

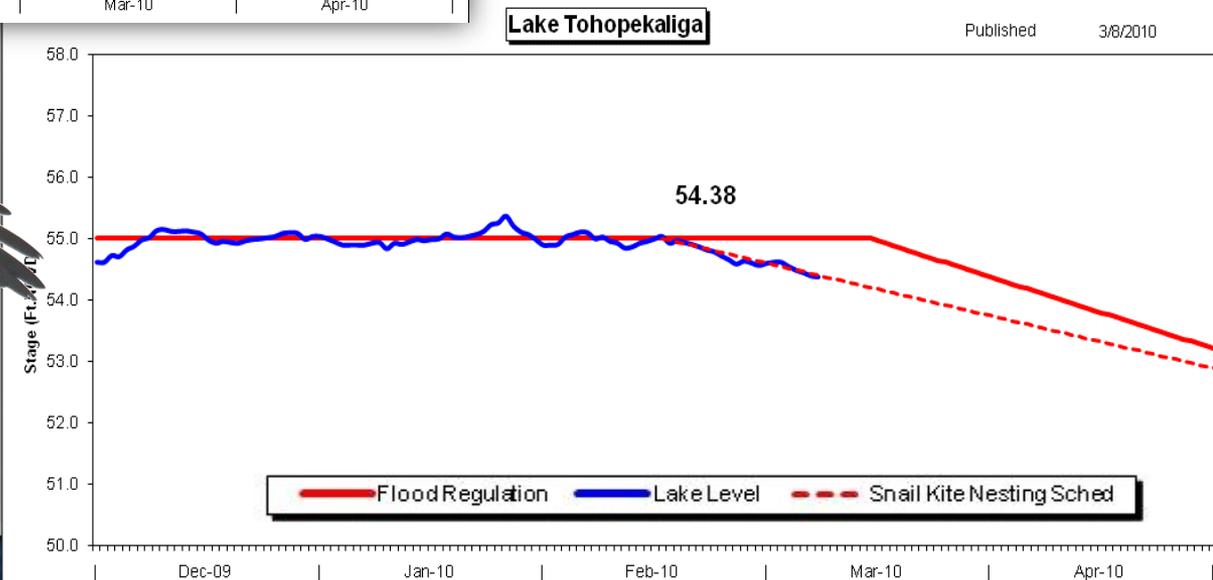
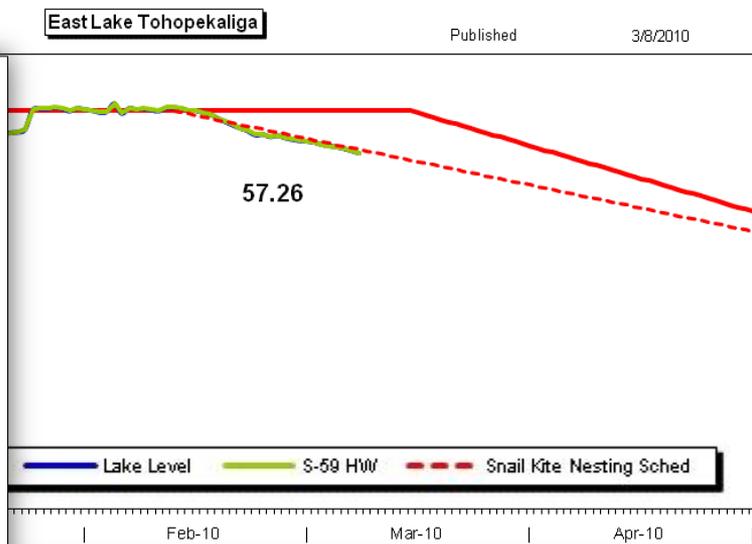
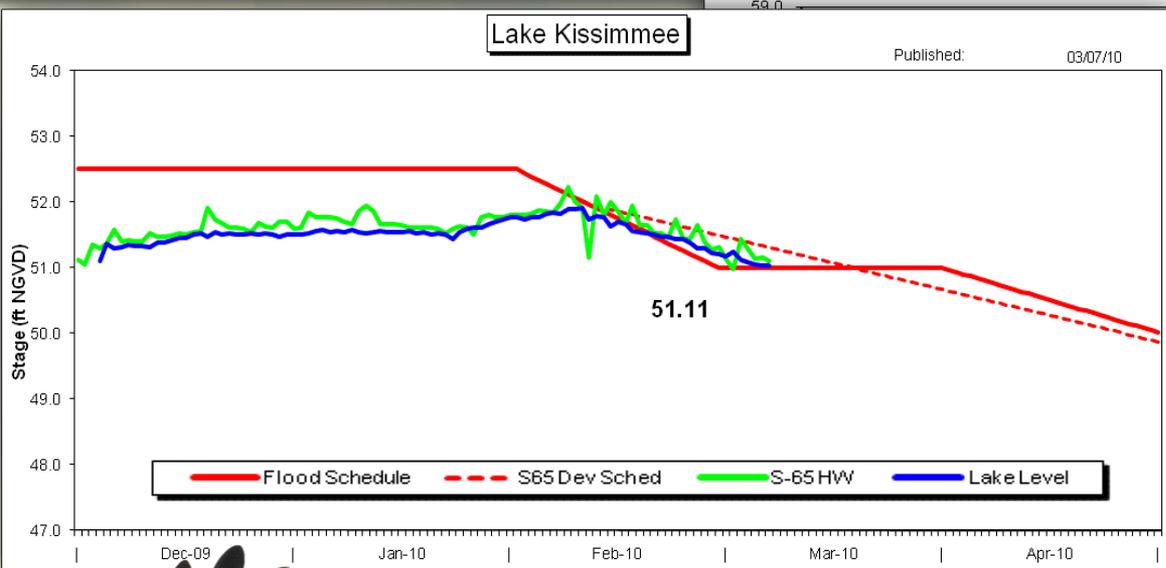
Governing Board Workshop
March 10, 2010

