

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
3301 GUN CLUB ROAD
WEST PALM BEACH, FLORIDA

Order No. 2011-038-DAO-WS

IN THE MATTER OF:

Declaration of Modified Phase I
Moderate Water Shortage
Restrictions for Specified Use
Classes Using Surface Waters within
the Lake Okeechobee Service Area,
including Lake Okeechobee and
Surface Waters Hydraulically
Connected to Lake Okeechobee
within the Everglades Agricultural
Area Water Use Basin, Lakeshore
Perimeter Water Use Basin,
Caloosahatchee River Water Use
Basin, Portions of the Indian Prairie
Water Use Basin, and the St. Lucie
River Water Use Basin within
Okeechobee, Glades, Palm Beach,
Lee, Hendry, Martin, and St. Lucie
Counties

2
SOUTH FLORIDA WATER MANAGEMENT DISTRICT
WEST PALM BEACH, FLORIDA
JUL 11 2011 4:55 PM
DECLARED

**DECLARATION OF WATER SHORTAGE AND IMPOSITION OF MODIFIED
PHASE I MODERATE WATER SHORTAGE RESTRICTIONS FOR THE
LAKE OKEECHOBEE SERVICE AREA**

The Executive Director of the South Florida Water Management District ("District"), upon authorization of the Governing Board and after considering recommendations of District staff and being otherwise fully apprised of the matter, issues this Order, modifying Water Shortage Warning Order 2010-206-DAO-WS, pursuant to Sections 373.175 and 373.246, Fla. Stat., and Chapters 40E-21 and 40E-22, Fla. Admin. Code, based on the following Findings of Fact and Ultimate Facts and Conclusions of Law:

FINDINGS OF FACT

1. On November 11, 2010, the Governing Board issued Order No. 2010-206-DAO-WS issuing a water shortage warning for all users that withdraw surface water directly from Lake Okeechobee and all surface waters hydraulically connected to Lake Okeechobee. A copy of Order No.: 2010-206-DAO-WS is available from the District Clerk.

2. After consideration of the water conditions, on December 20, 2010, the Governing Board modified Order No.: 2010-206-DAO-WS, authorizing the Executive Director to impose water shortage restrictions in the event that water levels in Lake Okeechobee fall into Zone A, as identified in Figure 22-4 and referenced in Rule 40E-22.332, Fla. Admin. Code. A copy of Order No.: 2010-214-DAO-WS is available from the District Clerk.

3. District staff has continued to monitor the conditions of the water resources and the needs of the water users as required pursuant to Rule 40E-21.221, Fla. Admin. Code.

4. Since the effective date of Order No. 2010-206-DAO-WS, the water resource conditions described in that order have declined.

5. The water sources subject to this Order are Lake Okeechobee and the surface waters hydraulically connected to Lake Okeechobee within the Everglades Agricultural Water Use Basin, Lakeshore Perimeter Water Use Basin, Caloosahatchee River Water Use Basin, portions of the Indian Prairie Water Use Basin, and the St. Lucie River Water Use Basin within Okeechobee, Glades, Palm Beach, Lee, Hendry, Martin, and St. Lucie Counties, commonly referred to as the Lake Okeechobee Service

Area ("LOSA"). A map depicting the area subject to this Order is attached hereto as Exhibit "A."

6. Users located in Sub-basin C (West Palm Beach Canal Basin) of the Everglades Agricultural Area, previously subject to Water Shortage Order No.: 2011-036-DAO-WS, that are located within LOSA region are appropriately included in this Order.

7. Lake Okeechobee water levels are regulated by the United States Army Corps of Engineers (USACE) pursuant to the Water Control Plan for Lake Okeechobee and the Everglades Agricultural Area also known as LORS 2008. The LORS 2008 was adopted in April, 2008 by the USACE in accordance with the National Environmental Policy Act (NEPA). Of particular importance in this regard is the USACE's Final Supplemental Environmental Impact Statement (FSEIS) and the United States Fish and Wildlife Service's (USFWS) Biological Opinion concerning the USACE's proposed LORS 2008. These documents contain the technical analysis of a comprehensive set of performance measures and alternatives, including the selected alternative which forms the basis of the LORS 2008 that was ultimately approved by the USACE when it issued a Record of Decision (ROD) for LORS 2008 on April 28, 2008. The ROD includes the USFWS' Biological Opinion. Since this date, the surface waters of Lake Okeechobee have been controlled pursuant to LORS 2008.

8. LORS 2008 is a compilation of operating criteria, guidelines, rule curves and specifications that govern the storage and releases from the Lake. LORS 2008 provides for management of Lake water levels and outlet canals via several distinct bands that are defined by seasonal fluctuations of the Lake level. Each management

band is designed to achieve specific objectives, consistent with Congressionally authorized purposes for the Lake. The bottom band is experienced when the Lake's level is low. This is the Water Shortage Management Band. When the Lake's level is in this band, water in Lake Okeechobee is managed in accordance with the District's Water Shortage Plan. (LORS 2008 Water Control Plan 7-10) During the USACE's NEPA analysis, it became apparent the LORS 2008 operations would cause Lake levels to drop into the Water Shortage Management Band significantly more frequently. (Final Supplemental Environmental Impact Statement, Appendices E and G) As noted in this Order, the Lake's level dropped below the Water Shortage Management Band on March 19, 2011.

9. One of the USACE's primary concerns in adopting the LORS 2008 was public health and safety. As stated in the USACE's ROD:

The recommended plan will allow Lake Okeechobee to be managed at a lower level than the current regulation schedule. Managing the lake at a lower level improves public health and safety performance by reducing structural risk to the HHD [Herbert Hoover Dike] while rehabilitation efforts are underway, and will provide environmental benefits to Lake Okeechobee and the downstream estuaries. (ROD 1)

10. The ROD also notes other reasons for the LORS 2008 and indicates the supporting studies to change the prior Lake regulation schedule were initiated to address high Lake levels which, in addition to threatening the HHD, also resulted in prolonged and high volume releases to the estuaries and degradation of the Lake's littoral zone habitat. (ROD 1)

11. The Final Supplemental Environmental Impact Statement (FSEIS) contains analysis of the impacts of the LORS 2008's lower water levels on numerous performance measures. The performance measures which are particularly relevant to

this Order include those associated with Lake Okeechobee, the Caloosahatchee Estuary, Water Conservation Areas, Stormwater Treatment Areas, the Everglades, the St. Lucie Estuary, and permitted water users.

12. In summary, the FSEIS's technical analysis of performance measures projected to occur as a result of the LORS 2008 indicated substantial improvement in the Lake's high water levels and the Caloosahatchee Estuary; substantial increase in the frequency, duration, and severity of water shortage restrictions on permitted water users; substantial increase in time that the Lake's level is below minimum navigation elevation; and violation of the District's Lake Okeechobee minimum flow and level found in Rule 40E-8.221, Fla. Admin. Code. Performance measures for other key indicators indicated less substantial impacts resulting from LORS 2008 implementation. (FSEIS, including Appendices E and G)

13. The District acts as local sponsor of the Central and Southern Florida Flood Control Project; Lake Okeechobee is a part of this Project. When Lake Okeechobee's water level declines into the Water Shortage Band, the LORS 2008 indicates: "Operations in this band are governed by the SFWMD's Lake Okeechoee Water Shortage Management (LOWSM) Plan." (LORS 2008 Water Control Plan 7-24) This Order implements the LOWSM Plan, as codified in Chapters 40E-21 and 40E-22, Fla. Admin. Code.

14. The use classes subject to this Order are the agricultural; nursery; and diversion and impoundment, including secondary users within diversion and impoundment boundaries water use classes identified in Rule 40E-21.651, Fla. Admin. Code.

15. The period since October 1, 2010 has been the second driest District-wide since 1932. Rainfall in the watershed basins which recharge Lake Okeechobee was about 45% of average.

16. Since October 2010, the Lake Okeechobee Region has averaged around 7.25 inches of rainfall. This is about 55% of the average rainfall for this period of time. The U.S. Climate Prediction Center (CPC) Drought Monitor reflects that the LOSA Region is experiencing a D2 (severe) or D3 (extreme) drought.

17. The current low rainfall conditions seen in the LOSA Region are expected to continue through the remainder of the dry season. NOAA and District meteorologists expect continued below average rainfall as a result of La Niña weather patterns. The CPC's one-month and three-month outlooks regarding precipitation probability predict a below average chance of rain.

18. Low rainfall levels have reduced water inflows to Lake Okeechobee. Current and projected inflows to Lake Okeechobee over the remainder of the dry season are relatively small.

19. Lake stages in the Kissimmee Chain of Lakes remain below their regulation schedules. As a result of both low lake stages in the Kissimmee Chain of Lakes region and below normal rainfall, discharge from S65 to the Kissimmee River has been kept low (<500cfs) since early September, well before the end of the 2010 wet season, as of March 18, 2011.

20. As of March 18, 2011, the Lake Okeechobee water level was 11.79 feet NGVD 29. This stage is 2.64 feet lower than the historical average for this date and 1.42 feet lower than the simulated average using the current regulation schedule (LORS

2008). The Lake Okeechobee water level recently dropped below Zone A as set forth in Rule 40E-22.332, Fla. Admin. Code (Figure 22-4).

