

WALK ON #2

**Lee County Board Of County Commissioners
Agenda Item Summary**

Blue Sheet No. 20051527

1. ACTION REQUESTED/PURPOSE: Presentation on County/District evaluation on what Lake Okeechobee and Estuary Recovery (LOER) means to Lee County, and what else can be done.

2. WHAT ACTION ACCOMPLISHES: Responds to the Board direction that the LOER be evaluated for short term actions that recover River and Estuary water Quality.

3. MANAGEMENT RECOMMENDATION: Support LOER, with additional actions as indicated in the attachment.

4. Departmental Category: Smart Growth, Natural Resources, and SFWMD.

5. Meeting Date:

10-18-2005

- 6. Agenda:**
- Consent
 - Administrative
 - Appeals
 - Public
 - Walk-On

- 7. Requirement/Purpose: (specify)**
- Statute
 - Ordinance
 - Admin. Code
 - Other briefing

8. Request Initiated:
 Commissioner St. Cerny as Chairman
 Department _____
 Division _____
 By: _____

9. Background: The October M and P meeting reviewed the draft basin water quality initiative proposal, that resulted from the August 15-16 consultation with the Corps of Engineers, and the SFWMD. The Basin Initiative is being presented to the Southwest Florida Regional Planning Council for acceptance. Since then, Governor Bush has declared a broader Lake Okeechobee and Estuary Recovery Initiative, into which the Basin Initiative can nest. Last Tuesday, the Board received a short Briefing on LOER, and asked for a more detailed explanation from the District at this meeting, with emphasis on the more immediate actions that will take place from now to the start of the next rainy season. The South Florida Water Management District and staff will make such a presentation.

Attached is the Lake Okeechobee and Estuary Recovery Plan and the Basin Initiative Request the SWFRPC will review on October 20th.

10. Review for Scheduling:

Department Director	Purchasing or Contracts	Human Resources	Other	County Attorney	Budget Services				County Manager/P.W. Director
					Analyst	Risk	Grants	Mgr.	
[Signature]	N/A	N/A	N/A	[Signature]	10/17/05	10/17/05	10/17/05	10/17/05	10-17-05

- 11. Commission Action:**
- Approved
 - Deferred
 - Denied
 - Other

Rec. by CoAtty

Date: 10/17/05

Time: 1:40pm

Forwarded To: Budget

10/17/05

From: Pete Winton
To: DeSalvo, Richard
Date: 10/17/05 9:08AM
Subject: Fwd: Blue sheet

Dick,

This walk-on was directed by Board at last week's meeting. Will get signed copy to you today.....thanks

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Caloosahatchee Watershed Recovery Initiative/Partnership

The focus of the Initiative is the watershed. It is to be the forerunner of the administrative and management partnership necessary to carry out the recommendations of the Southwest Florida Feasibility Study (A component of the Comprehensive Everglades Recovery Plan), and the not yet written Caloosahatchee River/Lower Charlotte Harbor Impaired Waters Recovery Plan.. To cover the three to four year period while the Study is completed and finalized, this forerunner effort's purpose is to take advantage of opportunities to address known problems, within the planning and implementation framework the partners can muster.

REQUESTED ACTION: The SWFRPC establish a "Policy Advisory" subcommittee of its members from the four counties of the watershed. The subcommittee's purpose would have four functions: (1) Serve as an interim (minimum one year) policy recommendation committee to its members for better coordination of land and water management efforts to improve water quality and storage within the Caloosahatchee basin. (2) Recommend a successor (or continuation) entity to serve as the coordination arm of the sustained effort needed for River system/estuarine recovery. (3) Identify any needed legislative authorizations or remedies to further this effort, including which projects need legislative funding. . (4) Establish a technical advisory committee that meets Initiative needs.

Below is the initial write up that guided discussions between Lee County and SFWMD.

The Initiative has several components, and operates from certain predicates:

1. Lake Okeechobee. Storage and water quality efforts for the Lake are diverse and massive. The Initiative is expected to support these efforts, but needs to participate in two major components:

A. Forepumping. As a relatively inexpensive tool to give greater flexibility, forepumping allows a broader range of Lake Management, which for our Watershed would reduce the frequency and duration of large "environmental" discharges out of the Lake, and allow more opportunities for flows to meet MFLs for the estuary.

