

THE MAYO BUILDING 407 SOUTH CALHOUN STREET TALLAHASSEE, FLORIDA 32399-0800

# FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES COMMISSIONER NICOLE "NIKKI" FRIED

August 14, 2020

Chris Stahl, Coordinator Florida State Clearinghouse, Florida Department of Environmental Protection 3800 Commonwealth Blvd., M.S. 47 Tallahassee, FL 32399-2400

RE: Project FL202007029002C -- Department of Defense, Office of the Chief of Engineers, Department of the Army, Flood Control Projects, Supplemental Environmental Assessment and Proposed Finding of No Significant Impact 2020 Planned Deviation to the Water Control Plan for Lake Okeechobee and Everglades Agricultural Area (LORS 2008) Glades, Hendry, Martin, Okeechobee, and Palm Beach Counties, Dated June 2020.

#### Dear Mr. Stahl:

Please find below the Florida Department of Agriculture and Consumer Services (FDACS) comments on the Supplemental Environmental Assessment (EA) and Proposed Finding of No Significant Impact (FONSI) 2020 Planned Deviation to the Water Control Plan for Lake Okeechobee and Everglades Agricultural Area (LORS 2008) dated June 2020.

The proposed LORS 2008 2020 Planned Deviation is a significant change in operations that will fundamentally alter the volume, timing, and location of releases, and will lead to higher or lower lake stages at different times in the annual hydrological cycle compared to LORS 2008. The Supplemental EA provides limited evaluation of the full extent of system-wide potential to create a variety of detrimental low water and high-water impacts on the Lake Okeechobee Minimum Flow and Level (MFL), endangered species, and water supply for the environment, stormwater treatment areas, Seminole Water Rights Compact, Lake Okeechobee Service Area (LOSA) and the Lower East Coast (LEC). A full evaluation and review of the proposed deviation would provide greater transparency and clarity to regulated stake holders and would allow the Corps to analyze the potential for unintended consequences contained in the entirety of the operations allowed by the proposed deviation.

Historically, deviations related to established Corp projects and operations are limited in scope to one-time events on an as-needed basis. Contrary to criteria associated with other deviations, the open-ended conditions and operational uncertainties contained in the Supplemental EA for the proposed LORS 2008 2020 Planned Deviation could allow the USACE to implement the deviation as a long term interim operational plan with unpredictable outcomes and minimal operational guardrails. FDACS recommends that the Corps adequately define those conditions that necessitate any deviation and articulate clear and predictable conditions to provide guidelines for ending the deviation. The process should be subject to the same analysis under the National Environmental Policy Act (NEPA) that was afforded to the "interim" operations schedule that became LORS 2008. This will allow impacted stakeholders and the public the ability to understand and provide comment on the proposed actions.

FDACS supports finding ways to be responsive to the potential for Harmful Algae Blooms (HABs) and the goal of finding ways to improve the ecological health of Lake Okeechobee (Lake) and the St. Lucie and Caloosahatchee estuaries that protects both the human and natural environments while balancing the Comprehensive Everglades Restoration Plan (CERP) and the authorized purposes of the Central and South Florida Project (C&SF Project).

FDACS recommends that the Corps provide information regarding the criteria and guidelines for identifying an HAB that would require a deviation response. The documentation provided identifies four conditions when the proposed LORS08 Planned Deviation could be applied. The first condition regarding the presence of an HAB needs definitions or criteria to identify when an HAB is present, the second condition regarding emergency declarations for an existing HAB is a clear condition, the third condition where an HAB is "anticipated to occur" needs to be defined. The fourth condition regarding a past HAB is not a response to the actual conditions being encountered, so FDACS suggests it be removed as a deviation condition. Vague terms in key places fail to provide clarity as to their intended meaning and can lead to unnecessary confusion and unintended expectations.

The additional work the Corp has undertaken to provide some guardrails based on seasonality, Lake stage and recession or ascension rates, along with the modeling of additional scenarios, has moved the Supplemental EA in the right direction and is appreciated. Based on the additional criteria and evaluation, operational outcomes for the deviation could be subject to review and comment if the deviation were based on one of the modeled scenarios and limited to the criteria, operations and timing contained in that scenario. However, the deviation is not limited to a predictable operational plan for review. None of the modeled scenarios used the operational

flexibility the deviation proposes for LORS 2008 Part C which establishes allowable Lake Okeechobee releases to the WCAs during dry conditions and low Lake stages when LORS08 guidance is no releases to the WCAs. This omission, along with the stated intention that operations for each HAB under the proposed deviation will be unique, precludes the ability to undertake a full evaluation of the proposed LORS 2008 2020 Planned Deviation. FDACS recommends that the Corps more adequately quantify and justify the current potential to "withdraw" virtually unconstrained volumes of water resources from the Lake in the Intermediate, Low, Base Flow and Beneficial Use operational sub-bands without any control over the arrival of the anticipated "deposit" in the form of adequate precipitation through the Lake Okeechobee basin.

