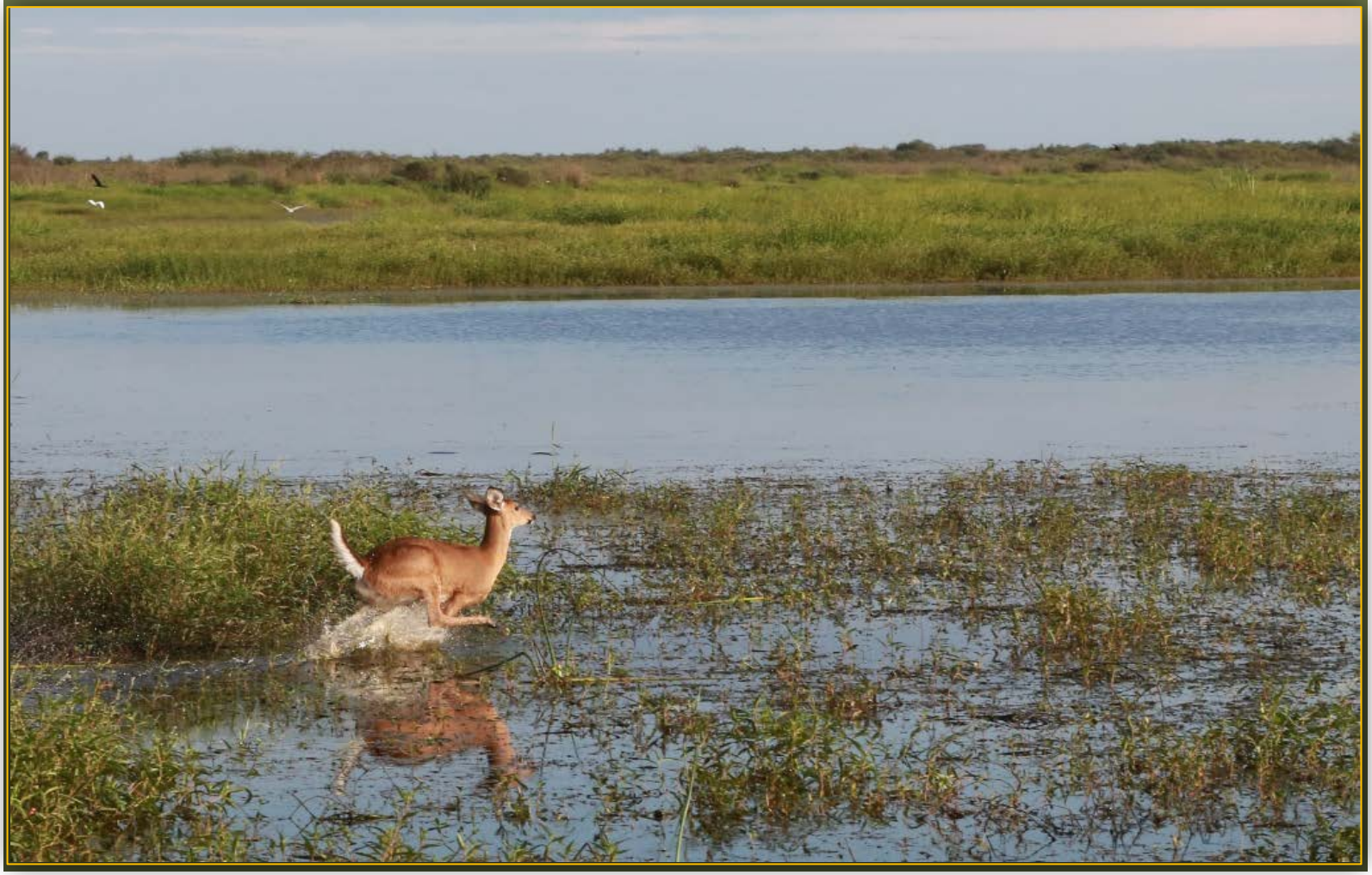
Ecological Conditions Update



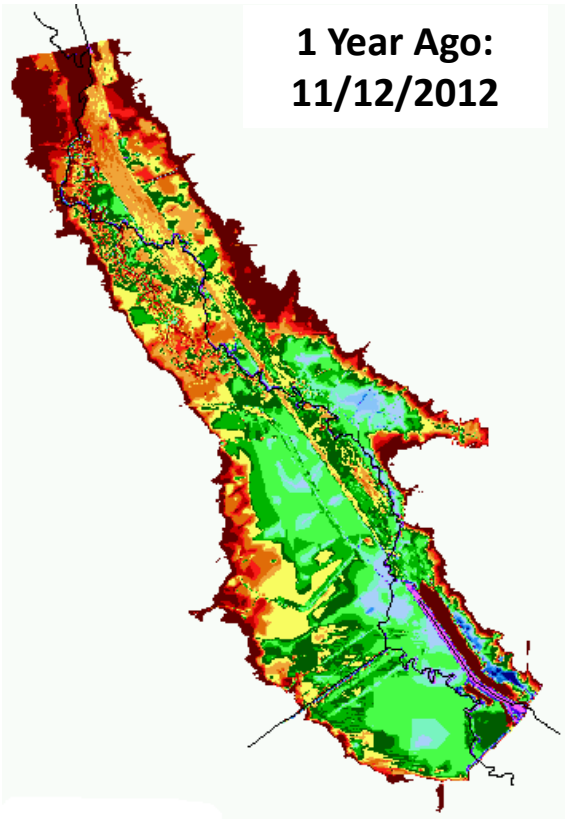
Governing Board Meeting

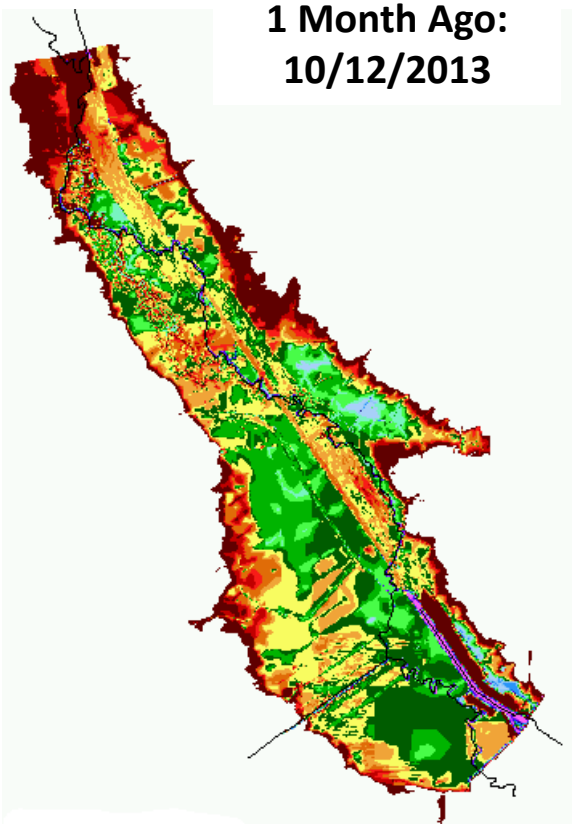
11/14/2013

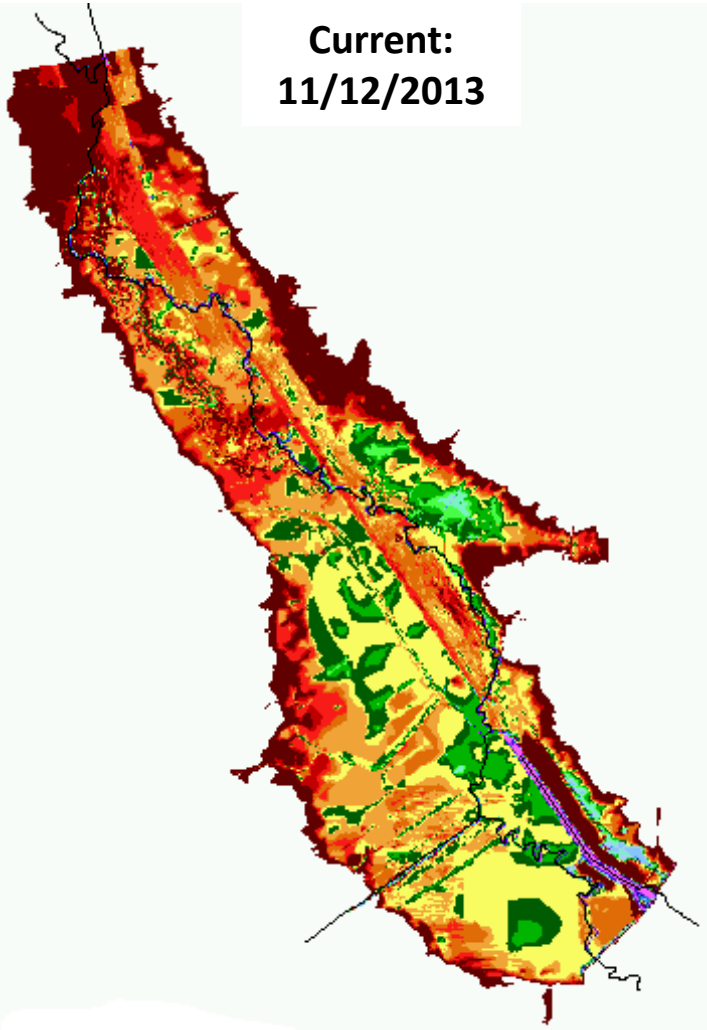
Terrie Bates
Director,
Water Resources Division

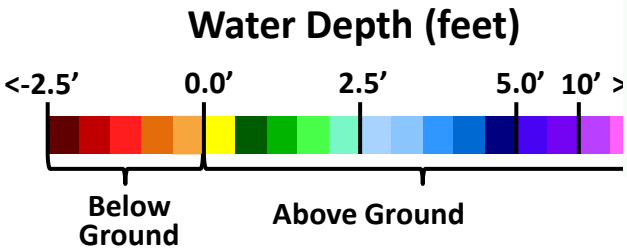
Kissimmee River (Pool C)

