

## Restoration Efforts

Comprehensive Everglades Restoration Plan (CERP)  
Comprehensive Water Quality Feasibility Study  
Modified Water Deliveries to Everglades NP  
Florida Keys Water Quality Improvements  
Southwest Florida Feasibility Study  
Indian River Lagoon Restoration  
Everglades Construction Projects  
Continuing Authorities Program  
Kissimmee River Restoration  
Critical Restoration Projects  
Water Preserve Areas  
C-111 Project  
and many more...

# Florida Keys Water Quality Improvements Program

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**Objective:** The primary objective of the Florida Keys Water Quality Improvements Program (FKWQIP) is to improve the quality of nearshore waters within the Florida Keys National Marine Sanctuary, the nation's largest marine protected area. Up to \$100,000,000 in Federal funding may be available for the implementation of this program, with a 35% local match requirement, for a total program cost of \$153,800,000.

## Program Goals

- 1) Carry out projects for the planning, design and construction of wastewater and stormwater treatment works in the boundary of the Florida Keys National Marine Sanctuary.
- 2) Improve wastewater and stormwater management practices throughout the Sanctuary.
- 3) Provide wastewater management methods that meet Advanced Wastewater Treatment (AWT) levels (depending on the system size).

## Legal Authority

Under authority of Public Law 106-554, dated 21 December 2001, the Corps of Engineers is authorized to provide technical and financial assistance to carry out projects for the planning, design and construction of treatment methods to improve water quality in the Florida Keys National Marine Sanctuary.

## Program Progress

Since passage of the enabling legislation, the U.S. Army Corps of Engineers has conducted a number of planning efforts necessary to move the program forward. A Programmatic Environmental Impact Statement (PEIS) is being prepared to address the purpose and need for wastewater treatment and stormwater management/treatment improvements in the Keys and to determine the environmental consequences of FKWQIP implementation. The Corps is relying upon previously prepared Monroe County wastewater and stormwater master plans to serve as the decision-making vehicles for developing a list of projects for potential funding.

Preparation of a Program Management Plan (PMP) is underway. The PMP will serve as a guide for implementation of the FKWQIP. It will also be used to facilitate communication among participants, assign roles and responsibilities, define assumptions and document decisions. The PMP will establish cost and schedule objectives against which performance can be measured.



## Responsibilities of Local Governments Upon Implementation

1. Obtain all lands, easements, rights of way and relocations needed for construction of wastewater and stormwater facilities.
2. Obtain all necessary permits.
3. Operates and maintain 100% of the wastewater and stormwater treatment facilities.

All of these responsibilities will be passed through to the individual municipalities as part of the implementation of the program.

## Partners

The Florida Keys Water Quality Improvements Program is being implemented by the South Florida Water Management District and the U.S. Army Corps of Engineers. Other active participants include Monroe County, Florida Keys Aqueduct Authority, Florida

Department of Community Affairs, U.S. Environmental Protection Agency, Florida Department of Environmental Protection, Key Largo Wastewater Treatment District as well as the municipalities of Key West, Layton, Marathon, Islamorada and Key Colony Beach.

## Background

The Florida Keys National Marine Sanctuary includes 2,800 square miles of nearshore waters extending from just south of Miami to the Dry Tortugas. Numerous federal and state parks and preserves, and portions of Florida and Biscayne bays and the Gulf of Mexico are located within the Sanctuary's boundaries. The Florida Keys extend about 220 miles southwest from the southern tip of the Florida peninsula. Adjacent to the Florida Keys are unique and nationally significant marine environments, including seagrass meadows, mangrove islands, and living coral reefs. These marine environments support rich biological communities possessing extensive conservation, recreational, commercial, and aesthetic values, which give this area special national significance.



Considered an ecological jewel of South Florida, the Sanctuary offers many opportunities for recreational and commercial fishing and tourism-based businesses that are crucial to Florida's economy.

This area contains the nation's largest living coral reef, with four million people per year visiting the reef to view its living beauty. The Sanctuary's water quality, affected by human development of the adjoining Keys and other factors, influences the coral reef and the multitude of living organisms dependent on the reefs. Anglers from around the world visit the Sanctuary to fish for its challenging gamefish, especially the billfish found in deeper marine waters and the bonefish which inhabit the shallow waters.

## Providing Better Water Quality

Congress approved the FKWQIP to improve the water quality of the Florida Keys National Marine Sanctuary. When completed, the Keys residents and visitors can expect improved nearshore water quality. Although authorized, funding for the program has not yet been appropriated. Funding will likely come on a yearly basis from Congress.

Although the FKWQIP is not a component of CERP, it is extremely important to ecosystem restoration in the Florida Keys. Together all of these initiatives will contribute to the overall restoration effort within the Florida Keys National Marine Sanctuary.

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## No Action Could Lead to Negative Effects to the Sanctuary

As with other Florida ecosystems, human activities over the past 100 years have affected the Sanctuary's water quality. Unwanted and harmful bacteria and nutrients from human wastes and chemicals such as pesticides and mercury are reaching this delicate ecosystem. Currently, the large majority of residents and commercial establishments are not connected to advanced wastewater treatment systems, but rather to septic tanks and outdated onsite package plants. These systems, if not properly operated, allow harmful bacteria and nutrients to leech into nearshore waters. In the areas where testing is performed on these waters, the beaches are often posted for health advisories after a moderate rainfall because bacteria have leached into the waters.

## Related Initiatives

A number of efforts to restore the South Florida Ecosystem are currently under way. These efforts include components of the Comprehensive Everglades Restoration Plan (CERP) (i.e. the Florida Bay and Florida Keys Feasibility Study, Florida Keys Tidal Restoration Project, and C-111 Spreader Canal). In addition to the CERP efforts,

the Florida Keys Carrying Capacity Study, Florida Bay and Adjacent Marine Systems Science Program, Florida Keys National Marine Sanctuary Water Quality Protection Program, Modified Water Deliveries to the Everglades National Park, and water improvement programs in Monroe County are also being developed.



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