The Lake Okeechobee Operations Screening (LOOPS) modeling performed for the Supplemental EA indicates the proposed concept of water banking will not be effective and has multi-year impacts during the Period of Record (POR) simulated. Appendix B, Figure 1, illustrates the water bank effectiveness of the 2020 Planned Deviation for a modeled scenario with a 120,000 acre-ft credit limit. The methodology to zero out the volume ledger of the proposed deviation February 1 through December 1 on an annual basis is projected to meet the net zero intention in four of the fifteen years where deviation use is simulated to occur. Successful water banking is a key operational component in support of a FONSI determination. The simulated success rate of approximately twenty-seven percent during deviation years over the modeled POR indicates that low stage adverse impacts during below average rain fall climatological conditions, both single year and multi-year events, cannot be overcome by water banking. FDACS suggests that LOOPS evaluation of the water banking scenarios based on information presented in Appendix B does not support a FONSI determination.

Given its potential to substantially alter Lake releases on a long-term basis, while creating system-wide impacts not anticipated by LORS 2008, FDACS believes the proposed LORS 2008 2020 Planned Deviation legally constitutes an interim operational plan under the provisions of NEPA, like LORS 2008, and recommends that the Corps adopt the deviation through the development of an Environmental Impact Statement (EIS) to allow for adequate public input and the examination of possible consequences to the natural and human environment. FDACS suggests that regional modeling and more information is necessary to support the conclusions and evaluate potential impacts to C&SF Project purposes, the environment and other goals and objectives of LORS 2008, as well as any deviations that are legally required to be considered as part of the NEPA process. Additional supporting technical and scientific documentation, further development of guardrails, full hydrological analysis, and greater surety on conditions and

decision criteria for HAB operations, will result in a more effective and defensible operational foundation.

FDACS appreciates the opportunity to comment and looks forward to continued progress on the Lake operations through cooperative efforts. Additional technical comments are attached. Please contact me if you have any questions.

Sincerely,

Christopher Pettit, Director

Office of Agricultural Water Policy

Department of Agriculture and Consumer Services



The Mayo Building 407 South Calhoun Street Tallahassee, Florida 32399-0800

# FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES COMMISSIONER NICOLE "NIKKI" FRIED

## **MEMORANDUM**

**DATE:** August 14, 2020

**TO:** Chris Stahl, Coordinator, Florida State Clearinghouse, Florida Department of

**Environmental Protection** 

**FROM:** Rebecca Elliott, Environmental Manager, Office of Agricultural Water Policy

**SUBJECT:** Staff Technical Comments on the Department of Defense, Office of the Chief of

Engineers, Department of the Army, Flood Control Projects, Supplemental

Environmental Assessment (EA) and Proposed Finding of No Significant Impact (FONSI) 2020 Planned Deviation to the Water Control Plan for Lake Okeechobee

and Everglades Agricultural Area (LORS 2008) Glades, Hendry, Martin,

Okeechobee, and Palm Beach Counties, Dated June 2020.

Project FL202007029002C

The following technical review comments, supplemental to the FDACS letter, are provided for consideration regarding the Draft Revised Supplemental Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) 2020 Planned Deviation for LORS 2008. These technical comments apply to the proposed deviation and its concepts throughout the draft document.

## General Concern

The Draft Supplemental Environmental Assessment (EA) with a proposed Finding of No Significant Impact (FONSI) 2020 Planned Deviation for LORS 2008 does not identify and evaluate a selected operational schedule adequate for reviewing all the changes in operations allowed by the proposed deviation and the full range of potential impacts to both natural and human environments. The modeling and evaluation provided in the Draft Supplemental EA is a subset of possible operations and outcomes the deviation would allow. An undefined set of possible conditions would trigger an unspecified deviation planning process to create a unique operational plan each time the deviation is used. Evaluation of the full range of outcomes due to allowable deviation operations is not possible due to the many uncertainties involved in implementing the proposed deviation and lack of supporting information.

### Significant Operational Change

The 2020 Supplemental EA and proposed FONSI is an improvement over the 2019 EA and proposed FONSI. Guardrails based on season, lake stage, and ascension and recession rates have been added along with the evaluation of a greater range of modeled scenarios and the intent to establish a credit limit each time the deviation is used. However, it still includes extremely broad discretionary provisions that can fundamentally change the operations allowed.

#### Lacks Evaluation of Full Range of Potential Operations and Impacts

The deviation is not limited to a predictable operational plan for review. In the modeled scenarios, there was no use of the complete range of operational flexibility that would deviate from LORS 2008 operational guidance. The full extent of low water and high water impacts is still not clear.

Given its potential to substantially and unpredictably alter Lake releases and create system-wide impacts not previously evaluated, it seems the proposed LORS 2008 2020 Planned Deviation would benefit from an Environmental Impact Statement (EIS). An EIS would provide information to support the conclusions and evaluate potential impacts to the environment, authorized project purposes and other goals and objectives of LORS 2008.

The potential operational risks during low water stages are referenced in the letter this memo accompanies. The potential for the deviation to create high water risks include increased risk for Herbert Hoover Dike (HHD) failure and increased flooding potential in the areas that could receive Lake Okeechobee releases in volumes and seasons contrary to LORS 2008 timing and distribution of releases.

