



**LEE COUNTY**  
SOUTHWEST FLORIDA

**BOARD OF COUNTY COMMISSIONERS**

Bob Janes  
*District One*

August 20, 2007

A. Brian Bigelow  
*District Two*

Yvonne Harberer  
U.S. Army Corps of Engineers  
P.O. Box 4970  
Jacksonville, FL 32232-0019

Ray Judah  
*District Three*

Tammy Hall  
*District Four*

Frank Mann  
*District Five*

Dear Ms. Harberer:

Donald D. Stilwell  
*County Manager*

David M. Owen  
*County Attorney*

Diana M. Parker  
*County Hearing Examiner*

As you are aware, Lee County ("the County") has been very engaged in the progress of the Lake Okeechobee Regulation Schedule Study ("LORSS"). The County, containing the Caloosahatchee River and Estuary, is a recipient of Lake Okeechobee discharges and as such, the LORSS has a direct impact on the health of our ecosystem. Our strong tourist-based economy thrives on health of our River, beaches and Estuary. The County understands that given the current constraints of the system, tangible benefits to Lake Okeechobee and the coastal Estuaries, are difficult to achieve. While there is some potential improvement to the Caloosahatchee River and Estuary with this new Regulation Schedule, the LORSS it is still far from a holistic solution because that will require additional water storage projects and conveyance to the southern part of the Everglades.

We have monitored the progress of, and provided comments relative to, the previous versions of the LORSS documents. Please accept this correspondence, and include it as a part of the record, on the August 2007 tentatively selected plan ("TSP" or "new TSP") for the Revised Draft Supplemental Environmental Impact Statement ("SEIS") for the LORSS. Our key points regarding the new TSP are as follows:

- **Parity for downstream receiving waters and estuaries.** This TSP indicates there should be parity among the two estuaries in terms of no additional harm in high discharge events.
- **The 17.25' Constraint.** We appreciate the Corps' response to our concerns regarding the effect of the previous 17.25' constraint on the TSP alternatives. The decision to formulate new alternatives that incorporate the Herbert Hoover Dike ("HHD") issues as a performance measure, rather than a constraint, is one of many factors that may result in somewhat better, although, in our opinion, not sufficiently better, performance for the Caloosahatchee River and Estuary over the last TSP. Evaluation of this performance measure shows only 8 days (over a 36 year period of record) where the Lake is above 17.25'. While the County understands the public safety concerns regarding the HHD, we also note


that much damage is done to our interests to avoid a very low-probability event. We recommend that the Corps should revisit this Regulation Schedule once the HHD rehabilitation is substantially complete.

- **Improvement with this TSP.** The SEIS asserts that there is an improvement by 6 months over the period of record, as compared to the previous TSP, in terms of high discharge events, but there is no improvement as compared to the current Water Supply and Environmental (“WSE”) schedule. There is slight reduction in the duration of those events. As expected from a lower Lake schedule, the corollary to that is that there is an increase in months where there are less flows to the Caloosahatchee River and Estuary. This TSP therefore does not represent a fundamental change in how the Lake is operated.
- **Pulse releases and base flows.** The SEIS asserts that there is an increase in Level 1 and 2 pulses (in terms of cubic feet per second discharge rates) and the reduction of the maximum Caloosahatchee discharges when the Lake stage is within the Intermediate operational band. The net effect of these changes appears to be to increase low volume discharges to avoid later high volume discharges.
- **Update Timelines.** The implementation of this LORSS has been delayed and it is likely that the various Comprehensive Everglades Restoration Plan (“CERP”) projects that will provide more water storage, thus taking pressure off of the Lake, will be delayed as well. The end result is that this “interim” schedule may be in place longer than 2010. The revised SEIS should accurately account for timeframes for the development of the “permanent” schedule.
- **Revision of water shortage triggers.** The County concurs in the use of the 2006 Lake Okeechobee Water Shortage Management Plan (“LOWSM”) and the other modeling updates, as the best available information to incorporate into the SEIS at the moment. But of concern, the July 2007 South Florida Water Management District Governing Board meeting included a significant discussion on the need for revisions to how the agency approaches drought management. It is clear from that discussion that the LOWSM and water shortage rules will be revisited and the effect on the TSP is unknown.
- **Clarify use of additional storage lands.** While the County understands that the goal is to first make releases to additional storage areas to minimize harmful flows, the specifics of the amount of land and the decision process to utilize those lands are unclear. The Corps has asserted that these are State actions, which we do not understand, as the storage proposals are directed at improving water management in the Lake, which is a Corps’ responsibility. At a minimum, the Corps should work with the

South Florida Water Management District ("SFWMD") to address this decision process and clearly articulate what the benefits will be before the Final SEIS.