21. Compounding climatic considerations, it is relevant to note the Lake's current level is lower than would have occurred under prior Lake regulation schedules due to LORS 2008 operations. See Composite Exhibit "C".

22. Lake Okeechobee stage projections indicate a 50% chance that Lake levels will decline over the next 11 weeks to 10.8 feet NGVD on June 1, 2011. If the Lake experiences drier hydrologic conditions equating to those which are experienced 25% of the time, then the Lake's level could decline to approximately 10.0 feet NGVD by June 1, 2011. Staff will continue to monitor conditions and update projections.

23. When considering whether to declare a water shortage, in addition to considering that Lake Okeechobee levels have fallen within Zone A, the District considers other factors that evaluate the sufficiency of remaining water supplies, the projected user demands, climate forecasts, the potential for serious harm to the water resources, projected water savings from cutting back user withdrawals from the affected source, and any projected impacts on imposing such cutbacks on the consumptive uses.

24. Demands for supplemental water deliveries from Lake Okeechobee, particularly for irrigation users within LOSA, are high, given the dry conditions. Peak demand for supplemental water deliveries typically occurs during the dry season months.

25. In evaluating whether serious harm to the water resource may occur, the District shall consider factors such as, but not limited to, the minimum flow and level

(MFL) set for the waterbody, the potential for increased saltwater intrusion or other groundwater contamination and the potential for irreversible adverse impacts to fish and wildlife.

26. As noted above, the impact of LORS 2008 was projected in the USACE's NEPA process to result in additional exceedances of Lake Okeechobee's MFL such that the Lake's MFL was projected to be violated. To date, the Lake's MFL has not been exceeded this year.

27. The USFWS issued its Biological Opinion on the LORS 2008 and, in summary, concluded the LORS would provide both benefits and impacts to the Lake's ecology such that the reduction in high water stress would balance the increased risk of extended periods of low water conditions. (Biological Opinion 64) The Biological Opinion contains a comprehensive review of LORS 2008's impacts on fish and wildlife. The USFWS concluded that LORS 2008 is not likely to jeopardize the continued existence of the Everglades Snail Kite and is not likely to destroy or adversely modify its designated critical habitat. (Biological Opinion 65)

28. As water demands and use continue to climb with the increasingly arid conditions, water levels across the District are steadily declining. The decline is exacerbated by high evaporation and transpiration rates and longer periods of wind and sunlight.

29. As a result, there is a significant potential that water supplies from Lake Okeechobee will decline to the extent that sufficient water will not be available to meet the present and anticipated requirements of the water users within the subject area, while protecting the water resources from serious harm.

30. District staff will continue to monitor conditions and recognizes the potential for recommending increased severity of water shortage restrictions.

ULTIMATE FACTS AND CONCLUSIONS OF LAW

31. The Governing Board is authorized to adopt a water shortage plan to regulate the withdrawal and use of water so as to protect the water resources of the District. § 373.246, Fla. Stat. (2010).

32. The District's Water Shortage Plan, otherwise known as the LOWSM Plan, is set forth in Chapter 40E-21, Fla. Admin. Code. The District's Regional Water Shortage Plan for Lake Okeechobee is set forth in Chapter 40E-22, Fla. Admin. Code.

33. Part III of Chapter 40E-22, Fla. Admin. Code, identifies water levels within Lake Okeechobee that will be considered by the Governing Board in declaring a water shortage pursuant to Rule 40E-21.231, Fla. Admin. Code. Pursuant to Rule 40E-22.332, Fla. Admin. Code, when water levels within Lake Okeechobee fall within Zone A, as set forth in Figure 22-4, a Phase 1 water shortage may be declared within the LOSA Region.

34. Based on the above Findings of Fact; including findings regarding Lake Okeechobee levels and supplies, water resource conditions, climatic forecasts, and projected user demands; the estimated present and anticipated available water supplies for specified use classes within LOSA are insufficient to meet the estimated and present user demands.

35. Pursuant to Rule 40E-21.231, Fla. Admin. Code, the District is authorized to declare a water shortage to equitably distribute Lake Okeechobee water supplies through implementation of the District's Water Shortage Plan set forth in Chapter 40E-

21, Fla. Admin. Code, and Part III of Chapter 40E-22, Fla. Admin. Code.

36. Pursuant to Rules 40E-21.521 and 40E-22.332, Fla. Admin. Code, under the above identified conditions, Phase I water shortage restrictions may be authorized, requiring cutbacks on consumptive use demands estimated for a 1-in-10 year drought condition by fifteen percent (15%).

37. The Governing Board is authorized to modify or rescind water shortage orders and has also authorized the District's Executive Director to modify the existing Order affecting LOSA via Order No.: 2010-214-DAO-WS. [Fla. Admin. Code R. 40E-21.291(4).]

38. The Governing Board may order any combination in lieu of or in addition to the restrictions in Part V, Chapter 40E-21, Fla. Admin. Code, if necessary to achieve the percent reduction in overall demand, including, but not limited to, restrictions on the total amount of water withdrawn at any given time; the timing of withdrawal; restrictions on withdrawal rates; and the geographic location of water withdrawals. (Fla. Admin. Code R. 40E-21.271.)

39. Rule 40E-21.401, F.A.C., and permit conditions authorize the District to obtain data concerning monitoring of water usage.

40. The District has monitored the condition of the water resources and the needs of the users as required by Rule 40E-21.221, Fla. Admin. Code.

41. In addition to considering that Lake Okeechobee levels have fallen within the Water Shortage Management Band, the District also considers other factors that evaluate the sufficiency of remaining water supplies, the projected user demands, climatic forecasts, the potential for serious harm to the water resources, projected water

savings from cutting back user withdrawals from the affected sources, and any projected impacts on imposing such cutbacks on the consumptive use. Fla. Admin. Code R. 40E-21.221.

42. The District has also considered projected Lake Okeechobee water levels anticipated to occur on June 1, 2011 in accordance with Rules 40E-21.221 and 40E-22.332, Fla. Admin. Code.

43. As a result, Phase I water shortage restrictions may be authorized requiring cutbacks on consumptive use demands, including agricultural; nursery; and diversion and impoundment, including secondary users within diversion and impoundment boundaries water use classes for a 1-in-10 year rainfall condition by 15 percent.

44. Considering the above findings of fact, it is necessary to enter this Order imposing specific restrictions on the affected users.

ORDER

Based upon the above Findings of Fact, Ultimate Facts and Conclusions of Law, the Governing Board orders that:

45. A water shortage is hereby declared and Modified Phase I Moderate Water Shortage Restrictions are imposed on the agricultural; nursery; and diversion and impoundment, including secondary users within diversion and impoundment boundaries, water use classes which use or divert surface water from Lake Okeechobee or surface waters hydraulically connected to Lake Okeechobee within the area depicted in Exhibit "A."

46. Users located in Sub-basin C (West Palm Beach Canal Basin) of the

Everglades Agricultural Area within the LOSA region, previously subject to Water Shortage Order No.: 2011-036-DAO-WS, shall be subject to the restrictions set forth in this Order.

47. Restrictions on permitted users and secondary users within diversion and impoundment boundaries:

- a. All irrigation systems shall be operated in a manner that will maximize the percentage of water withdrawn and held which is placed in the root zone of the crop and will minimize the amount of water withdrawn and released or lost to the users but is not immediately available for other users.
- b. Users having access to more than one source class shall maximize the use of the unrestricted or least restricted source class.
- c. District staff may, upon request from agricultural representatives, redistribute LOSA weekly allocations across sub-basin boundaries as long as weekly LOSA allocations are not exceeded.
- d. Central and Southern Florida Flood Control Project system deliveries to permitted users within LOSA shall reflect a 15 percent cutback in supplies needed to meet the user demands during one in ten year drought conditions. The following restrictions and process will apply to distributing water supplies to agricultural users within LOSA:
 - i. Permitted users are authorized to take their weekly allocation Monday through Friday, unless otherwise directed on the District's webpage under "water supply plan for LOSA."
 - ii. The following specific restrictions shall also apply to permitted users:

1. Agricultural operations which use overhead irrigation methods may apply their weekly allocation of water as needed.
2. Overhead irrigation of citrus nursery stock for moisture stress reduction shall be allowed on an as needed basis so long as the weekly allocation is not exceeded.
3. Nurseries using overhead irrigation methods may apply their weekly allocation of water as needed.
4. Low volume irrigation hours shall be voluntarily reduced.
5. Livestock water use shall be voluntarily reduced.
6. Aquacultural water use shall be voluntarily reduced.
7. Soil flooding for vegetable seed planting, rice planting, burning of sugarcane prior to harvest and to permit harvesting of sod shall be allowed on an as needed basis so long as the weekly allocation (for the "Other" use category) is not exceeded.

