

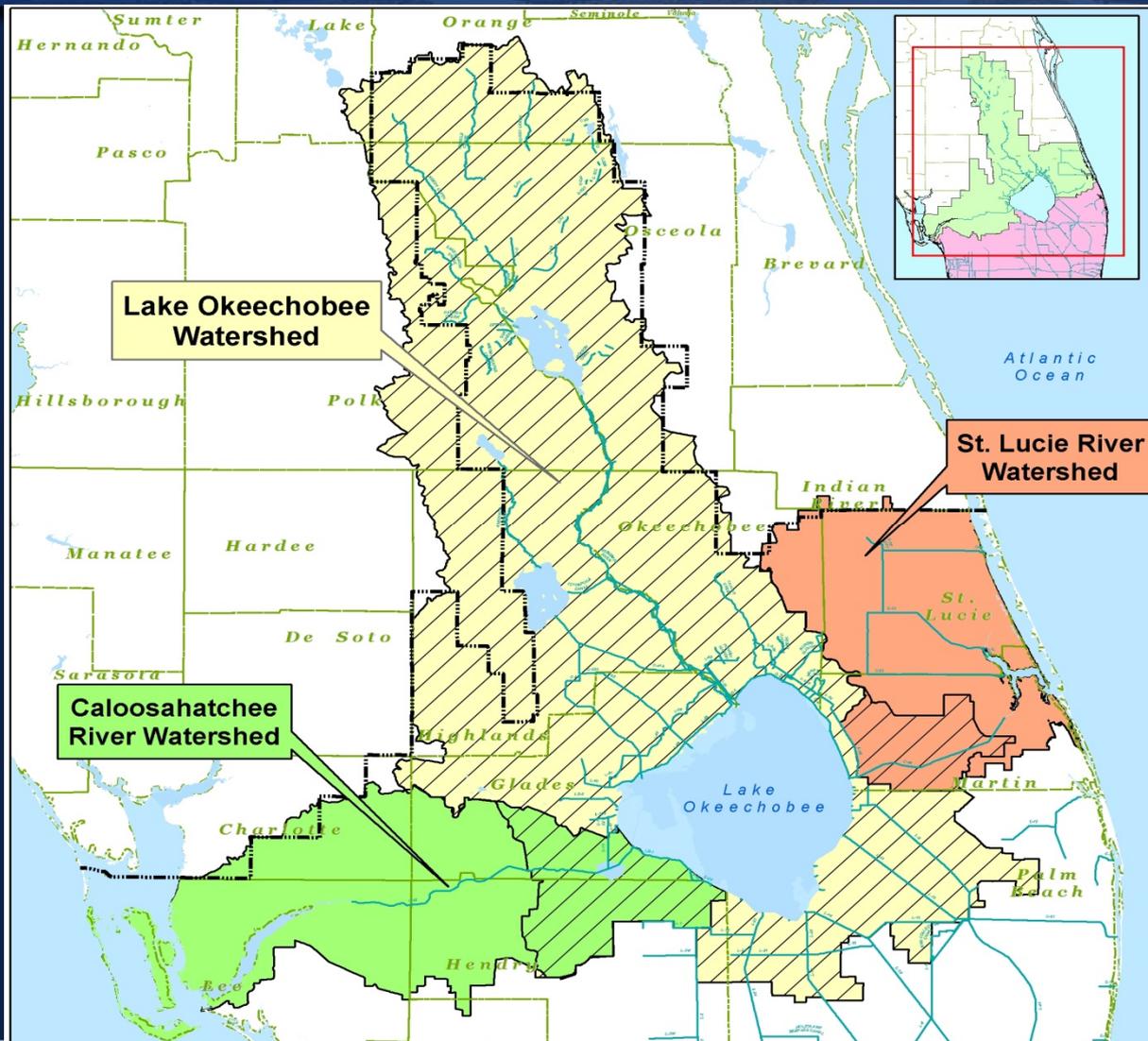


Northern Everglades and Estuaries Protection Program Update

Northern Everglades Interagency Meeting- 05/12/09
**Pinar Balci, Ph.D – Northern Everglades Lead Technical
Program Specialist**



