

Lake Okeechobee Phase II Technical Plan

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Implementation
Manager

Governing Board
Workshop

December 12, 2007



Status of Lake Okeechobee Phase II Technical Plan

- 
- **Draft Plan made available for public review
November 16th**
 - **Detailed discussion of plan**
 - **Northern Everglades Interagency Meeting,
November 27th**
 - **WRAC Lake Okeechobee Committee, November
28th**
 - **Public Meetings**
 - **Okeechobee, November 27th**
 - **Clewiston, November 28th**
 - **Public Comment Period ends December 13th**

Outreach Activities

- **Numerous opportunities were provided for stakeholder involvement throughout plan development process**
- **Outreach activities include-**
 - **Meeting Presentations**
 - **Briefings and Updates**
 - **Website**
 - **Media**
 - **Public Outreach Materials**



https://my.sfwmd.gov/northerneverglades

The screenshot shows a web browser window displaying the South Florida Water Management District (SFWMD) website. The browser's address bar shows the URL https://my.sfwmd.gov/northerneverglades. The website header includes the SFWMD logo, navigation links (Search, Site Map, Help, Who to Contact, Español), and a banner image of a roseate spoonbill with the text "Protecting the Northern Everglades & Estuaries". A navigation menu on the left lists various site sections, with "Northern Everglades" selected. A secondary navigation bar contains buttons for Home, Meetings, Lake Okeechobee, Caloosahatchee, St. Lucie, and CERP/Acceler8. The main content area features a section titled "Northern Everglades" with a sub-section for the "Lake Okeechobee Watershed Construction Project Phase II Technical Plan Draft". This section includes a paragraph of text, a list of PDF links for the report and its appendices, and a link to a release announcement. A footer note mentions a calendar of meetings for the public.

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

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Protecting the Northern Everglades & Estuaries

Home Meetings Lake Okeechobee Caloosahatchee St. Lucie CERP/Acceler8

Northern Everglades

Underscoring the state's commitment to Greater Everglades Ecosystem restoration, the Florida Legislature in 2007 expanded the Lake Okeechobee Protection Act to strengthen protection for the Northern Everglades by restoring and preserving the Lake Okeechobee watershed and the Caloosahatchee and St. Lucie estuaries.

Lake Okeechobee Watershed Construction Project Phase II Technical Plan Draft

The Coordinating Agency Planning Team consisting of the South Florida Water Management District, Florida Department of Agriculture and Consumer Services and Florida Department of Environmental Protection is pleased to announce the release of the [Lake Okeechobee Watershed Construction Project Phase II Technical Plan Draft](#) for your review and comment. The [public comment](#) period will conclude on December 13, 2007. Comments may be submitted through the [website](#) or by mail to Armando Ramirez, c/o SFWMD, MS 7640, 3301 Gun Club Road, West Palm Beach, Florida 33406

