SOUTH FLORIDA WATER MANAGEMENT DISTRICT

System-Wide Ecological Conditions Status Update

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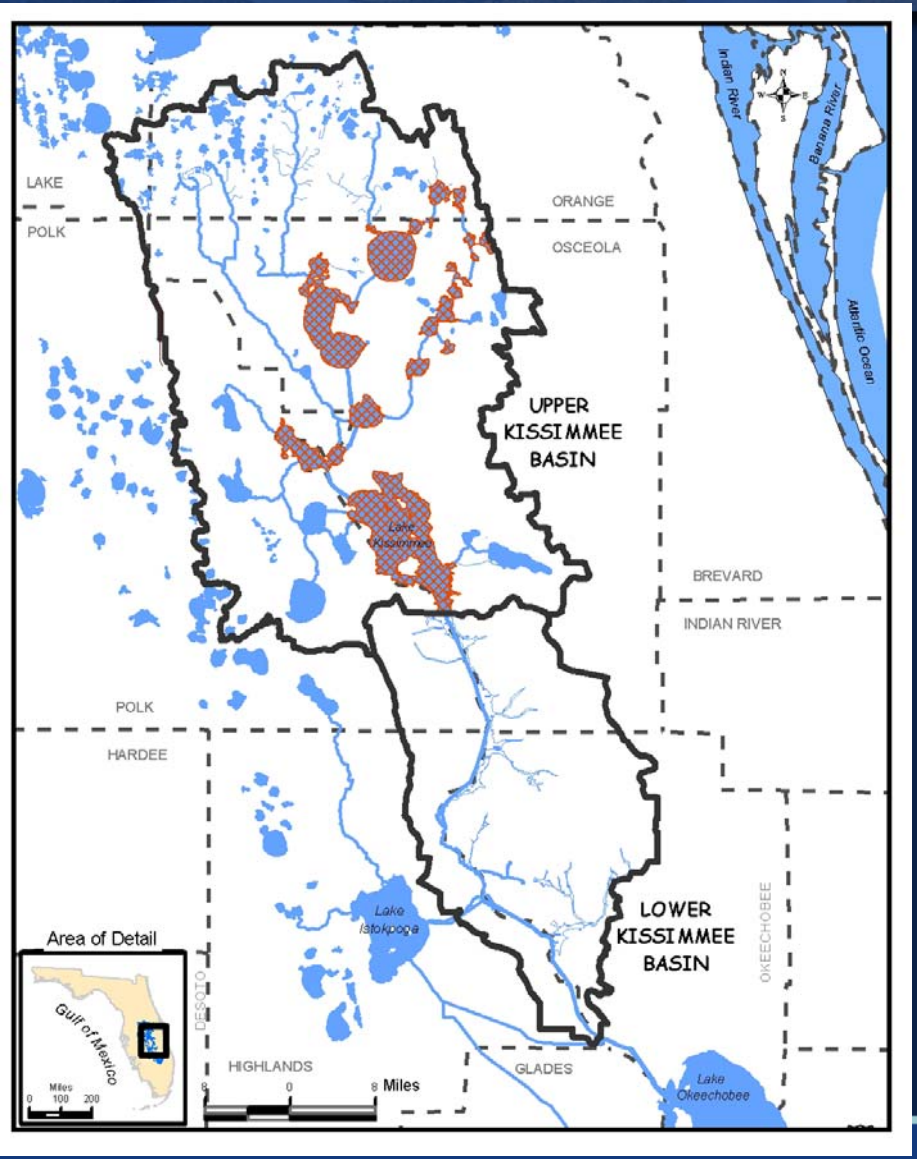
Watershed Management Department

Monthly Ecological Conditions Update

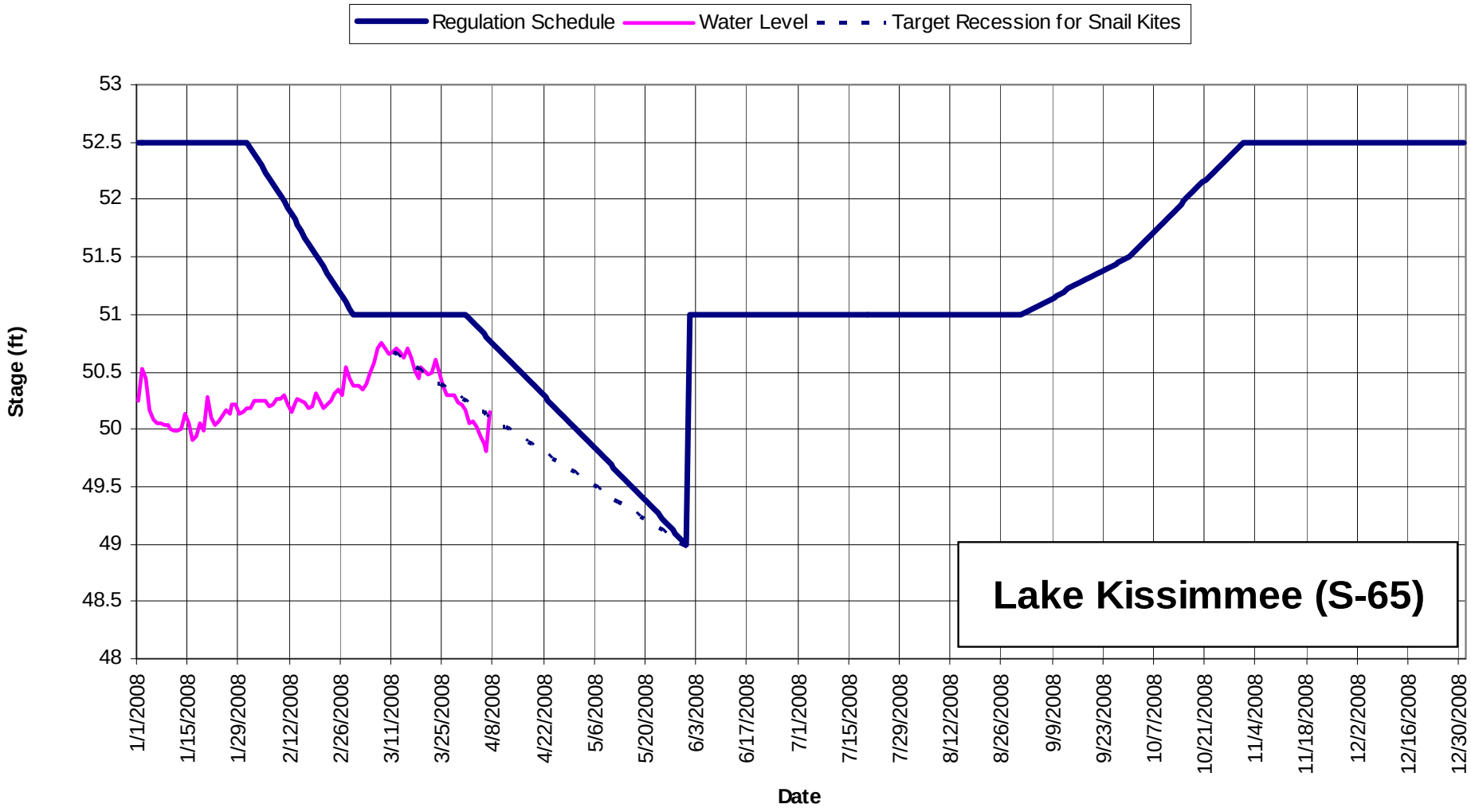
- Highlight current conditions
- Point out items of interest or potential concern
  - Kissimmee Chain of Lakes & Kissimmee River
  - Lake Okeechobee
  - Coastal Estuaries – St. Lucie & Caloosahatchee
  - Stormwater Treatment Areas (STAs)
  - Water Conservation Areas (WCAs), Everglades National Park (ENP), Florida Bay

