



Designing the EAA Reservoir to Eliminate Harmful Lake Okeechobee Discharges

Position Statement of the Guardians of Martin County

Originally adopted by the Guardians Board of Directors on December 12, 2016. This revised position was adopted by the Board on January 23, 2018, and will expire on January 23, 2021, unless, after subsequent review, it is further extended by the Board.

Position

The water quality treatment areas associated with the Everglades Agricultural Area (EAA) Reservoir project currently in the planning stages are too small. The Guardians urge the South Florida Water Management District (SFWMD) to analyze two additional project configuration alternatives before the District and the Legislature finalize their decision on the project so that it will be the “optimal configuration,” as Florida law requires.* These are hybrid options **R240 H1**, to include 35,000 acres of treatment areas in the Holey Land Wildlife Management Area, and **R240 H2**, to include an additional 29,000 acres of treatment areas in the Rotenberger Wildlife Management Area for a total of 64,000 acres of treatment areas in these two WMAs.[†]

The WMAs are state-owned lands in the vicinity of the project area identified in law. These lands are owned by the Internal Improvement Trust Fund. The Board of Trustees (governor and cabinet) has a duty to hold these lands “in trust for the use and benefit of the people of the state” (Florida Statutes 253.001). The Board of Trustees could cancel its lease to the Florida Fish and Wildlife Conservation Commission and repurpose the lands for water quality treatment.

Bottom line: When all authorized CERP projects are considered, SFWMD’s proposed EAA Reservoir project configuration options would help reduce discharges by a sub-optimal 52%; hybrid options **R240 H1** and **R240 H2** reduce discharges by 73% and 92%, respectively.[‡]

* Both hybrid options call for the minimum-sized 240,000 acre-feet reservoir on the 17,000 acre A-2 parcel identified in Florida Statutes 373.4598. If adequate water quality treatment areas are provided this configuration could meet Comprehensive Everglades Restoration Plan (CERP) goals (see **Background** section). The District’s options for either 6,500 or 11,500 acres of treatment areas are inadequate.

[†] See analysis (O’Laughlin and Gilio 2018) demonstrating that if **R240 H1** had been operational since 1980, then discharges would have been reduced by 50%; **R240 H2** reduced discharges by 69%. The District’s proposed options would reduce discharges by 29%. An alternative recently proposed by the Everglades Foundation (Treadway 2018) would improve that to 32%.

[‡] When other authorized CERP projects are operational, the District expects an additional 23% in discharge reductions (Morrison 2017), so total effect of SFWMD options is 29% + 25% = 59%; total effect of **RH240 H1** is 50% + 23% = 73%; **R240 H2** total effect is 69% + 23% = 92% reduction.

Issue

The footprint for the two basic project options the SFWMD has designed are confined to the two parcels of state-owned land identified in the law (Florida Statutes 373.4598) mandating reservoir construction (see **Map 1** on page 6). The A-2 parcel is nearly 17,000 acres currently leased to a private company for sugar cane production. The A-1 parcel has a water treatment facility on it called a flow equalization basin (FEB) that helps maintain stable flows of polluted runoff from private sugar cane lands into Stormwater Treatment Area 3/4 to the south of the A-1 FEB.

One of the two SFWMD “best buy” options would rebuild part of the A-1 FEB. The Guardians agree with the Everglades Foundation’s position that the A-1 FEB should not be included as part of the EAA Reservoir project. Given the minimum size of the reservoir specified in law and the strict water quality standards that must be met before water can move south out of the EAA, the Guardians agree with the Everglades Coalition (see Letters 2018) that the SFWMD’s project footprint is not large enough to provide adequate water quality treatment. More land is needed.

Some conservation groups, including the Everglades Foundation (Treadway 2018), are urging the SFWMD to work harder to acquire private farm lands in the vicinity of the A-2 parcel for the project (see Letters 2018). The law gives the SFWMD authority to terminate leases on state-owned lands and exchange these parcels for other lands that could become part of the project. To date the SFWMD has been unable to do that. Nevertheless some groups feel that this is the only way the EAA Reservoir project will be successful. The most desirable private lands are owned by Okeelanta Corp., a subsidiary of Florida Crystals Corp. owned by the Fanjul family of Palm Beach, Florida (see orange circles on **Map 1**, page 6).

Meanwhile other groups and organizations stand firmly in support of the idea that the state already owns enough land in and around the EAA, and that no more farm lands should be taken out of production for the EAA Reservoir project (see Letters 2018). It was for this reason that the law excluded the opportunity for the state to acquire additional lands in the EAA by exercising the power of eminent domain.

