

April 2015



just the FACTs

This fact sheet is provided as a reference to encourage a greater understanding of the various issues related to managing water in South Florida.



For more information on this subject, scan this QR code using a barcode reader app on your smartphone.



sfwmd.gov
South Florida Water Management District
3301 Gun Club Road
West Palm Beach, Florida 33406
561-686-8800 • 1-800-432-2045
www.sfwmd.gov

MAILING ADDRESS: P.O. Box 24680
West Palm Beach, FL 33416-4680

Nearshore Central Biscayne Bay Water Reservation

The joint state-federal Comprehensive Everglades Restoration Plan (CERP) identifies restoration of Biscayne Bay and its coastal wetlands as an integral step in achieving systemwide benefits in the south Florida ecosystem. Encompassing about 275 square miles of marine ecosystem and a watershed of about 850 square miles along the coast of Miami-Dade and northeastern Monroe counties, the Biscayne Bay Coastal Wetlands Project – Phase 1 will improve distribution of freshwater flows to the southern reaches of the bay, including Biscayne National Park.

The Water Resources Development Act (WRDA) of 2000 required the South Florida Water Management District to legally protect water intended for the natural system before any federal funding could be authorized to construct the three components of the CERP Biscayne Bay Coastal Wetlands Project – Phase 1. The District adopted a water reservation rule for Nearshore Central Biscayne Bay, and the project was authorized in WRDA 2014. Construction is complete on the Deering Estate Flow-way.

Defining water reservations

- A water reservation is a legal mechanism to set aside water for the protection of fish and wildlife or public health and safety. When a water reservation is in place, quantities and timing of water flows at specific locations are protected for the natural system. The necessary quantities and timing are determined using data which link local hydrology to the needs of fish and wildlife.
- All presently existing legal uses of water are protected so long as the use is not contrary to the public interest. If a project develops water above the amount needed to protect fish and wildlife, the Governing Board may certify the volume available for allocation to consumptive uses.

Reservations benefit the environment

Long-term success of ecosystem restoration is measured, in part, by the ability of native fish and wildlife to thrive in the habitats restored. Key facts considered in the development of the Nearshore Central Biscayne Bay water reservation in support of CERP restoration efforts included:

- Biscayne Bay is a shallow, subtropical estuary along the coast of Miami-Dade and northeastern Monroe counties. Many rare, threatened and endangered species live in this ecosystem, including manatees and American crocodiles.
- Major issues affecting Biscayne Bay include altered salinity patterns, variable water quality and a lack of freshwater flows to coastal wetlands.
- To aid restoration of the ecological functions of Biscayne Bay, CERP includes construction of a project that will improve distribution of freshwater flows to the southern part of the bay.

(more)

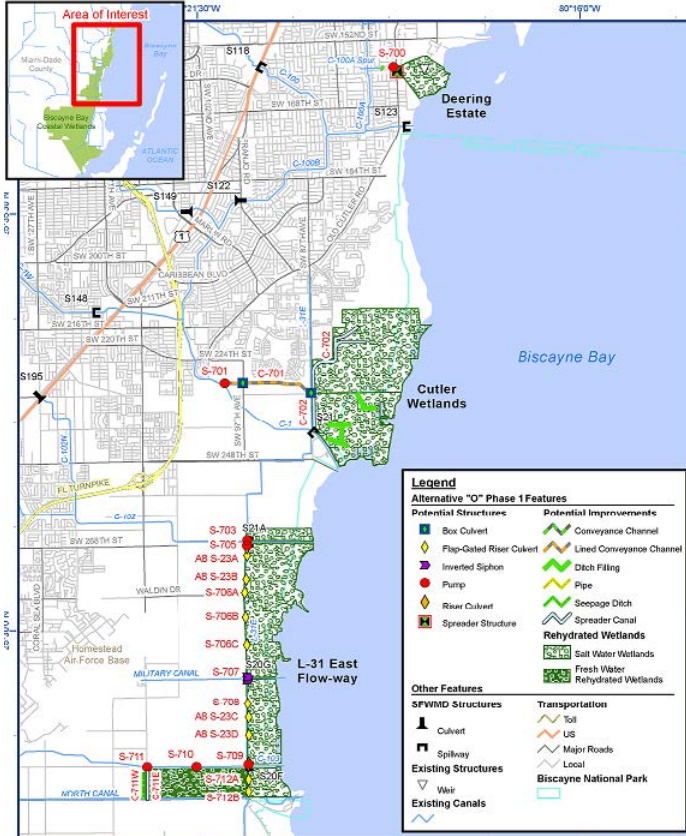
- The project will result in healthier coastal wetlands and a more natural overland flow of water. It will also help re-establish critical low-salinity habitat that is essential for a variety of estuarine plants and animals such as seagrasses, eastern oysters, blue crabs and spotted sea trout.
- Phase 1 components of the CERP project include construction of:
 - Deering Estate Flow-way
 - Cutler Wetlands Flow-way
 - L-31E Flow-way
- The District completed construction of the Deering Estate Flow-way in fall 2012 and is operating this component of the project. The Deering Estate Flow-way includes a 100 cubic-foot-per-second (cfs) pump station, a 2.5-acre wetland and related infrastructure. Four additional culverts have also been constructed in the L-31E Flow-way component.

