Habitat Restoration Needs Plan for Estero Bay

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Uniting Central and Southwest Florida to Protect Water and Wildlife

What is the Plan?

Comprehensive Conservation & Management Plan

Reducing Nutrient Pollution

Restoring Hydrological Flow

Protecting Wildlife and Habitat

Public Engagement

Full CCMP available at
https://www.chnep.org/our-plan

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Fish, Wildlife, and Habitat Protection

Vision

A diverse environment of interconnected, healthy habitats that support natural processes and viable, resilient native plant and animal communities.

Objective

Permanently acquire, connect, protect, restore, and manage natural terrestrial and aquatic habitats.

Strategy

Promote and facilitate permanent acquisition and effective protection and management of critical natural habitats including wildlife dispersal areas, movement and habitat migration corridors, wetlands, flowways, as well as environmentally sensitive lands and estuarine habitats

Who is the Implements this Plan?

Members of the Partnership:

- 10 Counties
- 15 Cities
- US EPA
- FL Dept. of Env. Protection
- Southwest Florida Water Management District
- South Florida Water Management District
- Central Florida Regional Planning Council
- Southwest Florida Regional Planning Council
- NGOs

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Why do we need this Plan?
To Work together to Fulfill:

- **Vision:**
  - **A diverse environment of interconnected, healthy habitats that support natural processes and viable and resilient native plant and animal communities**

- **Goal:**
  - **Increase the acreages of native habitats in the CHNEP area, both strategically and opportunistically**

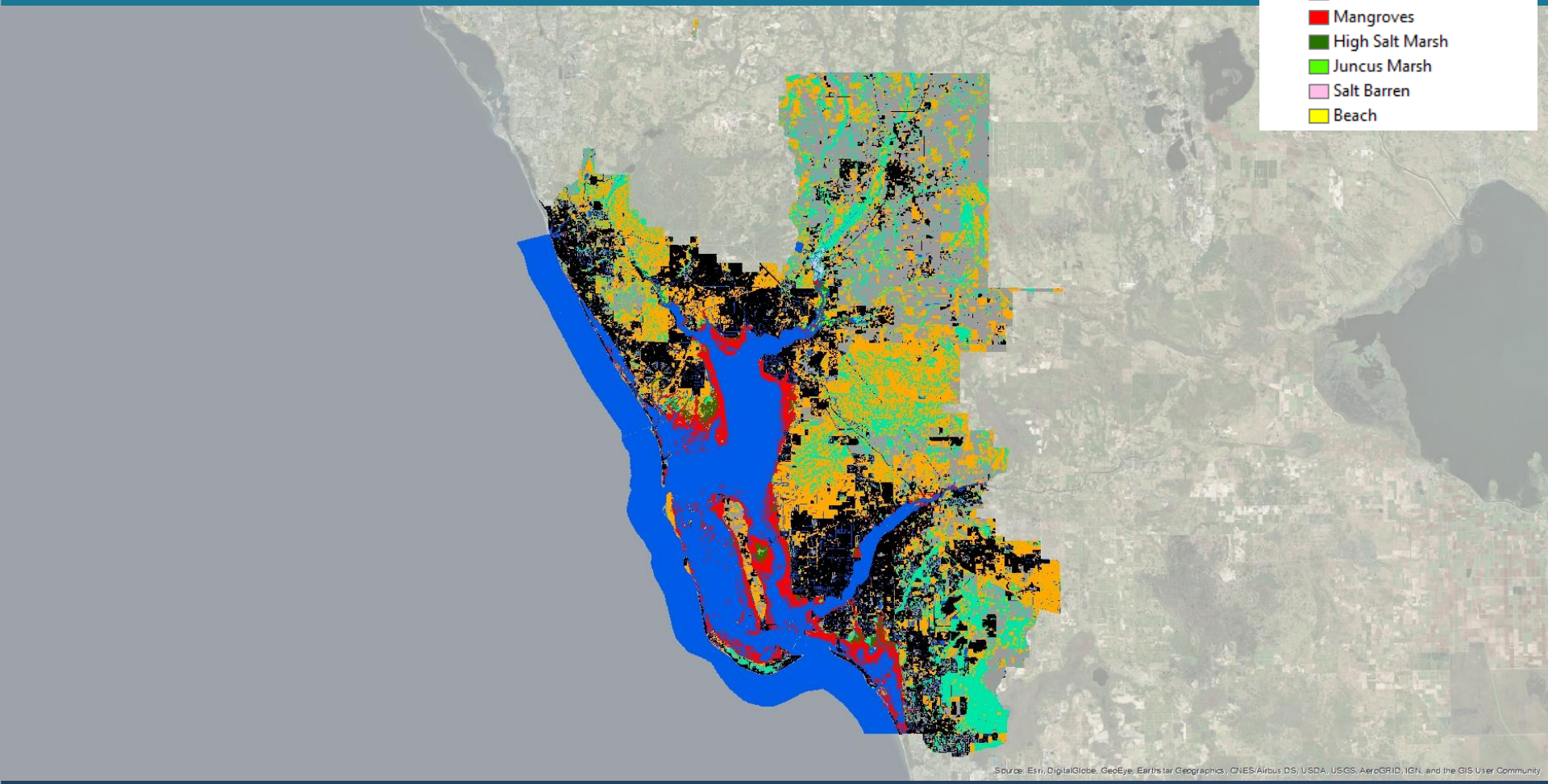
How did we create the Plan?

