Florida Senate President-Designate Joe Negron’s proposal to locate a water storage project in the Everglades Agricultural Area (EAA) will implement a key component of the Comprehensive Everglades Restoration Plan (CERP). The project will reduce damaging Lake Okeechobee discharges to the St. Lucie and Caloosahatchee estuaries, while providing a needed upstream freshwater source for the Southern Everglades and Florida Bay.

The EAA separates Florida Bay and the remaining Everglades from Lake Okeechobee. This region historically experienced water depths ranging from 1-5 feet but is now frequently pumped dry to allow for farming in the area. The State of Florida has converted some land within the bounds of the EAA for water treatment and conservation purposes, but the majority of land is still in agricultural production. Holding additional water in a portion of this region is key to recreating the critical linkage and move it where it is needed at the right time.

Negron’s Proposal: A Path to Implementing a Crucial CERP Project

Storing water in the EAA is one of the keystone components of CERP that has been part of the plan since it was approved in 2000. The EAA Storage Reservoir project calls for storing about 360,000 ac/ft (120 billion gallons) of water—holding water about 6 feet deep on 60,000 acres of land. This was slated to hold water from Lake Okeechobee and runoff from EAA farms in the wet season.

Once stored, the reservoirs can link up with the network of man-made filter marshes called Stormwater Treatment Areas that remove phosphorus and other nutrients that are harmful to the plants and wildlife of the Everglades. Once clean, the water can be sent south to the Central Everglades where it will continue its path through Everglades National Park to Florida Bay. With the Central Everglades Project (CEP) and additional bridges on Tamiami Trail, moving ahead concurrently, obstructions to the southern flow of water will be removed.

Senator Negron’s proposal seeks to purchase about 60,000 acres of land on which to build the EAA Reservoir project. The suggested locations are optimal because they can more readily make use of existing water treatment infrastructure. Other locations within the EAA could also be utilized but may require additional infrastructure.

Negron’s $2.4 billion cost estimate includes the cost of acquiring land and constructing an EAA Reservoir that mirrors longstanding CERP plans. Bonding dollars made available from the Water and Land Legacy Amendment can provide this funding without preempting other restoration projects.
Now is the Time to Revisit the EAA Reservoir

Florida’s coastal waters are now experiencing an unprecedented ecological collapse, making the urgency of constructing an EAA reservoir clear. With an abnormally rainy winter in early 2016, in order to protect the aging Herbert Hoover Dike, billions of gallons of water are being discharged from Lake Okeechobee to the St. Lucie and Caloosahatchee estuaries. The change in the balance of fresh and saltwater, exacerbated by excess nutrients from agricultural and community sources, negatively impacts native vegetation, fish, and coastal birds. Blue-green algae blooms have formed in the St. Lucie and famously-clear coastal waters have turned dark brown and green, driving away tourists, harming local businesses, and reducing home values. Scientists have also detected harmful bacteria in some areas, making the water dangerous for human contact.

At the same time, a substantial seagrass die-off in Florida Bay has occurred because the Bay is cut-off from its natural source of freshwater and is now an unnaturally rainfall-driven system. With local drought conditions beginning in 2015, over 50,000 acres of seagrass died in the Bay, making the once blue waters look like pea soup and negatively affecting recreational and commercial fishing as well as other water-related activities that bring tourists to the Florida Keys. In the historic Everglades, Florida Bay was the end point of the River of Grass and would have been more resilient to a localized drought. Only storing water south of the Lake will provide an outlet for water being discharged to fragile coastal estuaries while concurrently holding water that can be sent south to Florida Bay.

Building On Other Restoration Projects

The Central Everglades Project (CEP), bridging Tamiami Trail, and the C-111 projects are all critical restoration components that will provide an outlet for water to flow south from Lake Okeechobee and replenish the Central Everglades and Florida Bay. But these projects do not preclude the need for the EAA Reservoirs Project. As these projects remove barriers to flow, it enables more freshwater to move south. But without the ability to store the water that is currently discharged to tide during wet periods, there will still not be enough water to move through this new infrastructure during dry periods. Planning is under way for other CERP projects looking to store and move water north of Lake Okeechobee and in the Western Everglades, but planning for water storage in the EAA has been delayed and is not slated to begin until 2021. The U.S. Army Corps of Engineers has expressed willingness to begin planning sooner. Senator Negron’s plan compounds the urgency to begin project planning.

Now is the time to revisit the EAA Reservoir project outlined in CERP and get planning for this crucial project underway. Audubon Florida applauds Senator Negron’s solution-based efforts to accelerate Everglades restoration projects aimed at easing the harmful estuarine discharges to the east and west, while concurrently providing a southern output to rehydrate Everglades National Park and Florida Bay.

1. The CERP identified the need for 360,000 ac-ft of water storage in the EAA and the new science demonstrates that the need for flows passing through EAA is even higher than envisioned in CERP. This suggests that storage greater than 360,000 ac-ft, and necessary treatment, is likely needed if CERP goals and objectives are going to be fully achieved. (The Central Everglades Planning Project, Final Integrated Project Implementation Report and Environmental Impact Statement, December 2014, accessed September 27, 2016, http://1.usa.gov/231xlbr.)