B. WSE Deviations. The Lake operates from a "Water Supply and Environmental" schedule. Since its inception, the Lake Managers recognize the need for more flexibility in decision points. The flexibility needs are pursued by Stakeholders. Simply said, the Partnership (including Lee County) needs to individually and collectively represent our area's needs in these discussions.

2. Basin water supply. The basin suffers from a hyper exaggerated wet/dry season due to the nature of our drainage system. Too much water is lost during the wet season to adequately meet our needs in the dry season. This is a primary reason for the C-43 reservoir effort. C-43 phase I is not enough however. There are several opportunities looming for smaller scale rehydration efforts. These should be identified, and where funding is needed, jointly pursued for funding. The SWFFS should when complete identify a more complete and systematic review of these needs and opportunities.

A. Support the water supply targets for C-43 basin for the estuary, urban use, and agricultural

demands, with the first priority that they be met from within the basin.

B. Support the reservation of water from storage areas at the indicated level necessary for the seasonal health of the estuary.

3, Basin Water Quality. Great expanses of the basin's open waters are declared impaired, most commonly for nutrients. The public response involves reconstruction of drainage systems for water quality and enhanced standards for new development.

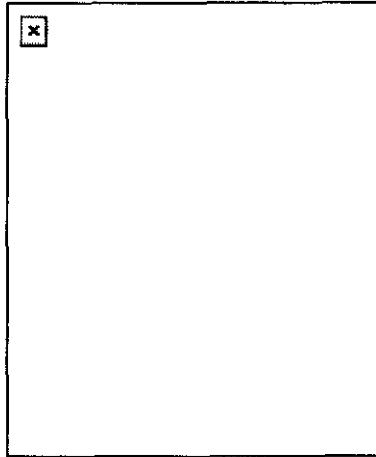
A. Pollution Load Reduction Goal.. An issue with the C-43 Reservoir is that a "Goal" is not established by which this and other efforts can be evaluated for their role in achieving success. This expected outcome of the SWFFS is several years away. An Interim Goal based upon best known available information to the partners is critical to not lose momentum in partnering for improvement and in pursuing three to four years of "known" remedies that can help address the problem, prior to SWFFS finalization.

B. Projects. Establish a preliminary 5 year program of restoration and enhancement projects that are evident in need and that can be made project ready, with the support of the partnership.

C. Regulatory review. Complete and implement the proposed BMPs that would make new urban and agricultural development "impact neutral" in water quality.

4. Alternatives Evaluation. Aquifer Storage and Recovery, and wet season flooding of portions of the EAA are controversial alternatives that help meet wet season storage needs, and in the case of ASR, provide more flexibility for utility planning and achieving dry season MFLs. The Partnership needs to participate in the discussions and assessment of these alternatives, representing the basin's needs.

5. Planning and Management structure. Sufficient public administrative and managerial infrastructure exists to implement a partnership program. A current system of ad hoc meetings can be made more regular, and an annual agenda established to provide more regularity in achieving outcomes. The initial two partners need to be the SFWMD and Lee County, but the partnership is not effective without FDEP, and Charlotte, Glades and Hendry Counties. Other partners are desirable (not overlooking the role of municipalities), but the steps noted above require these partners as a minimum.



In response to identified water resource needs, legislative directives, and demands of Florida citizens, an action plan has been developed to help restore the ecological health of Lake Okeechobee and the St. Lucie and Caloosahatchee Estuaries. Key state agencies charged with carrying out this plan include the South Florida Water Management District (SFWMD), the Department of Environmental Protection (FDEP), the Department of Agriculture and Consumer Services (FDACS) and the Department of Community Affairs (FDCA).

Through the leadership of the Governor and Legislature, initial funding has been provided for a series of “fast-track” capital projects to help provide meaningful water quality improvements:

Complete by 2009

▪ Lake Okeechobee Fast Track Projects

The Lake Okeechobee Fast Track projects include the following components: an 800-plus acre expansion of the Nubbin Slough Stormwater Treatment Area (STA); the construction of a 4,000-acre reservoir in Taylor Creek; the construction of another 2,700-acre STA at Lakeside Ranch (south and west of Nubbin Slough); the re-routing of flows from the S-133 and S-191 basins to the Lakeside Ranch STA; and, potentially, the re-routing of flows from the S-154 basin also to the Lakeside Ranch STA. The combined storage and phosphorus reduction benefits are estimated at 48,000 acre feet and 65 to 75 metric tons, respectively.

