

# Pine Island Flatwoods Preserve Wetland Habitat Enhancement



Conservation Foundation of the Gulf Coast

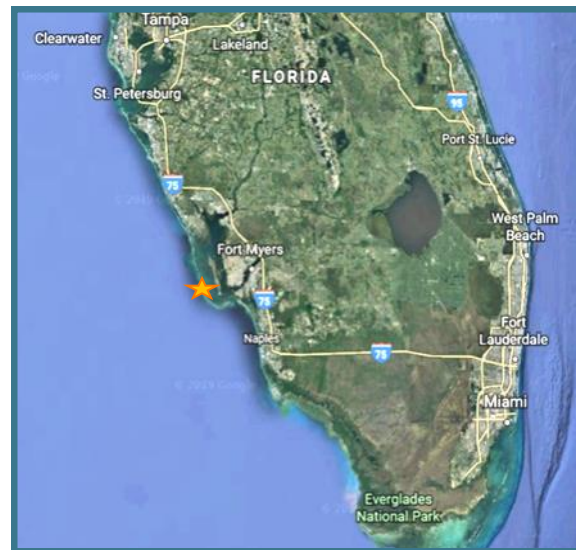
## Summary

Pine Island Flatwoods Preserve, part of the Lee County Conservation 20/20 Program, is a 919-acre passive area which supports 134 wildlife species. This project is identified in the Pine Island Flatwoods Preserve Land Stewardship Plan, to control exotic plant species, provide freshwater to wildlife outside of the wet season, and restore hydrology of the site.

The proposed 1.27 acre project area presently includes four abandoned shrimp farm ponds surrounded by multiple earthen spoil berms. The planned construction activities include the removal of these berms, construction of 100 feet of new berm to ensure wetland water retention, and re-contouring of the current shrimp pond area to create two distinctive water management areas for habitat enhancement purposes. Following construction, the enhanced freshwater marsh will be approximately 2 to 2.5 feet deeper and will connect to the Pine Island Sound estuary through an estuarine pond and outfall.

Restoration of these old shrimp ponds will provide wetland habitat and a freshwater source to wildlife year-round. The project will also improve water quality and flows downstream.

## FISH, WILDLIFE, & HABITAT RESTORATION



**Location:** Lee County, FL

**Partners:** Florida Fish and Wildlife Conservation Commission, Lee County Parks and Recreation Conservation 20/20

**Status:** Ongoing

**CHNEP Cost:** \$113,450

**Funding Source:** CHNEP

**2019 CHNEP Plan Activity:**



Fish, Wildlife, & Habitat Restoration  
2.2: Encourage management of public lands and private lands with public conservation easements to protect, restore, and create native plant and animal communities.



## Anticipated Results and Benefits

### Enhanced Quality of Wildlife Habitat:

Documented listed species on-site include Little Blue Heron, Tricolored Heron, Reddish Egret, Roseate Spoonbill, and threatened Wood Stork. This project will result in the enhancement of wildlife habitat by restoring an abandoned developed area (former shrimp ponds) to a more natural coastal freshwater and estuarine wetland habitat. Exotic invasive species will also be removed from the site, improving habitat quality. The project will also extend the hydroperiod of wetlands, thereby increasing breeding habitat for amphibians, feeding habitat for wading birds, and providing a freshwater source for other animals.

### Restored Hydrology:

Restoring more natural flows will increase fresh surface and ground water availability to support healthy natural systems. The hydrology of the site will be restored by reconstructing the former shrimp ponds from a series of spoil berms and exotic plant-infested ditches. Freshwater will flow from the restored freshwater wetland to a brackish-water pond and eventually out into the mangrove-lined estuary.

### Increased Wetlands:

This project will increase the area of restored wetland habitat. Wetlands naturally filter out pollutants and provide freshwater base flow to maintain healthy salinity levels in tidal creeks and estuaries. As a result of increasing wetlands on-site, cleaner and more appropriate flows of freshwater will be flowing across and off-site — supporting healthier and more abundant aquatic life downstream.

## CONTACT INFORMATION

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[CHNEP.org](http://CHNEP.org)



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