Accelerating Headwater Land Protection in the Mobile Bay Watershed











# Healthy Watersheds Consortium (HWC)

▲ Launched in 2015, 6-year partnership, \$11 million

### Partnership between:

- U.S. Endowment for Forestry and Communities (partnership manager/ program co-funder)
- U.S. Environmental Protection Agency (EPA) (program co-funder)
- U.S. Department of Agriculture Natural Resources Conservation Service (USDA-NRCS) (program co-funder)
- Goal of the HWC Grant Program: "accelerate strategic protection of healthy, freshwater ecosystems and their watersheds"



# **Area of Interest – Mobile Bay Watershed**



### **Project Goal**

To advance strategic protection of healthy headwater habitats in the Mobile Bay Watershed

- ❖ Partners: MBNEP, M&N, Alabama Forest Resources Center
- \* Key Stakeholders: Alabama Wildlife Federation

Photo credit: MBNEP

http://www.mobilebaynep.com/the\_landscape/watershed\_map/



# **HWC Grant Project Goals**

### Short-term:

- Develop a Mobile Basin Habitat Atlas
- Conserve 10,000 acres over 2-year grant period (acquisition, easement, etc.)

### Overall:

- Build upon prior successes, watershed assessments and strategic efforts
- Be strategic in conservation rather than opportunistic



# **HWC Grant Project Goals**

### Long-term:

 Conserve 100,000 acres via acquisition or easement over the next 5-10 years

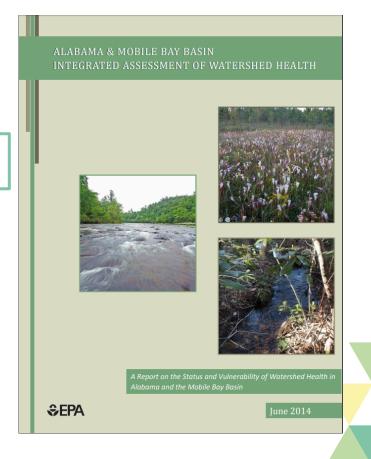
#### Overall:

- Build upon prior successes, watershed assessments and strategic efforts
- Be strategic in conservation rather than opportunistic



### **Data Sources:**

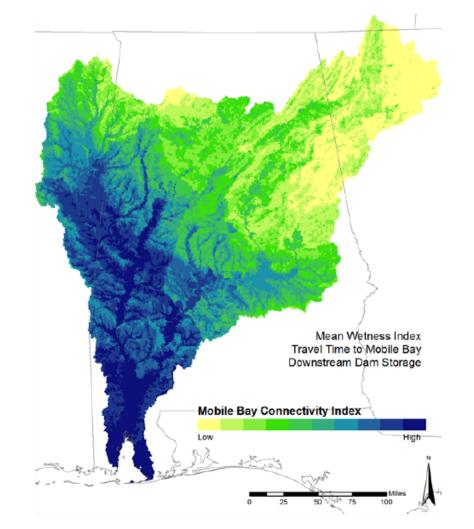
- Alabama and Mobile Bay Basin Integrated Assessment of Watershed Health
- ▲ MBNEP's Comprehensive Conservation and Management Plan (CCMP): 2013-2018 & draft 2019-2023
- Conserving Alabama's Coastal Habitats: Acquisition and Restoration Priorities of Mobile and Baldwin Counties
- Open Source Databases
- Landscape Conservation Cooperatives
  - Gulf Coastal Plains & Ozarks LCC