48. Pursuant to Section 373.119(2), Fla. Stat., and in recognition of the need of multiple users within the affected basins to lower pump intakes or install additional temporary facilities, the Executive Director issues this Order authorizing the temporary installation and operation of pumping facilities located within the area which is subject to this Order. Application processing fees shall be waived for temporary installations authorized by this Order. This Order shall automatically authorize users to install such temporary pumping facilities, so long as the following conditions are satisfied:

- a. A written description of the temporary pumping facility or lowered intake is submitted to District staff which indicates the intent to temporarily enable the

permitted consumptive users to access surface water at lower elevations.

b. An 8½" × 11" drawing is submitted clearly showing all additional temporary facilities to be placed in the District's right-of-way. Pump size and capacity, diameter, length, and elevation of any culvert installation must also be depicted on the drawing.

c. The user provides reasonable assurances that all reasonable water quality protection measures necessary to avoid off-site impacts will be employed. Measures may include turbidity screens, hay bales, fuel spill containment tank, etc. The user must also provide reasonable precautions to ensure that all temporary facilities do not increase wildfire potential or restrict other permittees from receiving their allocation of water.

d. The user provides reasonable assurances that the temporary installations, and the operation thereof, will not degrade or otherwise interfere with the integrity of any channel, bank, berm, levee, structure, or any secondary channel, bank, berm, levee, or structure.

e. The user provides reasonable assurance that temporary pumping units and appurtenant equipment shall be installed in such a manner so as to not block or otherwise interfere with District access. Piping shall be properly buried or bridged in a manner satisfactory to the District.

f. A 24-hour telephone contact person with a listing of the person's work, residence, mobile, and pager numbers must be provided with the written submittal.

g. The written submittal must include a statement accepting

application of all standard limiting conditions contained in Rule 40E-6.381, Fla. Admin. Code, to the temporary pumping installation authorized by this Order.

h. Users must provide evidence of their pump installation design and intent to comply with the terms of this Order, along with appropriate 24-hour contact information at the site, in a visible weatherproof pouch or cover.

i. The written submittal must include a statement accepting the requirement that all temporary facilities will be removed from the canal and right-of-way within 15 days after the Governing Board or Executive Director rescinds the Declaration of Water Shortage.

j. The written submittal must include a statement accepting the requirement that any canal and right-of-way impacted by the placement of temporary facilities will be restored to the District's satisfaction within 15 days after the Governing Board or Executive Director rescinds the Declaration of Water Shortage.

49. Permitted water users are requested to submit water usage monitoring data in accordance with permit conditions. Pumpage reports for the temporary facilities authorized pursuant to Paragraph 48 must be submitted. The Director of the Water Use Regulation Division is authorized to request, in writing, those permitted water users whose permit conditions require submittal of water usage monitoring data to provide additional data or data submittals at increased frequencies, as determined appropriate.

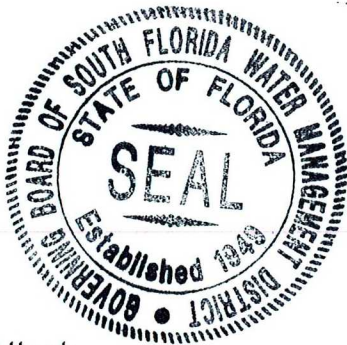
50. A user may request relief from this Order by filing an application for variance in accordance with Rule 40E-21.275, Fla. Admin. Code, but must conform to the water use restrictions until the Executive Director grants a temporary variance or the Governing Board grants a variance.

51. The District requests that every city and county commission, state and county attorney, sheriff, police officer and other appropriate local government official within the boundaries of Exhibit "A" assist in the implementation and enforcement of this Water Shortage Order. The District staff will cooperate with the local governments in implementing such enforcement measures.

52. This Order declaring a water shortage and imposing Phase I Moderate Water Shortage Restrictions shall become effective on March 26, 2011 and shall remain in effect until modified or rescinded by the Governing Board, the Executive Director, or the Executive Director's designee, if the circumstances set forth in Subsection 40E-21.291(5), Fla. Admin. Code, are present.

53. A copy of the Notice of Rights is attached as Exhibit "B."

DONE AND SO ORDERED in West Palm Beach, Florida, on this 21 day of March 2011.



Attest:


District Clerk/Assistant Secretary
March 21, 2011

SOUTH FLORIDA WATER
MANAGEMENT DISTRICT
By its Executive Director


CAROL ANN WEHLE

Legal Form Approved:


Jennifer Bokankowitz, Esq.

Lake Okeechobee Region Sub-Basin Boundaries

- A: NORTHEAST LAKE SHORE
- B: ST. LUCIE (C-44)
- C: WPB CANAL & L-8
- D: E. BEACH & E. SHORE WCD
- E: N. NEW RIVER & HILLSBORO
- F: MIAMI CANAL BASIN
- G: C-21 & S-236 BASINS
- H: CALOOSA HATCHEE (C-43)
- I: NORTHWEST LAKE SHORE
- J: NORTH LAKE SHORE

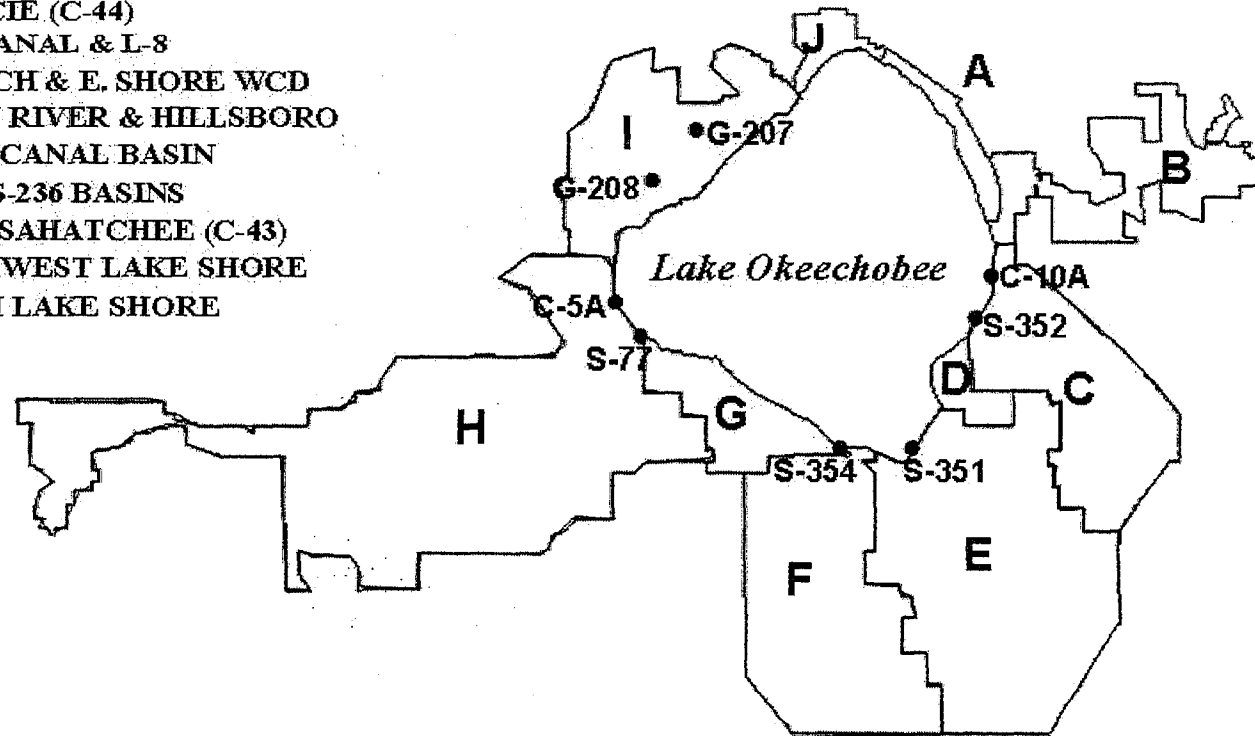


Figure 21-4

NOTICE OF RIGHTS

As required by Sections 120.569(1), and 120.60(3), Fla. Stat., following is notice of the opportunities which may be available for administrative hearing or judicial review when the substantial interests of a party are determined by an agency. Please note that this Notice of Rights is not intended to provide legal advice. Not all the legal proceedings detailed below may be an applicable or appropriate remedy. You may wish to consult an attorney regarding your legal rights.

RIGHT TO REQUEST ADMINISTRATIVE HEARING

A person whose substantial interests are or may be affected by the South Florida Water Management District's (SFWMD or District) action has the right to request an administrative hearing on that action pursuant to Sections 120.569 and 120.57, Fla. Stat. Persons seeking a hearing on a District decision which does or may determine their substantial interests shall file a petition for hearing with the District Clerk within 21 days of receipt of written notice of the decision, unless one of the following shorter time periods apply: 1) within 14 days of the notice of consolidated intent to grant or deny concurrently reviewed applications for environmental resource permits and use of sovereign submerged lands pursuant to Section 373.427, Fla. Stat.; or 2) within 14 days of service of an Administrative Order pursuant to Subsection 373.119(1), Fla. Stat. "Receipt of written notice of agency decision" means receipt of either written notice through mail, or electronic mail, or posting that the District has or intends to take final agency action, or publication of notice that the District has or intends to take final agency action. Any person who receives written notice of a SFWMD decision and fails to file a written request for hearing within the timeframe described above waives the right to request a hearing on that decision.

