

April 22, 2019

VIA EMAIL ONLY: LAKEOCOMMENTS@USACE.ARMY.MIL

United States Army Corps of Engineers
Jacksonville District
Attention: Dr. Ann Hodgson
Post Office Box 4970
Jacksonville, Florida 32232-0019

Re: United States Sugar Corporation's Scoping Comments regarding the Lake Okeechobee System Operating Manual

Dear Dr. Hodgson:

This firm represents the United States Sugar Corporation ("USSC"), an interested stakeholder in issues related to the management of Lake Okeechobee ("Lake"). We submit this letter on behalf of USSC, in response to the United States Army Corps of Engineers' ("Corps") request for public comment in the National Environmental Policy Act ("NEPA") scoping analysis for the Lake Okeechobee System Operating Manual ("LOSOM"). Consistent with NEPA's scoping process, we identify issues, alternatives, and potentially significant effects to be considered by the Corps, and respectfully request that the Corps include this letter and all attachments into the LOSOM administrative record.

USSC is an interested stakeholder in issues related to the Lake and its operations. USSC has a substantial interest in the Corps' development of LOSOM. Farming in Florida since 1931, USSC owns and farms approximately 245,000 acres of farm lands located Glades, Hendry, Palm Beach, and Martin counties. Within the LOSOM Study Area ("Study Area"),¹ USSC grows sugarcane, oranges, sweet corn and winter vegetables, relying on water from the Lake to grow its crops. Dependent upon weather and growing conditions, USSC produces over 8 million tons of sugarcane each year, providing approximately 10 percent of all the sugar produced in America. Sugar produced by USSC is used by food manufactures in the United States to make bread, canned fruits and vegetables, juices, beverages, and ice cream, to name a few. USSC is also one of Florida's major producers of oranges and orange juice products, providing 250 million glasses of premium orange juice each year, and making it one of the largest suppliers of orange juice nationwide.

¹ The LOSOM Study Area is depicted in Figure 1 of the Corps' LOSOM scoping letter dated January 29, 2019.

USSC has a long standing history as a good steward of its land, has been a major supporter of Everglades restoration, and contributes significantly to south Florida's thriving economy and growing communities. USSC employs close to 2,500 employees, and regularly supports numerous philanthropic efforts in its community, including hurricane relief, food banks, education and youth sports. The farmers in the Everglades Agricultural Area ("EAA") 1) have contributed approximately 100,000 acres of privately-owned farm land for Everglades restoration, 2) pay an agricultural privilege tax (a tax unique to the EAA) to support Everglades restoration, 3) have invested more than \$400 million in restoring and preserving the Everglades, and 4) implement the most successful and well documented EAA Best Management Practices program, reducing phosphorus loads in stormwater runoff by a long term average of 57 percent. No other community, business or special interest can claim this level of contribution for the betterment of south Florida's environment.

With these significant economic, environmental and social commitments within the Study Area, operating the Lake to meet the Congressionally mandated Central and Southern Florida Project ("C&SF Project" or "Project") purposes, which include water supply and flood protection, is of utmost importance to USSC.² USSC's farming operations depend on the Corps' proper balancing of the water supply and flood control purposes, as the Lake is an essential water supply source for agricultural production for south Florida. The Corps' temporary three-year Lake schedule, Lake Okeechobee Regulation Schedule 2008 ("LORS08") put USSC's, and south Florida's, water rights at severe risk. Now, with the long-awaited repairs to the Herbert Hoover Dike ("HHD") nearing completion, restoring USSC's and the region's water rights to the levels that existed with the last permanent schedule approved by the Corps, the Water Supply and Environment Schedule ("WSE"),³ is critical.

As the Corps develops LOSOM, USSC identifies the following issues and concerns that we request the Corps analyze:

The New Lake Schedule Must Allow For More Storage in the Lake, When Needed

The LOSOM schedule is the Corps' and the State's opportunity to realize the benefits from the significant investment made in repairing the HHD, and develop a balanced and holistic Lake schedule. LORS08 lowered the Lake, temporarily, to allow for the HHD to be repaired. But in doing so, LORS08 caused adverse effects to our communities with increased harmful

² See House Document 643, 80th Congress, for the cost-benefit analysis and support for National Economic Development; the Central and Southern Florida Flood Control District's ("CSFFCD") resolutions and the CSFFCD-related Florida Statutes recognized benefits including defined land use benefits, such as providing flood protection for over 531,000 acres of agricultural land in the Okeechobee – Everglades region.

