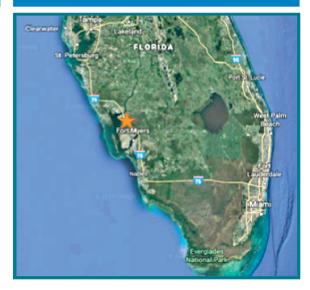
Charlotte Harbor Flatwoods Hydrological Restoration Initiative

Florida Fish and Wildlife Conservation Commission

HYDROLOGICAL RESTORATION



Summary

The Charlotte Harbor Flatwoods Hydrologic Restoration Initiative (CHFI) encompasses 80,000 acres of land including the Cecil Webb/Babcock Wildlife preserve, Yucca Pens Wildlife preserve, and numerous creeks that flow into the eastern Charlotte Harbor and Caloosahatchee Estuaries. This watershed has experienced economic impacts as a result of the Deepwater Horizon oil spill, along with other roadway and development impacts. These environmental alterations have increased pollution and hydrological degradation.

The goals of the CHFI are to enhance sheet flow and natural flow, improve water quality, restore groundwater recharge, reduce flooding, and enhance fish and wildlife. The initial steps to the restoration of this area involve collecting and synthesizing data using an integrated, three dimensional, hydrological model to determine the appropriate hydropatterns, timing, and quantity of water flows required to improve hydrological conditions and habitat.

CHNEP is funding the development of a science based, data driven, Strategic Hydrological Planning Tool that will provide guidance to resource management agencies related to the appropriate restoration and management of land areas and surface waters currently flowing through this area. This comprehensive approach of data collection, evaluation and planning will guide the success of this restoration project.

Location: Charlotte & Lee Counties

Partners: Charlotte County, Southwest Florida Water Management District, South Florida Water Management District, and Florida Fish and Wildlife Conservation Commission

Implemented: 2020

Status: Ongoing

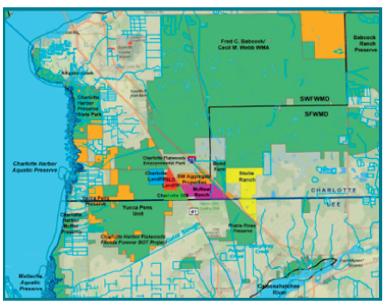
CHNEP Cost: \$573,060

Funding Source: Natural Resource
Damage Assessment and Florida
Department of Environmental Protection
funds managed through CHNEP

2019 CHNEP Plan Activity:

Hydrological Restoration 1.1: Review existing data collection and identify gaps. Conduct data collection, modeling, and analyses of historical, current, and projected hydrologic conditions to identify needs and guide hydrologic restoration.

COASTAL & HEARTLAND NATIONAL ESTUARY PARTNERSHIP





Anticipated Results and Benefits

Flood Reduction:

Man-made alterations have created unnatural flood zones and dehydrated wetlands throughout this watershed. Creating a hydrologic model of flow patterns will determine which areas are of most concern and should be a main focus for restoration modifications beneficial to both public and wildlife.

Enhanced Fish and Wildlife Habitat:

The modeling of this watershed is a critical component to the development of a Strategic Hydrological Planning Tool to increase and enhance the surrounding habitat. Restoring this area will create marsh and wetland habitat for fish, shorebirds, turtles, and many other species.

Improved Water Quality:

Returning this region to its original state will allow for water to be distributed through a natural filtration system of aquatic vegetation and wetlands, resulting in improved water quality throughout the watershed.



CONTACT INFORMATION

1050 Loveland Blvd. Port Charlotte, FL 33980 (941) 833-6580 <u>CHNEP.org</u>





Uniting Central and Southwest Florida to protect water and wildlife