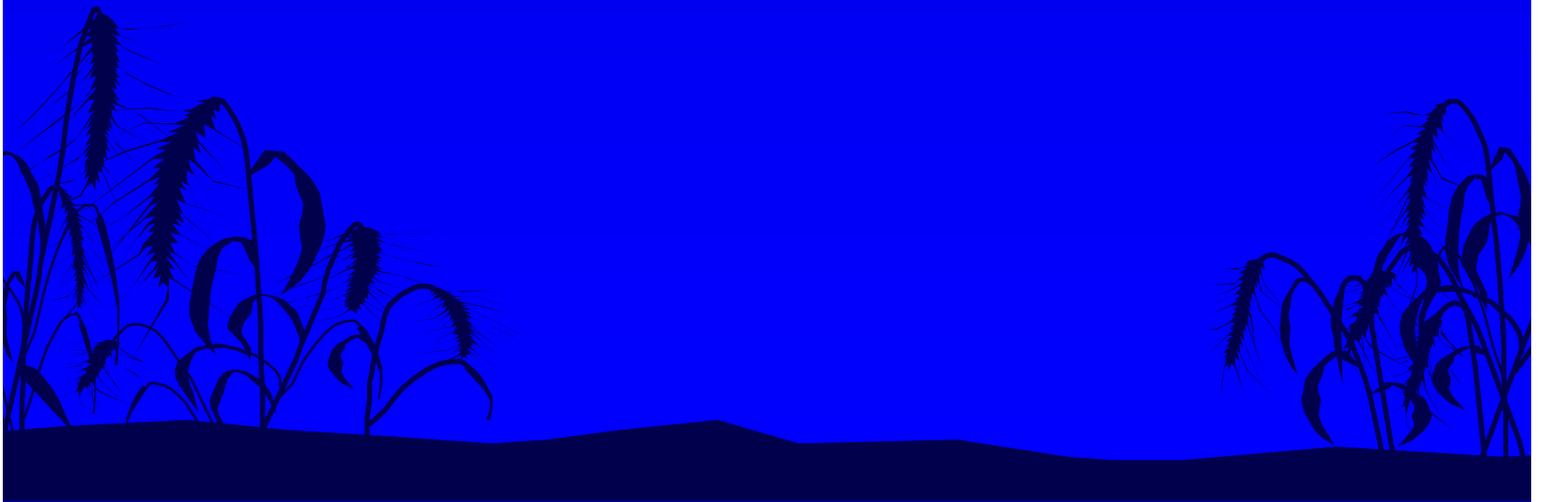
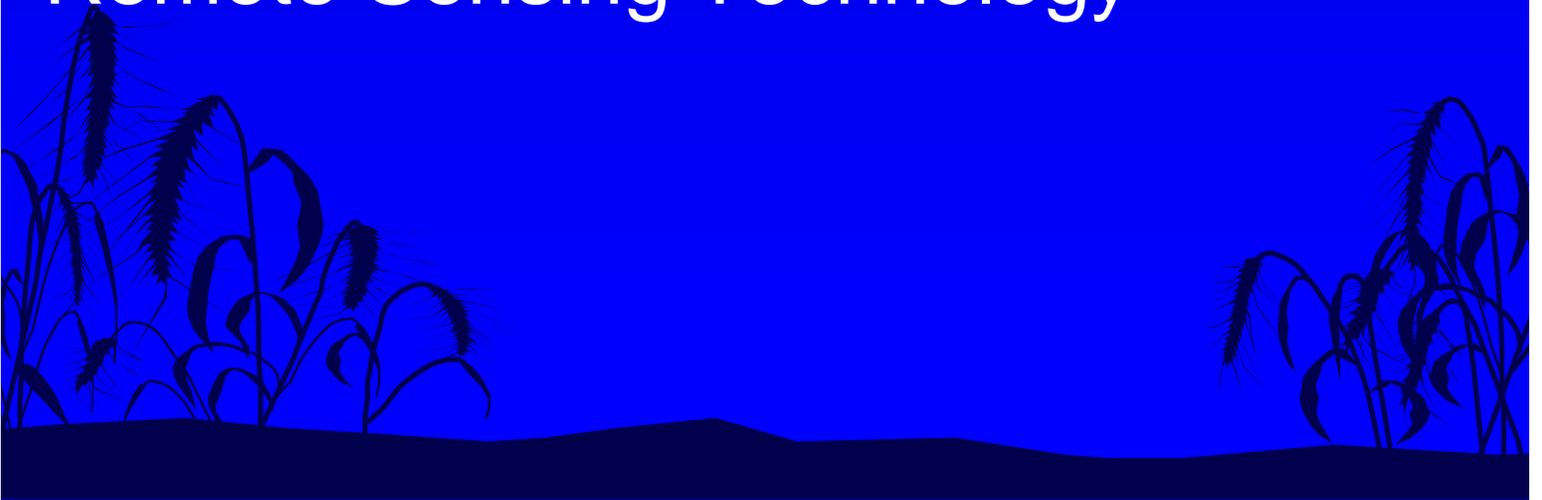


***Baldwin County Wetland  
Advance Identification  
(ADID)***



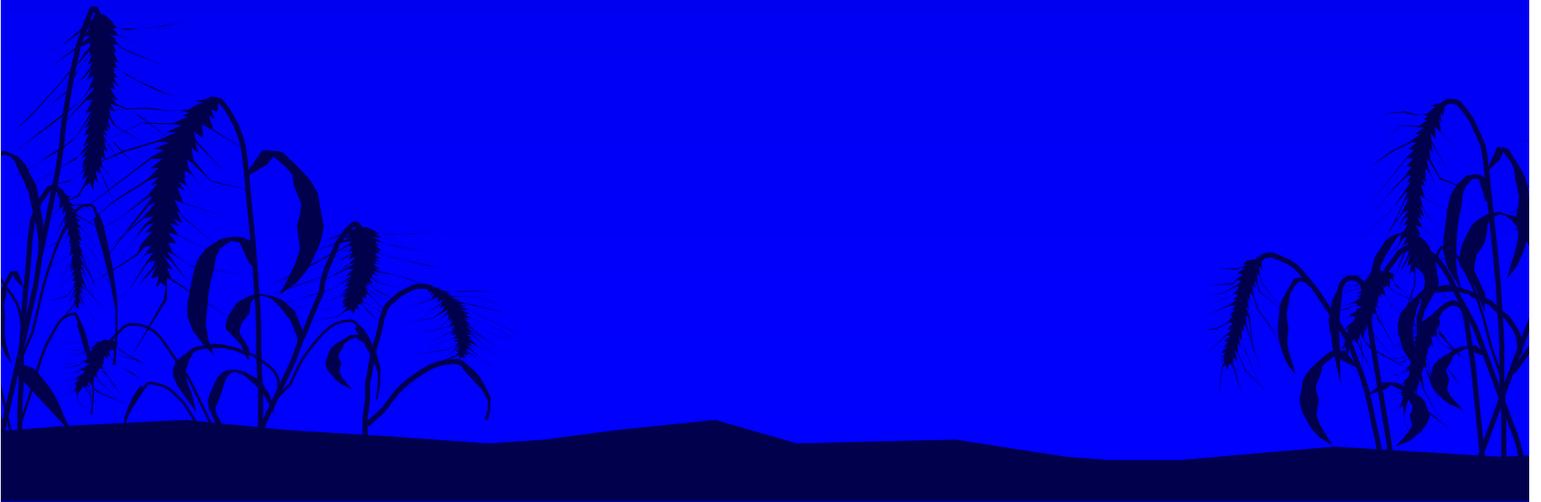
# *Nature of the Project*

- ADVISORY
- Planning
- Growth Management
- Geographic Information System (GIS) / Remote Sensing Technology

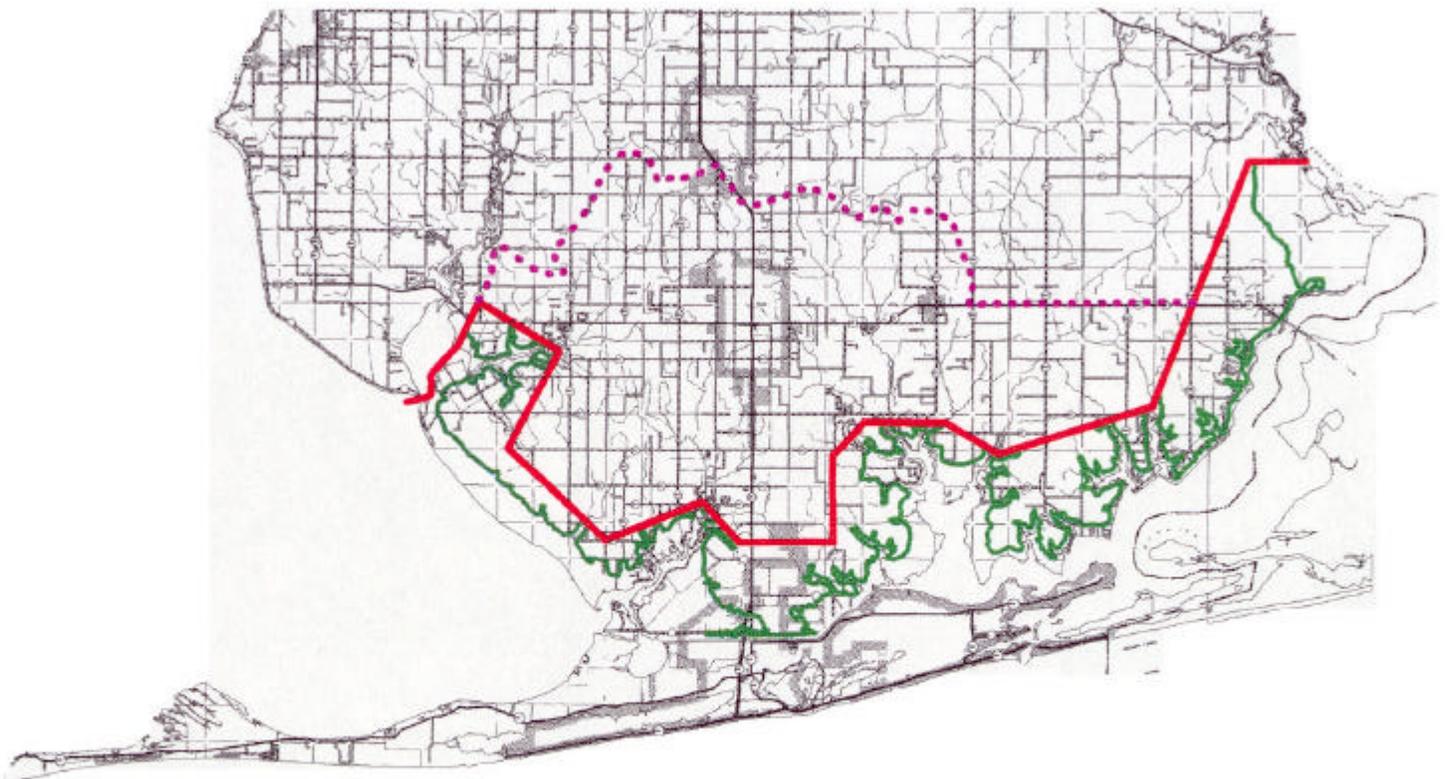


# *Why was Baldwin Co. Chosen?*

- Rapid Growth
- High Volume of wetland resources
- Citizen and local government invitation



# ADID Project Boundaries



Section 404 permits are required for any filling of wetlands that are jurisdictional under the Section 404 program. All designations are **ADVISORY ONLY**. They do not guarantee the issuance of a Section 404 permit, nor do they represent the denial of a Section 404 permit. This map was created as a result of remote sensing and GIS technology. Actual field conditions may differ from those indicated in the map.

