

# The Mobile Bay National Estuary Program and Partners Taking on Trash in Coastal Watersheds



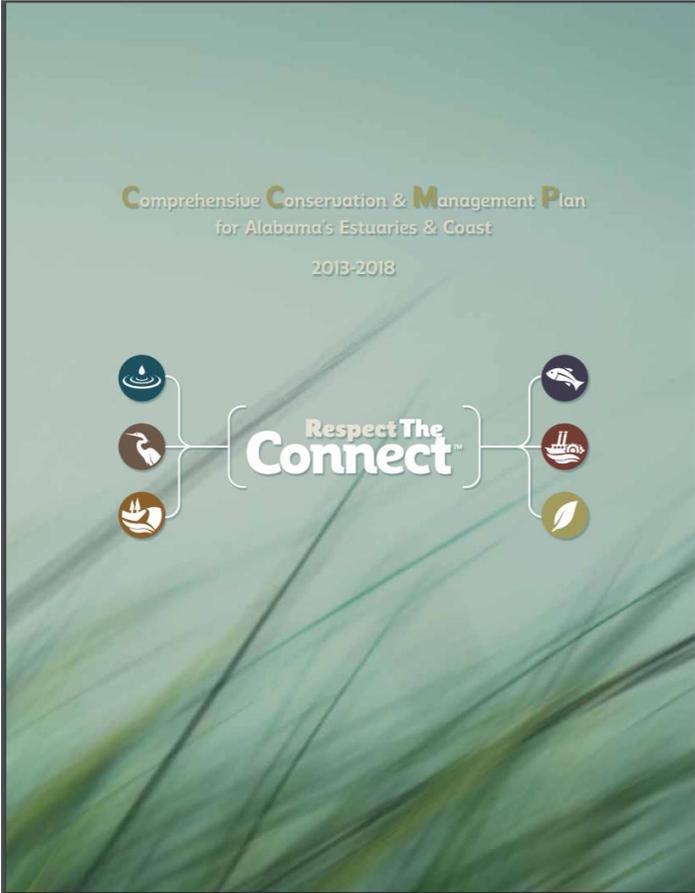
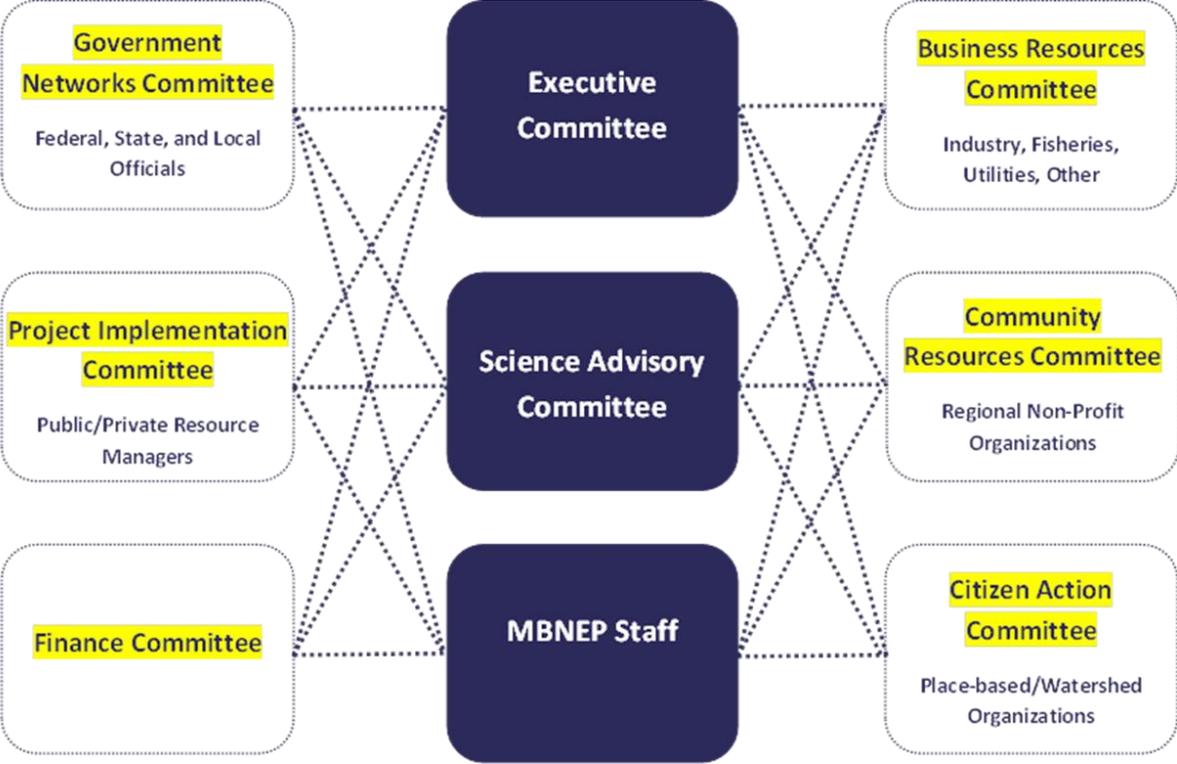
American Association of Port Authorities'  
Environment Committee

April 10, 2019  
Mobile, AL



# Making Science Matter to Community Influencers:

## The Mobile Bay National Estuary Program Management Conference



2013-2018

# Comprehensive Conservation and Management Plan

## The Science:

## Highest Ranking Habitats, Ecosystem Services and Stresses

Habitat	Ecosystem Services Most Stressed	Top Stress Impacts	Values
Freshwater Wetlands	Nesting for birds and turtles Biodiversity Wildlife, Fisheries	Land Use Change Fragmentation Dredging and Filling	Access Fish Heritage Resilience Water Quality
Intertidal Marshes and Flats	Biodiversity Fisheries Wildlife Water Quality	Sediment Sea Level Rise Fragmentation	Access Beaches Fish Heritage Resilience Water Quality
Streams and Rivers (Riparian Buffers)	Fish Biodiversity Water Quality Sediment	Freshwater discharge Land Use Change Sediments	Access Fish Heritage Resilience Water Quality

# The Connection:

What people value  
most about living in  
coastal Alabama...



