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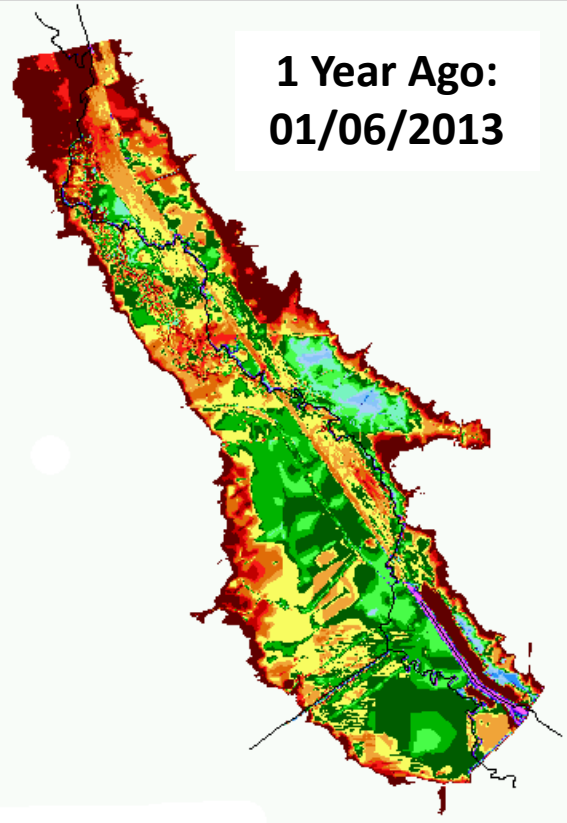
Governing Board Meeting
January 9, 2014

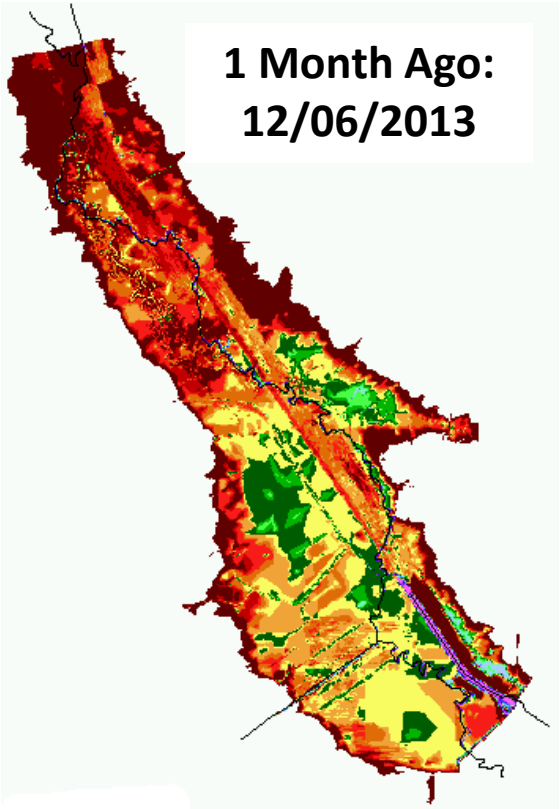
Ecological Conditions
January, 2014 Update

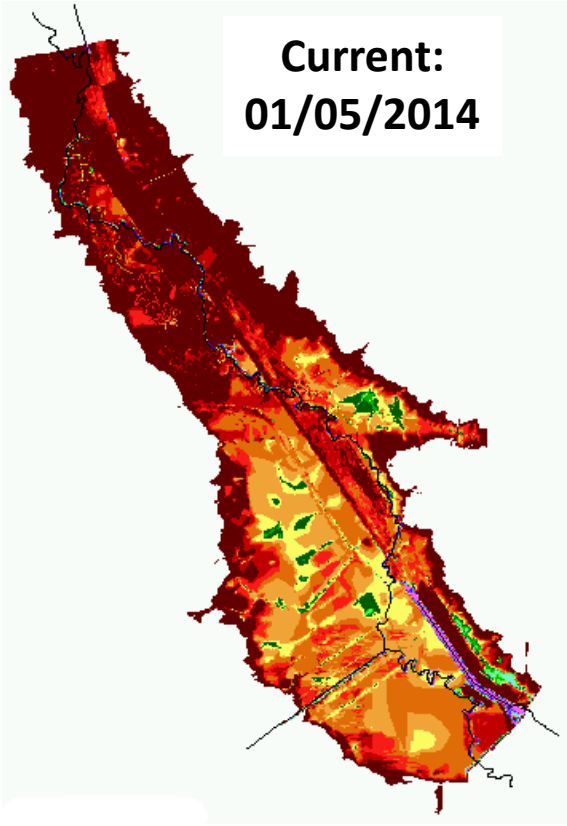
Terrie Bates
Director, Water Resources Division

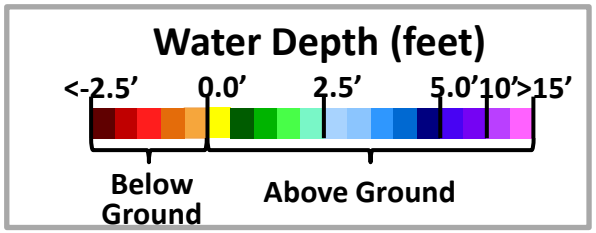
Kissimmee River (Pool C)