Upper and Lower Kissimmee Basins

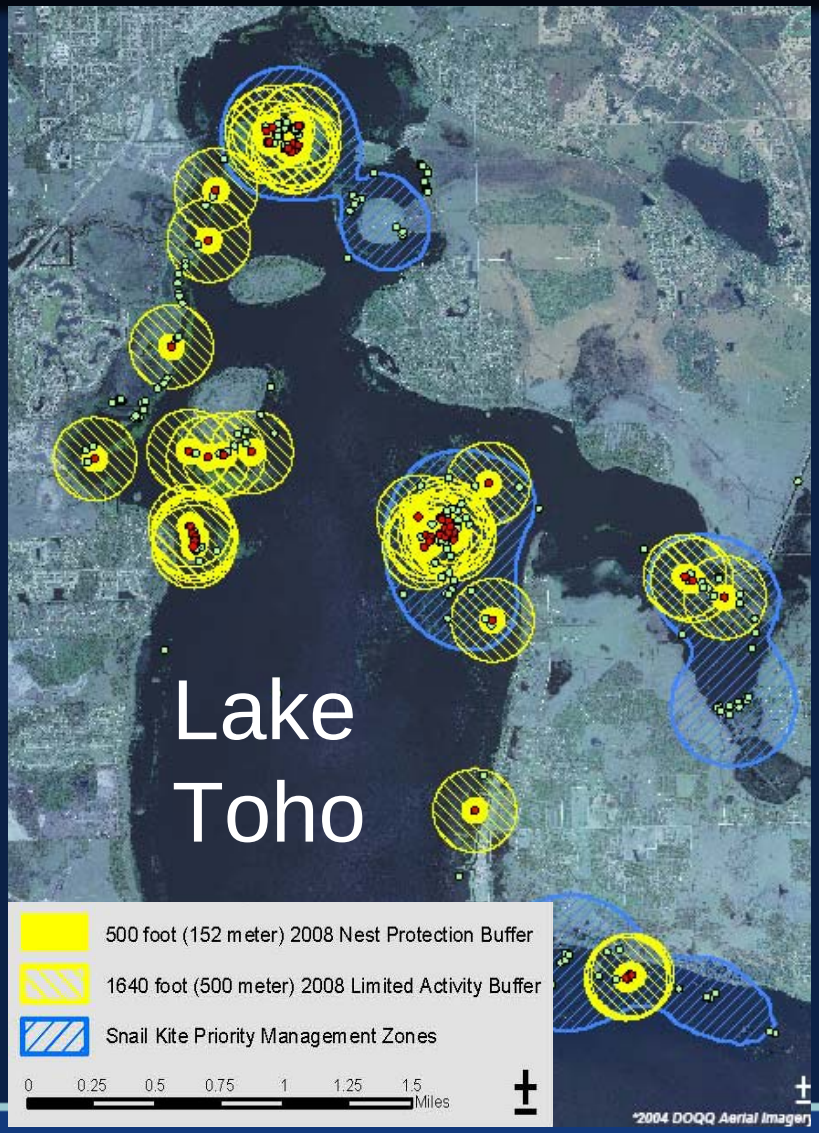


Snail Kite Nesting has begun in the Upper Basin

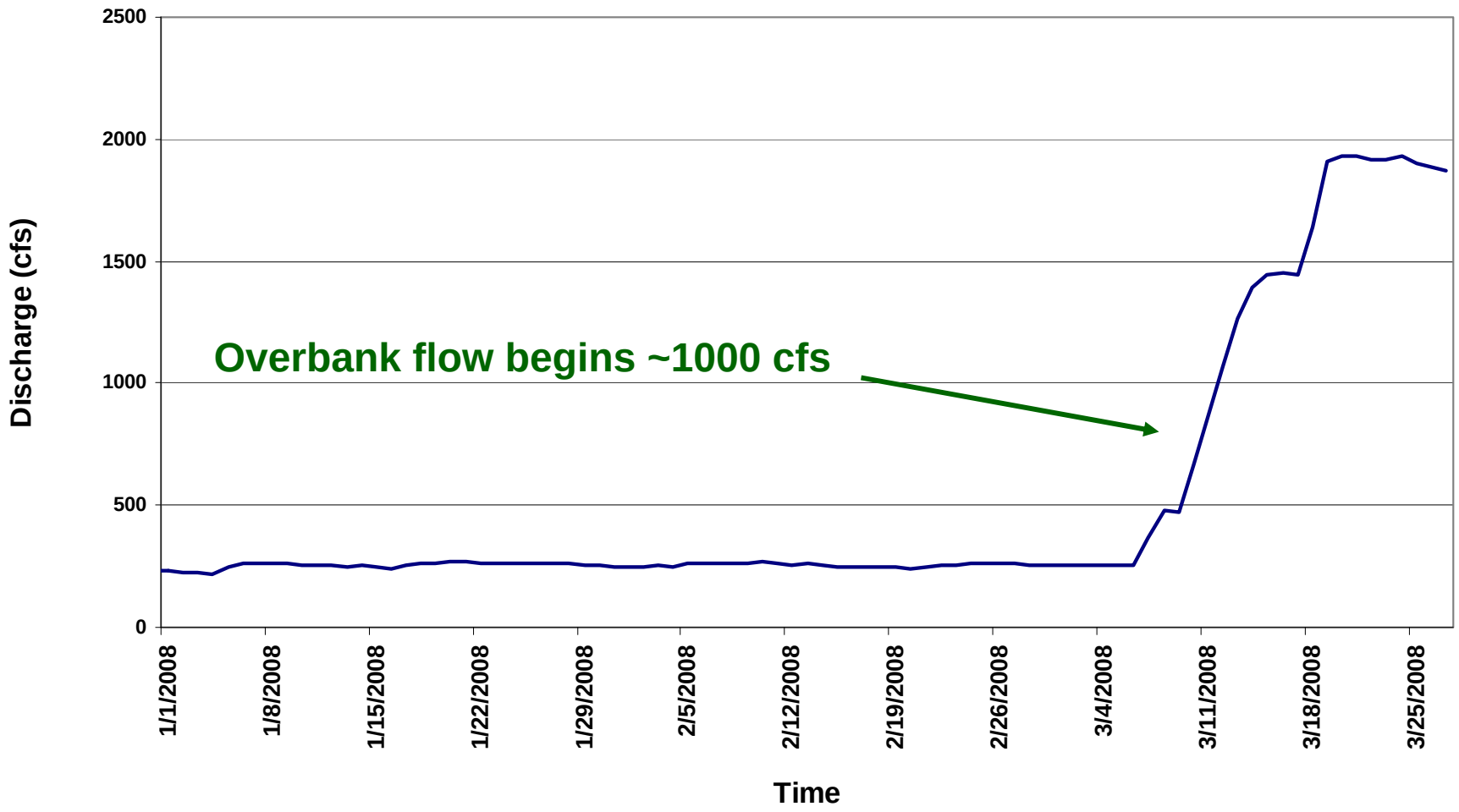
Spring recession in upper basin lakes



Snail Kite nesting sites

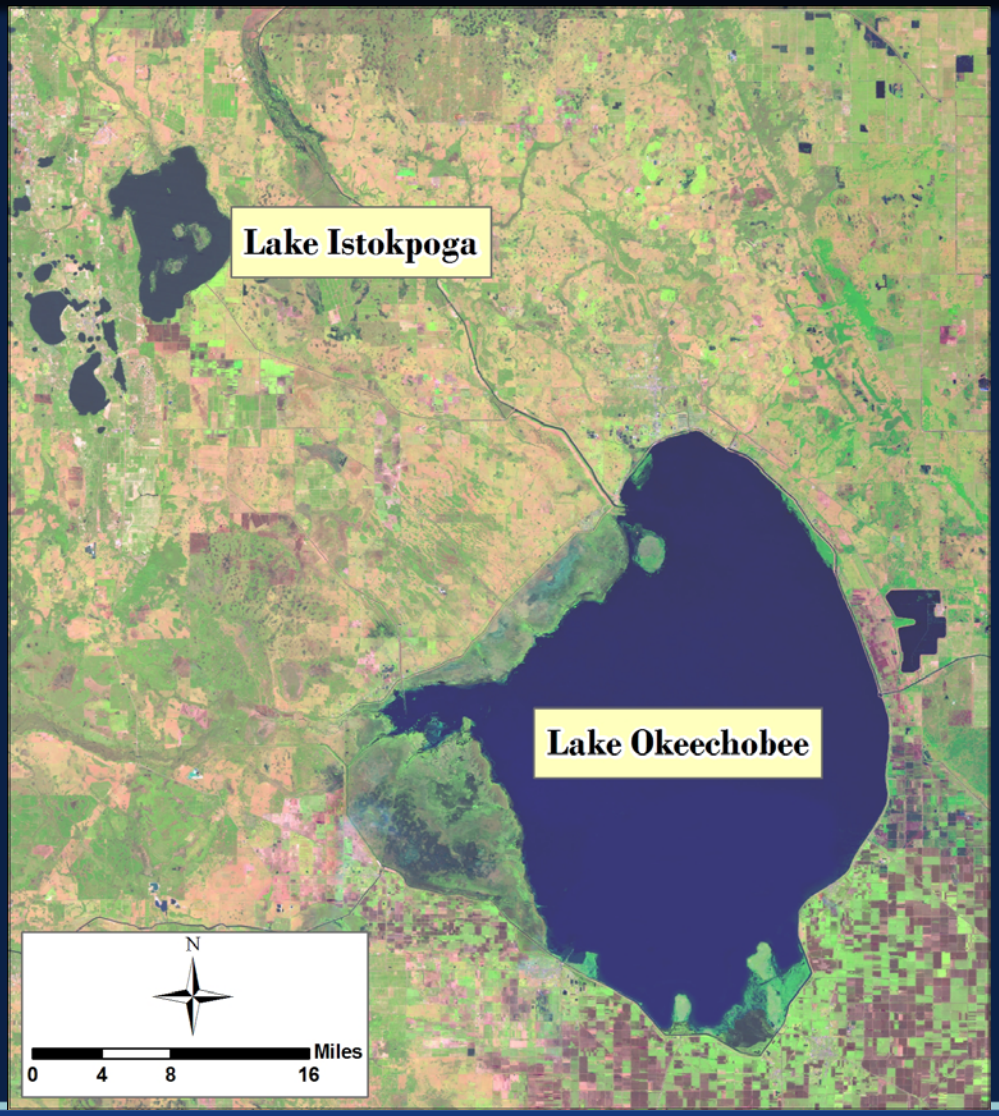


Inundation of the Kissimmee River floodplain

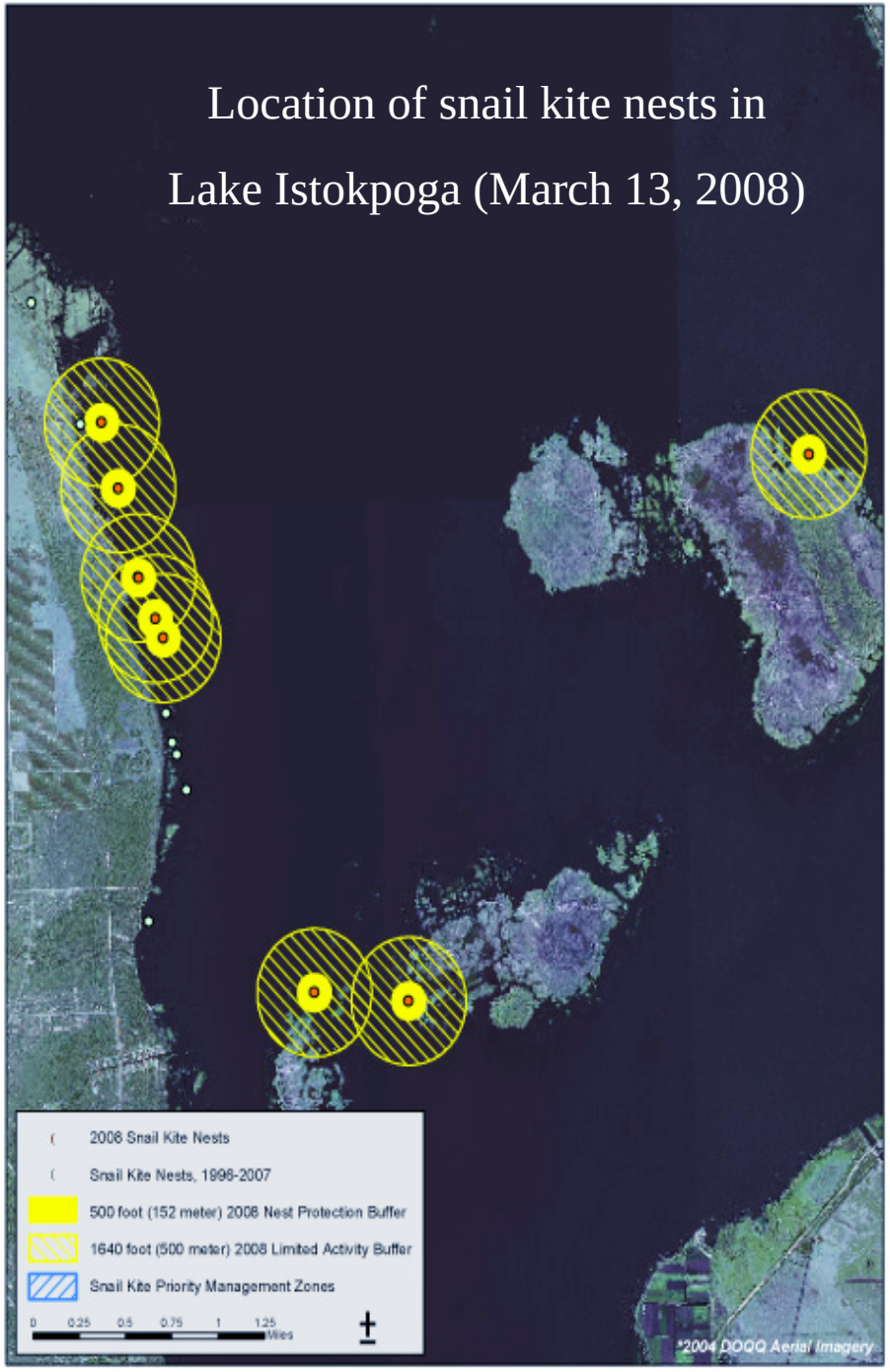


Floodplain Inundation