Access to Water and Open  
Spaces



Coastlines  
(Beaches and Other Shorelines)



Fish



Heritage and  
Culture



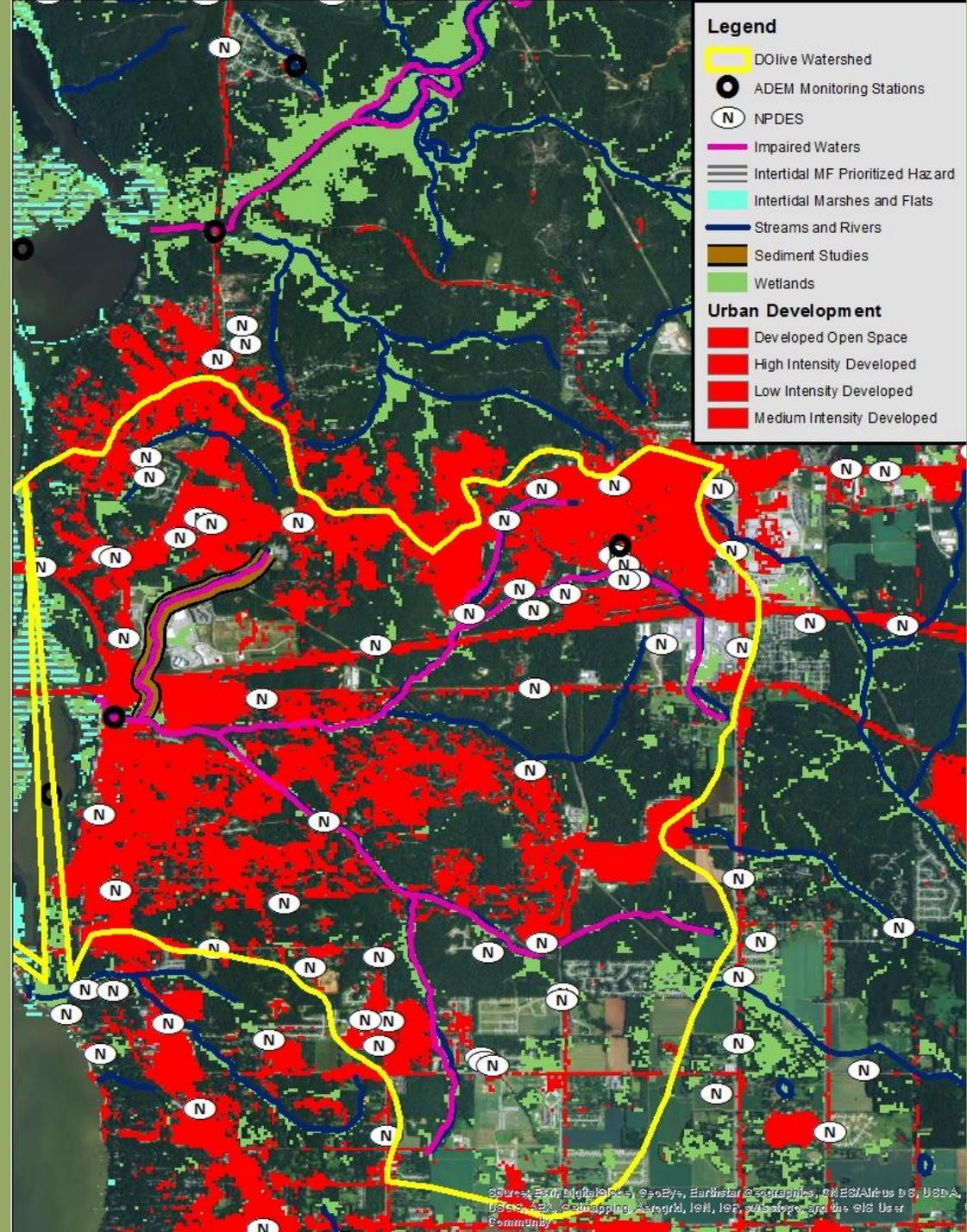
Environmental Health and  
Resilience