Repurposing the Rotenberger and Holey Land Wildlife Management Areas (WMAs) was conceived in 2000 as a CERP project. The University of Florida Water Institute report to the Legislature in 2014 identified options for reducing discharges and sending more water south of Lake Okeechobee. The report said more land south of the lake was necessary and repurposing the WMAs was one of only three potential opportunities to obtain enough land (Graham et al. 2015, pp. 103-106). The other two options are purchasing private lands or water farming on private lands.

As has happened before, strong pushback from some wildlife advocacy groups can be expected. The hunters who take an average of 23 deer per year from these two areas will surely not want to give up their sport. Important as these interests are, they should not preclude the SFWMD from analyzing these alternatives because two to four times as much water could be sent south

compared with the SFWMD options, thereby dramatically reducing discharges without the need to acquire more private land. Given an quantification of benefits by the SFWMD, policymakers could then decide whether Florida citizens would gain more benefits from these lands by following current plans (see FWC 2015) or repurposing them as water quality treatment areas,.

Florida has a no net loss of hunting lands policy (Florida Statutes 379.3001). By repurposing the two WMAs to include water quality treatment, recreation opportunities would not be lost, but instead shifted from deer to ducks and bass. The 57,000 acres of stormwater treatment areas that already line the inside edge of the EAA in many places are considered by the Florida Wildlife and Fish Conservation Commission as small game hunting areas (see, e.g., FWC 2018) and the FWC likely would continue to allow hunting and fishing in the repurposed WMAs.

Background

More than a century ago the State of Florida commenced efforts to drain the Everglades and create farmlands south of Lake Okeechobee. Canals were dug to connect the lake to the St. Lucie River to the east and the Caloosahatchee River to the west, so that excess lake water could be sent to tide rather than south into the vast “River of Grass” that eventually flows into Florida Bay. Today approximately 500,000 acres of fertile farmlands south of the lake are drained during the wet season and irrigated during the dry season, mostly to grow sugar cane.

In high water years billions of gallons of freshwater are discharged east and west. When too much freshwater reaches the estuaries, the balance of fresh and saltwater changes, harming submerged vegetation, fish, and water birds (Audubon Florida 2016). In 2013 and 2016 the estuaries turned cloudy brown and sickly green—driving away tourists, harming local businesses, and reducing home values. Harmful bacteria have made the water in some places dangerous for human contact. At the same time that the estuaries in the northern part of the Everglades are adversely impacted by too much freshwater, massive seagrass die-off in Florida Bay occurs because of insufficient freshwater. Without a source of freshwater from the upstream Everglades, Florida Bay cannot recover from dry conditions that alter the fresh and saltwater balance. The prediction for the Bay is a deeper collapse, including algae blooms and fish die-offs within a few years (Audubon Florida 2016).

Some of these collateral damage problems were recognized more than 60 years ago. A storage reservoir south of the lake was envisioned to help reduce discharges and send more water south. When the state and federal governments formed a partnership in 2000 and the Comprehensive Everglades Restoration Plan (CERP) became federal law, an EAA Reservoir was identified as Component G. In 2006 Governor Jeb Bush accelerated construction of the reservoir on the A-1 parcel that the state had purchased for that purpose in 1999 from the Talisman Sugar Company. After the state had spent \$272 million on construction, in May 2008 Governor Charley Crist halted the reservoir project. In 2015 the A-1 parcel became a 15,000 acre shallow reservoir called a flow equalization basin (FEB), a constructed impoundment to capture stormwater runoff

and provide a more steady flow of water to the STAs and help to achieve optimal water quality improvement performance (see **Map 1** on page 6).

According to the SFWMD (2018), CERP set two goals for the EAA Reservoir project:

CERP Goal 1: moving an additional 300,000 acre-feet of water per year south out of the Everglades Agricultural Area (EAA) and into the Everglades Protection Area. The SFWMD says its options are “close to achieving the desired increase” (Wilcox 2017).

CERP Goal 2: reducing by 80% the harmful discharges of excess Lake Okeechobee water, a goal to be met by all authorized CERP projects taken together. The SFWMD says that discharges reductions will total about 59% after their EAA Reservoir configuration option and other authorized CERP projects are operational (Morrison 2017). The EAA Reservoir is only one component for reaching this goal.