Filing Instructions

The Petition must be filed with the Office of the District Clerk of the SFWMD. Filings with the District Clerk may be made by mail, hand-delivery or facsimile. **Filings by e-mail will not be accepted.** Any person wishing to receive a clerked copy with the date and time stamped must provide an additional copy. A petition for administrative hearing is deemed filed upon receipt during normal business hours by the District Clerk at SFWMD headquarters in West Palm Beach, Florida. Any document received by the office of the SFWMD Clerk after 5:00 p.m. shall be filed as of 8:00 a.m. on the next regular business day. Additional filing instructions are as follows:

- Filings by mail must be addressed to the Office of the SFWMD Clerk, P.O. Box 24680, West Palm Beach, Florida 33416.
- Filings by hand-delivery must be delivered to the Office of the SFWMD Clerk. **Delivery of a petition to the SFWMD's security desk does not constitute filing. To ensure proper filing, it will be necessary to request the SFWMD's security officer to contact the Clerk's office.** An employee of the SFWMD's Clerk's office will receive and file the petition.
- Filings by facsimile must be transmitted to the SFWMD Clerk's Office at (561) 682-6010. Pursuant to Subsections 28-106.104(7), (8) and (9), Fla. Admin. Code, a party who files a document by facsimile represents that the original physically signed document will be retained by that party for the duration of that proceeding and of any subsequent appeal or subsequent proceeding in that cause. Any party who elects to file any document by facsimile shall be responsible for any delay, disruption, or interruption of the electronic signals and accepts the full risk that the document may not be properly filed with the clerk as a result. The filing date for a document filed by facsimile shall be the date the SFWMD Clerk receives the complete document.

Initiation of an Administrative Hearing

Pursuant to Rules 28-106.201 and 28-106.301, Fla. Admin. Code, initiation of an administrative hearing shall be made by written petition to the SFWMD in legible form and on 8 and 1/2 by 11 inch white paper. All petitions shall contain:

1. Identification of the action being contested, including the permit number, application number, District file number or any other SFWMD identification number, if known.
2. The name, address and telephone number of the petitioner and petitioner's representative, if any.
3. An explanation of how the petitioner's substantial interests will be affected by the agency determination.
4. A statement of when and how the petitioner received notice of the SFWMD's decision.
5. A statement of all disputed issues of material fact. If there are none, the petition must so indicate.
6. A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the SFWMD's proposed action.
7. A statement of the specific rules or statutes the petitioner contends require reversal or modification of the SFWMD's proposed action.
8. If disputed issues of material fact exist, the statement must also include an explanation of how the alleged facts relate to the specific rules or statutes.
9. A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the SFWMD to take with respect to the SFWMD's proposed action.

A person may file a request for an extension of time for filing a petition. The SFWMD may, for good cause, grant the request. Requests for extension of time must be filed with the SFWMD prior to the deadline for filing a petition for hearing. Such requests for extension shall contain a certificate that the moving party has consulted with all other parties concerning the extension and that the SFWMD and any other parties agree to or oppose the extension. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

If the District takes action with substantially different impacts on water resources from the notice of intended agency decision, the persons who may be substantially affected shall have an additional point of entry pursuant to Rule 28-106.111, Fla. Admin. Code, unless otherwise provided by law.

Mediation

The procedures for pursuing mediation are set forth in Section 120.573, Fla. Stat., and Rules 28-106.111 and 28-106.401-405, Fla. Admin. Code. The SFWMD is not proposing mediation for this agency action under Section 120.573, Fla. Stat., at this time.

RIGHT TO SEEK JUDICIAL REVIEW

Pursuant to Sections 120.60(3) and 120.68, Fla. Stat., a party who is adversely affected by final SFWMD action may seek judicial review of the SFWMD's final decision by filing a notice of appeal pursuant to Florida Rule of Appellate Procedure 9.110 in the Fourth District Court of Appeal or in the appellate district where a party resides and filing a second copy of the notice with the SFWMD Clerk within 30 days of rendering of the final SFWMD action.



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

December 17, 2007

Colonel Paul L. Grosskruger
Commander and District Engineer
United States Army Corps of Engineers
Jacksonville District Post Office Box 4970
Jacksonville, FL 32232-0019

Dear Colonel Grosskruger:

**Subject: Lake Okeechobee Regulation Schedule Study – Final
Supplemental Environmental Impact Statement**

Thank you for incorporating the South Florida Water Management District's (District) October 10, 2007 Governing Board meeting recommendations in the Final Supplemental Environmental Impact Statement (FSEIS), received for review on November 17, 2007. The Governing Board specifically requested the U.S. Army Corps of Engineers (Corps) to incorporate language emphasizing the interim nature of the Lake Okeechobee Regulation Schedule (LORS) in the FSEIS, acknowledging that the Corps could adjust operations within LORS' operational flexibility or through schedule deviations to provide additional storage pending completion of dike rehabilitation in Reaches 1, 2 or 3. Since the October 10th Governing Board meeting, there have been two developments that warrant mentioning here:

1. The Proposed changes to the District's Water Shortage Plan (Chapter 40E-21 F.A.C.) were officially adopted on November 15, 2007. The timeframe to challenge the proposed rule changes has expired and the rule became officially effective in mid-November. I have attached a copy, per discussions from the last Project Delivery Team meeting on December 4, 2007, of the relevant excerpts of this rule for your information. Please note these rule changes did not affect the District's existing Water Shortage Trigger (WST) line, as found in Rule 40E-22.332, Fla. Admin. Code. It should be noted that in tables 6-16 and 6-17 on pages 182 and 183 in the FSEIS, the T3 alternative in both tables should read T3 (WST) instead of T3 (SSM), in accordance with the revised Lake Okeechobee Water Shortage Management Plan summarized in Appendix G of the FSEIS.
2. The District was encouraged that the long-awaited US Fish and Wildlife Service (FWS) Biological Opinion determined that the interim LORS did not constitute a jeopardy opinion for the snail kite.

COMPOSITE
EXHIBIT C

3. The District may be able to provide assistance to the Corps in support of the following recommendations provided by FWS in their Biological Opinion:
 - a. While FWS does not anticipate that this interim schedule would result in an incidental take, monitoring of changes in the vegetation patterns in the littoral zone will be required between an established base period (2003) and 2010. The 2003 base period map is a District product, and future vegetation maps may be produced through a District contract, which will assist FWS in determining if there was an increase in optimal snail kite habitat at the end of the schedule's interim period.
 - b. The recommendation to implement an apple snail breeding program for re-introduction into the Lake is another effort that the District is pursuing in cooperation with Harbor Branch Oceanographic Institute. Re-establishment of apple snail populations in lakes that have been severely impacted by extreme low lake levels as a result of droughts has generated much interest recently. In Lake Okeechobee's situation, low lake stages will be more common until the Herbert Hoover Dike improvements can be made and stages can be increased incrementally. The District will provide your staff with the data and results of its experimental apple snail hatchery project when they become available.

In addition, the revised Water Control Plan is being reviewed and comments are being directly provided to the Corps water managers under a separate effort by District staff. The District looks forward to assisting the Corps in the implementation of this interim regulation schedule as well as providing technical expertise as needed in the development of the System Operating Manual.

Sincerely,



Carol Ann Wehle
Executive Director
South Florida Water Management District

CW/ko
Attachment

- c: Yvonne Haberer, USACE
Beth Lewis, SFWMD
Chip Merriam, SFWMD
Pete Milam, USACE
Kim O'Dell, SFWMD
Beth Ross, SFWMD
Susan Sylvester, SFWMD

THE FULL TEXT OF THE RULE IS:

40E-21.521 Phase I Moderate Water Shortage.

(1) (a) through (e) No change.

(f) Diversion and Impoundment into Non-District Facilities. Water used for diversion and impoundment into non-District facilities shall be voluntarily reduced; however, the diversion of surface water from sources in the Lake Okeechobee Region as depicted on Figure 21-4 and described in subsection 40E-21.691(3), F.A.C., shall be subject to the restrictions described in subparagraph (2)(a)6., below.

(2) Agriculture.

(a) Agricultural Use:

1. through 5. No change.

6. The District's allocation determination for agricultural irrigation within the entire Lake Okeechobee Region as depicted on Figure 21-4 will be based on 15% cutbacks to the calculated 1 in 10 supplemental crop demands calculated on a weekly basis. The entire Lake Okeechobee Region supplemental crop demands will be distributed among the sub-basins depicted in Figure 21-4 based on a grouping of crop types, irrigation methods (e.g. flood irrigated crops versus micro irrigated crops), the associated acreage totals as identified in the individual water use permits combined with the associated 1 in 10 evapotranspiration demands of the crops. An additional amount of water from Lake Okeechobee will be added to the weekly allocation as necessary to account for conveyance losses that occur through seepage and free surface evaporation from the Central and Southern Florida Flood Control System Project canals. The share of the entire Lake Okeechobee Region irrigation allocation available to each sub-basin may be further adjusted to prioritize water deliveries among crops, as long as the sum of the sub-basin allocations does not exceed the weekly allocation for

the entire Lake Okeechobee Region and that equity among users and sub-basins is assured. Such adjustments shall be based upon irrigation efficiency, potential for economic loss, and acreage irrigated as opposed to non-irrigated acreage. Withdrawals by each permitted user within the Lake Okeechobee Region as described in subsection 40E-21.691(3), F.A.C., shall be limited to an amount that represents each user's share of their sub-basin weekly allocation based on their permitted crop type and irrigated acreage ~~the total allocation for agricultural irrigation made by the District from Lake Okeechobee (Lake) for that month and in that basin. The District shall provide the users with the data necessary to calculate their weekly allotment of water. The District's allocation determination for agricultural irrigation within the Lake Okeechobee Region will be based on its evaluation of the supply capabilities of the source class, the supply capabilities of other source classes available in the area, the needs of agriculture and other users in the area, and the District's overall management strategy for handling the uncertainties of future climatological events. The share of the total agricultural irrigation allocation available to each user will be based on any prioritization among crops the District establishes based on irrigation efficiency, economic loss and equity considerations, and the acreage and quantity of withdrawals for which the user has been permitted. The District's allocation determination for agricultural irrigation within the Lake Okeechobee Region will be based on the supply capacity of Lake Okeechobee assuming a June 1st lake stage of 10.5 feet NGVD.~~

(2) (b) through (e) No change.

