



## Central Everglades Planning Project: *A Roadmap to Achieve Restoration Results*

### Introduction

Hundreds of thousands of wading birds once nested in the Everglades.<sup>1</sup> Starting in the mid 1800s, canals, levees and other infrastructure were put in place to make the area more suitable for development and agriculture. As a result of these changes to the ecosystem, wading bird populations have declined sharply from historic numbers to a total of only 48,000 wading bird nests in 2013.<sup>2</sup>

These manmade changes to the landscape have left wetlands in the region in poor health – some areas are over dry, while other areas are too wet. Wading birds rely on natural seasonal changes in water levels for nesting and foraging for food. Having too much or not enough water at the right time can lead to wading birds abandoning their nests.

Coastal estuaries have also suffered from these changes to the landscape. Historically, during the rainy season, water would spill over the banks of Lake Okeechobee and flow south in a slow, steady pattern, known as sheetflow, finally emptying into Florida Bay.

Today, when water levels become too high in Lake Okeechobee, water is diverted from its natural path and is instead released into the Caloosahatchee and St. Lucie estuaries. These large releases of freshwater can lead to algae blooms, and die-off of seagrasses and oysters.

### The Solution: Restoring the Central Everglades

The Central Everglades is the vast region of the Greater Everglades Ecosystem that connects Lake Okeechobee and Everglades National Park. Restoring water flow patterns in the Central Everglades will improve habitat quality and provide the conditions necessary to return an abundance of wildlife to the region.

The Central Everglades Planning Project (CEPP) is a series of interconnected restoration projects that are designed

to increase freshwater flows south. When complete, CEPP will provide increased storage, treatment, and delivery of water that will benefit the Central Everglades, coastal estuaries, and Florida Bay.

In the Central Everglades, increases in freshwater will rehydrate wetlands and improve the habitat for wading birds and other wildlife. Combined with other restoration efforts such as Tamiami Trail bridging, and the C-111 projects, more of these flows will be delivered to Florida Bay. This will rebalance salinity levels and benefit fish, crabs, and other animals that are the food source of birds like Roseate Spoonbills.

In the coastal estuaries, reducing releases of water from Lake Okeechobee will restore salinity levels and allow seagrasses and oyster beds to recover. (See Figure 1)

### Storing Water

New water storage features in the Everglades Agricultural Area south of Lake Okeechobee will capture and store water that is currently discharged in large volumes to the Caloosahatchee and St. Lucie estuaries, where it damages the fragile ecosystem.

### Flowing Water South

Planned features in the Water Conservation Areas in western Palm Beach and Broward Counties will improve the distribution and conveyance of freshwater. Projects include the removal of levees and backfilling parts of the Miami Canal which will restore sheetflow and will help direct larger freshwater flows to wetlands.

### Keeping Water in the Everglades

Because of the nature of the water table in South Florida, water that enters the Everglades can easily seep into urban areas. CEPP includes operational changes and construction of a partial barrier to better manage seepage and ensure that more water remains in the Everglades for the benefit of the ecosystem.

<sup>1</sup> Frederick, P., et al., The White Ibis and Wood Stork as indicators for restoration of the everglades ecosystem. *Ecol. Indic.* (2008), doi:10.1016/j.ecolind.2008.10.012

<sup>2</sup> Cook, Mark I., ed. *South Florida Wading Bird Report*. Rep. Vol. 19. West Palm Beach: South Florida Water Management District, 2013.

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## Audubon's Restoration Goals for the Central Everglades

Restoring freshwater flows south from Lake Okeechobee will benefit an area extending from the Central Everglades all the way south to Florida Bay. Due to the ecosystem decline observed in the Central Everglades<sup>3</sup>, Audubon has long urged for the prioritization of restoration projects that restore flow and provide ecosystem benefits more quickly.

CEPP represents a response to this call to action and was the direct result of an expedited planning process that can now be used as a model for future ecosystem restoration projects around the nation. CEPP will store, treat, and convey more water south, greatly benefiting Roseate Spoonbills, Everglade Snail Kites, other iconic Florida species, as well as people.

### Audubon scientists expect CEPP to provide many benefits including:

- ⇒ Improve area and quality of habitat for birds and other wildlife by increasing freshwater flows to the central Everglades by an average 200,000 acre-feet per year.
- ⇒ Rehydrate of wetlands by restoring sheetflow through removal of more than 25 miles of canals and levees to restore natural sheet flow to 10,000 acres of degraded wetlands.
- ⇒ Helps prevent algae blooms and degradation of habitat quality in the Caloosahatchee and St. Lucie estuaries by reducing damaging freshwater releases from Lake Okeechobee
- ⇒ Improve salinity levels and habitat quality for Roseate Spoonbills and other wildlife in Florida Bay.
- ⇒ Rehydration of aquifers for over 7 million people who rely on the Everglades for drinking water.