Maps to create REAL targets and opportunities using the best available data scientific modeling for the future (e.g. development and sea level rise):

- **Habitat shifts due to sea level rise**
- **Existing preservation and conservation lands**
- **Proposed land acquisition priorities**
- **Listed species critical habitats and migratory corridors**
- **River floodplain functions**
- **Long-term trends in freshwater flows**
- **Historical soils distributions**

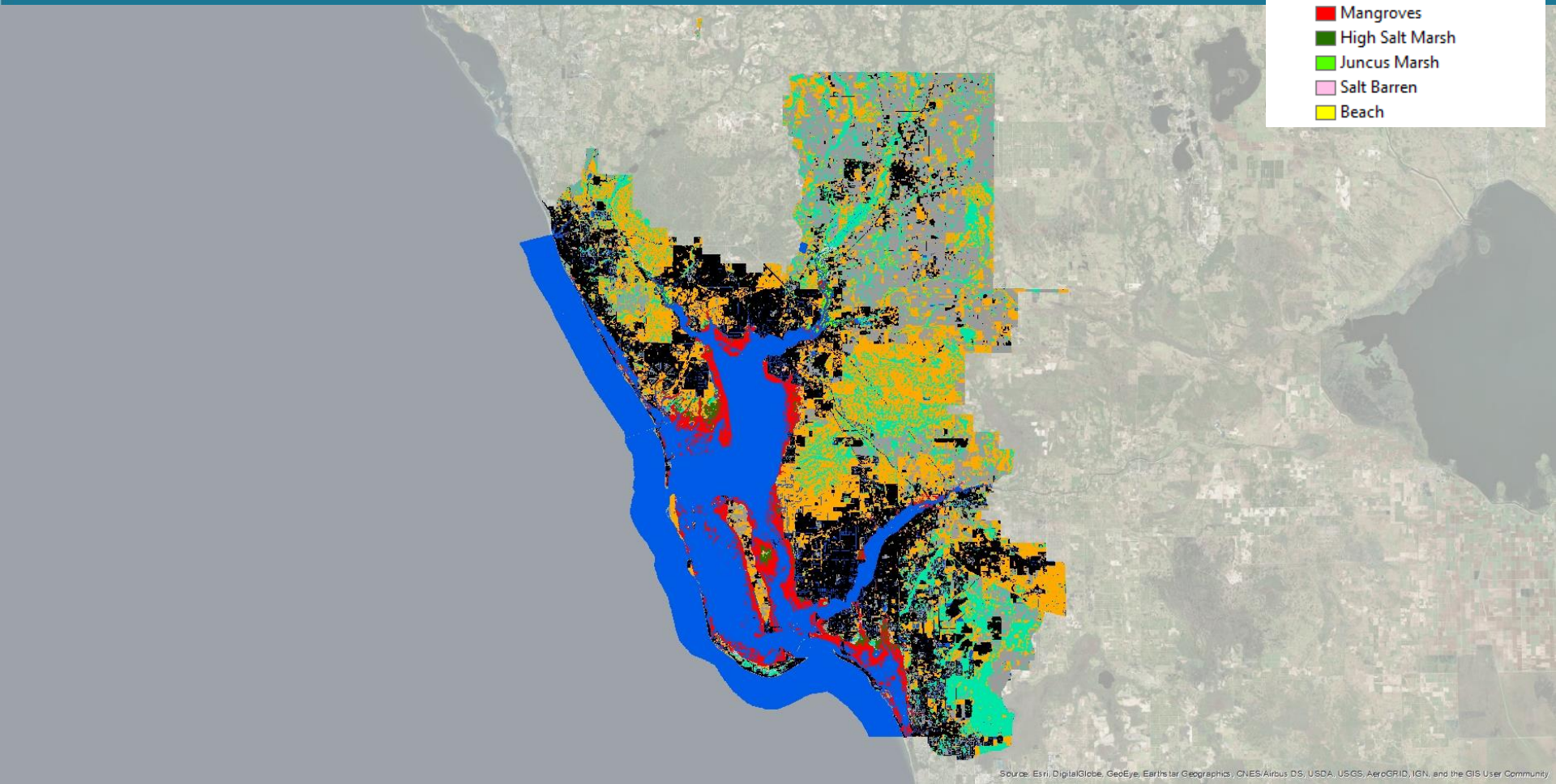
Modeling Habitat Shifts from Sea Level Rise

