

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.



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

md_dov

April 2015

Picayune Strand and Fakahatchee Estuary Water Reservations

The joint state-federal Comprehensive Everglades Restoration Plan (CERP) identifies restoration of the Picayune Strand as an integral step in achieving systemwide benefits in the south Florida ecosystem. The Picayune Strand Restoration Project includes 55,000 acres of native Florida wetlands and uplands in the western Everglades. Restoration of this area will restore surface water flow to vital wetlands, ensure wetland plants and animals thrive – including endangered and threatened species – and improve the estuaries within the Ten Thousand Islands region collectively known as the Fakahatchee Estuary. Other benefits include a more natural fire regime and improved aquifer recharge.

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 CERP Picayune Strand Restoration Project. The District has adopted separate water reservation rules for the Picayune Strand and Fakahatchee Estuary, and project construction is underway.

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 Picayune Strand and Fakahatchee Estuary water reservations in support of CERP restoration efforts included:

A unique combination of ecosystems dominates the landscapes of Picayune Strand and the Fakahatchee Estuary, collectively a vast extent of wet prairies, pine and cabbage palm flatwoods, hardwood hammocks and tidal marshes. The sloughs, strands and wet prairies of Picayune Strand provide freshwater surface flow to the Fakahatchee Estuary, one of the largest mangrove systems in Florida.

- The restoration of the Picayune Strand Restoration Project area is the key to providing the connectivity of the extensive home ranges needed by many threatened and endangered species known to occur, or may occur, in the project area and downstream estuary. These include the eastern indigo snake, wood stork, red-cockaded woodpecker, gopher tortoise, Florida bonneted bat, Florida panther, Florida black bear, Everglades snail kite, American crocodile, West Indian manatee, bald eagle and smalltooth sawfish.
- Water set aside to protect the Picayune Strand and Fakahatchee Estuary ecosystems benefits America's Everglades and estuaries and supports the Picayune Strand Restoration Project, which is part of CERP.

Background and conditions

- The Picayune Strand Restoration Project area is located in Collier County, which has one of the fastest growing human populations in the United States. Development and expansion of human activities in the area have caused widespread habitat loss, degradation and fragmentation.
- Surface water sheet flow within, and from, Picayune Strand has been intercepted by 279 miles of roads and captured in 48 miles of canals, affecting historic drainage patterns. Altered hydrology of the system results in highly variable freshwater outflow from the Faka Union Canal to the Fakahatchee Estuary, often either too much or too little freshwater flow, creating abnormal downstream salinity levels throughout the year. This affects aquatic flora and fauna that inhabit the estuary. The impact on commercial and recreational fisheries has been significant.
- Authorized by Congress in WRDA 2007, the Picayune Strand restoration area includes 55,000 acres of native Florida wetlands and uplands located between Alligator Alley (Interstate 75) and the Tamiami Trail (U.S. 41) in the western Everglades.
- Construction features include:
 - o Three spreader canals
 - o Three pump stations: Merritt, Faka Union and Miller
 - Plugging 48 miles of canals (with more than 100 plugs to block the flow) Removing and degrading 260 miles of crumbling roads
 - o Managing non-native vegetation
 - Constructing features to maintain current levels of flood protection (levees, canals and culverts) and mitigate effects of manatee refugium at the Port of the Islands Marina.

Reservation development and public input

- The District Governing Board initiated water reservation rule development in February 2008. The public process included:
 - Review by a panel of nationally recognized, independent scientific experts.
 - Six public workshops and two Governing Board workshops on rule development
- The water reservations were adopted by the Governing Board on Dec. 2, 2008, and became effective July 2, 2009 (Rule 40E-10.041, Florida Administrative Code).
 - The water reservation rule for Picayune Strand identifies and reserves from consumptive use the water needed for the CERP project.
 - The water reservation rule for Fakahatchee Estuary identifies and reserves from consumptive use the water needed to protect fish and wildlife in the Fakahatchee Estuary, which further supports the objectives of the Picayune Strand CERP project.



Location Maps

(left) Picayune Strand Restoration Project

(below) Fakahatchee Estuary



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