### **Identify**:

# Hydrologically Connected Catchments

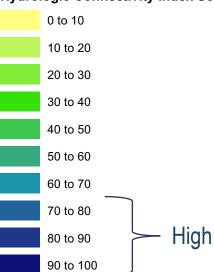


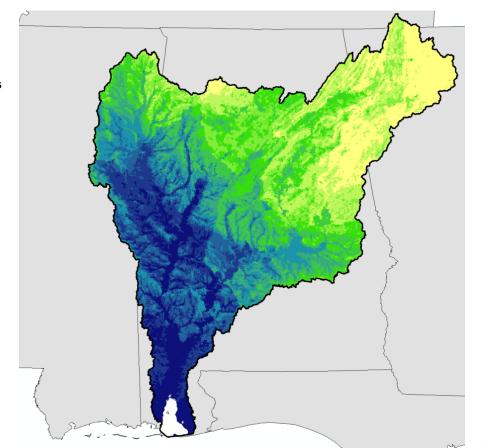


# **Hydrological Connectivity (HC)**

### Legend









# HC Results (≥ 75 index score):

16,714 Catchments 6,492,440.08 Acres 10,144.44 Miles<sup>2</sup>

### Legend

### **Watershed Connectivity Index Scores**

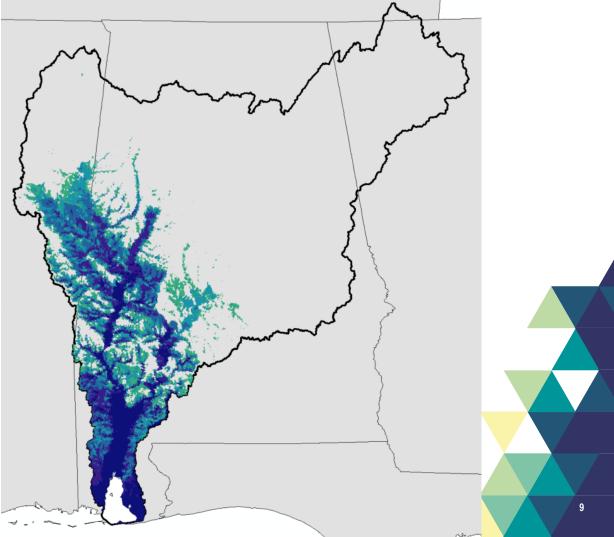
75 to 80 80 to 85

85 to 90

90 to 95

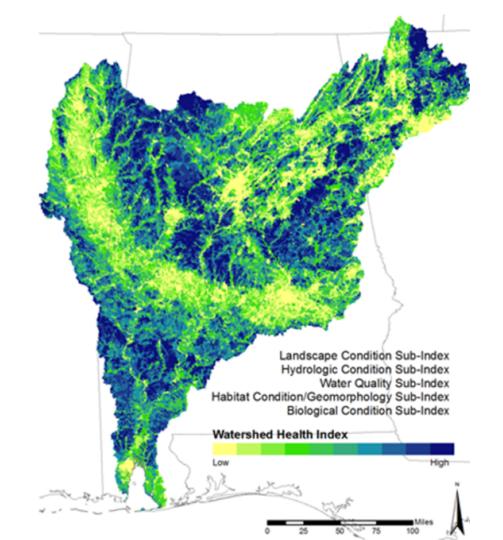
95 to 100





### **Identify:**

# Healthy Habitat Catchments

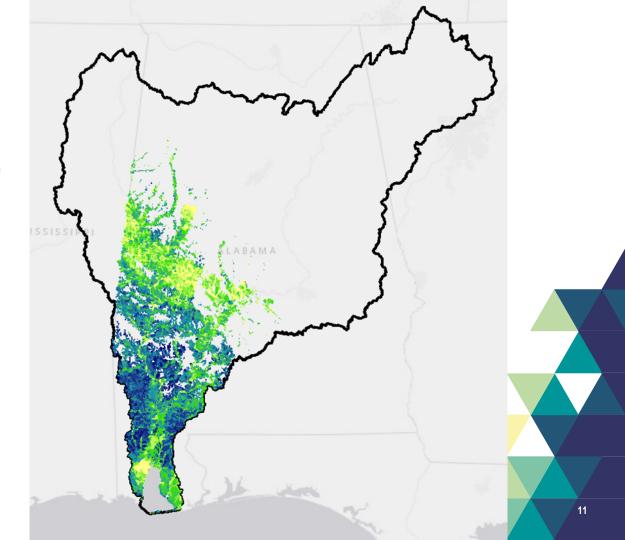




# Habitat Health & Location in AL

Watershed Health Index Score







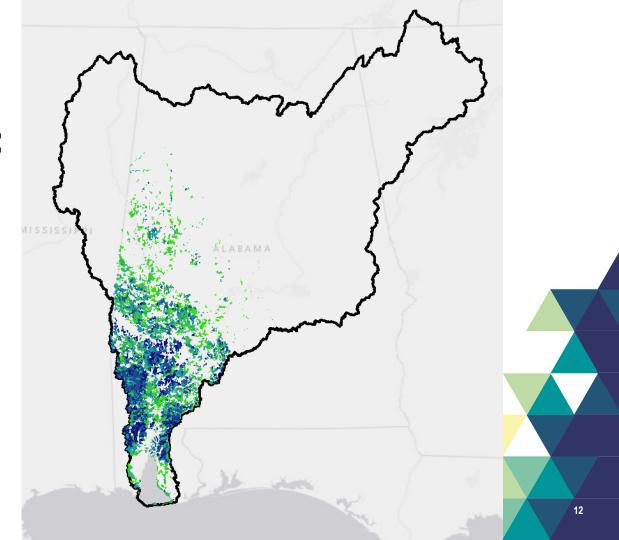
## Habitat Health ≥ 50 & in Alabama (HC ≥ 75 index score):

7,755 Catchments 3,062,408 Acres 4,785 Miles<sup>2</sup>

#### Watershed Health Index Score

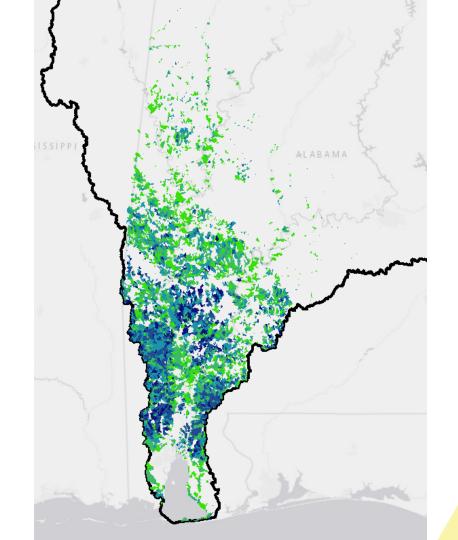
- **50 60**
- **61 70**
- **1** 71 80
- **81** 90
- **91** 100