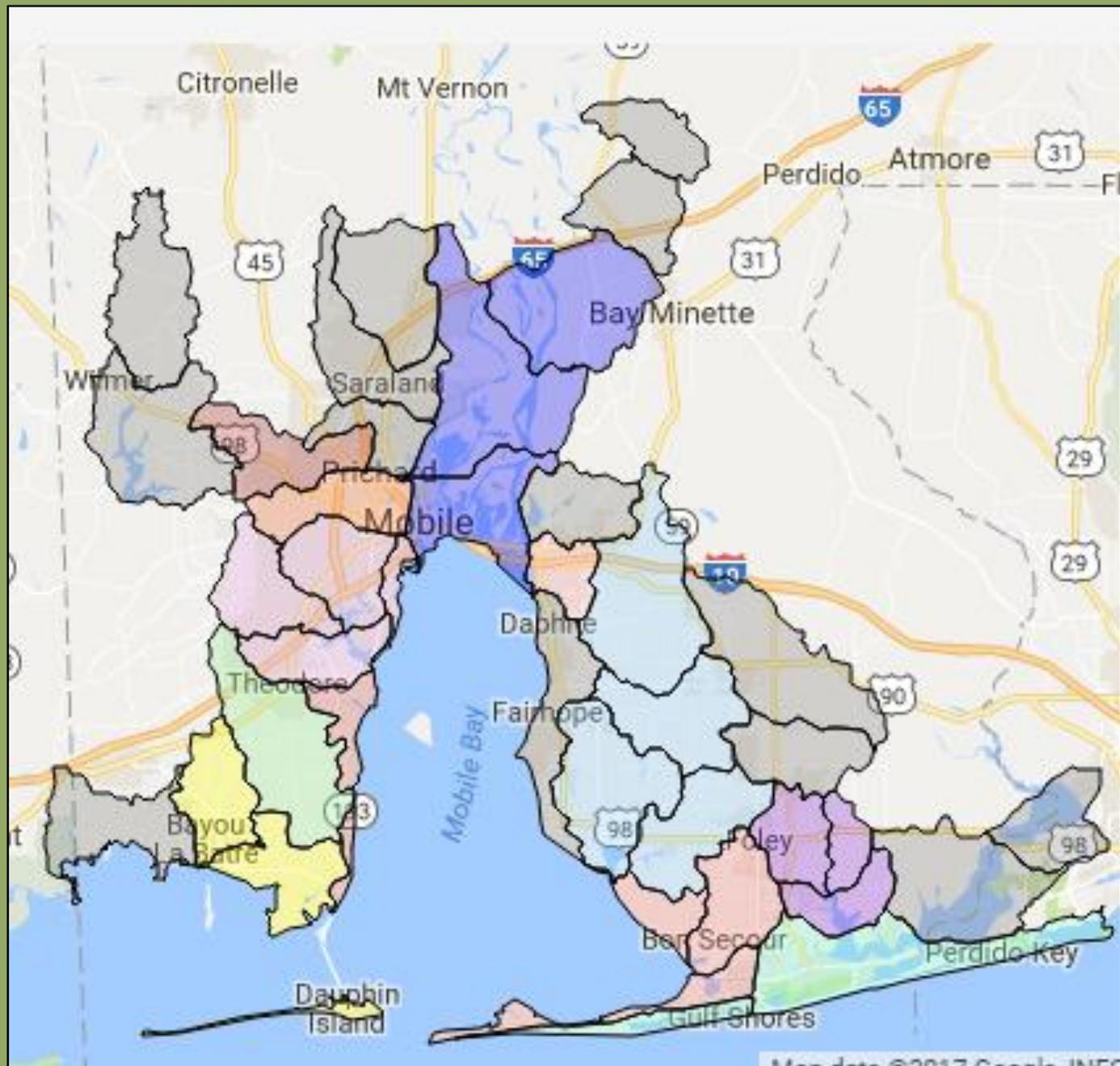


Water Quality

# The Methodology:

## A Watershed Approach





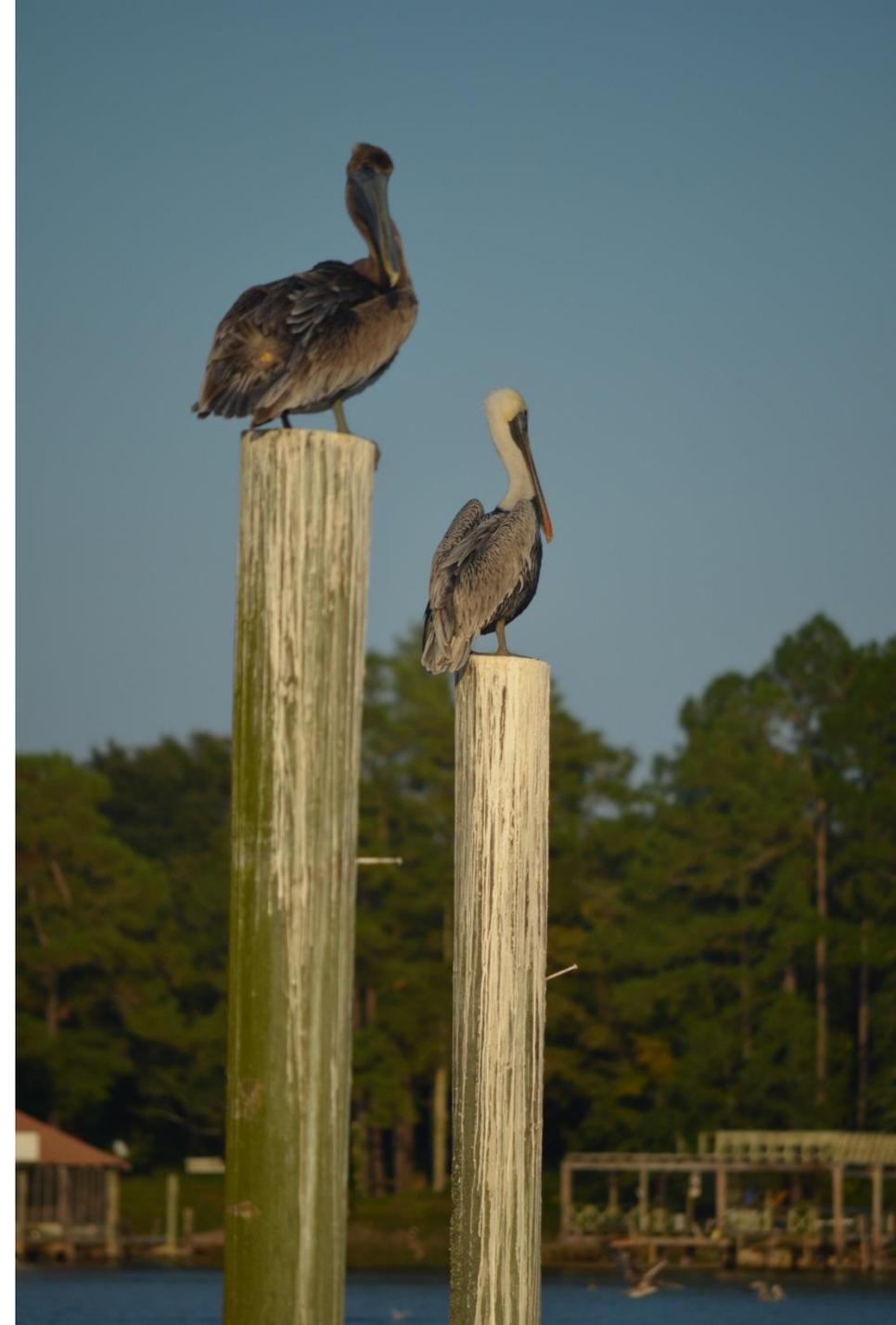
# Goals of the watershed planning ...