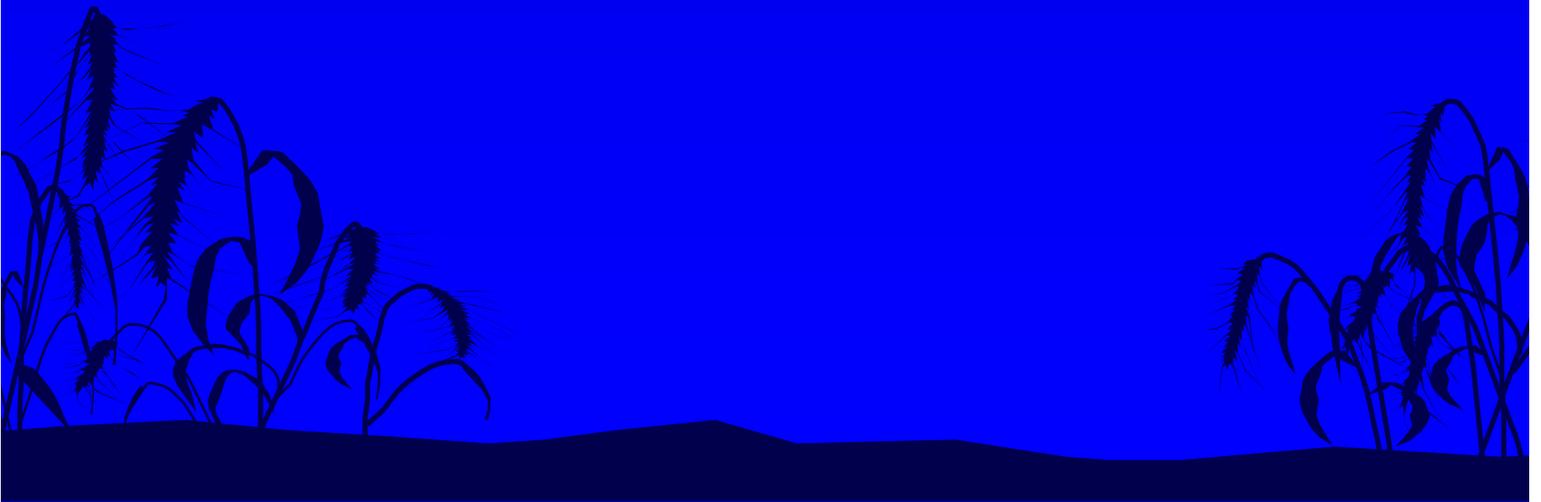
 Level 1 ADID Project Area  
Level 2 ADID Project Area  
ADID Assessment Area



FIGURE 1.2. ADID PROJECT BOUNDARIES

## ***ADID Project Goal!***

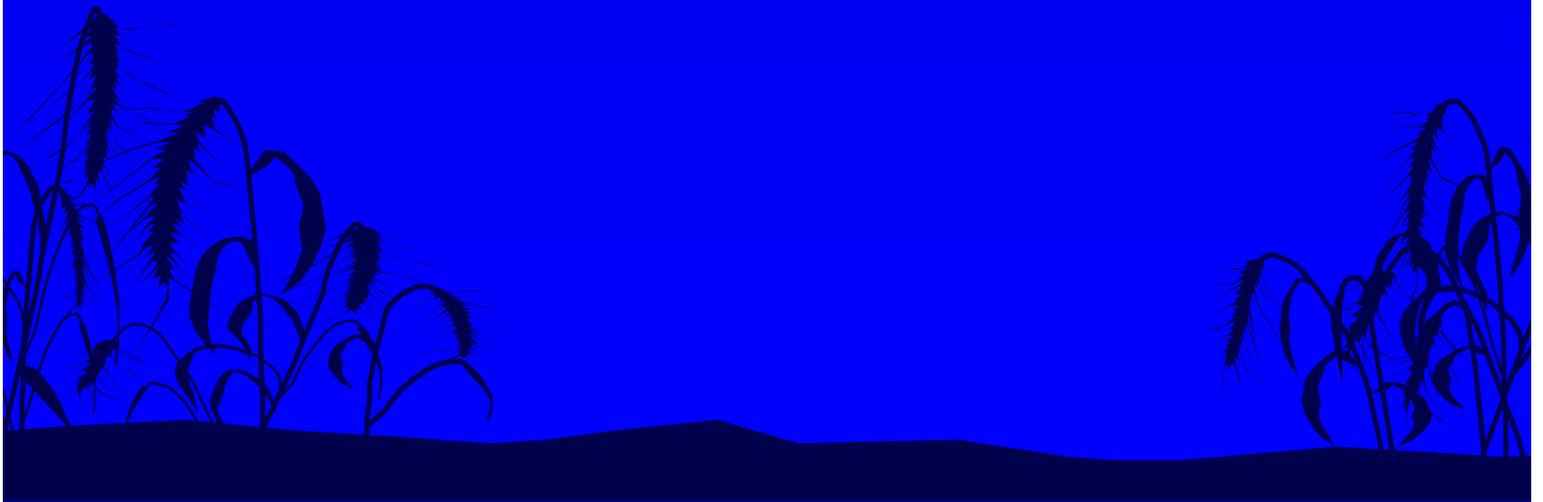
- To encourage protection of wetlands within the project area of coastal Baldwin County Alabama.



# *Cooperative Project: Local*

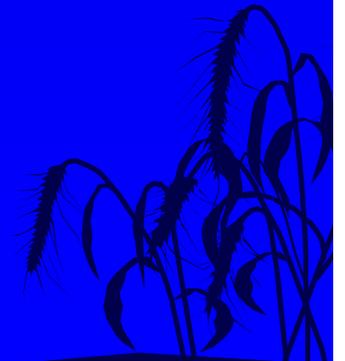
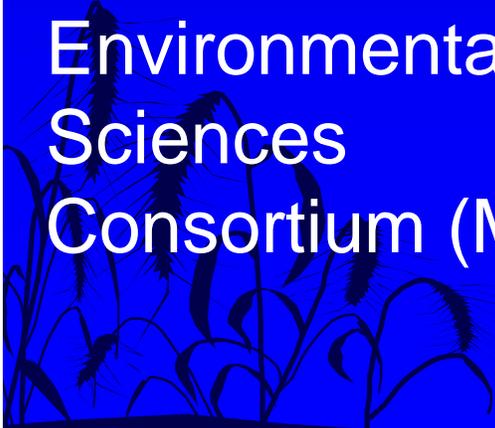
■ South Alabama  
Regional Planning  
Commission  
(SARPC)

■ Baldwin County  
Commission (BC)



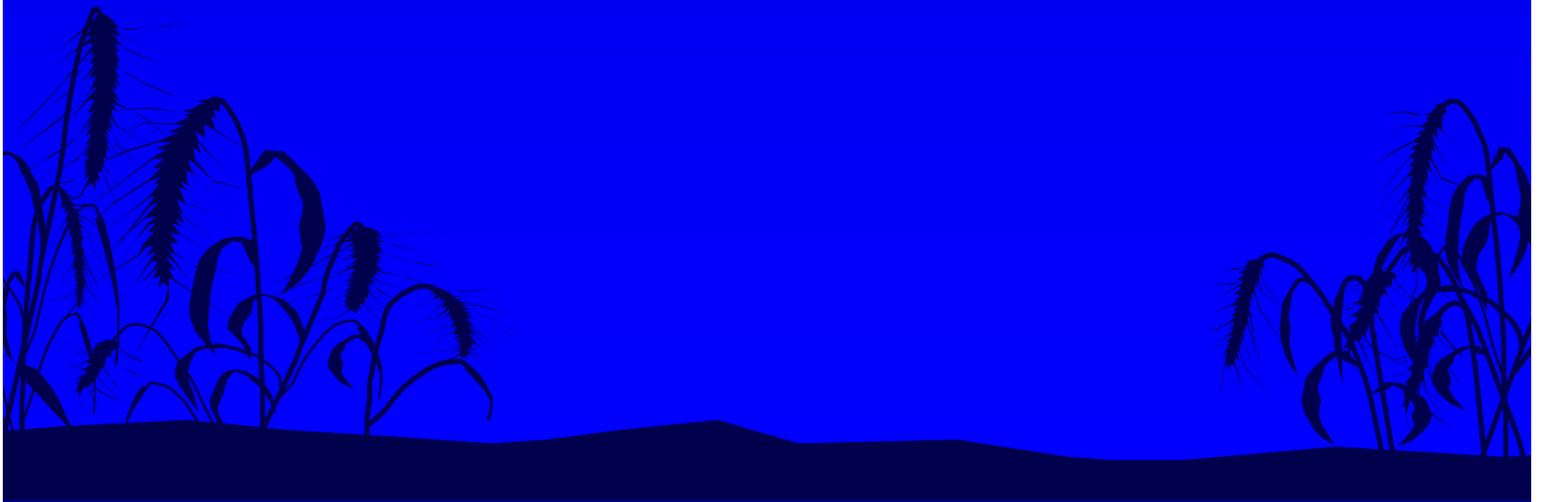
# *Cooperative Project: State*

- Alabama  
Department of  
Environmental  
Management  
(ADEM)
- Alabama  
Department of  
Economic and  
Community Affairs  
(ADECA)
- Marine  
Environmental  
Sciences  
Consortium (MESOC)



# *Cooperative Project: Federal*

- U.S. Environmental Protection Agency (EPA)
- U.S. Army Corps of Engineers (COE)
- Natural Resource Conservation Service (NRCS)
- U.S. Fish & Wildlife Service (USFWS)



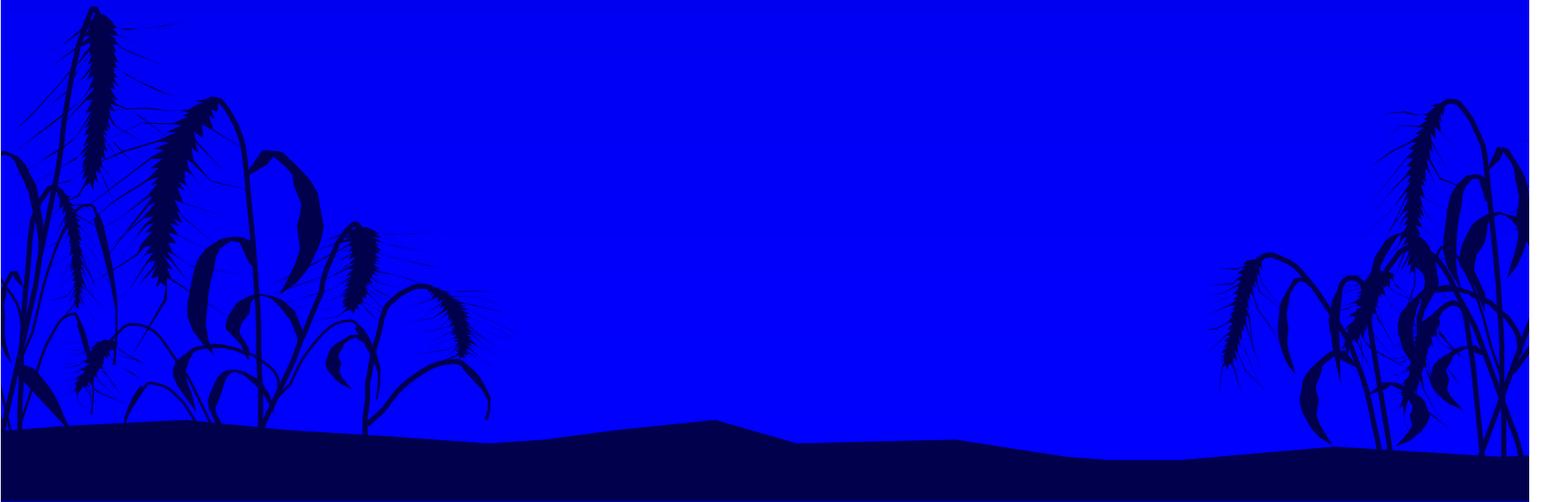
# *Project Structure*

- **Interagency Team** - All agencies
- **Technical Committee** -  
Representatives from select agencies
- **Peer Review Committee** -  
Representatives from Government,  
Private Sector, Environmental Groups,  
and Academia