(3) through (4) No change.

Specific Authority 373.044, 373.113 FS. Law Implemented 373.042, 373.0421, 373.175, 373.246 FS. History—New 5-31-82, Amended 1-26-86, 2-14-91, 9-10-01, _____.

40E-21.531 Phase II Severe Water Shortage.

(1)(a) through (e) No change.

(f) Diversion and Impoundment into Non-District Facilities. 4- Water used for diversion and impoundment into non-District facilities shall be voluntarily reduced; however, the diversion of surface water from sources in the Lake Okeechobee Region as depicted on Figure 21-4 and described in subsection 40E-21.691(3), F.A.C., shall be subject to the restrictions described in subparagraph (2)(a)6., below.

(2) Agriculture.

(a) Agricultural Use.

1. through 5. No change.

6. The District's allocation determination for agricultural irrigation within the entire Lake Okeechobee Region as depicted on Figure 21-4 will be based on 30% cutbacks to the calculated 1 in 10 supplemental crop demands calculated on a weekly basis. The entire Lake Okeechobee Region supplemental crop demands will be distributed among the sub-basins depicted in Figure 21-4 based on a grouping of crop types, irrigation methods (e.g. flood irrigated crops versus micro irrigated crops), the associated acreage totals as identified in the individual water use permits combined with the associated 1 in 10 evapotranspiration demands of the crops. An additional amount of water from Lake Okeechobee will be added to the weekly allocation as necessary to account for conveyance losses that occur through seepage and free surface evaporation from the Central and Southern Florida Flood Control System Project canals. The share of the entire Lake Okeechobee Region irrigation allocation available to each sub-basin may be further adjusted to prioritize water deliveries among crops, as long as the sum of the sub-basin allocations does not exceed the weekly allocation for the entire Lake Okeechobee Region and that equity among users and sub-basins is assured. Such adjustments shall be based upon irrigation efficiency, potential for

economic loss, and acreage irrigated as opposed to non-irrigated acreage. Withdrawals by each permitted user within the Lake Okeechobee Region as described in subsection 40E-21.691(3), F.A.C., shall be limited to an amount that represents each user's share of their sub-basin weekly allocation based on their permitted crop type and irrigated acreage ~~the total allocation for agricultural irrigation made by the District from Lake Okeechobee (Lake) for that month and in that basin. The District shall provide the users with the data necessary to calculate their weekly allotment of water. The District's allocation determination for agricultural irrigation within the Lake Okeechobee Region will be based on its evaluation of the supply capabilities of the source class, the supply capabilities of other source classes available in the area, the needs of agriculture and other users in the area, and the District's overall management strategy for handling the uncertainties of future climatological events. The share of the total agricultural irrigation allocation available to each user will be based on any prioritization among crops the District establishes based on irrigation efficiency, economic loss and equity considerations, and the acreage and quantity of withdrawals for which the user has been permitted. The District's allocation determination for agricultural irrigation within the Lake Okeechobee Region will be based on the supply capacity of Lake Okeechobee assuming a June 1st lake stage of 10.5 feet NGVD.~~

(2) (b) through (e) No change.

(3) through (4) No change.

Specific Authority 373.044, 373.113 FS. Law Implemented 373.042, 373.0421, 373.175, 373.246 FS. History—New 5-31-82, Amended 1-26-86, 2-14-91, 9-10-01, _____.

40E-21.541 Phase III Extreme Water Shortage.

(1) (a) through (e) No change.

(f) Diversion and Impoundment into Non-District Facilities. 4. Water used for diversion and impoundment into non-District facilities shall be voluntarily reduced; however, the diversion of surface water from sources in the Lake Okeechobee Region as depicted on Figure 21-4 and described in subsection 40E-21.691(3), F.A.C., shall be subject to the restrictions described in subparagraph (2)(a)6., below.

(2) Agriculture.

(a) Agricultural Use.

1. through 4. No Change.

5. The District's allocation determination for agricultural irrigation within the entire Lake Okeechobee Region as depicted on Figure 21-4 will be based on 45% cutbacks to the calculated 1 in 10 supplemental crop demands calculated on a weekly basis. The entire Lake Okeechobee Region supplemental crop demands will be distributed among the sub-basins depicted in Figure 21-4 based on a grouping of crop types, irrigation methods (e.g. flood irrigated crops versus micro irrigated crops), the associated acreage totals as identified in the individual water use permits combined with the associated 1 in 10 evapotranspiration demands of the crops. An additional amount of water from Lake Okeechobee will be added to the weekly allocation as necessary to account for conveyance losses that occur through seepage and free surface evaporation from the Central and Southern Florida Flood Control System Project canals. The share of the entire Lake Okeechobee Region irrigation allocation available to each sub-basin may be further adjusted to prioritize water deliveries among crops, as long as the sum of the sub-basin allocations does not exceed the weekly allocation for the entire Lake Okeechobee Region and that equity among users and sub-basins is assured. Such adjustments shall be based upon irrigation efficiency, potential for economic loss, and acreage irrigated as opposed to non-irrigated acreage. Withdrawals

by each user within the Lake Okeechobee Region as described in subsection 40E-21.691(3), F.A.C., from each source class in each month shall be limited to an amount that represents each user's share of their sub-basin weekly allocation based on their permitted crop type and irrigated acreage ~~the total allocation for agricultural irrigation made by the District from that source for that month and in that basin.~~ The District shall provide the users with the data necessary to calculate their weekly allotment of water. ~~The District's allocation determination for agricultural irrigation will be based on its evaluation of the supply capabilities of the source class, the supply capabilities of other source classes available in the area, the needs of agriculture and all other users in the area, and the District's overall management strategy for handling the uncertainties of future climatological events. The share of the total agricultural irrigation allocation available to each user will be based on any prioritization among crops the District establishes based on irrigation efficiency, economic loss and equity considerations and the acreage and quantity of withdrawals for which the user has been permitted. The District's allocation determination for agricultural irrigation within the Lake Okeechobee Region, as described in subsection 40E-21.691(3), F.A.C., will be based on the supply capacity of Lake Okeechobee as defined by the establishment of a temporary reference elevation.~~

~~a. The short and long term harm to the water resources and economy associated with further reduction in Lake stage;~~

~~b. The harm to the crops, and associated economic impacts, projected to result from the reduction or elimination of water supply; and~~

~~c. The projected drought duration.~~

~~The day to day operational decisions associated with implementing the temporary revised reference elevation shall be delegated to staff in the Phase III water~~

~~shortage order. The governing board will be updated on a monthly basis at a governing board or other public meeting of past and projected changes to the temporary revised reference elevation.~~

6. (b) through (e) No change.

(3) through (4) No change.

Specific Authority 373.044, 373.113 FS. Law Implemented 373.042, 373.0421, 373.175, 373.246 FS. History—New 5-31-82, Amended 1-26-86, 2-14-91, 9-10-01, _____.

40E-21.551 Phase IV Critical Water Shortage.

(1) (a) through (e) No change.

(f) Diversion and Impoundment into Non-District Facilities. ~~4.~~ Water used for diversion and impoundment into non-District facilities shall be voluntarily reduced; however, the diversion of surface water from sources in the Lake Okeechobee Region as depicted on Figure 21-4 and described in subsection 40E-21.691(3), F.A.C., shall be subject to the restrictions described in subparagraph (2)(a)6., below.

(2) Agriculture.

(a) Agricultural Use.

1. through 4. No change.