Ecological Conditions Update

David Unsell

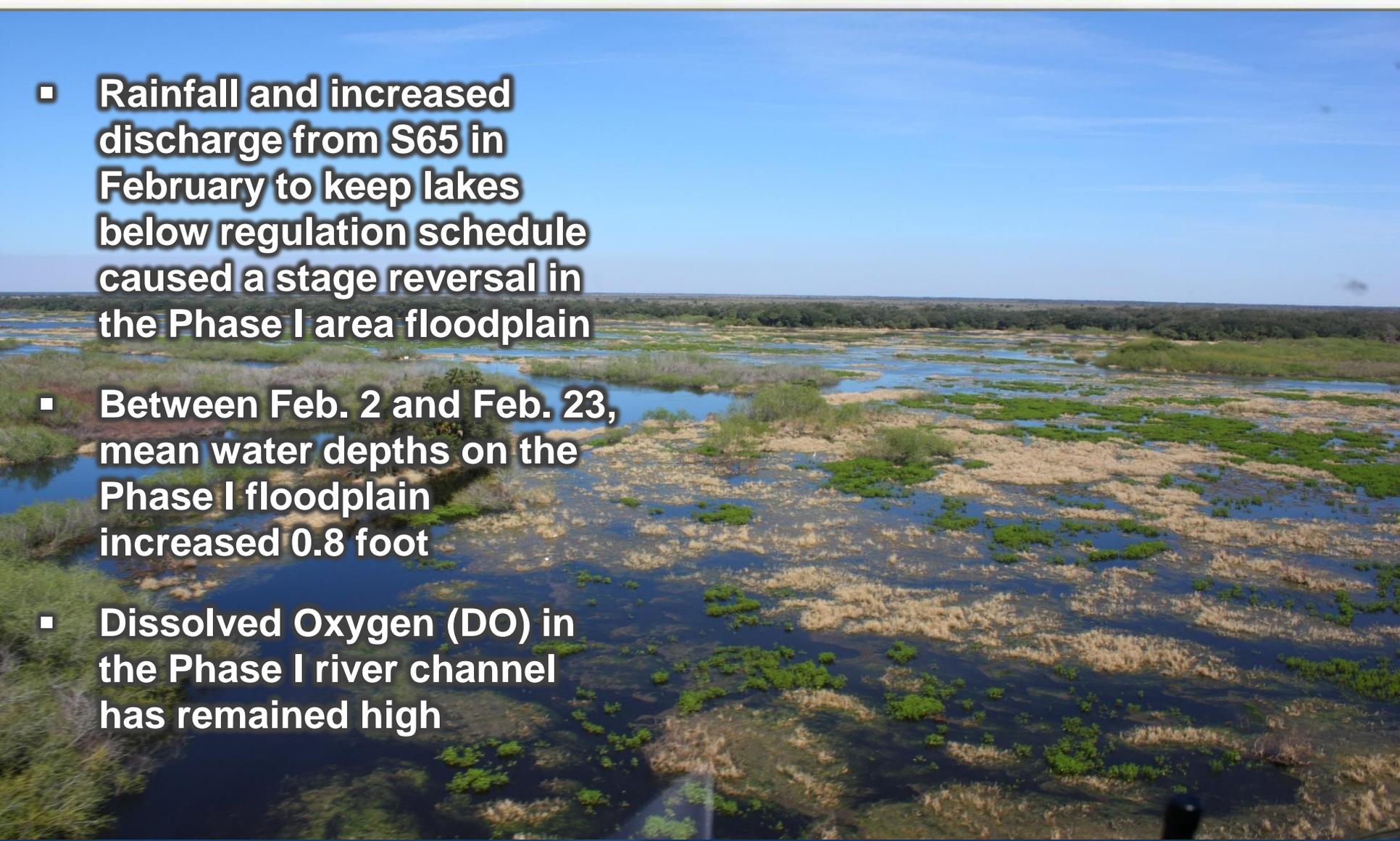
Division Director, Lake Okeechobee Division
Restoration Sciences Department

Kissimmee Basin



Kissimmee Basin

- **Rainfall and increased discharge from S65 in February to keep lakes below regulation schedule caused a stage reversal in the Phase I area floodplain**
- **Between Feb. 2 and Feb. 23, mean water depths on the Phase I floodplain increased 0.8 foot**
- **Dissolved Oxygen (DO) in the Phase I river channel has remained high**



Kissimmee Basin



US Army Corps
of Engineers



South Florida
Water Management
District



The South Florida Water Management District and the U.S. Army Corps of Engineers, Jacksonville District invite you to attend the opening of the

Istokpoga Canal Boat Ramp Area

**Thursday, March 25, 2010
10:30 am**

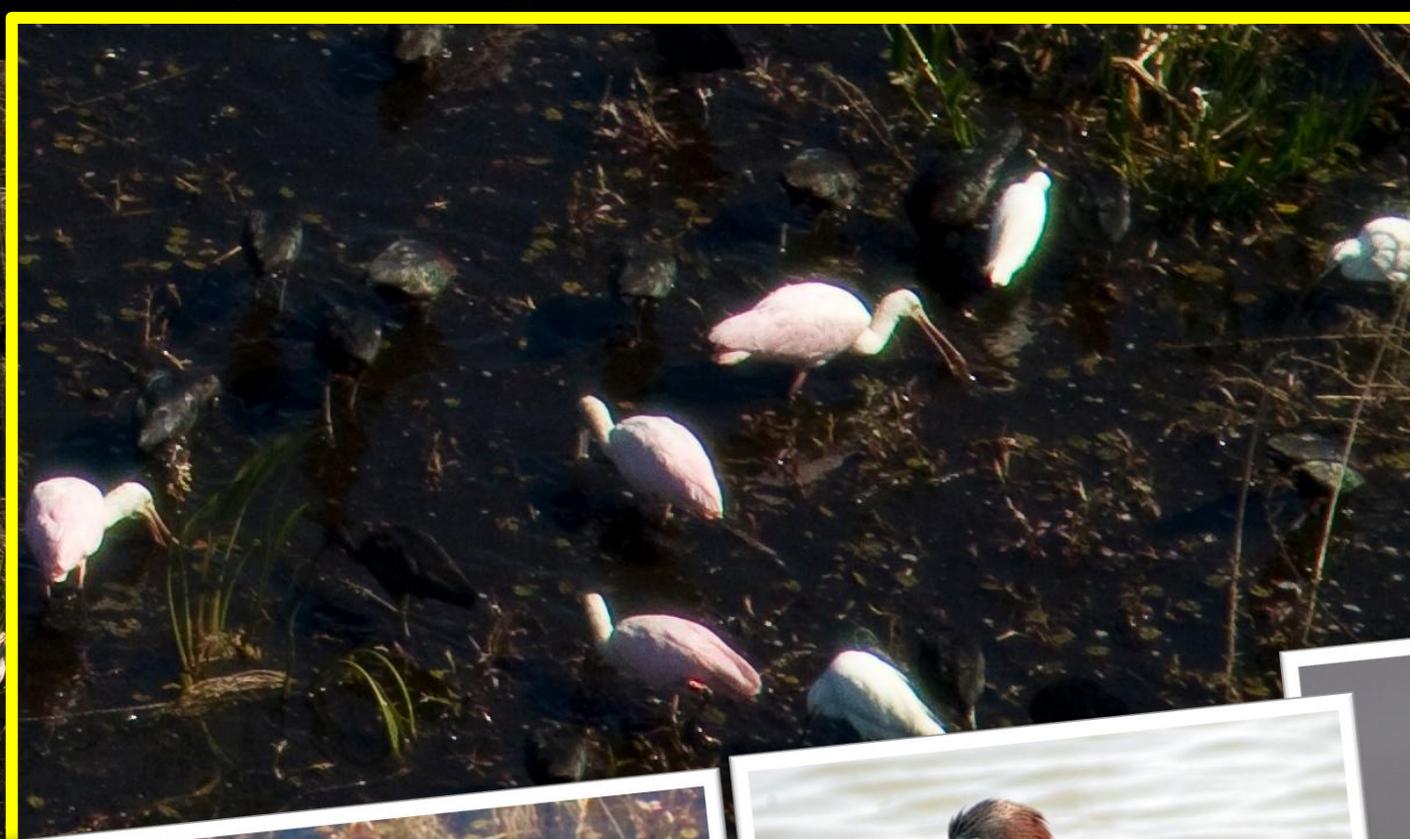
U.S. Highway 98 and Istokpoga Canal in Highlands County