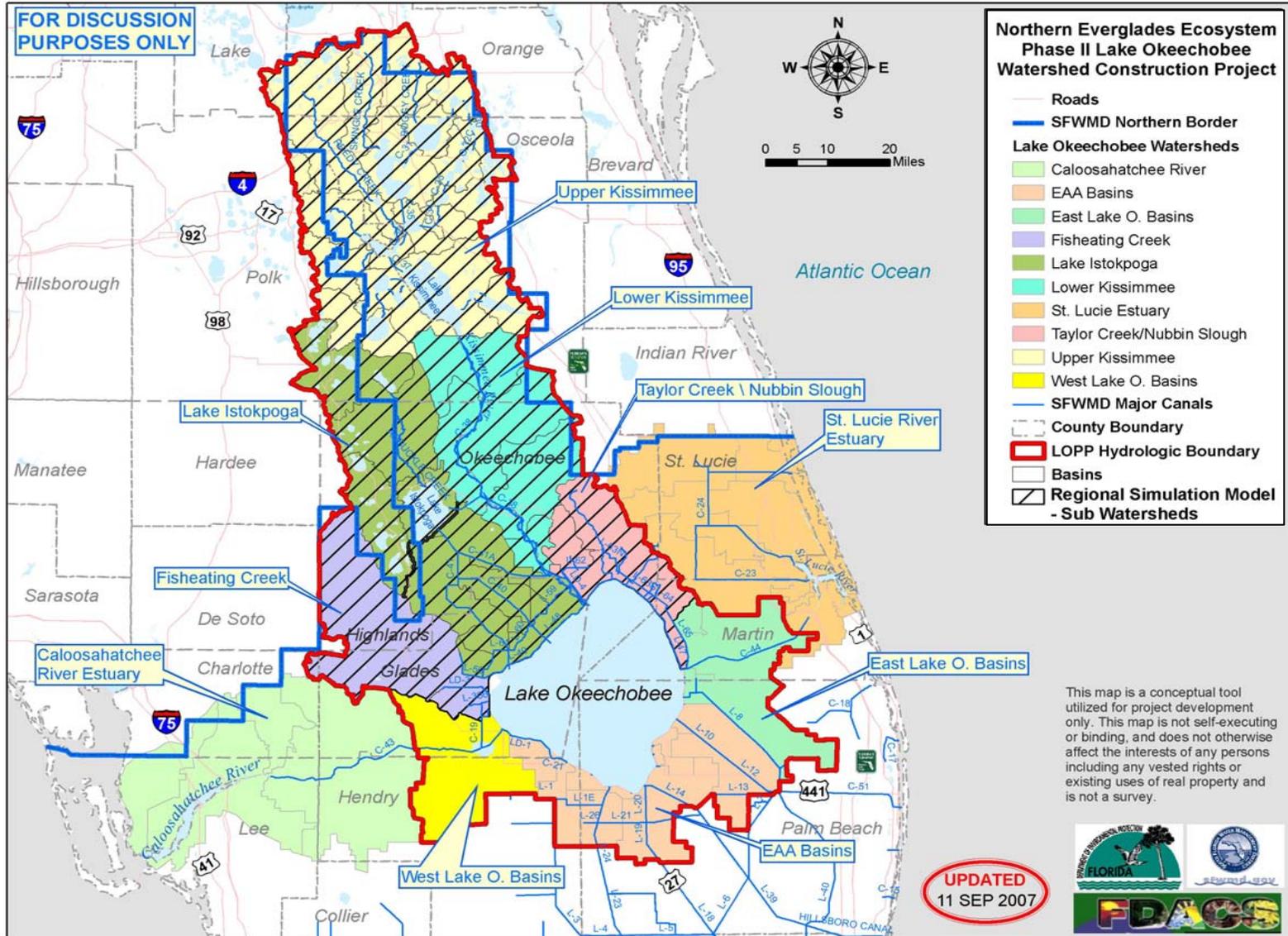
- ▶ [Lake Okeechobee Phase II Technical Plan Draft - Report \[PDF\]](#)
 - [Appendix A \[PDF\]](#)
 - [Appendix B \[PDF\]](#)
 - [Appendix C \[PDF\]](#)
 - [Appendix D \[PDF\]](#)
- ▶ [Lake Okeechobee Phase II Technical Plan Draft - Release Announcement \[PDF\]](#)

For a calendar of [Meetings](#) intended to involve and inform all of the interested public and

Lake Okeechobee Watershed Construction Project Phase II Technical Plan

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- **Plan Sections**
 - **Executive Summary-work in progress**
 - **Technical Overview**
 - **Introduction**
 - **Planning Process**
 - **Interagency Coordination and Public Overview**
 - **Water Quality Data Analysis**
 - **Water Quantity Data Analysis**
 - **Formulation of Alternative Plans**
 - **Alternative Plan Evaluation and Comparison**
 - **Plan Projects and Actions**
 - **Plan Refinements and Revisions**

Study Area



Plan Formulation and Evaluation

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- **Formulation**
 - **Alternative 1- Common Elements**
 - **Alternative 2- Maximizing Storage**
 - **Alternative 3- Maximizing Water Quality Improvements**
 - **Alternative 4- Optimize Storage and Water Quality Improvements**
 - **Evaluation**
 - **Water Quality Performance**
 - Phosphorus reduction
 - **Water Quantity (Storage) Performance**
 - Lake Okeechobee Stages
 - St. Lucie and Caloosahatchee Estuary Flows
 - Lake Okeechobee Service Area Water Supply

Identification of the Phase II Technical Plan

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- **Builds upon the LOPP by incorporating all projects included in the 2007 LOPP update.**
 - **Encompasses and builds upon all other on-going and planned efforts in the watershed that are directed toward Lake Okeechobee restoration including CERP and LOER.**
 - **Initially emphasizes lower cost and locally applied source control options by incorporating and prioritizing all on-going and planned BMP and watershed phosphorus-source control programs.**
 - **Promotes involvement of private landowners as partners in the restoration program through project features such as the BMPs, FRESP, and alternative water storage projects.**

Identification of the Phase II Technical Plan

- **Minimizes real estate acquisition requirements by attributing substantial TP-load reduction to source control options and promoting storage and treatment on privately owned lands.**
- **Includes regional projects that will complement and build upon success of source control options.**
- **Includes additional water quality projects necessary to meet the Lake Okeechobee TMDL for total phosphorus.**
- **Identifies the range of storage needed (900,000 ac-ft – 1.3 million ac-ft) for lake stage and discharge management.**