Fast Track Lead Agency: SFWMD

Fast Track Supporting Agencies: USACE, FDEP

Other LOER Plan Components

In addition to the “turn-dirt” construction projects, several other far-reaching and innovative components – some which do not require large capital outlay – can also provide more immediate and measurable improvements in the condition of Lake Okeechobee, the St. Lucie Estuary and the Caloosahatchee Estuary. Combined, these initiatives comprise a bold and aggressive recovery plan.

Complete non-structural revisions by 2006

Complete full implementation – with structural changes in place – by 2010

▪ Revise Lake Okeechobee Regulation Schedule

To help achieve a better balance among management objectives – flood control, water supply and navigation, and the competing needs of the lake, estuaries and greater Everglades ecosystem – the U.S. Army Corps of Engineers (USACE) will revise the lake regulation schedule by December 2006. The ultimate goal is to achieve lower lake water levels and reduce high volume discharges to the estuaries.

As structural components, such as the Acceler8 reservoirs are completed, the USACE will continue to revise the schedule. The SFWMD and other supporting agencies will be working in tandem to revisit water supply demand estimates, supply side management strategies and the modeling and design of forward pumps.

Lead Agency: USACE

Supporting Agencies: SFWMD, FDEP, FDACS, the Florida Fish and Wildlife Conservation Commission (FWC), and the U.S. Fish and Wildlife Service (USFWS) (Federal)

Complete by 2007

▪ Establish Total Maximum Daily Loads (TMDLs) for Lake Okeechobee tributaries

Currently, Total Maximum Daily Loads (TMDLs) are to be developed for tributaries in the Lake Okeechobee watershed by September 2011. Because TMDLs scientifically establish the pollutant reductions necessary to restore water quality, it is essential that they be adopted as quickly as possible. Therefore, FDEP will accelerate the development of TMDLs for tributaries within the Lake Okeechobee watershed and will complete them by 2007. This work will be accompanied by the development of a basin management action plan with local stakeholders, which will identify the specific actions to be taken by all parties to restore water quality and incorporate the elements of this acceleration plan. FDEP also will continue to develop and implement TMDLs for the St. Lucie and Caloosahatchee tributaries and estuaries.

Lead Agency: Florida Department of Environmental Protection (FDEP)

Supporting Agencies: SFWMD, FDACS

Complete by 2008

▪ Implement mandatory fertilizer Best Management Practices (BMPs) (revised application rates for agriculture; low phosphorus for urban use)

FDACS, in conjunction with Institute of Food and Agricultural Sciences (IFAS), will re-assess recommended phosphorus application rates for agricultural crops and revise FDACS BMP rules appropriately. The revised recommendations will be a required component of the landowner's BMP implementation plan. FDACS will also facilitate the development and use of a low phosphorus fertilizer for urban settings in the Lake Okeechobee, St. Lucie Estuary and Caloosahatchee Estuary watersheds. These actions will reduce farm and urban phosphorus loads by 116 metric tons.

Lead Agency: FDACS

Supporting Agencies: FDEP, SFWMD, IFAS, local governments

Complete by 2008

▪ Implement revised Environmental Resource Permit (ERP) criteria for new development for the Upper and Lower Kissimmee, Lake Okeechobee, St. Lucie Estuary and Caloosahatchee Estuary Basins

The Lake Okeechobee Protection Act (LOPA) currently requires activities that result in a "land use change" to demonstrate that they will not increase the current phosphorus load discharging off-site. However, initiation of these activities provides an opportunity to improve upon the existing condition with minimal economic impact. Through the use of best management practices and stormwater management systems a net 25% to 50% reduction in the current phosphorus load discharging off of a parcel is anticipated to have a measurable improvement downstream and will be one of the provisions of the revised ERP.

Lead Agency: SFWMD

Supporting Agencies: FDEP and FDACS

Complete by 2008

▪ Identify options for storage and/or disposal of excess surface water

Areas inside the SFWMD boundaries – both public and private – may have available capacity and the potential to store Lake Okeechobee and/or tributary basin waters when there is a surplus in the watershed to prevent these excesses from impacting the estuaries. It may be possible for facilities to be constructed to deliver such excess

waters under a management schedule that would be beneficial to the lake and St. Lucie and Caloosahatchee estuaries while not impacting current water supply demands.