Driving Directions

From City of Okeechobee: Travel north on US Highway 98 approximately 25 miles to the Istokpoga Canal Bridge. Look for Istokpoga Canal Boat Ramp Area sign. Make a right turn into facility.

From Sebring at US 27: Travel south on US Highway 98 approximately 17 miles to the Istokpoga Canal Bridge. Look for Istokpoga Canal Boat Ramp Area sign. Make a left turn into facility.

For more information, please email durban@sfwmd.gov



Glossy Ibis in flight



Glossy Ibis

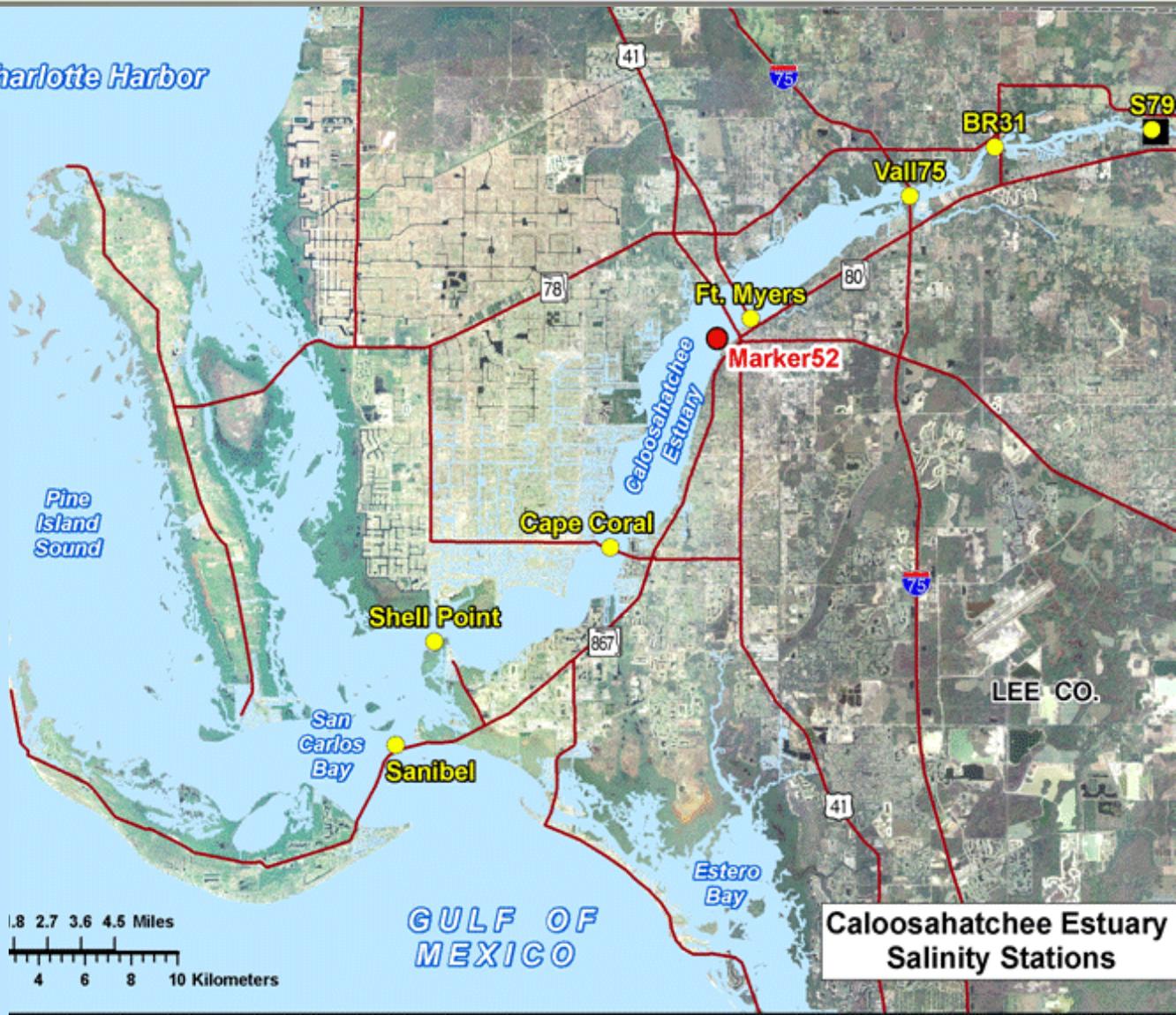


Roseate Spoonbill

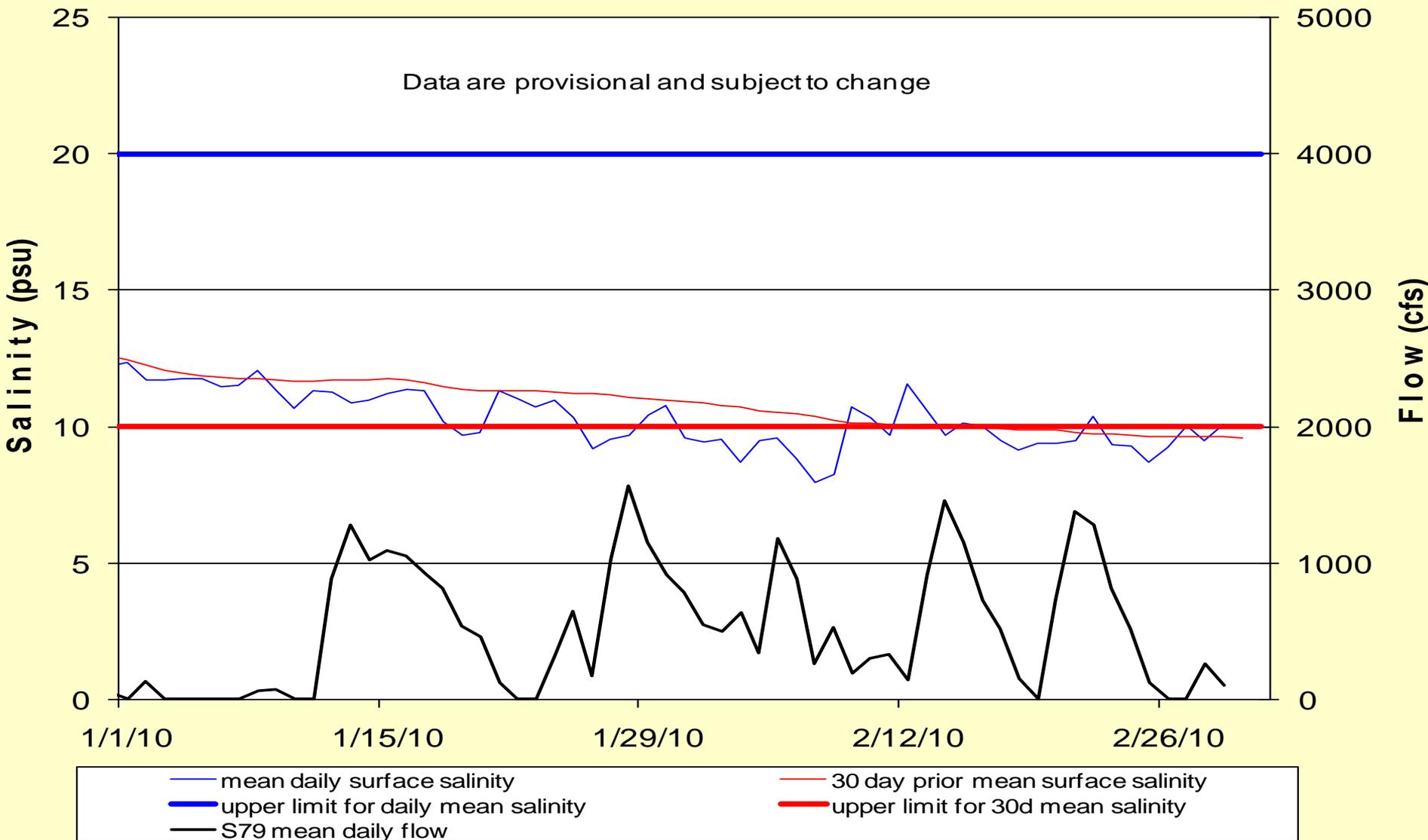
Caloosahatchee Salinity: Fort Myers

Pulse releases to the Caloosahatchee estuary have reduced the 30-day moving average salinity at Ft. Myers

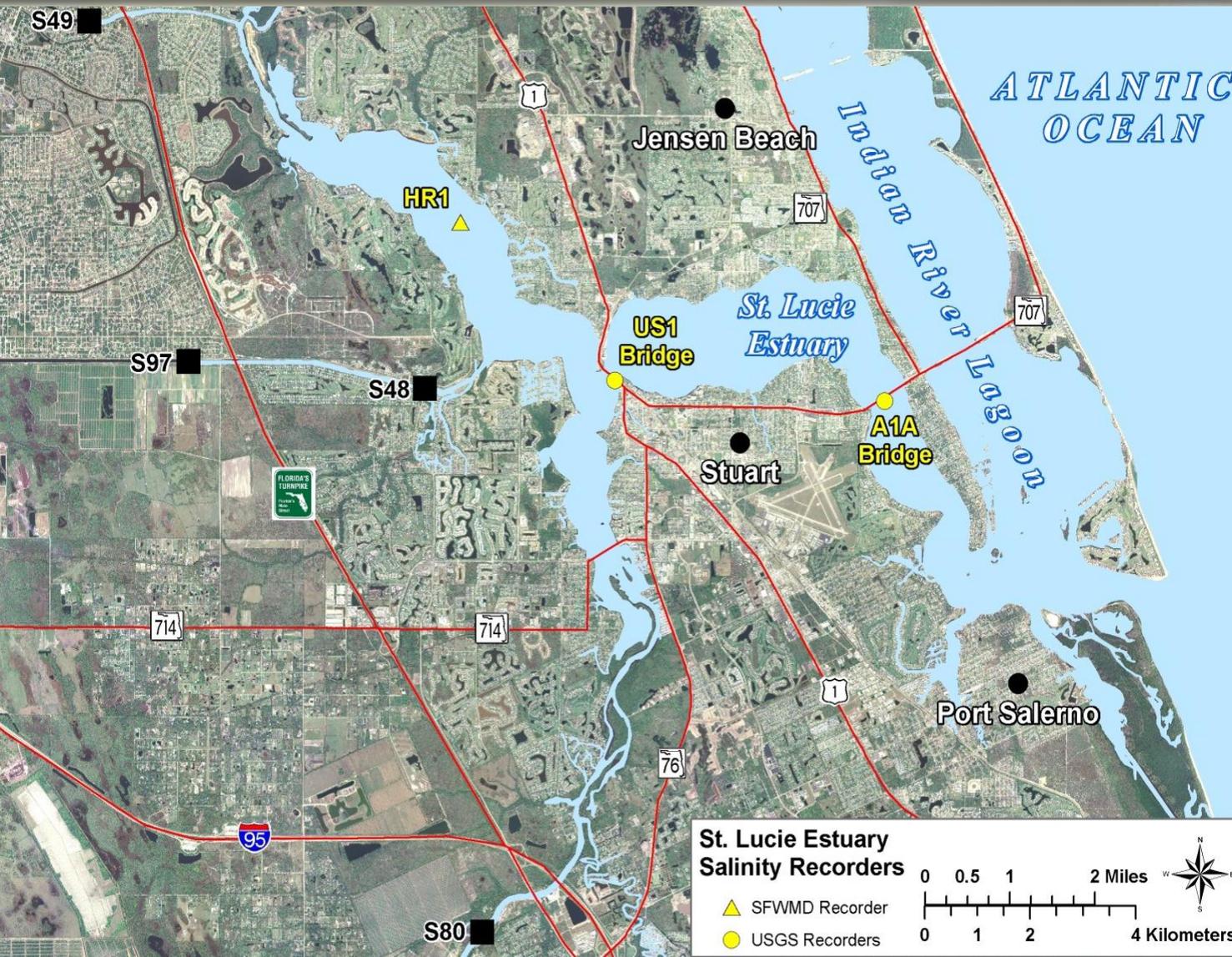
Salinity conditions in the upper and lower Estuary are within the environmentally favorable range