Plan Features

- **Local Features**
 - **Phosphorus Source Control Programs**
 - **Land Management Programs**
 - **Alternative Water Storage Facilities**
 - **Local Initiatives**
- **Regional Features**
 - **Storage**
 - **Stormwater Treatment Areas**
 - **Reservoir Assisted Stormwater Treatment Areas**
 - **Deep Injection Wells**
- **Other Features**
 - **In-Lake Treatment**
 - **Innovative Nutrient Control Technologies**
 - **Wetland Restoration**

Plan Implementation Stages

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- **Initial Implementation Measures**
 - **Near-term projects initiated in next three years**

 - **Mid-Term Implementation Measures**

 - **Long-Term Implementation Measures**

Initial Implementation Measures

		Water Quality	Water Quantity
Projects	Agricultural and Urban BMPs and Regulatory Programs	✓	✓
	LOPP Phosphorus Source Control Projects	✓	✓
	Local Government Initiatives	✓	✓
	Florida Ranchlands and Environmental Services Projects	✓	✓
	LOER Alternative Water Storage Projects	✓	✓
	LOER Stormwater Treatment Areas	✓	✓
	CERP ASR Pilots	✓	✓
	CERP Lake Okeechobee Watershed Project	✓	✓
Technology and Model Refinement	BMP Research and Refinement	✓	
	Chemical Treatment Feasibility Study	✓	
	Water Quality Model Development	✓	
	ASR Feasibility- Pilot Cycle Testing, ASR Regional Study, ASR Optimization Analysis		✓
	Hydrologic Model Refinement		✓
	Sub-Watershed Conceptual Planning	✓	✓

Summary of Total Estimated Costs

- **Initial Implementation Measures**
 - **Non-CERP Cost= \$260-320 Million**
 - **CERP Cost= \$1-1.4 Billion**
 - **CERP costs are eligible for 50 percent cost share with the federal government**
 - **Lake Okeechobee Fast Track projects included in CERP cost are eligible for federal cost share, however those funds will be needed in advance of the CERP project from State and SFWMD sources**
 - **Costs do not include dollars that have already been expended to date**
 - **Costs include the full cost to build a project completely even if construction period goes beyond the initial implementation stage**

Summary of Total Estimated Costs

- **Mid-Term Implementation Measures**
 - To be determined based on Technology and Model Refinement Studies and Initial ASR Feasibility
 - Initial Estimates to be provided in 2010 Lake Okeechobee Protection Plan Update

- **Long-Term Implementation Measures**
 - To be determined based on Final ASR Feasibility
 - Estimates to be provided in 2013 Lake Okeechobee Protection Plan Update

- **Funding Sources and Opportunities**
 - Non-CERP- Primarily SFWMD and State with opportunity of Federal and Local funding
 - CERP- SFWMD/State and Federal 50/50 Cost Share

Plan Refinement and Revisions

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- **Process Development and Engineering**
 - **Model and Technology Refinement**
 - **Lake Okeechobee Watershed Water Quality Model Development**
 - **Northern Everglades RSM Refinement**
 - **Existing Technology Refinement**
 - **BMP Research and Refinement**
 - **STA Integration and Refinement**
 - **Lake Okeechobee ASR Pilots and Regional Study**
 - **Innovative Nutrient Control Technology**
 - **Chemical Treatment Pilot Study**
 - **Hybrid Wetland Treatment Technology**
 - **Sub-watershed Conceptual Planning**
 - **Plan Revisions**
 - **Reporting**

Public Comments

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- Supportive of planning process and recommendations
 - Relationship between CERP-LOWP, LOER/LOFT, and Technical Plan
 - Interconnection between Lake Okeechobee Technical Plan and River Watershed Protection Plans
 - BMP effectiveness and need for more stringent regulatory programs
 - Importance of local features and working with landowners
 - Need for growth management and coordinated comprehensive planning reviews
 - Definition of minimum flow and harmful discharges to St. Lucie Estuary questioned
 - Northern Everglades planning should include entire EAA
 - Potential for Water Supply Reservoir in Upper Kissimmee
 - Timing and next steps- when will more detailed planning and refinement begin

Technical Plan Development Schedule

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- **End of Public Comment Period** **December 13th**
 - **Review comments and revise draft** **Dec-Jan 2007**
 - **Final Plan to Governing Board** **January 2008**
 - **Submit Plan to Legislature** **February 1, 2008**



Questions