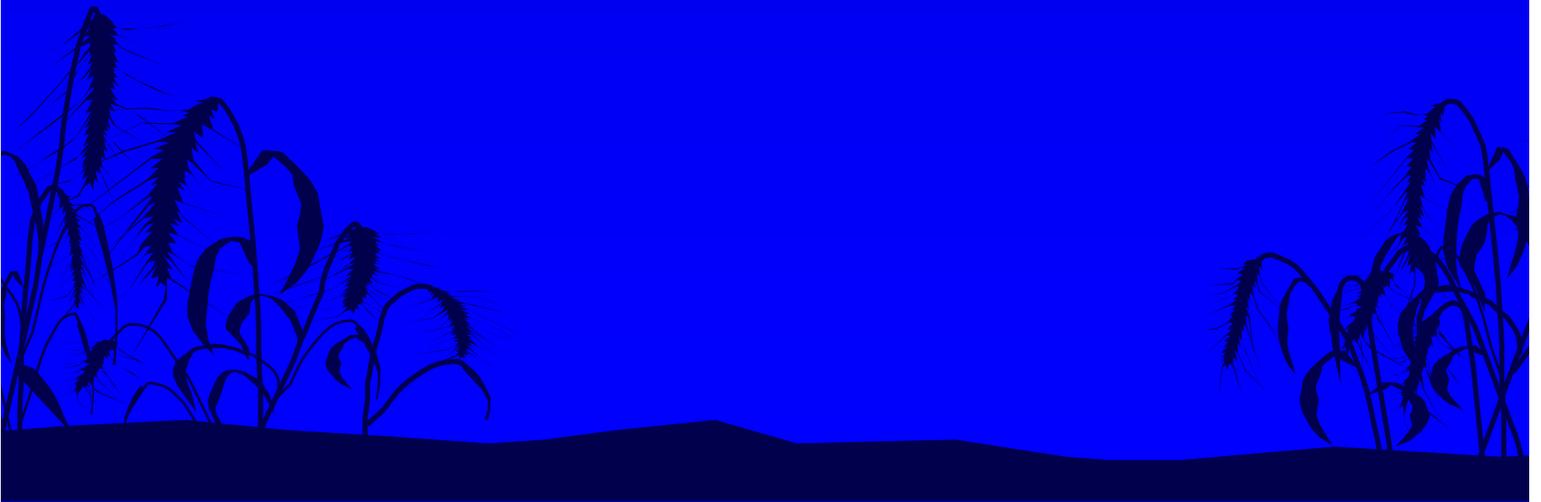
# *Project Objective*

- Provide a computer database (Including: maps and a technical summary document) identifying wetland locations and functions on which to base local land-use planning decisions.



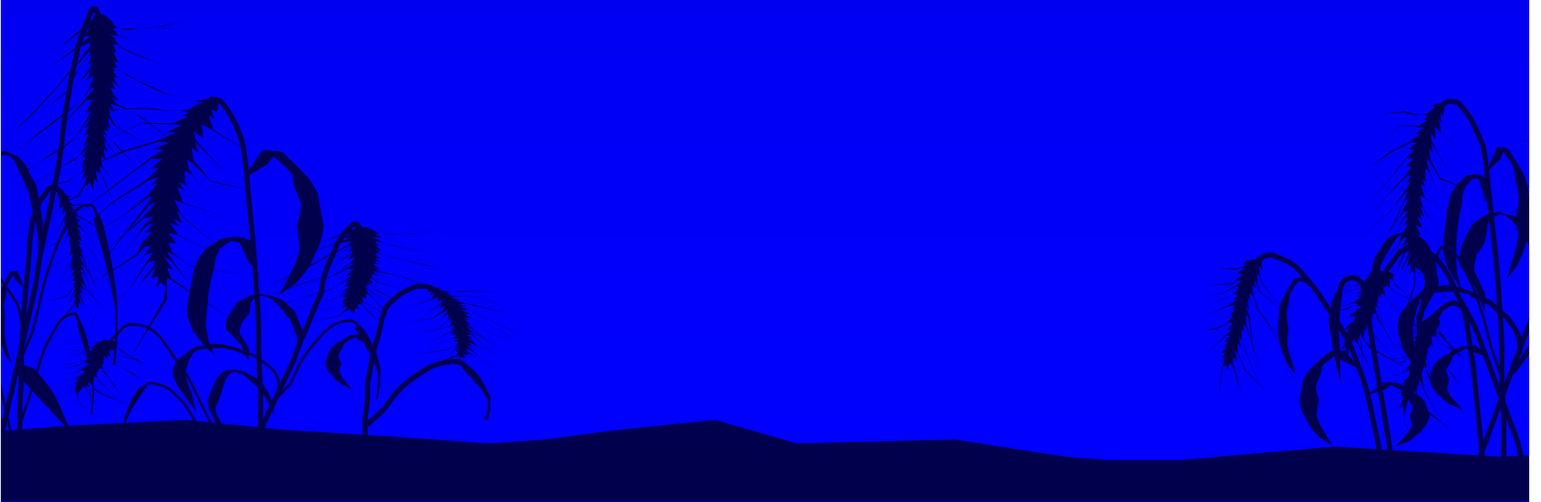
# *Project Objective*

- Enhance public awareness of wetland issues.



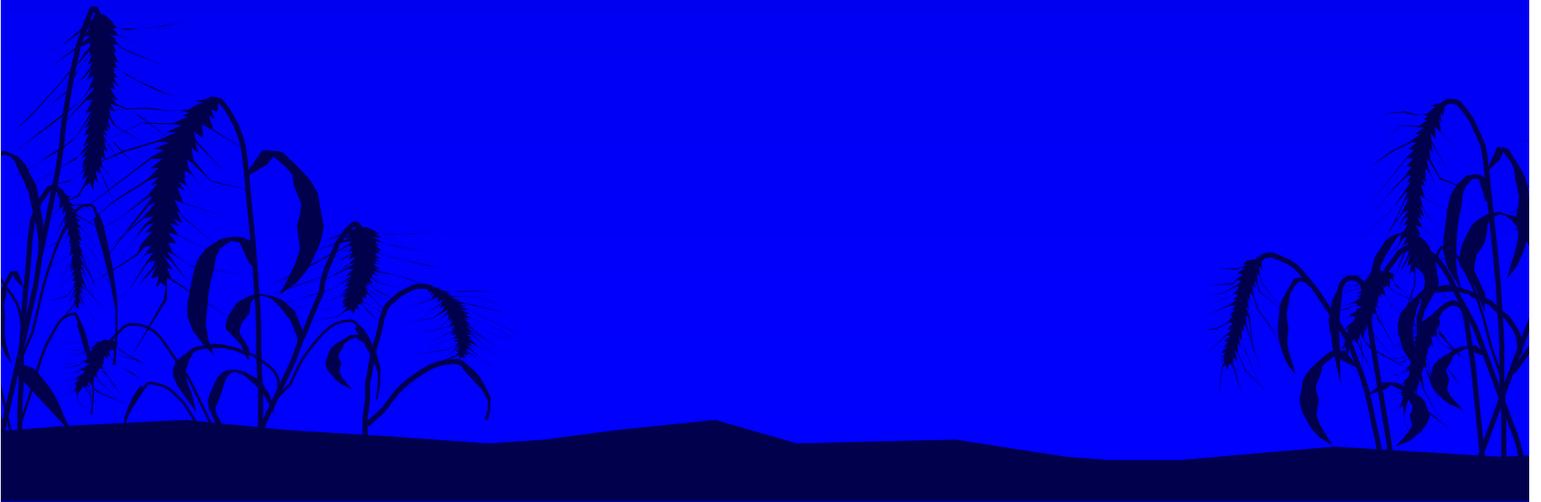
# *Project Objective*

- Provide an opportunity for interagency coordination on wetland issues.



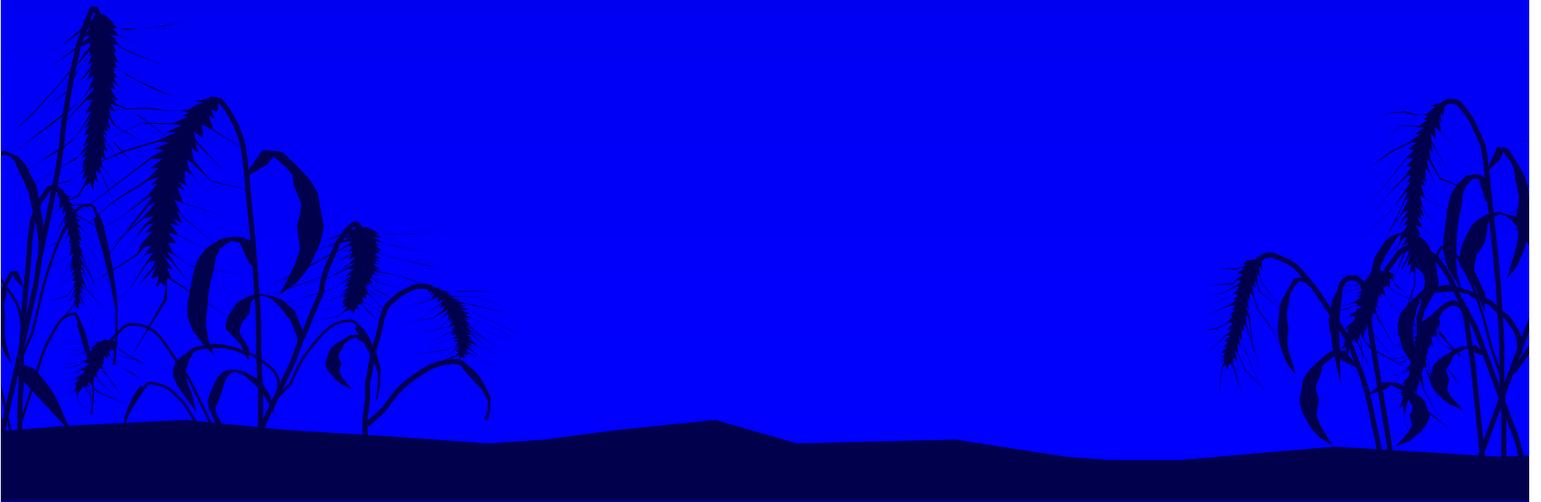
## *Project Objective*

- Collect baseline information to support potential acquisition of wetlands, designation of mitigation sites, and implementation of additional management mechanisms.



# *ADID Products*

- Technical Summary Document
- Maps



# *ADID GIS Database Layers*

National Wetland Inventory (NWI)