# **Priority Headwater Habitats:**

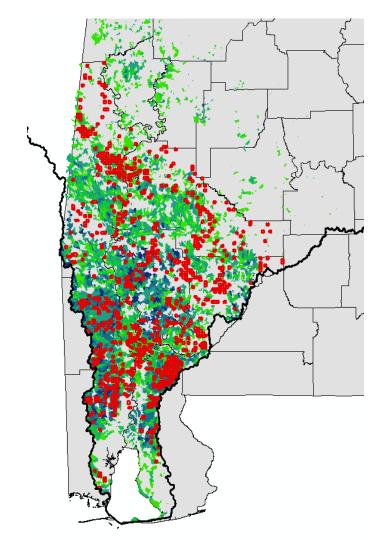
## **Catchments**





# **Priority Headwater Habitats:**

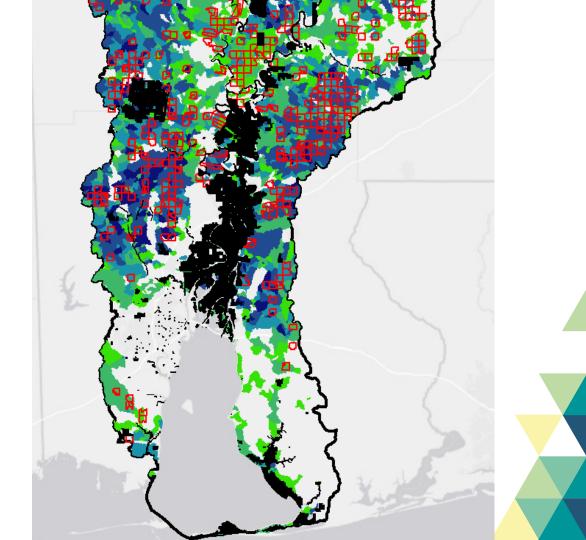
### **Parcels**





# Priority Parcels (500 ac +)

~ 800 parcels totaling over 450,000 ac.



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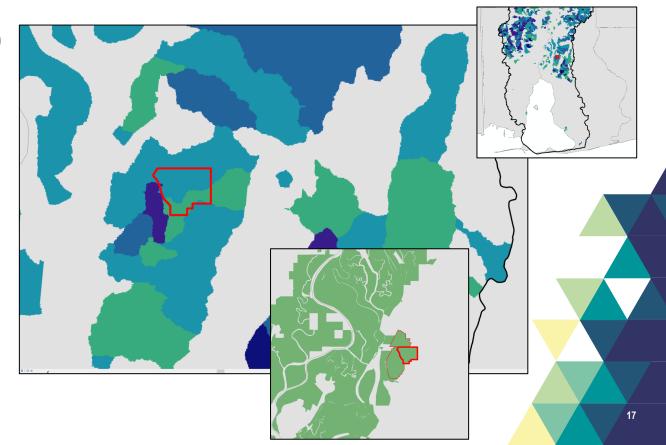
# **AFRC Easements Acquired Since Start of Project**

			Primary Criteria		Secondary Objectives	
			500 acres or larger	Priority Catchments (connectivity >75 & habitat health > 50)	Adjacent (boarders) stream	Adjacent to existing Conserved Lands
ID	Property Name	Acres	2018 Easements			
1	Post Oak Plantation/ Farm	930.81	✓	✓	-	✓
2	Hooks lake/ Phase 1	5,878.25	✓	✓	✓	✓
3	Weewoka Creek Farm	473.49	-	-	-	-
4	Ghost Fleet East	599.26	✓	✓	✓	✓
5	Ghost Fleet West	940.36	✓	✓	✓	✓
6	Cadwallader Place	1,953.39	✓	✓	✓	✓
7	Gusto	923.8	✓	-	-	-
ID	Property Name	Acres	2019 Easements			
1	Arlington Plantation	363.62	-	✓	_	-
	Total Acres Conserved	12,062.98				



## Case Study: Ghost Fleet East Parcel, Baldwin County, AL

- Size: Approximately 600 acres
- Easement acquired in 2018
- High hydrologic connectivity & habitat health
- Adjacent to existing ALFRC and State conserved lands





## **Project Progress Update: Year 1**

### Summary YEAR 1:

- Compiled parcel and ecological data layers into GIS Database
- Developed a framework & identified priority habitats
- Identified & contacted owners of potential properties for conservation
- Acquired 8 easements in since start of project totaling + 12,000 acres



### **Next Tasks**

Finalize GIS database

Finalize Habitat Atlas Report

### MOBILE BAY BASIN HABITAT ATLAS

ACCELERATING HEADWTER LAND PROTECTION IN THE MOBILE BAY BASIN

DRAFT December 2019

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### **Next Tasks**

- Continue Outreach and Education
- Finalize Outreach video
- AFRC continue to acquire 100,000 acres for easement
  - Contact willing landholders
  - Educate landholders on easements

