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"Ding" Darling Wildlife Society - Friends of the Refuge

An Update on Modifying Lake O's Release Schedule

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It is reasonable that so much attention is currently being paid to the pandemic and the associated economic crisis. We all hope that before too long those issues will be behind us. However, when they are behind us, we will still be facing significant water resource issues. Because of that, we must continue to focus on improving the quantity and quality of our water resources. With that goal in mind, the next couple of articles will discuss where we stand with some key water resource topics. This article will focus on two of the initiatives that have the goal of modifying Lake Okeechobee's release schedule and will point out why it can be so difficult to reach agreement on these initiatives. The subsequent article will focus on the [Water Resources Development Act \(WRDA\) of 2020](#).

Implementing Operational Flexibility

The Army Corps of Engineers manages the releases out of Lake Okeechobee based on a set of guidelines contained in the [2008 Lake Okeechobee Release Schedule](#) (LORS). These guidelines are based on a set of conditions, including the height of the lake, the time of year, and the weather forecast. Based on the value of those conditions at a given point in time, the guidelines indicate how much water can be released out of the lake.

The purpose of the Lake O release guidelines is to enable the corps to manage the water releases in a way that considers all the congressionally authorized purposes for the lake. This includes flood control, navigation, water supply for a variety of constituents, enhancement of fish and wildlife, and recreation. As described in [a previous article](#), the Army Corps is part way through a process to create a new set of guidelines referred to as the [Lake Okeechobee System Operating Manual](#) (LOSOM). The process that the Army Corps has established for LOSOM calls for it to be implemented in multiple stages, beginning in 2023.

In the last couple of years, the Army Corps has used [operational flexibility](#) that is allowed in LORS to lower the level of Lake O. This had a positive impact on the "Ding" Darling Refuge because it reduced the need for the kind of massive water releases that contributed to the destructive algal bloom outbreaks that occurred in 2018.

Col. Andrew Kelly is the Commander and District Engineer of the U.S. Army Corps of Engineers, Jacksonville District. In [a recent article](#), he described how, in the fall of 2018, the Army Corps began to use the operational flexibility that is allowed in LORS to lower the level of Lake O. As a result of using

that operational flexibility, “We saw submerged aquatic vegetation increase four-fold to 20,000 acres, built enough capacity to absorb heavy mid-summer rains that raised the lake stage by two feet without making releases to the estuaries, were in a good position to deal with Hurricane Dorian when it threatened the state, and had enough water to maintain flows to the Caloosahatchee,” wrote Kelly.

While using that operational flexibility was favorable to some of the congressionally authorized purposes for Lake O, it was detrimental to others. As Kelly pointed out in that article, navigation was negatively impacted as the locks that enable boats to pass between Lake O and various canals had to operate on [restricted hours](#) due to the low water levels in the lake. In addition, while lowering the level of Lake O enabled a massive increase in native vegetation, it also interfered in the nesting season for some tens of thousands of wading birds that reside at the lake.

As previously noted, water supply for a variety of constituents is one of the congressionally authorized purposes for the lake. One of these constituents is the agricultural community south of the lake. It typically wants the lake levels high so that there is no chance that, even if there were a severe drought, they would not get all the water they want for their crops. To keep the corps from using operational flexibility to lower the level of Lake O, in August 2019, U.S. Sugar [sued the Army Corps](#). The court found in favor of the Army Corps and U.S. Sugar indicated that it [would not appeal](#) the ruling because it believed that the Army Corps has ceased its “rogue operations.”

Reducing Harmful Algal Blooms

The Army Corps’ civil works activities [traditionally have centered](#) on the planning, construction, and maintenance of improvements to rivers, harbors, and other waterways, as well as on flood control. In the recent past, the Army Corps has increasingly focused on environmental sustainability and [ecosystem](#) restoration in coastal areas and inland waterways. However, the corps has not typically played an active role in improving water quality.

The corps is currently exploring the option of implementing planned deviations from LORS to reduce the risk of exacerbating potential health concerns associated with harmful algal blooms (HABs) in Lake Okeechobee and the St. Lucie and Caloosahatchee estuaries while not impacting other authorized purposes of the water in the lake. Their intentions are documented in [this document](#). Reflecting the fact that the corps doesn’t traditionally focus on water quality, section 1.1 of that document explains why the corps believes they have the authority to implement these deviations.

In July 2020, the corps conducted a webinar to discuss the deviations they were considering. A copy of the slides used during that webinar can be found [here](#). As discussed in the webinar, the deviations from LORS 2008 that the corps is suggesting would be implemented under a variety of conditions, including if:

- An HAB is currently occurring in the lake, associated canals, or the estuaries;
- A state of emergency has been declared for an HAB;
- An HAB is forecasted;
- An HAB has occurred in the last 12 months and has caused environmental or economic harm.

The corps has stated that it would coordinate with relevant agencies such as the South Florida Water Management District before implementing any deviations to LORS. One of the deviations they are considering is making releases into both the St. Lucie and Caloosahatchee estuaries that are higher than

would be indicated by LORS. The goal of these releases is to reduce the need to make releases when an HAB is present. Another deviation they are considering is holding back water releases when an HAB is present with the goal of having the total volume of water that is released above and below LORS guidance balance out to be zero over the course of a year. For more detail on their proposed operational strategy, see [here](#).

Implementing these deviations to LORS would be beneficial to the Refuge as well as the rest of Southwest Florida as it would reduce the likelihood of HABs of the type that attacked the Refuge in 2018. However, not all the users of the water in Lake O will support those deviations. As was previously mentioned, water supply is one of the authorized uses for the lake. That is the justification for agricultural interests such as U.S. Sugar to fight attempts to lower the level of Lake O in the dry season. In addition, because Lake O is the backup source for drinking water for parts of Palm Beach, Broward, and Miami-Dade counties, during the public comment period of the July webinar hosted by the corps, multiple groups in those counties expressed their concern that the deviations the corps is considering represent a threat to their drinking water supply.

Conclusions

The deviations to LORS that the corps is seeking have the potential to significantly reduce the likelihood that a significant HAB will impact Southwest Florida in general, and the Refuge in particular. Analogously, the ongoing work that the corps is undertaking to create LOSOM has the potential to either significantly improve or degrade our water resources.

In the May 28 edition of “Ding” on the Wing, we issued a call to action to ask for your help stop the attempt on the part of some organizations to hijack the process that Army Corps has set up to create LOSOM. In the next DOTW we will let you know where that process stands.

Because the corps actively solicits public comments prior to making decisions about modifications to the Lake O release schedule, we will continue to reach out to you at appropriate times and ask you to provide input to the key decision-makers. We believe that those decision-makers are more influenced by input that reflects an accurate knowledge of the complexity of decision the corps is making. In this case, that means recognizing that there are many authorized purposes for the water in Lake O and that an effective release schedule relies on several factors, some of which, such as the upcoming weather and likelihood of an HAB, can only be stated in probabilistic terms.

In Case You Missed It: Florida’s Blue Green Algae Task Force is considering a toxic algae water quality standard. See [more](#).