



Audubon FLORIDA

State of the Everglades

Spring 2017



Dear Friends,

When I think of the Everglades, I am flooded with images of majestic wading birds spreading their wings, the reflection of white clouds on crystal clear water, and the knowledge that within the subtle landscape, life abounds. The joy of watching Everglades restoration unfold is found in knowing that we're helping nature heal itself.



Too often during the last few years, the Everglades has instead been associated with toxic algae, dead seagrass, and diminishing wildlife. But in this State of the Everglades report, I am happy to share a major victory in advancing the Everglades Agricultural Area (EAA) Reservoir. It was brought about by Audubon's advocacy network working with dedicated partners to create a wave of political will.

There will always be new challenges to meet on the journey to restore America's Everglades. But the ecosystem is resilient and so are Audubon advocates.

Success would not be possible without your support. Thank you!

Julie Hill-Gabriel
Deputy Director, Audubon Florida

South Florida Waters Win as State Approves Everglades Reservoir

From toxic blue-green algae blooms blanketing the St Lucie and Caloosahatchee estuaries, to sickly yellow-green dying seagrass beds in Florida Bay, our coastal waters were sending out an S.O.S.. Audubon advocates answered the call, encouraging the Florida Legislature to create more water storage south of Lake Okeechobee. In May, the Legislature passed Senate Bill 10 (SB 10), which Gov. Rick Scott recently signed into law. The bill aims to design, plan, and build a water storage reservoir in the Everglades Agricultural Area (EAA).

Floridians demanded action and the Legislature responded. Thanks to the leadership of Senate President Joe Negron and bill sponsor Sen. Rob Bradley, SB 10 survived many iterations and negotiations in the Florida Legislature. This piece of legislation brings us closer than ever to implementing the EAA Reservoir- a critical Everglades restoration project that has been on the books since the Comprehensive Everglades Restoration Plan (CERP) was signed into law 17 years ago.

A reservoir south of Lake Okeechobee will:

- Store significant amounts of untreated freshwater that would otherwise harm sensitive coastal estuaries;
- Clean it through the network of man-made marshes; and
- Reconnect the parched Everglades National Park and Florida Bay to its historic upstream source of freshwater by sending water from the Reservoir south.

The adopted bill seeks to identify a configuration of lands for the EAA Reservoir from a combination of state-owned lands, land swaps, lease negotiations, and smaller purchases from willing landowners. The legislation then directs the South Florida Water Management District to configure a site for the project that can store a minimum of 240,000 acre-feet of freshwater while still meeting strict water quality standards. The legislation also requests cooperation with the U.S. Army Corps of Engineers and sets an ambitious schedule to avoid delays in the planning and construction of this restoration project.

Senate Bill 10 is a win-win for our ailing waters, our communities, and our economy. Audubon Florida looks forward to continually working with Audubon advocates and partners as SB 10 is implemented.



Florida wading birds, like Tricolored Herons, depend on America's Everglades to live and nest. Photo: Bill Chitty

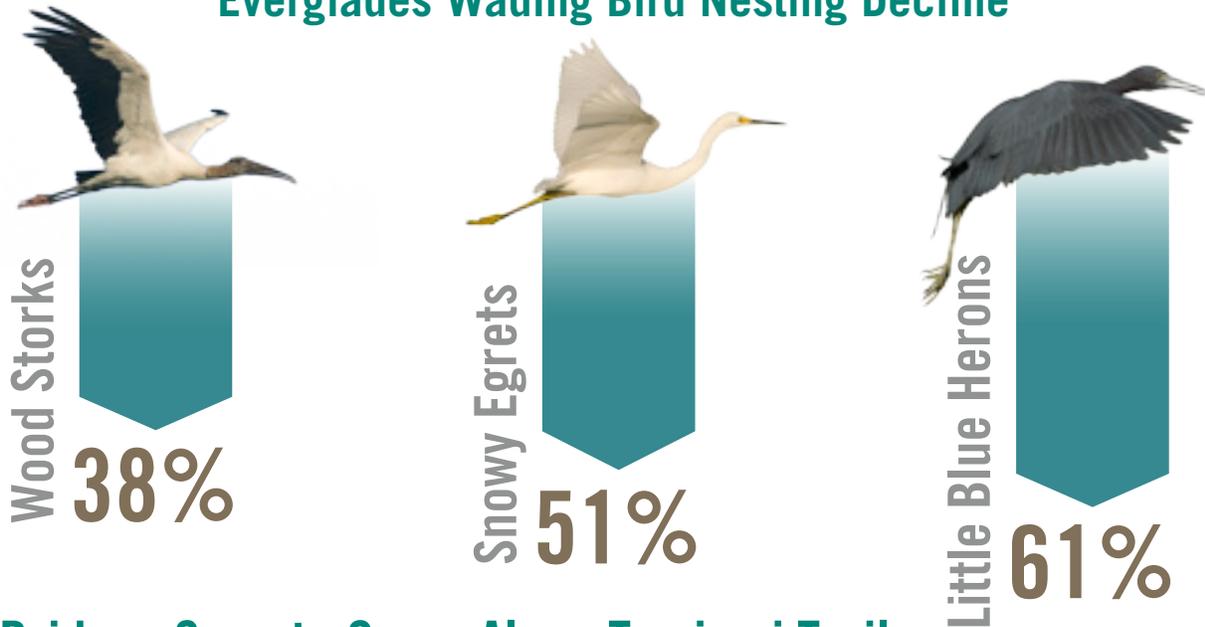
Wading Bird Nesting Decline Continues in America's Everglades