³ The Corps' LOSOM website contains the July 7, 2000 WSE Record of Decision, the Errata to the Final Environmental Impact Statement, and the June 1999 Simulation of Alternative Operational Schedules for Lake Okeechobee, Appendices A, B, and C. We have included the November 1999 Final Environmental Impact Statement for WSE in Attachment 2.

discharges to the estuaries and diminished water supply for water users. Since 2001, the Corps has been repairing the 143-mile long HHD, at a cost of \$1.8 billion, with the State of Florida contributing \$100 million.⁴ With these repairs nearing completion, LOSOM is the Corps' opportunity to restore water supply performance, as it previously committed in its November 2007 LORS08 Final Supplemental Environmental Impact Statement. *See* pp. iv-v. The Corps should not spend resources analyzing alternatives that do not fully restore water supply to levels that existed prior to LORS08. The Corps should instead preserve its ability to meet all project purposes, in conjunction with Comprehensive Everglades Restoration Plan ("CERP")⁵ project components, and LOSOM's purpose and need should clearly state the need to restore water availability for all of south Florida's water users and uses, while reducing harmful estuary discharges.

As stated by the University of Florida's scientists, restoring the storage lost in LORS08 has been recognized as part of the solution to meet restoration goals, including reducing harmful discharges to the estuaries.⁶ It is well-established that LORS08 lowered the Lake by *1.25 feet* lower than prior schedules and in doing so lost more than *500,000 acre feet* of storage capacity.⁷ As further noted in a University of Florida publication, if the storage lost in the Lake due to LORS08 was restored with a new Lake schedule, it would provide for all of the water supply and environmental benefits the State of Florida expects from CERP:

"The current LORS 2008 is 1.25 feet lower than Run 25 and WSE. This equates to, on average, more than 500,000 acre feet of lost storage capacity in the lake. As a result, unless a new regulation schedule restores some or all of that capacity, there may be insufficient water stored in the regional ecosystem to provide all of the environmental and water-supply benefits expected to happen when CERP is complete. This is because, as noted earlier, the lake is the main place in the regional system to hold water in the dry season and then make it available for restoration south of the lake in the dry season. Options to make up for the lost lake storage include surface storage in other reservoirs beyond the capacity in the CERP plan, dispersed storage on land, or underground storage. Or the bands could be raised in a new regulation schedule for Lake Okeechobee."

⁴ Corps' HHD Rehabilitation Project Update Fact Sheet, Spring 2019. Retrieved on April 22, 2019 from <https://usace.contentdm.oclc.org/utills/getfile/collection/p16021coll11/id/3424..>

⁵ CERP Final Integrated Feasibility Report and Programmatic Environmental Impact Statement, April 1, 1999.

⁶ In 2015, University of Florida scientists recommended making changes to the Lake schedule to store more water. Graham, W.D, M.J. Angelo, T.K. Frazer, P.C. Frederick, K.E. Havens, and K.R. Reddy. 2015. *Options to reduce high volume freshwater flows to the St. Lucie and Caloosahatchee estuaries and move more water south from Lake Okeechobee to the southern Everglades: An Independent Technical Review by the University of Florida Water Institute*. University of Florida, Gainesville, FL, 143 pp. <https://www.flsenate.gov/UserContent/Topics/WLC/UF-WaterInstituteFinalReportMarch2015.pdf>.

⁷ Havens, K. E. (2018). *Managing High Water Levels in Florida's Largest Lake: Lake Okeechobee (TP-232)*. Gainesville: University of Florida Institute of Food and Agricultural Sciences. Retrieved April 16, 2019, from <http://edis.ifas.ufl.edu/pdf/SG/SG15400.pdf>.

The Corps' scoping letter states, "[t]he purpose of the Manual is to reevaluate and define operations for the Lake Okeechobee regulation schedule that take into account nearly complete CERP infrastructure which will soon be operational components of the water management system." LOSOM's project purpose should capture all of the C&SF Project purposes to allow for a balanced schedule. Consistent with these University of Florida recommendations, it is critical to restore water supply and storage capacity in the Lake to at least the amount that existed prior to the temporary LORS08.