It is the County's position that while there has been some improvement when reviewing this TSP and comparing it to the last one, there is little improvement from the current WSE schedule. This latest proposal does not solve the fundamental long-term problems of the Caloosahatchee Estuary, caused by releases from the Lake. With the other problems of CERP water storage project delays, the delay in this TSP and potential revisions to the SFWMD water shortage triggers, it is clear that the "mitigation strategies," such as water storage on additional SFWMD lands, become all the more important. It is critical that these mitigation strategies must be addressed now before this SEIS is finalized and the new TSP is implemented. Clarifying and finalizing the SFWMD water shortage triggers and policy is central to this effort of addressing these mitigation strategies. The County looks forward to continuing to work with the Corps as this new TSP is finalized.

Sincerely,



Commissioner Bob Janes, Chairman  
Lee County Board of County Commissioners

Enc.: Comments

Cc: Ray Judah, Commissioner, Lee County  
Tammy Hall, Commissioner, Lee County  
Frank Mann, Commissioner, Lee County  
A. Brian Bigelow, Commissioner, Lee County  
Jim Lavender, Director, Lee County Public Works  
David Owen, Esq., Lee County Attorneys Office  
Roland Ottolini, Director, Lee County Natural Resources  
Kurt Harclerode, Operations Manager, Lee County Natural Resources  
John J. Fumero, Lewis, Longman & Walker, P.A.  
Pete Milam, U.S. Army Corps of Engineers  
Kim O'Dell, South Florida Water Management District

Comments regarding the *Revised Draft Supplemental Environmental Impact Statement: Lake Okeechobee Regulation Schedule*, (“SEIS”) June 2007.

### **General Comments:**

- For the purposes of these comments, the terms tentatively selected plan (“TSP”), Alternative E and “T3” are the same alternative, which is the currently chosen plan.

Section 1.4, Page 7: We continue to support the agency goal (or objective) of achieving “optimal” lake levels and reduction of high regulatory releases to the estuaries.

Section 8, Pages 183-185: The current TSP appears to mark an improvement over the August 2006 TSP.

### **Timing and Scheduling**

Section 1.5, Pages 8-9: This section outlines Phase 1, 2 and 3 efforts to modify the Lake’s regulation schedule. While the Corps is currently in the midst of Phase 2, it is clear that this effort has been delayed, largely due to drought management issues and reformulation of the August 2006 TSP, but work has been delayed in this effort. Phase 3 efforts expected to begin in late 2007 are likely delayed as well. This revised SEIS should reflect updated timelines to accurately account for this “interim” schedule as well as the development of the “permanent” schedule to be completed under Phase 3.

Section 1.7, Page 11: The County is concerned that until more storage (significant storage) is brought on line, the Corps will make only minor improvements in the Lake’s schedule.. Mindful of that concept, Phase efforts must be scheduled and based on real timelines that are affected by the authorization and funding of Comprehensive Everglades Restoration Plan (“CERP”) projects and Acceler8 projects. While Band 1 of the Master Implementation Sequencing Plan (“MISP”) may provide the best information on the projected schedules of these projects, the SEIS should reflect the reality that a permanent schedule by 2010 is not realistic. *See also*, “Proposed Operational Guidance,” Page A-7.

### **Revisions to Assumptions**

Section 1.6, Page 9: This section describes the array of alternatives in the previous TSP. The development of those alternatives, with constraints due to Herbert Hoover Dike (“HHD”) integrity issues, is described. We appreciate the Corps’ efforts to respond to west coast estuary concerns and the decision to formulate new alternatives that incorporate the HHD issues as a performance measure rather than a factor that removes alternatives from further consideration. *See also*, discussion in Section 2.2, Page 16. But, as set forth herein, we believe there are still many other factors that need to be considered if the SEIS is to adequately address the impacts of Lake releases on the Caloosahatchee River and Estuary.

