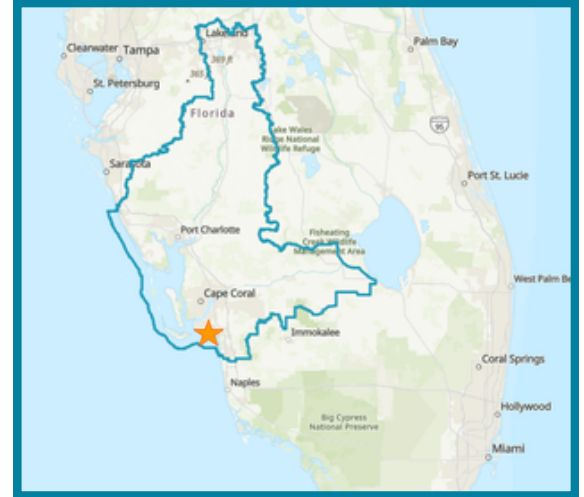


# Lee County Adaptation Plan Focus Areas 15 & 16

## WATER QUALITY IMPROVEMENT



### Summary

The Town of Fort Myers Beach is a coastal low-lying town that is vulnerable to flooding from changes in water levels and storm surge. Its 2025 Vulnerability Assessment and Adaptation Plan identified several focus areas for stormwater management improvements.

This project addresses Indian Bayou Drive (Focus Area 15) and Ibis Street (Focus Area 16), both designated as focus areas based on being prone to frequent flooding. While enhancements to the Town's stormwater infrastructure have been made, Indian Bayou encompasses a separate stormwater network segment that has not benefitted from the nearby improvements. Recent small-scale stormwater projects were installed along Ibis Street in an effort to mitigate frequent flooding from backflow. The area nevertheless experiences flooding, requiring further evaluation and design. This project will entail hydrologic and hydraulic modeling of both areas to evaluate the performance of the stormwater systems under various conditions, and to develop recommendations for additional measures to mitigate flooding and minimize pollutant transport into coastal waters.

By enhancing drainage along Indian Bayou Drive and Ibis Street, frequent flooding during high-tide and rainfall events will be reduced, in addition to water pollution entering into coastal waters and wetlands; further protecting their water quality.

**Location:** Lee County

**Partners:** Town of Fort Myers Beach

**Implemented:** 2026

**Status:** Ongoing

**CHNEP Cost:** \$200,000

**Funding Source:** EPA IJJA

**2025 CHNEP Plan Activity:**  

Water Quality Improvement 3:  
Reduce urban stormwater and agricultural runoff pollution

Fish, Wildlife, & Habitat Protection 2:  
Protect, monitor, and restore environmentally sensitive lands and waterways including critical habitat area

# COASTAL & HEARTLAND NATIONAL ESTUARY PARTNERSHIP



## Anticipated Results and Benefits

### Improved Water Quality

Enhanced stormwater retention as a result of this project will reduce frequent flooding during high-tide and rainfall events will decrease mobilization of pollutants. The Indian Bayou area also outfalls directly to a mangrove swamp, so this will protect the water quality of that coastal waterway by reducing urban pollution and conserving natural resources and ecosystems. Excess pollutants and nutrients in a water body lead to the rapid and overgrowth of algae and plants, causing algal blooms, which not only produce toxins harmful to the water, humans, and wildlife, but they also decrease oxygen and block sunlight, greatly impacting the ecosystem below. By reducing the flow of pollution entering the surrounding waterbodies, water quality will improve and increase overall ecosystem health.

### Enhanced Flood Protection

Flood mitigation remains a critical priority due to the increasing risk of roadway impassability and property damage affecting businesses and residents. Taking measures to identify hazards, assess vulnerability and risks, investigate options, and plan and implement actions before a catastrophe occurs avoids expensive damages requiring remedial actions and enhances the community's flood protection and resilience to future severe storms.

## CONTACT INFORMATION

1050 Loveland Blvd., Suite D  
Port Charlotte, FL 33980  
(941) 833-6580

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



*Uniting Central and Southwest Florida to protect water and wildlife*