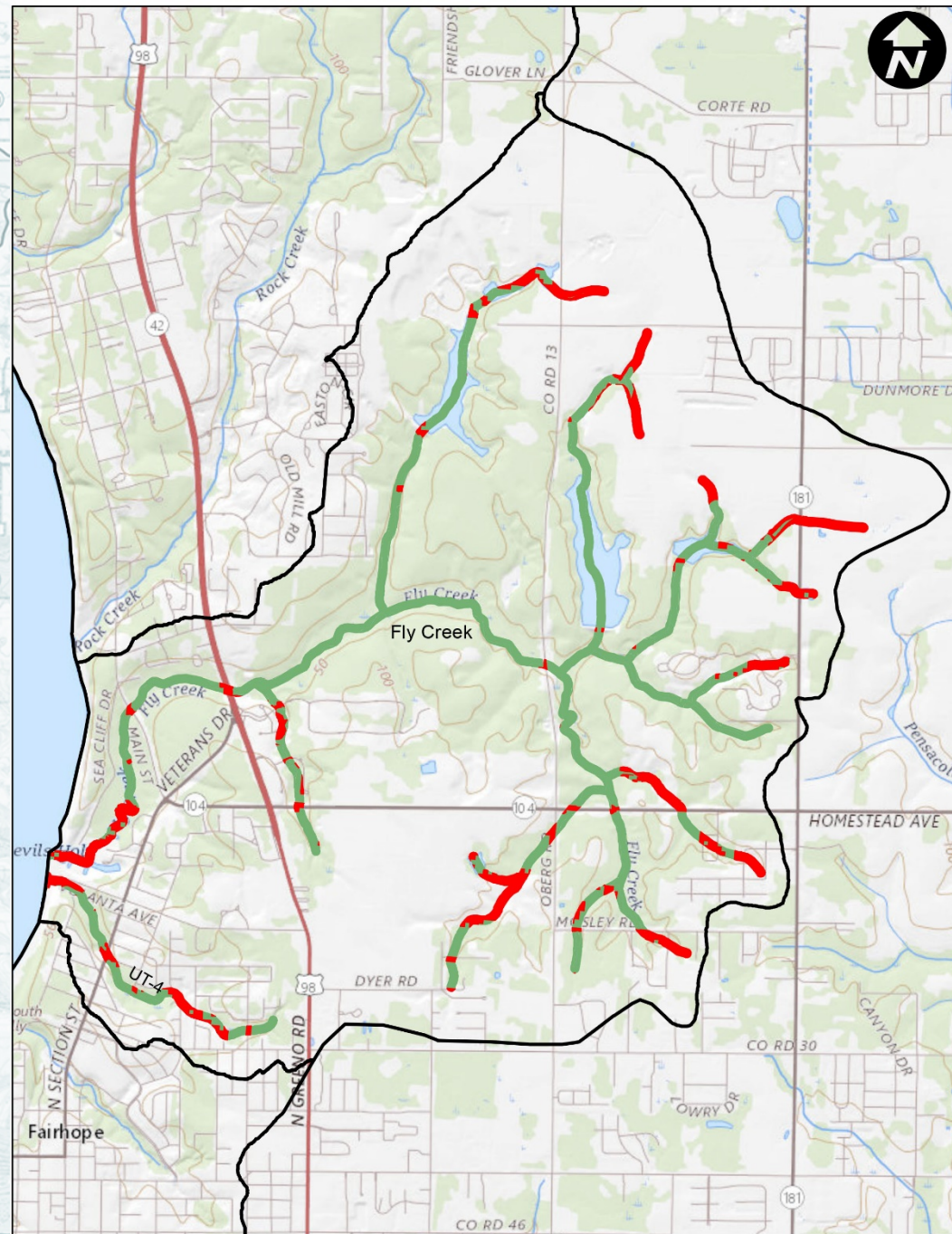
Mobile Bay

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



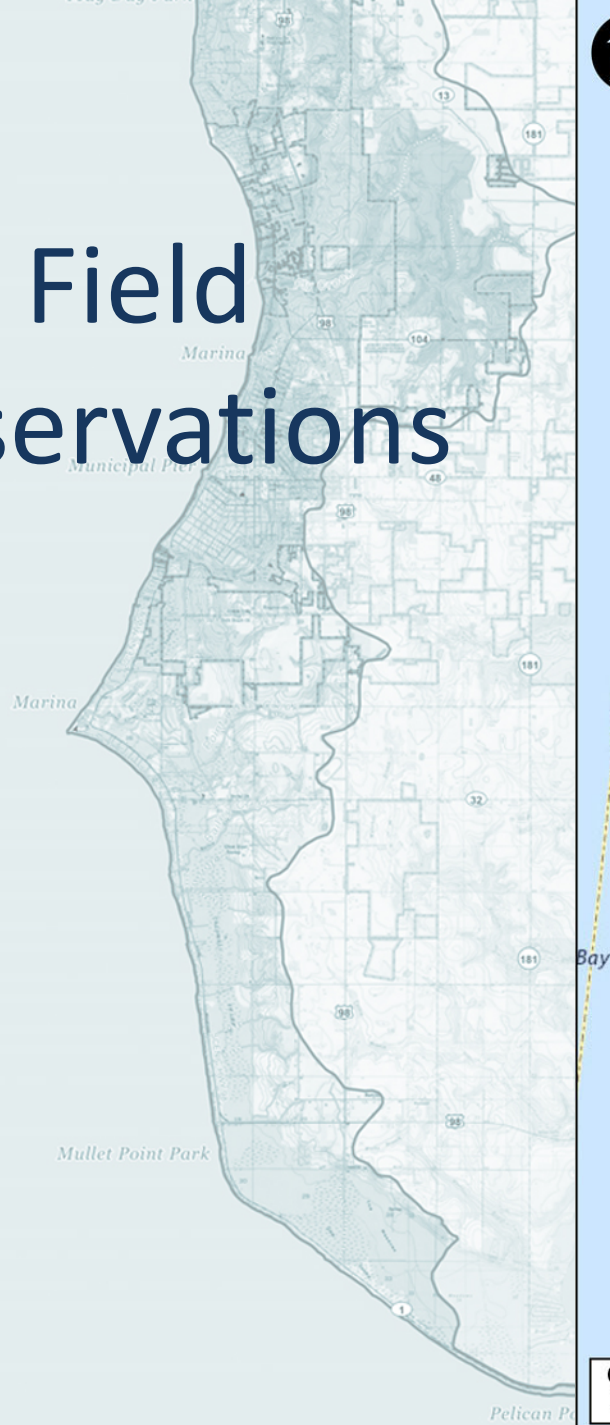