Monthly Water Depth Maps



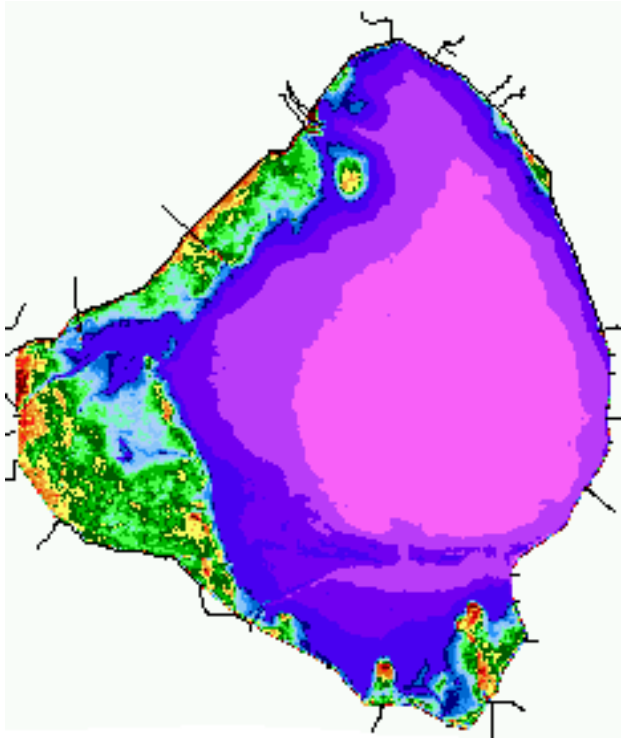






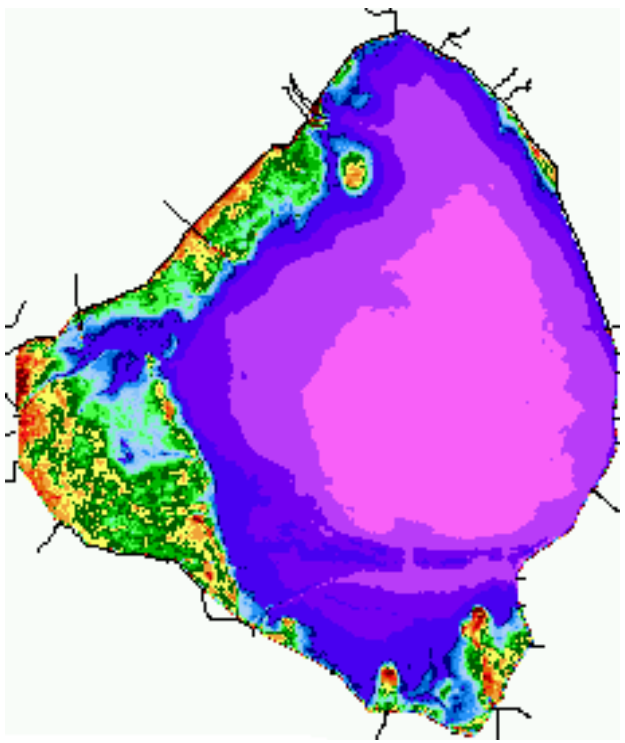
Lake Okeechobee
Water Depth Timeseries Maps

1 Year Ago: 1/6/2013



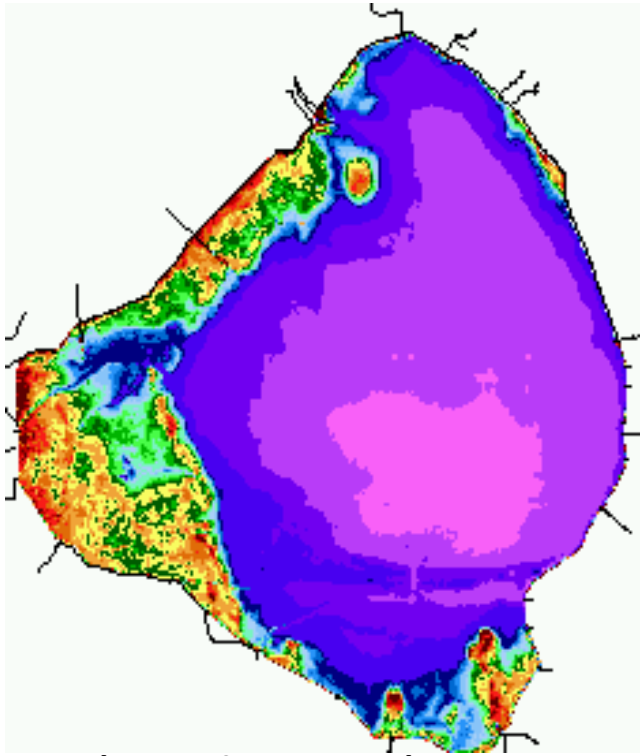
(14.95 ft NGVD29)

1 Month Ago: 12/7/2013



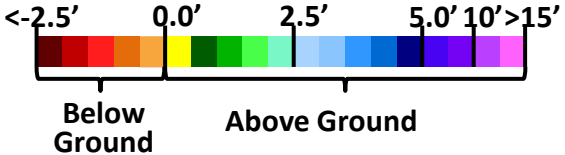
(14.59 ft NGVD29)