The Northern Everglades





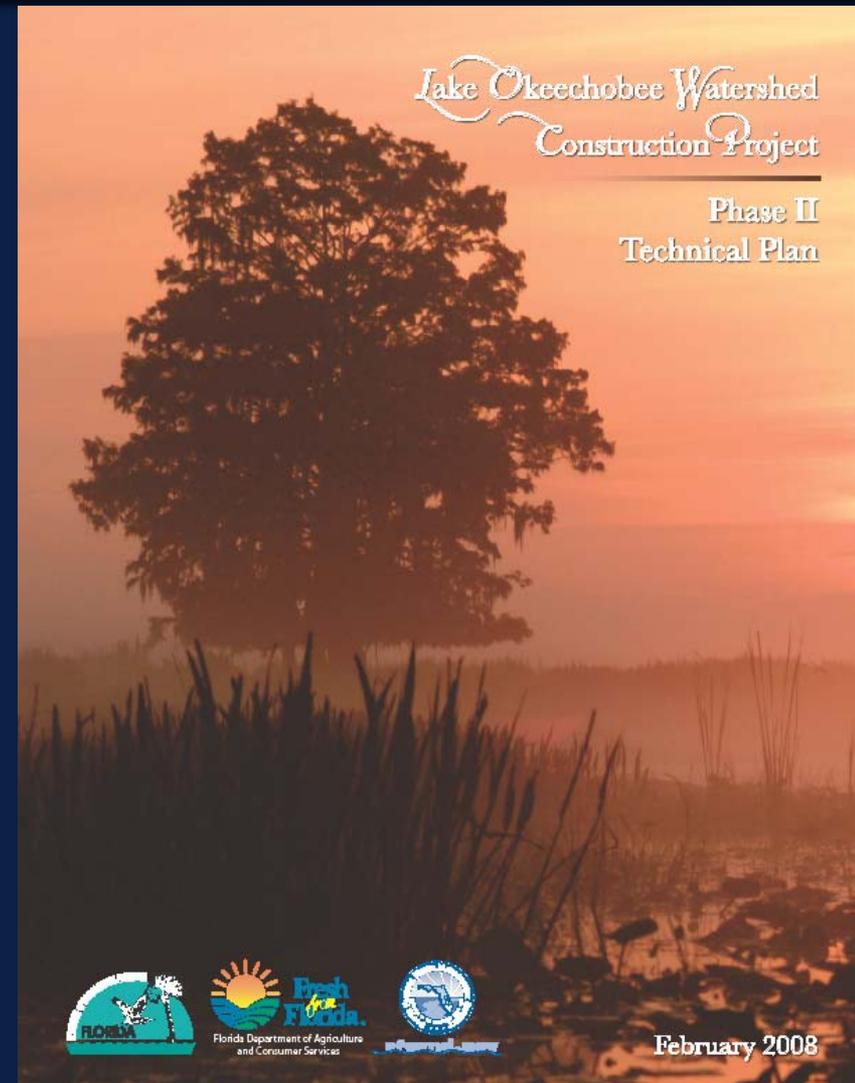
Lake Okeechobee Watershed Construction Project Phase II Technical Plan

Status of On-Going Projects



Lake Okeechobee Phase II Technical Plan

- **Delivered to Legislature on February 1, 2008**
- **No action was taken during session- therefore plan is deemed approved and may be implemented**
- **Process Development and Engineering process is moving forward**





Chemical Treatment Study

- Designed to investigate available information on chemical treatment technologies that have been tested to reduce total phosphorus loads in stormwater runoff.
- Literature review is completed by a team of experts to address series of study questions developed by an interagency technical team.
 - Northern Everglades Chemical Treatment Final Report will be presented on May 14th.



Fisheating Creek Feasibility Study

- **Fisheating Creek-** selected due to challenges associated with this portion of the Lake Okeechobee watershed
- **Objectives:**
 - Further define the best mix of surface storage and water quality improvement features that are most suitable in a given sub-watershed;
 - Identify locations for siting these features;
 - Develop preliminary engineering design and cost estimates for the identified features.



Fisheating Creek Feasibility Study (con't)

- **Completed in several phases:**
- **First Phase includes investigation of available information and work plan development- Completed**
- **Second Phase is underway:**
 - **Alternative formulation, evaluation and selection**
 - **Compilation of results and write-up of the report**
 - **Work Order is executed**
- **Expected to be completed by mid-2010**





Lake Side Ranch STA

- **Project is designed in two phases:**
 - *Phase 1: STA- North, S-650 pump station and canal improvements*
 - *Phase 2: STA-South and S-191A pump station*
- **Contract awarded for STA-North construction in March 2009.**
- **Construction of STA South and S-191A pump station contingent on additional funding**





Caloosahatchee and St. Lucie River Watershed Protection Plans

Status of On-Going Projects



River Watershed Protection Plans

- **Final Plans submitted to the Legislature on Jan 1, 2009**
- **If the Legislature takes no action on the plans during the 2009 legislative session, the plans are deemed approved and may be implemented**
- **RWPPs will provide the basis for FDEP's BMAP development**