Pelican

Wetland or Forested Upland

Altered Land

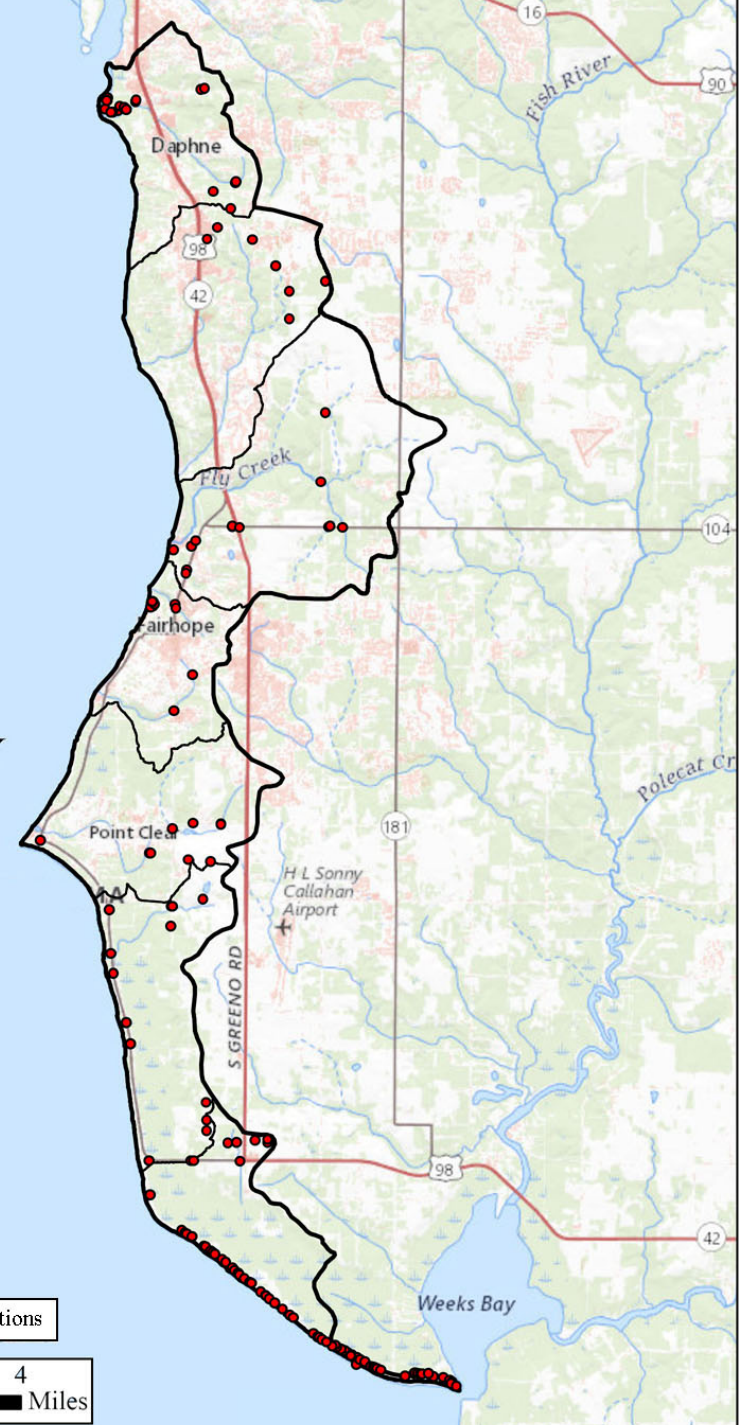
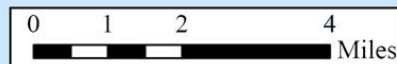
0 0.4 0.8 1.2 Miles