Hydric Soils

Color infrared photography

Black & White photography

Land-use

Mitigation sites

Fire data

Endangered Species data

Well-head protection areas

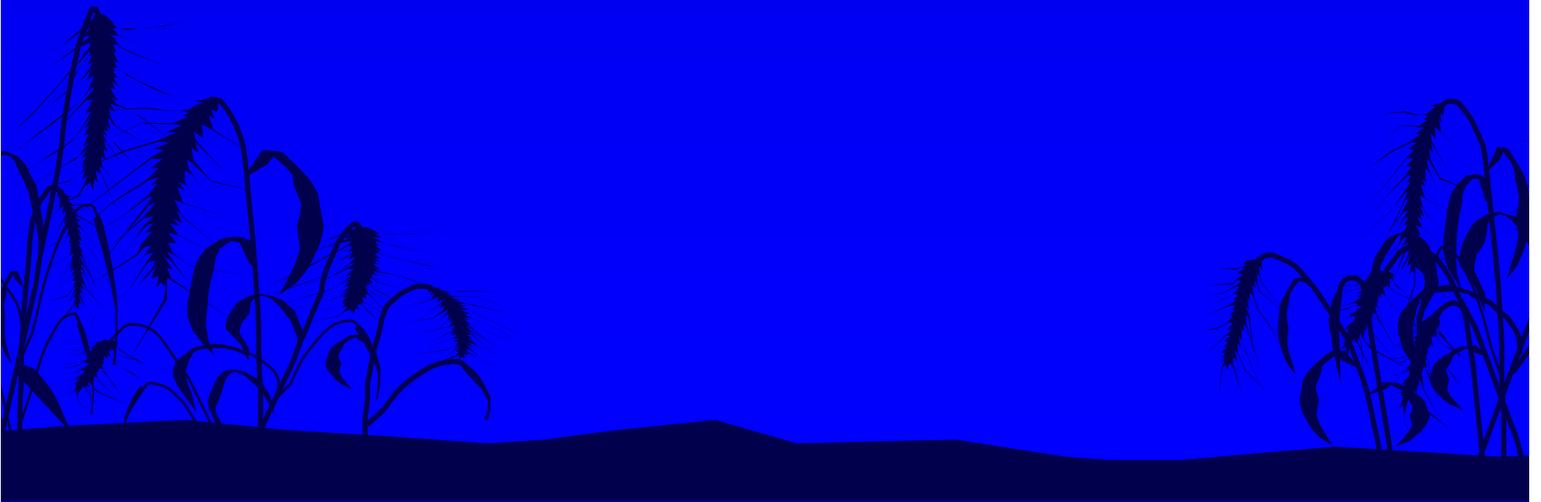
Roads

Floodplain data



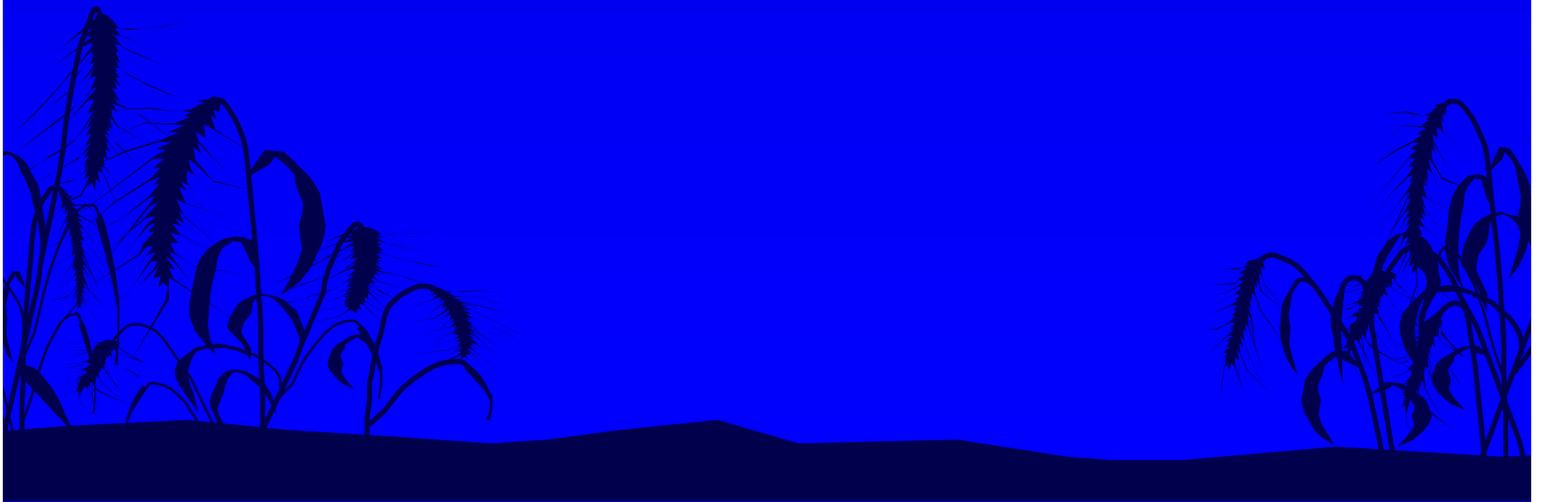
# *ADID Wetland Classification*

- Depressional
- Fringe
- Flat
- Riverine

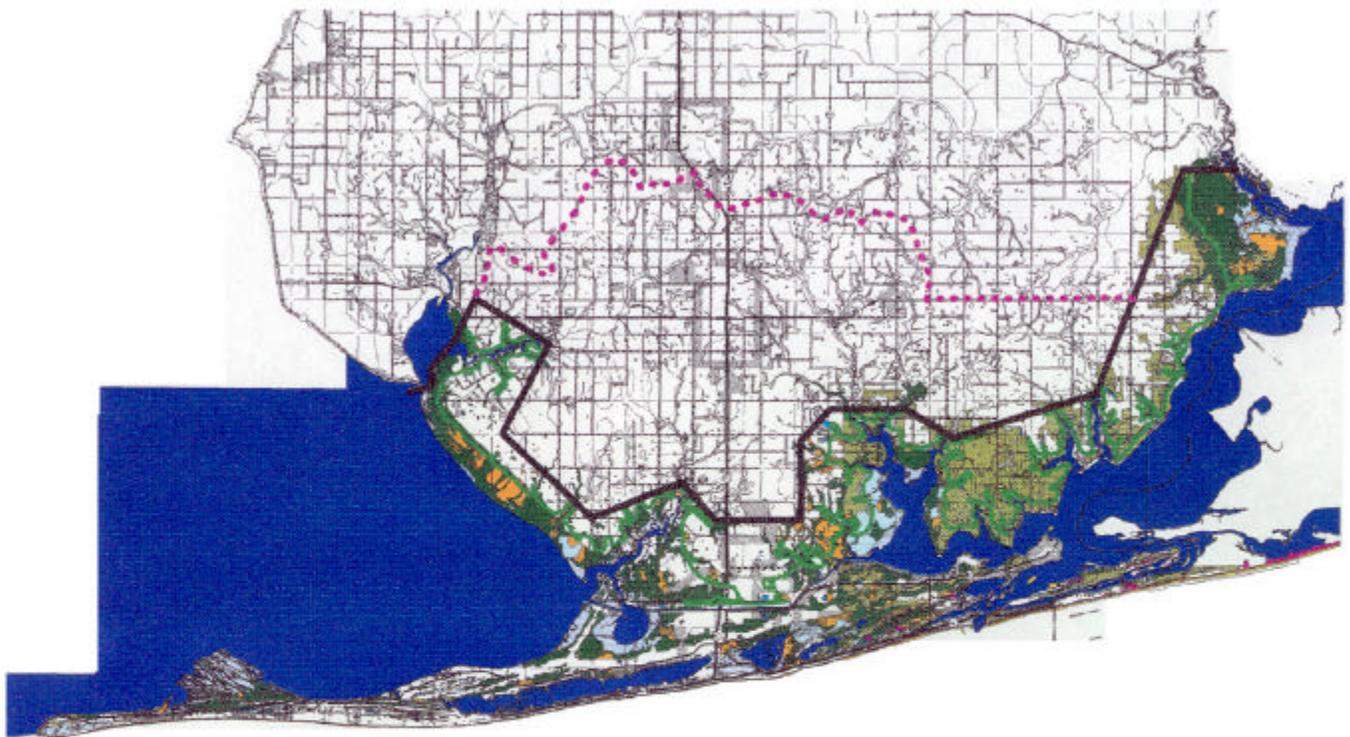


# *Classification Protocol*

- National Wetland Inventory
- Hydric Soils Information



# National Wetland Inventory



Section 404 permits are required for any filling of wetlands that are jurisdictional under the Section 404 program. All designations are ADVISORY ONLY. They do not guarantee the issuance of a Section 404 permit, nor do they represent the denial of a Section 404 permit. This map was created as a result of remote sensing and GIS technology. Actual field conditions may differ from those indicated in the map.

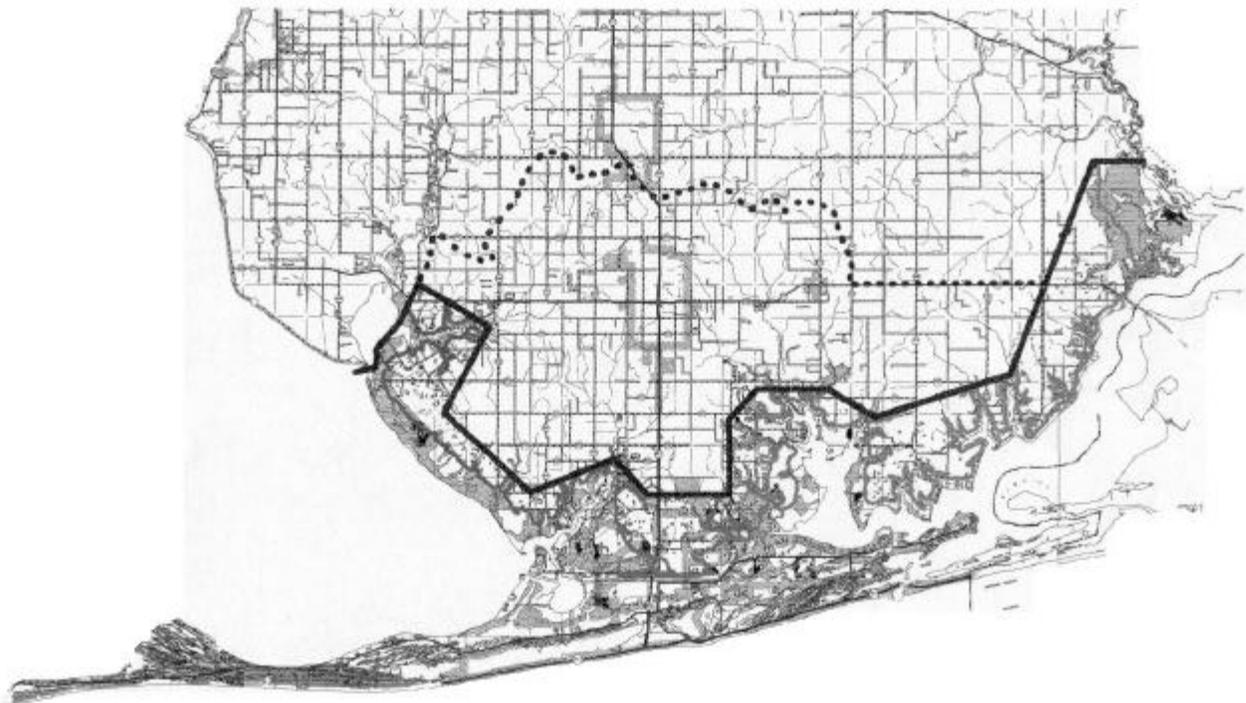
ADID PROJECT AREA NWI WETLAND CLASSIFICATION



# Hydric Soils



# ADID Wetland Classification



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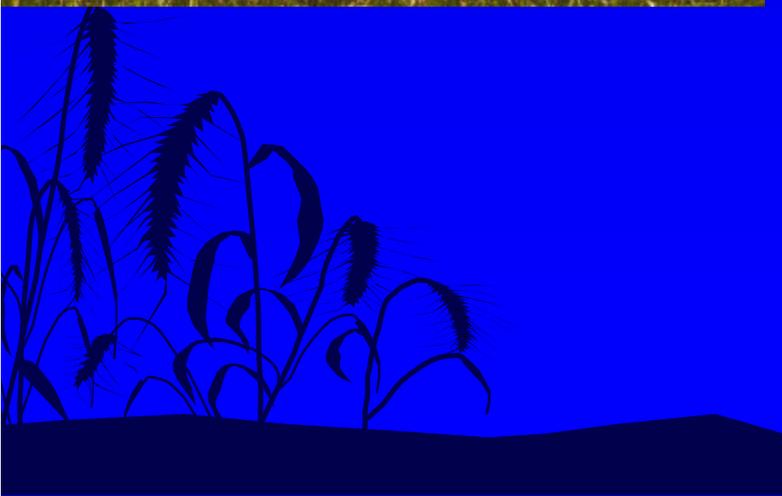
- Level 1 ADID Project Area
- Level 2 ADID Project Area
- ADID Assessment Area
- Riverine Wetlands
- Flat Wetlands
- Depressional Wetlands

