Northern Everglades Initiative Update

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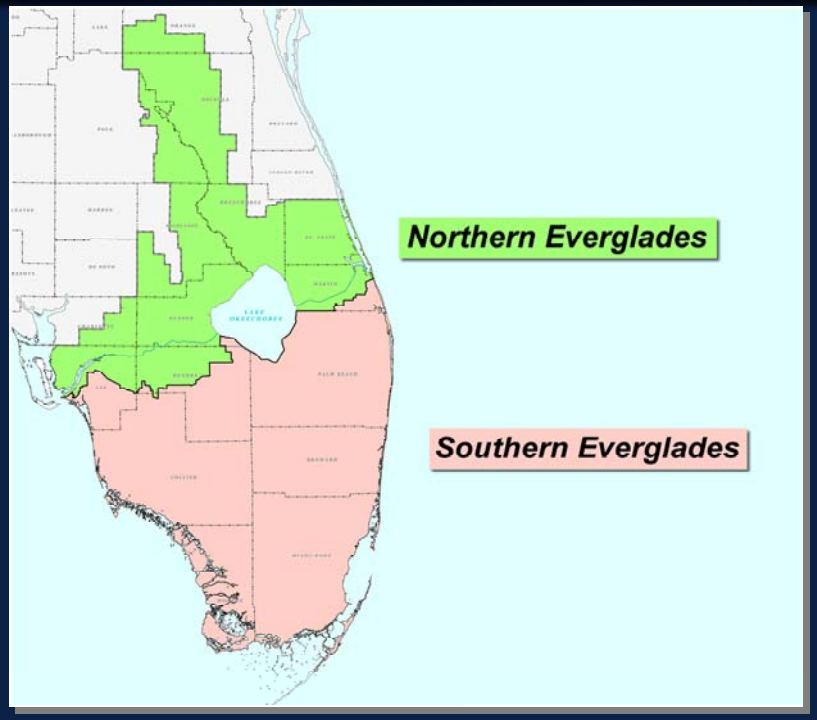
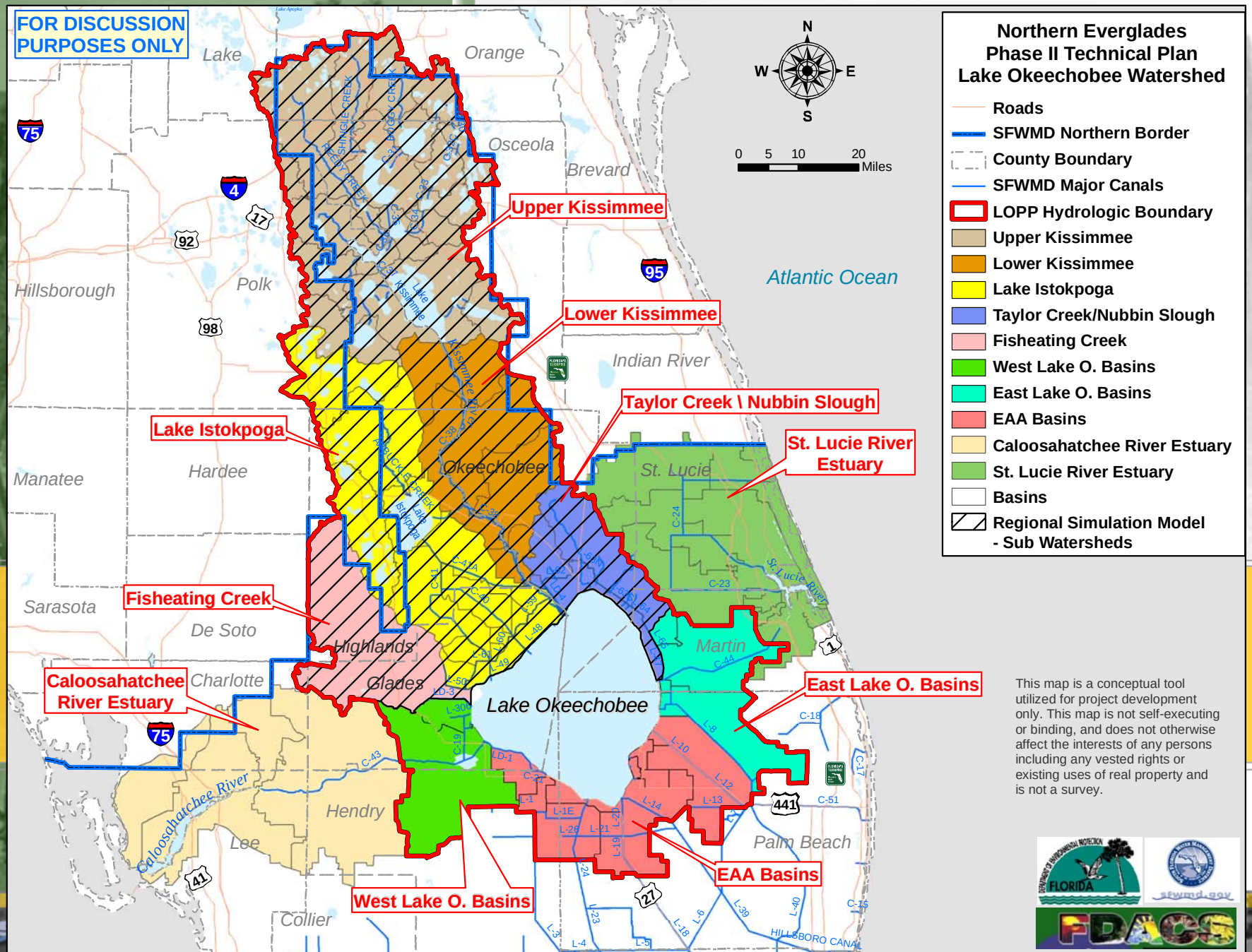
Lake Okeechobee Interagency Meeting
July 10, 2007

