South Florida National Parks

National Park Service
U.S. Department of the Interior

Everglades National Park
40001 State Road 9336
Homestead, FL 33034

What's Happening Just Outside the Park Entrance?

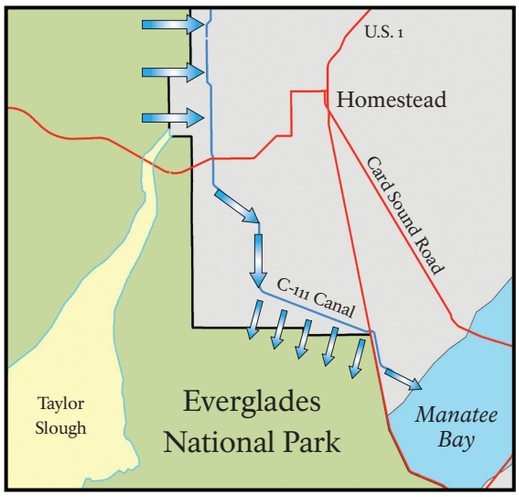
Restoration in Action

Since late 2009, visitors to Everglades National Park have caught a glimpse of the ongoing effort to restore the famed River of Grass. Just outside the park's Homestead entrance, crews can be seen constructing the **C-111 Spreader Canal Western Project**, one of over 60 individual projects authorized as part of the 2000 Comprehensive Everglades Restoration Plan. Once complete, the project will help reduce the loss of water from the park due to seepage and serve to help revitalize marshes and estuaries further downstream.

The C-111 Canal

Completed in 1966, the C-111 is the southernmost canal in south Florida's extensive water management system. The waterway was designed to provide flood protection and drainage for areas to the west and south of the city of Homestead. Collectively, this area covers a basin of approximately 100 square miles.

The canal runs north-south between the boundary of Everglades National Park and agricultural fields, before turning southeast, where it crosses large expanses of marl wetlands before ultimately emptying into Manatee Bay. Though an earthen plug caps the canal at the coast, it is sometimes opened during times of extreme flooding to quickly discharge water to tide.



The C-111 Canal currently draws water away from the eastern border of Everglades National Park, depriving Taylor Slough of needed freshwater flows.

Unintended Consequences

During its 40 years of operation, the C-111 Canal has brought unintended impacts to the natural systems of south Florida. The canal has resulted in the loss of water from Everglades National Park as it seeps eastward into the canal. This loss of water has parched Taylor Slough, a deep-water feature in the eastern Everglades that feeds into the coastal estuaries of northeastern Florida Bay. The loss of this freshwater flow has changed seasonal salinity patterns and threatened the ecological productivity of the area.

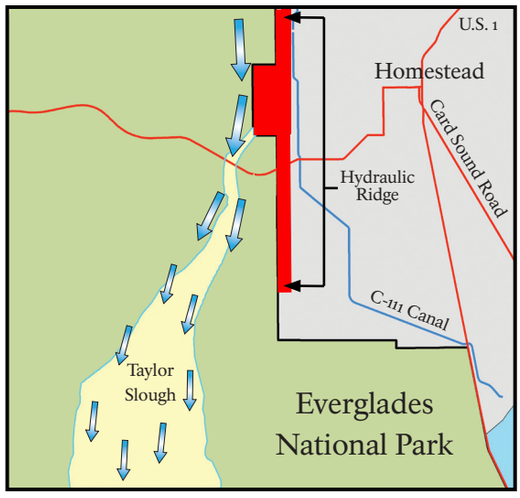
The C-111 has also brought changes to natural areas outside Everglades National Park. The canal captures water within the basin and channels it to the coast, bypassing the freshwater wetlands over which it would have naturally flowed. While these areas remain parched, Manatee Bay is sometimes inundated by unnatural infusions of freshwater that disrupt the estuarine salinities necessary to sustain life. This happens most notably when the earthen plug is opened to prevent flooding.

Roseate Spoonbills depend upon the health of coastal estuaries to feed and raise their young. In northeastern Florida Bay, nest numbers have declined dramatically following the completion of the C-111 canal and associated water management projects.

What the Project Will Accomplish

A series of pump stations and water impoundment areas are being constructed along the eastern border of the park. These features will be used to divert water away from the C-111 canal back toward the park's eastern border. This water, which might otherwise have been funneled down the canal, will be pooled in detention areas and canals immediately adjacent to the park, creating a "hydraulic ridge" that will maintain a barrier to seepage loss from the park and retain water in Taylor Slough.

Additional features of the project are occurring well south of the visible project site. Operational changes to water control structures downstream will incrementally raise water levels in the area. Additionally, segments of canals to the south are being plugged to promote greater overland flow through the freshwater marsh.

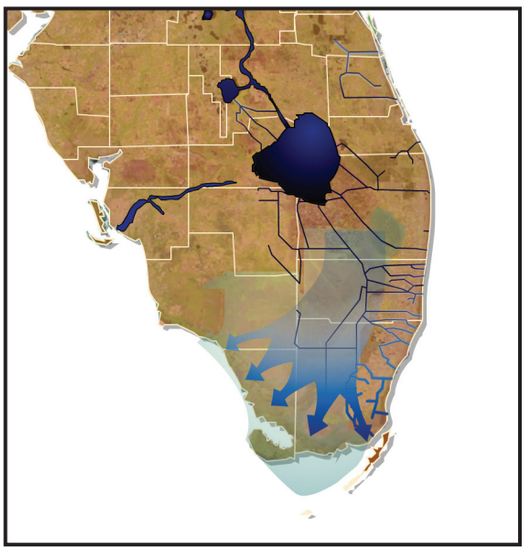


Once completed, the project will use a series of pumps and detention areas to create a nine-mile hydraulic ridge along the eastern border of the park. This ridge will help prevent seepage from Taylor Slough into the C-111 canal.

What the Project Won't Do

The Spreader Canal Western Project redirects water from the C-111 canal for the benefit of Everglades National Park and other coastal wetlands and estuaries nearby. The project is intended to better manage the waters already present in the basin, and represents an important first step in restoration. The project is not designed to augment water supplies to the area.

The C-111 Spreader Canal Western Project is designed to work in tandem with other restoration initiatives further upstream. The completion of projects intended to elevate portions of the Tamiami Trail and reestablish connections across south Florida landscapes will be necessary to realize the full ecological benefits of the ongoing Everglades restoration effort.



The C-111 Spreader Canal Western Project is but one of several important restoration initiatives intended to work in aggregate to ensure the long-term health of the Everglades ecosystem.
Image courtesy of the US Army Corps of Engineers

Learn More & Get Involved

You can learn more about this and other Everglades restoration projects online at:

www.EvergladesPlan.org

Sign up to receive the Everglades Report newsletter, view the calendar of upcoming events, browse teaching materials for the classroom, and follow our progress on Facebook and Twitter.

the journey to restore America's Everglades

See the Project Site

Want to see this exciting restoration project in person? All you need is a handheld GPS!

Follow these coordinates to find the **Everglades Restoration Geocache #3** and get a great view of the C-111 Spreader Canal Western Project site:

N 25°24.213'
W 080 °33.620'

Please be sure to seal the cache well and return it to its original location. New to geocaching? You can learn more by visiting the park website at:

www.nps.gov/ever/geocaching

This cache has been placed with the kind permission of our partners at the South Florida Water Management District and the Florida Department of Transportation for the purposes of public outreach and education.

As a reminder, geocaching is generally prohibited within areas managed by the National Park Service and the U.S. Fish and Wildlife Service.