Entire Watershed- 2016
Run 3, Intermediate-High SLR, Low Accretion



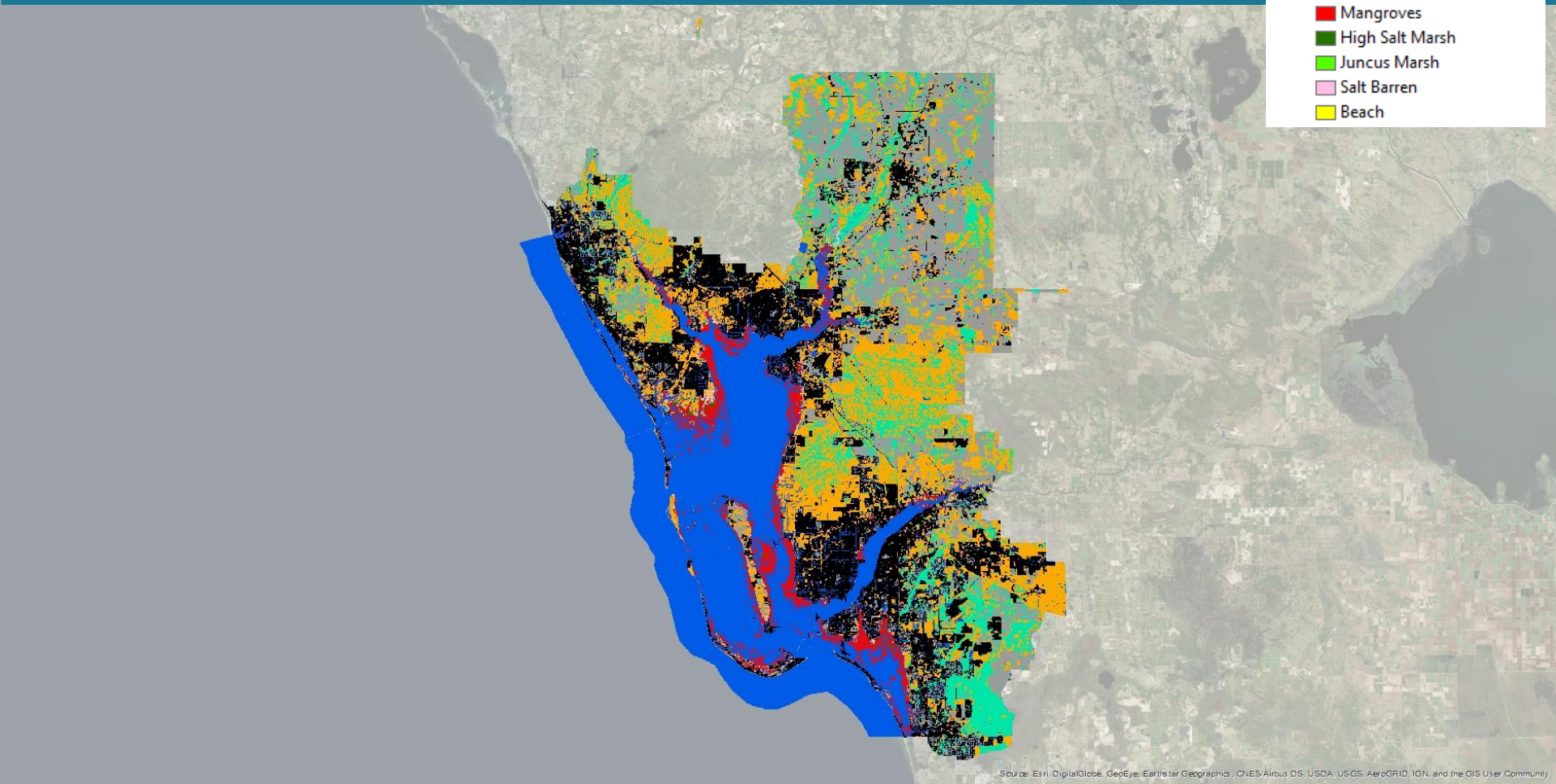
Modeling Habitat Shifts from Sea Level Rise

Entire Watershed- 2040
Run 3, Intermediate-High SLR, Low Accretion



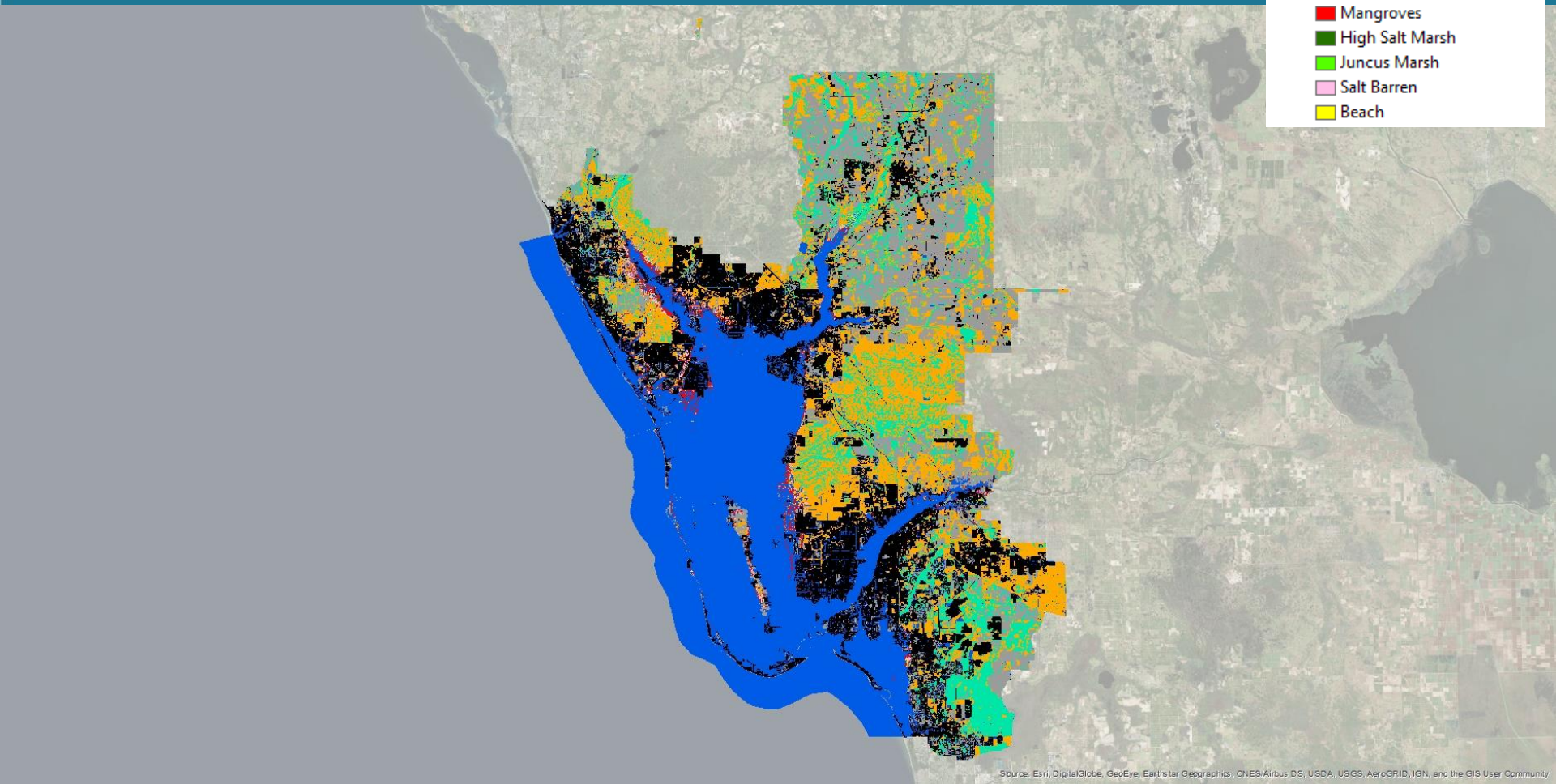
Modeling Habitat Shifts from Sea Level Rise