The annual South Florida Wading Bird Report showed that 2016 had the lowest wading bird nesting count since 2008 and continued the downward trend of below-average nesting for the eighth year in a row. The report, which is compiled by the South Florida Water Management District and includes sections written by Audubon scientists, also noted that there has not been a strong wading bird nesting season in America's Everglades in more than a decade.

Nesting of wading birds naturally fluctuated in the pre-drained Everglades with poor nesting efforts cushioned by above-average nesting years. Last year was a very unusual water year with hydrologic cycles that were nearly the reverse of expected conditions. In the historic Everglades, unfavorable nesting years would be balanced overall by successful nesting conditions. The lack of an above-average nesting year in the past 10 years compounds the need to build restoration projects faster. Speeding up restoration will slow the decline of indicator species and avoid hitting an irreversible tipping point.

Audubon scientists recommend accelerating the construction of Everglades projects- especially those capable of delivering more freshwater from upstream sources to Florida Bay and Everglades National Park. These projects, coupled with expansion of wetland habitat, are necessary to consistently provide the quality foraging sites birds need for successful nesting.

Everglades Wading Bird Nesting Decline



More Bridges Soon to Come Along Tamiami Trail

In the latest sign of Everglades restoration progress, work has started on a much-needed second bridge on Tamiami Trail. Since built in the 1920s to connect Tampa to Miami, the Tamiami Trail has choked the natural north-to-south flow of water into Everglades National Park and the Southern Everglades. The Trail reduces the amount of freshwater that can reach these parts of the Everglades essential for wading birds like the Roseate Spoonbill. Removing the barrier to flow by bridging the roadway has been a top Audubon priority for decades.

The next bridge will be 2.6 miles and will add to the ecological connectivity provided by the one mile bridge, built in 2012. This significant milestone sends more freshwater south where it is needed and is an exciting step forward for restoring America's Everglades.



Freshwater: The Key to Florida Bay's Future

The Florida Bay ecosystem remains in a precarious state following the 2015-2016 seagrass die-off, which researchers now estimate has impacted at least 50,000 acres of the Bay's seagrass community. This event revealed the Bay's vulnerability when salinity levels get too high and the impact of losing crucial sea grass habitat for the prey of water birds and game fish. Fishing guides report historically low catches, and nest counts of wading birds were down this past breeding season. The scientific evidence indicates only one solution: more freshwater.

Despite the alarming findings in Florida Bay during the past two years, the resiliency of the ecosystem is beginning to offer hope for the future. Indications are that the Bay may be in a recovery phase. Audubon scientists are noting improved water quality and new growth of the pioneering shoal grass. Juvenile spotted seatrout, an indicator species and popular game fish, were noted by researchers to have increased during early 2017. While nest counts were low, Roseate Spoonbill parents were successful in rearing chicks this year. These are promising signs and proof that habitat and wildlife can recover if given the chance. However, it took 20 years for the seagrass community to fully recover following a similar die-off event in the late 1980s. The flow of freshwater between Lake Okeechobee and Florida Bay must be re-established if we are to prevent ecological collapse.

Flooding Concerns Evaporate as Drought and Wetland Losses Mount

Significant changes can occur in just a few short months. After last season's freshwater discharges from Lake Okeechobee, so little freshwater is now heading from the Lake to the Caloosahatchee estuary that it is being harmed by hypersalinity. Drought conditions have spawned large wildfires in Florida, with heavy tolls in lost property and forced evacuations. These extreme back-to-back conditions of flooding then drought are evidence that Florida does not have a sustainable water management structure in place. And new challenges are sure to arise as 1,000 people move to Florida every day.