Current: 1/6/2014

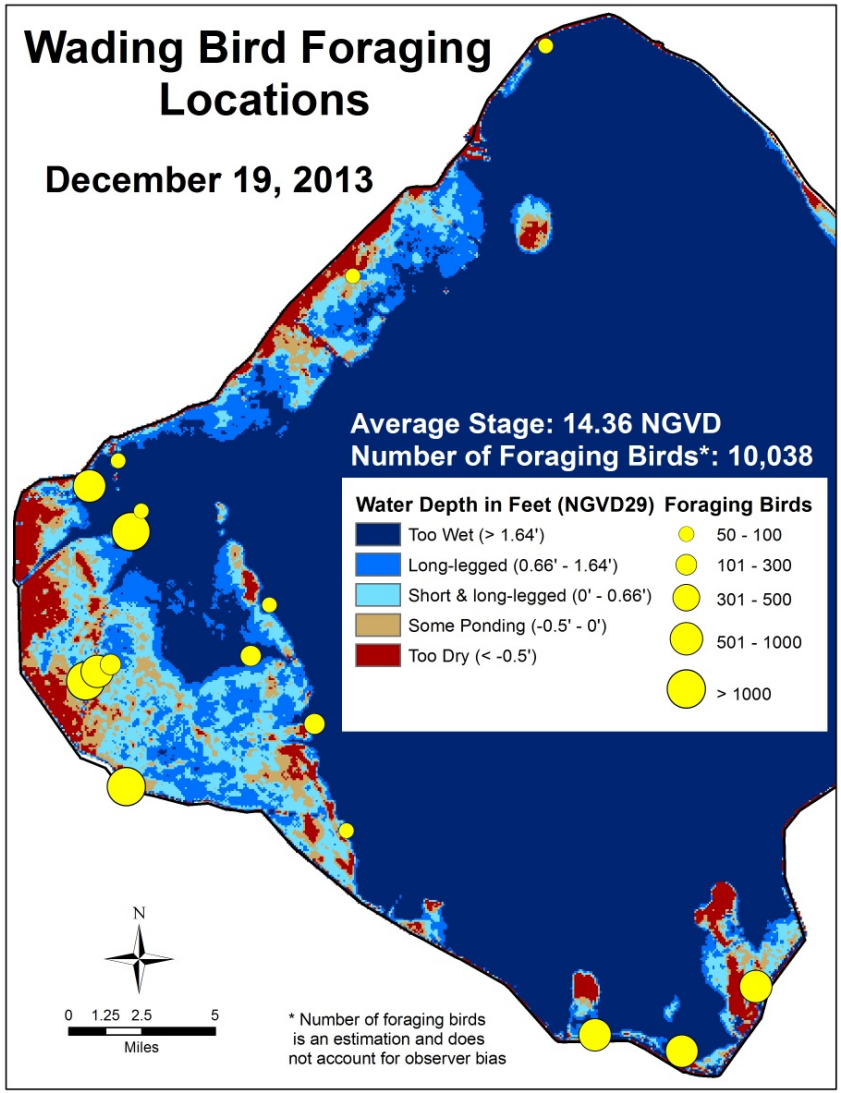


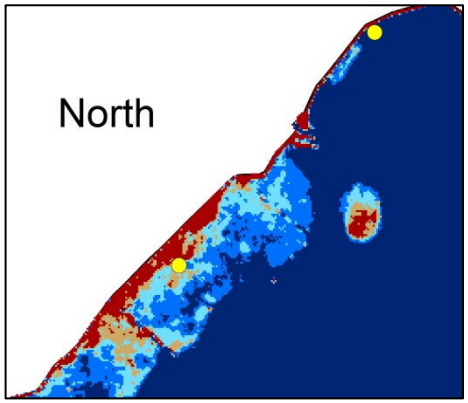
(14.09 ft NGVD29)

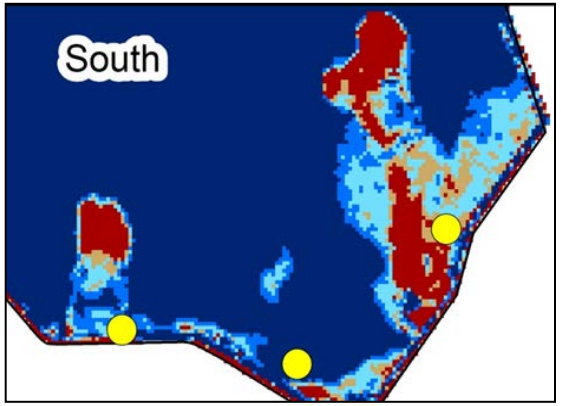
Water Depth (feet)