Background and conditions

- Historically, water flowed into southern Biscayne Bay through many creeks and groundwater springs.
- Construction of the regional flood control system eliminated the natural distribution of water flow into the bay and reduced water storage within the watershed, altering seasonal flow patterns.
- Today, water is discharged directly into southern Biscayne Bay through a series of canals, which results in point source discharges of fresh water.
- Salinity patterns along the western shoreline have been changed as a result with increased spatial variability and reduced estuarine habitat.
- Nearshore habitats consisting of shoal grass and eastern oyster beds have been reduced compared to historical distributions.
- Wetlands near the shoreline have become salt-intruded, changing from freshwater marsh to salt-tolerant mangrove forest.
- Low-salinity coastal wetland habitat required for juvenile endangered American crocodiles has been greatly reduced.
- The original creek beds that supported aquatic habitats have transformed into tree islands.

Reservation development and public input

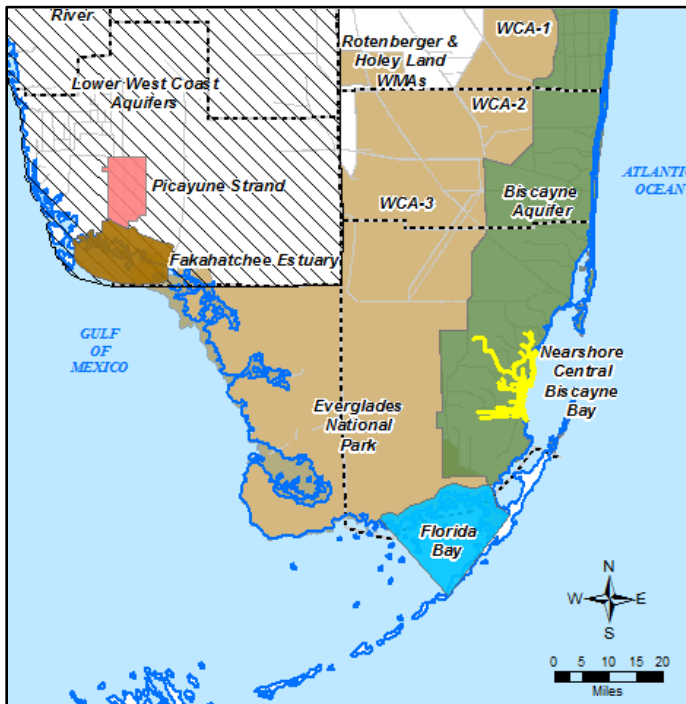
- The District Governing Board initiated water reservation rule development in December 2010. The public process included:
 - Three public workshops to solicit input from stakeholders and to develop draft rule language in 2012.
 - Additional public input opportunities during Water Resources Advisory Commission and Governing Board meetings in 2013.
- The water reservation was adopted by the Governing Board on June 13, 2013, and became effective on July 21, 2013 (Rule 40E-10.061, Florida Administrative Code).



Location Maps

(left) Biscayne Bay Coastal Wetlands Project – Phase 1

(below) Nearshore Biscayne Bay water reservations area (in yellow)



For more information about this water reservation rule or other previously adopted reservations, please visit www.sfwmd.gov/reservations.