ADID PROJECT AREA HGM WETLAND CLASSIFICATION

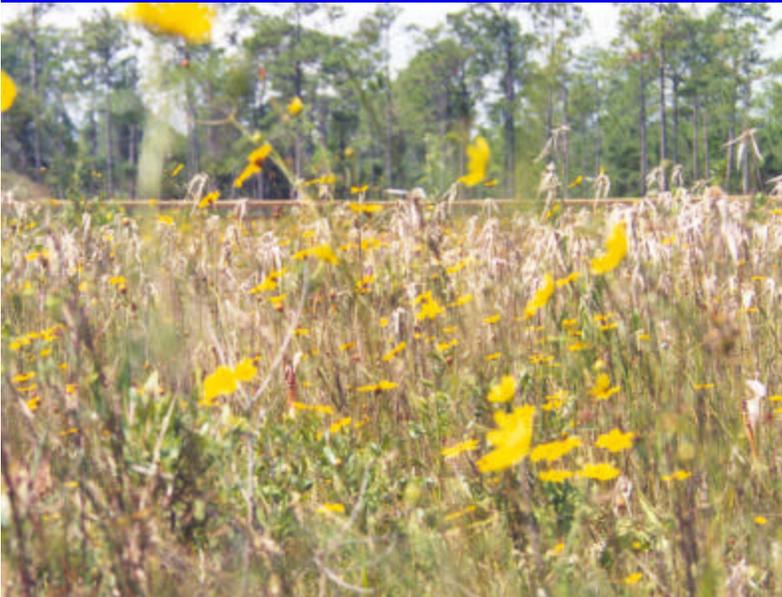
# *Depressional Wetland Area*



# *Fringe Wetland Area*



# *Flat Wetland Area*

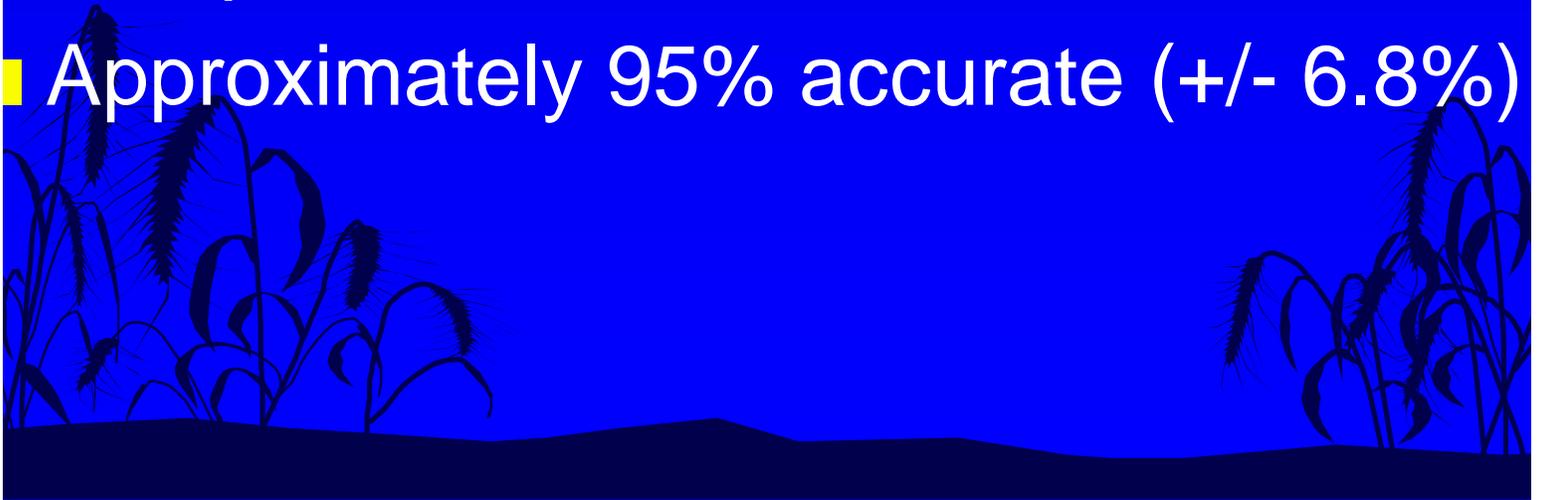


# *Riverine Wetland Area*

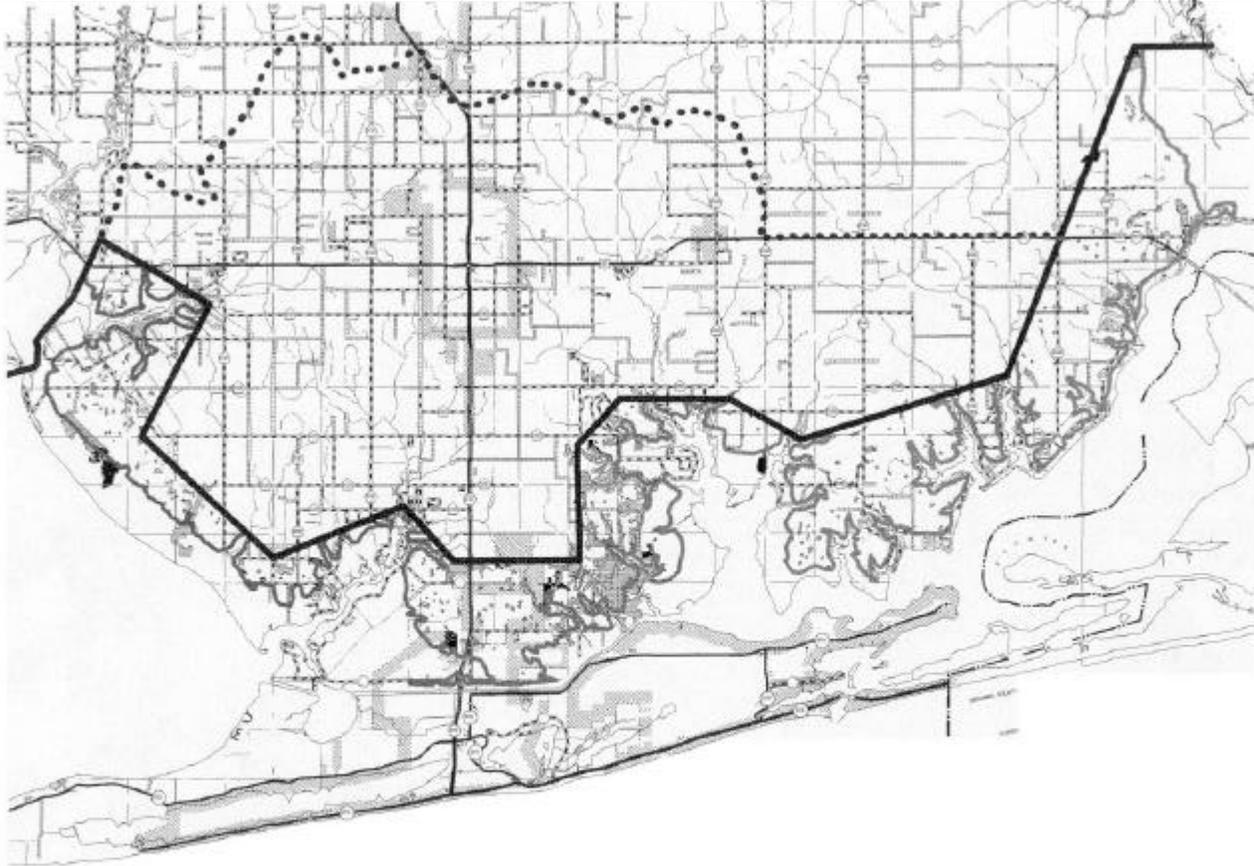


# *ADID Validation Study*

- To determine ADID remote wetland classification accuracy compared to actual field conditions.
- Size of sampling sites - quarter acre.
- Sample size of 74
- Approximately 95% accurate (+/- 6.8%)



# Validation map (1)

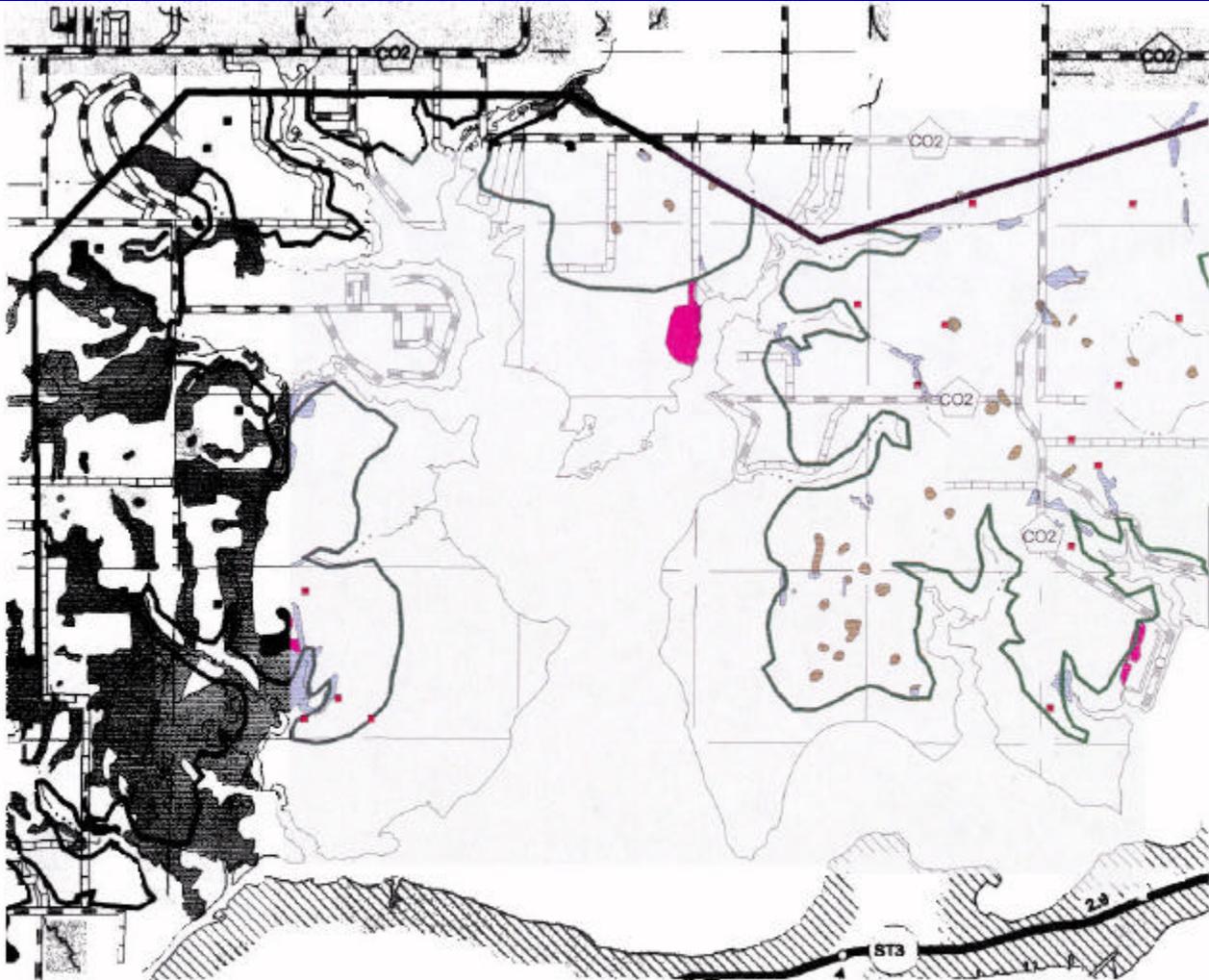


Section 404 permits are required for any filling of wetlands that are jurisdictional under the Section 404 program. All designations are **ADVISORY ONLY**. They do not guarantee the issuance of a Section 404 permit, nor do they represent the denial of a Section 404 permit. This map was created as a result of remote sensing and GIS technology. Actual field conditions may differ from those indicated in the map.