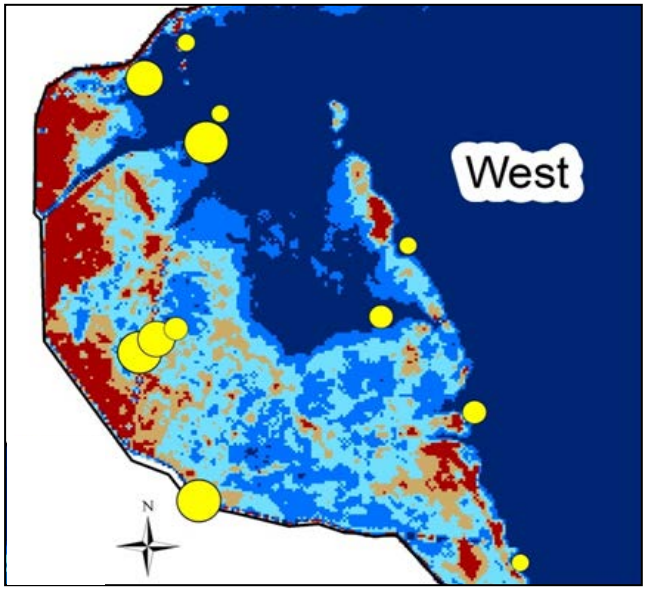


Lake Okeechobee
Wading Bird Foraging





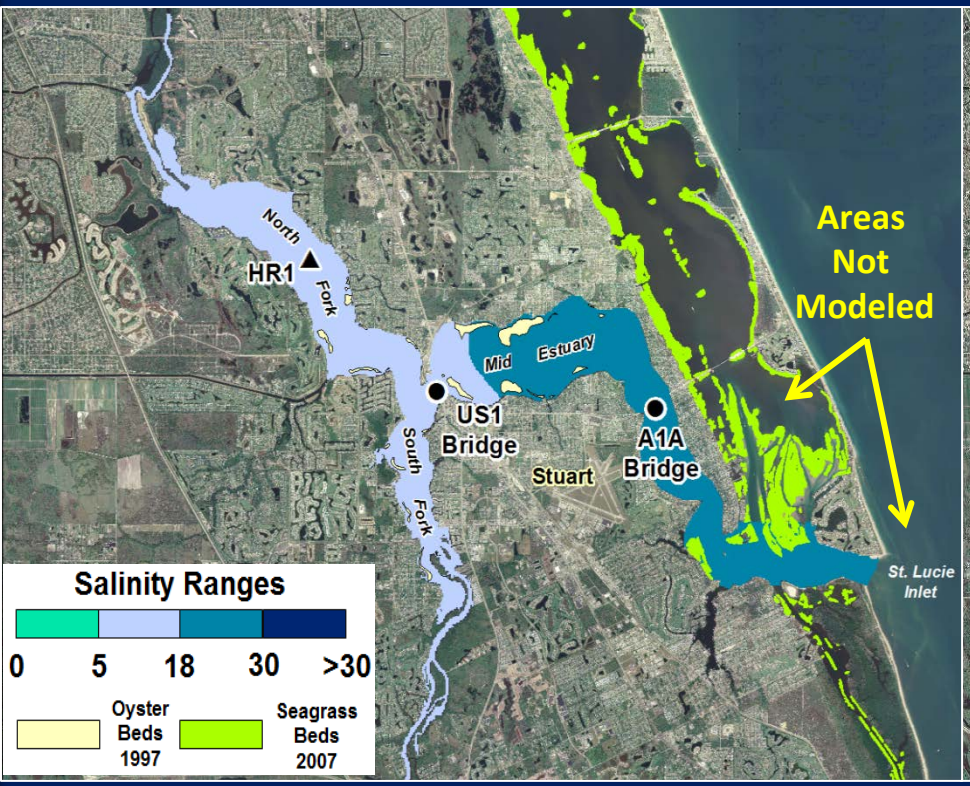




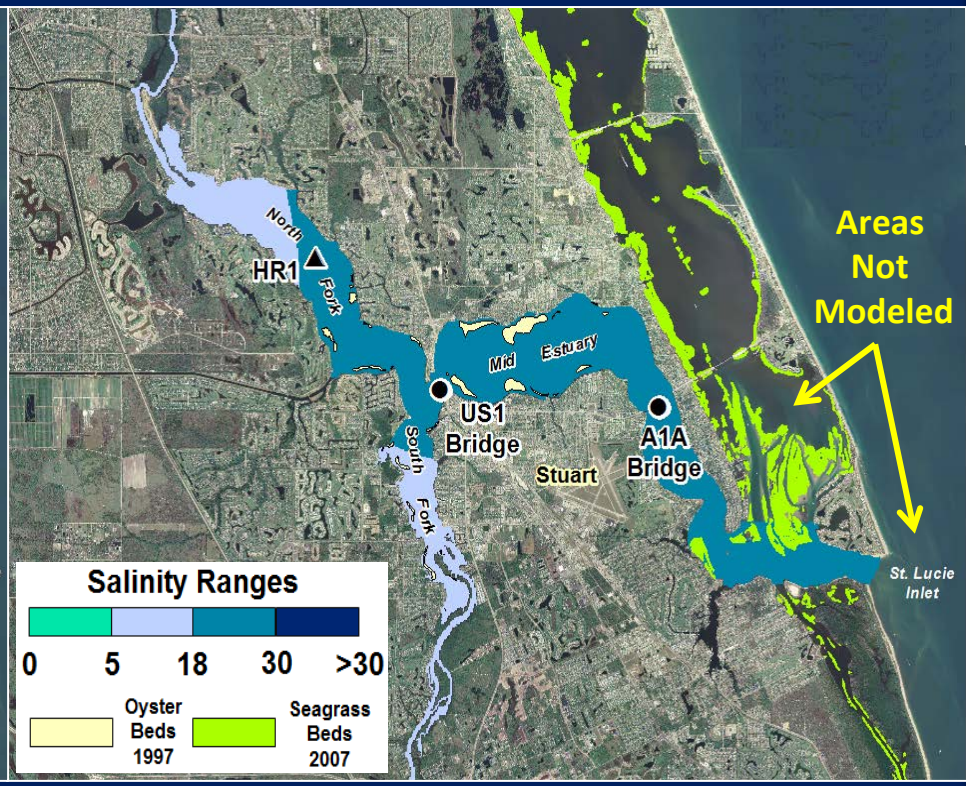
St. Lucie Estuary

Salinity Conditions

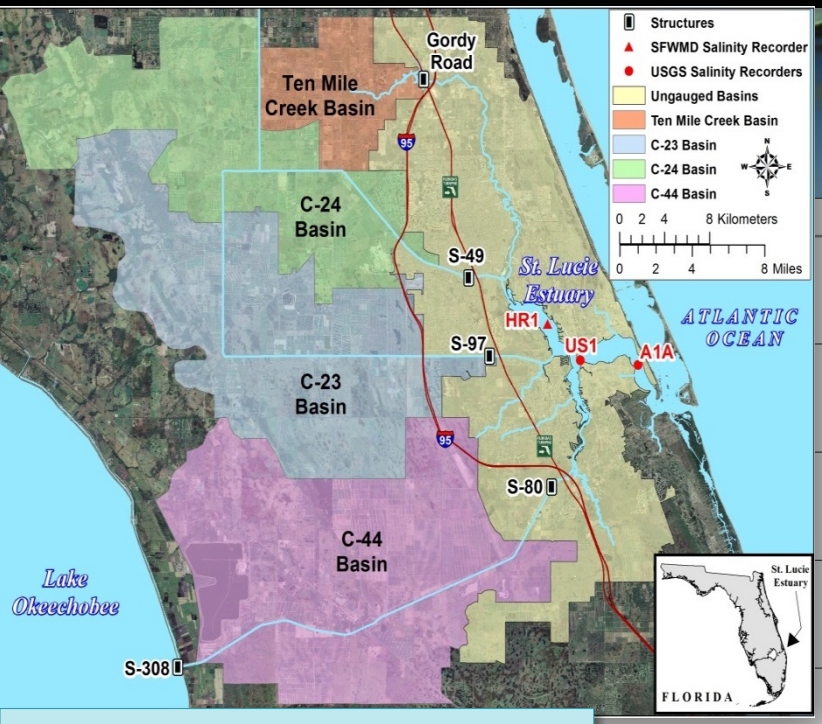
December 9, 2013



January 6, 2014

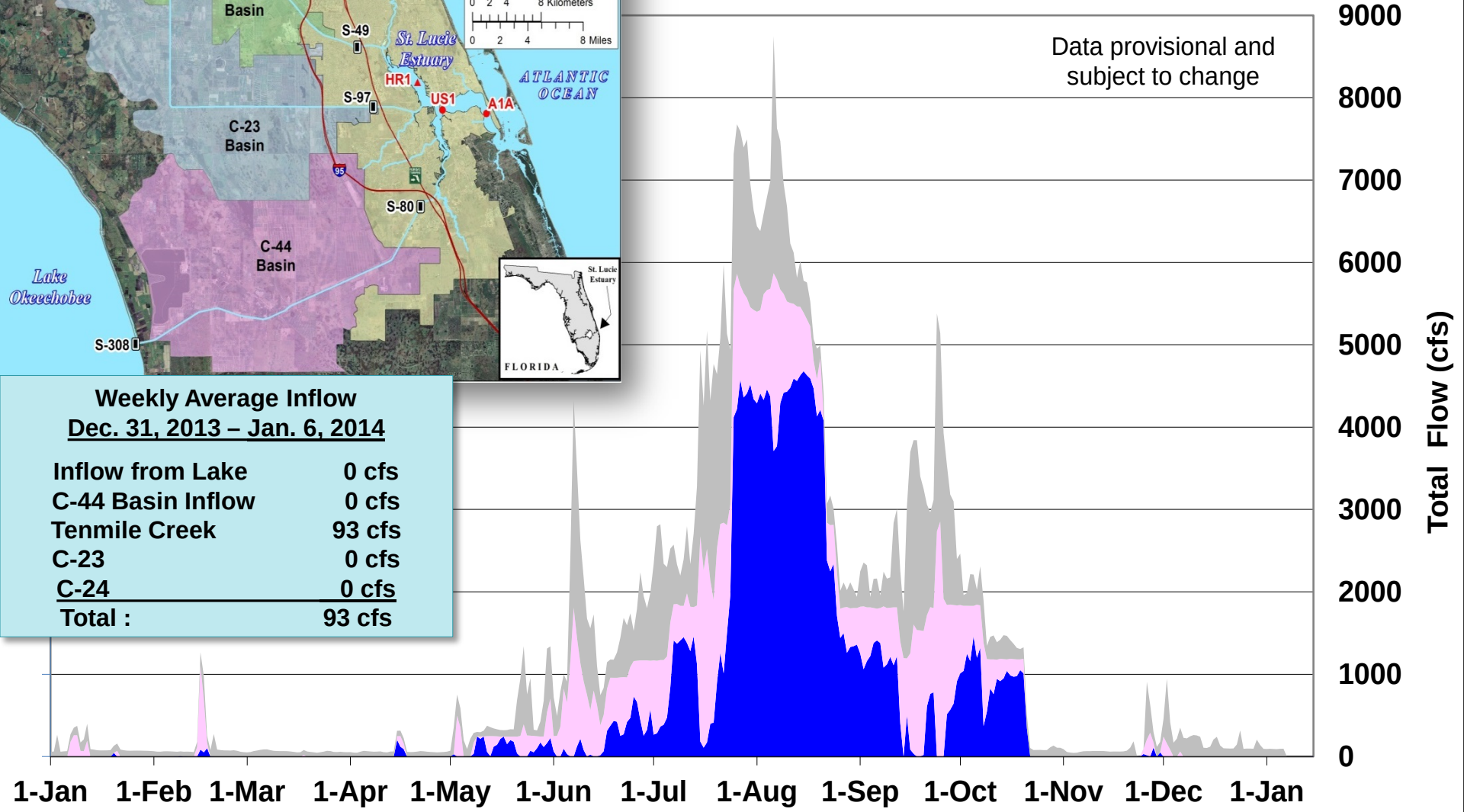


