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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.

Caloosahatchee River (C-43) West Basin Storage Reservoir Water Reservation

The joint state-federal Comprehensive Everglades Restoration Plan (CERP) identifies restoration of the Caloosahatchee Estuary as an integral step in achieving systemwide benefits in the south Florida ecosystem. The Caloosahatchee River (C-43) West Basin Storage Reservoir is a 170,000 acre-foot aboveground reservoir that will moderate flows to the estuary and help to achieve a more balanced salinity regime.

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 storage reservoir project. The District has adopted a water reservation rule for the Caloosahatchee River (C-43) West Basin Storage Reservoir, and the project was authorized in WRDA 2014.

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 Caloosahatchee River (C-43) West Basin Storage Reservoir water reservation in support of CERP restoration efforts included**:**

- Promoting a balanced and healthy salinity regime in the Caloosahatchee Estuary is essential for maintaining the ecological integrity and associated economic benefits of this unique habitat on Florida's southwest coast.
- The Caloosahatchee River and Estuary are part of the Charlotte Harbor estuarine complex, Florida's second largest estuarine ecosystem. It includes Matlacha Pass, Estero Bay and Pine Island Sound aquatic preserves; Charlotte Harbor National Estuary; and the Caloosahatchee, Matlacha Pass and J. N. "Ding" Darling National Wildlife Refuges, along with many other federal, state and local parks and recreation areas.

(more)

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

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- The Caloosahatchee River and Estuary are located downstream of the S-79 water control structure (Franklin Lock and Dam) in Lee County. The C-43 Canal runs from Lake Okeechobee to S-79. It empties into the river and estuary, which stretches about 25 miles to Shell Point.
- To aid in the restoration of the ecological functions of the Caloosahatchee River and Estuary, CERP recommended construction of a 170,000 acre-foot aboveground reservoir. The reservoir will provide an additional source of water to maintain desirable salinity levels in the estuary during periods of low flow, and capture and attenuate some of the excess basin runoff and regulatory releases from Lake Okeechobee during periods of high flow.
- The Caloosahatchee River (C-43) West Basin Storage Reservoir will be located in Hendry County west of LaBelle, on the east side of the Townsend Canal and south of State Road 80.
- The proposed footprint of the reservoir is approximately 10,700 acres.

Background and conditions

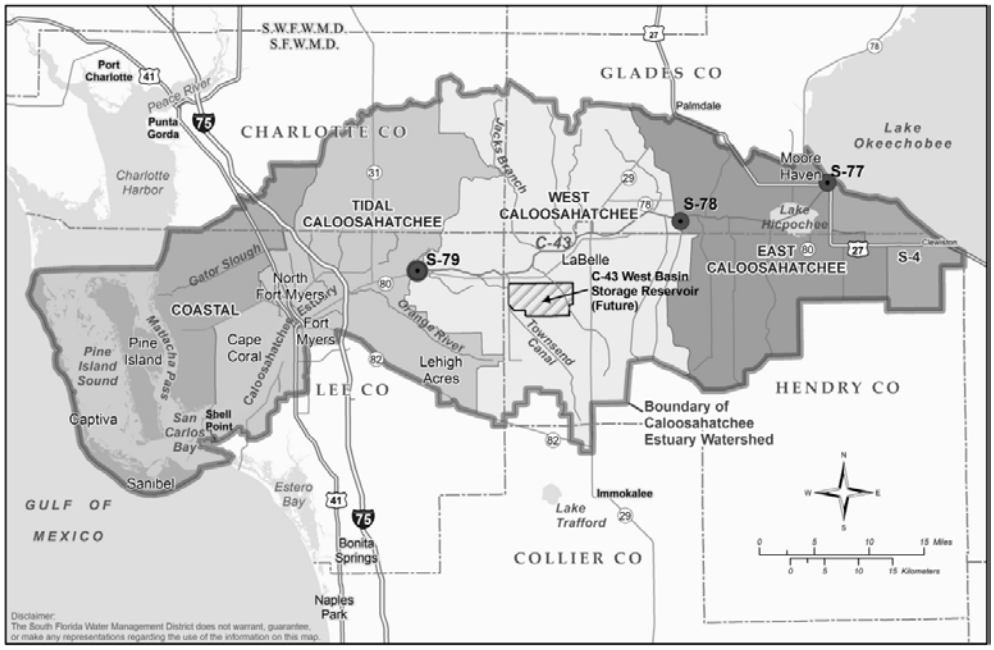
- Historically, the Caloosahatchee River was a shallow, meandering river with headwaters originating near Lake Hicpochee.
- Beginning in the 1880s, the freshwater portion of the river was straightened, deepened and reconfigured into a major drainage/navigation canal (C-43 Canal), extending from the Moore Haven Lock and Dam (S-77) on Lake Okeechobee to the Franklin Lock and Dam (S-79) at the head of the estuary. The S-79 water control structure was completed in 1966 to act, in part, as a salinity barrier.
- Today, the Caloosahatchee River (C-43 Canal) is permanently connected to Lake Okeechobee. The C-43 Canal is also the western leg of the Cross-Florida Waterway, extending from Stuart on the Atlantic Ocean to Fort Myers on the Gulf of Mexico.
- Hydrologic changes to the river and its watershed have greatly increased the variability of freshwater inputs and salinity levels in the estuary.
    - During the wet season, rainfall runoff that was historically retained and/or evaporated in the watershed now reaches the estuary in greater volume over a shorter time period.
    - The construction of the S-79 structure has truncated the estuary, blocking the natural gradient of fresh water/salt water that historically extended upstream of the S-79 structure during the dry season.
    - During the dry season, agricultural and urban water supply demands result in reduced flows to the river and estuary located downstream of the S-79 structure.
- Low salinity areas in the upper estuary, between Fort Myers Bridge and Beautiful Island, support submerged aquatic vegetation that provides important nursery areas and habitats for larval and juvenile fish and invertebrates.

