



Sent via electronic mail

September 9, 2020

Chauncey Goss, SFWMD Board Chairman
cgoss@sfwmd.gov

Scott Wagner, SFWMD Vice Chairman
swagner@sfwmd.gov

Carlos Martinez, SFWMD Member
cmartinez@sfwmd.gov

Cheryl Meads, SFWMD Member
cmeads@sfwmd.gov

Charlette Roman, SFWMD Member
croman@sfwmd.gov

Jay Steinle, SFWMD Member
jsteinle@sfwmd.gov

Jacqui Thurlow-Lippisch, SFWMD Member
jthurlowlippisch@sfwmd.gov

Ron Bergeron Sr., SFWMD Member
rbergeron@sfwmd.gov

Benjamin Butler, SFWMD Member
bbutler@sfwmd.gov

Re: Cape Sable seaside sparrow: Everglades restoration constraints and opportunities

Dear Governing Board Members,

We recognize that moving water south from Lake Okeechobee to Everglades National Park and Florida Bay is a key priority of this governing board, and we share your commitment to that principal Everglades restoration goal. With that in mind, we are writing to provide information about how this goal intersects with the conservation of the endangered Cape Sable seaside sparrow (sparrow).

While some members of the public have pointed to the sparrow as a primary obstacle to moving water south, a fact-based analysis of the issue shows this is simply not the case: There is no so-called “single-species management”. The Cape Sable seaside sparrow stands as a beneficiary of Everglades restoration — not an impediment to it.

It is true that the U.S. Army Corps of Engineers (Corps) is required to close some structures to protect one of the last breeding areas for the sparrow, but it is false and misleading to claim the

sparrow is causing too little water flowing to Florida Bay, too much water flowing to the northern estuaries, or for high-water levels in Water Conservation Area-3A (WCA-3A).¹

First, the restrictions on S-12A and S-12B are largely during the Everglades' dry season.

It is well-documented that impounding water in WCA-3A for agriculture, urban use and flood control has modified the salinity regime of Florida Bay, not the sparrow.² The Corps manages the timing, duration, and magnitude of flows into and out of WCA-3A through its operational plans, which until recently were governed by the Everglades Restoration Transition Plan (ERTP). The ERTP required the Corps to exercise its operational flexibility to maximize water flows through the S-12 structures to prioritize regulatory releases from WCA-3A to the east to protect sparrow subpopulation A habitat during nesting season pending completion of work on the Tamiami Trail.³ The majority of these closures coincided largely with the dry season when most areas in marl prairies are dry or drying and there was insufficient water behind the S-12s to sustain flow anyhow. The Corps recently incorporated these operational plans in its new Combined Operational Plan (COP) not because they are necessary to prevent the sparrow's extinction, but because they are integral to the Corps' plan to "begin to restore historic flows to Northeast Shark River and Taylor Sloughs in ENP."⁴

The conditions giving rise to Florida Bay experiencing low dissolved oxygen driven by high temperatures and salinities occur during the dry season when water is not flowing through the

¹ To the extent that C-111 sparrow restrictions are perceived as an issue, context matters. Prior to C-111, water was delivered to Taylor Slough through S-174 and into the L-31W canal system. The S-174 was decommissioned, and S-332 pump station started pumping water from the L-31W canal system to the remnant headwater wetlands of Taylor Slough. It originally operated at 165 cfs. When it was increased to 465 cfs, it had an adverse effect on sparrow, so it was brought back down to 165 cfs. The S-332 was then replaced by the S-332D with additional pump capacity via the S-332B and S-332C, however, due to seepage losses to the adjacent C-111 Canal, the S-332D Detention Area does not deliver the same volume of water to Taylor Slough as when deliveries were made via the S-174 and S-332. Therefore, since at least 2012, the flow at S-332D has been increased from 165 to 500 cfs from July 15-Nov 30; 325 cfs from Dec 1-Jan 31, and 250 cfs Feb 1-July 14, with a portion of the amount that is not released redirected into the Southern Detention Area. U.S. Fish and Wildlife Service. 2016. Biological Opinion for the Everglades Restoration Transition Plan – 2016 [*hereinafter* USFWS 2016 BO] at 37-38, F-5.

² McIvor, C., Levy, J., and R. Bjork. 1994. Changes in Freshwater Inflow from the Everglades to Florida Bay Including Effects on Biota and Biotic Processes: A Review in *Everglades: The Ecosystem and Its Restoration*. Davis, S. and J. Odgen (eds.) at 141.

