

Everglades Agricultural Area (EAA) Storage Reservoirs, Phase 1 OVERVIEW

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Introduction



For 5,000 years the Everglades flourished in South Florida. Nurtured by torrential rains and searing sun, they evolved into a vast vista of sawgrass and fragile teardrop-shaped islands. A treasure trove of biodiversity, the greater Everglades ecosystem stretched from the Kissimmee River to Florida Bay. Today, 120 years after man first sought to tame this watery wilderness, it is an ecosystem in peril.

Drainage reduced the Everglades by half and still needlessly sends 1.7 billion gallons of water a day to sea. The number of wading birds, once so numerous in flight they blotted out the sun, has declined 90 to 95 percent. Some 69 species of plants and animals are listed as threatened or in danger of extinction; 13 candidates are waiting to be listed. Tons of nutrient-rich sediments cover the once-sandy bottom of Lake Okeechobee feeding noxious algal blooms and invasive plants and sapping the vitality of Florida's largest lake.

Recognizing the scope and severity of the threats, Congress authorized the U.S. Army Corps of Engineers to develop a Comprehensive Everglades Restoration Plan. The \$7.8 billion, 30-year plan sets out 68 projects to restore the Everglades and was approved in the Water Resources Development Act of 2000. That act also authorized the Corps to work with the U.S. Department of Interior and the state of Florida to implement the plan while protecting the water supply of current users and maintaining existing levels of flood protection.

Project Description and Goals

Embankments will be constructed to create multiple reservoirs capable of storing a combined total of 240,000 acre-feet of water, or about 78 billion gallons. During the rainy season, or other periods of heavy rain, excess water will be routed to the reservoirs reducing the need to back-pump nutrient-rich field runoff into Lake Okeechobee. That, in turn, will curtail damaging discharges of water from the lake into the St. Lucie and Caloosahatchee River estuaries.

To facilitate moving water within the EAA, stretches of the Miami, North New River, Bolles and Cross canals in EAA will be widened or deepened.

Specifically, the goals of the project are to:

- Provide a source of water that can be released to the Water Conservation Areas during South Florida's dry season or drought.
- Reduce the back-pumping of nutrient-rich water from farm fields into Lake Okeechobee and ill-timed, damaging releases of fresh water into the St. Lucie and Caloosahatchee estuaries.
- Supply water to optimize operations of nearby Stormwater Treatment Areas.
- Ensure continued flood protection and irrigation water for the Everglades Agricultural Area.

Project Purpose

The objective of the comprehensive plan is to restore, preserve and protect the South Florida ecosystem while providing for other water-related needs of the region. The primary purpose of the Everglades Agricultural Area Storage Reservoirs, Phase 1 project is the same. However, some secondary benefits that protect farmers in the Everglades Agricultural Area, which often is called the EAA, also will be gained.

More detailed planning and design is underway to determine the number, size and configuration of the reservoirs.

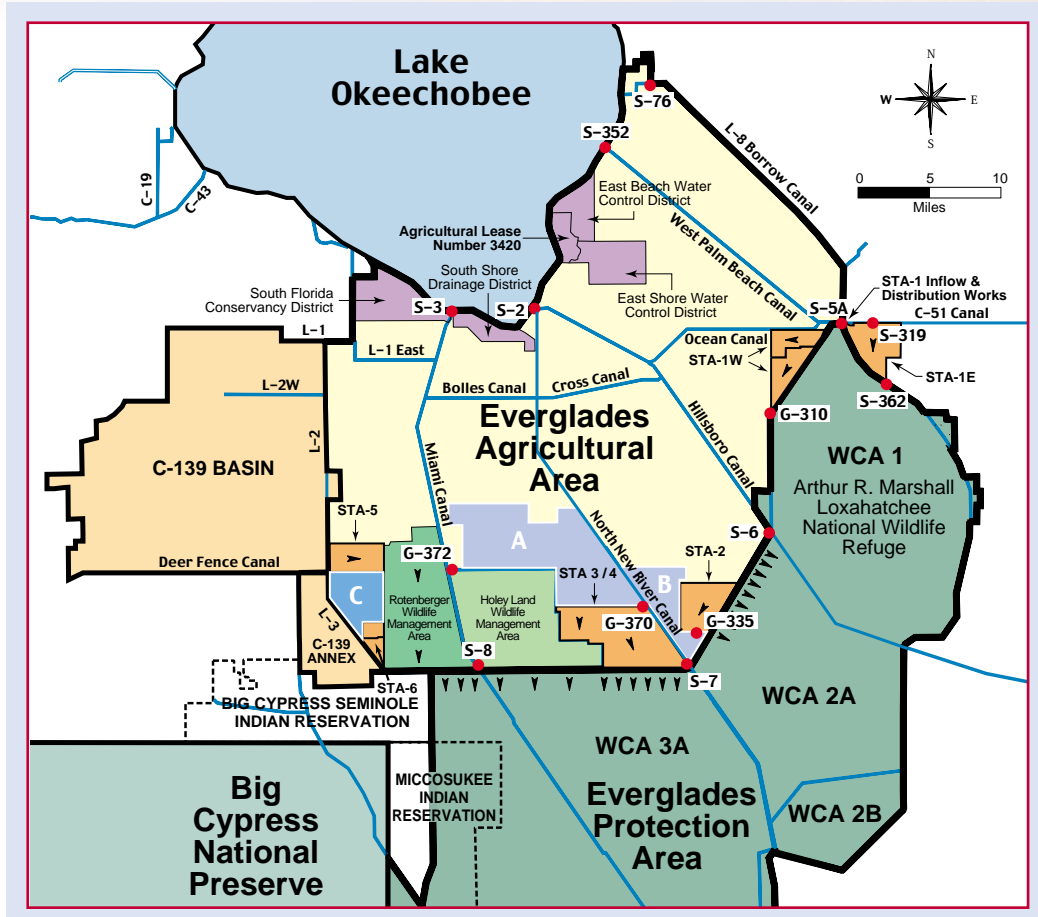
The reservoirs will be designed to improve the performance of the Stormwater Treatment Areas, also called STAs. The South Florida Water Management District has built and operates four such treatment areas and soon will add two more. These are relatively shallow impoundments that utilize native plants to reduce concentrations of polluting nutrients.



Cost and Benefits

Phase 1 planning, design and construction costs are estimated at \$233 million. The state and federal governments will share the costs equally.

This project provides water managers the flexibility needed to improve conditions in Lake Okeechobee, to reduce damaging discharges to estuaries on both coasts and to deliver water south to the Everglades Protection Area. Additionally, it will be designed to maintain flood protection for the EAA and to avoid disruption of water supplies. The environmental benefits of Everglades Restoration cannot be expressed in monetary terms, thus traditional cost-benefit studies are not conducted. However, this project will be designed to optimize benefits to the South Florida ecosystem in a cost effective manner.



Project Implementation

The Project Management Plan has been approved. Staffs of the U.S. Army Corps of Engineers and the South Florida Water Management District, who is the “local sponsor,” now are developing a Project Implementation

Report. That report will provide detailed impact assessments. Public involvement is sought, and workshops and stakeholder meetings are being scheduled. Additional information is available on the Internet at: www.evergladesplan.org



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