Restoring America's Everglades INDIAN RIVER LAGOON-SOUTH: C-44 RESERVOIR & STA



The C-44 Reservoir and Stormwater Treatment Area (STA) project is the first component of the multi-billion dollar Indian River Lagoon-South project.

Authorized in the Water Resources Development Act of 2007, the Indian River Lagoon-South project is one of the largest 1st Generation Comprehensive Everglades Restoration Plan (CERP) projects.

When all authorized components of Indian River Lagoon-South are complete, water resource managers will have the best resources available to:

- Provide clean water to the Indian River Lagoon and St. Lucie Estuary
- Provide clean water for agriculture and communities
- Maintain and possibly improve flood damage reduction for communities

The Indian River Lagoon-South project and all its components will help revitalize south Florida's ecosystem, tourism and economy.



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Reservoir

<u>Contract Awarded:</u> Sept. 2015 <u>Contract Total:</u> \$197 million

Will enable an additional 16.5 billion gallons of water to be stored from the C-44 basin

Pump Station

<u>Contract Awarded:</u> April 2015 <u>Contract Total:</u> \$40 million

Will pump water from the intake canal into the reservoir

System Discharge Canal

<u>Contract Awarded:</u> Aug. 2014 <u>Contract Total:</u> \$5.4 million

Will enable basin runoff treated within the STA to discharge back into the C-44 Canal and flow to the St. Lucie Estuary

Stormwater Treatment Area ((STA))

<u>Contract Awarded:</u> Oct. 2014 <u>Contract Total:</u> \$100 million

Will treat C-44 basin runoff stored in the reservoir, resulting in cleaner water flowing into the C-44 Canal and St. Lucie Estuary

Intake & C-133/133A Canals

<u>Contract Completed:</u> July 2014 <u>Contract Total:</u> \$36 million

Intake Canal: Will convey basin runoff from the C-44 canal into the reservoir's pump station

C-133/133A canals: Will convey basin runoff north of the project site into the C-44 Canal







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Together, the U.S. Army Corps of Engineers and the South Florida Water Management District are working to deliver essential restoration benefits to the ecologically diverse Indian River Lagoon and St. Lucie Estuary. The completed C-44 Reservoir & STA will:

- Capture, store and treat local basin runoff from the C-44 basin
- Revitalize habitat in the Indian River Lagoon, the most biologically diverse estuarine system in the continental United States, home to more than 3,000 species of plants and animals
- Restore the delicate balance of fresh and salt water in the Indian River Lagoon and St. Lucie Estuary
- Enable an additional 16.5 billion gallons of water to be stored in the C-44 basin
- Provide 3,600 acres of new wetlands
- Reduce average nutrient loads
- Provide significant water-quality improvements to both the Indian River Lagoon and the St. Lucie Estuary





The reservoir is the largest water storage component of the C-44 project and a key storage component of the entire Indian River Lagoon-South project. Construction of this reservoir is a major step forward towards being able to store local basin runoff and improve conditions in the St. Lucie Estuary and Indian River Lagoon.



The \$197 million reservoir contract was awarded to Barnard Construction Inc., from Bozeman, Montana on Sept. 11, 2015. The contract involves constructing:

- The 3,400-acre reservoir that will store up to 15 feet of water and will provide 50,600 acre-feet (16.5 billion gallons) of storage capacity.
- The 35,000-foot long Western Reservoir Perimeter Canal, which runs parallel to most of the northern, western, and southern embankments of the reservoir. It will be used to transmit surface runoff and seepage flow from the embankment internal drain and the trench drain systems.
- A corresponding 50-foot wide spillway for the Western Reservoir Perimeter Canal that will discharge into the intake canal, which was completed as part of the Corps' first construction contract for the project, in July 2014.
- The 15,000-foot long Eastern Reservoir Perimeter canal, which runs parallel to the eastern embankment of the reservoir. It will convey runoff and seepage from the embankment internal drain and the trench drain system.
- A reservoir discharge tower structure comprised of three slide gates to convey a maximum of 1,100 cubic feet per second (cfs) (600 cfs under normal operations) through two culverts to the system discharge canal.
- Two miles of the system's discharge canal that will convey flows from the reservoir through the Distribution Canal to the Eastern Stormwater Treatment Area (STA) Collection Canal.
- The installation of several box culverts in various locations around the project footprint to provide vehicular access across canals. Additionally, the reservoir embankment includes the construction of several boat ramps for access inside the reservoir.