Lake Okeechobee and Lake Istokpoga



Snail Kite Nests and Priority Management Areas, Lake Istokpoga, 03/13/2008

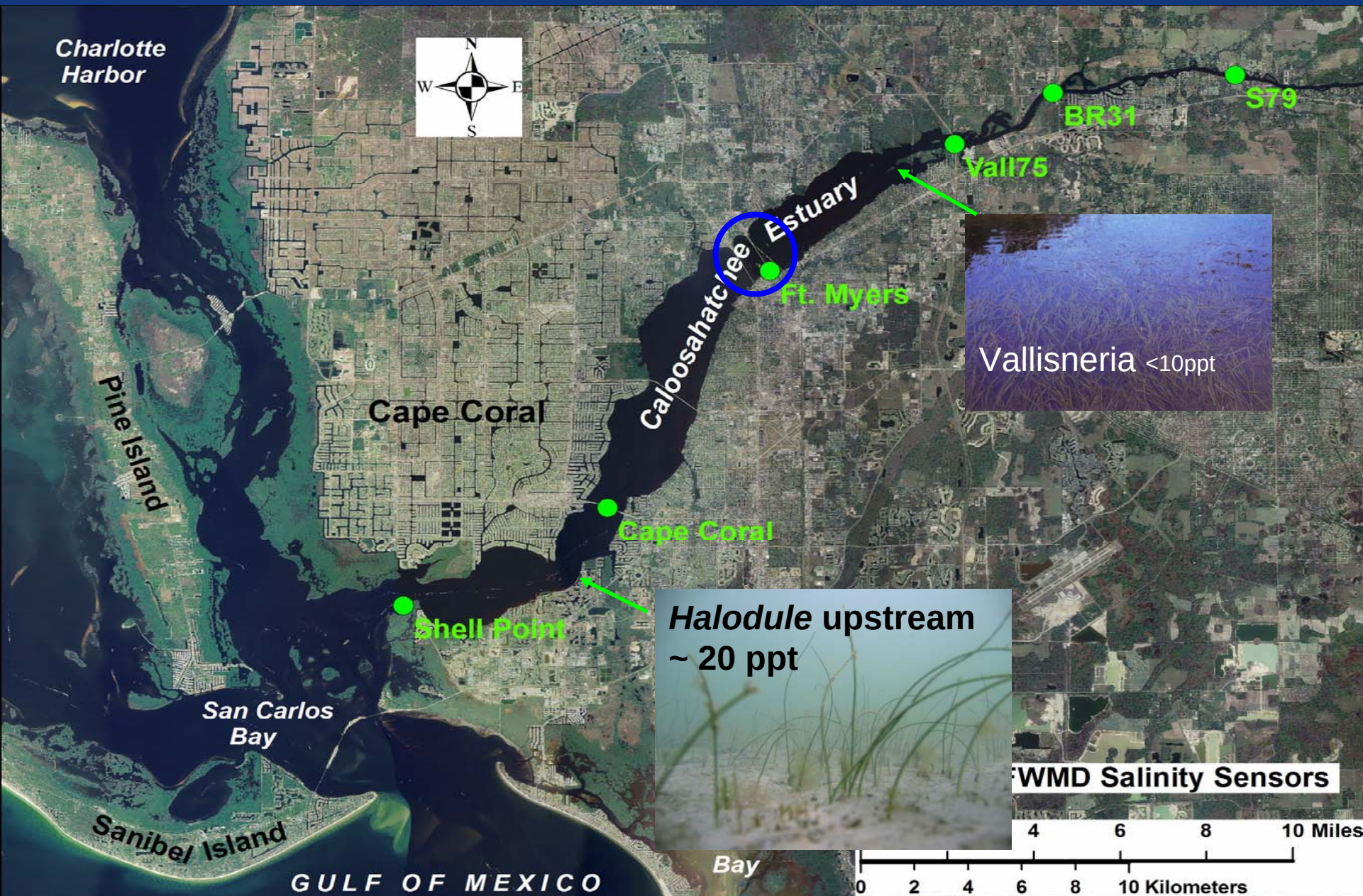


Lake Istokpoga Aquatic Plant Management Work Plan 2007-08

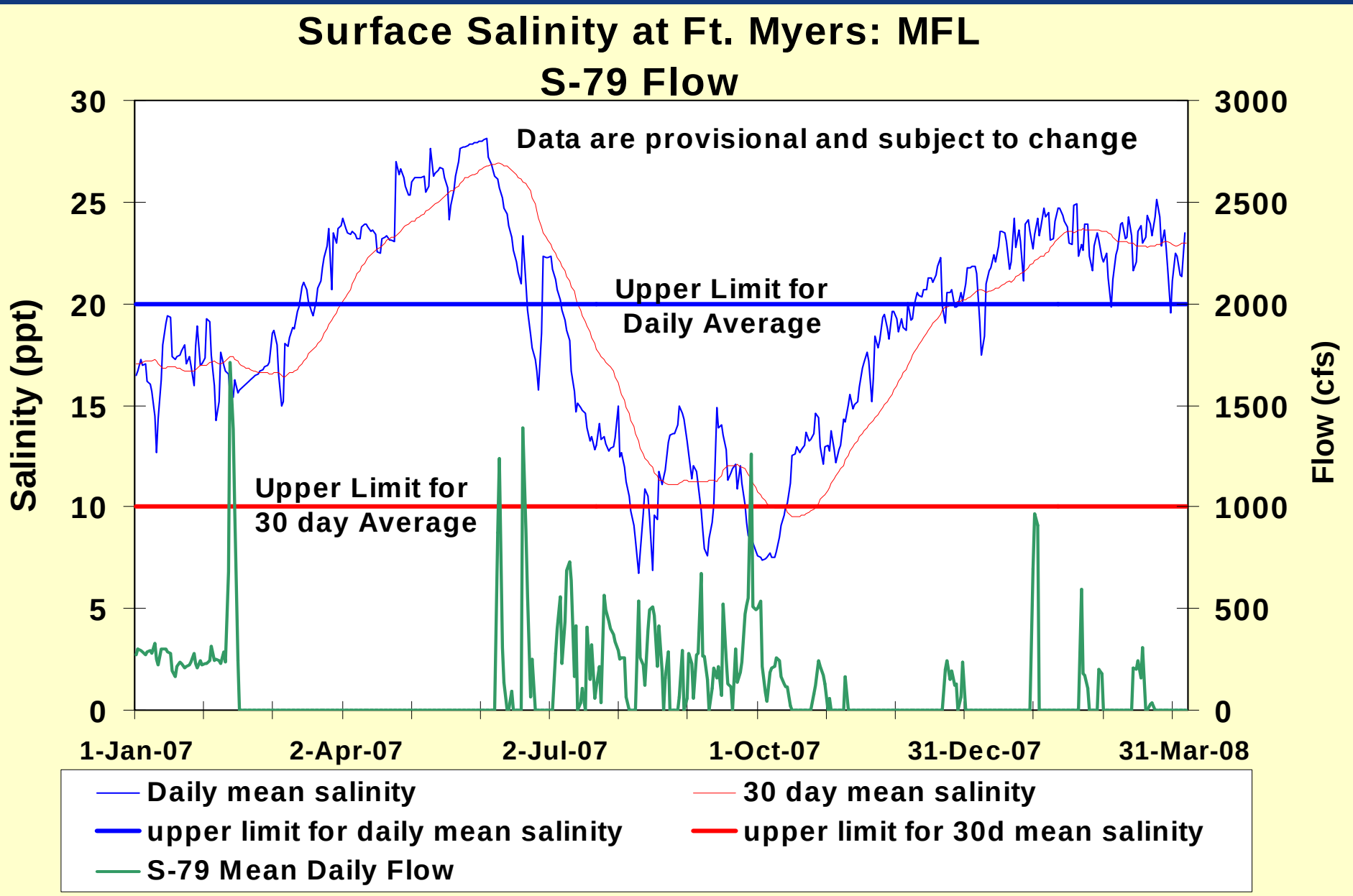
2700 Acres
Scatterd Cattail 500 Acres
2700 Acres
2004-05 SFWMD Aerial Photography

-TREE PLANTING AREA-