Caloosahatchee Salinity: Fort Myers

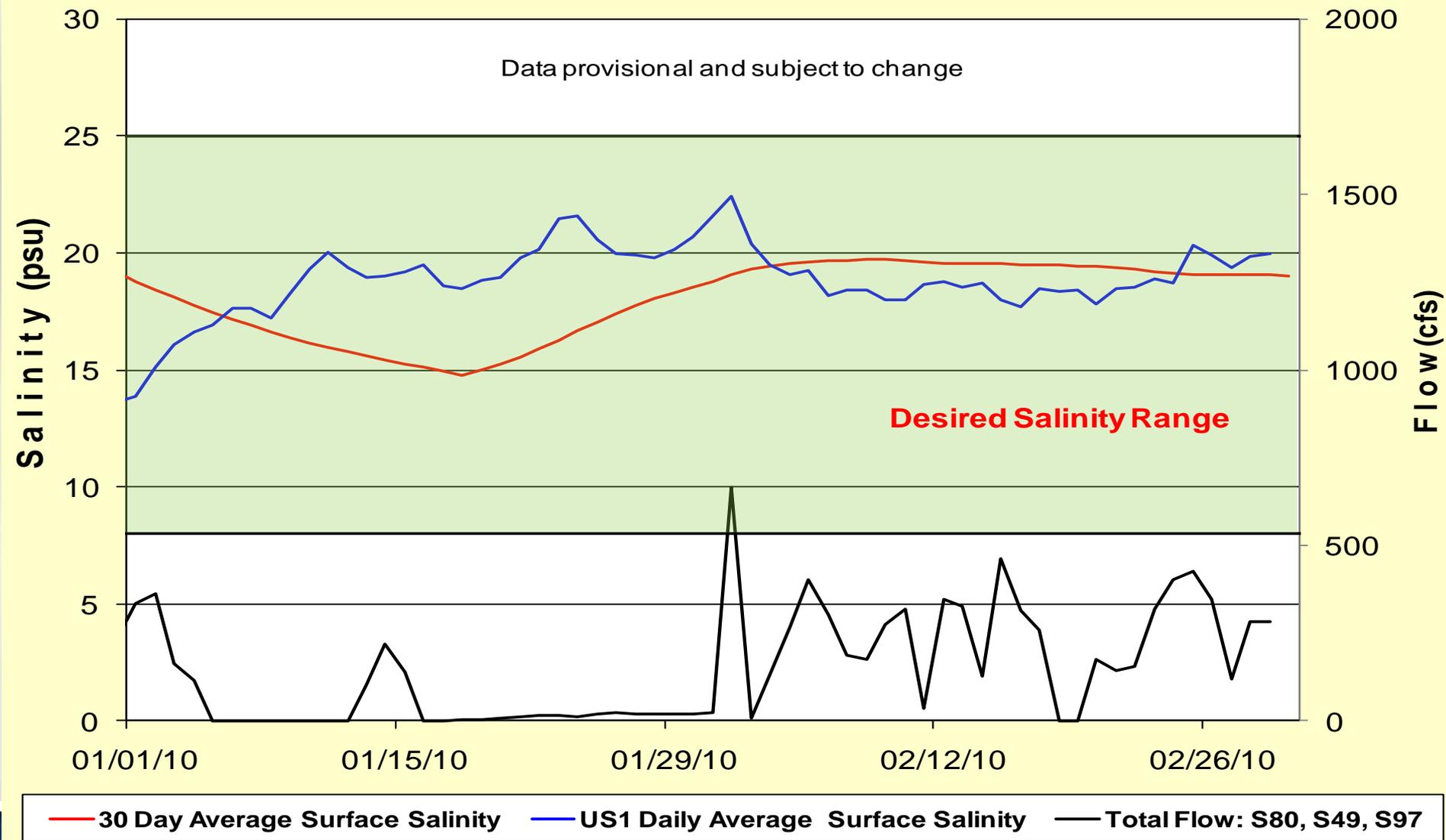


St. Lucie Salinity: US 1 Bridge

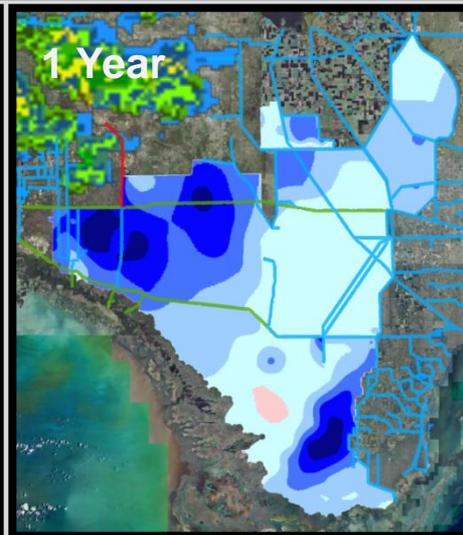
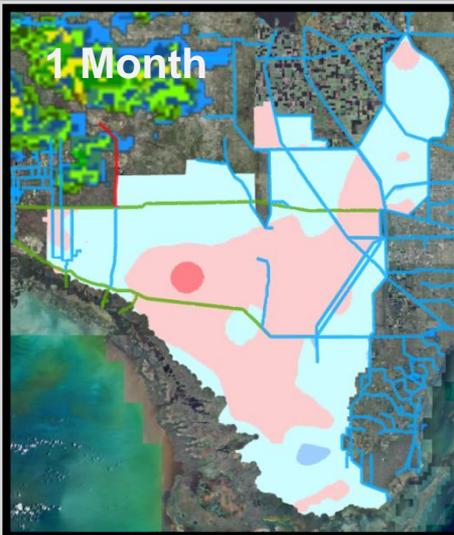
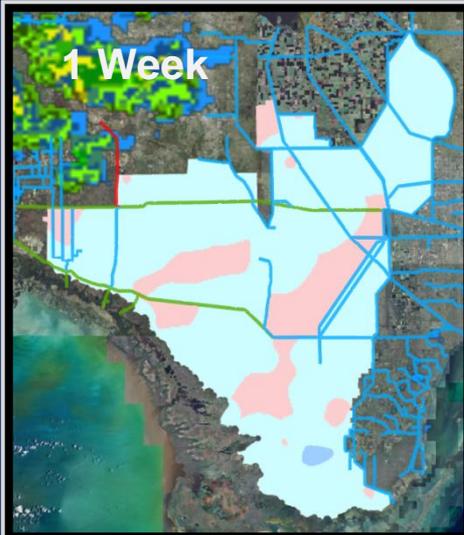
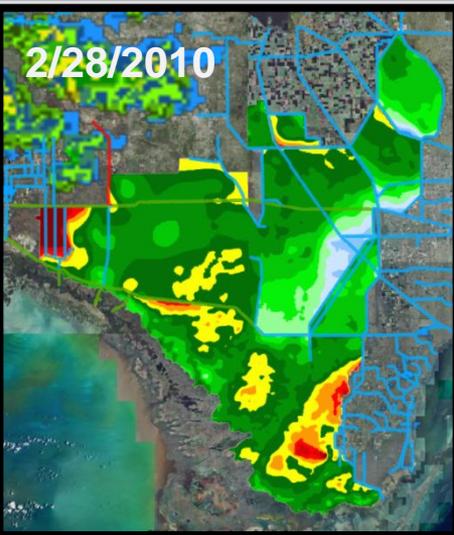