Entire Watershed- 2070
Run 3, Intermediate-High SLR, Low Accretion



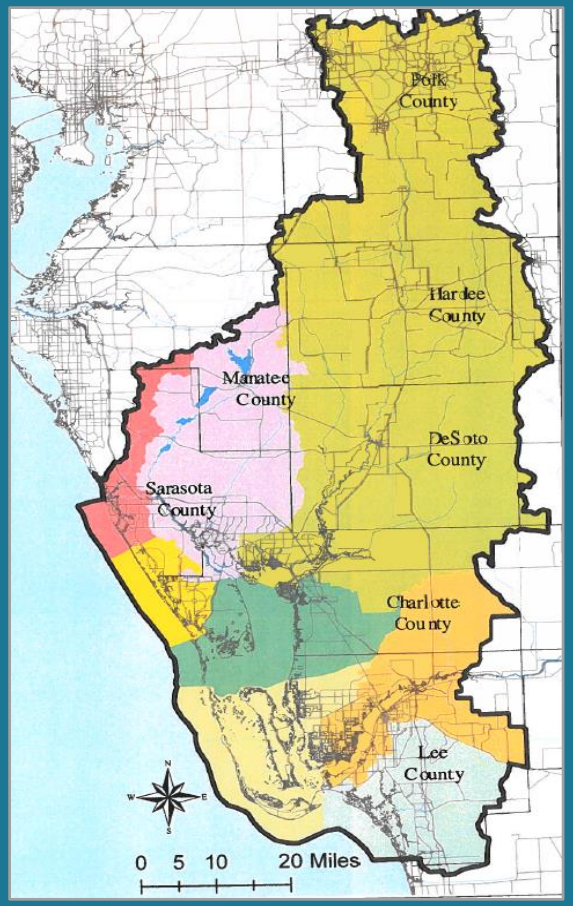
Modeling Habitat Shifts from Sea Level Rise

Entire Watershed- 2120
Run 3, Intermediate-High SLR, Low Accretion



Mapped Four Types of Targets

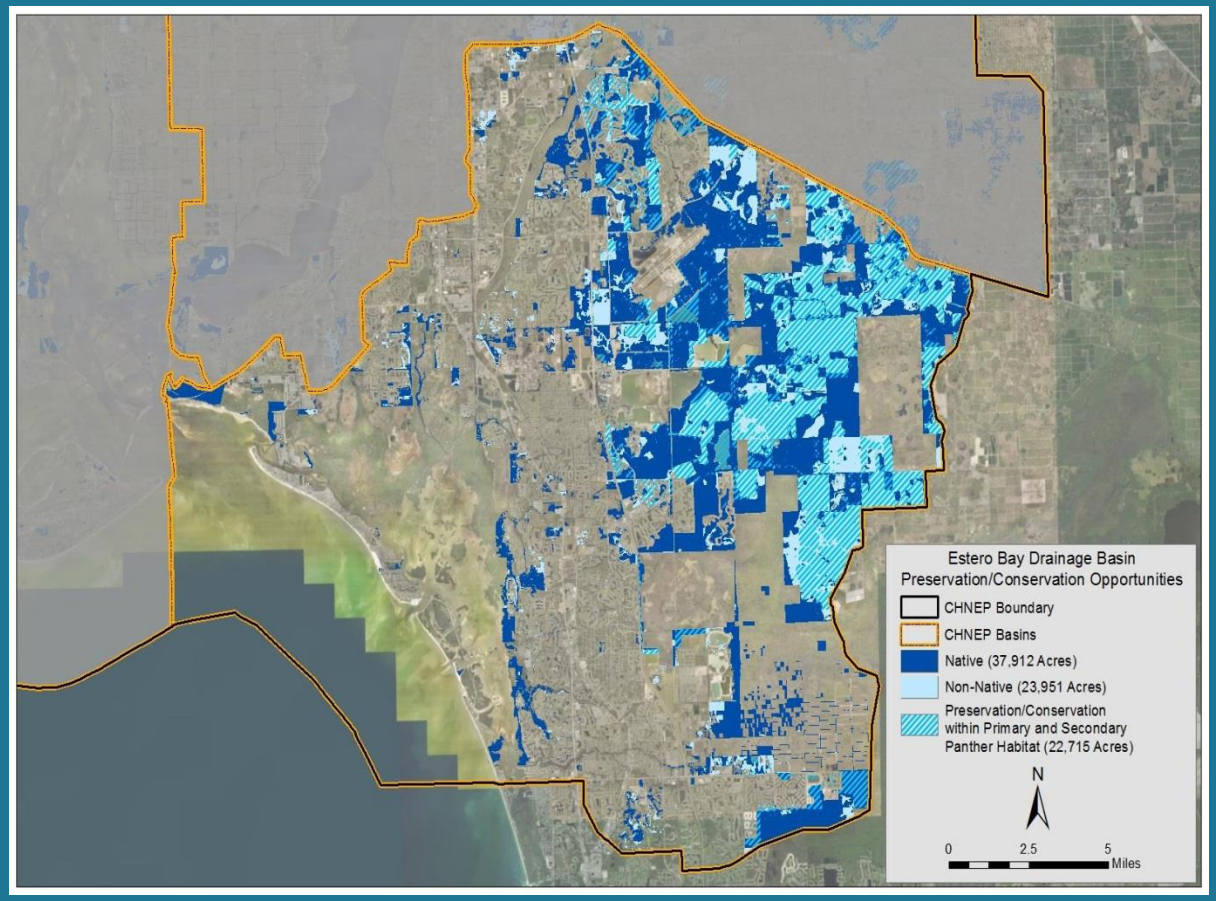
- Preservation/Conservation Opportunities (Not Publicly Owned)
- Management/Enhancement Targets (Public Lands or Conservation Easement)
- Restoration Targets (Public Lands or Conservation Easement)
- Reservation Opportunities (Coastal buffers for SLR)