Field Observations



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● Field Observation Locations



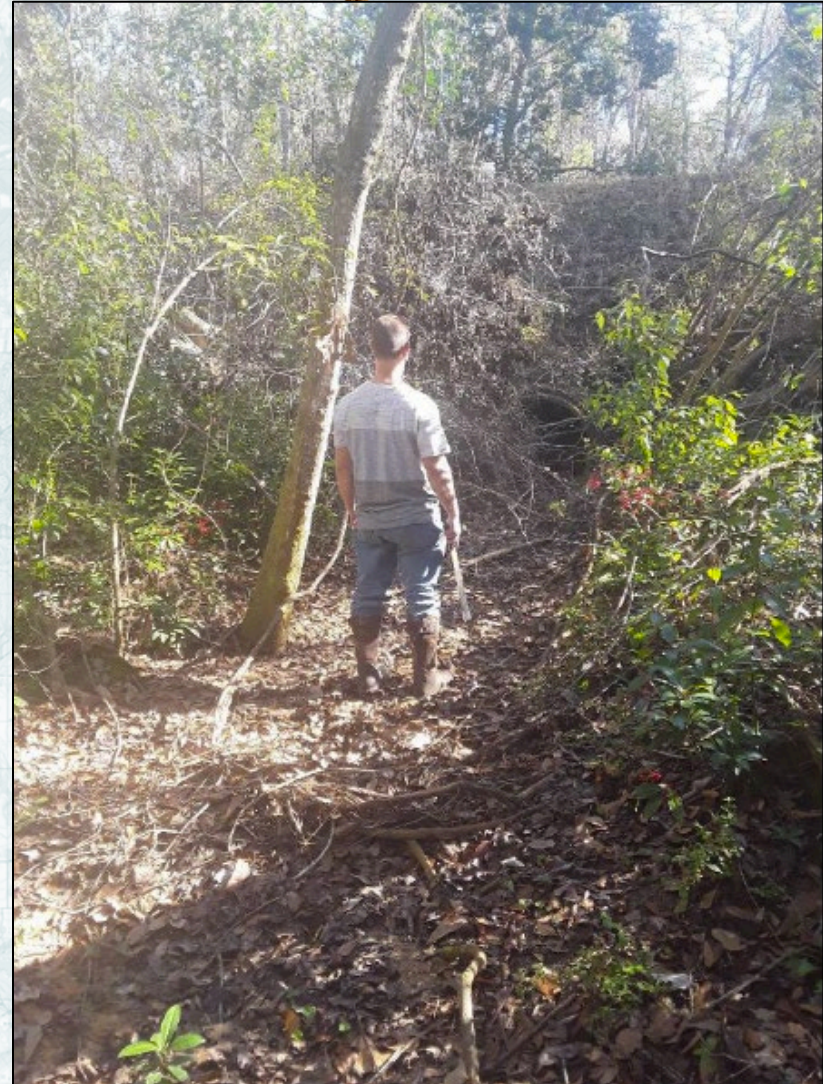
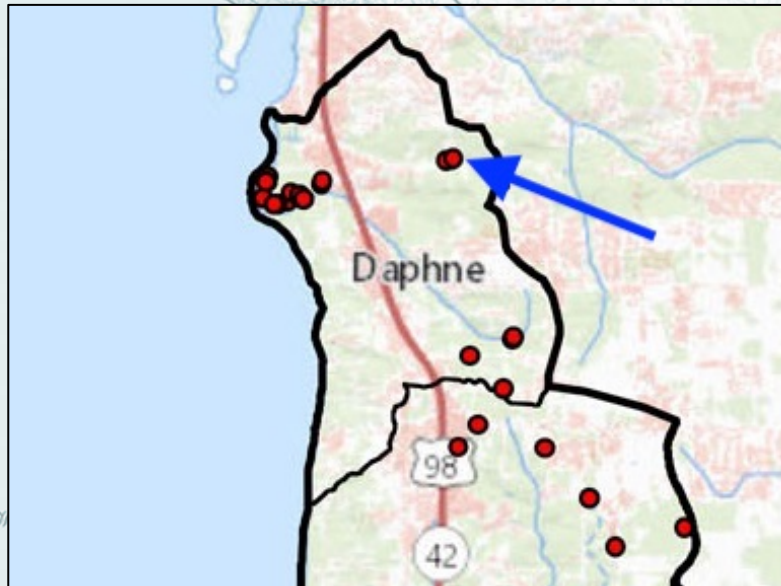
Field Observations