Monthly Water Depth Maps



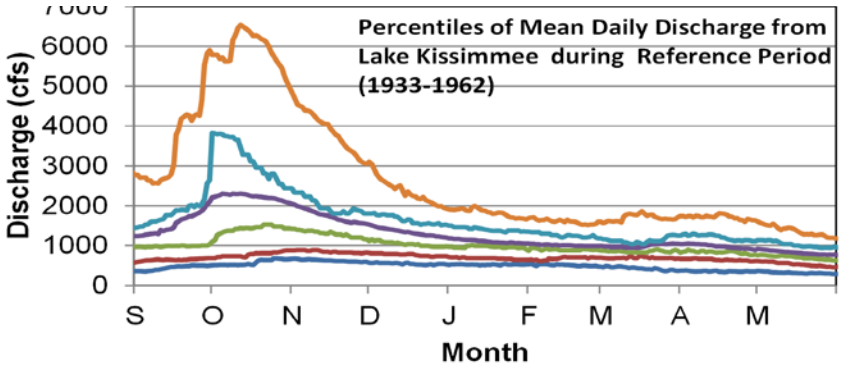




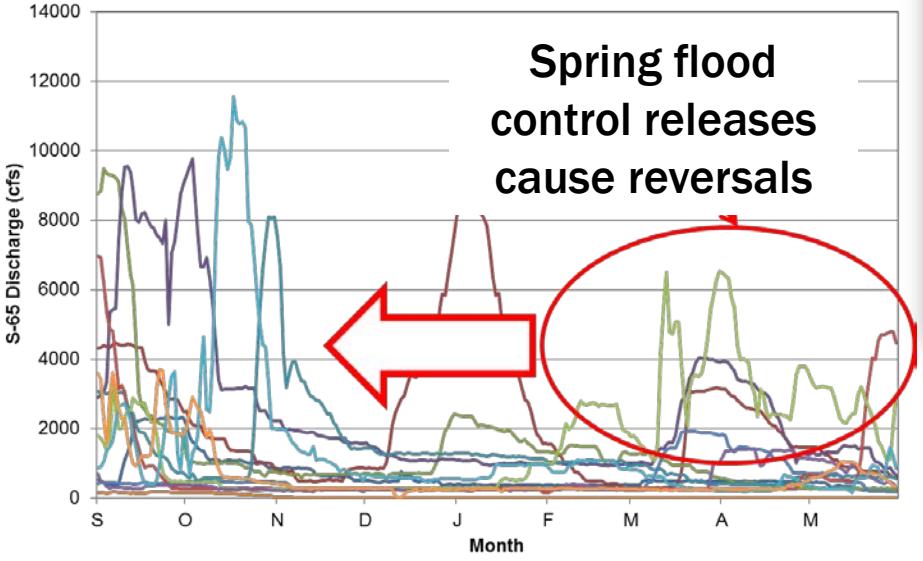


S-65 Operational Strategy: End of Wet Season Pulse

Pre-Channelization

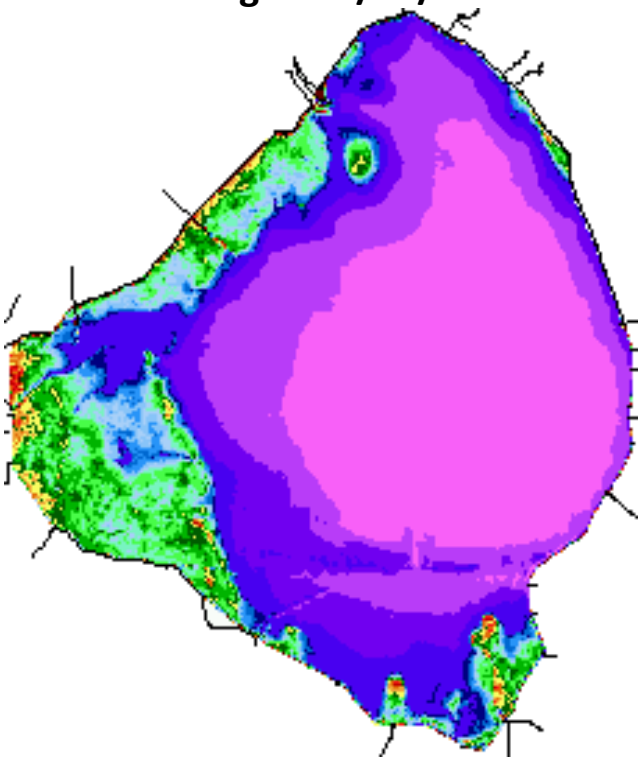


Post-Channelization



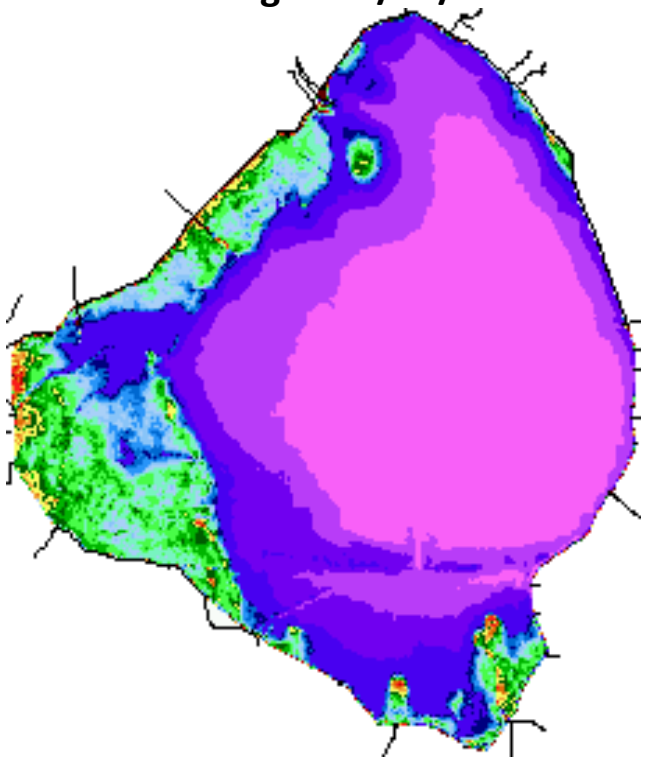
Lake Okeechobee
Water Depth Timeseries Maps

1 Year Ago: 11/12/2012



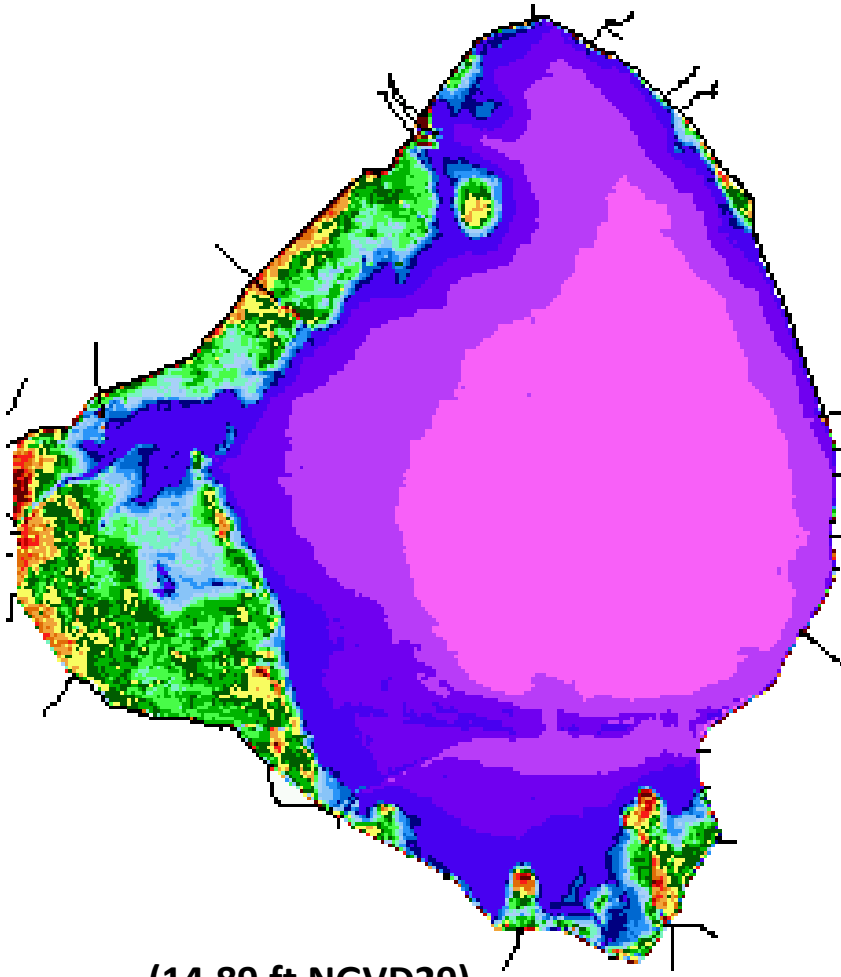
(15.51 ft NGVD29)

1 Month Ago: 10/13/2013



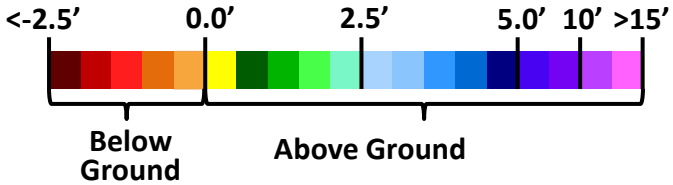
(15.69 ft NGVD29)