WSE, the Last Permanent Schedule, Must be the Basis of Comparison for Evaluating Alternatives to Objectively Assess Effects on South Florida

The Corps should compare all alternatives modeled in LOSOM to WSE, the last permanent schedule, rather than the temporary LORS08, which by its own admission reduced water supply for all of South Florida. Because the HHD repairs were underway, LORS08 had a high stage hard constraint that artificially limited the alternatives. It also created a base flow band that conflated the federal authority to prevent dam failures with the State's authority to make water allocations for environmental and economic uses. If the Corps only compares LOSOM to LORS08, any perceived benefits over LORS08 would be illusory due to LORS08's hard constraints that diminished the State's ability to allocate water according to state law. Such a result would be contrary to the required "hard look" in NEPA. Using WSE as the basis for comparison is appropriate, even necessary, since LORS08 was a temporary schedule that was unable to properly balance project purposes due to the HHD repairs. We encourage the Corps to use WSE as the basis of comparison to fully and equitably assess the effects, both positive and negative, of LOSOM.

To illustrate the basis of comparison, we include Attachment 1, comparing the Lake's performance measures against WSE, against LORS08 and against a schedule with a low elevation of 11 feet. On balance, the LORS08 schedule remains inferior for meeting the Lake's performance measures or balancing the Project's purposes. A schedule targeting a June 1st elevation of 11 feet is equally inferior. We respectfully request that the Corps consider Attachment 1 as it develops its alternatives for LOSOM and insure that WSE is used as the basis of comparison. The complexities associated with balancing the C&SF Project's purposes merit this type of NEPA analysis.

LOSOM Must Protect Florida's Water Resources, as Mandated in the CERP Savings Clause

The Corps discusses the integral nature of Lake Okeechobee and CERP, in its scoping information materials when it states, "[r]egulation of Lake Okeechobee is an integral part of the restoration effort on-going in central and south Florida, *working with the Comprehensive*

Everglades Restoration Plan to better manage the hydrology of the regional system and meet the many-faceted needs of the urban and natural environments.” (emphasis added).⁸

The CERP savings clause is found in Water Resources Development Act of 2000 (“WRDA 2000”).⁹ Section 601(h)(1) of WRDA 2000 states, “[t]he overarching objective of the Plan is the restoration, preservation, and protection of the South Florida Ecosystem while providing for other water-related needs of the region, including water supply and flood protection.” Section 601(h)(5)(A)(i) adds that “[u]ntil a new source of water supply of comparable quantity and quality as that available on the date of enactment of this Act is available to replace the water to be lost as a result of implementation of the Plan, the Secretary and the non-federal sponsor shall not eliminate or transfer existing legal sources of water, including those for . . . agricultural or urban water supply. . .” The Plan is defined as CERP, which includes operational features.¹⁰ Indeed, CERP provided a framework to guide modifications, including operational modifications, to the C&SF Project to meet the water related needs of South Florida. LOSOM, a system operating manual, which is a component of the C&SF system operating plan, is, therefore, subject to the federal savings clause in WRDA 2000.¹¹ Nineteen years after the enactment of WRDA 2000, LOSOM will be developed under the full application of WRDA 2000, and as part of CERP operations. Congress recognized that CERP, and the operation of the C&SF Project, are intricately linked. LOSOM underscores this today.

The State will also be required to conduct the state-mandated savings clause analysis under the requirements in Section 373.1501(5), Florida Statutes. Because LOSOM is an integral part of CERP operations, both the State and the Corps must adhere to their respective savings clause requirements. These legal mandates protect Florida’s water resources and economy, and were a cornerstone of CERP and the State of Florida’s decision to embark on funding CERP projects for its citizens.¹² Therefore, in the development of LOSOM, the Corps and the State must fully account for all project authorities, which include the savings clauses in WRDA 2000 and Chapter 373, Florida Statutes.¹³

⁸ LOSOM Facts & Information. Feb. 2019. Retrieved April 22, 2019, from <http://usace.contentdm.oclc.org/utills/getfile/collection/p16021coll11/id/3406>.

⁹ Water Resources Development Act of 2000, Pub. L. No. 106-541, 114 Stat. 2572.

¹⁰ The “Plan” is defined as “the Comprehensive Everglades Restoration Plan contained in the “Final Integrated Feasibility Report and Programmatic Environmental Impact Statement”, dated April 1, 1999, as modified by this section.” Section 601(a)(4) of WRDA 2000.

¹¹ CERP contains construction and operational features. LOSOM is an operational feature of CERP. See WRDA 2000; CERP Final Integrated Feasibility Report and Programmatic Environmental Impact Statement, April 1, 1999; 33 C.F.R. § 385.28.