Plan for Estero Bay

Preservation/Conservation Opportunities

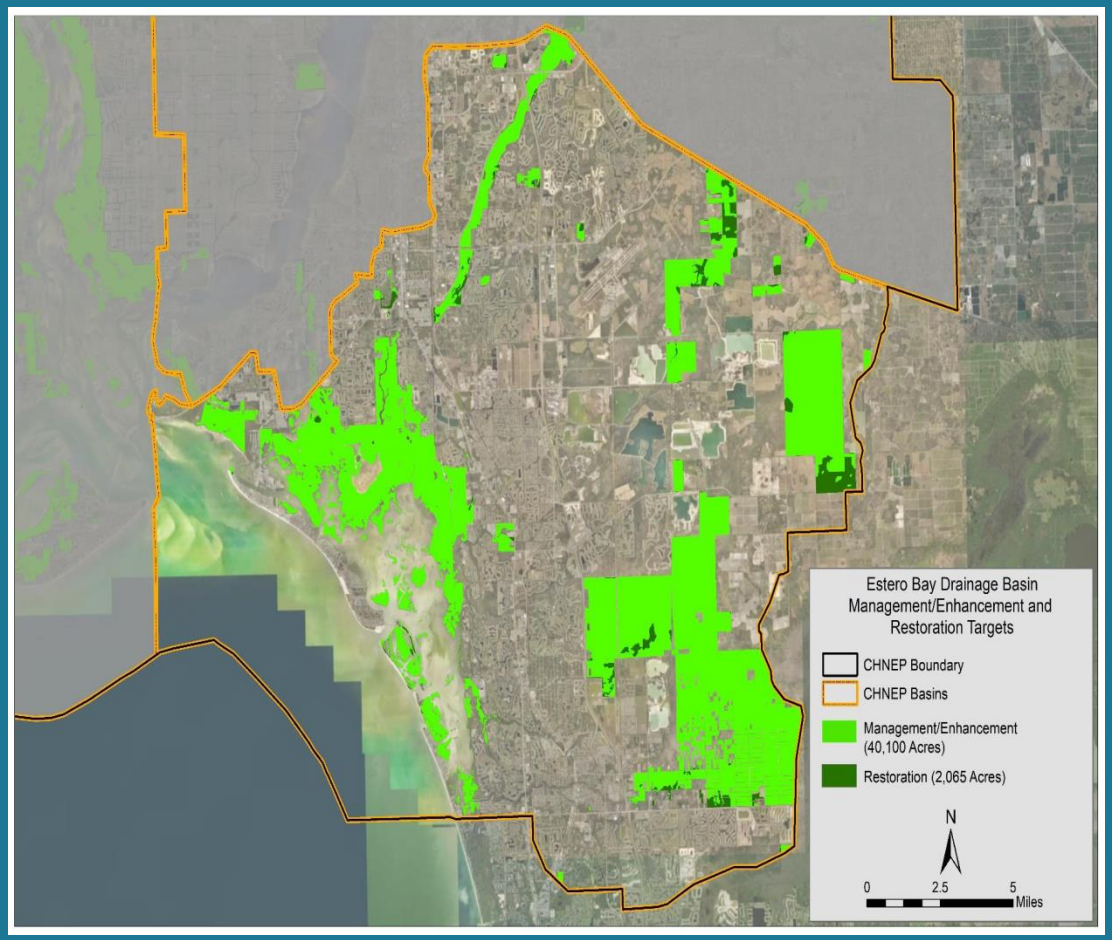
- Total = 61,863 acres (27%)
- Native habitats = 37,912 acres
- Non-native habitats = 23,951 acres
- Panther habitat overlay = 22,715 acres