³ USFWS 2016 BO at xvi. The more stable subpopulations to the east did better, averaging 33-39% in the target hydroperiod range during the same time frame. To put this in perspective, subpopulation A - the one the S-12 management decisions are designed to address – averaged only 9% of its acreage within the optimal hydroperiod range during the nesting seasons from 1992 to 2014.

⁴ U.S. Fish and Wildlife Service completed a new biological opinion on the Combined Operational Plan May 5, 2020 which concludes water releases will not jeopardize the sparrow and will allow for "unprecedented flow deliveries into Northeast Shark River Slough" U.S. Fish and Wildlife Service. 2020. Biological Opinion for the Combined Operational Plan (COP) [*hereinafter* USFWS 2020 BO] at 2. This was made possible by increasing the stages in the L-29 borrow canal and a fully functional detention area along the eastern boundary of ENP at 7. The seasonal closures of S-332D and S-344 will be removed under COP and will be opened when the WCA-3A regulations schedule is in Zone A and not subject to seasonal closures for the sparrow. *Id.* at 13; U.S. Army Corps of Engineer. 2020. Corps. 2020. Combined Operational Plan. [*hereinafter* Corps 2020 COP] Appendix A Water Control Plan. Vol. 4 Water Conservation Areas, ENP and South Dade at 7-3.

system. Therefore, the delayed opening of the S-12A and S-12B is largely irrelevant as a Florida Bay impact. The S-12 structures very rarely operate near their design criteria or capacity because the peak average elevation for WCA-3A is lower than the original design headwaters of the S-12s.⁵ Not only are the sparrow-related closures intended to keep habitat drier, they also push more water out of WCA-3A to Florida Bay than they hold back from the S-12s.

Moreover, the water that does flow through the S-12s when water levels in WCA-3A rise does not directly flow into Florida Bay. The S-12s, particularly S-12A and S-12B are too far to the west, the result of construction decisions influenced by landownership. Water flowing through them goes to the Shark River Estuary and Ponce de Leon Bay via Shark River Slough. Meanwhile, the water that is diverted from S-12A and S-12B is pushed farther east where it can flow into Taylor Slough which empties directly into Florida Bay. Therefore, during the wet season, when water flows through the S-12s and indirectly migrates to Florida Bay, Florida Bay is already receiving wet season flow from Taylor Slough.

Second, S-12A and S-12B are unable to alleviate pressure on the Herbert Hoover Dike.

The Water Control Plan for Lake Okeechobee and Everglades Agricultural Area dictates that in the High Lake Management Band, when the Herbert Hoover Dike (HHD) surrounding the Lake is most likely under stress, releases of water to the WCAs via the EAA canals are not possible because the canals in the EAA must be used to relieve flooding from the EAA and cannot absorb additional flow from the Lake or rainfall.⁶ Historically, by the time the HHD experiences high-water pressure, the rest of the system, i.e. the stormwater treatment areas (STAs) and Everglades Agricultural Area (EAA), is too wet to move water from the Lake to the south, resulting in the Corps relying on the northern estuaries for massive water releases.⁷ Moreover, because S-12A and S-12B are gravity-fed gates, during the drier season very little or no water moves through them. Even at their peak during wet season, their total capacity rarely approaches 2,000 cfs. By comparison, the capacity at the S-77 and S-308 structures of the northern estuaries is 9,300 cfs and 7,300 cfs, respectively.⁸ The S-12s and the system linking them to the Lake were not designed to and cannot help relieve pressure from the HHD.

Third, the WCA-3A schedule and rainfall, not the sparrow, dictates how much water is in WCA-3A.

The Water Conservation Areas were designed to meet the following objectives: (1) to act as a depository for excess water from the agricultural areas; (2) prevent Everglades water from flooding into urban and agricultural lands; (3) recharge groundwater and prevent saltwater

⁵ Corps 2020 COP at 7-6.

⁶ Corps 2020 COP App A Water Control Plan at 7-12.

⁷ Lake release are “limited by high water levels in the WCAs, STA treatment capacity limits, and limited or no conveyance capacity in the primary canals within the EAA.” Corps 2008 LORS at 7-28.