¹² See Local Government Resolutions from Palm Beach County, City of West Palm Beach, Okeechobee County, Palm Beach Soil and Water Conservation District and Lake Worth Drainage District included in the Supporting Documents.

¹³ The Corps’ January 29, 2019 letter cites the LOSOM project authority as Section 1106 of the 2018 Water Resource Development Act (WRDA).

Additional Operational Flexibility Violates NEPA and Should Not Be Included in LOSOM

LOSOM formulation should not include additional operational flexibility. LORS08 included additional operational flexibility, which allows for increased adverse effects to users and the Project's purposes, not previously evaluated. The U.S. Fish and Wildlife Service stated that the uncertainty injected by this flexibility undermines the ability to fully evaluate the effects on fish and wildlife and undertake a full analysis of the effect on the human environment.¹⁴ The risks from additional operational flexibility can also result in serious, adverse economic and natural resource consequences throughout the south Florida region, and these risks require analysis. Additional operational flexibility may also skew monitoring data, compromising the ability to accurately assess progress towards restoration by CERP project components. The Corps' memoranda for the record (October 2018 and February 2019) issued to document the use of recent additional operational flexibility in LORS08 did not undertake an analysis of all the potential effects to the human environment, provided no opportunity for public engagement, and were inadequate as a NEPA analysis.¹⁵

The Corps' regulations already provide a process for deviations as a means to alter Lake operations, with safeguards to protect the Project purposes and allow input. LOSOM should not need to implement additional operational flexibility because it should employ sufficient flexibility within the schedule through climate forecasts, hydrologic conditions, and 'up to' volumes in its release decision trees. If LOSOM requires a change, the deviation procedures could be implemented, which provide for meaningful public input and scientific analysis, currently lacking in LORS08's additional operational flexibility process. LOSOM is being developed at a time when public officials and stakeholders are demanding transparency in science and meaningful public discourse. Additional operational flexibility provides none of these and should have no place in the development of LOSOM.

LOSOM Should Not Rely on the State's Use of Portable Forward Pumps to Meet its Project Purposes

LOSOM should be developed to accomplish the Congressionally-authorized, multiple Project purposes using existing Project infrastructure, and not rely on the State's voluntary implementation of forward pumps to meet federally mandated purposes. The State-owned forward pumps were most recently permitted¹⁶ as a means for the State to mitigate impacts to water supply due to previous Corps operational decisions. They should not be relied upon or considered in the LOSOM formulation as they are not federally authorized Project components.

¹⁴ See U.S. Fish and Wildlife Service's LORS08 Fish and Wildlife Coordination Act Report, October 12, 2007, pp. 52, 54-55, which noted concerns regarding the breadth and frequency of use of additional operational flexibility.

¹⁵ A recent letter, dated March 15, 2019, from a group of stakeholders outlines concerns with the use of additional operational flexibility, and is included in the Supporting Documents.

¹⁶ U.S. Army Corps of Engineers, Permit No. SAJ-2006-0 1969 (SP-KDS), dated August 7, 2018, issued to South Florida Water Management District.

Moreover, these pumps were only permitted for five (5) years per the Corps, despite requests from the State for a permit duration commensurate with the LORS08. If, however, the forward pumps are necessary as a result of LOSOM, then similar to other Project infrastructure, the Corps should analyze the pumps consistent with how they are currently permitted, be responsible for sharing the cost associated with their installation and use, as well as any change in permitting or the Section 7 consultation with the Service regarding listed species. Lastly, if the Corps relies on the State's operation of forward pumps to meet its Project purposes, then these pumps must be authorized as permanent facilities necessary for achieving the Project purpose and should not be subject to recurring, 5-year regulatory Corps review, as if they were unrelated to the Lake schedule.

USSC Supports a New Lake Schedule that Equitably Balances All Project Purposes

LORS08 was a temporary risk management measure, anticipated by the Corps to be in place for only three years while the HHD repairs were conducted.¹⁷ Now, 11 years after adopting LORS08, the HHD repairs are nearly complete and, for the first time, new CERP projects are coming online, including the C-43 Reservoir and C-44 Reservoir and stormwater treatment area. A comprehensive LOSOM formulation should include analysis of the effects on the following: the stormwater treatment areas, salt-water intrusion, impacts to fish and wildlife and natural areas such as the Lake Worth Lagoon, water rights, navigation, and the resiliency of the regional water system to changing climatic conditions. We encourage the Corps to also consider the incremental additions of the newly constructed state and CERP projects, and the operation of these projects to improve the water resources in the C&SF Project.