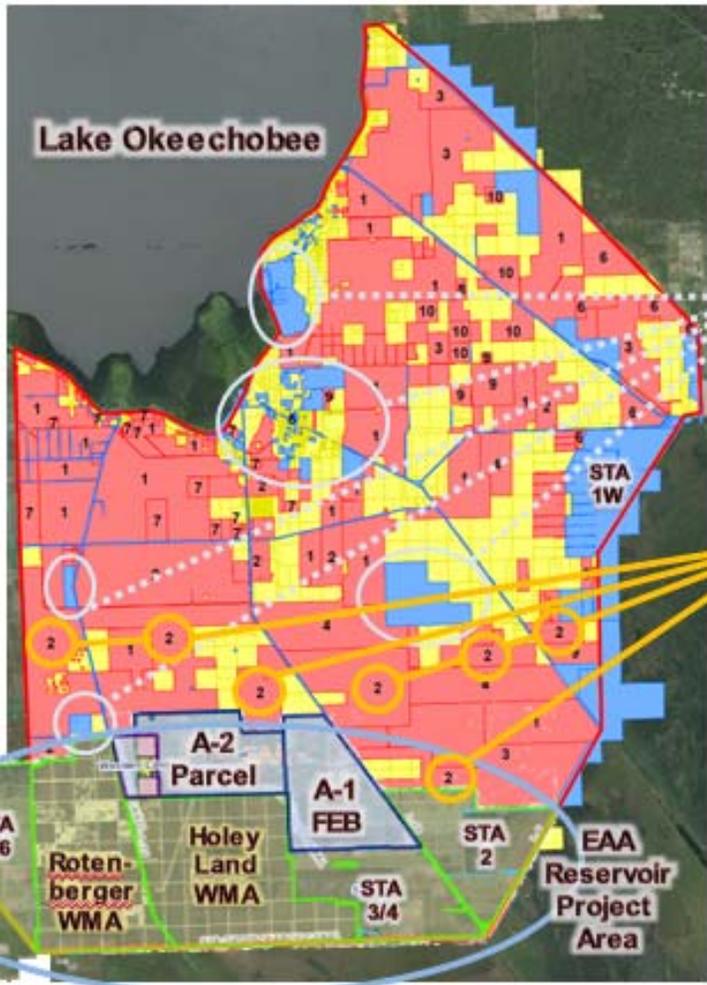
In December 2016 the Guardians took a position strongly supporting state acquisition of lands in the Everglades Agricultural Area (EAA) south of Lake Okeechobee for construction of a storage reservoir and recommended a series of specific actions (see O’Laughlin 2016). While the bill was being debated in the Legislature, the Guardians published a paper rebutting arguments against the EAA Reservoir (O’Laughlin 2017). The Legislature passed Senate Bill 10 and Governor Rick Scott signed it on May 12, 2017, and said, “To have the opportunity to sign SB 10 and focus on how we are going to get storage south of the lake—that’s a big deal and long term, it is going to be a big opportunity” (Scott 2017).

The 2017 Water Storage Reservoirs law (Florida Statutes 373.4598) provided much of what the Guardians had asked for in December 2016. It provides \$800 million as the state’s share of project funding. However, the law eliminated the possibility for the state to use the power of eminent domain to acquire private lands for the EAA Reservoir project. The law identified two parcels of state-owned land that would provide the basic footprint for the project, and policy tools to expand the project area if necessary. At this writing, attempts to exchange state-owned land in the EAA for private land close to the A-2 parcel have not been fruitful. The law requires an “optimal configuration” for the project and specifies a minimum size of 240,000 acre-feet of storage and adequate water quality treatment areas to meet standards.



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Everglades Agricultural Area

Land Ownership

- Public Ownership
- Private Ownership
- Major Private Ownership (by acreage owned)

- 1, U S SUGAR CORP (115,574)
 - 2, OKEELANTA CORP (76,009) *
 - 3, NEW HOPE SUGAR CO (33,970)
 - 4, KING RANCH INC (19,744)
 - 5, WEDGEWORTH FARMS INC (9,901)
 - 6, STOFIN CO INC (7,305)
 - 7, SBG FARMS INC (6,470)
 - 8, CLOSTER FARMS (6,366)
 - 9, SUGAR CANE GROWERS (5,710)
 - 10, NEW FARM INC (5,663)
- * Subsidiary of Florida Crystals Corp.

Map 1. EAA land ownership with EAA Reservoir project area overlay, plus C-139 Annex. Ownership information from Treasure Coast Regional Planning Commission http://www.tcrpc.org/departments/MapGallery/2016/1604a_EAA_Private.pdf