5. The District's allocation determination for agricultural irrigation within the entire Lake Okeechobee Region as depicted on Figure 21-4 will be based on 60% cutbacks to the calculated 1 in 10 supplemental crop demands calculated on a weekly basis. The entire Lake Okeechobee Region supplemental crop demands will be distributed among the sub-basins depicted in Figure 21-4 based on a grouping of crop types, irrigation methods (e.g. flood irrigated crops versus micro irrigated crops), the associated acreage totals as identified in the individual water use permits combined with the associated 1 in 10 evapotranspiration demands of the crops. An additional amount

of water from Lake Okeechobee will be added to the weekly allocation as necessary to account for conveyance losses that occur through seepage and free surface evaporation from the Central and Southern Florida Flood Control System Project canals. The share of the entire Lake Okeechobee Region irrigation allocation available to each sub-basin may be further adjusted to prioritize water deliveries among crops, as long as the sum of the sub-basin allocations does not exceed the weekly allocation for the entire Lake Okeechobee Region and that equity among users and sub-basins is assured. Such adjustments shall be based upon irrigation efficiency, potential for economic loss, and acreage irrigated as opposed to non-irrigated acreage. Withdrawals by each user within the Lake Okeechobee Region as described in subsection 40E-21.691(3), F.A.C., from each source class in each month shall be limited to an amount that represents each user's share of their sub-basin weekly allocation based on their permitted crop type and irrigated acreage the total allocation for agricultural irrigation made by the District from that source for that month and in that basin. The District shall provide the users with the data necessary to calculate their weekly allotment of water. The District's allocation determination for agricultural irrigation will be based on its evaluation of the supply capabilities of the source class, the supply capabilities of other source classes available in the area, the needs of agriculture and all other users in the area, and the District's overall management strategy for handling the uncertainties of future climatological events. The share of the total agricultural irrigation allocation available to each user will be based on any prioritization among crops the District establishes based on economic loss and equity considerations and the acreage and quantity of withdrawals for which the user has been permitted.

6.(b) through (e) No change.

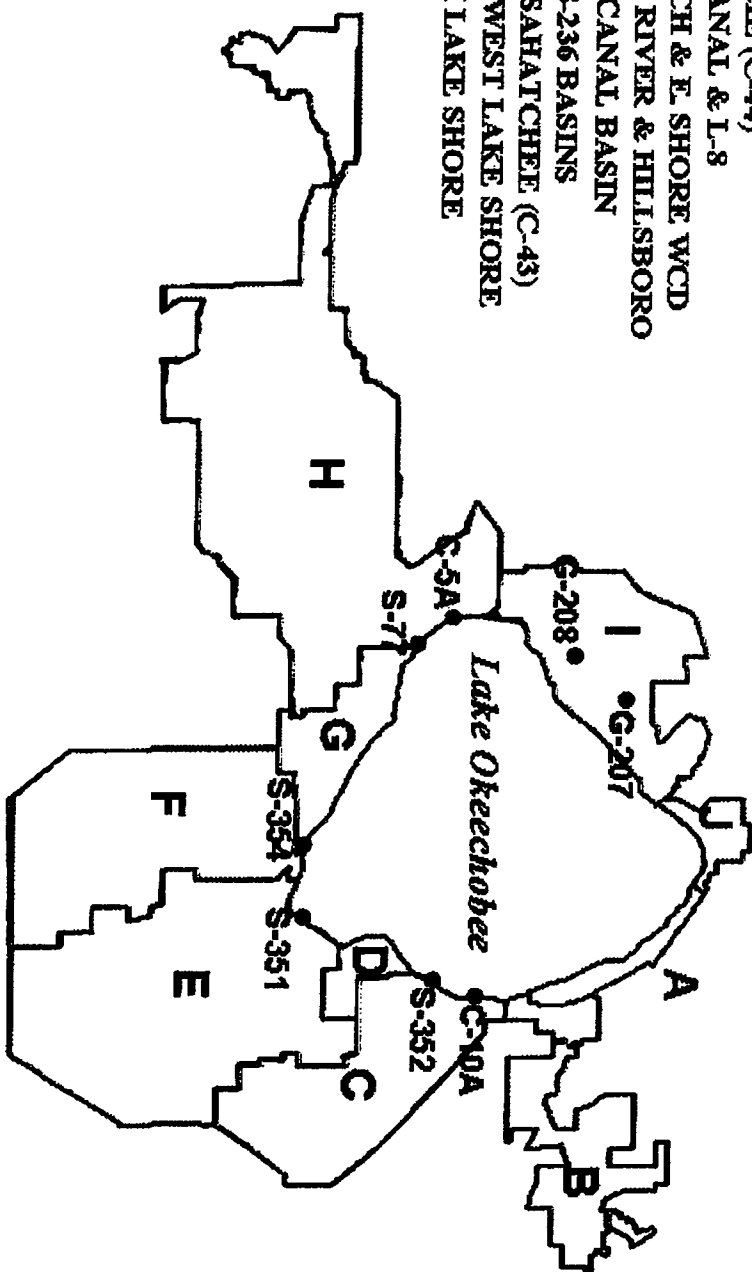
(3) through (4) No change.

Specific Authority 373.044, 373.113 FS. Law Implemented 373.175, 373.246 FS.

History—New 5-31-82, Amended 1-26-86, 2-14-91, _____.

Lake Okeechobee Region Sub-Basin Boundaries

- A: NORTHEAST LAKE SHORE
- B: ST. LUCIE (C-44)
- C: WPB CANAL & L-8
- D: E. BEACH & E. SHORE WCD
- E: N. NEW RIVER & HILLSBORO
- F: MIAMI CANAL BASIN
- G: C-21 & S-236 BASINS
- H: CALOOSAHATCHEE (C-43)
- I: NORTHWEST LAKE SHORE
- J: NORTH LAKE SHORE





SOUTH FLORIDA WATER MANAGEMENT DISTRICT

EX07-092

October 23, 2007

Colonel Paul L. Grosskruger
Commander and District Engineer
United States Army Corps of Engineers
Jacksonville District Post Office Box 4970
Jacksonville, FL 32232-0019

Dear Colonel Grosskruger:

Subject: Lake Okeechobee Regulation Schedule Tentatively Selected Plan Comments

At the October 10, 2007 South Florida Water Management District (District) Governing Board meeting held in West Palm Beach, a status update regarding the U.S. Army Corps of Engineers' (USACE) proposed Tentatively Selected Plan (TSP) for the proposed modification to the Lake Okeechobee Regulation Schedule was given. Chip Merriam, Deputy Executive Director, presented a summary of the benefits, issues, and concerns that staff identified as well as those which stakeholders expressed during recent District Water Resource Advisory Committee meetings. Several stakeholder groups, including east and west coast estuarine constituents, provided comments in support of the TSP. Audubon reluctantly supported the TSP, while Tribal and agricultural interests were not supportive largely due to projected adverse water supply impacts. The essence of Mr. Merriam's presentation and the District Governing Board's direction to staff are summarized below.

The key benefits of the TSP include reduction in high Lake Okeechobee (Lake) stages such that Herbert Hoover Dike safety concerns are addressed. Moreover, the TSP provides several benefits to the Lake's ecology such as protection of aquatic vegetation by lowering average Lake stages, benefits associated with *periodic* extreme low lake levels, encouragement of bulrush germination (10-10.5'), and oxidation of organic muck in littoral zone. Staff also noted estuarine benefits from implementation of the proposed TSP were expected to be mixed.

Consistent with District input to the USACE in August, the District's main concerns with the TSP include the increased potential for Lake minimum flow and level (MFL) exceedances and violations, including a fifty percent increase in the average number of days of Lake MFL exceedance. Analysis indicates water shortage cutbacks do not reduce or prevent these MFL exceedances. While the Lake's ecology can benefit from periodic lower levels, as noted above, ecological concerns with these lower levels also exist and include impacts to Snail Kite habitat and food source, loss of native habitat and exotic plant expansion, and adverse fish reproduction impacts. Concern for adverse impacts to permitted users' supply availability and level of certainty also exists as there is a significant potential for water shortage cutbacks to be imposed more frequently than once every ten years.

Additional concerns were expressed in regard to the US Fish and Wildlife Service (USFWS) consultation, since the Biological Opinion on the proposed TSP had not yet been received. Staff indicated that a jeopardy Biological Opinion was unlikely. After the Board meeting, staff received the USFWS Biological Opinion and is reviewing it.

Additionally, concern for impact to the Seminole Tribe's water rights was expressed. Specifically, the Compact between the Seminole Tribe of Florida, the State of Florida, and the District establishes a federal water right for the Tribe's reservations. At the Governing Board meeting representatives of the Seminole Tribe indicated the TSP dramatically impacts the Tribe's Reservations and erodes its water rights without mitigation. District staff indicated its on-going evaluation of mitigation alternatives which may, potentially, be implemented during the anticipated 2008 drought, particularly at the Tribe's Brighton Reservation.

After a lengthy discussion, the Board members voted to direct staff to: forward the identified concerns to USACE for consideration; obtain and review the USFWS' Biological Opinion; negotiate the beginning of the next regulation schedule process, paralleling the Systems Operations Manual with a new Lake schedule study; start the process, soon after finalizing TSP, to acknowledge new projects as they are built such as the C-43, C-44, EAA Reservoir, and other Band 1 projects; recognize USACE has challenges with federal process; and address Brighton Reservation supply issues by addressing G-207 pump capability or Lake Istokpoga deviation.

Most significantly, the Board discussed the interim nature of the TSP and linkage of this schedule, among other issues, to Dike repairs. On this point, the Governing Board specifically requested the USACE commit to using flexibility within the TSP to incrementally add water to the Lake as Dike reaches 1, 2, and 3 are repaired. To assist the USACE in capturing the Governing Board's motion and describing the interim nature of the TSP, I have attached proposed language for your consideration.