Section 2.2, Page 16: The County concurs in the use of the 2006 Lake Okeechobee Water Shortage Management Plan (“LOWSM”) and the other modeling updates, as the best available information to incorporate into the SEIS at the moment. But of concern, the July 2007 South Florida Water Management District Governing Board meeting included a significant discussion on the need for revisions to how the agency approaches drought management. It is clear from that discussion that the LOWSM and water shortage rules will be revisited. The timing of these changes, and the scheduling of modeling those effects in conjunction with this TSP, are unclear from the SEIS. Section 2.3 also acknowledges these potential rule revisions. The Corps states that “[b]ased on guidance from SFWMD, the 2006 draft LOWSM plan was not anticipated to undergo significant change prior to the approval by the SFWMD Governing Board later in 2007.” The fact is, this expectation may no longer be correct, and the effect on the current TSP will be unknown. *See also*, “Lake Okeechobee Management Bands, Water Shortage Management Band,” Page A-8-9.

Section 2.3, Page 17: The 2006 alternatives were based on a 1.0’ lowering of the Supply Side Management line (“SSM”), while the 2006 LOWSM plan utilizes a lowering of the “trigger line” by 0.8’. There are significant differences in the performance of the alternatives due to the elevation of this trigger line. While the 2006 LOWSM line is probably a more accurate depiction of where the ultimate trigger line may end up, again, there is still some level of uncertainty surrounding where this line will be and what the effect may be. The trigger line represents a significant element of the regulation schedule. The Corps and SFWMD should use every effort to finalize the LOWSM plan, model its effects in the context of the TSP, and incorporate those results into the Final SEIS.

Section 2.5, Page 21: This section should be updated based upon the fact that the temporary forward pumps have been constructed and the SFWMD is no longer “proposing” these structures. The section should also describe the status of the permanent forward pumps and what changes, benefits, impacts or differences may occur due to their use in the context of the TSP.

Section 2.6.6, Page 54: This section describes the changes that have occurred to the TSP. One of the key factors of the new TSP is the increase in Level 1 and 2 pulses (in terms of cubic feet per second discharge rates) and the reduction of the maximum Caloosahatchee discharges when the Lake stage is within the Intermediate operational band. The net effect of these changes is to increase low volume discharges to avoid later high volume discharges. The reduction in maximum Caloosahatchee discharges is important to the Caloosahatchee Estuary, and is a necessary element of this TSP. *See also*, Section 3.1.

Section 3.3, Page 77: In the “Operational Band” section a “base flow release to the Caloosahatchee Estuary” is described as a release from Lake Okeechobee at S-77 to achieve a 450 cfs flow at S-79.” This operation considers base flow from the basin and allows Lake Okeechobee to supplement the increment between the basin flow and the 450 cfs. This operation, in conjunction with the increased lower volume pulse releases,

would appear to directly benefit the estuaries. Further, this TSP recognizes parity among the two estuaries by allowing for flexibility to divide these releases between the two estuaries (650 cfs) as needed to minimize impacts or provide additional benefits.

Section 3.4, Page 80: The section on “Make-Up Releases” needs to be expanded to include environmental considerations before the release is made. The section describes the operation as allowing for releases to be “made up” for water that could not be moved out of the Lake due to high water elevations in the water conservation areas (“WCAs”), stormwater treatment area (“STA”) capacity limitations and conveyance limitations in the Everglades Agricultural Area (“EAA”). The targeted releases limited due to these constraints can later be “made up” from Lake Okeechobee “as soon as possible” and “may occur when Parts C and D do not allow releases or prescribe lower volume releases.” While these releases are not to exceed 2,800 cfs at the S-79, when the Lake is below the Intermediate Sub-Band, the seasonality and estuary conditions are equally important to consider before making these releases. The County believes that the limitation to 2,800 cfs, when the Lake is below the Intermediate Sub-Band, should be expanded to specifically include consideration of the season and estuary conditions before “Make-Up Releases” are made. *See also*, Page A-12. We also are concerned that these constraints represent a greater level of concern by the Corps for the WCAs than for the Caloosahatchee Estuary.

Section 3.6, Page 81: Many stakeholders were concerned, in relation to the last TSP, that the most recent 2001-2005 weather conditions had not been considered. Section 3.6 describes the Corps’ efforts to include some level of analysis (Lake Okeechobee Operations Screening Model “LOOPS”), in the development of this TSP, to include those years due to the unusual hurricane season and drought events. *See also*, Section 4.2. However, this analysis should be more robust.

This modeling is also addressed in Appendix E, Page E-46-47 and shows the number of months with average discharge to the Caloosahatchee greater than 2,800 cfs is reduced from 25 to 22 months, but there is an increase by 2 months of flows greater than 4,500 cfs. Please explain whether or not this increase in high discharge events is likely influenced by the unusual hurricane activity in those years or not.