Current: 11/14/2013

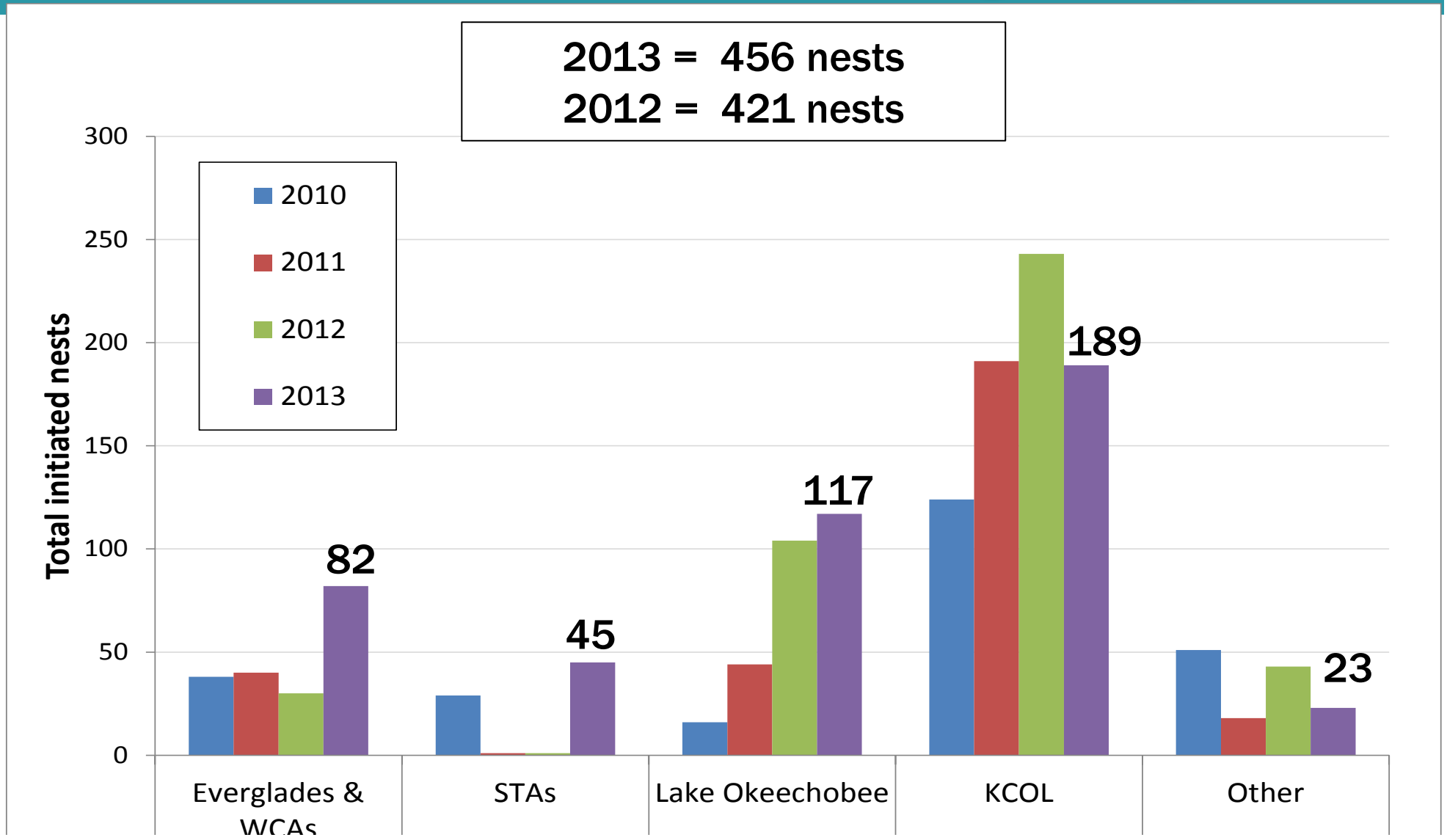


(14.89 ft NGVD29)

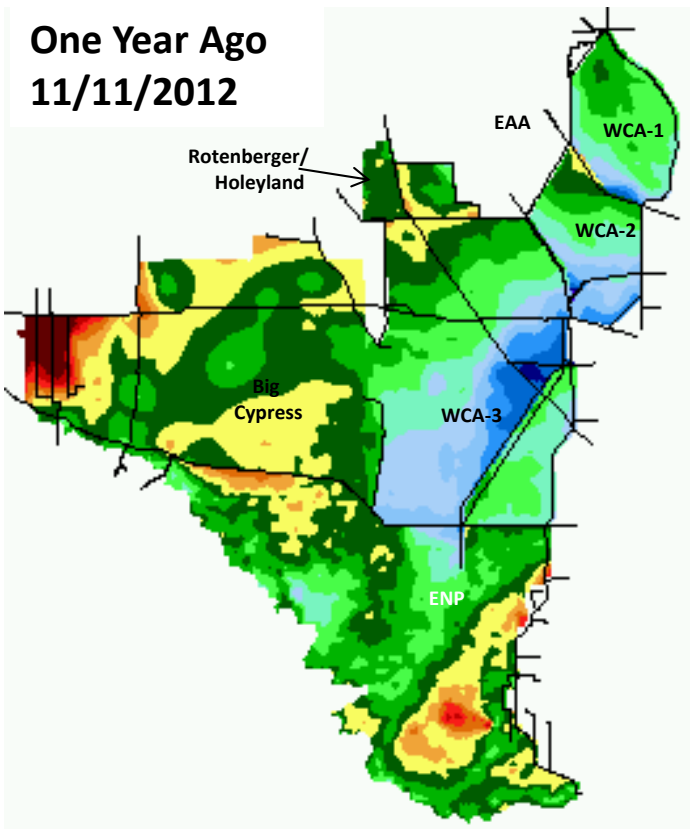
Water Depth (feet)

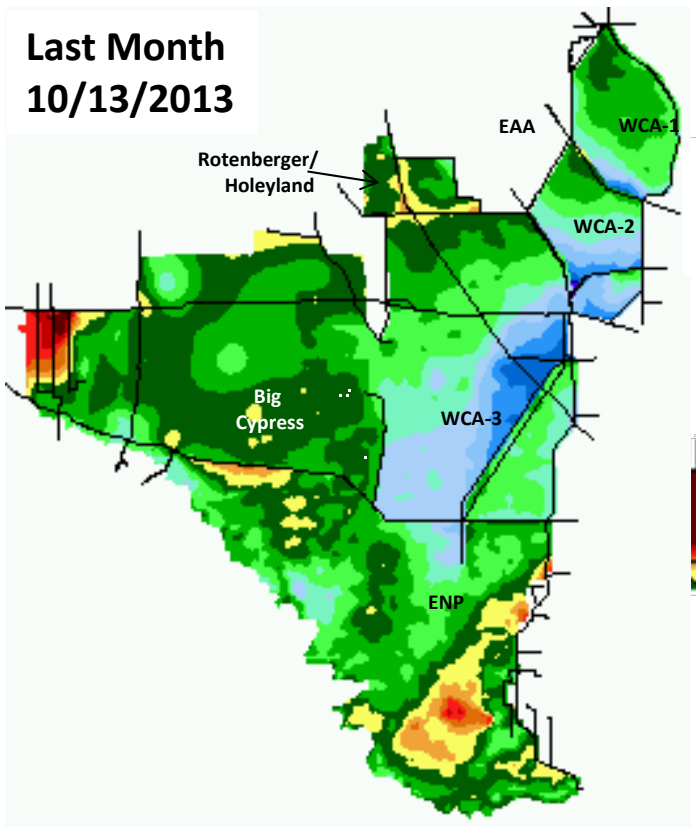


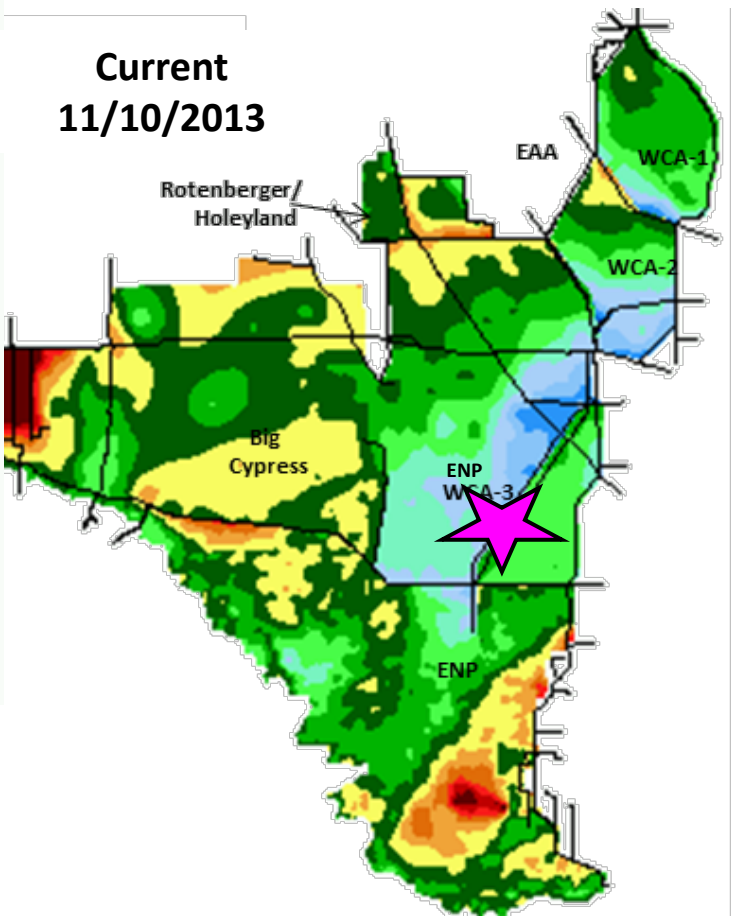
Snail Kites
Total Nests Initiated by Region

