



February 15, 2024

Colonel James Booth
District Commander – Jacksonville District
U.S. Army Corps of Engineers
701 San Marco Blvd.
Jacksonville, FL 32207

RE: Lake Okeechobee Water Releases

Dear Colonel Booth,

Thank you for this opportunity to provide feedback on the planned releases from Lake Okeechobee. While we appreciate the opportunity to work with you to assess the plans to lower the lake, it is unfortunate that the northern estuaries have been placed in this risky position. With higher than average lake levels and models predicating a wetter dry season due to El Nino, SCCF and its partners have expressed our belief that there was ample opportunity to lower the lake prior to the situation we are now faced with. However, now that releases are necessary to keep the lake below the ‘high’ band in LORS08 and more rainfall predicted to be on its way, it is imperative that the releases are structured to avoid the largest ramifications. Hopefully this can be achieved by ‘pulsing’ the water out of Lake Okeechobee.

An important factor to consider while pulsing water from the Lake is the length of recovery time, which allows the oysters within the Caloosahatchee estuary to recover in the appropriate salinity. The report from Dr. Rumbold (2021) posited that, in cooler waters, oysters may be able to withstand diminished salinity from large releases for periods of up to 14 days. However, his report also stated that it is imperative those releases would be followed with a 14-day period of recovery time, where the salinity returns to the healthy levels, above 10‰ (ppt). This means that not only will it be necessary to space 14-day pulses out with at least 14 days of downtime in between them, but it will also be necessary to monitor the conditions of the estuary to ensure that the salinity levels have risen back above 10‰ before the 14-day recovery window begins. It is also important to note that not only is a recovery time necessary to bring conditions back out of the stress envelope in the estuary, but any modelling of the Caloosahatchee must include basin run-off in addition to releases from S-77 to truly demonstrate the impact on both estuaries. Finally, the models that are presented to stakeholders to factor into our evaluation should include the proposed and necessary recovery time to demonstrate the state of the estuary when the next pulse is set to begin, a minimum of 14-days after the estuary returns to the proper 10‰ salinity levels.

The length of these pulses and recovery times will be difficult to manage because it is also imperative that these releases have a complete cessation prior to the oyster spawn that usually occurs starting in April. If releases occur during the active spawn, and they push the spat out of the estuary it could cause a major mortality event and impact oyster populations for generations. With estuaries still recovering from hurricanes and past releases, this is not a risk that our ecosystem can afford.

It is also important to note that even if these pulses are timed perfectly to protect oyster spawning, there will still be ramifications to our estuaries that our costal communities will bear the brunt of. Oysters are currently making gametes that are necessary for their spawn, and stress will impact the health of the

overall event. The life cycles of important fish such as sheepshead and menhaden are currently in key stages of their life cycle and are going to be detrimentally impacted, with large ramifications to our fisheries. Tarpon are incredibly sensitive to water quality, and they are already beginning to arrive off our shores from their annual migration. These releases will likely impact this migration to our waters this year, potentially causing them to leave the area and having an impact to our local tourism-based economies.

Finally, it cannot be understated the risk that these releases have to creating harmful algae blooms that we could suffer the impacts of for months and years to come. The nutrient laden water has the ability to feed macroalgae blooms that shade out our seagrass and create hypoxic conditions when they die. Any blue-green algae present, even if it is not seen as a massive bloom in the lake, will seed our river for dangerous conditions later. We have already seen blue-green algae present this year in Alva and at the Davis boat ramp in the Caloosahatchee. Additionally, the risk of red tide, although lower than it could be, is still present. We have seen samples return background levels within the last two weeks, and wildlife is being treated with suspected brevetoxicosis. Our communities cannot survive another massive harmful algal bloom. A recent study by SCCF and our partners at the Conservancy of Southwest Florida and Captains for Clean Water showed that a singular harmful algal bloom could cost our coastal communities over \$5 billion in lost economic impacts and potentially erase over 43,000 jobs. It is crucial that your release plan is able to be reactive to stop the releases if conditions change to show an increased risk of red tide.

We are in the situation that everyone hoped we could avoid, with a dangerously high lake and more rainfall on the way. While it is necessary to get the lake down, it is critical that we do so in a way that does not decimate our coastal communities, as we have seen in the past. As you begin releasing water please ensure that the pulses are structured with enough recovery time in between them to truly let our estuaries rebuild. Please announce that you will have a defined end date to the releases, reflecting an understanding of the importance of the oyster spawning to the ecological cycles within our estuaries. And please be responsive to any changing conditions concerning red tide, which we know can be exacerbated into massive harmful blooms as a direct result of releases from Lake Okeechobee.

As we all work together to safely lower the lake, it is important that you are using every avenue available to you to take every drop of water out of the lake that you can. This means sharing the burden among all stakeholders, not just the northern estuaries. Please work with the district to move water into any available space in the canals south of the lake, taking any available pressure off of the northern estuaries and demonstrating that this is an issue that we are collectively working towards a solution. It is imperative that we continue to see meaningful engagement from the Army Corps with stakeholder groups throughout this process. I hope that the Corps will commit to having weekly meetings with scientists and experts where you share longer 6-week models of projected conditions, compare them to actual conditions, and pledge to be responsive to changing conditions to help protect our ecosystems, our economies, and the environment that we all rely on.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt DePaolis', written in a cursive style.

Matt DePaolis
Environmental Policy Director