St. Lucie Estuary



Weekly Average Inflow
Dec. 31, 2013 – Jan. 6, 2014

Inflow from Lake	0 cfs
C-44 Basin Inflow	0 cfs
Tenmile Creek	93 cfs
C-23	0 cfs
C-24	0 cfs
Total :	93 cfs



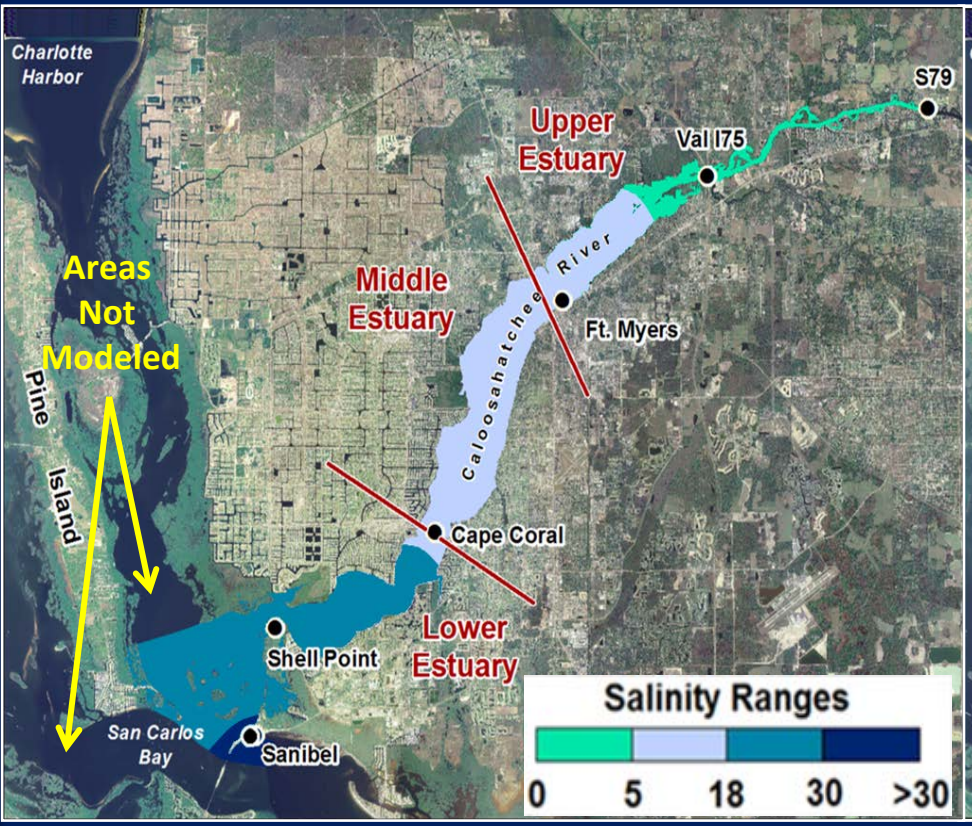
■ Inflow from Lake ■ C-44 Basin Runoff ■ Inflow from C-24, C23, and Tenmile Creek Basins*