Students and volunteers from Palm Beach County are helping to restore Torry Island by participating in tree planting activities. Enjoy the new trees and walking trails! Please help care for them.
WALKING TRAIL ONLY!
NO MOTORIZED VEHICLES!
THANKS!
For more information contact:
The Marshall Foundation at 561.805.8733
or
Boyle Boyer at 261.0575

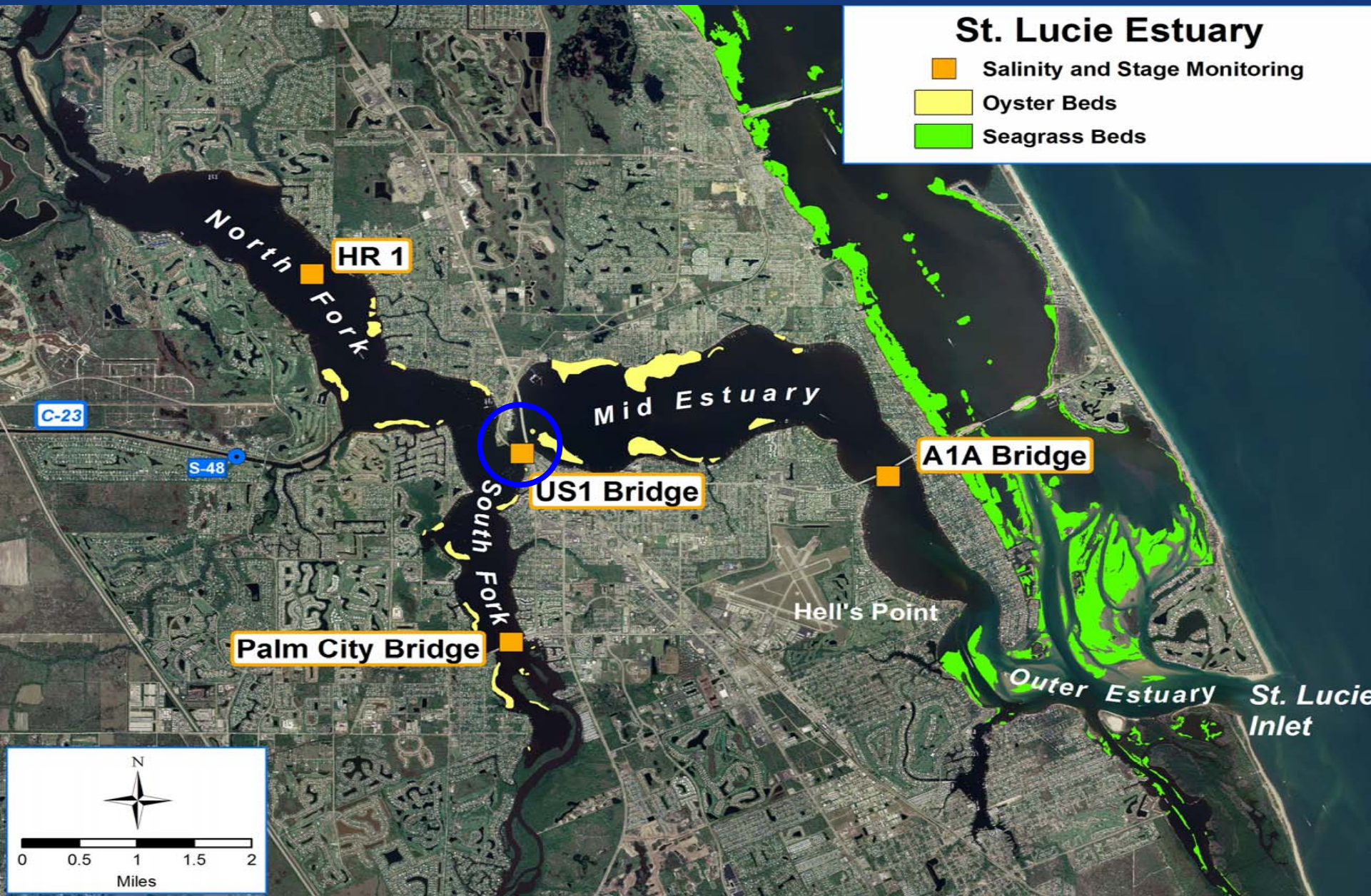
Estuarine Conditions: Caloosahatchee River