In the St. Lucie, the daily salinity at the US1 Bridge was within the salinity envelope

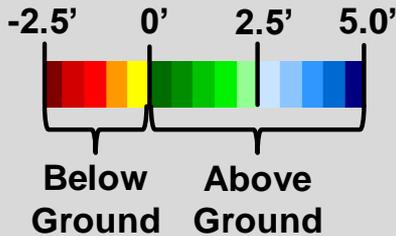
St. Lucie Salinity: US 1 Bridge



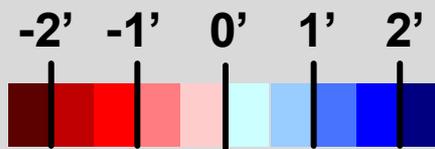
Everglades Water Depths and Difference Maps (Present minus Past)



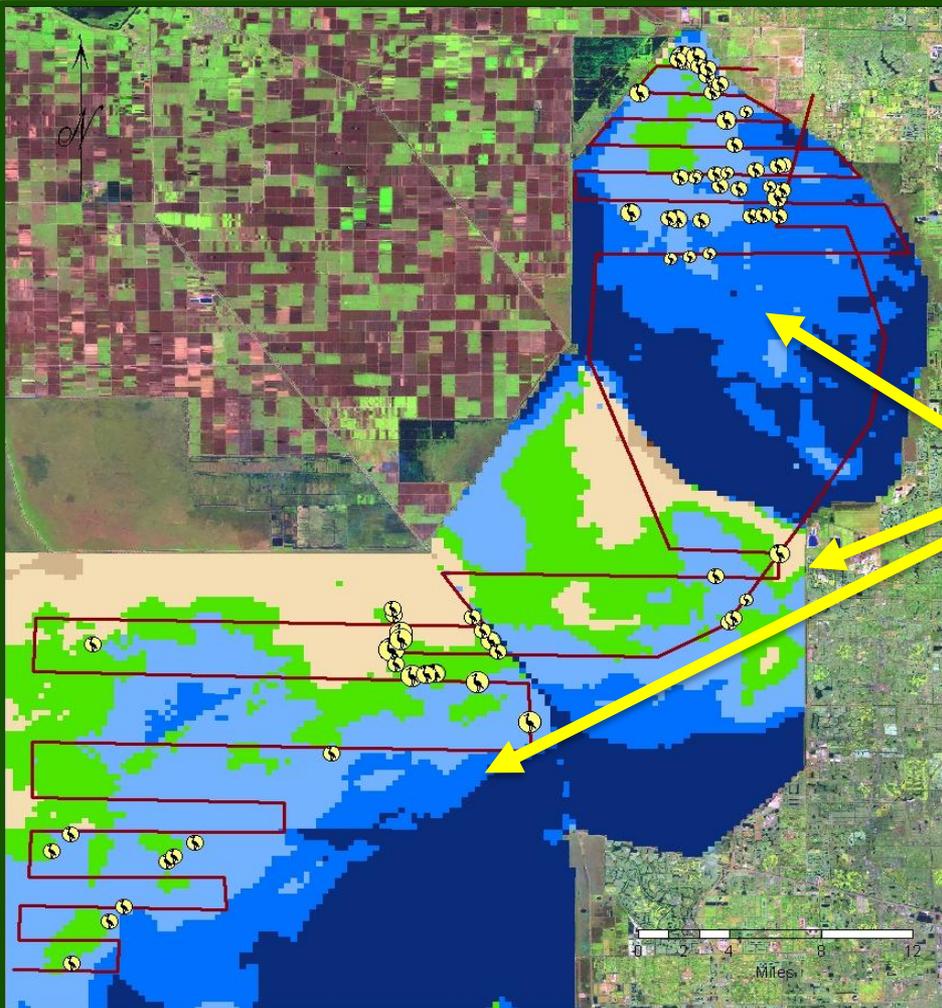
Water Depth (feet)



Water Depth Difference (feet)



Wading Bird Foraging Areas



This map shows where wading birds were feeding in relation to water depth on Feb 26th 2010