C-43 Water Quality Treatment and Testing Facility

- **Objective: Develop, design and build a testing facility that will study nitrogen removal methods and improve the quality of the on-site system**
- **Several major tasks completed:**
 - **Cultural resources field work; Phase I/II Environmental Site Assessments; Total Nitrogen Reduction Technologies Review**
- **Others underway:**
 - **Environmental remediation**
 - **Topographic Survey work order**
 - **Water quality evaluation work order**
- **Next Step: Design of test cells**



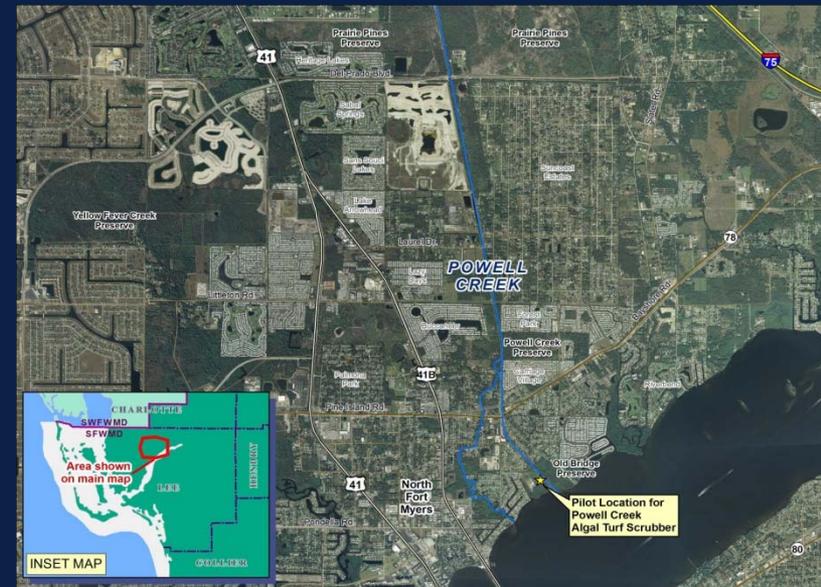
Spanish Creek/Four Corners Phase I

- **Completed gopher tortoise relocation survey and submitted permit to FWCC**
- **Completed monitoring well installation of the Four Corners Flowway Study area**
- **Gathering data from monitoring wells for flow model**
- **Working with Hendry County to coordinate County Line Ditch Maintenance**
- **Next steps – Complete data collection and flow model**



Powell Creek Algal Turf Scrubber

- Pilot construction completed and operation began in October 08
- Data collection underway
 - Algae is growing algae and initial nutrient removal results are promising
- Next steps- Completion of monitoring and final report by January 2010





Dispersed Storage and Treatment Projects

- **Caloosahatchee:**
 - **Caloosahatchee Area Lakes Restoration/Alternative Water Storage Project- Assessment Complete**
 - **Barron WCD Phase I- Complete; Phase II- Canceled**
 - **Clewiston Site- On-Hold**
 - **Central County WCD- Under Discussion**
- **St. Lucie:**
 - **Alderman- Deloney Ranch (Florida Ranchlands Environmental Services Project)- Complete**
 - **Indian Town Citrus Growers Association Water Storage Project- Complete**



Status of Ongoing Projects- Caloosahatchee and St. Lucie

- **Research and Water Quality Monitoring**
 - Wet season synoptic flow and WQ monitoring is planned for freshwater Caloosahatchee (east of S-79)
 - **Research- Several studies are underway**
 - Caloosahatchee Oligohaline Zone
 - Groundwater Seepage to Caloosahatchee Estuary and St. Lucie estuary



Status of Ongoing Projects- St. Lucie

- **5/5/5 projects with Martin County**
 - **Manatee Pocket Dredging**
 - Removal of accumulated muck for water quality and habitat improvement
 - **Manatee Creek Basin Water Quality Retrofit**
 - Provides treatment of uncontrolled discharges to the Manatee Pocket from the Manatee Creek
 - **North River Shores Vacuum Sewer System**
 - Enhances water quality in the North Fork of the St. Lucie River by eliminating nutrient loading from septic systems
 - **Old Palm City Phase III Water Quality Retrofit**
 - Improves water quality through developing a neighborhood stormwater quality management system



Status of Ongoing Projects- St. Lucie

- **Hybrid Wetland Treatment Technology Pilot Project**
 - **Ideal #2 Grove**
 - Treats citrus runoff that drains to the Indian River Lagoon from St. Lucie County
 - Reduced mean inflow TP levels from 180 to 21 $\mu\text{g/L}$ (88% reduction)



Ideal #2 Grove

<https://my.sfwmd.gov/northerneverglades>



Questions