Lead Agency: SFWMD

Supporting Agencies: FDEP, local governments

Complete by 2010

▪ Implement growth management programs to encourage innovative land use planning to facilitate acquisition of lands for public works

Innovative land use planning techniques will be developed by the Department of Community Affairs, in partnership with affected local governments, the regional planning council, the Department of Environmental Protection, and water management districts. One example is the Rural Lands Stewardship Areas Program which provides that counties designate all or portions of lands classified in the future land use element as predominantly agricultural, rural, open, open-rural, or a substantively equivalent land use, as a rural land stewardship area. Within these areas, planning and economic incentives are applied to encourage the implementation of innovative and flexible planning and development strategies and creative land use planning techniques. This and other land use planning techniques, such as clustering development and transferable development rights, are tools to facilitate the construction of public works projects and the acquisition of lands necessary to protect and restore the watershed and downstream receiving water bodies.

Lead Agency: Department of Community Affairs (FDCA)

Supporting Agencies: Local Governments, WMDs, and FDEP

Complete by 2011

▪ Elimination of land applications of domestic wastewater residuals

Domestic wastewater residuals, including Class AA residuals, contain nutrients. These residuals continue to be imported and land applied in phosphorus sensitive basins. The volume of residuals being land applied in the Lake Okeechobee basin, which extends northward to include the Upper and Lower Kissimmee Basins, has decreased but the material still being applied is contributing excessive nutrients to already ecologically degraded systems. However, the amount of material in the St. Lucie Estuary and Caloosahatchee Estuary watersheds has been increasing. Steps need to be taken to eliminate the land application of residuals within these watersheds to remove a nutrient loading source from the system. This will prevent over 600 metric tons of phosphorus from being land applied in the watersheds.

Lead Agency: FDEP

Supporting Agencies: FDACS, SFWMD

Complete by 2015:

▪ Full Implementation of the Lake Okeechobee Protection Program and the CERP Lake Okeechobee Watershed Project

The SFWMD, in cooperation with FDEP and FDACS, developed the Lake Okeechobee Protection Plan (LOPP) as required by the Lake Okeechobee Protection Act. The LOPP contains a phased, watershed-based comprehensive approach to reduce phosphorus loading to the lake, as specified in the adopted Total Maximum Daily Load (TMDL) for the lake. Numerous activities and projects in the watershed are currently being planned and implemented by the coordinating agencies. These activities include the implementation of phosphorus source control programs including on-site Best Management Practices and regional water detention and phosphorus control projects, restoration of isolated wetlands, and in-lake remediation activities. In addition, the Lake Okeechobee Watershed Project (LOWP) of CERP will provide substantial amounts of water storage and approximately 39% of the load reduction needed to meet the TMDL. Continued support of this program through 2015 is imperative.

Lead Agencies: SFWMD, FDEP, FDACS, and USACE

Supporting Agencies: University of Florida - Institute of Food and Agricultural Sciences (UF-IFAS), Natural Resources Conservation Service (NRCS), U.S. Department of Agriculture (USDA), FWC, USFWS, local governments

▪ **Additional Challenges for Action Plan Partners**

Local Governments

- Work with the 9 County Coalition for Responsible Management of Lake Okeechobee and the St. Lucie and Caloosahatchee Estuaries and Lake Worth Lagoon to develop local government consensus on Lake and Estuary issues/ needs
- Implement stormwater utilities and stormwater retrofit projects
- Partnerships to creatively use existing public lands for water quality retrofit projects
- Assist with BMP implementation for low phosphorus fertilizer in urban settings
- Move forward to convert residential septic tank systems to central sewer
- Step up land acquisition for preservation and restoration

Florida Inland Navigation District

- Remove sediments and stabilize the banks of the St. Lucie

U.S. Army Corps of Engineers

- Replace structures S-308 and S-77 with top or mid-water release instead of the current bottom water release to reduce sediments moving into the St. Lucie and Caloosahatchee

U.S. Congress

- Authorize the Water Resources Development Act Indian River Lagoon PIR
- Implement the Modified Water Deliveries project