*Does not include runoff from the tidal basin or groundwater

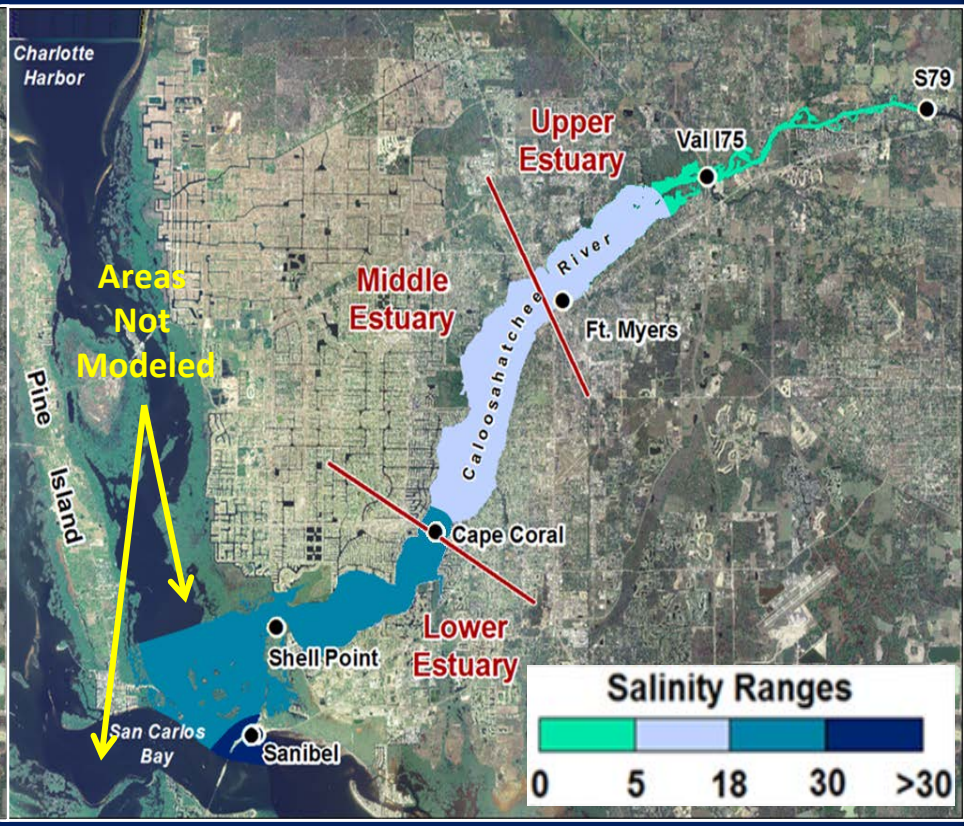
Caloosahatchee Estuary

Salinity Conditions

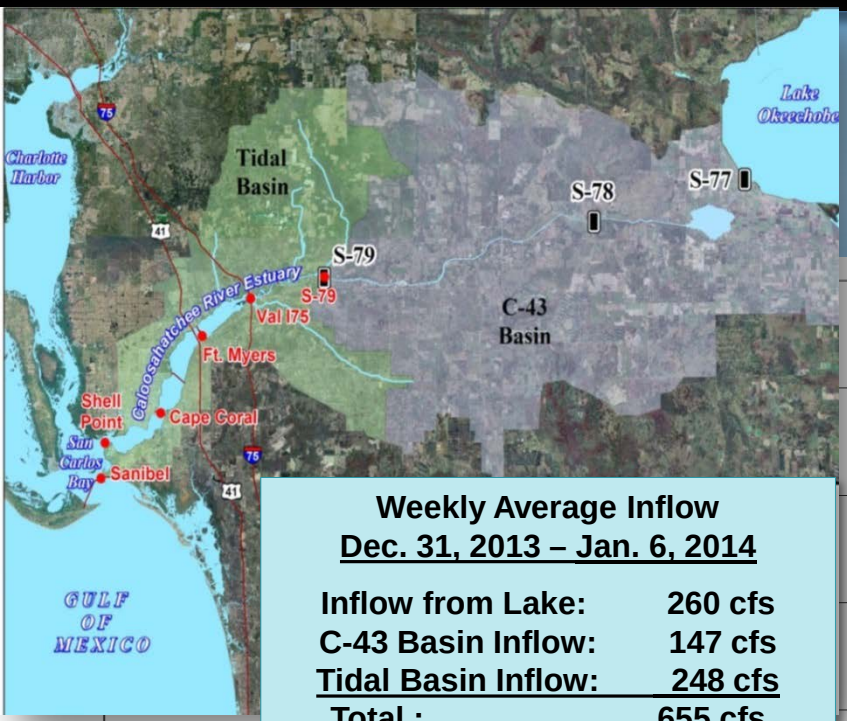
December 9, 2013



January 6, 2014

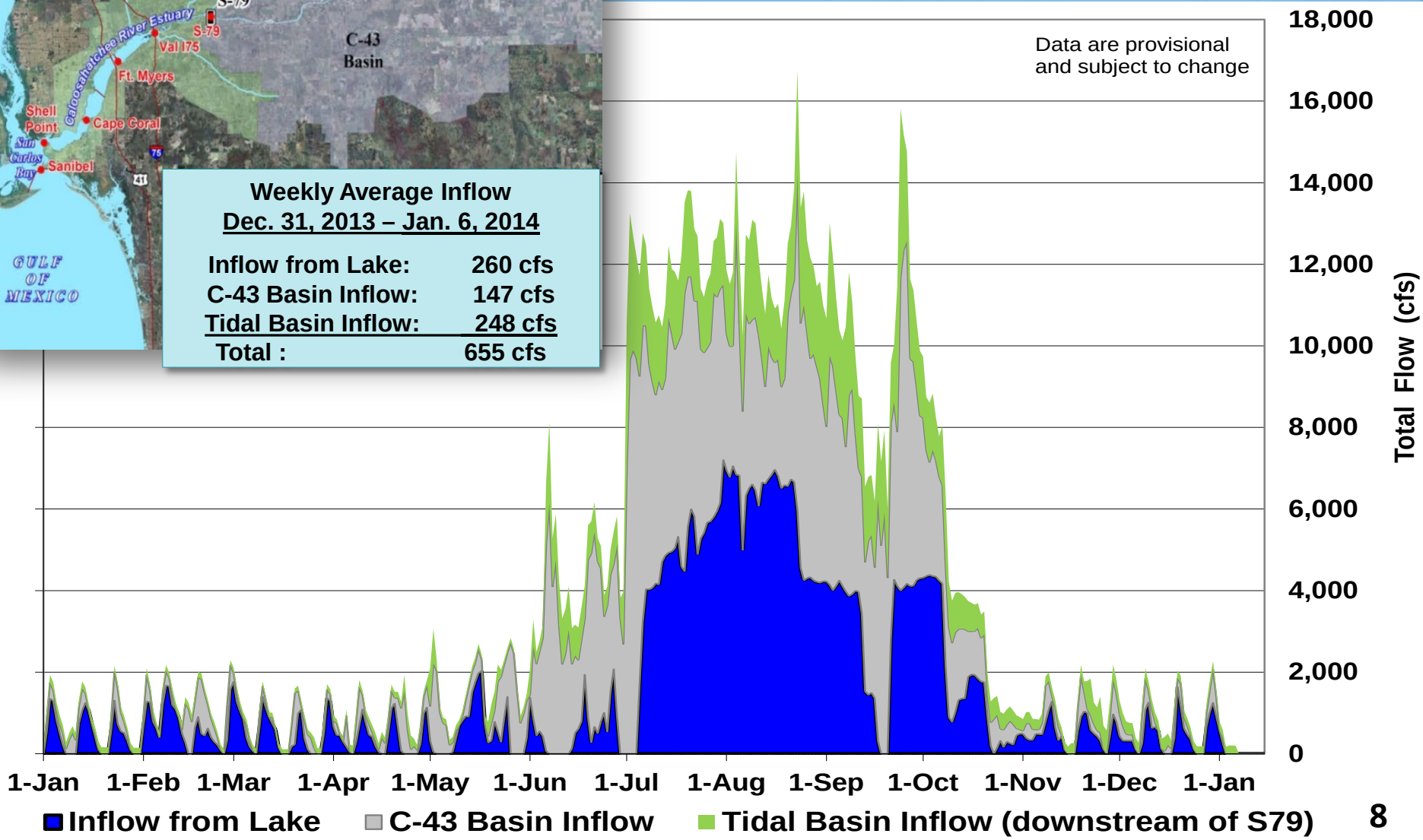


Caloosahatchee Estuary



Weekly Average Inflow
Dec. 31, 2013 – Jan. 6, 2014

Inflow from Lake:	260 cfs
C-43 Basin Inflow:	147 cfs
Tidal Basin Inflow:	248 cfs
Total :	655 cfs