Plan for Estero Bay

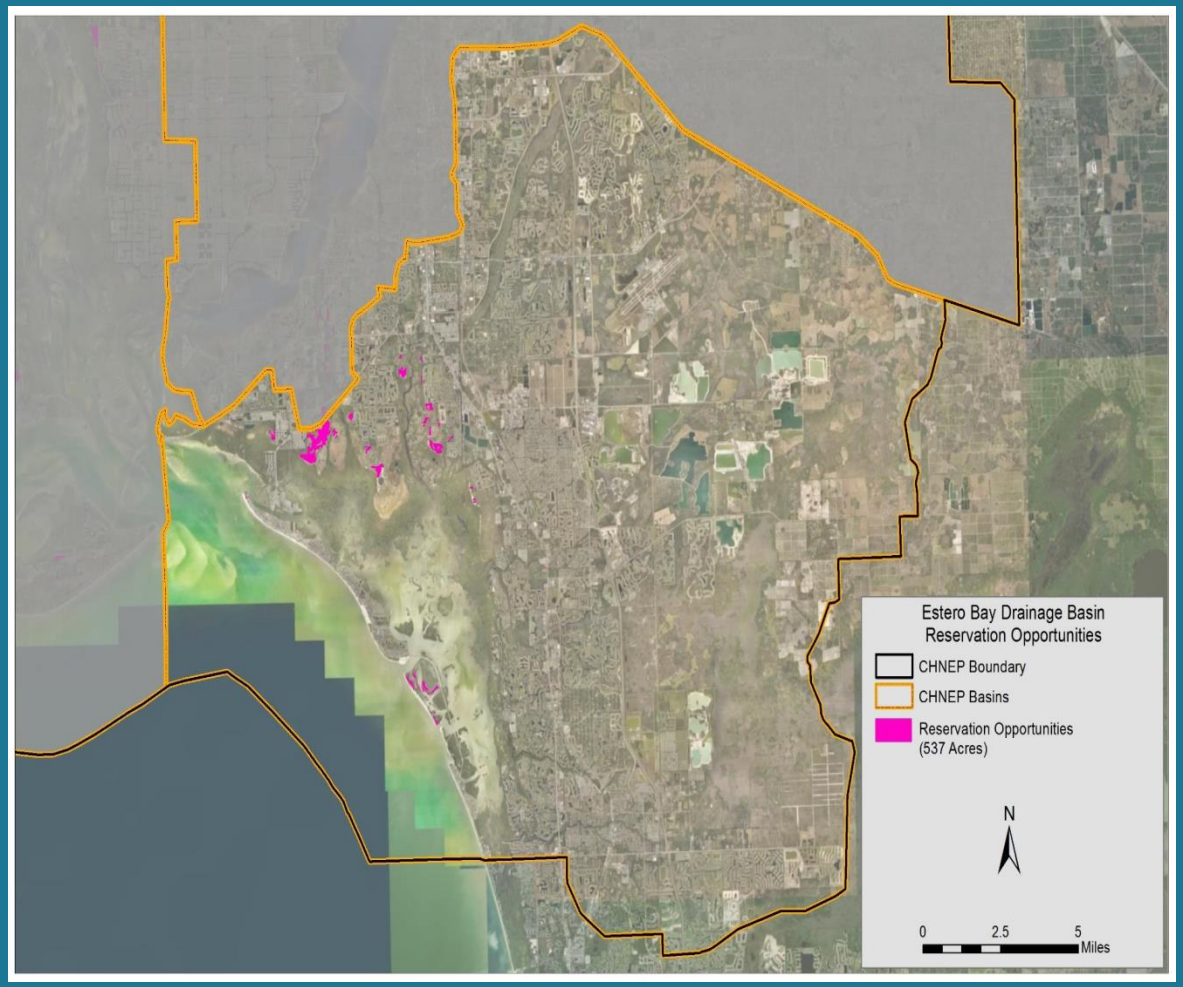
Management/Enhancement and Restoration Targets

- Total = 42,165 acres (18%)
- Enhancement = 40,100 acres
- Restoration =
- 2,065 acres



Plan for Estero Bay

- Reservation =
- 537 acres (<1%)