VALIDATION STUDY SAMPLING LOCATIONS - ENTIRE AREA

# Validation map (2)



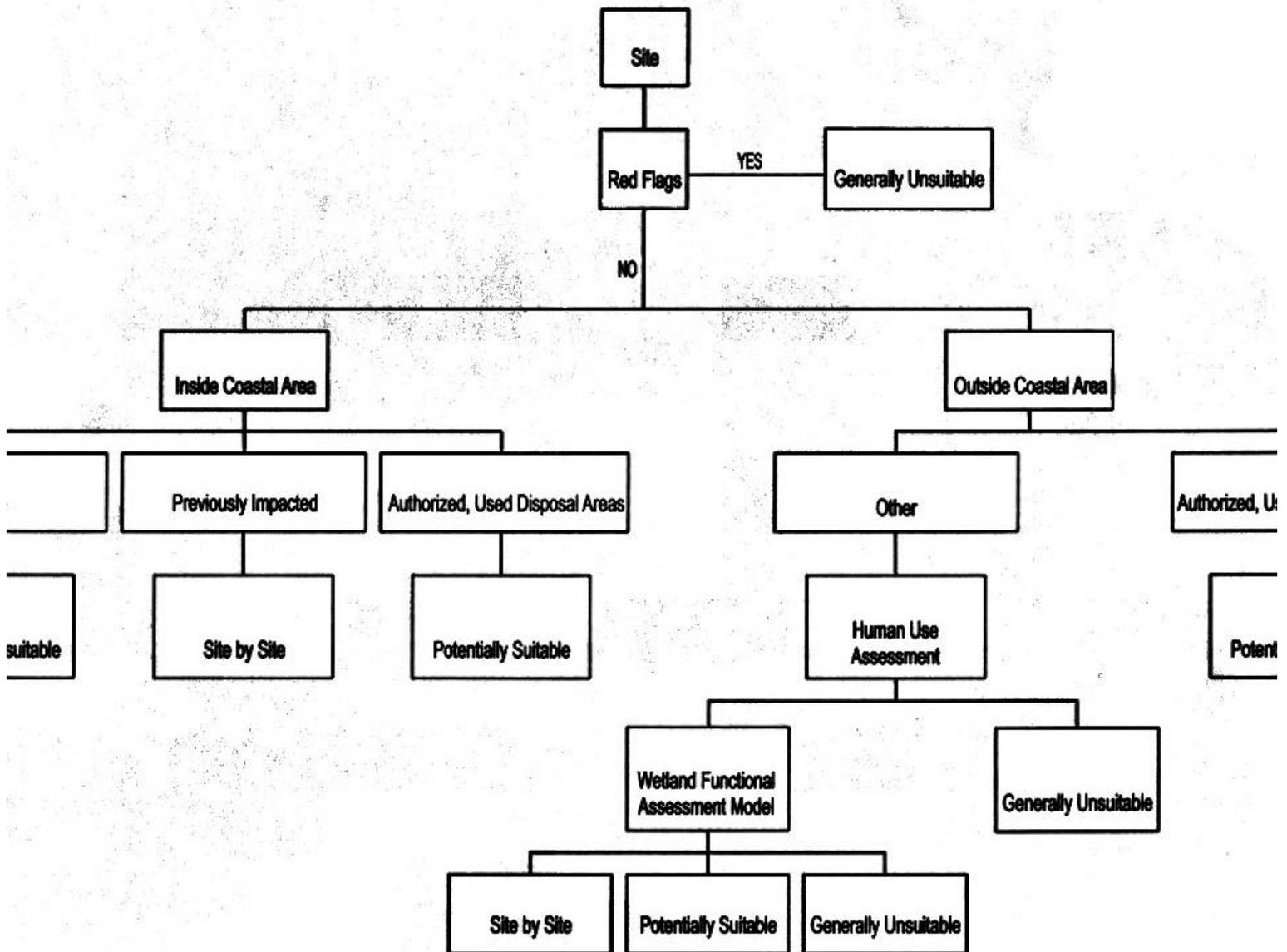
Section 404 permits are required for any filling of wetlands that are jurisdictional under the Section 404 program. All designations are **ADVISORY ONLY**. They do not guarantee the issuance of a Section 404 permit, nor do they represent the denial of a Section 404 permit. This map was created as a result of remote sensing and GIS technology. Actual field conditions may differ from those indicated in the map.

-  Selected Sites
-  Level 1 ADID Project Area
-  Level 2 ADID Project Area
-  ADID Assessment Area
-  Riverine Wetlands
-  Flat Wetlands
-  Depressional Wetlands



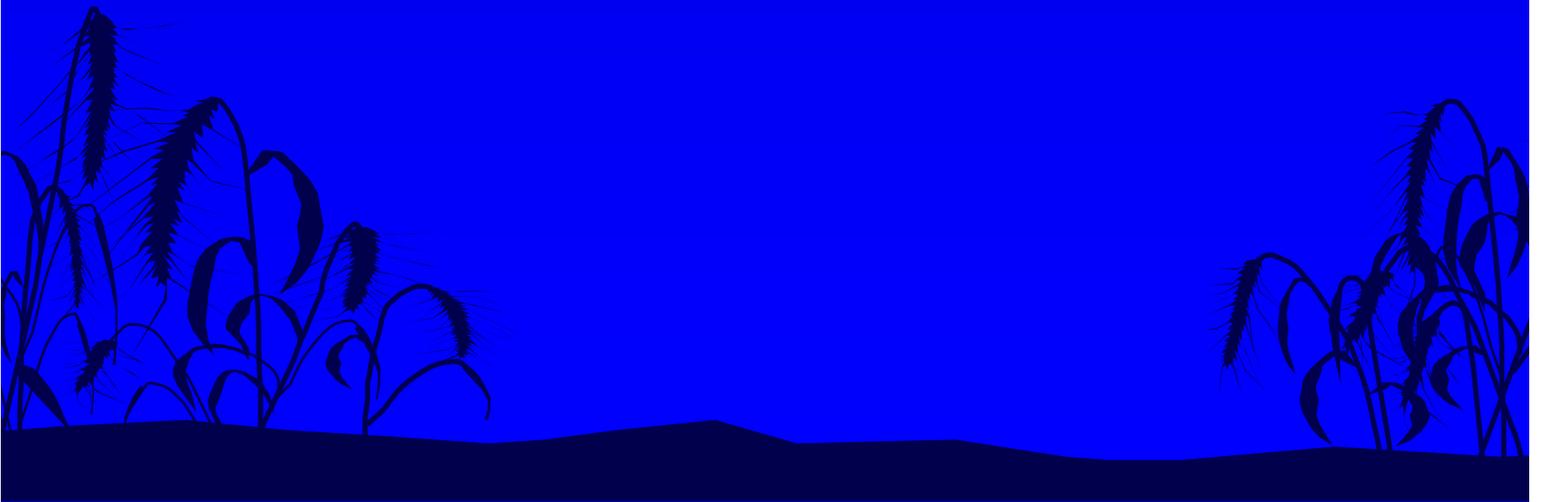
VALIDATION STUDY SAMPLING LOCATIONS - PLOT 4

# ADID Suitability Designations Decision Tree



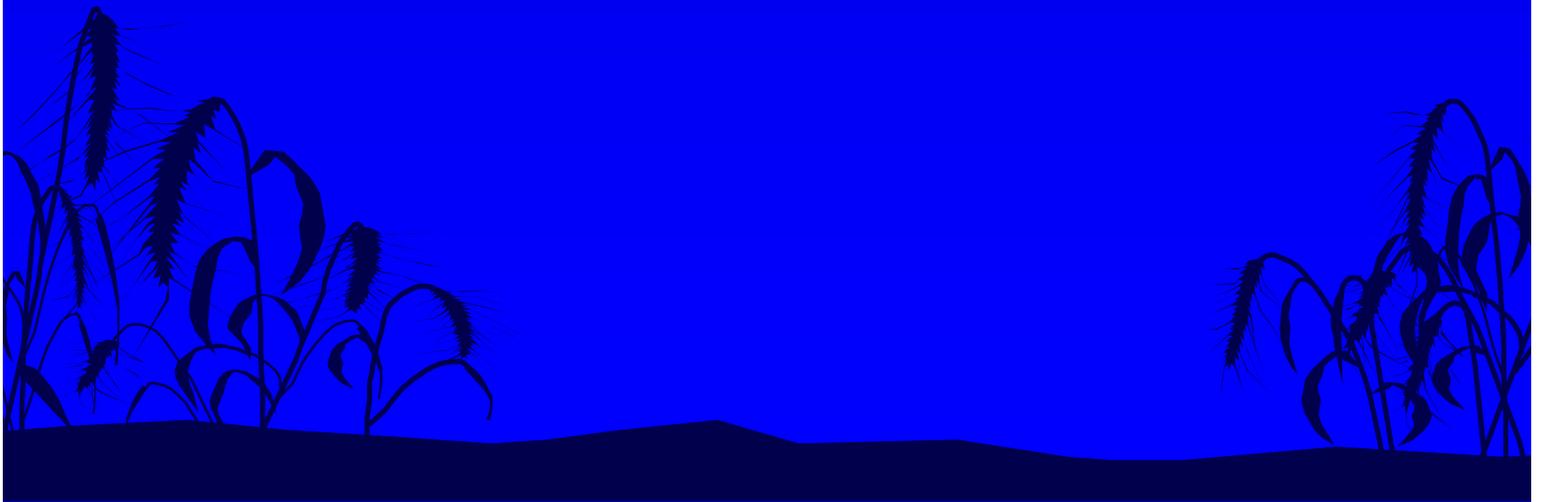
# *Wetland Functions Assessed*

- Water / Floodwater Storage
- Sediment / Toxicant / Nutrient Removal
- Wildlife / Fisheries Habitat
- Groundwater Maintenance



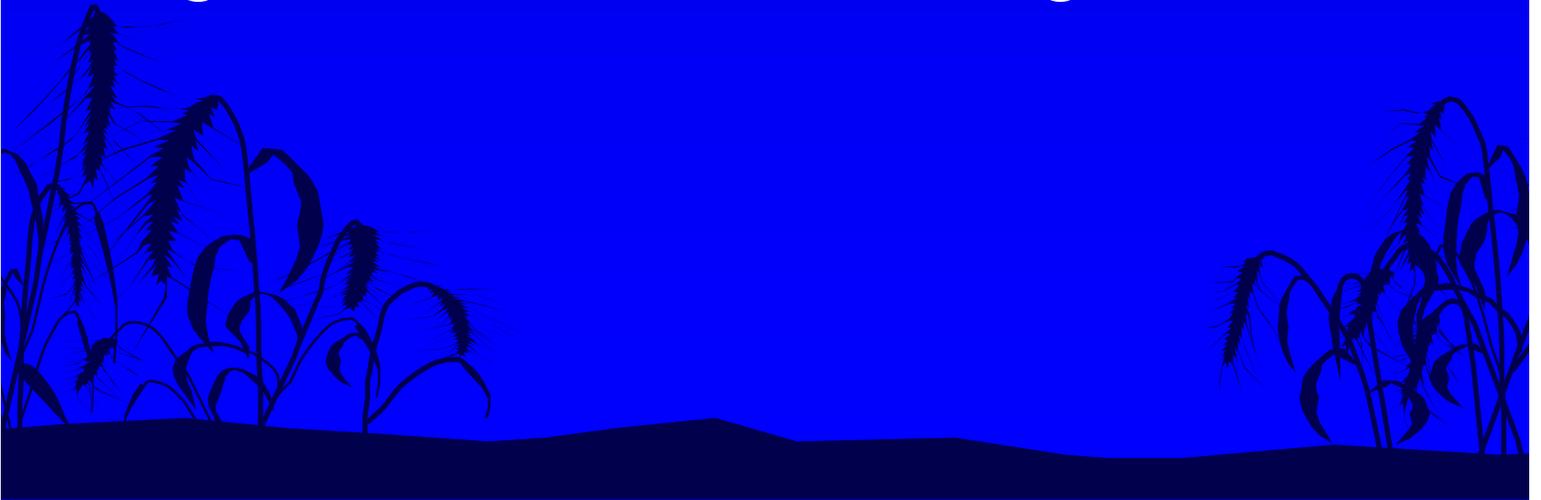
# *Functional Assessment Models*

- One for each wetland type
- All four wetland functions assessed



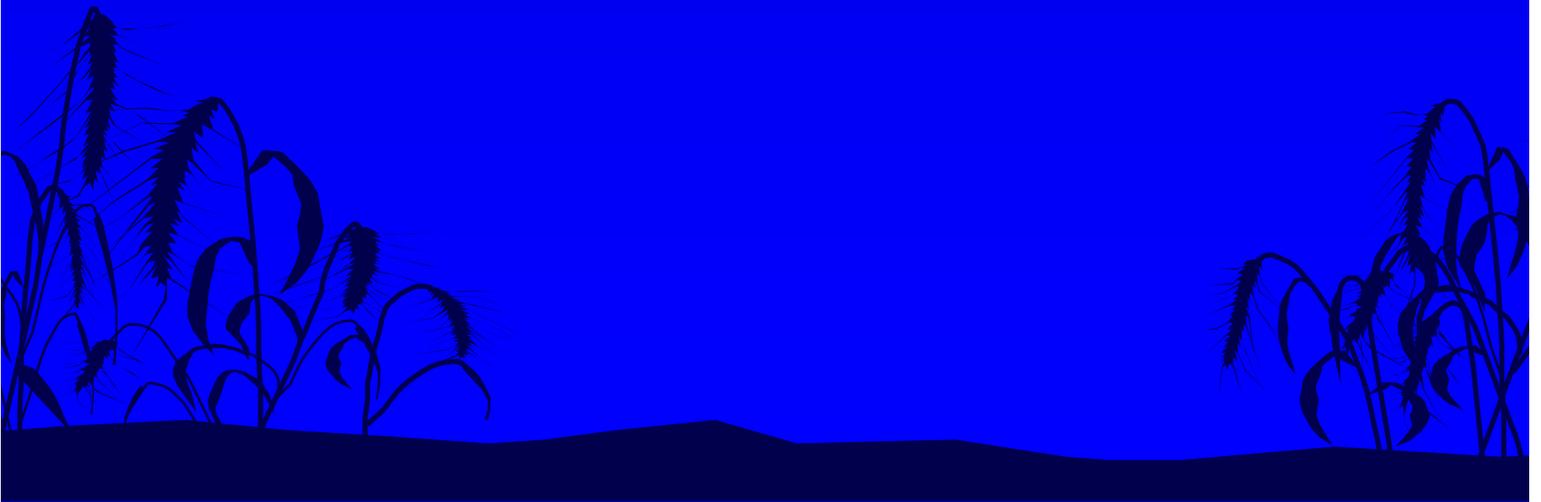
# *ADID Red Flags*

- Publicly Owned Lands
- Unique or Naturally Rare Wetlands / or Critical Habitat or Known Habitat for Endangered Species
- Mitigation Wetlands or Mitigation Banks