This April, among a crowd of supporters, the South Florida Water Management District Governing Board voted unanimously to submit a Letter of Support for CEPP to the federal government.

Audubon strongly recommends the Army Corps moves forward with federal approval, so this important project can move quickly toward construction.

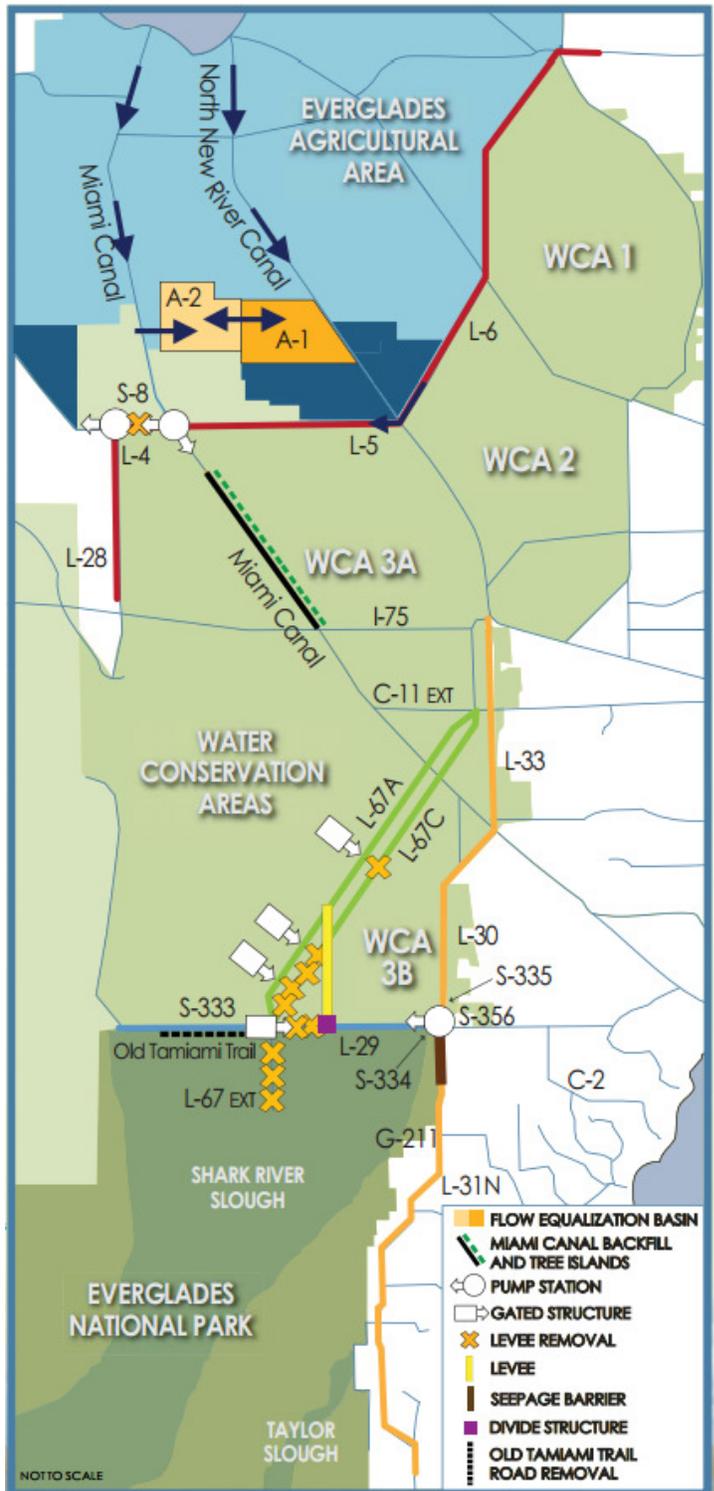


Figure 1: The CEPP Tentatively Selected Plan. Map by SFWMD.

<sup>3</sup>. Committee on Independent Scientific Review of Everglades Restoration Progress, National Research Council. *Progress toward Restoring the Everglades: The Second Biennial Review*. Washington, D.C.: National Academies, 2008. Available: [https://download.nap.edu/login.php?record\\_id=12469&page=%2Fdownload.php%2Fdownload.php%2Fdownload.php](https://download.nap.edu/login.php?record_id=12469&page=%2Fdownload.php%2Fdownload.php%2Fdownload.php)