The Section also describes “additional operational flexibility” used to address circumstances not evaluated as part of this SEIS. This “additional operational flexibility” presumably replaces the previous “Non-Typical Operations” (“NTO”) concept in the previous SEIS. The County understands the need for additional operational flexibility to address unforeseen conditions, and this is important to allocate burdens and benefits to the natural system equitably. The Section concludes with a discussion on public notification of these operations. The County’s primary comment is that all interested parties should be involved in implementing these procedures before they are “noticed” of the decision. Experience has shown with the previous TSP that public involvement in these types of decisions can result in a better effect on the environment overall. *See also*, Page A-13. In addition, we believe that the Corps should prepare additional NEPA documentation at the time it makes the decisions, to ensure intelligent decision making.

Section 4.3.2, Page 87: It is the County's understanding that hydrological model output assumes maximum practicable releases from Lake Okeechobee within each decision tree band, with consideration of downstream operational constraints and that this maximum releases are not always implemented. Essentially, this paints a "worst case scenario." This section should be expanded to describe how conservative the performance evaluations will be due to this effect.

Section 4.4, Page 94: The SEIS acknowledges that modification of water shortage rules is important as the Preferred Alternative model run projects lower lake levels more often than the existing WSE schedule. This results in more Lake Okeechobee Minimum Flow and Level ("MFL") violations and the need for water shortage rule revisions that address this issue. This makes our previous comments regarding the July SFWMD Governing Board discussion, in the context of water shortage rule revisions and the use of 2006 LOWSM, all the more important.

Additionally, analyzing the current TSP in the context of current water shortage triggers ("WST") against 2006 LOWSM for performance is helpful to understand the importance that these triggers have on environmental and water supply performance. Any additional changes in the water shortage rules or triggers (or revisions to 2006 LOWSM) must be considered in the Final SEIS. *See also*, Section 5.8.

#### **Additional Storage Areas**

Section 3.2, Page 75: This section states that "[w]hen the Operational Guidance and/or basin conditions between Lake Okeechobee and the estuaries result in flows deemed undesirable by SFWMD to the estuaries, the SFWMD may seek to store Lake Okeechobee water on available SFWMD designated lands." The County also understands that this Operational Guidance is not incorporated into any alternative analysis and that performance of the TSP can likely be enhanced by this operation. While the County understands that the goal is to first make releases to alternative storage areas to minimize harmful flows, the specifics of the amount of land and the decision process to utilize those lands are unclear. We do not believe that these should be just state actions, because they are designed to address the problems caused by the Corps' management of the Lake. The Corps should work with the SFWMD to address this decision process and clearly articulate what the benefits will be before the Final SEIS.

Section 3.3, Page 76: In the description on the "Water Shortage Management Band," the document states that draft Water Shortage Management Band elevations may change upon completion of SFWMD's rulemaking process in 2007." As stated above, the rulemaking process may be more expansive than originally contemplated, and the SFWMD and Corps should work to ensure that all analysis is complete before the Final SEIS.

Section 4.5, Pages 95-99: This Section describes the use of SFWMD lands for additional water storage as a precursor to higher volume discharges, thus minimizing impacts to

downstream receiving waters. The County understands that this is one of the “additional considerations” that exists which can further improve performance of the TSP, this is a non-Federal action, and that the modeling of the alternatives does not consider these lands or operations. It is important that these operations are more clearly articulated in this SEIS process so that stakeholders can formulate a well-informed opinion as to the importance of this additional storage to success of this TSP. From a modeling perspective, many of the assumptions make sense such as the lands are actually available with all infrastructure, local basin runoff considerations, and the storage is utilized before releases are made. But the SEIS still fails to sufficiently analyze key issues, for instance:

- What lands (and how much) have been identified/committed for this storage?
- How much infrastructure and/or expense is necessary to make these lands available for storage?
- How soon can the storage be brought on line as modeled?
- Is the SFWMD planning for 150,000 acre-feet of storage, 450,000 acre-feet of storage, or something in between?

It is the County’s belief that based on the preliminary analysis contained in the SEIS and previously circulated by the SFWMD, significant benefits may occur for the Caloosahatchee once this storage comes on line. These include: a reduction of flows greater than 4,500 cfs by four months to eight months (for the 150,000 acre-feet and 450,000 acre-feet of storage scenarios respectively). This analysis also shows a reduction of flows greater than 2,800 cfs by six to seven months (for the 150,000 acre-feet and 450,000 acre-feet of storage scenarios respectively). These benefits are not without trade-offs though, and utilizing that storage during intermediate high flow events makes it unavailable later to capture extreme high flow events. Further analysis on the optimal operations (and the timing or use of that storage) for these additional water storage area is necessary to determine when that storage should be utilized and what the water quality impacts may be; these are simply to be “defined in the future.”