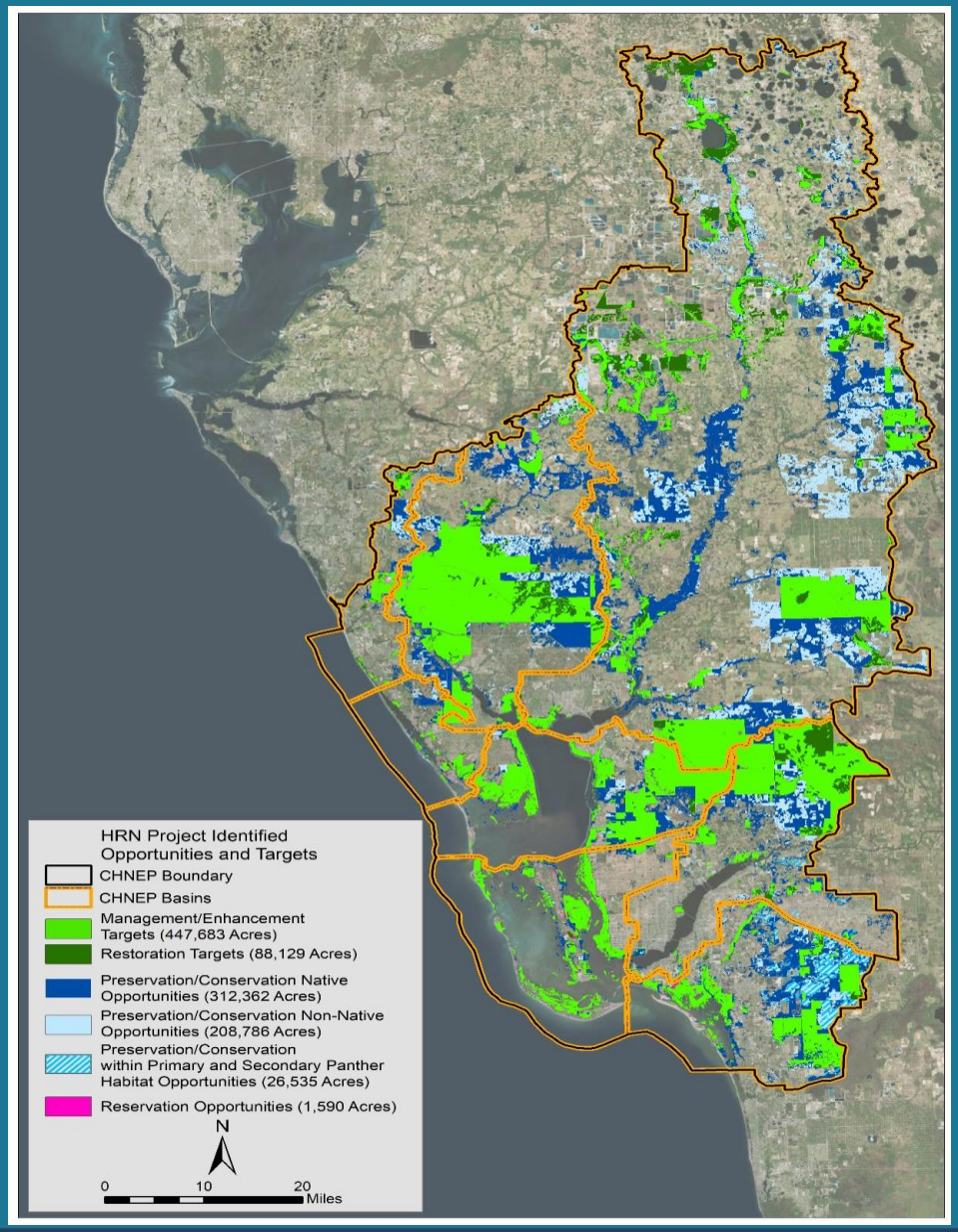


How Does Estero Bay Compare?

Good News!
Many areas in floodplain and coastal areas already Preserved.

- **Edison Farms**
- **Corkscrew Regional Ecosystem Watershed (CREW) Lands**

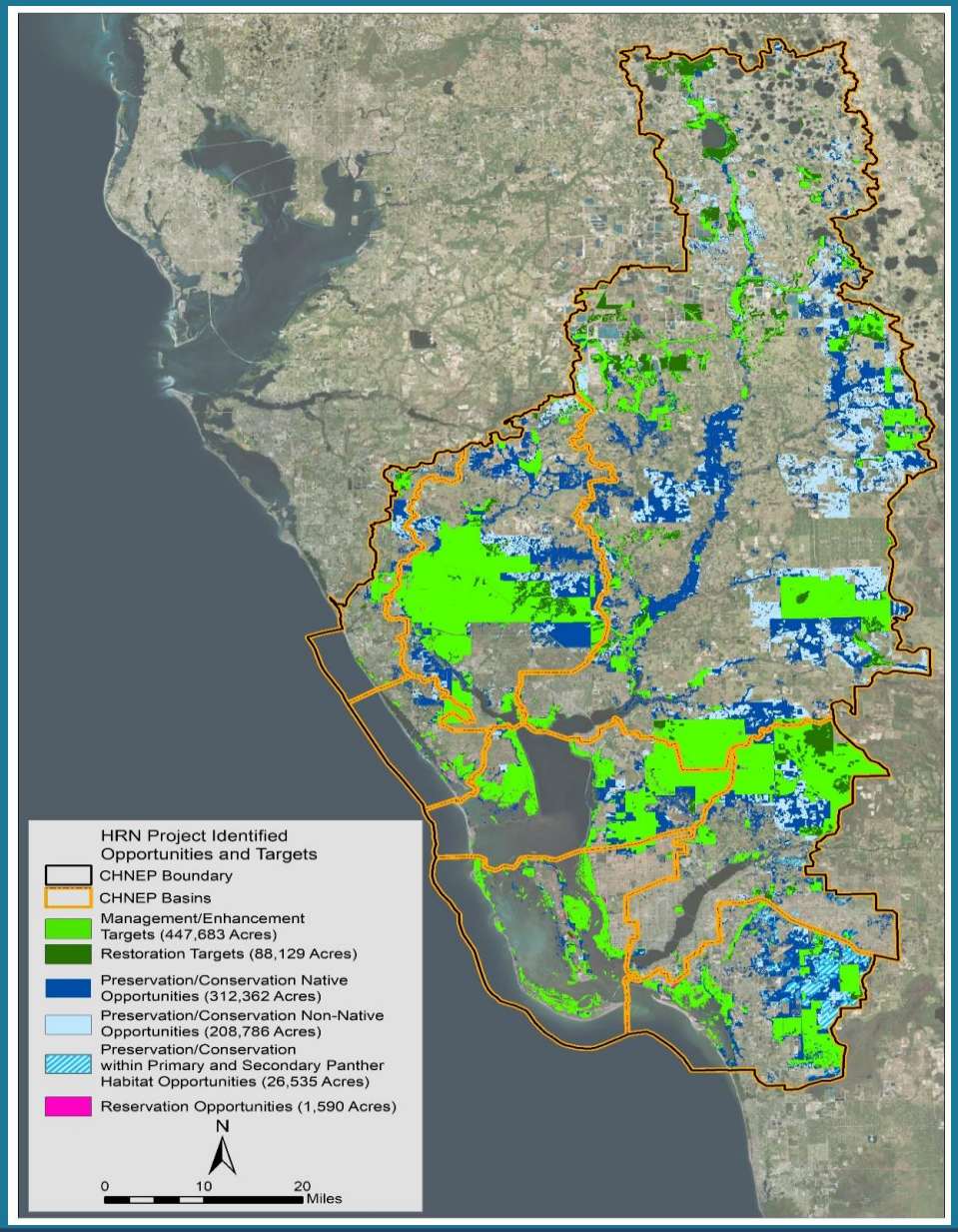
Some Opportunities exist to preserve Panther habitat upland.