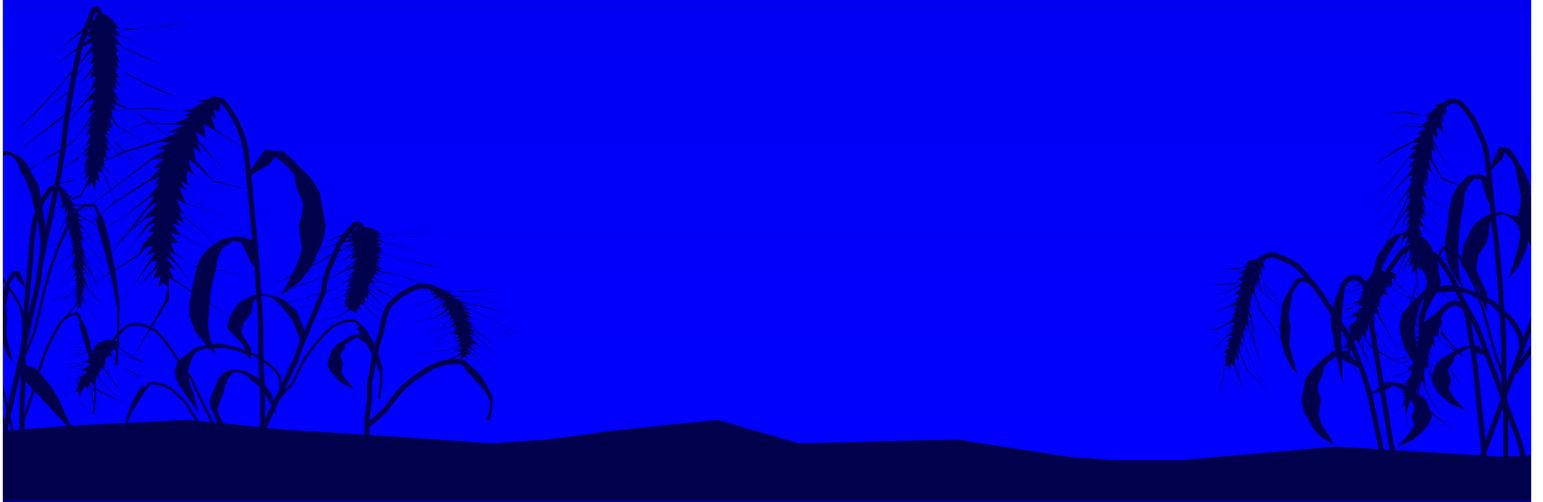
# *Suitability Designation Categories*

- Potential suitable for fill with compensatory mitigation
- Site by site evaluation required
- Generally unsuitable for fill



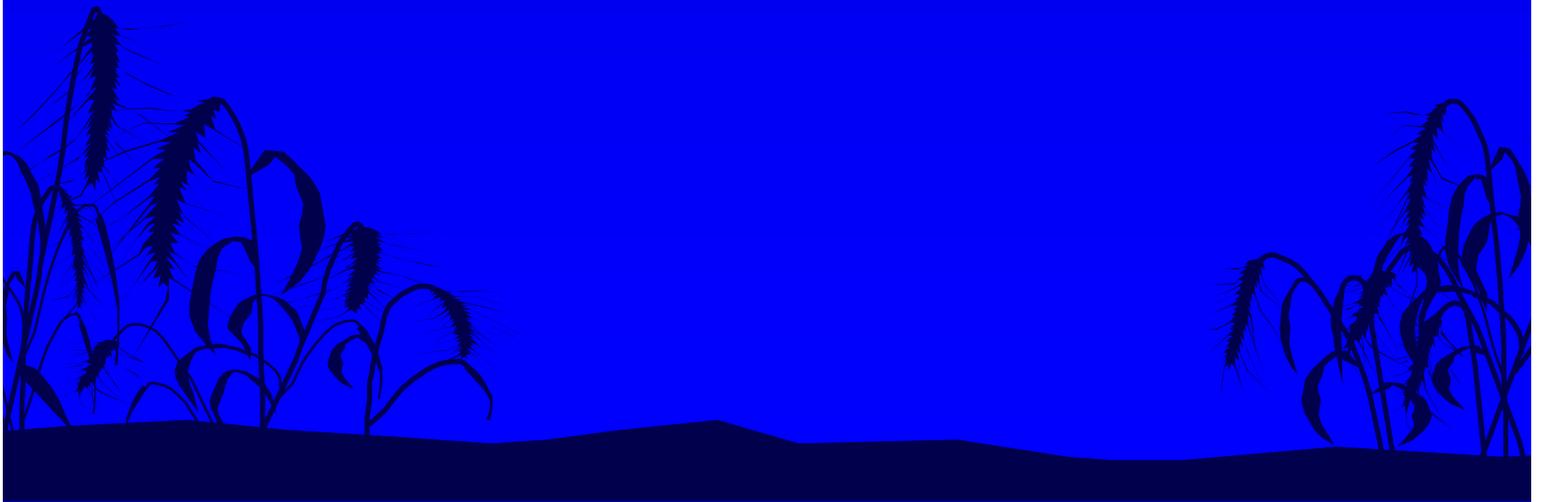
# *Suitability Designation Thresholds (Depressional)*

- Potentially suitable - 53% and lower
- Site by site - 54% through 66%
- Generally unsuitable - 67% and higher



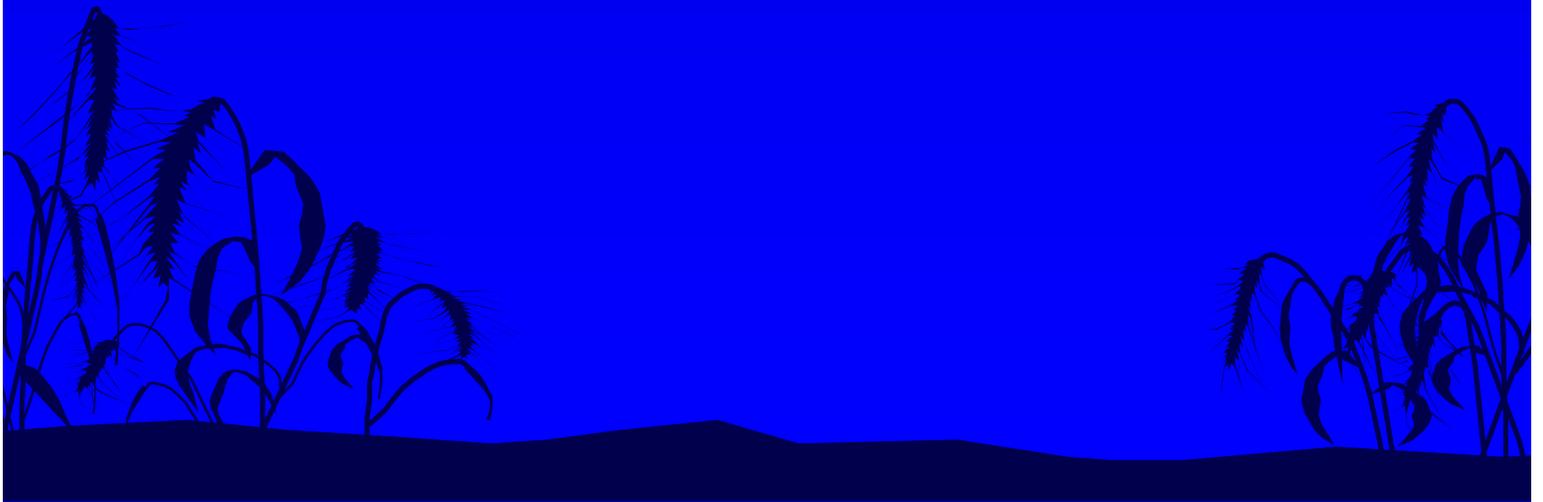
# *Suitability Designation Thresholds (Flat)*

- Potentially suitable - 58% and lower
- Site by site - 59% through 70%
- Generally unsuitable - 71% and higher

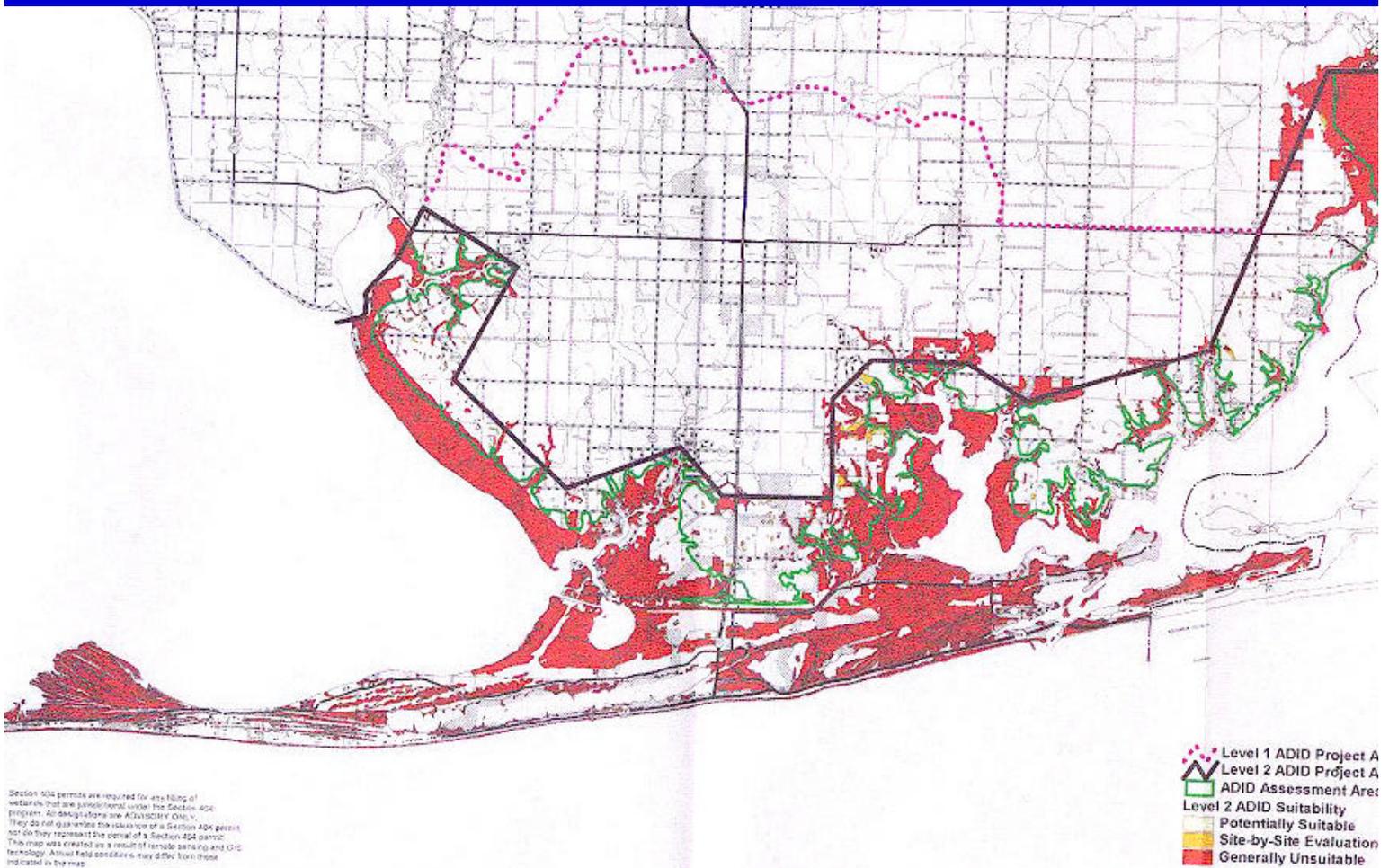


# Suitability Designation Thresholds (Riverine)

- Potentially suitable - 56% and lower
- Site by site - 57% through 72%
- Generally unsuitable - 73% and higher