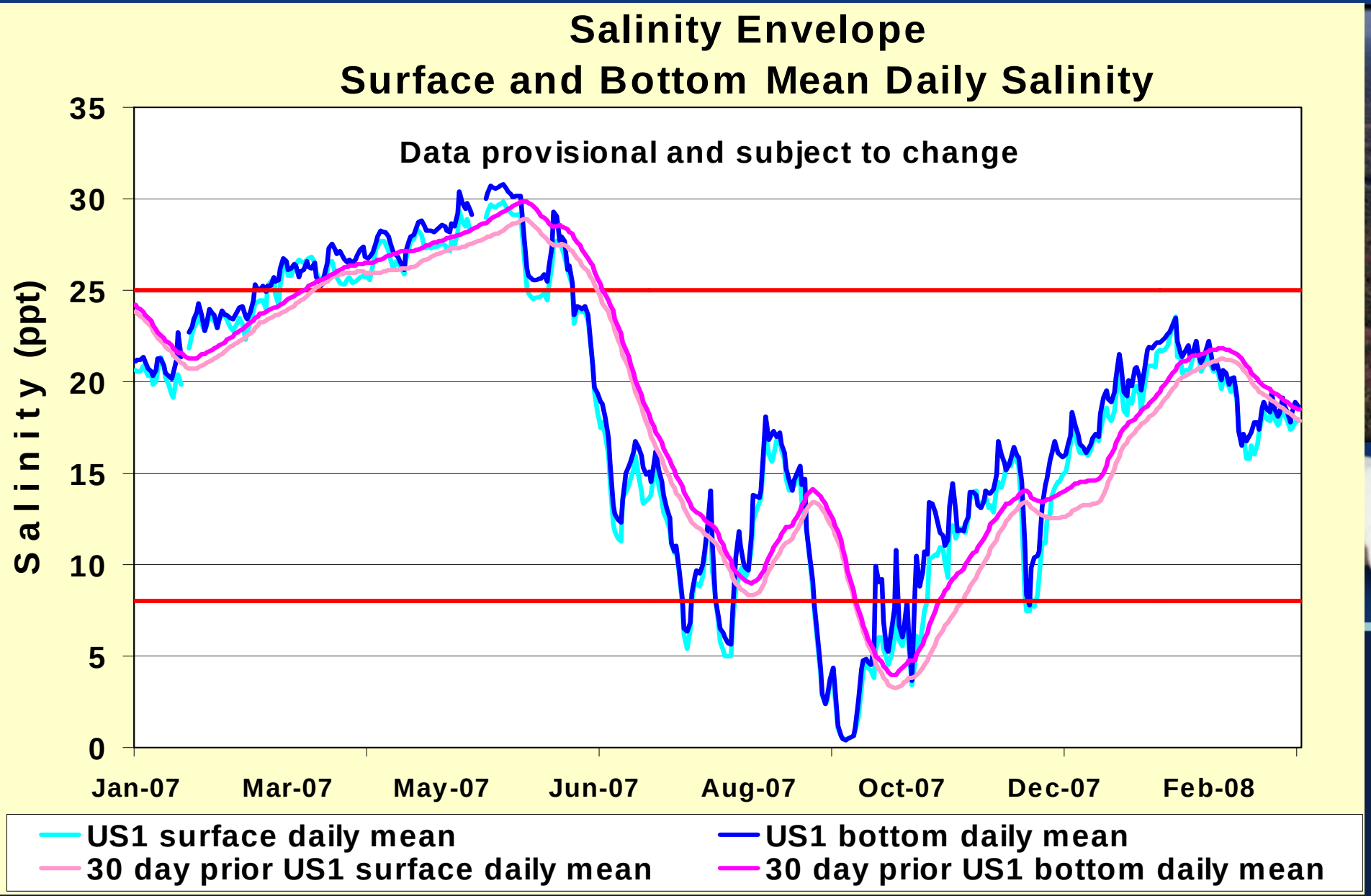
Estuarine Conditions: Caloosahatchee River