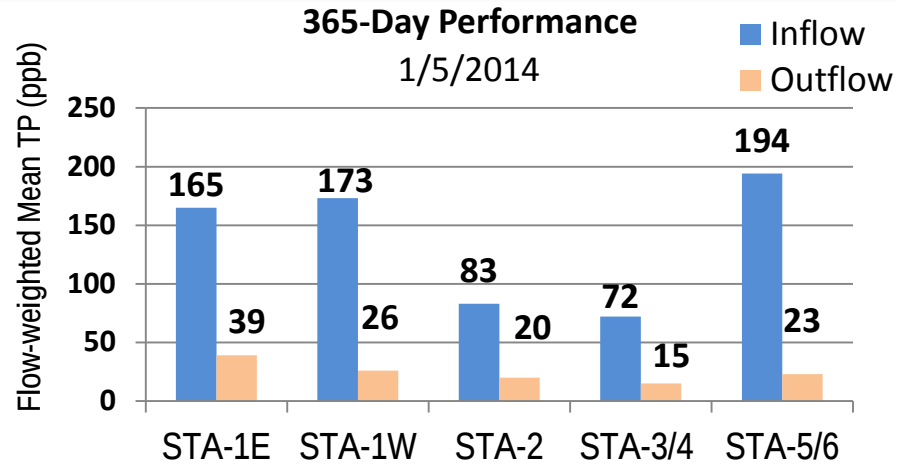


Stormwater Treatment Areas (STAs)
Phosphorus Performance & Water Depths

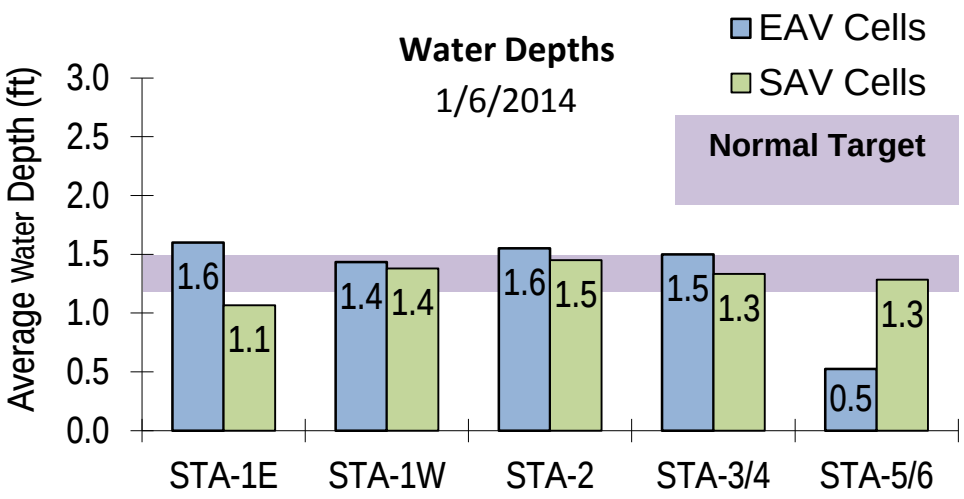
- Outflow TP range:

  15 ppb (STA-3/4) – 39 ppb (STA-1E)

- Lake Okeechobee Regulatory Releases south discontinued
- Water depths
  - Dry season reduction in stages for vegetation health
  - Dryout conditions in some STA-5/6 emergent aquatic vegetation (EAV) cells



Graph contains preliminary data



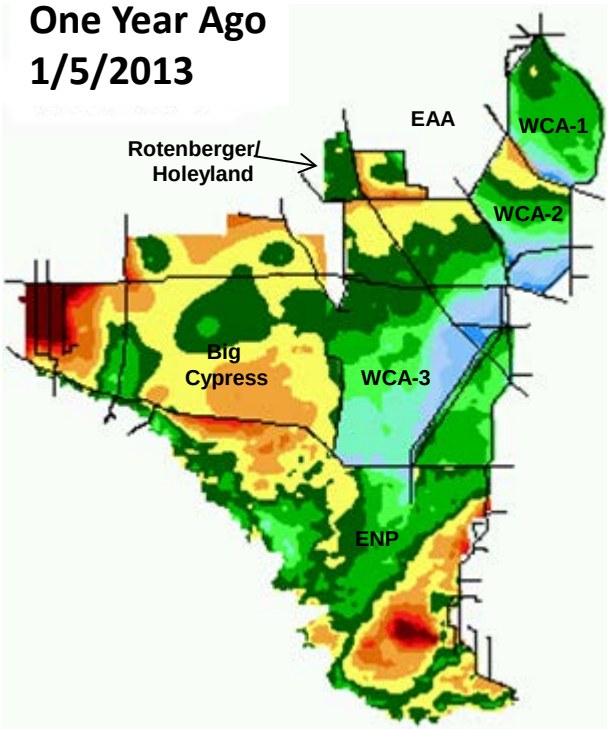
Graph contains preliminary data. STA-1E Cells 1 & 2 and STA-2 Cells 7 & 8 were excluded due to offline status.