⁸ U.S. Army Corps of Engineers. 2008. Central and Southern Florida Project Water Control Plan for Lake Okeechobee and Everglades Agricultural Area [*hereinafter* Corps 2008 LORS] at 7-2, 7-13.

intrusion; (4) store and convey water, including for agricultural irrigation; (5) enhance fish, wildlife, and recreation; and (6) release excess water to Everglades National Park to restore and maintain natural conditions.⁹ As a result of prioritizing flood control and irrigation for agriculture in WCA-3A, its regulation schedule “does not mimic the seasonal patterns driven by the natural hydrological cycle,” and stacks up water in southern WCA-3A going into the wet season.¹⁰

To address this lopsided water management regime and because of delays in completing restoration projects designed to restore historic flow, the Corps has implemented emergency deviations from sparrow-protecting measures (i.e. opening gates early and delaying closing gates) multiple times to address high water concerns in WCA-3A.¹¹ In other words, the sparrow did not make water in WCA-3A high, and did not prevent the Corps from releasing that water when the WCA-3A schedule dictated.¹² For example, the Corps’ 2017 deviation, which kept structures open when the 2016 biological opinion ERTTP required they be closed to protect the sparrow, was expected only reduced water in WCA-3A 0.7 feet over a three month period.¹³

The Everglades Agricultural Area is the Everglades restoration bottleneck.

The sparrow does not stand in the way of Everglades restoration; it will be one of the many beneficiaries of it. However, restoration has been slow, and has failed to address the single largest impediment to restoration — the Everglades Agricultural Area.¹⁴ As a result, the ill-placed, outdated water infrastructure sends water to the western side of the Shark River Slough and into sparrow habitat,¹⁵ rather than to the east, where it historically flowed and where restoration plans intend to ultimately send it.¹⁶

⁹ C&SF Project, USACE Master Water Control Manual for the WCAs, ENP and ENP-SDCS, Vol. 4 (June 1996) Sec. 3-02b., p3-3). Some have also blamed the sparrow for WCA-3A water levels harming deer in the area, but this ignores the legacy of past bad management of Everglades resources. “The initial operating schedule and configuration of structures over-drained the northern portion of the area. This enabled a large deer herd to flourish until wet cycles returned and large deer mortalities resulted. Substantial changes were made in deer management in the 1980s, when Governor Graham resolved that the deer herd would be managed in a manner consistent with *whatever water levels were in place.*” Light and Deen. 1994. Ch. 4 Water Control in the Everglades: A Historical Perspective in *Everglades: The Ecosystem and Its Restoration* (eds.) Davis, S. and J. Ogden.

¹⁰ USFWS 2020 BO at 108.

¹¹ U.S. Army Corps of Engineers. 2017. Endangered Species Act Biological Assessment: Planned Temporary Deviation Biological Assessment. Incidentally, this has likely resulted in the decline of sparrows in Subpopulation A with zero birds detected in 2019 at USFWS 2020 BO at 65.

¹² Corps 2020 COP at 7-26. This same schedule has shortened the window of time snail kites can breed in WCA-3A, the “most critical component of snail kite habitat in Florida”, often resulting in nest abandonment, and USFWS 2020 BO at 107.

¹³ U.S. Army Corps of Engineers. 2017. Environmental Assessment and Finding of No Significant Impact: Emergency Deviation to Affect Relief of High Water Levels Within Water Conservation Area 3A and the South Dade Conveyance System Post Hurricane Irma and Planned Deviation to Affect Relief of High Water Levels Within Water Conservation Area 3A at 15.

¹⁴ The EAA alone eliminated 3,100 square-miles of the original Everglades. USFWS 2016 BO at 119.

¹⁵ USFWS 2016 BO at 79 “it is clear that construction and operation of the C&SF project has diverted the historic flow path to the west, significantly increasing the amount of water in the vicinity of the S-12 structures and C5SS-A.”

¹⁶ USFWS 2016 BO at xv.

Not only did the EAA eliminate 3,100 square-miles of original Everglades,¹⁷ the EAA gets priority water irrigation and drainage. “Water releases from the Everglades Agricultural Area to the Water Conservation Areas and from the Water Conservation Areas to Everglades National Park have also produced a much greater frequency of sharper peaked water deliveries during both the wet and dry seasons.”¹⁸ There have also been persistent concerns regarding water quality of floodwaters released from the EAA into WCA-3A and Everglades National Park.¹⁹ The WCAs exist to store “excess water,” and are designed to both prevent flooding in the EAA and urbanized east coast region and also to provide water to the EAA,²⁰ the urban areas, and aquifers southward.²¹ Therefore, the questions water managers should be asking are:

- (1) How much water is prioritized for the EAA, as opposed to the Everglades and Florida Bay, during the dry season?**
- (2) Given that EAA water eventually moves through WCA-3A, how much water in WCA-3A originates in the EAA?**²²

The first priority in terms of moving water into STAs and south is agricultural runoff in the EAA: EAA wastewater is pumped into STAs then conservation areas – first into WCA-1, then WCA-2A, then WCA-3A.²³ Pumps stations are designed to remove $\frac{3}{4}$ of an inch of agricultural area runoff per day, and in the event the STAs cannot handle additional inflow, untreated water may be diverted directly to WCA-1.²⁴ Surface water inflows from the EAA enter the WCAs typically following treatment in a STA.²⁵

“Single-species management” is not the problem because it does not exist in the Everglades.