- **Improve water quality**
- **Improve habitats**
- **Protect continued customary uses of biological resources**
- **Improve watershed and community resilience**
- **Expand opportunities for community access**



# What is in a plan? *(EPA's 9 Key Elements +)*

- **Build Partnerships**- key stakeholders, community input and concerns
- **Characterize the Watershed**- causes and sources of impairments, identification of data gaps and estimation of pollutant loads *(history, access, SLR and storm surge scenarios)*
- **Set Goals and Identify Solutions** % of pollutant load reductions and management measures to achieve goals
- **Design Implementation Program**- Initial actions, interim milestones, monitoring plan, education program, and costs and financing opportunities
- **PLUS- Six Values, Sea Level Rise/Storm Surge Scenarios**



# How watershed plans are informing coastal restoration.

- Intensive community education and engagement
- Identification of restoration and protection opportunities
- Tool for local governments in securing resources
- Recommendations prioritized on “biggest bang for the buck”
- National Flood Insurance Program Discounts through the Community Rating System



# Watershed Intergovernmental Cooperation

## *D'Olive Watershed Intergovernmental Task Force*

- Consistent subdivision regulations changes
- Intergovernmental cooperation and use of resources

## *Three Mile Creek Watershed Public-Private Partnership*

- Improved litter enforcement/debris removal

## *Fowl River Watershed Task Force*

- Establishment of Volunteer Monitoring Corps

## *Fish River Watershed Management Authority*

- Regional Stormwater Management
- Consistency in sub-division regulations



# Watershed Community Buy-In

- Volunteer WQ monitoring
- Rain barrel installations and workshops
- Community clean-ups
- Paddle trips
- Watershed signage



# Watershed Restoration and Conservation

- Streambank & riparian buffer, wetland restoration
- Shoreline stabilization/living shorelines
- Green infrastructure retrofits
- Invasive species management
- Tidal marsh restoration & conservation
- Trash Abatement initiatives

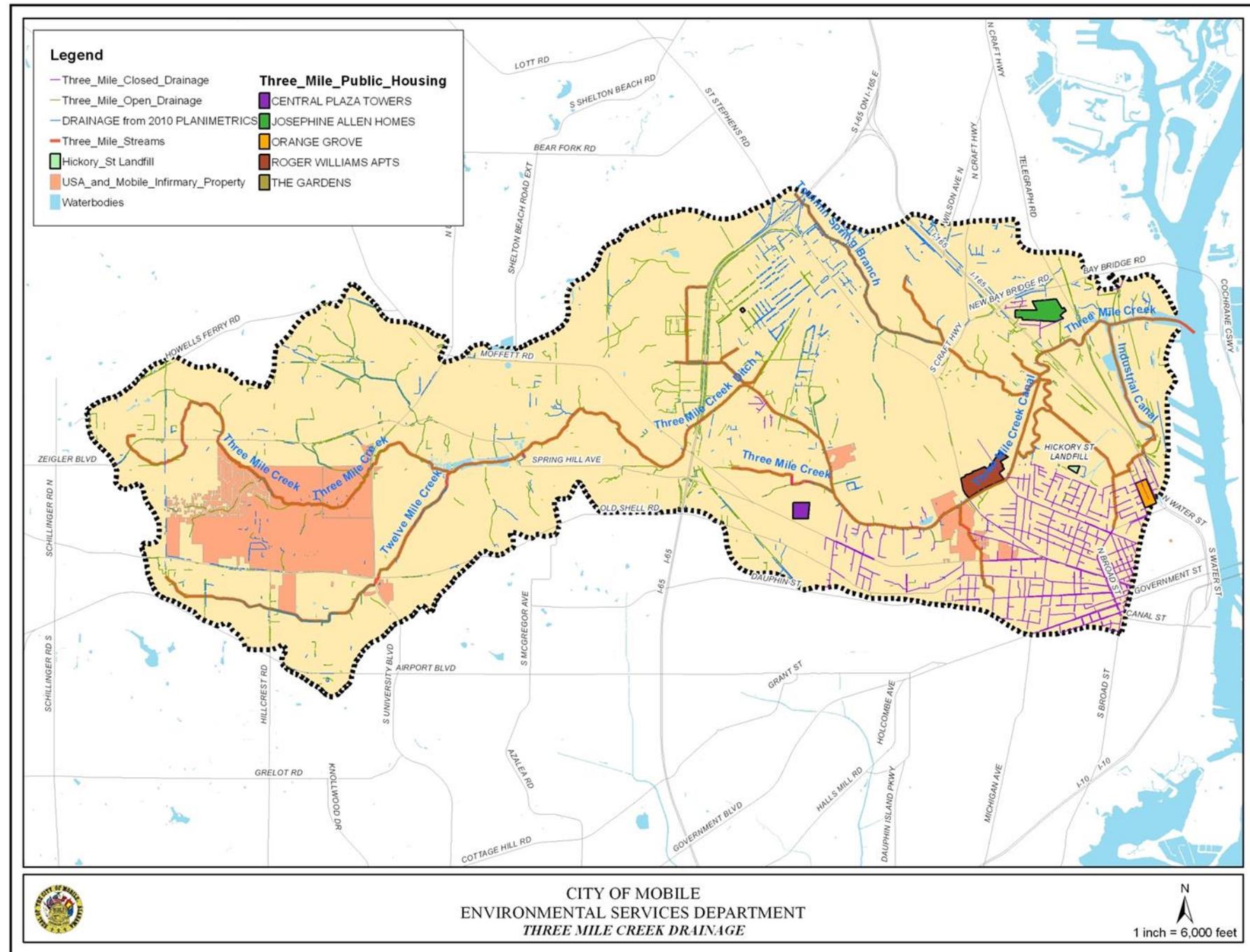


A scenic view of a creek winding through a lush green landscape. The foreground is dominated by large trees with Spanish moss hanging from their branches, framing the view. The middle ground shows a wide, green field leading to a creek that curves through the distance. The background is a dense forest under a hazy sky.

Three Mile Creek  
Watershed Restoration

# The Goals of the Plan

- Improve **water quality**.
- Protect and improve the **health of fish and wildlife**.
- Provide **access** to resources.
- Restore heritage and **cultural connection** between the watershed and community.
- Plan and prepare for **climate resilience**.