### **Water Quality**

Section 5.9, Pages 131-133: This Section primarily focuses on the impacts from nutrient loading to the Caloosahatchee Estuary and the allocation of that loading between the Lake Okeechobee, River and Estuary basins. The discussion of nutrient loads does not analyze the effects of those loads on ecological factors or evaluate the different alternatives’ effects on nutrient loading. This discussion ignores the water quality implications of delivering extreme freshwater flows, thus creating an imbalance in the salinity envelope for the Estuary. While the County recognizes that some nutrient loading to the Caloosahatchee comes from other sources, the impacts to the Estuary from Lake Okeechobee discharges are significant, especially in years with high Lake discharges. In fact, these Lake discharges are the largest contributor of nutrients to the Estuary).

The revised draft SEIS still does not adequately analyze the water quality effects of the different alternatives. The only measure of water quality considered by the Corps is

salinity, which is not directly evaluated but is approximated by flow rates. In addition, rather than analyzing the effects of each alternative on the incidence of harmful algal blooms, the SEIS dismisses the connection between high nutrient content in Lake Okeechobee discharges and the incidence of harmful algal blooms, including blue-green algae, red tide, and red drift algae. Nor does the revised SEIS evaluate the potential impacts of these discharges on Lee County's drinking water supply. The SEIS also does not contain any real analysis of the effect poor water quality has on endangered and threatened species in the Caloosahatchee Estuary. The County continues to be very concerned about impacts to these species and other biota.

Section 6.21, Pages 174-175: This Section should be expanded to include a discussion of the projects and initiatives the SFWMD will be undertaking after the passage of the Northern Everglades and Estuary Protection Act ("NEEPA"). This Section should also include more detail on the potential for changes to 2006 LOWSM, the SFWMD's Drought Management Policy, any Lake Okeechobee MFL changes or any other rule changes that may effect WSTs or drought management.

Section 6.2.2, Pages 137-138: Table 6-2 outlines the mean monthly flows to the Caloosatchee as a result of the various alternatives and No-Action scenario. In extremely high discharge events, the Caloosahatchee performance is no more or less discharge events, but there is an improvement by six months over the period of record as compared to the previous TSP. As expected from a lower Lake schedule, the corollary to that is that there is an increase in months where there are less flows to the Caloosahatchee. Finally, the TSP appears to show less time the Caloosahatchee is receiving those high discharge flows (duration) as compared to the previous TSP, at least in the period of record. This is demonstrated in Table 6-3 in that there is an increase in shorter term (6-7 week) events, but a decrease in longer term (8-9, 10-12 & 13-16 week) events. This increase is likely due to the increase in pulse events and base flows. This assessment appears to be consistent for the timing of those flows in the March-June timeframe (Table 6-6).

Additionally, when comparing the high volume discharges between the Caloosahatchee and the St. Lucie, there appears to be more equity between the estuaries with this TSP as compared to the previous TSP. The estuaries nevertheless continue to receive the brunt of environmental impacts from the Lake.

Appendix E, Page E-36: During the POR, the cumulative volume of regulatory releases from Lake Okeechobee to the Caloosahatchee Estuary at S-77 increases from 13.63 million acre-feet (No Action) to 14.96 million acre-feet for the TSP. The cumulative volume of releases at S-79 (including C-43 Basin Runoff) increases from 37.33 million acre-feet (No Action) to 38.15 million acre-feet for the TSP. The total contribution of Lake Okeechobee regulatory releases increases by 2% from the TSP. The rationale for these trends should be explained. For instance, is the increase in cumulative flow due to increasing the pulses and base flows or is it due to some other factor? What are the trade-offs associated with these trends?

### **Water Supply Discussion**

Section 6.12.1, Page 164: Table 6-13 summarizes the water supply performance of the TSP in relation to the current WST and the 2006 LOWSM. Table 6-13 also clearly shows that the impact of the TSP is lessened with the 2006 LOWSM triggers over the existing WSTs. As previously stated, an important issue to be addressed is the efficacy of using the 2006 LOWSM assumptions if they are subject to change before the TSP is implemented. *See also*, Page E-17.

Finally, we incorporate by reference Lee County's previous comments regarding management of water levels in the Lake, and the comments of other entities in Lee County, such as the City of Sanibel and non-profit environmental organizations.