The “single-species management” narrative is a distraction from the true, obvious bottleneck of Everglades restoration, the Everglades Agricultural Area. Unfortunately, the red herring is echoed by even well-meaning people because there is a kernel of truth: the Corps does keep the gates closed during the traditional Everglades dry season which mimics the natural flow and

¹⁷ USFWS Vol 4 App J SOM at 97.

¹⁸ Davis, S. and J. Ogden. 1994. Toward Ecosystem Restoration in *Everglades: The Ecosystem and Its Restoration*. Davis, S. and J. Ogden (eds.) at 783.

¹⁹ Corps 2020 COP at 4-17.

²⁰ S-39 is designed to move water from WCA-1 to the Hillsboro Canal; S-142 is designed to move water from WCA-3A to North New River Canal during dry season. Corps 2020 COP at 7-41-7-42. “Water supply releases are also made from the WCAs to the EAA.” Vol 4 Water Conservation Areas, ENP and South Dade App J SOM at 7-10.

²¹ USFWS 2016 BO at 32; U.S. Army Corps of Engineers. 2018. 2018 Planned Temporary Deviation to Affect Relief of High Water Levels Within Water Conservation Area 3A at 24.

²² The snail kite population was greatly impacted by the removal of WCA-3A and Lake Okeechobee from its productive breeding grounds. USFWS 2016 BO at 136. Meanwhile the amount of water that moves through these gates has a negligible impact on water levels in WCA-3A. *Id.* at 27.

²³ Corps 2008 LORS. 7-4, 7-5. SFWMD implemented the Interim Action Plan to reduce the nitrogen loading in the Lake from the EAA by diverting EAA water to the WCAs during flood control activities. Corps 2020 COP at 7-7.

²⁴ Corps 2020 COP at 7-17.

²⁵ Corps 2020 COP at 7-14.

volume of water in the region, which is why it also facilitates sparrow nesting. However, it is without merit to conclude that the closures are responsible for the water quality or quantity issues experienced by the estuaries, or the high-water concerns in WCA-3A.

Instead of placing blame on the sparrow, stakeholders and decision makers alike should do all they can to secure substantially greater water storage, treatment, and conveyance throughout the EAA to realize the shared vision of a fully restored Everglades, with sufficient flow to support a healthy Florida Bay and free of damaging discharges of polluted water to our northern estuaries.

Thank you for your commitment to meaningful Everglades restoration.

Respectfully,

Jaclyn Lopez
Florida Director
Center for Biological Diversity

Eve Samples
Executive Director
Friends of the Everglades

Audubon Florida
Doug Gaston, Northern Everglades Policy
Analyst

Calusa Waterkeeper
John Cassani

Cape Coral Friends of Wildlife
Pascha Donaldson

Conservancy of Southwest Florida
Marisa Carrozzo, Everglades and Water
Policy Manager

Defenders of Wildlife
Elizabeth Fleming, Senior Florida
Representative

Everglades Law Center
Lisa Interlandi, Executive Director

Florida Bay Forever
Emma Haydocy, Executive Director

Florida Keys Chapter of Izaak Walton League
Richard Grosso

Friends of Arthur R. Marshall Loxahatchee
National Wildlife Refuge
Ron Seifer, President

Lake Worth Waterkeeper
Reinaldo Diaz, President

Peace River Audubon
Bren Curtis, Conservation Chair

Sanibel-Captiva Conservation Foundation
Ryan Orgera, Ph.D., Chief Executive Officer

Sierra Club Miami Group
Stephen Mahoney, Conservation Chair

Tropical Audubon Society
Paola Ferreira, Executive Director

cc:

Robert A. Spottswood, FFWCC Chair

Michael W. Sole, FFWCC Vice Chair

Rodney Barreto, FFWCC Member

Steven Hudson, FFWCC Member

Gary Nicklaus, FFWCC Member

Gary Lester, FFWCC Member

Sonya Rood, FFWCC Member