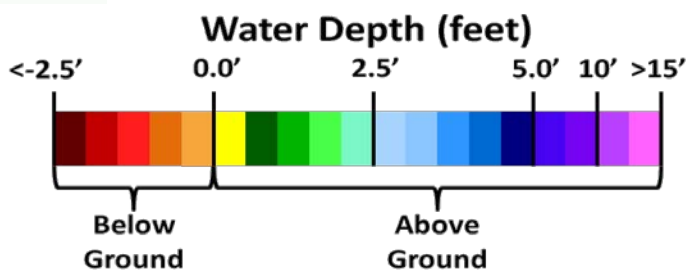


Greater Everglades
Water Depth Monthly Snapshots



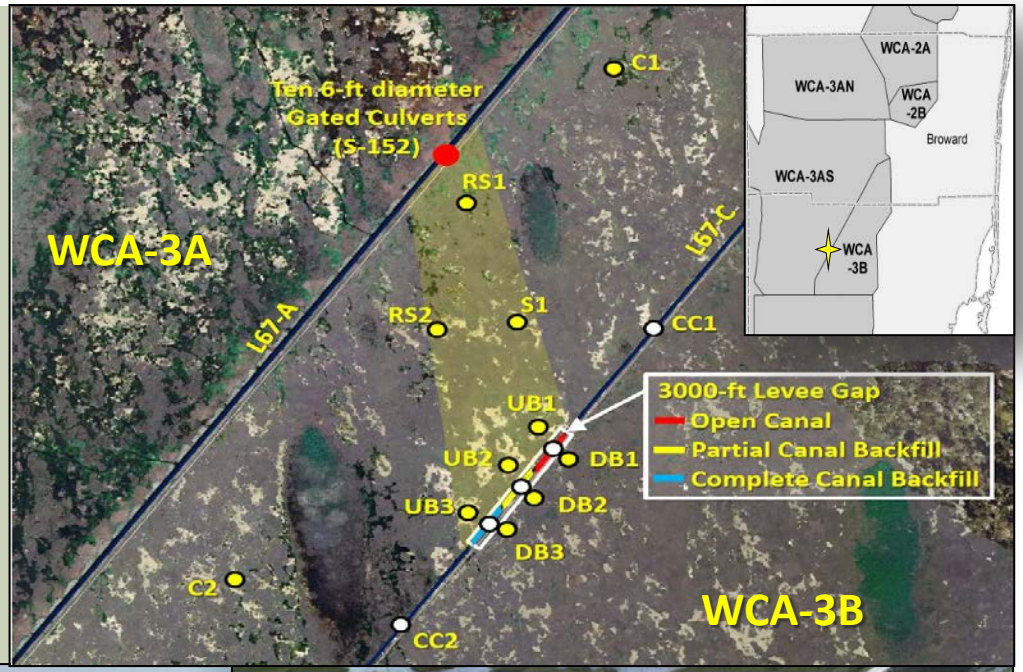






CERP - DECOMP Physical Model (DPM)

- DPM designed to understand ecological effects of:
  - restoring flow in the Everglades
  - effects of filling the canals to re-connect the wetlands
- Flow began on Nov. 5
- District & USGS staff monitored flow rate and direction using a tracer dye

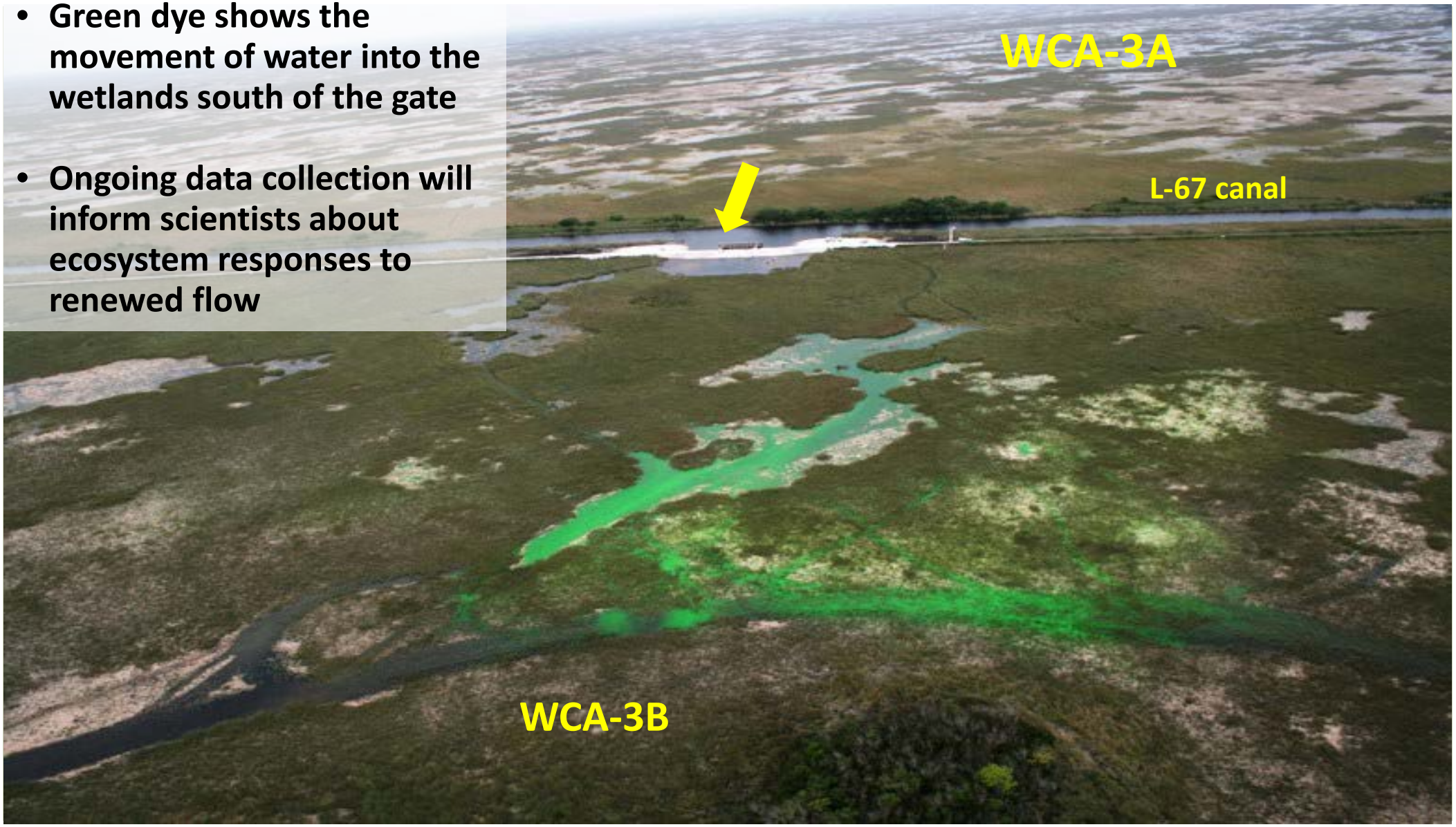


DR. FRED SKLAR PREPARING DYE TRACER

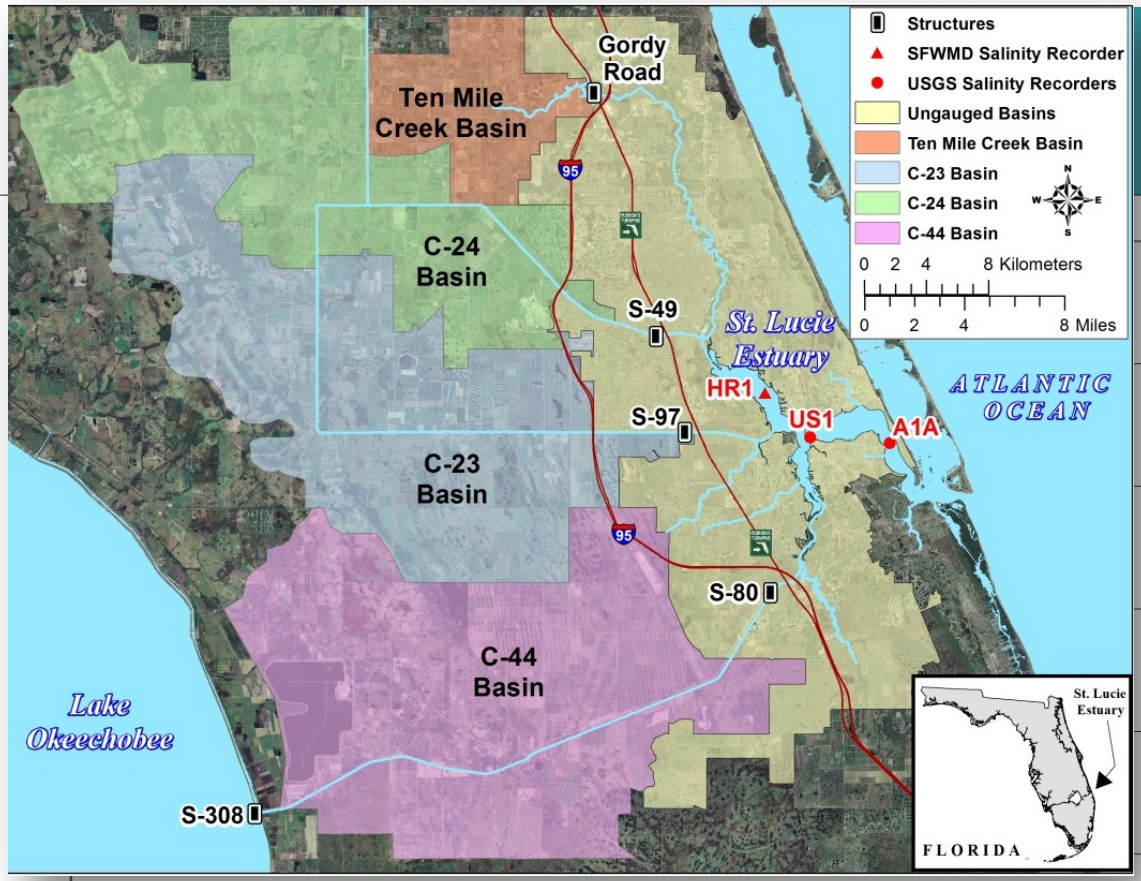
DYE RELEASE

CERP - DECOMP Physical Model (DPM)

- Green dye shows the movement of water into the wetlands south of the gate
- Ongoing data collection will inform scientists about ecosystem responses to renewed flow

