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quick facts on...

Protecting and Improving the Caloosahatchee River and Estuary

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The South Florida Water Management District is a regional, governmental agency that oversees the water resources in the southern half of the state. It is the oldest and largest of the state's five water management districts.

Our Mission is to manage and protect water resources of the region by balancing and improving water quality, flood control, natural systems, and water supply.

The health of the Caloosahatchee River and Estuary is integral to sustaining the overall way of life and economy of Southwest Florida. Working with local, state and federal government partners, environmental groups, residents and businesses, the South Florida Water Management District is seeking reasoned solutions to improve water quality and better manage the timing and quantity of water flows to the Caloosahatchee River and Estuary.



S-79 Franklin Lock and Dam

Background

In the late 19th century, real estate developers connected the Caloosahatchee River to Lake Okeechobee in an effort to drain water from the Everglades and open the interior of the state for development and agriculture. Lock and dam structures were constructed to control water flow, and the shallow and crooked Caloosahatchee River was transformed into a regulated waterway. By the 1930s, the connection became an integral part of South Florida's flood control system, which is still in use today.

The timing and quantity of freshwater flows from Lake Okeechobee are managed by the U.S. Army Corps of Engineers. These have a direct effect on the salinity balance within the Caloosahatchee Estuary. Lake management decisions have been made more difficult in recent years by extreme weather patterns, from droughts to floods. Over time, population growth, neighborhood stormwater runoff and even leaky septic tanks have added to water quality challenges in the estuary.

Actions and Progress

A multi-faceted approach in meeting these complex and diverse challenges has produced

many successes benefitting the Caloosahatchee River and Estuary.

Operations

- The U.S. Army Corps of Engineers manages Lake Okeechobee water levels with the goal of balancing flood control, public safety, navigation, water supply and ecological health. This is done through the use of a regulation schedule to manage lake levels based on the time of year, weather expectations and public safety issues.
- A revised regulation schedule was adopted in 2008 by the Corps. Decisions to retain or release water are based on the current regulation schedule and the best available science, data and recommendations.
- The SFWMD makes advisory recommendations to the Corps on lake management based on its Adaptive Protocols guide. This newly updated document lays out scientifically based measures and methods to better balance the needs of the lake and estuarine ecosystems and South Florida's water supply.

Water Quality

- Landmark state legislation was passed in 2007 to protect the Northern Everglades, which led to creation of the Caloosahatchee River Watershed Protection Plan. The plan is designed to reach water quality targets and maintain appropriate salinity levels in the estuary.
- Investments by the State of Florida and the SFWMD of more than \$15.6 million since 2004, with matching local dollars, are delivering more than 80 local water quality improvement projects to the Caloosahatchee region. Projects include:
 - ✓ Cape Coral stormwater retrofit to improve water quality in the estuary
 - ✓ Harns Marsh water quality improvement
 - ✓ Billy Creek Preserve water quality improvement and storage
 - ✓ Caloosahatchee Creeks Preserve water quality improvement and habitat restoration
 - ✓ Sanibel Island central sewer expansion to improve water quality
- Coordination and sharing of data have improved among agencies and organizations as a result of working together on development and implementation of the Caloosahatchee River Watershed Protection Plan.
- The SFWMD and Lee County partnered to purchase 1,773 acres of land in Glades County for \$37.3 million. The property will be used for the C-43 Water Quality Treatment and Testing Facility to remove nitrogen from water bound for the estuary.

Water Storage

- Surface water storage on private, public and tribal lands in the Northern Everglades watershed has expanded by 128,630 acre-feet, with another 15,600 acre-feet under construction. This was achieved through a coalition of government agencies, landowners and environmental organizations.
- The SFWMD recently purchased 26,800 acres of strategically located property for Everglades restoration purposes to specifically provide for additional water storage and treatment facilities. An option to purchase another 153,000 acres, should future economic conditions allow, would provide further opportunities to benefit the Everglades, Lake Okeechobee and the Caloosahatchee and St. Lucie estuaries.
- The Comprehensive Everglades Restoration Plan, the Congressionally approved framework for restoring, protecting and preserving the water resources of central and southern

Florida, calls for construction of the 170,000 acre-foot Caloosahatchee River (C-43) West Basin Storage Reservoir Project. It will help store and manage basin runoff for meeting estuary needs during the dry season.



Caloosahatchee River at Ft. Myers

- ✓ The SFWMD has invested approximately \$100 million to purchase the land for the project, construct/monitor test cells and complete the project design.
- ✓ The reservoir is at the shovel-ready stage, awaiting federal authorization and funding for construction.

Water Supply

- Since 2006, the SFWMD has awarded \$32.7 million for 42 projects to increase the alternative water supply in the Caloosahatchee watershed. These are non-traditional water supplies, such as brackish groundwater, surface water captured during wet weather and expansion of reclaimed water systems. These alternative supplies help minimize impacts to traditional sources.
- The SFWMD has established minimum flows and levels necessary to prevent significant harm to the estuary from permitted water withdrawals.
- Work has begun on a Caloosahatchee water reservation, which is a legal mechanism to set aside water specifically for the protection of fish and wildlife or public health and safety.
- A restricted allocation rule is in effect that caps consumptive water use in the Lake Okeechobee service area at current levels and prevents increased withdrawals (over actual, historic demands) from Lake Okeechobee and integrated conveyance systems, such as the Caloosahatchee River.

A Continuing Commitment

Crucial resources and funding are included in the SFWMD 2010-2011 budget to continue moving forward. A myriad of initiatives and efforts are already under way, or planned, to protect and restore the Caloosahatchee River and Estuary.

The South Florida Water Management District is fully committed to continue building on these efforts to benefit the watershed. Collaborative partnerships are vital to ultimately improving water quality and better managing the timing and quantity of water flows to the estuary.



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