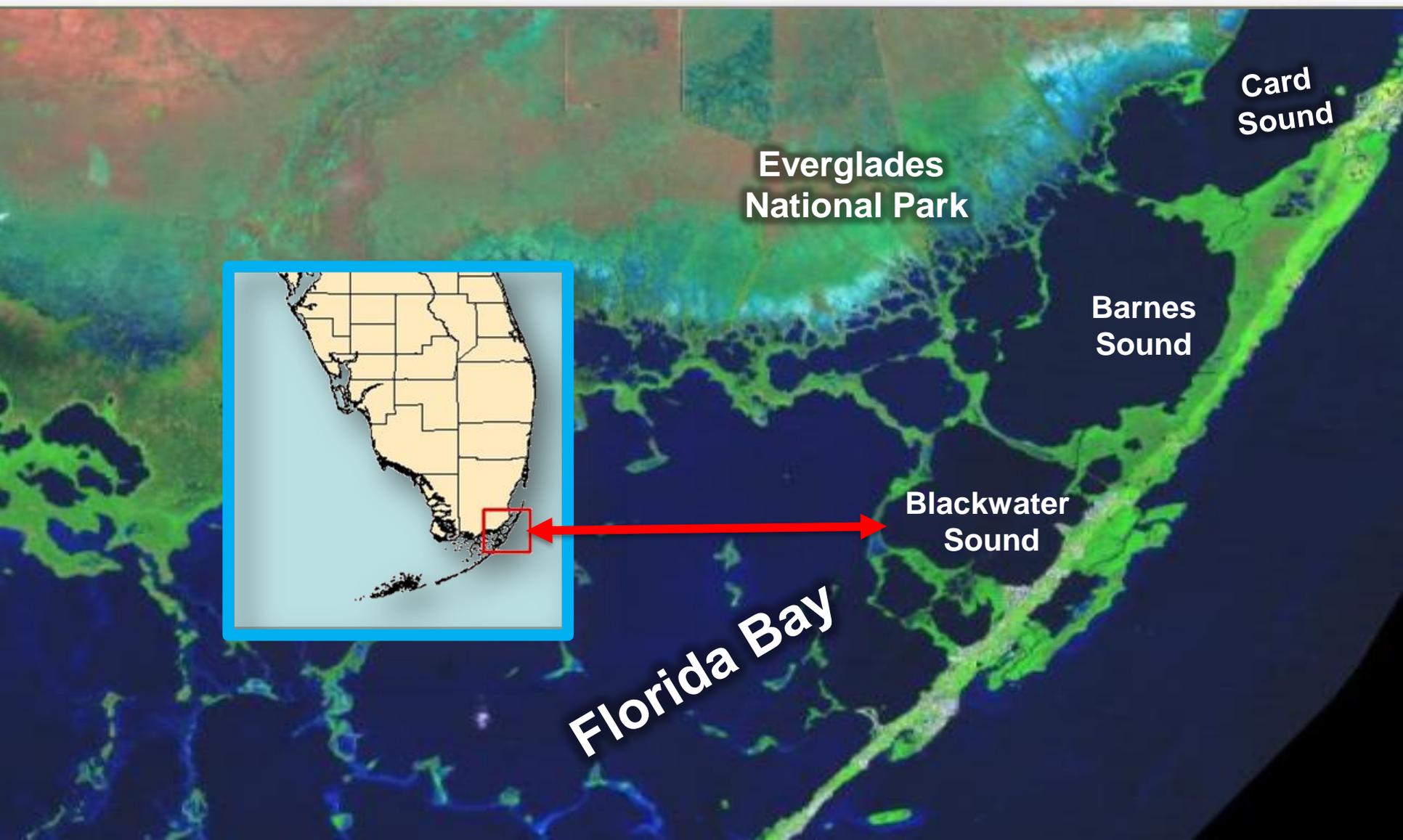
Wading birds are currently feeding in WCA-2A, WCA-3A and the Lox National Wildlife Refuge

Green areas represent water depths that are optimal for wading bird feeding (~0.25 – ~0.5 ft)

Dark red lines are the flight lines used to survey for wading birds

Legend			
— Feb 26 Flight Path	🕒 101 - 200	Water Depth (ft)	🟢 0.24 - 0.53 (optimal)
🕒 0 - 20	🕒 201 - 500	🟤 < -1.67	🟡 0.53 - 1.00 (suboptimal wet)
🕒 21 - 100	🕒 501 - 1000	🟠 -1.67 - -0.48 (too dry)	🟠 1.00 - 1.45 (too wet)
		🟡 -0.48 - 0.24 (suboptimal dry)	🟢 > 1.45

Blackwater Sound



Card Sound

Everglades National Park

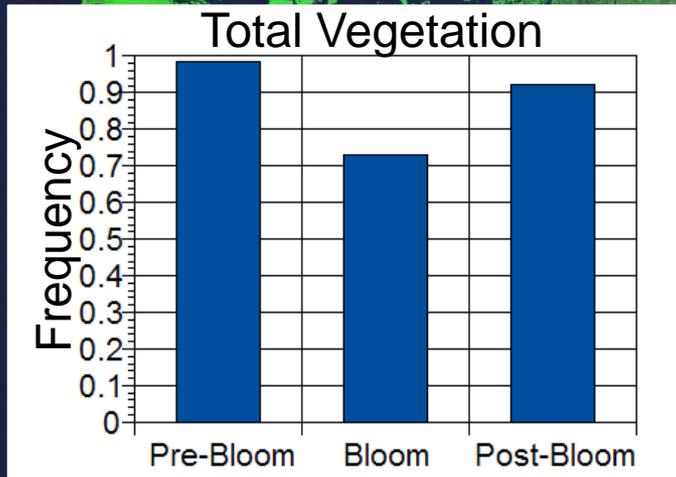
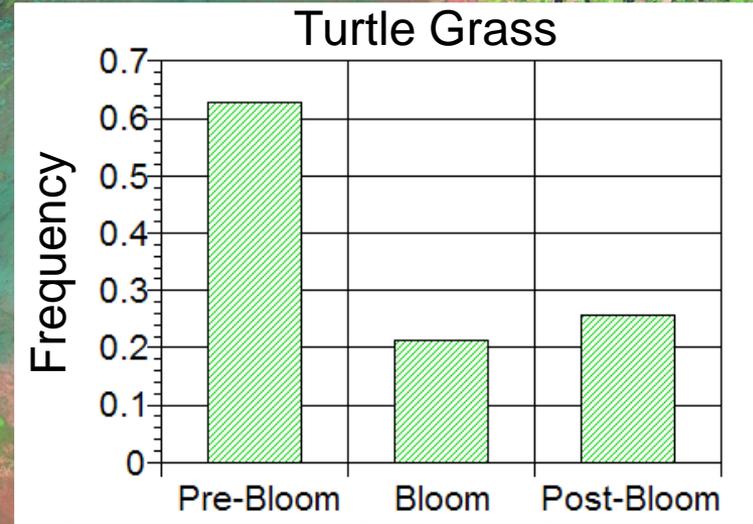
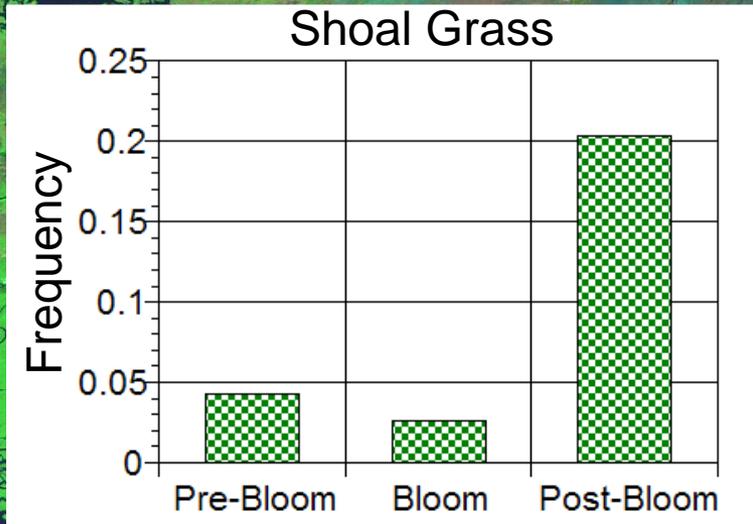
Barnes Sound