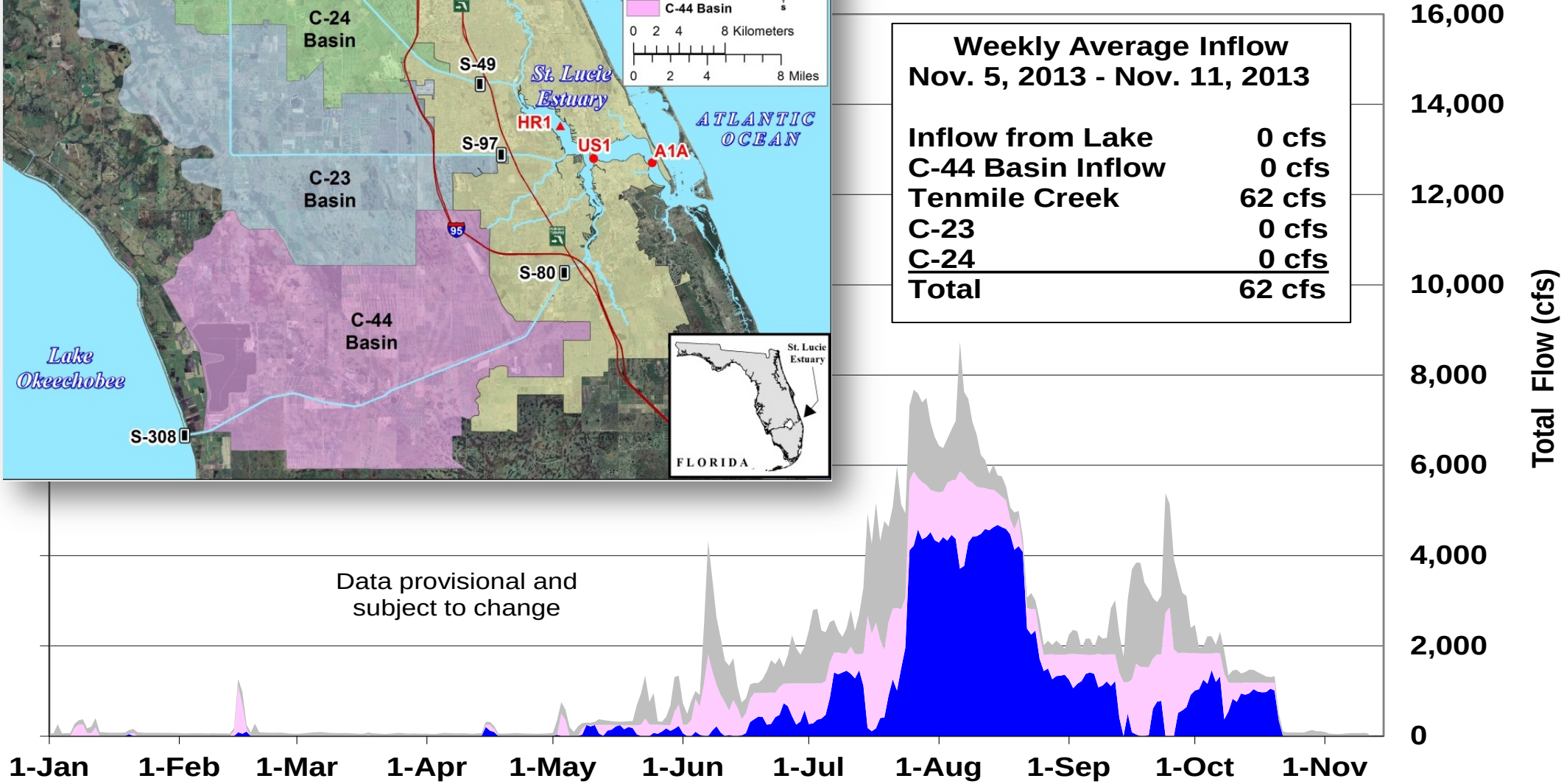


St. Lucie Estuary



Weekly Average Inflow
Nov. 5, 2013 - Nov. 11, 2013

Inflow from Lake	0 cfs
C-44 Basin Inflow	0 cfs
Tenmile Creek	62 cfs
C-23	0 cfs
C-24	0 cfs
Total	62 cfs