# ADID PROJECT AREA WETLANDS SUITABILITY DESIGNATIONS

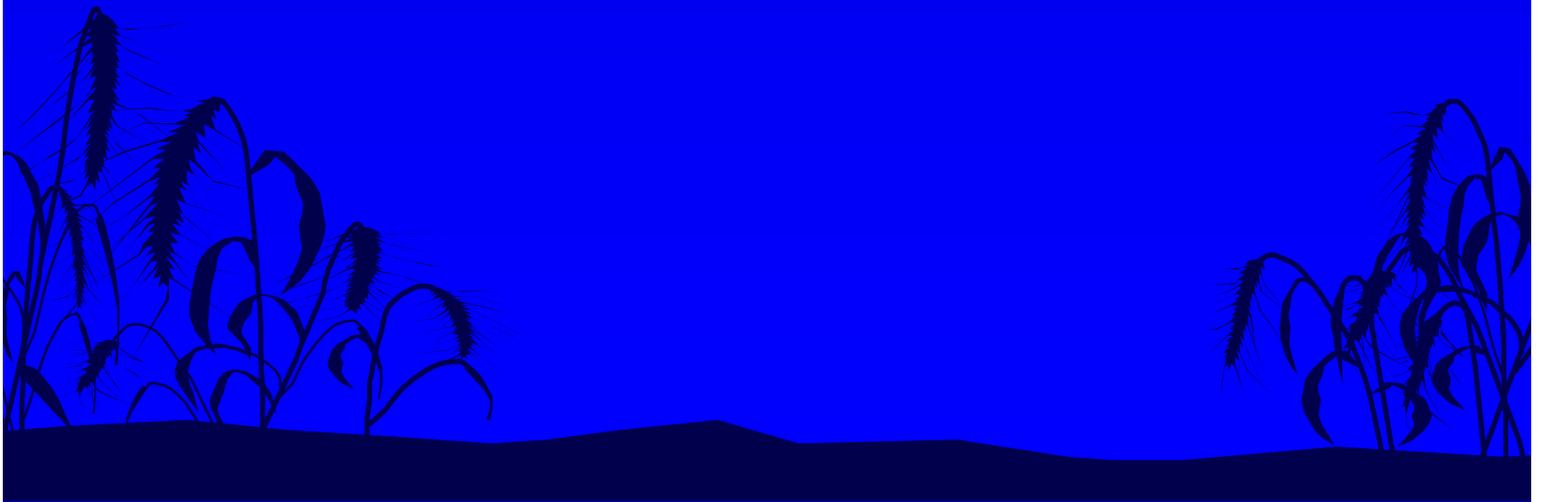


# *Project Area Wetland Results*

- Total acres: 88,972
- Total Wetland acres: 52,676
- Total Depressional acres: 7,075
- Total Fringe acres: 23,164
- Total Flat acres: 1,363
- Total Riverine acres: 21,074
- Potentially suitable for fill: 1%
- Site by site: 1%
- Generally unsuitable for fill: 98%

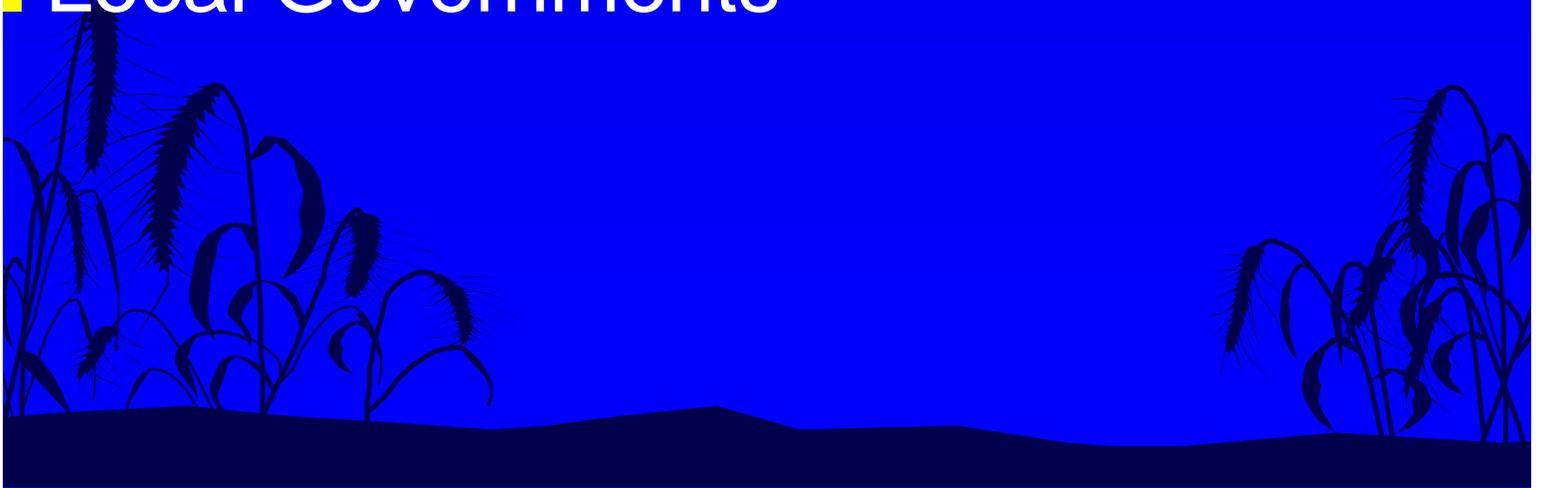
# *Assessment Area Results & Suitability Designations*

- Total Wetland Area: 4,313 acres
- Potentially suitable for fill: 11 %
- Site by site evaluation: 13%
- Generally unsuitable for fill: 76%



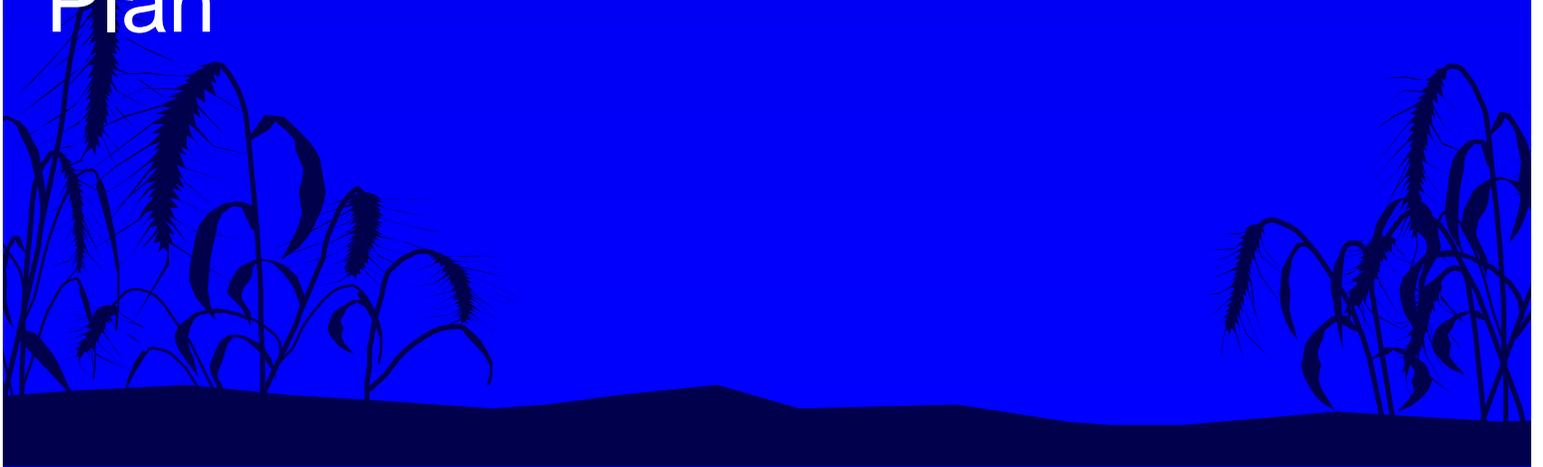
# *Who will Benefit from the ADID?*

- Regulatory Agencies
- Private Landowners
- Real Estate Professionals
- Developers
- Local Governments



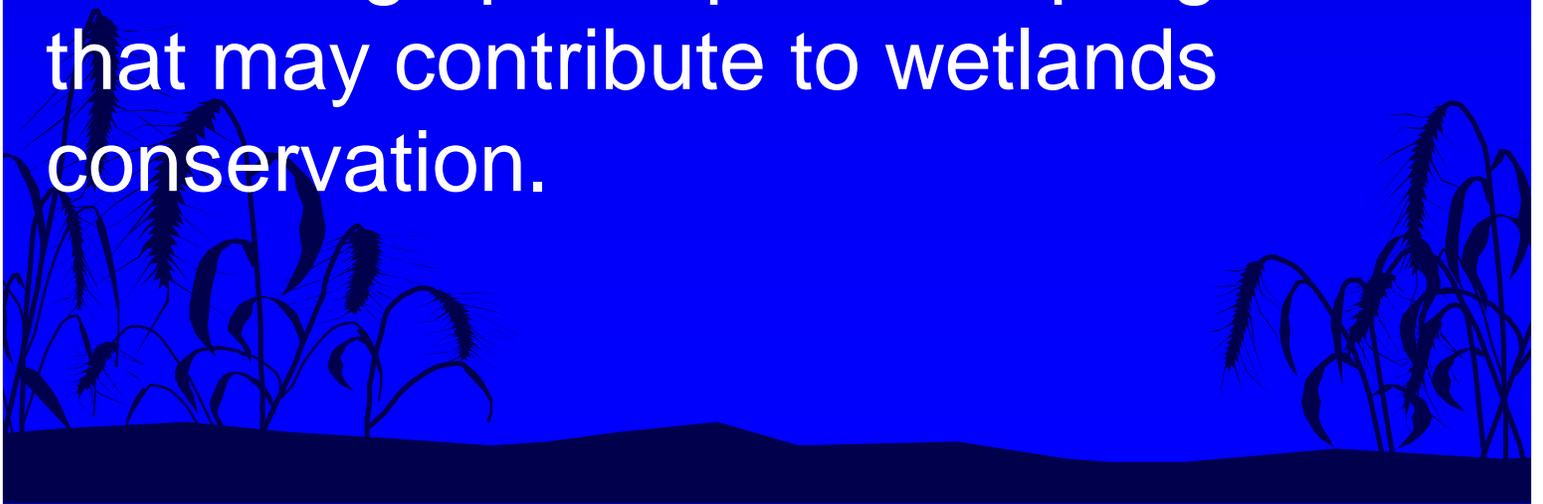
# *ADID Recommendations*

- Explore the Possibility of a COE General Permit for Selected ADID Areas.
- Encourage the Development of a Baldwin County Wetlands Conservation Plan



## *ADID Recommendations*

- Explore the feasibility of local agency participation in interagency on-site field meetings.
- Purchase of highly functioning wetlands
- Encourage participation in programs that may contribute to wetlands conservation.



# *How will Baldwin County Use the ADID Results?*

- Incorporate into Wetland Protection Overlay District
- Potential Wetland Purchases
- Map entire county using ADID technology
- Encourage wetland protection through education