Estuarine Conditions: St. Lucie Estuary

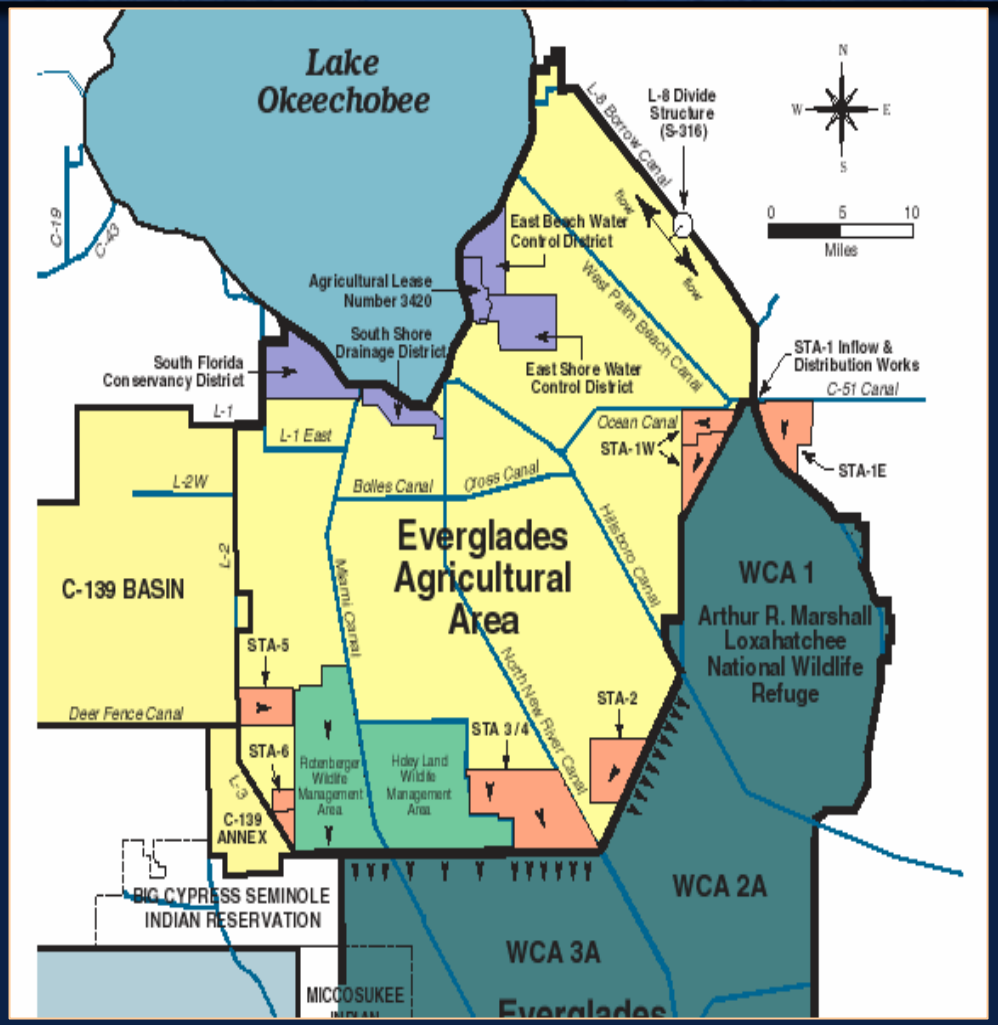


Estuarine Conditions: St. Lucie Estuary

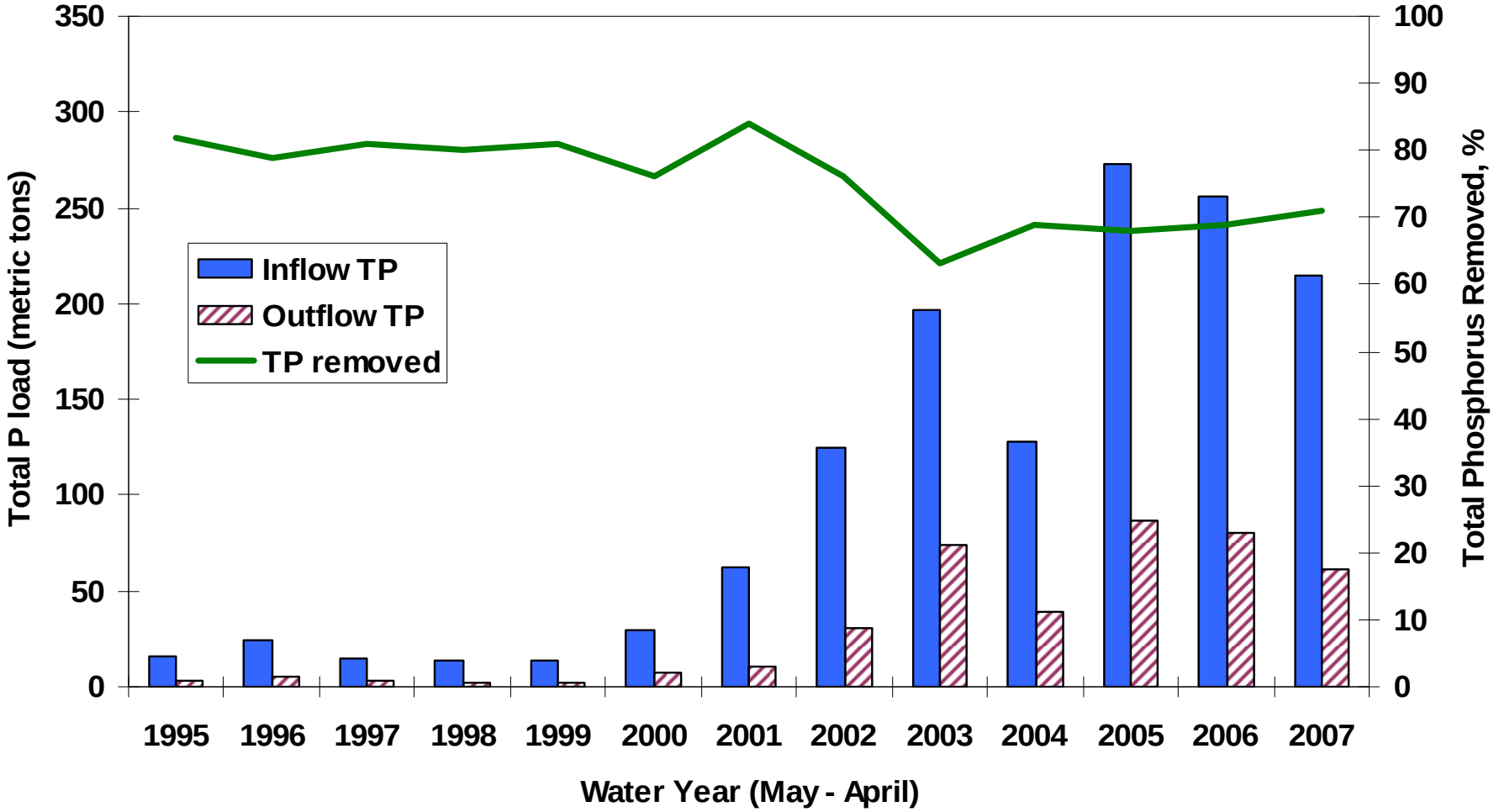


Everglades Construction Project (ECP) Stormwater Treatment Areas

Water Yr	Operational STAs
1995-97	STA-1W
1998-99	STA-1W , STA-6
2000	STA-1W, 5, 6
2001-03	STA-1W, 2, 5, 6
2004-05	STA-1W, 2, 3/4, 5, 6
2006-07	STA-1W, 1E, 2, 3/4, 5, 6



Historical STA Performance (Total P Load Reduction)



Recent Activities in the STAs

STA-5: Clean-up of internal distribution canal and upstream of inflow structures in L-3 canal

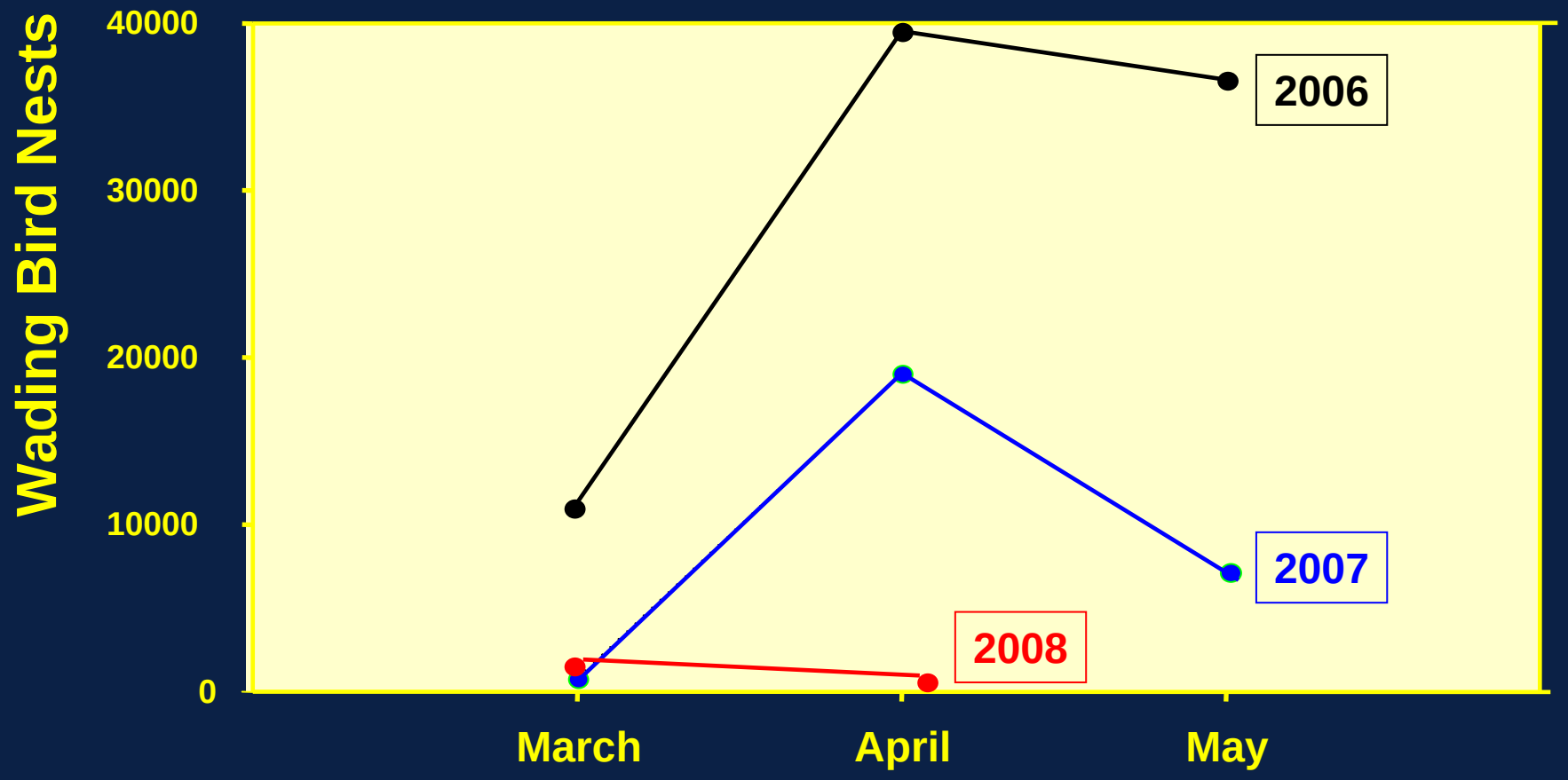
Conversion of STA-1W Cell 3 from emergent to submerged aquatic vegetation