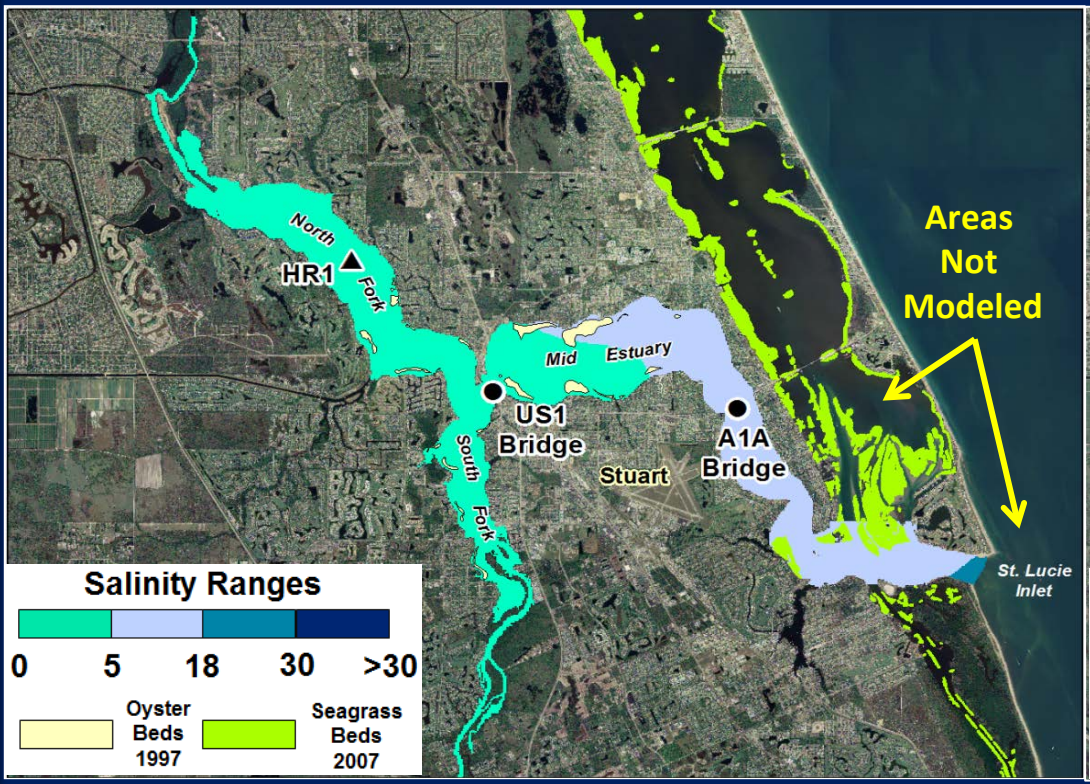


*Does not include runoff from the tidal basin or groundwater

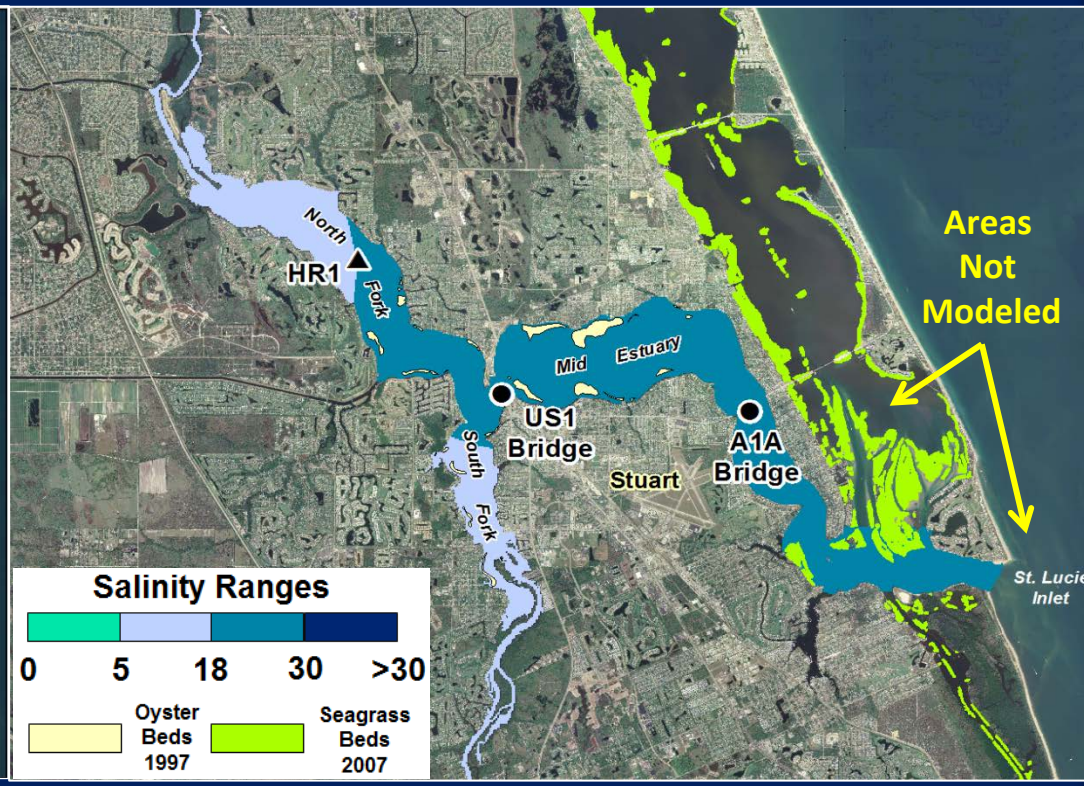
St. Lucie Estuary

Salinity Conditions

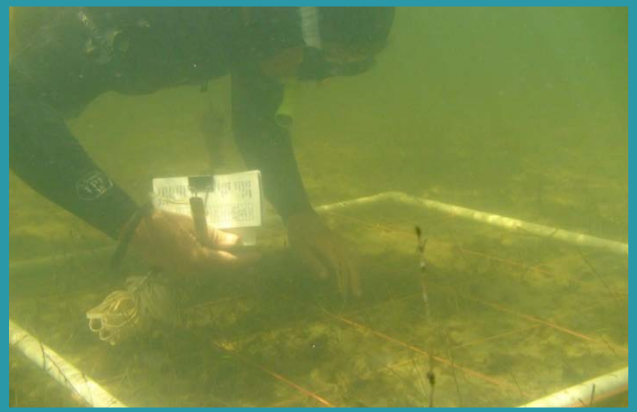
October 7, 2013

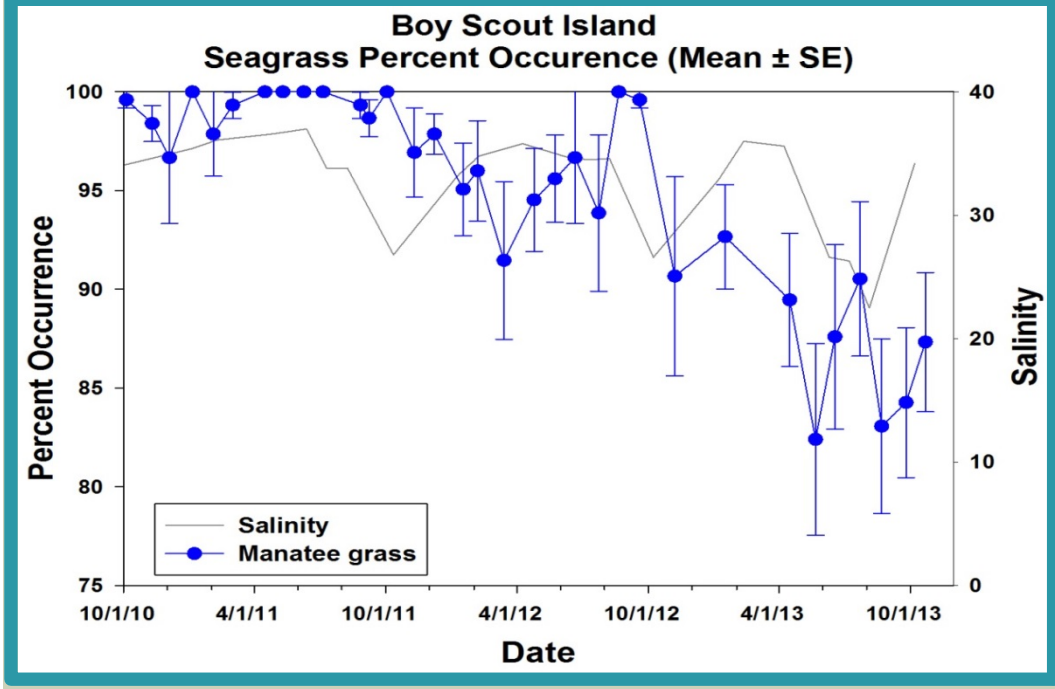


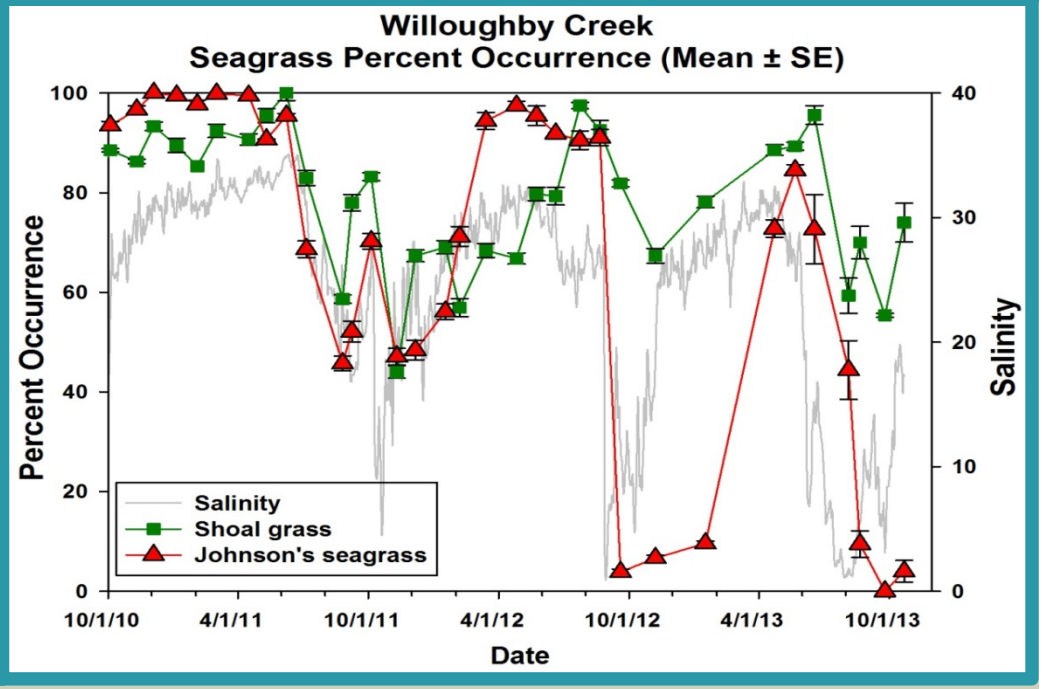
November 11, 2013



St. Lucie Estuary Seagrass

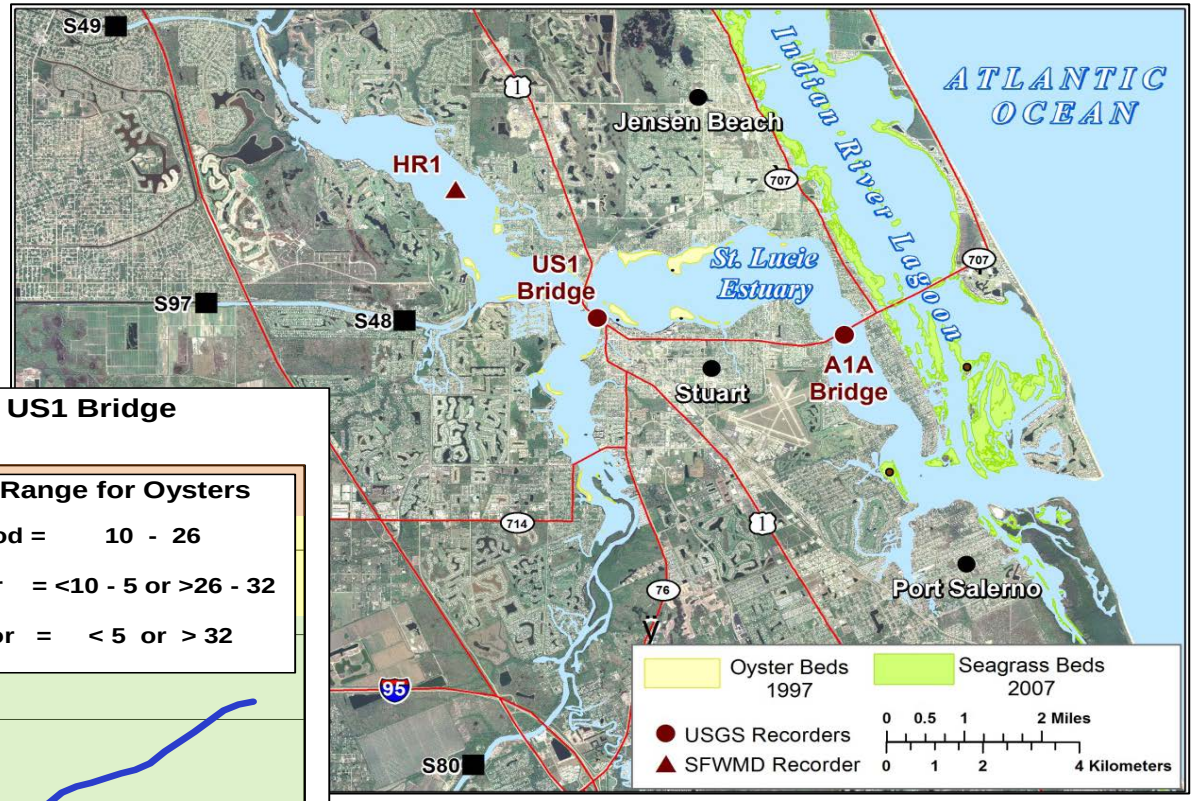


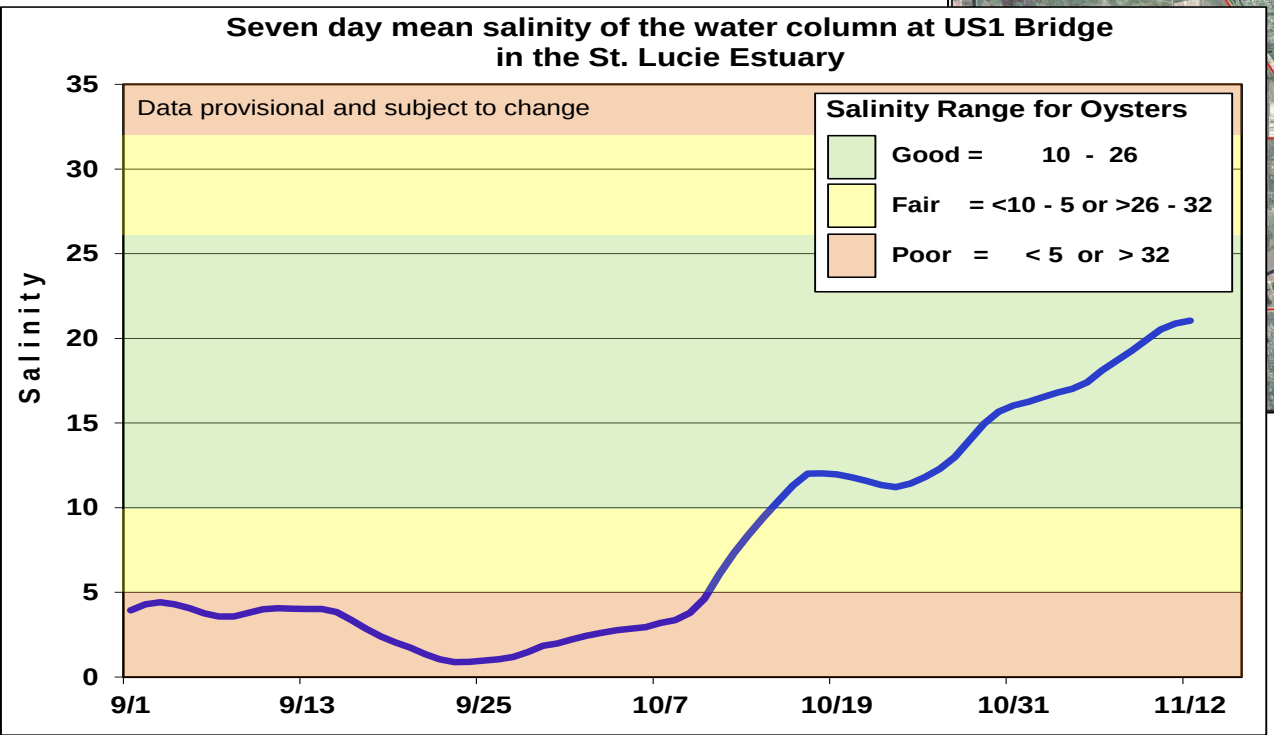