## The Objectives:

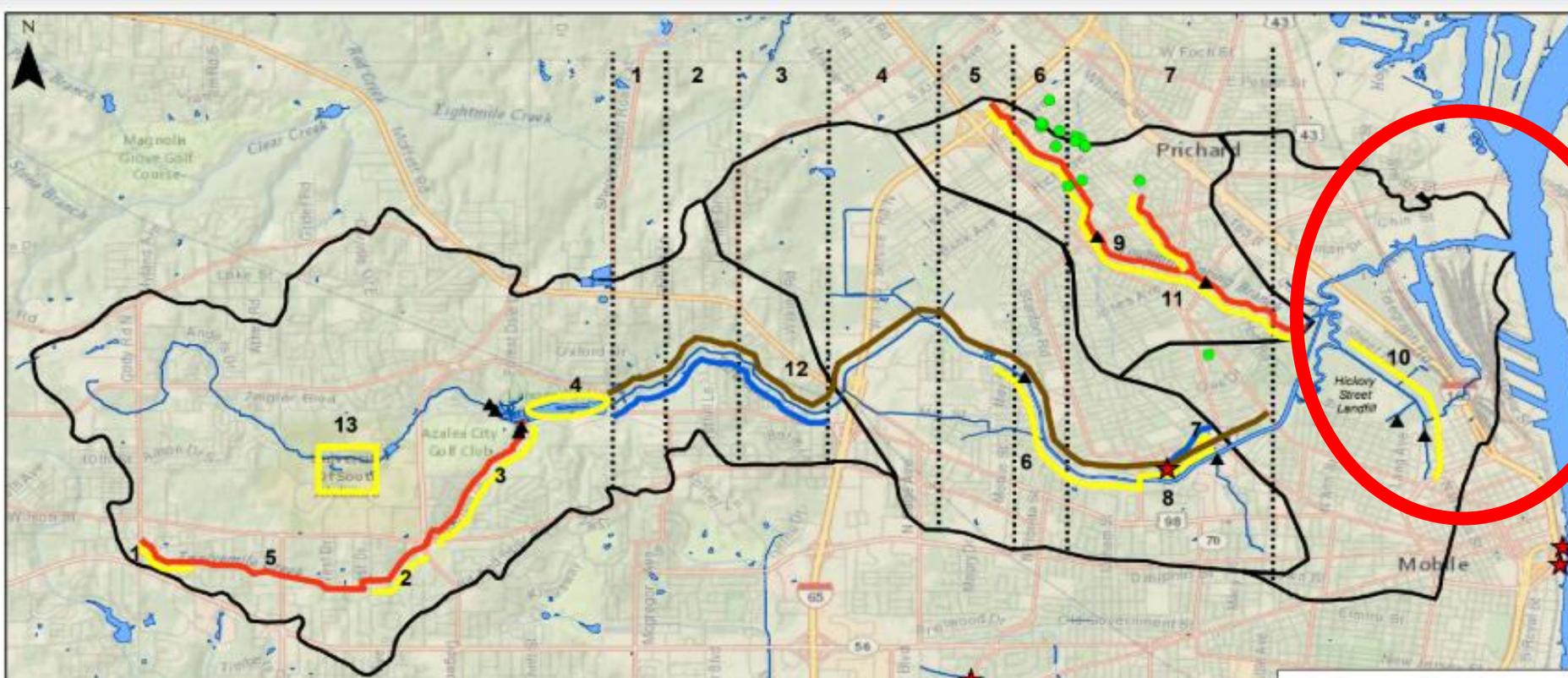
1. **Develop 10 miles of continuous greenway** and restore natural channels and riparian buffers where feasible.
2. Develop a strategy for implementing **Total Maximum Daily Loads (TMDLs)**.
3. Achieve State water quality use standards for **Warm Water Fisheries**.
4. Eliminate all know **illicit connections/sanitary inputs**.
5. **Reduce amount of trash** in waterways by 75%.
6. Install environmental educational signage in six existing or proposed parks.



## Key Areas of Focus

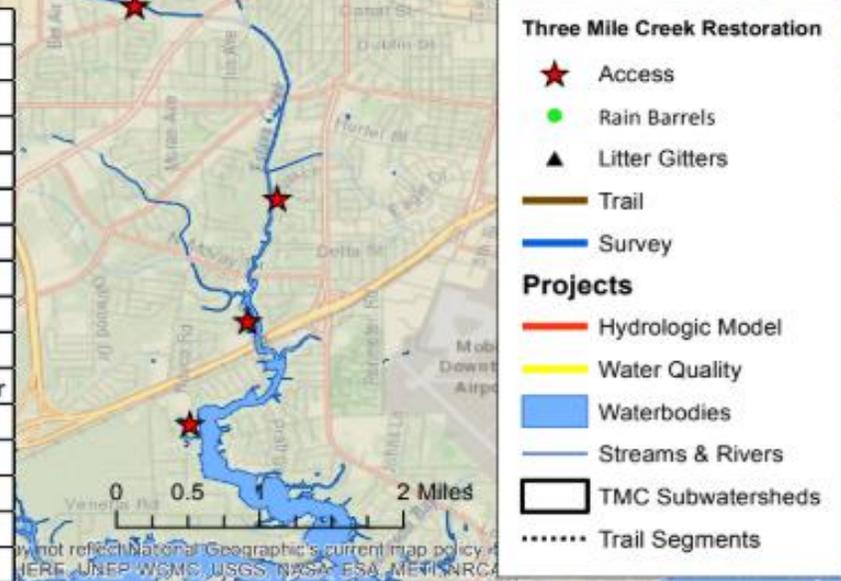
- Environmental
- Access
- Community Engagement





Three Mile Creek drains into the Port.

Project	Project Name	Lead
1	Twelve Mile Creek-Cody to Foreman Road	MBNEP
2	Twelve Mile Creek-East Drive to University	City of Mobile
3	Twelve Mile Creek-University to Langan Park Lake	City of Mobile
4	Langan Park Lake Dredging	City of Mobile
5	Twelve Mile Creek-Hydrologic Model	MBNEP
6	Trunkline N. of Mobile St. to Stanton Rd-St. Stephens Rd.	MAWSS
7	Stormwater Attenuation Tanks (SWAT)	MAWSS
8	Tricentennial Park Improvements	City of Mobile
9	Toulmins Spring Headwaters to source-Hydrologic Model	Mobile County
10	One Mile Creek Marine Debris	Mobile Baykeeper
11	Toulmins Spring Branch-Engineering & Design	Mobile County
12	Three Mile Creek Trail	City of Mobile
13	USA Stormwater Management Program	USA
<b>Projects Not Shown on Map</b>		
	Three Mile Creek-Invasive Species Planning and Implementation	MBNEP