Audubon's Western Everglades Research Center at Corkscrew Swamp Sanctuary has identified a significant regional drop in the water table since 2000 and is investigating likely causes. This is on top of Audubon-documented continued shallow wetland losses due to faulty laws and rules. There has also been no nesting by Wood Storks in eight of the last 11 years at the sanctuary, which is unprecedented at this former stronghold for the species.

There is a building crisis in water and wetland resources that requires urgent investments in monitoring, research, restoration, and better environmental protections. Audubon and our partners have begun this crisis response through working to:

- Reform and strengthen wetlands protections;
- Promote water conservation efforts;
- Advocate for land conservation programs;
- Advance the Western Everglades Restoration Project; and
- Support the construction of the C-43 Reservoir, Picayune Strand, and Corkscrew Regional Ecosystem Watershed restoration.

These vital steps are part of a larger strategy to prioritize water resources decisions that value water for the environment. Current restoration projects in the Western Everglades will continue to serve as an example of how Audubon science drives action.



Species: Wood Stork. Photo: R.J. Wiley



Lake Okeechobee. Photo: Tabitha Cale

Lake Okeechobee, the Heart of the Greater Everglades

Lake Okeechobee seems constantly in the headlines as a symbol of South Florida's water management challenges. Some decision-makers and stakeholders claim that it should hold more water or should be pumped lower than gravity allows. Others focus only on the dangers posed by the need to repair the ageing Herbert Hoover Dike or call the Lake toxic, even though it is a world-renowned bass fishery. While many different opinions exist about the future of Lake Okeechobee, Audubon remains focused on keeping the Lake a healthy part of Florida's environment and economy.

The first Audubon Okeechobee warden, Marvin Chandler, began protecting Lake Okeechobee in 1936. He was responsible for enforcing state game and fish laws and protecting wading bird colonies. In 1938, the Governor and Cabinet designated two wildlife sanctuaries under Audubon's care in the Lake's marshes, covering 29,000 acres (45 square miles). To this day, Audubon maintains and protects these sanctuaries.

Audubon's first priority is that Lake Okeechobee is managed as a lake, not a reservoir. Despite years of abuse from nutrient pollution and damaging water management, the Lake's wildlife are abundant. Consider the ecological successes:

- In a good year, one million black crappie are caught, more than the rest of Florida combined;
- The largemouth bass fishery sets heavyweight records in national bass tournaments;
- In 2016, at least 111 Everglade Snail Kite nests successfully fledged young, more than any other waterbody in the state; and
- Wading birds usually nest in the thousands and single day foraging counts have yielded as many as 50,000 birds on the Lake.

Lake Okeechobee is one of Florida's greatest ecological treasures. But a failure to recognize all of these benefits led to the Lake being under attack this legislative session. Proposals were made to hold the Lake harmfully deep as an alternative to water storage in the EAA Reservoir. After Audubon highlighted potential dangerous impacts to the Lake, these proposals did not advance. At the same time, the South Florida Water Management District wants permission to pump the Lake as low as possible during drought conditions in order to supply permitted water users, like the sugar industry and utilities. After these pumps were used in 2001 and 2007, the population of the Everglade Snail Kite dropped by 50 percent. Kites that rely on the Lake had no suitable habitat to rely on when the Lake was pumped alarmingly low.

Lake Okeechobee will always be the liquid heart of America's Everglades, playing a central role in South Florida's water management decisions. And as restoration efforts continue, the role of the Lake will continue to be debated. With your help, Audubon will stand up and be the voice for this unique resource.

Everglades Advocates in Tallahassee

Audubon's Everglades team helped organize and lead the Everglades Coalition's Everglades Action Day and the first-ever Sport Fishing Day at the Capitol to advocate for Everglades restoration priorities with legislators. We thank the passionate and knowledgeable community members, students, captains, fishing guides, and anglers who made their voices heard to protect the River of Grass!



Bass Pro Donation Enhances Audubon's Everglades Ecosystem Research

Bass Pro Shops recently made a generous donation of a new boat, motor, and trailer to Audubon's Everglades Science Center in Tavernier, Florida. Audubon researchers find the 19' Mako bay boat, named "Calusa," perfectly suited for their ecological studies. It has already enhanced Audubon research efforts by allowing for the completion of another successful year of wading bird nest monitoring on Florida Bay.



The donation came through support from the local community and World Wide Sportsman in Islamorada, Florida. They recognized Audubon's significant role in maintaining the health and vitality of the Everglades ecosystem. Under the visionary conservation leadership of its founder Johnny Morris, Bass Pro Shops is known as a national leader in protecting habitat and connecting families to nature with a mission to inspire everyone to enjoy, love, and conserve the great outdoors. Audubon thanks Bass Pro Shops and World Wide Sportsman for this generous gift.



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