St. Lucie Estuary - Oysters

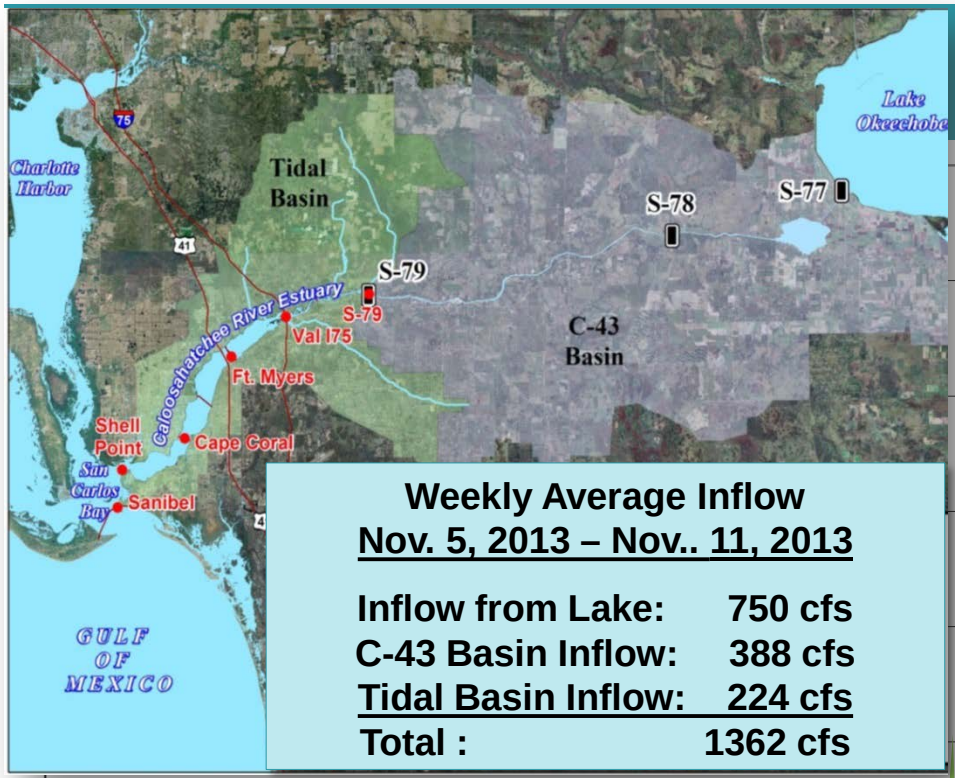
Due to early rainfall, Lake releases began in early May and ceased on October 21st.





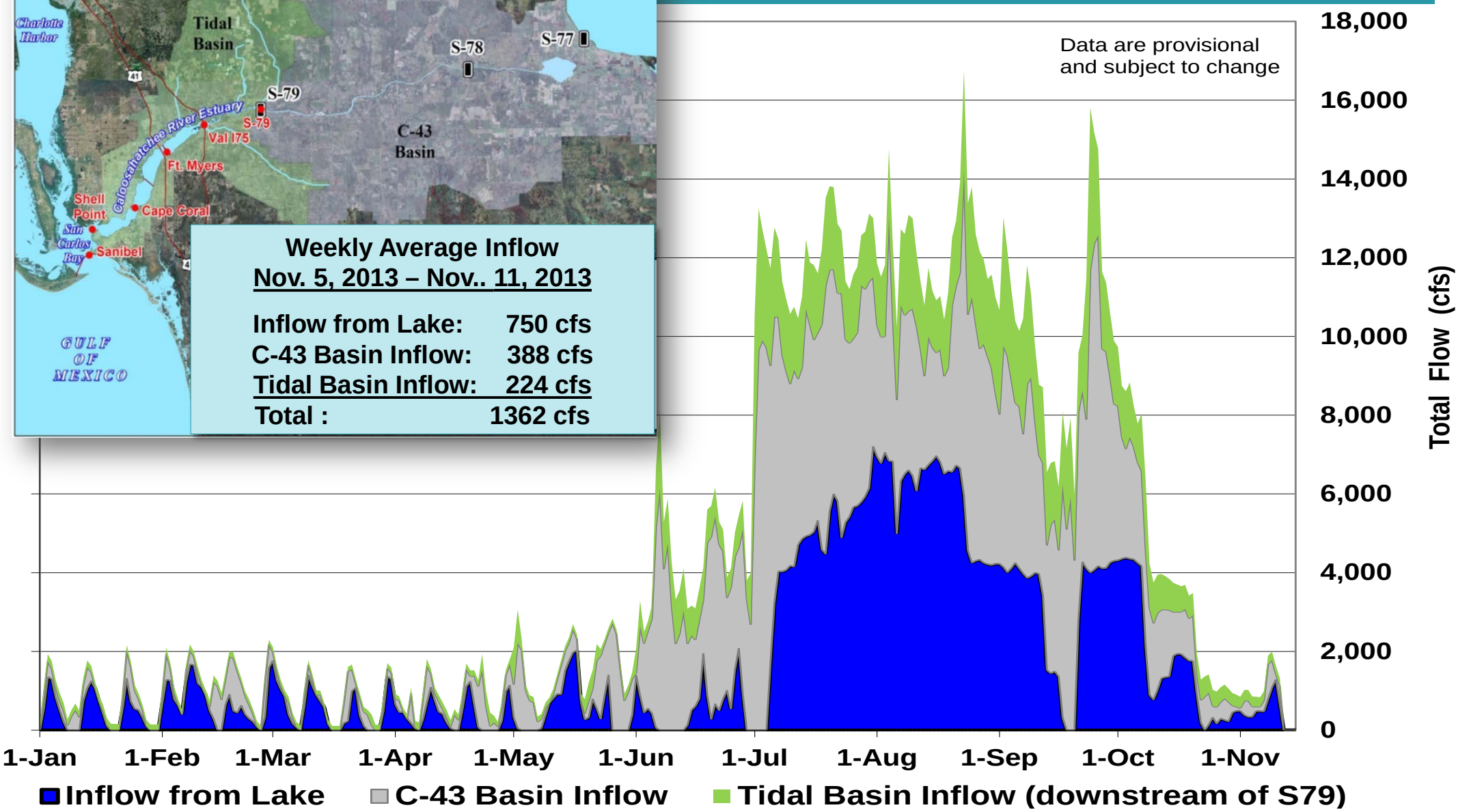
Salinity returned to a good range for adult oysters (green zone) In mid-October.

Caloosahatchee Estuary



Weekly Average Inflow
Nov. 5, 2013 – Nov.. 11, 2013

Inflow from Lake:	750 cfs
C-43 Basin Inflow:	388 cfs
Tidal Basin Inflow:	224 cfs
Total :	1362 cfs