It is clear balancing the multi-purpose objectives of Lake Okeechobee's regulation schedule is a complex task. The District looks forward to continuing to provide assistance to the USACE as it finalizes this TSP and engages in future schedule modifications. Thank you in advance for your consideration of the District Governing Board's recommendations in regard to this TSP.

Sincerely,



Carol Ann Wehle
Executive Director
South Florida Water Management District

CW/le
Attachment

c: Chip Merriam

INTERIM NATURE OF the Lake Okeechobee Regulation Schedule:

A new regulation schedule was required to respond to high lake levels that resulted in integrity issues and concerns with the Herbert Hoover Dike (HHD), high volume releases to the estuaries, and impacts to Lake Okeechobee littoral zones. Hence, a new Lake Okeechobee Regulation Schedule (LORS) was developed. LORS is intended to be an interim schedule. Because this schedule was formulated to address specific conditions existing in 2007, as circumstances change, the Corps will adapt its Lake Okeechobee operations accordingly. The Corps expects to operate under LORS until the earlier of (1) implementation of a new Lake Okeechobee schedule as a component of the system-wide operating plan to accommodate the Comprehensive Everglades Restoration Plan (CERP Band 1 projects) and the SFWMD's fast track Acceler8 projects, or (2) completion of HHD seepage berm construction or equivalent dike repairs for reaches 1, 2 and 3. The occurrence of the above referenced events are expected to allow for greater operational flexibility, potentially including higher lake levels for increased water storage. In balancing the multiple project purposes, the Corps, will timely shift from the interim LORS to a new schedule with the intent to complete any necessary schedule modifications or deviations concurrent with completion of (1) or (2).

Pending completion of rehabilitation in Reaches 1, 2 or 3, as HHD rehabilitation progresses, the Corps will evaluate the capacity to operate the Lake in a manner to provide more water storage in conjunction with achieving other project purposes. The anticipated points at which the Corps will utilize the flexibility within the schedule consistent with protection of health safety and welfare to provide additional storage include, at a minimum, completion of filling of the toe ditch, construction of the seepage berm within the existing right of way in Reach 1, and equivalent dike improvements in Reaches 2 or 3, which are currently under design. Upon changed circumstances, the Corps will provide additional storage, consistent with technical analysis, that might result from higher lake elevations. The Corps can respond to changed circumstances by adjusting operations within LORS' operational flexibility or through schedule deviations.

The Corps will conduct appropriate NEPA analysis as it responds to new information and to support any future schedules, schedule deviations or modifications.

As required by the CERP Programmatic Regulations, projects implemented under the CERP are to be operated under a System Operating Manual and individual Project Operating Manuals. The initial System Operating Manual, which is currently in draft, will be a system-wide operating plan for CERP features as well as features of the existing C&SF Project. In Fiscal Year 2008, the Corps and SFWMD will initiate the System Operating Manual Study to look at possible revisions to the initial System Operating Manual due to construction and operation of the CERP Band 1 projects as well as possible modifications to Lake Okeechobee operations as a result of Herbert Hoover Dike repairs. The LORS will be a priority in these revisions.

The EIS analysis indicates that LORS is projected to adversely impact water supply at low lake levels with the current SFWMD water supply triggers. During LORS implementation, the Corps will utilize the flexibility within the schedule to take advantage of potential opportunities to increase water supply benefits considering all other project purposes, antecedent conditions and forecast conditions. If necessary to address unforeseen circumstances, the Corps may implement planned or emergency deviations to LORS.



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

3301 Gun Club Road, West Palm Beach, Florida 33406 • (561) 686-8800 • FL WATS 1-800-432-2045 • TDD (561) 697-2574
Mailing Address: P.O. Box 24680, West Palm Beach, FL 33416-4680 • www.sfwmd.gov

October 12, 2006

Colonel Paul L. Grosskruger
Commander and District Engineer
United States Army Corps of Engineers
Jacksonville District Post Office Box 4970
Jacksonville, FL 32232-0019

Dear Colonel Grosskruger:

Thank you for the opportunity to comment on the draft Supplemental Environmental Impact Study (SEIS), including the "Tentatively Selected Plan," (TSP) for the Lake Okeechobee Regulation Schedule Study (LORSS). It is our intent to provide comments to identify issues of concern to the South Florida Water Management District (District), provide technical information for incorporation in the United States Army Corps of Engineers (USACE) Final SEIS document, and improve upon the performance of the Lake Regulation Schedule for the benefit of the Lake and estuaries.

The presentations conducted by USACE staff at the August 3rd and September 7th Lake Okeechobee Water Resources Advisory Committee (WRAC) meetings and at the September 12th District Governing Board meeting, have been very helpful to the stakeholders and the Governing Board. They have been instrumental in helping the District's policy setting Governing Board formulate its position on the multitude of issues embedded within this proposed Lake Regulation Schedule.

Please keep in mind that while the following is a summary of the District's concerns, it has become apparent to us that the USACE has begun to address many of these issues. Accordingly, we anticipate that the results will be reflected in a Final SEIS that satisfies all legal requirements and provides a solid foundation for the USACE's final decision on the Interim Regulation Schedule:

- **Tentatively Selected Plan:**

- **General Operations:** Our previously transmitted concerns regarding the clarity of operations as described in the draft Water Control Plan (WCP) remain a concern. We are encouraged that the USACE and District operations staffs met to work through previously identified concerns with the TSP and the draft WCP. This effort succeeded in providing a greater appreciation and understanding of the complex issues associated with the daily operations of managing a flexible water management system. It has also provided helpful perspectives concerning the duties of the USACE and the District in balancing all the individual components and factors addressed in the Draft SEIS. It is critical that this team continue to meet on a regular basis, and District operations staff remains ready to assist with review of the second draft of the WCP.

GOVERNING BOARD

Kevin McCarty, *Chair*
Irela M. Bagué, *Vice-Chair*
Miya Burt-Stewart

Alice J. Carlson
Michael Collins
Nicolás J. Gutiérrez, Jr., *Esq.*

Lennart E. Lindahl, *P.E.*
Harkley R. Thornton
Malcolm S. Wade, Jr.

EXECUTIVE OFFICE

Carol Ann Wehle, *Executive Director*

- Non-Typical Operations Concern: The District's primary operational concern with the TSP centers upon the "Non-Typical Operations" (NTOs) provisions. While the District supports the USACE's attempt to provide flexibility in Lake operations, the NTO provisions of the proposed WCP are confusing. As we understand it, typical operations are based on Alternatives 1bS2-m, while NTOs are based on Alternatives 2a and 2a-m. The document identifies Alternative 1bS2-m as the TSP, but doesn't adequately clarify that NTOs and hence Alternatives 2a and 2a-m are also part of the TSP. The operational criteria defining when to switch to NTOs operations were not analyzed as a part of the TSP alternative; therefore, it is difficult to predict Lake operations and their corresponding effect on the various performance measures. The Final SEIS should detail the proposed action and its expected performance. Specifically, the Final SEIS description of the proposed regulation schedule and the WCP should remove all references to Alternative 2A and 2A-m. Those alternatives have unacceptable performance for the estuaries and water supply and were not endorsed by the PDT. We acknowledge that the USACE has mentioned in various public meetings its intent to remove the NTOs from the TSP.
- Managed Recession Concern: While the District concurs with the USACE's proposed decision to remove NTOs from the TSP, it is critical to preserve the ability to incorporate periodic, managed recessions into the revised schedule. Therefore, we have modified our original documentation of the Managed Recession contained in the Draft SEIS as Attachment F and ask that the USACE include it in the Final SEIS. (This modified document is included as our Enclosure A.)
- High Wet Season Discharges Concerns:
 - Current modeling of the TSP indicates that the number of high discharge months (> 4500cfs) to the Caloosahatchee estuary is likely to increase. Such flows adversely impact marine areas that do not normally experience the low salinity that accompanies these discharges. We encourage the USACE to continue to test ideas designed to reduce the number of high discharge months.
 - To reduce the additive impacts of regulatory releases from the Lake at S-77 and high runoff from the C-43 basin on the Caloosahatchee Estuary, District staff tested and proposes an idea for further evaluation. The idea is to measure pulse releases at the coastal structure S-79 rather than at the point of release from the Lake, S-77. Screening model results indicate this idea helps reduce the number of exceedences of high flows greater than 4500 cfs at S-79. This approach has precedence as regulatory pulse releases to the St. Lucie Estuary are measured at the coastal structure. District staff has tested many other ideas to improve TSP performance and will continue to provide input to the USACE.
- Base Flow Characterization: Please clarify the nature of the base flows to the Caloosahatchee Estuary. It is the District's understanding that these flows are provided as low-level releases for the integrity of the Dike system and flood control. They are not provided for environmental water supply purposes.