The LOSOM schedule will be the first schedule to operate the C&SF Project to accomplish CERP's overall objectives.¹⁸ USSC supports the Corps replacing LORS08 with a schedule, similar in performance to WSE, that provides the opportunity for more storage, when needed, and a holistic balancing of all the Project purposes. USSC also supports the Corps' shift to system operating manuals to ensure the overarching objectives of CERP are achieved. To this end, LOSOM can be aligned with the Integrated Delivery Schedule¹⁹ and define operational assumptions that reflect sequencing commitments and the capabilities of existing Project infrastructure.

We encourage the Corps to incorporate our comments into the LOSOM analysis. We look forward to continuing to work with the Corps and the South Florida Water Management District on this critical matter. Thank you for the opportunity to comment and we request that the Corps add this letter and our supporting documents into the LOSOM administrative record.

¹⁷ See ER 1110-2-1156 on dam safety.

¹⁸ See 33 C.F.R. § 385.28.

¹⁹ Integrated Delivery Schedule, July 2018 Update, Retrieved April 22, 2019, from <https://usace.contentdm.oclc.org/utis/getfile/collection/p16021coll11/id/2641>.

Sincerely,



Luna E. Phillips

On behalf of the Gunster Law Firm

Attorneys for United States Sugar Corporation

LEP/mam

Enclosures: Attachment 1 – Comparison Chart of Lake Okeechobee Regulation Schedules
Performance

Attachment 2 – Supporting Documents for LOSOM Administrative Record
(Submitted under separate cover.)

cc: *Comment Letter and Attachment 1 Only:*

Colonel Andrew Kelly, United States Army Corps of Engineers

Lieutenant Colonel Jennifer A. Reynolds, United States Army Corps of Engineers

Ms. Kim Taplin, Senior Program Manager, United States Army Corps of Engineers

Mr. Tim Gysan, Project Manager, United States Army Corps of Engineers

Mr. Eric Summa, Chief, United States Army Corps of Engineers

Ms. Erica Skolte, Public Affairs Specialist, United States Army Corps of Engineers

South Florida Water Management District Governing Board Members

Mr. Drew Bartlett, Executive Director, South Florida Water Management District

Ms. Jennifer Smith, Chief of Staff, South Florida Water Management District

Ms. Paula Cobb, General Counsel, South Florida Water Management District

Client

Attachment 1

Comparison Chart of Lake Okeechobee Regulation Schedules Performance

ATTACHMENT NO. 1

To

United States Sugar Corporation's (USSC) Lake Okeechobee System Operating Manual (LOSOM) Scoping Comment Letter, April 22, 2019

Lake Okeechobee Regulation Schedule Performance Comparison

Green = Best Performer, Red = Worst Performer

Performance Measure ⁴	Lake Schedule		
	WSE ¹	LORS08 ²	Lake to 11' ³
Number of months with Lake triggered damaging St Lucie estuary flow greater than 2,000 cfs	14	19	29
Number of months with Lake triggered damaging Caloosahatchee estuary flow greater than 2,800 cfs	50	36	52
Mean annual Lake regulatory discharge to the St Lucie in thousand acre feet	169	178	288
Mean annual Lake regulatory discharge to the Caloosahatchee in thousand acre feet	437	476	562
Number of months with Caloosahatchee estuary mean monthly flow less than 300 cfs	186	106	141
Number of Lake Okeechobee Service Area (LOSA) water supply cutback months	22	37	72
Number of damaging LOSA water supply cutback years greater than 100,000 acre feet	7	8	16
LOSA 10 drought year average cutback volume in thousand acre feet	163	221	300
Percent of time Lake Okeechobee is in the preferred stage envelope	29.3%	28.7%	20.8%
Number of Lake Okeechobee Minimum Flow and Level exceedance events	5	10	15

1) Schedule developed by the SFWMD and adopted by the Corps in 2000.

2) Temporary Schedule adopted by Corps in 2008 due to problems with the Herbert Hoover Dike.

3) Operational strategy to lower the lake to 11' prior to the wet season.

4) Modeling was performed using the Lake Okeechobee OPERations Screening (LOOPS) Model version 6.28.1. The LOOPS Model was developed by the SFWMD to provide rapid screening-level testing of operating rules for Lake Okeechobee. The performance measures listed are standard model output. LOOPSv6.28.1 has a 46 year period of record.