Mobile

Upper Jordan Brook

- Heavily silted watercourse
- Functionally not a wetland



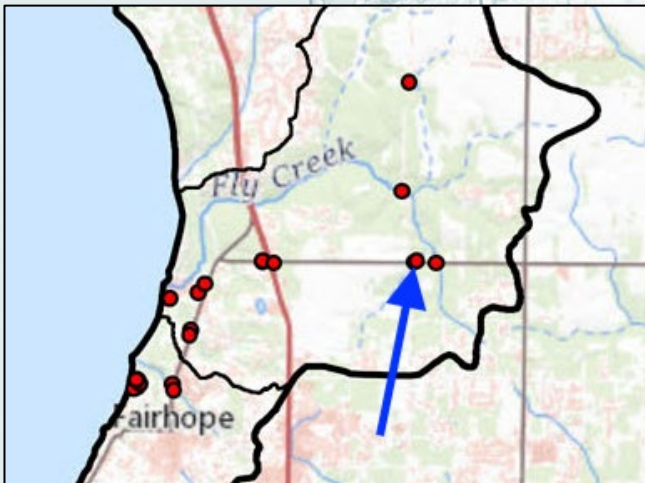
Field Observations



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Fly Creek Tributary at CR 104

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

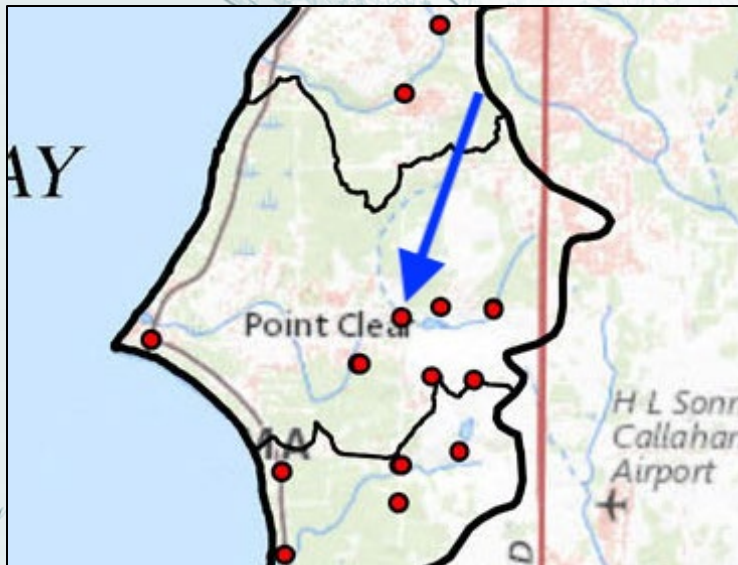


Field Observations



Point Clear Creek

- No wetlands
- Eroded watercourse
- Headcutting drain



Invasive Plants



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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.