Low Lake Operations - Water Supply Impacts and Projected MFL Violations

- o **Lake Okeechobee Water Shortage Management Plan:** The District is pleased to include with these comments the Draft Lake Okeechobee Water Shortage Management (LOWSM) Plan (Enclosure B, with an electronic version forwarded to Yvonne Haberer and Pete Milam via email). The LOWSM Plan will replace the former Supply Side Management (SSM) Plan and the surrogate lowering of the trigger line by one foot in the TSP. Please remove any references to the previous SSM Plan and replace these references with the LOWSM Plan, while noting that the assumptions made in the Draft SEIS concerning the replacement of the SSM Plan have been validated by the contents of the LOWSM Plan. The LOWSM Plan, although not yet formally adopted by the SFWMD Governing Board, has been discussed extensively. It received support at both the September WRAC and Governing Board meetings. Since it is currently the USACE's intent to improve upon the TSP, we respectfully request the inclusion of the LOWSM model revisions into the next set of sensitivity run assumptions addressing estuary performance measures improvements. Based on modeling conducted to develop the LOWSM Plan, it is anticipated that, as a result of the LOWSM Plan and the use of temporary forward pumps, water supply concerns raised in conjunction with the TSP and lower Lake levels will be adequately addressed without deleterious effects to other performance measures.
- o **Lake Schedule Produces Lower Stages Which Require Forward Pumps:** The USACE's Final SEIS should clarify several considerations associated with low Lake operations. The District's main function during drought conditions is to equitably apportion available Lake water among all users. Water is delivered from the Lake for many purposes during drought conditions including releases to meet the restricted demands of permitted users, to help prevent salt water intrusion in aquifers on both coasts, to supplement water deliveries from the WCAs, and to address various environmental water supply needs such as Everglades fire protection. The draft SEIS made several references to the District's operation of the Lake at low levels; the role of the District should be clarified in light of the above. As a related matter, the District, in an effort to address water supply concerns associated with the TSP and to help the USACE move forward with the Lake schedule modification, accepts the resulting responsibility of installing forward pumps as a mechanism to ameliorate impacts of the lower Lake schedule on existing legal users. The Final SEIS should note that the LOWSM operations were designed to 'match' the water level and water supply performance of the USACE's proposed Lake schedule. Therefore, the delivery of water supply to the Lake Okeechobee Service Area via LOWSM will not cause the Lake levels to decline below levels contemplated in the Lake Regulation Schedule.
- o **Lake Schedule Produces Lower Stages which Reduce Operating Capability of Lake Inflow Structures:** The experience of the 2000-2001 drought showed that low Lake stages also affect the capability to hold normal stages upstream of S-65E, S-84, S-191, S-71, and S-72. Maximum head criteria may need to be reevaluated by the USACE. The current criteria limits the head across the structures and thus releases must be made to preserve the maximum head. Such releases lower the headwater stages and reduce the water supply capability of the system.

- **Water Availability Impacts:** The Draft SEIS does not appear to adequately address certain issues regarding reduction of backup water supplies given the overall lower Lake level caused by the proposed Lake Regulation Schedule. For example, it assumes forward pumps will be effective in addressing water supply (for users and environmental interests) issues during drought conditions. The Final SEIS should provide more detail on issues associated with reliance on the forward pumps such as: evaporation losses, conveyance limitations, and Lake ecology impacts. The District suggests that the Final SEIS expressly recognize that less water, as a whole, will be available to meet demands during the dry season and should also identify the associated implications of this situation.
- **Proposed MFL Violation Recovery Plan:** The USACE's proposed Lake Regulation Schedule is projected to result in Lake levels that will violate the District's Lake Okeechobee minimum flows and levels (MFL). (See Chapter 40E-8, Florida Administrative Code) In response to the anticipated low Lake levels that are likely to generate Minimum Flows and Levels (MFL) violations, the District is preparing an MFL Recovery Plan that will be incorporated into the Lower East Coast Regional Water Supply Plan (LECRWSP). This document will address Lake restoration efforts that the District will implement when Lake levels exceed or violate the MFL. Since these lower Lake levels can provide opportunities to conduct restoration efforts during low water periods that otherwise would not be possible. These periods will allow the District to conduct native aquatic and tree planting, sediment scraping, dredging, and other habitat enhancements, which may include the possible supplementation of apple snail populations
- **Maximum Lake Level Constraint:** As all participants in this process acknowledge using a project constraint of 17.25' NGVD, as the maximum Lake Okeechobee water level, means more water must be discharged to the estuaries. Because of the continued concerns regarding the imposition of the 17.25' maximum Lake level, we respectfully request that this constraint be revisited in the Final SEIS to ensure that this decision reflects the best judgment and expertise of the USACE on this important public safety question.

● **Endangered Species**

- **Temporary Pumps and LORSS:** The District is pleased that the U.S. Fish & Wildlife Service (FWS) will include an assessment of the District's temporary forward pump operations in its Biological Opinion for this proposed action. The inclusion of temporary forward pumps in the Biological Opinion should simply reflect the fact that the use of these pumps is simply a 'tool' that will be used to provide a similar water supply capability at low Lake stages caused by implementation of a lower Lake Regulation Schedule.
- **Permanent Forward Pumps and FWS Timeline:** Unfortunately, timing is such that the District will need to make decisions about its plan to purchase and install permanent forward pumps while there remains the possibility of a jeopardy opinion issued by the FWS on the snail kite. The potential that a jeopardy opinion could prohibit operation of the forward pumps when the Lake reaches 10.2 NGVD is of grave concern to the District for financial and programmatic reasons. Until the FWS issues its Biological Opinion on the LORSS, the District believes that similar

concerns should apply to the operation of the temporary forward pumps. The Final SEIS should make clear that the forward pumps and LOWSM are the integral tools needed to meet the water supply demands of environmental, agricultural, urban, and tribal interests within the new Lake Regulation Schedule.

- **Temporary Deviations in Related Areas of the C & SF System:**

- During the 2000 – 2001 drought the USACE authorized temporary deviations from the Water Control Plans for the Water Conservation Areas and Lake Istokpoga. These authorizations proved to be important, alternative mechanisms to complement managing the limited volumes of water available in Lake Okeechobee. For example, using the temporary deviation from the Lake Istokpoga regulation schedule enabled Lake restoration efforts to occur at a time when the Lake was naturally low; moreover, Lake water releases to produce the restoration were provided at a fortuitous time for users in need of water supply. Given this experience, the District encourages the USACE to recognize in the Final SEIS the opportunities to accomplish multiple C & SF system objectives by strategically authorizing temporary deviations in other water bodies during droughts. Such a System-wide perspective can result in optimum management of the resource.

- **Herbert Hoover Dike Integrity:**

- The District continues to support the USACE's efforts to repair and rehabilitate the Dike and encourages the USACE to expeditiously accelerate completion of this work.

- **Seminole Tribe Concerns:**

- The Draft SEIS concludes there will be no impact to Native American resources. Because the Seminole Tribe of Florida depends on Lake Okeechobee water supply at two of their reservations – the Brighton and Big Cypress Seminole Indian Reservations, additional discussion of this subject in the Final SEIS is warranted and should include the following information. Analysis of the USACE's proposed Lake Okeechobee Regulation Schedule shows it will reduce the Lake's stages to below 10 feet NGVD on a more frequent basis. Clearly, these Lake stages are a concern for both the Brighton and Big Cypress Reservations since both Reservations rely on the Lake, in part, for water supply and it is difficult to convey water out of the Lake below this level. District and USACE staff recently met with Tribal representatives to discuss proposed short- and long-term measures to address the issue at both Reservations. During this regulation schedule evaluation, the District has been mindful of its responsibility to provide the Tribe with its surface water entitlement rights. We have endeavored to satisfy these obligations through our analysis of the Lake schedule modifications and our commitment to provide alternative means of delivering water at low Lake levels.

- **Documentation of STA Flow Constraint:**

- The total phosphorus loads entering STA-3/4 were identified as a constraint early in the plan formulation and performance evaluation process. The 2007 Base Condition and the TSP for the Lake Okeechobee Regulation Schedule were

evaluated for their projected influence on the performance of STA-3/4 and contains sufficient background documentation on why the STA-3/4 inflow loads are a constraint. Simulated Lake releases were compared to a Performance Measure (PM) consisting of average monthly flows to STA-3/4. In recognition that the phosphorus concentrations occurring in Lake releases are presently higher than assumed during the design of STA-3/4 and in the recent EAA Regional Feasibility Study (RFS), the volume of Lake releases derived for the PM were reduced proportionately to ensure that the phosphorus load does not overload STA-3/4 and reduce its effectiveness.

- o The Dynamic Model for Stormwater Treatment Areas – Version 2 (DMSTA2, 6/30/06) was utilized to simulate phosphorus reductions within the STA. The results of the DMSTA modeling efforts were forwarded to the USACE but were not included in the Draft SEIS. The summary is included here as Enclosure "C". The final plan and revised 07LORS simulation will be re-evaluated with DMSTA. This information, as well as the constraint documentation, should be included in the Final SEIS.

We welcome the opportunity to continue to work with the USACE in an intensive, collaborative effort to develop the best possible revisions to the Lake Okeechobee Regulation Schedule. Thank you for your consideration of these comments.

Sincerely,



Carol Ann Wehle
Executive Director
South Florida Water Management District

CW/ko

Enclosures:

- Enclosure A - Incorporation of Periodic Managed Recessions into the TSP
- Enclosure B - Lake Okeechobee Water Shortage Management Plan (LOWSM)
- Enclosure C - Evaluation of the Base Condition and the Tentatively Selected Plan on the Performance of STA-3/4

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