New Public Use Areas at the STAs

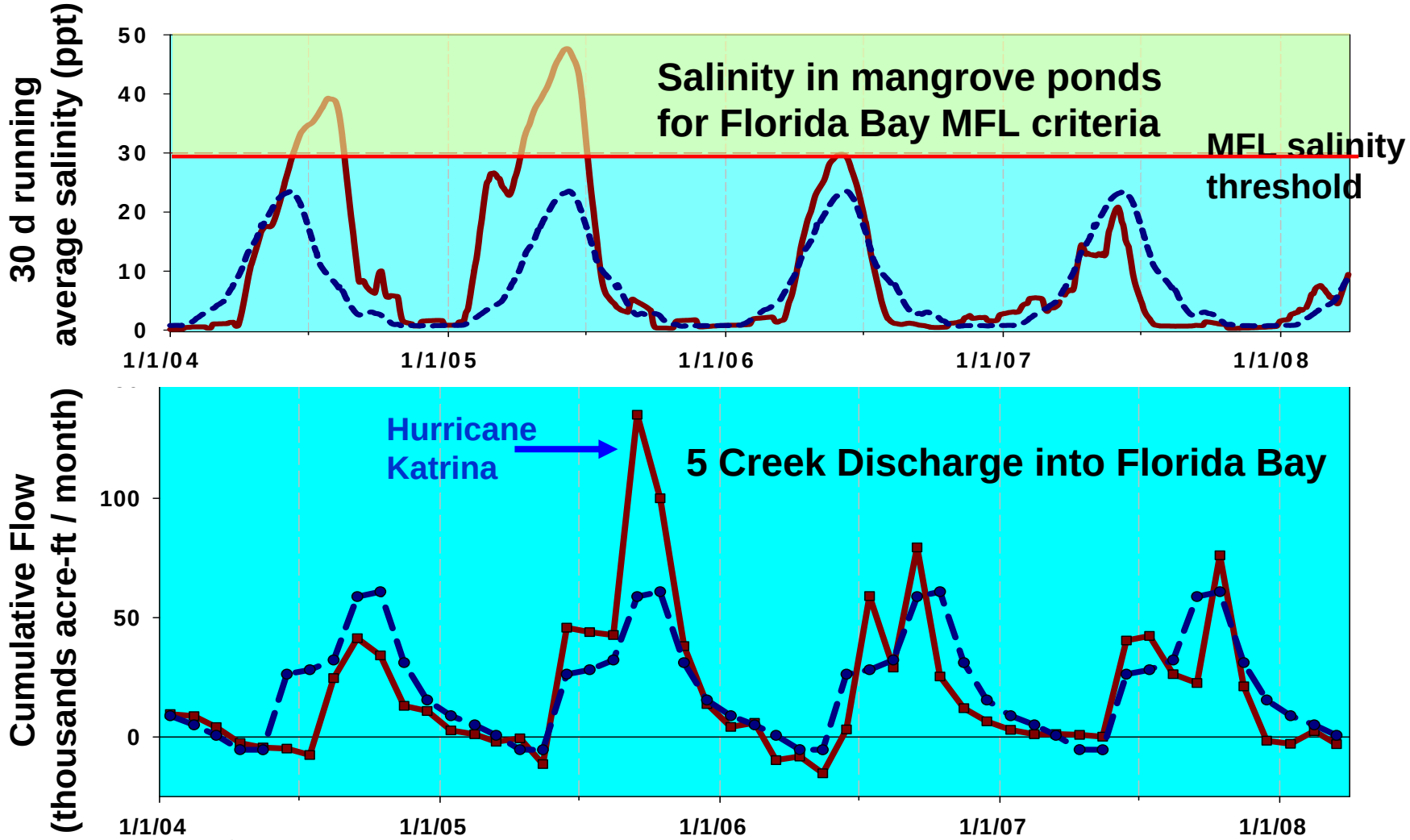
STA-1 East

STA-1 West

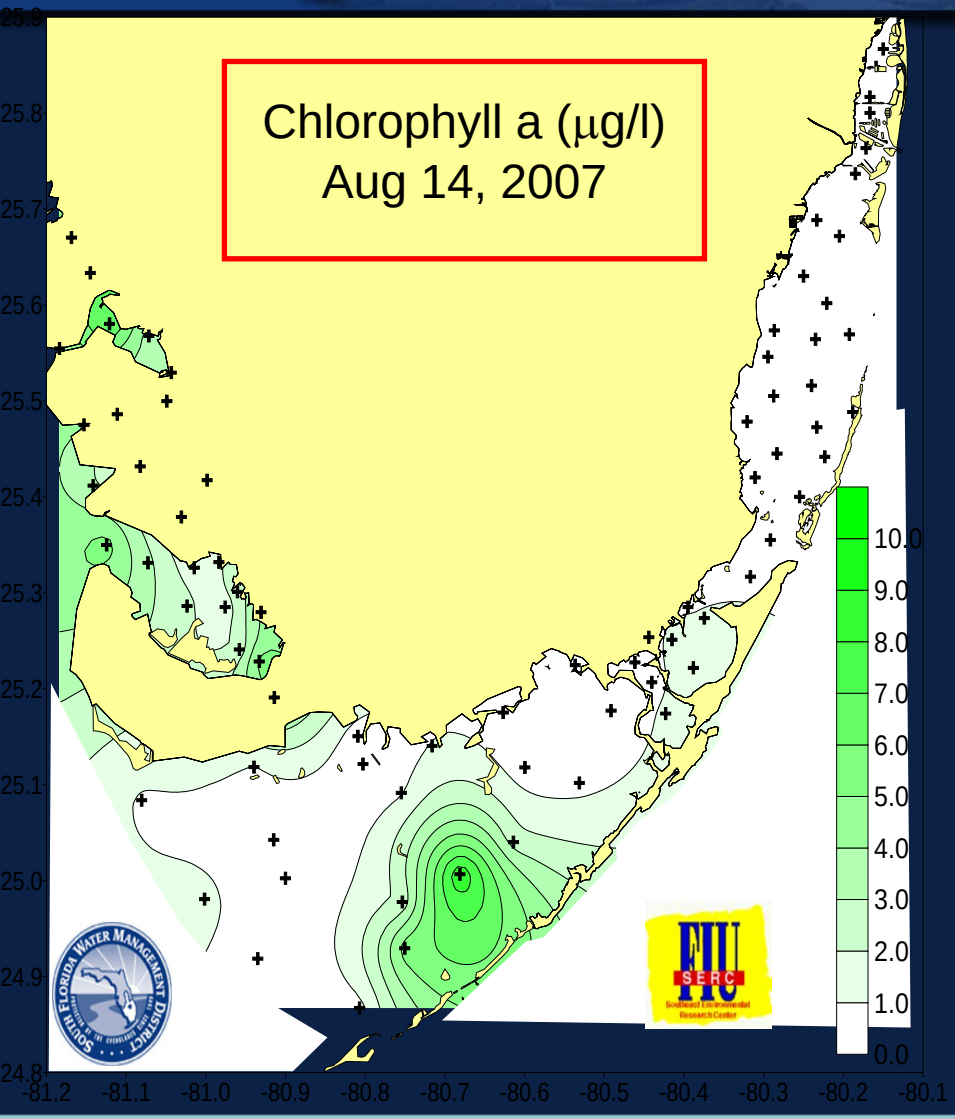
Everglades Wading Bird Nesting

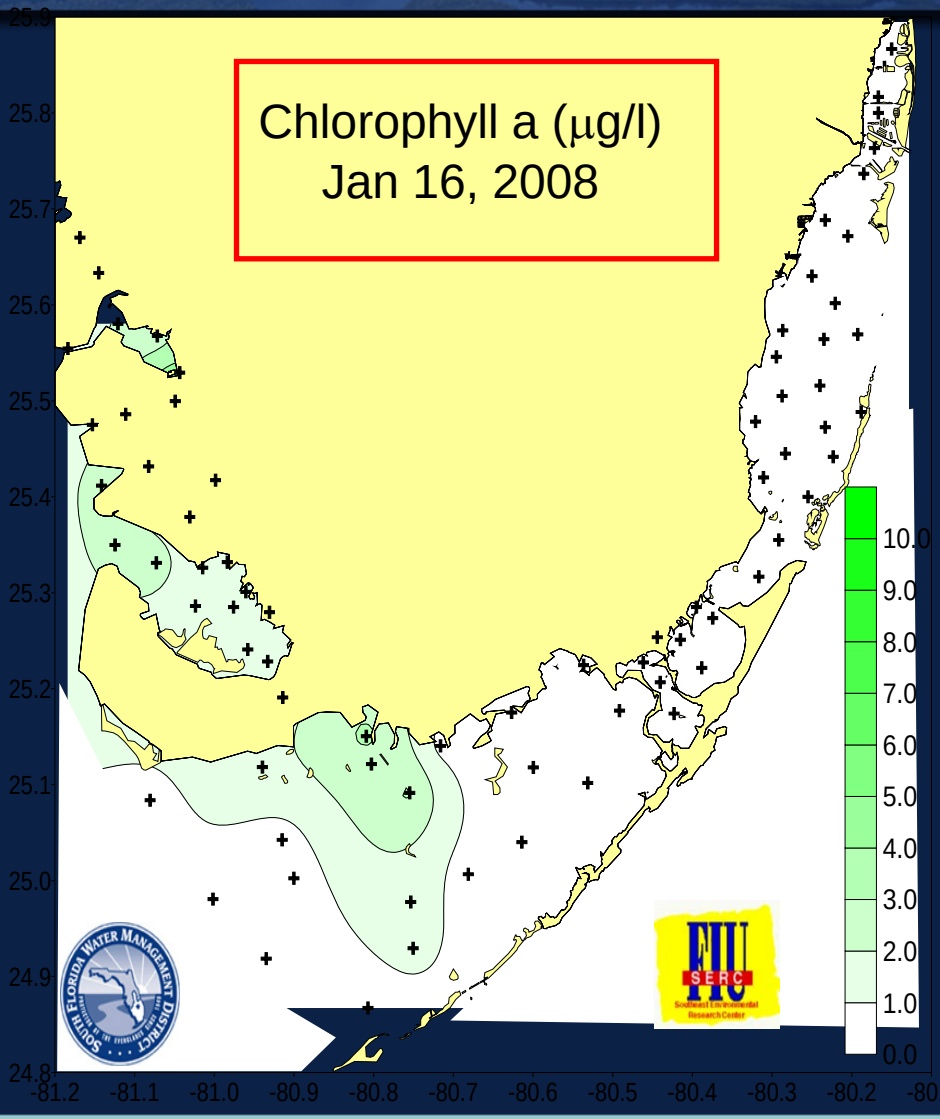


Florida Bay: Salinity and Freshwater Flow

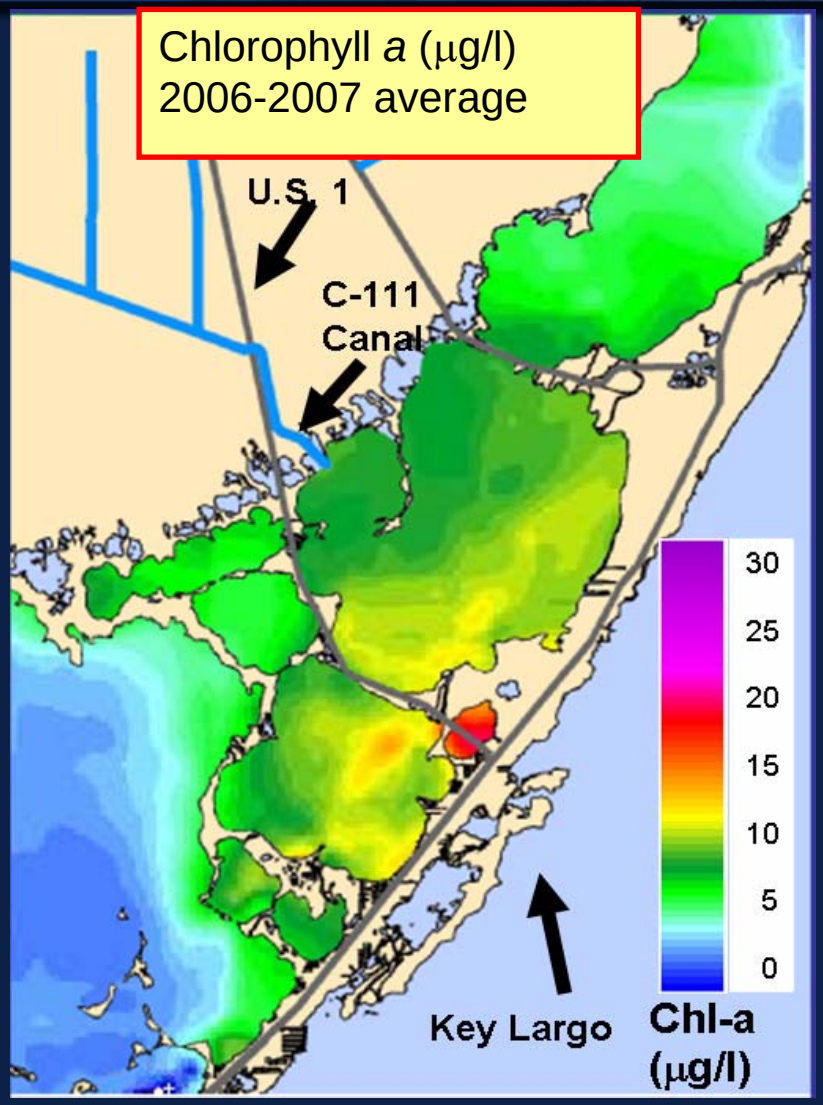


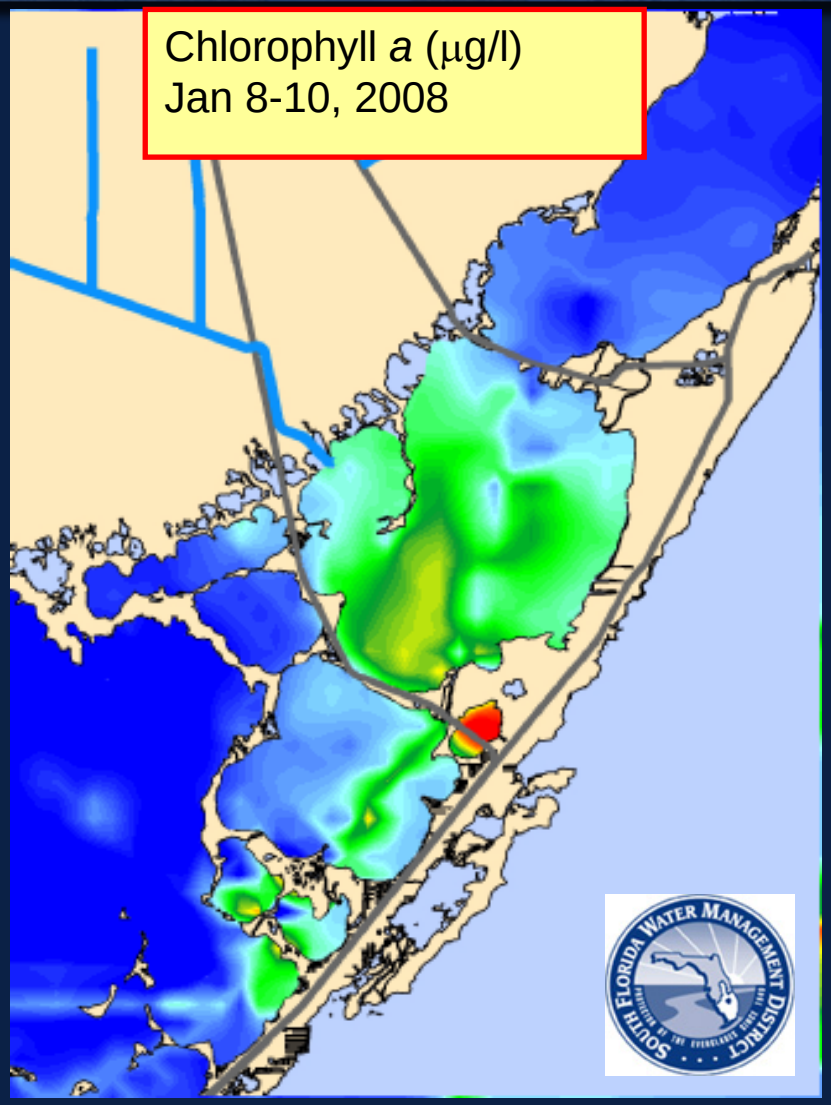
Florida Bay Algal Blooms: Status of Southern Blooms





Florida Bay Algal Blooms: Status of Eastern Blooms





Florida Bay Algal Blooms: Causes and Effects

Southern Bay Bloom:

- Bloom cause: uncertain (but water management not likely involved)
- Bloom effects: major sponge die-off (but not seagrass die-off)
- Technical workshop (March 14) and upcoming public meeting sponsored by SFWMD and Florida Keys National Marine Sanctuary (April 15)

Eastern Bay Bloom:

- No previous bloom in this area recorded
- Geographically centered around U.S. Highway 1
- Likely bloom cause: combination of road construction and hurricane disturbance (including nutrient output from C-111 Canal)
- Likely bloom effect: seagrass (SAV) die-off in Blackwater and Barnes Sounds