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



Critical Issues

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



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And the Survey says...



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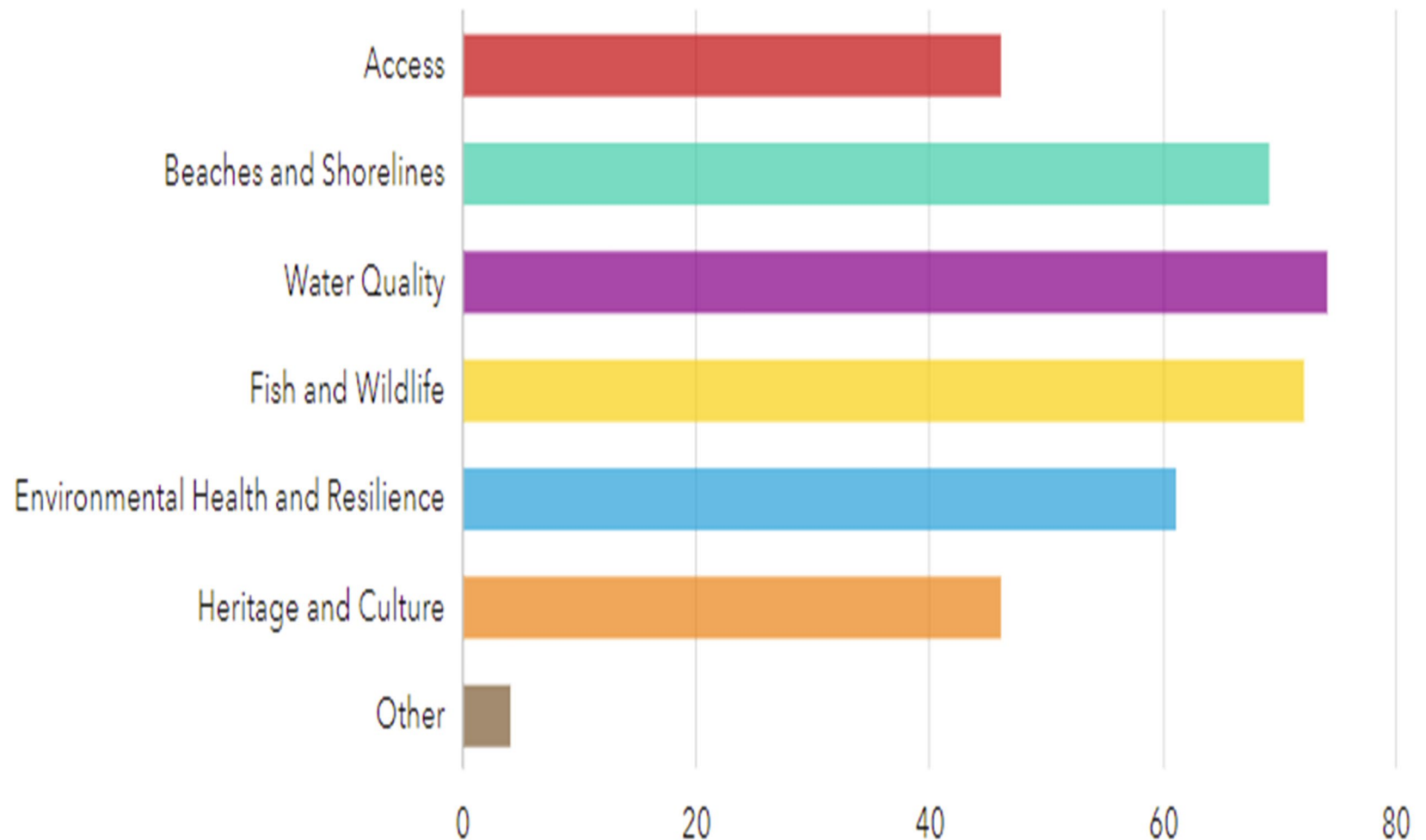


What are the things that make the Eastern Shore most unique and desirable that should be protected or improved?