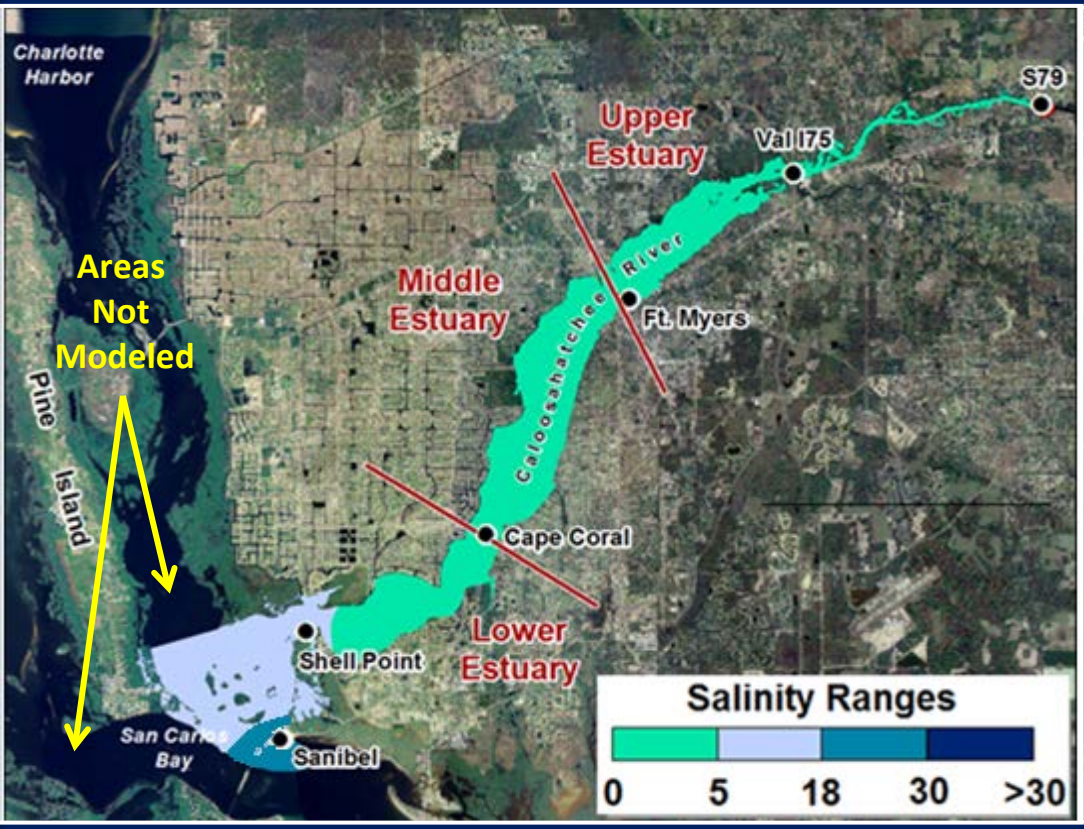


*Does not include direct overland runoff from the tidal basin or groundwater

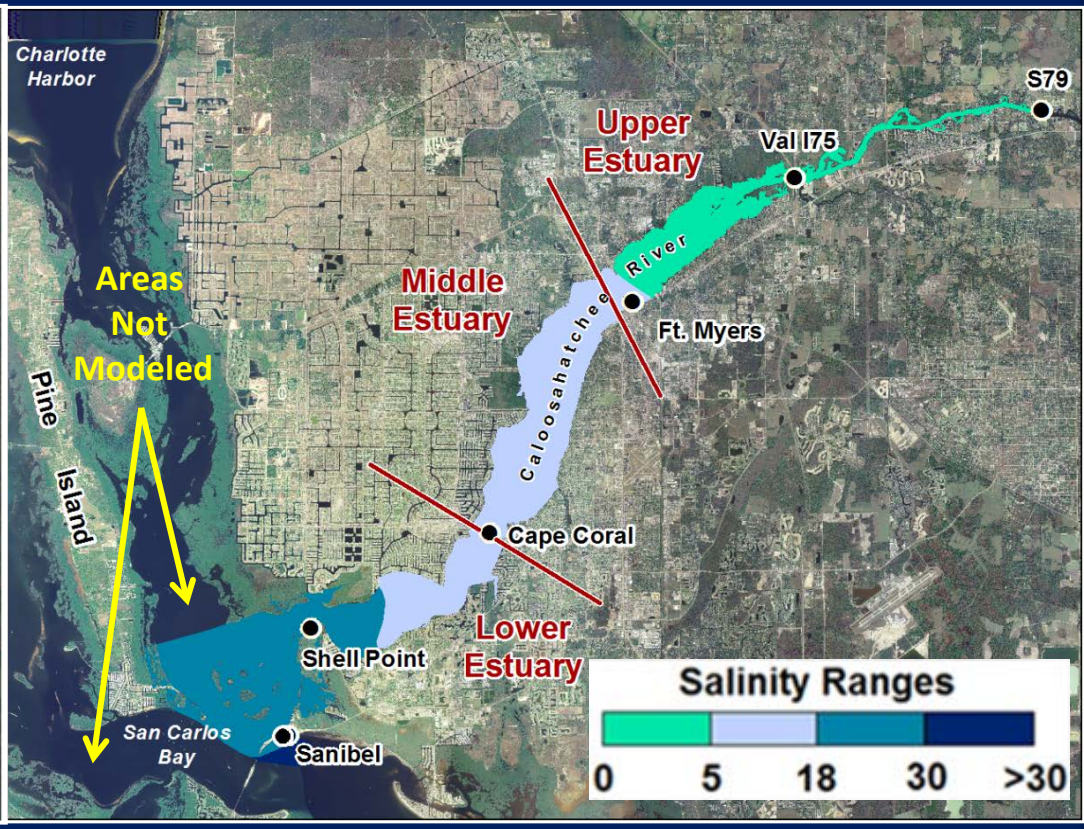
Caloosahatchee Estuary

Salinity Conditions

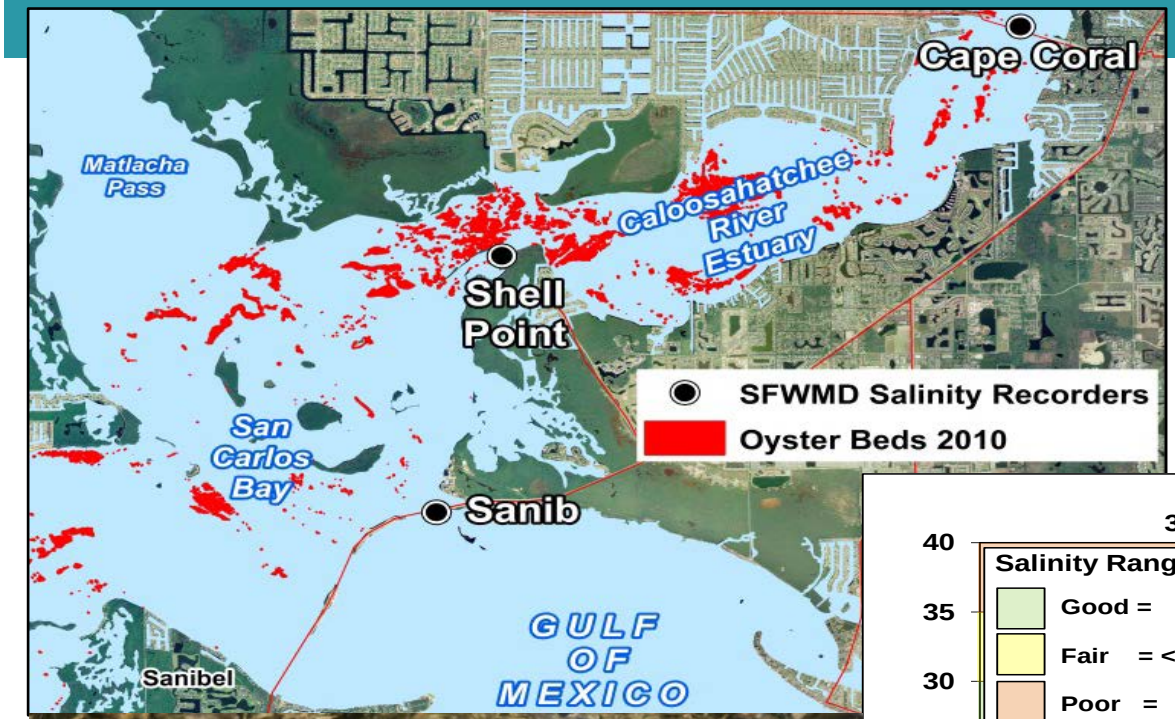
October 7, 2013



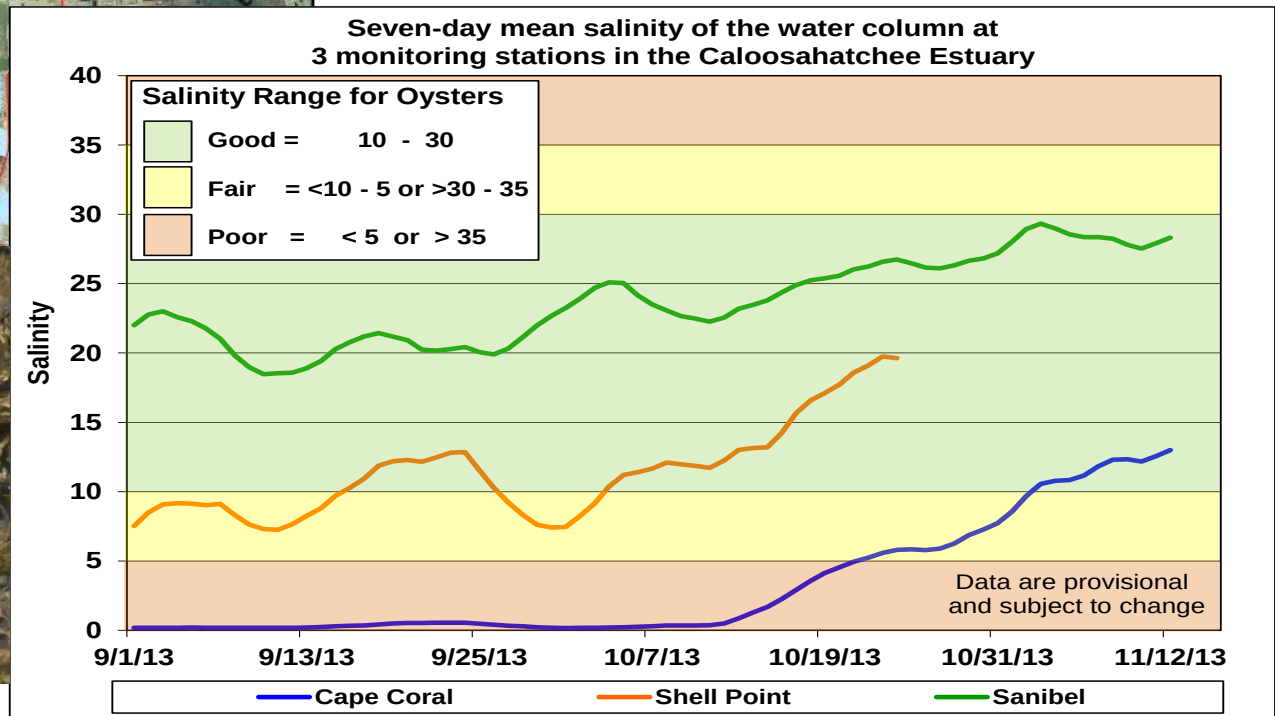
November 11, 2013



Caloosahatchee Estuary- Oysters



Salinity has returned to a good range for adult oysters (green zone) from Cape Coral Bridge and downstream



Gators are Alive & Well (in STA1-E)

Thank You!