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August 28, 2019

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Ms. Melissa Nasuti
U.S. Army Corps of Engineers
701 San Marco Boulevard
Jacksonville, FL 32207
Transmitted by email: Melissa.a.nasuti@usace.army.mil

Subject: Lake Okeechobee 2019 Planned Deviation to the Water Control Plan for Lake Okeechobee and the Everglades Agricultural Area (LORS 2008)

Dear Ms. Nasuti:

Thank you for this opportunity to provide comments on the Army Corps of Engineer's (Corps) Draft Environmental Assessment (EA) and Proposed Finding of No Significant Impact (FONSI) for the planned deviation from Lake Okeechobee Regulation Schedule (LORS) 2008. Lee County appreciates the Corps' continuing efforts, through Lake operations and discharges, to better consider impacts of Harmful Algae Blooms (HABs). The proposed deviation is consistent with the operational flexibility that is already contained in LORS and is intended to ameliorate conditions that facilitate formation of cyanobacterial blooms (e.g. low salinity, enhanced nutrient loading) in the Northern Estuaries (Caloosahatchee and St. Lucie) and to reduce the chances of transporting cyanobacteria or other harmful algae from Lake Okeechobee to these estuaries. Operational strategies taken to prevent or minimize HABs, similar to those that were experienced in the 2018 summer months, are something that Lee County supports.

According to the EA, Option B, the preferred alternative, calls for preemptive releases to be made from Lake Okeechobee to the Caloosahatchee (up to 2000 cfs at S-79) and St. Lucie (up to 730 cfs at S-80) when LORS 2008 Part D calls for releases of up to 450 cfs at S-79 and up to 200 cfs at S-80. Periods where Part D calls for 450 cfs generally occur in the winter and spring months when the Caloosahatchee Estuary ordinarily requires flows greater than 450 cfs to achieve an acceptable, protective balance of salinity levels in the estuary. Lee County is supportive of strategies to manage Lake Okeechobee by providing additional flow in those critical periods.

While the County is supportive of increasing flow in the winter and spring months in the lower sub bands of LORS, we would like to offer the following concerns and suggestions:

1. It is anticipated that utilization of the proposed deviation will predominately occur in the winter and spring months. The March to June timeframe is especially important as those are months when fishery recruitment and oyster spawning occur. If and when 2,000 cfs is released under this deviation during those time periods, continual monitoring of salinity, flow, and other parameters of interest (e.g. oyster spat settlement) should be performed to ensure that there are no adverse impacts to fishery recruitment and oyster spawning. Monitoring for impacts and conditions should occur at locations proximate to the areas of greatest concern (e.g. oysters in Iona Cove, upper estuarine nursery near Beautiful Island). The contemplated discharges at those times must also be at rates that will not create unintended adverse impacts during these critical timeframes. While flows greater than 450 cfs are desired, 2,000 cfs may create unintended harm.
2. The EA states that 2000 cfs (upper limit of a preemptive release) would result in a salinity range of 13-27 PSU, which is within the range of 10 to 30 PSU protective of oysters. These estimates of the salinity range between Cape Coral and Shell Point may not be accurate and should be better supported. The pages referenced in the 2014 System Status report show relationships between monthly salinity samples and the 30-day average flow at S-79 for two water quality monitoring stations in the Caloosahatchee Estuary: CES 07 and CES 09. These stations are inappropriately located for predicting salinity at Cape Coral or Shell Point. CES07 is located in upper Iona Cove and significantly downstream of Cape Coral. CES09 is located downstream of Shell Point in San Carlos Bay. As stated in the first comment above, Lee County is concerned that at 2,000 cfs, salinity may fall outside of the 10 to 30 PSU range that the Corps is predicting. Therefore, the location of monitoring is of utmost importance to determine the health of the Estuary at these critical times.

A more accurate estimate of the salinity at Shell Point and Cape Coral can be obtained from continuous salinity monitoring sites maintained by the South Florida Water Management District on the Cape Coral Bridge and a platform near Shell Point. Lee County is supportive of flow rates closer to the 1,000 cfs range rather than the upper limit of the release 2000 cfs.

3. Lee County has concerns with the Corps referring to 2,800 cfs as a “harm” standard. The Caloosahatchee will face “harm” at flows lower than 2,800 cfs. While flows of 2,800 cfs have been well documented to harm both submerged aquatic vegetation and oysters in Iona Cove, flows less than 2,800 can cause harm in other areas of the estuary.

4. While the report recognizes that releasing 2000 cfs during the dry season represents a seasonal shift in discharge, ecological consequences of this shift should be closely monitored. Too much discharge in the dry season may also result in a higher nutrient load to the Estuary. River discharges can be a significant source of nutrients to feed red tide events (see Vargo et al 2008), which typically start in winter months off the coast. The deviation should specifically state that preemptive discharges will not be made during red tide events occurring or contemplated to occur in local waters.

Thank you again for taking this proactive measure to prevent or minimize outbreaks of HABs in the Lake, the Caloosahatchee River and Estuary. Lee County supports this effort and looks forward to working with you and other stakeholders as implementation moves forward

Sincerely,



Roland Ottolini, PE
Director, Division of Natural Resources

cc: Lee County Commissioners
Roger Desjarlais, County Manager
Dave Harner, Deputy County Manager
Richard Wesch, County Attorney