- Historic homes
- Grand Hotel
- Mobile Bay/Delta
- Southern hospitality
- Biodiversity
- Jubliees
- Family-friendly
- Live oaks
- Sunsets
- Water activities
- Cost of living
- Quality of life

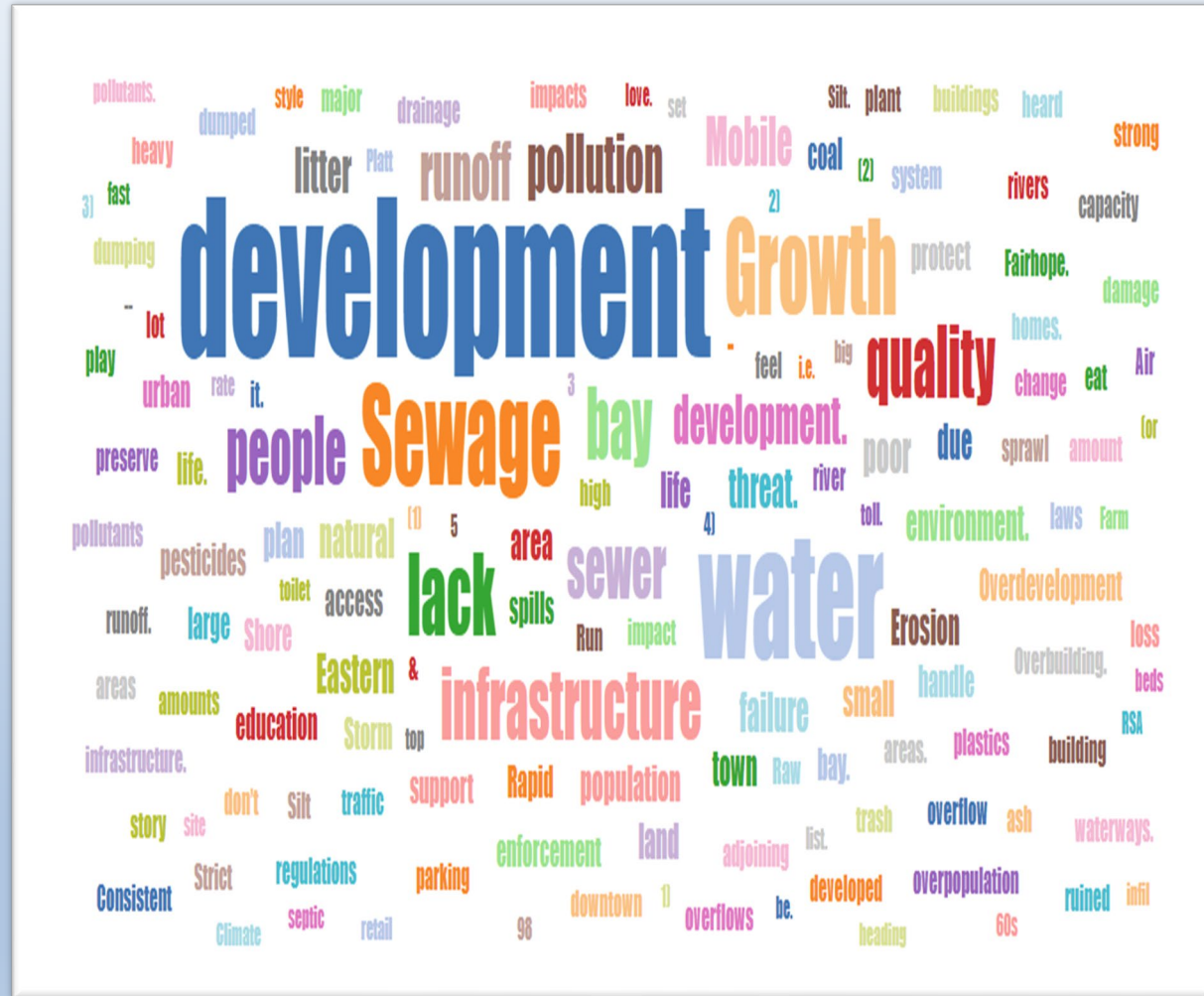


The strength is most related to:

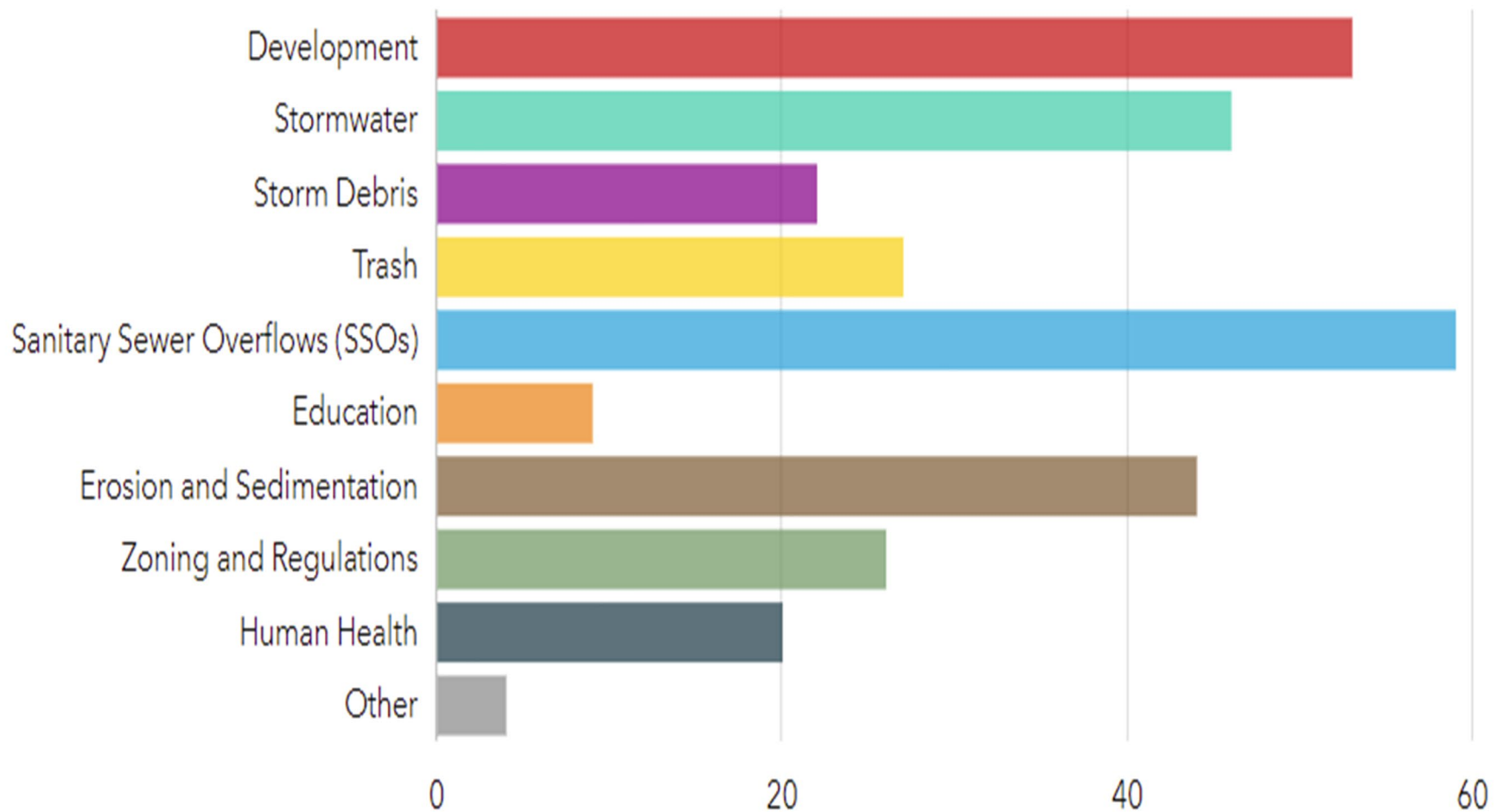


What is threatening our community?

- Development
- Erosion
- Pollution
- Sewer overflows
- Stormwater Runoff
- Lack of Education
- Lack of Regulations
- Litter
- Corporate Polluters
- Habitat Loss



Threats are most related to:



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

- Postpone and withhold your judgement of ideas
- Encourage wild and exaggerated ideas
- Build on the ideas put forward by others
- Every person and every idea has equal worth



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