### Vague Criteria, and Decision-making Protocols

The decision-making process contains vague and undefined protocols with ambiguous descriptions of agencies and staff responsible for the process and decisions. The Lake Okeechobee Periodic Scientist Call (LO PSC) is identified as an appropriate forum. The current format of the LO PSC is not adequate for identifying HAB conditions or the development of unique operational schedules. Clearer descriptions are needed regarding the process that will take place when decisions are made about using the planned deviation and developing a unique operational schedule. There is a lack of well-defined criteria to be applied in implementing the process.

## Proposed Deviation Operations Contrary to LORS 2008 Intent

Releases in the Beneficial Use Sub-Band are contrary to the stated intent of LORS 2008 as adopted to preserve a minimal portion of the water supply purpose of the Central and Southern Florida Project (C&SF) while the HHD is being rehabilitated. Suggest there be no deviation advanced releases in the Beneficial Use Sub-Band to stay consistent with LORS08 that only beneficial water supply releases occur in the Beneficial Use Sub-band. While more guardrails have been provided in the June 2020 Supplemental EA compared to the August 2019 EA, advance releases in the Beneficial Use Sub-band to reduce lake levels unacceptably increases the risk of low water impacts to all the project purposes, including recreation, that rely on Lake Okeechobee's water supply in the dry season.

A buffer of 0.25 feet above the water shortage line is not adequate to provide the protections necessary for the human and natural environment. If the USACE retains advanced releases in the Beneficial Use Sub-band, recommend none be made below 12 feet and recommend a buffer of 0.5 feet above the water shortage line be applied at least through the dry season until June 1. Recommend terms like advanced releases will be "reduced" and "cut-back" within 0.5 or 0.25 feet of the Water Shortage Management Band be replaced with "ceased" and "releases will revert to the SFWMD Adaptive Protocols per the provisions of LORS 2008".

The proposed deviation operations have the potential to upend the water budget volume modeled in LORS 2008 and in Comprehensive Everglades Restoration Plan (CERP) project planning to meet water supply needs due to changes in the timing and distribution of water system-wide.

## Modeling of Proposed Water Bank Indicates It Will Not be Effective

The LORS 2008 Planned Deviation Draft Supplemental EA & FONSI proposes a water banking annual ledger which begins February 1 and allows advanced releases through late winter and spring with the intention to balance by December 1 by not making LORS 2008 releases in the late summer and fall. Model results presented in Appendix B indicate this methodology is not effective at avoiding more severe and frequent water shortages than would be experienced under LORS 2008 when wet season rainfall is below average and the advanced release withdrawals cannot be repaid.

The Water Bank methodology uses "up-to" maximums in the Supplemental EA modeling as the automatic release volume held back. Holding back from maximum release volumes is already a common Corps practice allowed under LORS 2008. The ability to choose different release volumes based on an allowable range is the source of much of the flexibility within LORS 2008. To assume maximum releases would always be made is an over prediction of release volume

"repayments" due to the deviation since the Corp often makes releases less than the maximum amount and already does under LORS 2008.

The timing of water supply availability is problematic for the proposed FONSI due to the deviation's potential to substantially lower Lake Okeechobee stage in the dry season. If water is not available in the dry season when it is needed most, future "repayments" in the wetter months will not mitigate water supply shortfalls for both the natural and human environment in real time.

#### LOOPS Model Results Not Adequate for Full Range of Regional Deviation Operations

Lake Okeechobee Operations Screening (LOOPS) modeling caps releases south at 60,000 acre ft per year and is not capable of accounting for the large volumes of advanced releases south that would be allowed by the deviation in the Low, Base Flow, and Beneficial Use Sub-bands during dry conditions contrary to LORS 2008 guidance. The scenarios offered in the June 2020 Draft Supplemental EA do not represent a full range of possible scenarios. The range of credit limit scenarios and how they might perform is an informative modeling screening exercise but does not include a regional evaluation of potential outcomes.

LOOPS use of the entire POR for the Lake stage duration curves to evaluate the deviation masks the disproportionate risk of low water impacts during the dry years and low lake stages. The deviation creates the largest difference from LORS 2008 operations during dry or low stage conditions when LORS 2008 calls for low volume or no releases, such as in the Beneficial Use Sub-band which is not subject to LORS 2008 regulatory releases even during wet conditions. Focusing the evaluation on deviation years and removing non-deviation years would provide a clearer picture of changes due to deviation operations.

#### Summary

The Draft Supplemental EA with a proposed FONSI 2020 Planned Deviation for LORS 2008 does not provide enough information for review and evaluation of all the deviation operations allowed. There is lack of definition for the conditions that would trigger deviation operations, lack of a specified process for developing a unique deviation operations schedule, lack of certainty for limits on detrimental impacts to authorized project purposes and lack of modeling results to support a system-wide evaluation.

A more beneficial approach overall can be managing Lake Okeechobee based on the stage and climatic conditions at a specific time in accordance with LORS 2008 while using the flexibility already allowed to support responsiveness to potential and existing HAB conditions. Deviations limited in scope to one-time events on an as-needed basis could be preferable.