Everglades Ecosystem

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Everglades Ecosystem




FOR DISCUSSION PURPOSES ONLY
Northern Everglades
Phase II Technical Plan
Lake Okeechobee Watershed
Roads
SFWMD Northern Border
County Boundary
SFWMD Major Canals
LOPP Hydrologic Boundary
Upper Kissimmee
Lower Kissimmee
Lake Istokpoga
Taylor Creek/Nubbin Slough
Fisheating Creek
West Lake O. Basins
East Lake O. Basins
EAA Basins
Caloosahatchee River Estuary
St. Lucie River Estuary
Basins
Regional Simulation Model - Sub Watersheds
N
W
E
S
0 5 10 20 Miles
Upper Kissimmee
Lower Kissimmee
Taylor Creek \ Nubbin Slough
St. Lucie River Estuary
Lake Istokpoga
Fisheating Creek
Caloosahatchee River Estuary
East Lake O. Basins
EAA Basins
West Lake O. Basins
Lake Okeechobee
Atlantic Ocean
Lake
Orange
Osceola
Brevard
Hillsborough
Polk
Indian River
Manatee
Hardee
Okeechobee
St. Lucie
Sarasota
De Soto
Highlands
Martin
Charlotte
Glades
Hendry
Lee
Palm Beach
Collier
Caloosahatchee River
St. Lucie River
HILLSBORO CANAL
This map is a conceptual tool utilized for project development only. This map is not self-executing or binding, and does not otherwise affect the interests of any persons including any vested rights or existing uses of real property and is not a survey.

Phase II Technical Plan
Lake Okeechobee Watershed

Problems

- Undesirable high levels in Lake Okeechobee
- Undesirable low levels in Lake Okeechobee
- Excess regulatory discharges to the Caloosahatchee Estuary
- Undesirable low flows to the Caloosahatchee Estuary
- Excess regulatory discharges to the St. Lucie Estuary
- Excessive phosphorus loads to Lake Okeechobee
- Limited operating flexibility for lakes stage management
- Upper Floridan – groundwater water supply limitations in Upper Kissimmee Basin

Phase II Technical Plan
Lake Okeechobee Watershed

Objectives

- Meet Lake Okeechobee Watershed Total Maximum Daily Loads
- Manage Lake Okeechobee levels within an ecologically desirable range
- Manage flows to meet desirable salinity ranges for the St. Lucie and Caloosahatchee Estuaries
- Identify opportunities for alternative surface water supply sources in the watershed

Phase II Technical Plan
Lake Okeechobee Watershed

Constraints

- Provide Kissimmee River restoration flows
- Avoid precluding Everglades restoration flows
- Maintain water supply for affected water user basins
- Herbert Hoover Dike limitations
- Maintain existing levels of flood protection
- Minimum flows and levels- Lake Okeechobee, St. Lucie Estuary, Caloosahatchee Estuary, Lake Istokpoga
- Water quality standards

Phase II Technical Plan
Lake Okeechobee Watershed

Management Measures

- **Definition**
  - **A management measure is a feature or activity that can be implemented at a specific site to address one or more planning objectives.**
  - **A feature is defined as a structural element that requires construction or assembly on-site.**
  - **An activity is defined as a non-structural action or a practice that is implemented to achieve one or more project goals.**

Phase II Technical Plan
Lake Okeechobee Watershed

Management Measures

- Currently compiling and sorting measures by levels
- Levels of management measures
  - Level 1- Already constructed/implemented or construction/implementation imminent
  - Level 2- Construction/implementation likely; Detailed design/activity development ongoing; Location well defined
  - Level 3- Implementation certainty unknown; Conceptual level of design/activity development complete; Location defined
  - Level 4- Implementation certainty unknown- Conceptual idea; May have rough order of magnitude cost and/or general basin location
  - Level 5- Implementation certainty unknown-Conceptual idea with limited information

Phase II Technical Plan
Lake Okeechobee Watershed

Schedule

Assemble Baseline Information and Alternative Formulation	Summer	2007
Draft Plan	October	2007
Final Plan to Governing Board	January	2008
Submit Plan to Legislature	February 1	2008

Questions