Next Steps

Studies and Modeling needed to decide how to best manage or enhance these lands for:

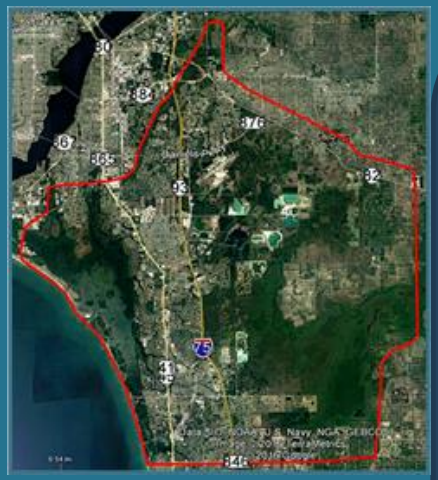
- **Water Supply**
- **Water Quality Treatment**
- **Flood Protection**
- **Aquifer Recharge**
- **Habitat Protection**



South Lee Co. Watershed Initiative Hydrological Modeling Project

South Lee County watershed surface/ground water models to be updated.

CHNEP future study to evaluate restoration scenarios that will balance hydrology, water quality, environmentally sensitive flood protection and habitat for native species.



Partners: SWFRPC, City of Bonita Springs, Lee County, Village of Estero, Bonita Springs Utilities, FDOT, Conservancy of Southwest Florida, Audubon Society, and the Estero Council of Community Leaders, Corkscrew Sanctuary

Benefits:

- Increased aquatic and terrestrial habitat
- Improved water quality
- Informed decision making

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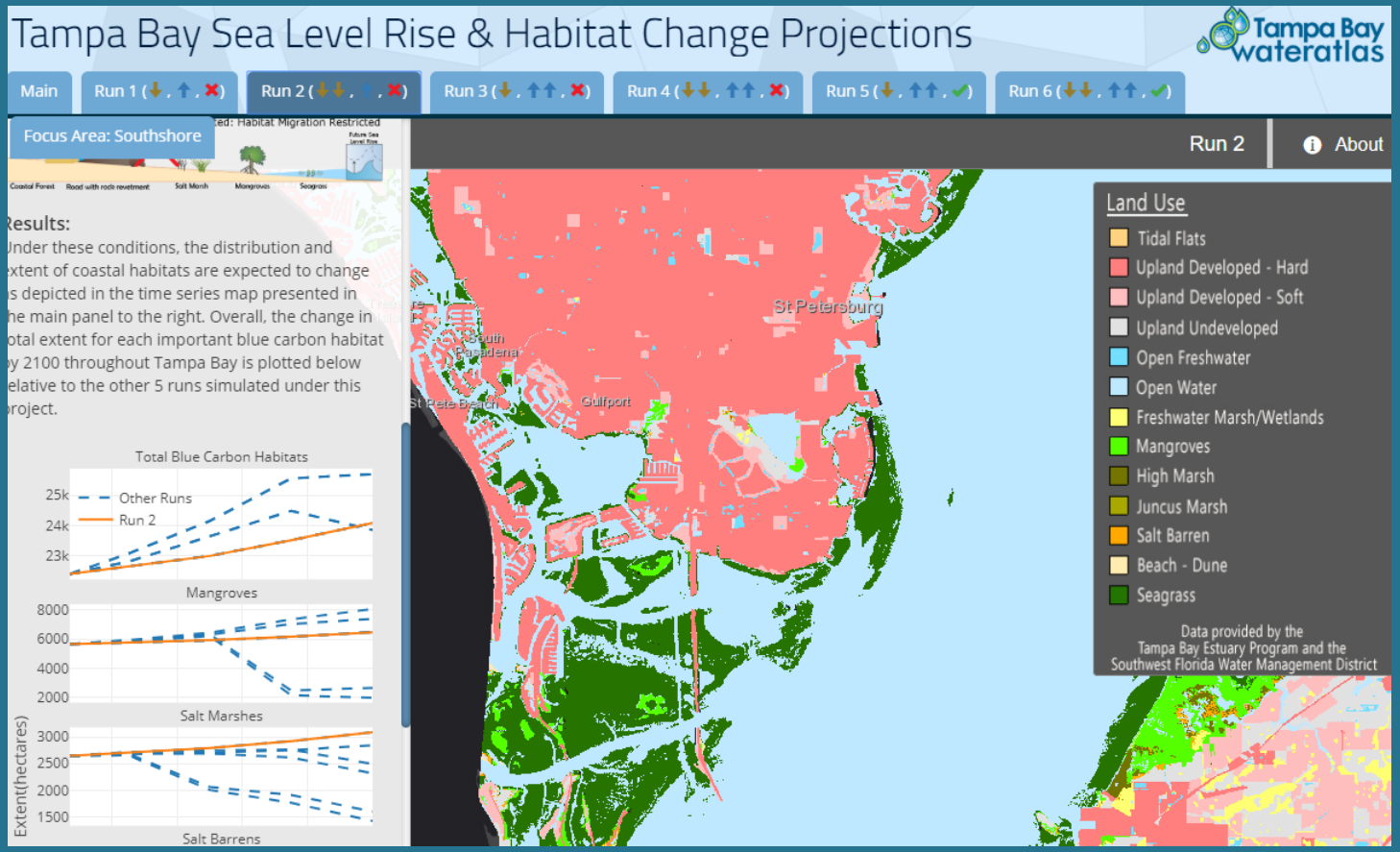
Who can this information help?

- Land Use Planners
- Ecologists
- Transportation Planners
- Water Resource Managers
- Environmental Land Managers
- Parks and Recreation Managers
- Land Acquisition Programs
- Wildlife Managers
- Agencies: FDEP, FWC, SWFWMD,SFWMD

COMING SOON! Maps Easily Accessible on CHNEP Water Atlas as Interactive Map Viewer



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Questions?

For Full Report of HRN for Original CHNEP area, go to CHNEP.org → News & Resources → Publications & Reports → Habitat Restoration Needs Report