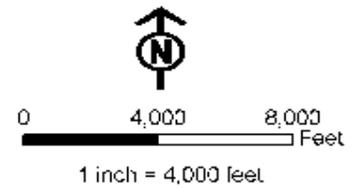
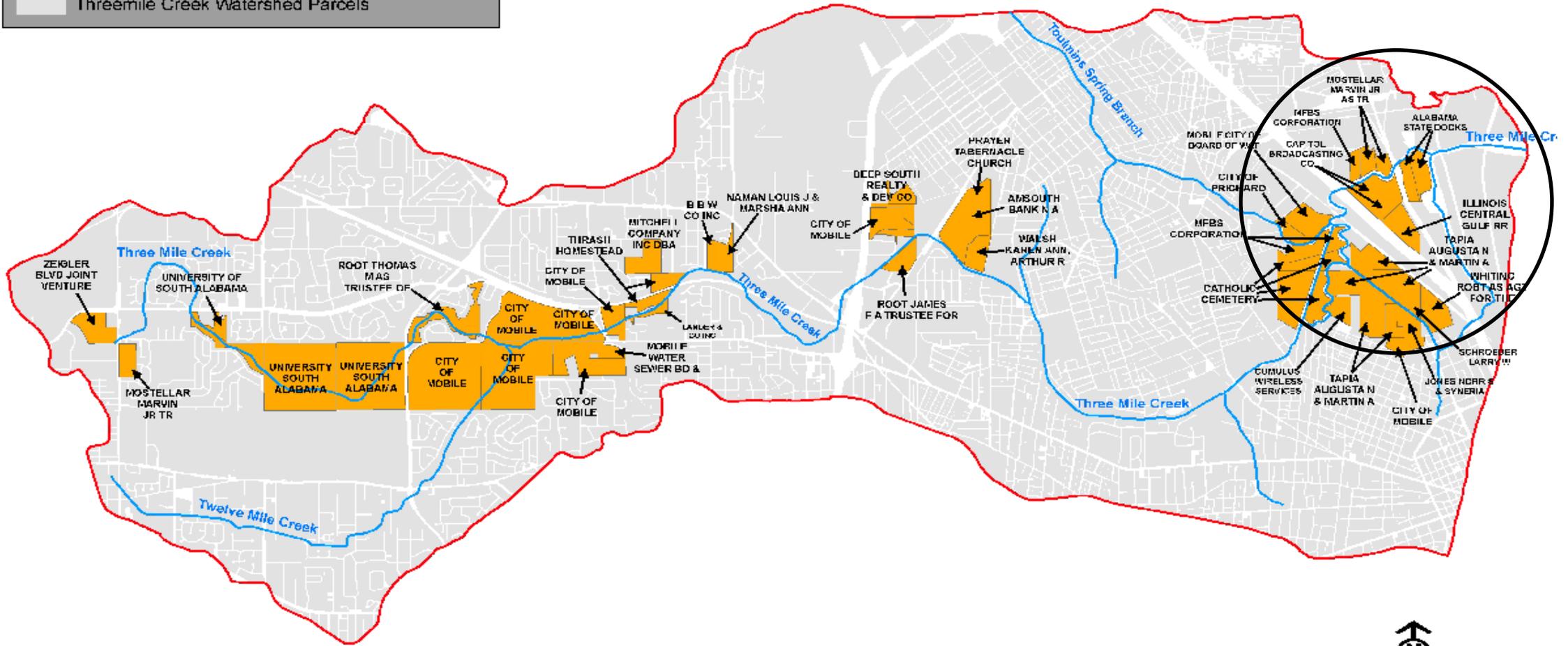


- Three Mile Creek Restoration**
- ★ Access
  - Rain Barrels
  - ▲ Litter Gitters
  - Trail
  - Survey
- Projects**
- Hydrologic Model
  - Water Quality
  - Waterbodies
  - Streams & Rivers
  - TMC Subwatersheds
  - Trail Segments

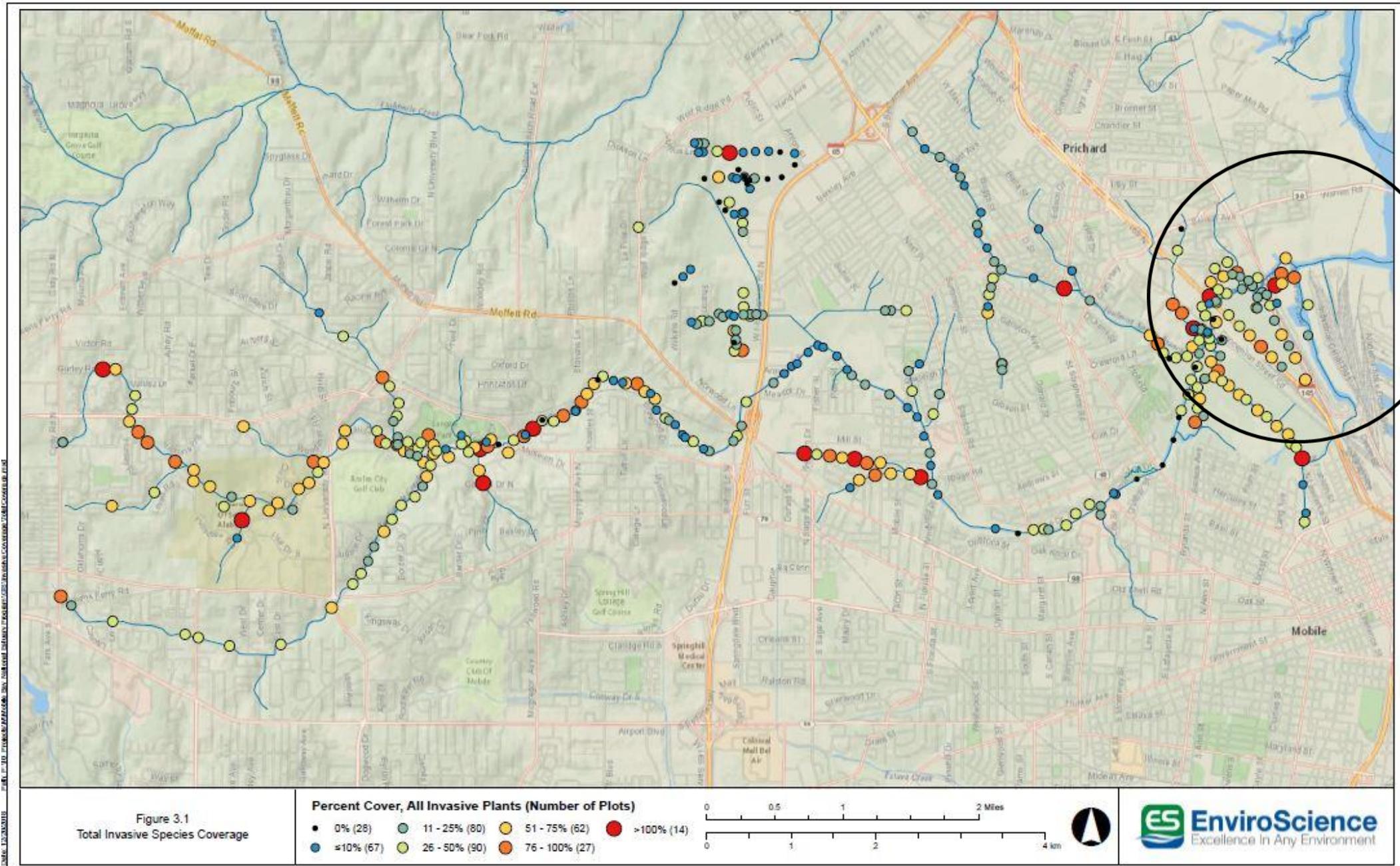
# Three Mile Creek Invasive Species Control Plan