Blackwater Sound

Florida Bay



Blackwater Sound Benthic Vegetation



* Data collected by Miami-Dade DERM

Pre-Bloom: WY2003 & 2004
 Bloom: WY2007 & 2008
 Post-Bloom: WY2009 & 2010

Seagrasses are showing signs of successional recovery in the northern section of the Blackwater Sound

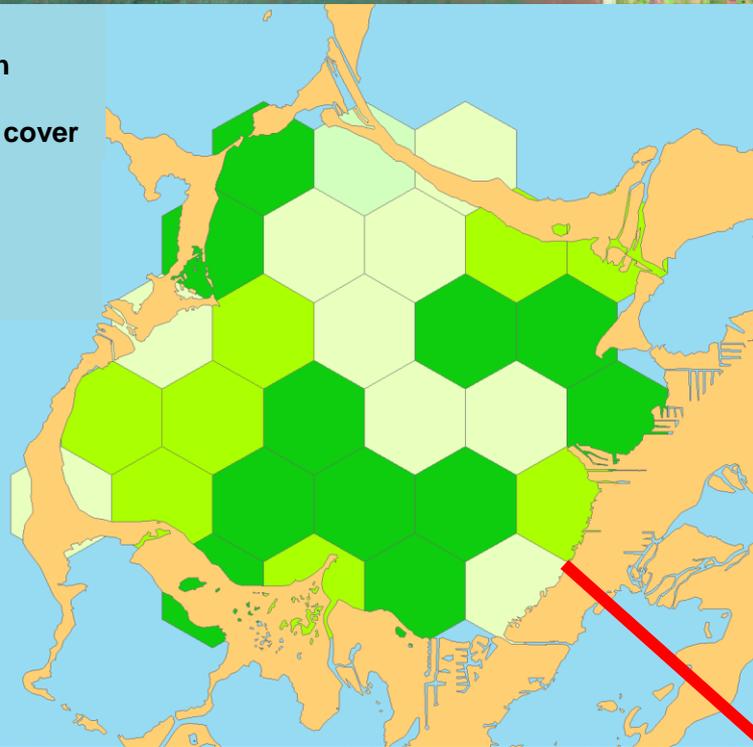


Blackwater Sound Seagrasses

Total seagrass cover in Blackwater Sound remains patchy and sparse

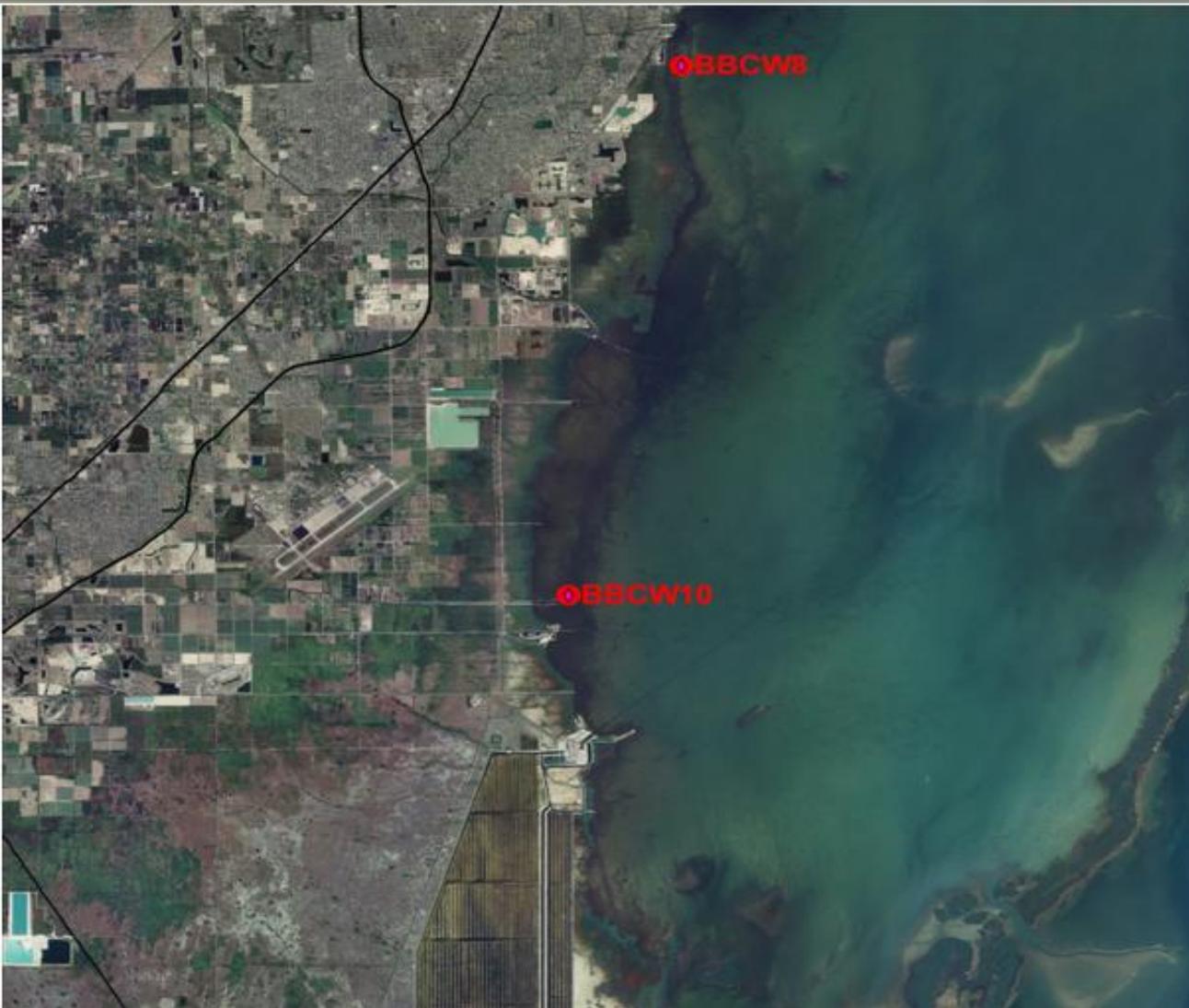
Percentage of observations with greater than 5% seagrass bottom cover

- 0-25%
- 25-50%
- 50-75%
- 75-100%



* Data shown were collected in May 2009 through a cooperative agreement with the South Florida Fish Habitat Assessment Program (FWCC)

Biscayne Bay Salinity



**In Biscayne Bay,
the salinity is
within the
preferred range
for seagrasses**

**No hypersalinity
was reported in
the near shore
area last month**

Ecological Conditions Update



Thank You!

David Unsell

Division Director, Lake Okeechobee Division
Restoration Sciences Department