- Tape grass is an important submerged aquatic plant that historically thrived in the upper estuary. Scientists use tape grass beds, which grow in shallow water, as an indicator of estuarine health. Tape grass communities help to maintain water clarity and quality by stabilizing and trapping sediments and taking up nutrients that would otherwise promote rapid ecological changes in the estuary.
- Lower reaches of the estuary are characterized by a shallow bay with moderately dense beds of shoal grass along the shoreline. The substantial oyster reef community at Shell Point near the mouth of the estuary represents the upstream boundary of this essential habitat. Extensive mangrove forests dominate undeveloped areas of the shoreline.
- Major issues affecting the Caloosahatchee Estuary watershed include constraints on water supply availability, widely fluctuating salinity concentrations and increased nutrient loading. Restoration of a healthy, productive Caloosahatchee Estuary is essential to maintaining the ecological integrity and associated economic benefits of publicly owned or managed areas.

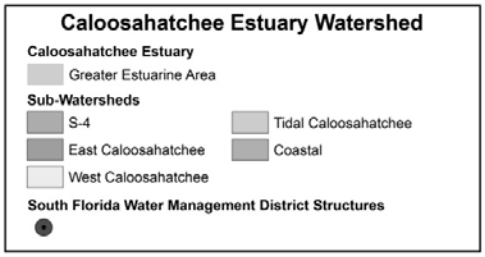
Reservation development and public input

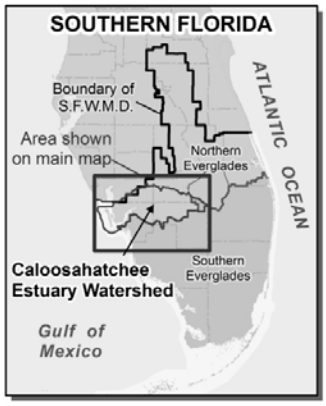
- The District Governing Board initiated water reservation rule development in February 2012. The public process included:
  - Public workshops to solicit input from stakeholders and to develop draft rule language in 2012 and 2014.
  - Discussion of the draft rule language at the February 6, 2014, Water Resources Advisory Commission meeting.
- The water reservation was adopted by the Governing Board on May 15, 2014, and became effective on July 16, 2014 (Rule 40E-10.041, Florida Administrative Code).

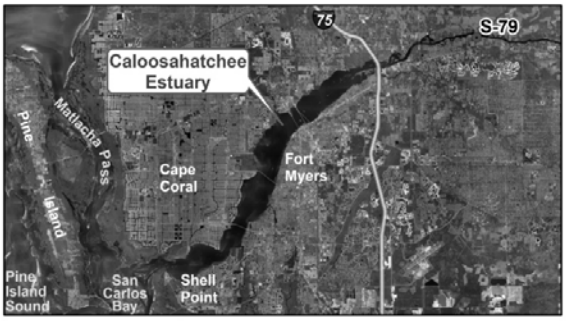
Location Map



Caloosahatchee Estuary Watershed







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