**Legend**

-  Streams
-  Large Undeveloped Parcels Near Threemile Creek
-  Threemile Creek Watershed
-  Threemile Creek Watershed Parcels



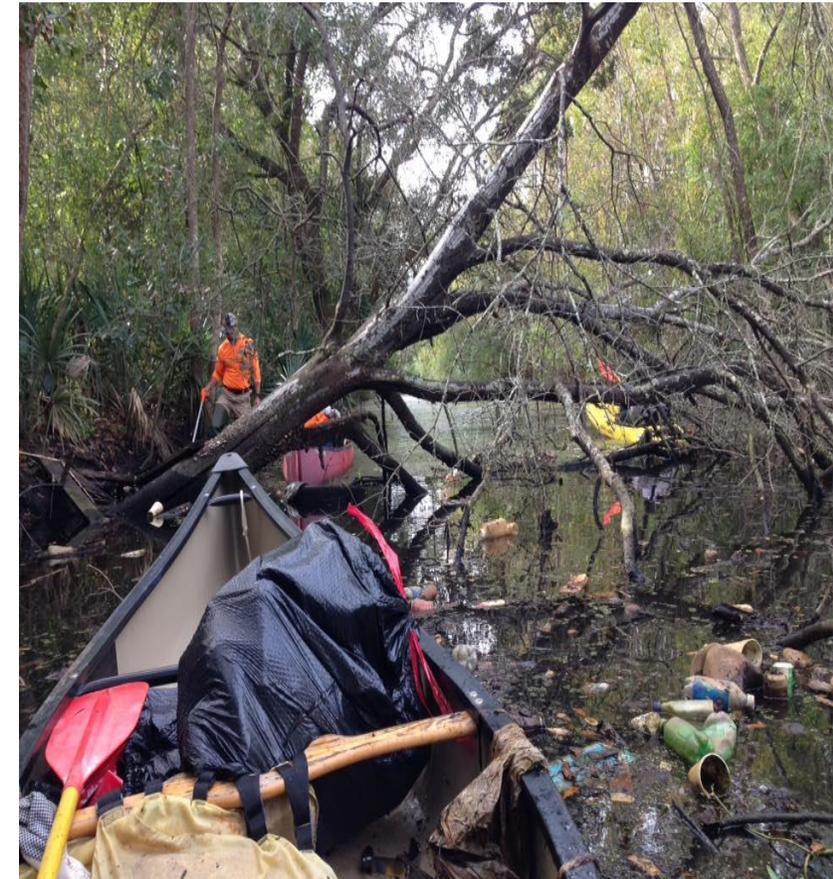
# Total Invasive Species Coverage Across the Three Mile Creek Watershed



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# Litter Abatement: Maple Street Tributary, Mobile, AL

November 11, 2016

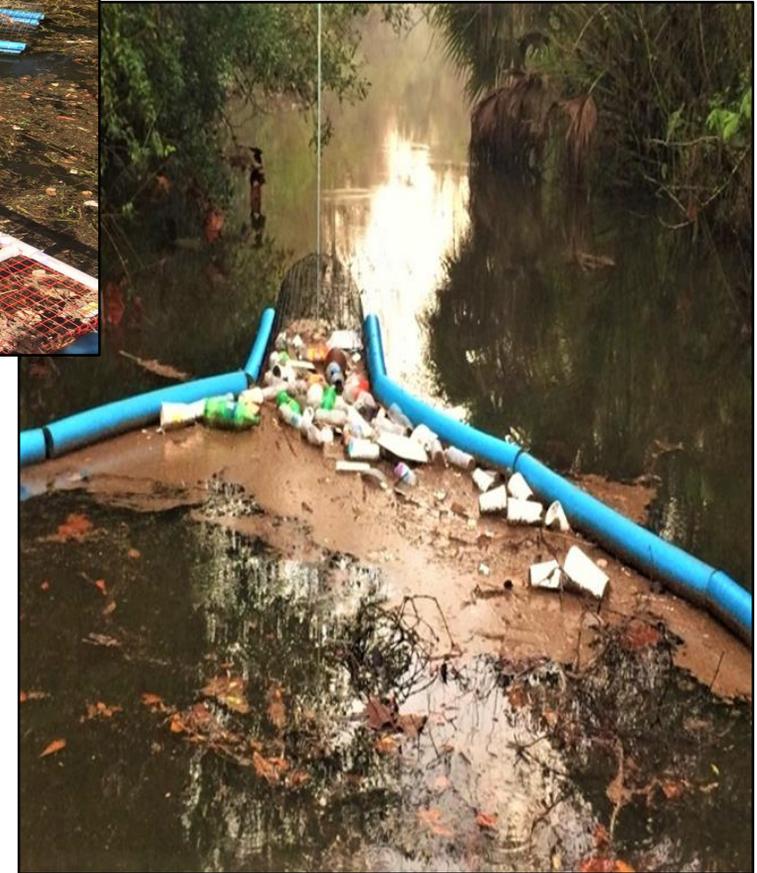


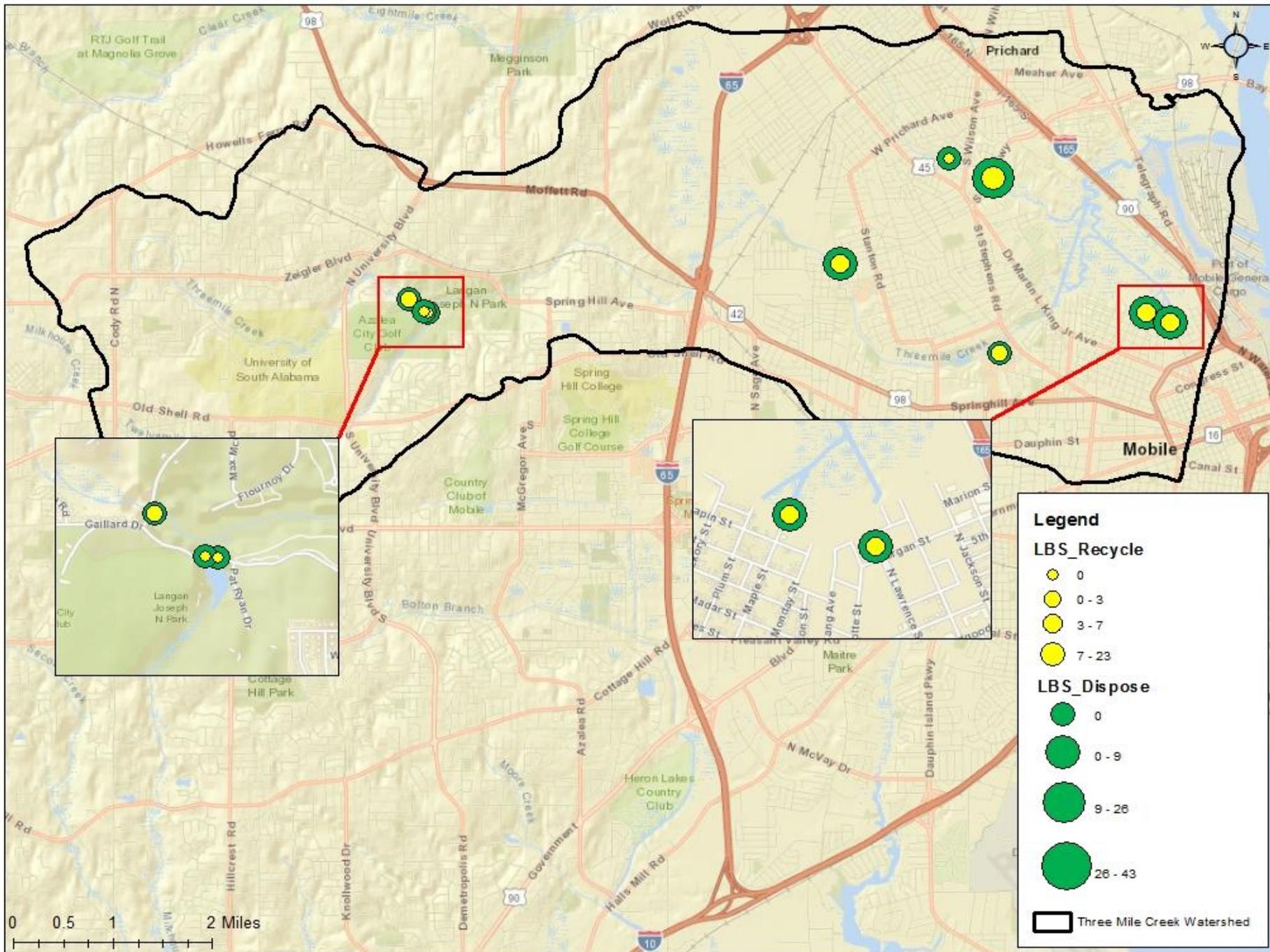
**Maple Street Tributary After.**



# Implementing a Comprehensive Trash Abatement Strategy in the Three Mile Creek Watershed

- Deployment of 10 Litter Gitter devices in the Three Mile Creek
- Reduce amount of stormwater-borne trash/litter by 4,800lbs
- Engage workers to remove legacy litter through the Watershed
- Implement trash & volunteer monitoring program at each Litter Gitter sites
- Plan & Implement an alternative packaging incentive program targeting local businesses
- Conduct an outreach event to raise awareness
- Coordinate and perform a “TRASH MOB”





Since 2014, without regulatory compulsion, the Alabama State Port Authority has conducted annual Three Mile Creek Trash Removal Campaign along ASPA shoreline out of stewardship and public relations concerns.

- In 2015, 2,000 cubic yards of floatable trash.
- In 2016, only 40 cubic yards of trash and debris were recovered.
- In 2017, North Garrow's Bend and Arlington Park Wetlands were added to the scope.
- In 2018, 616 bags were collected.
- In 2019, 155 bags were collected. (**Progress?**)
- The Port spends **approximately \$30K**, annually on this January-February Trash Removal Campaign.



A BILL  
TO BE ENTITLED  
AN ACT

Relating to littering; to amend Sections 13A-7-29, 23-5-6, 32-5-76, 32-5A-60, and 33-6-10, Code of Alabama 1975, to provide additional penalties for criminal littering to include enhanced penalties for littering of cigarettes, cigars, littering of containers of urine, and littering of restaurant take-out containers; to include within the enhanced penalties increased fines and mandatory community service requirements; and in connection therewith would have as its purpose or effect the requirement of a new or increased expenditure of local funds within the meaning of Amendment 621 of the Constitution of Alabama of 1901, now appearing as Section 111.05 of the Official Compilation of the Constitution of Alabama of 1901, as amended.  
BE IT ENACTED BY THE LEGISLATURE OF ALABAMA:

SYNOPSIS: This bill would prohibit local governing bodies from banning the use of plastic grocery bags.

A BILL  
TO BE ENTITLED  
AN ACT

Relating to local governments and containers used by retailers to convey items to purchasers; to prevent municipal and county governments from adopting or enforcing an ordinance that regulates the use, disposition, or sale of, or prohibits, restricts, or imposes any fee, charge, or tax on certain auxiliary containers; and to provide exceptions.  
BE IT ENACTED BY THE LEGISLATURE OF ALABAMA:  
Section 1. As used in this act, the following terms shall have the following meanings unless the context clearly indicates otherwise:

## Future efforts at the State level

Contact:  
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[rswann@mobilebaynep.com](mailto:rswann@mobilebaynep.com)



Thank You.