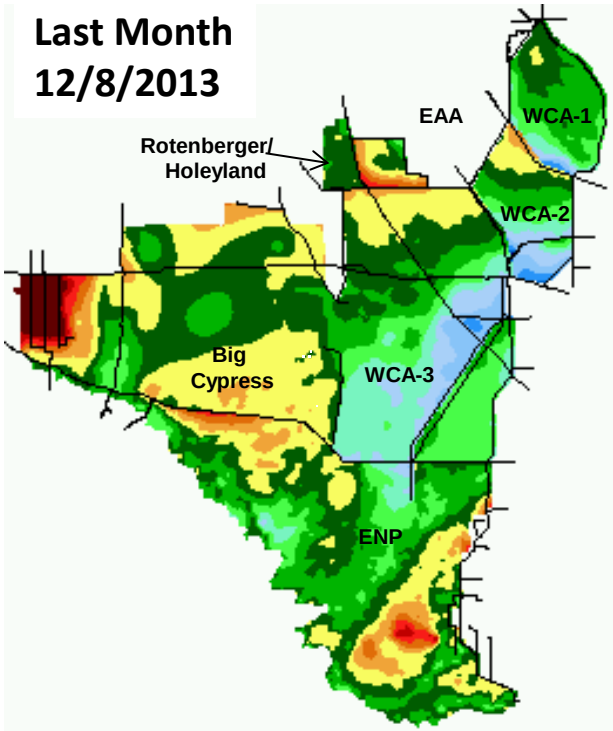
Stormwater Treatment Areas: Vegetation Management Activities Conducted in Dry Season

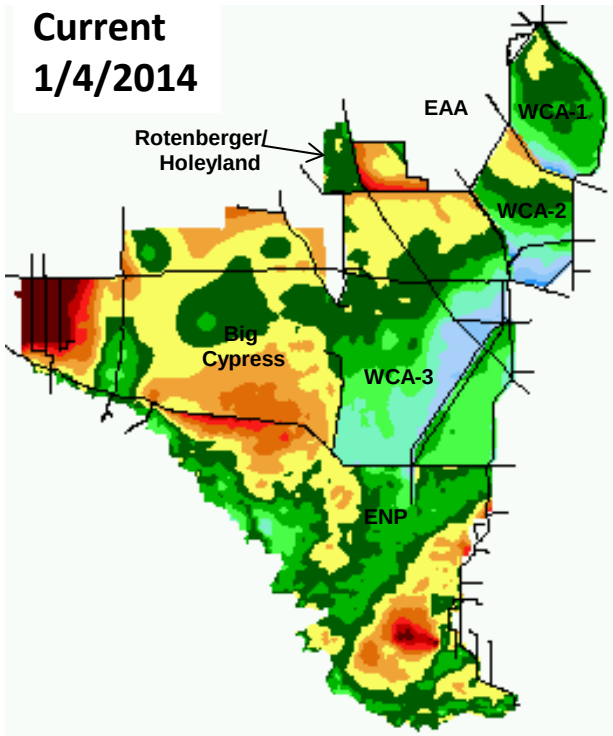
Vegetation management activities are conducted in the dry season when STA inflows are reduced and water depths decline.

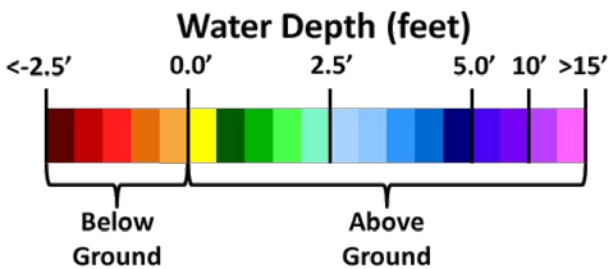
- Plantings to alleviate hydraulic some short-circuiting areas
- Vegetation strips fortified to increase compartmentalization
- Herbicide treatment of undesirable willow & floating vegetation
- Incremental conversion from emergent vegetation to submerged vegetation in STA-2 Cells 5 & 6

Greater Everglades
Water Depth Monthly Snapshots

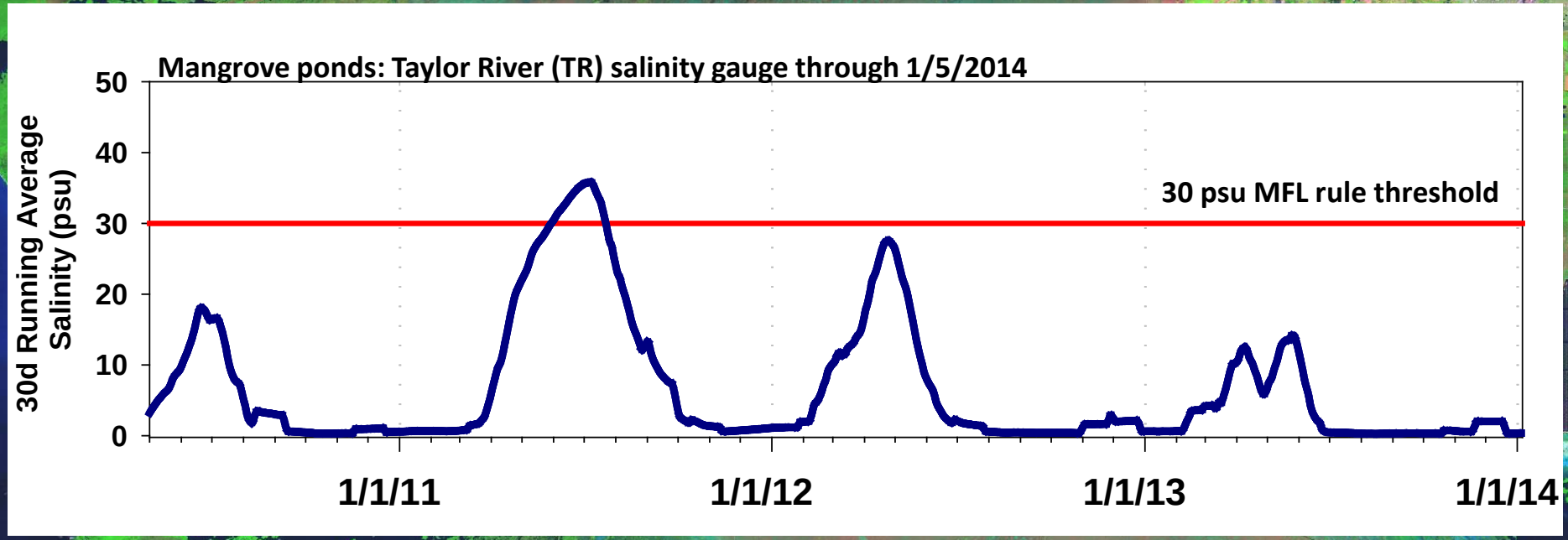






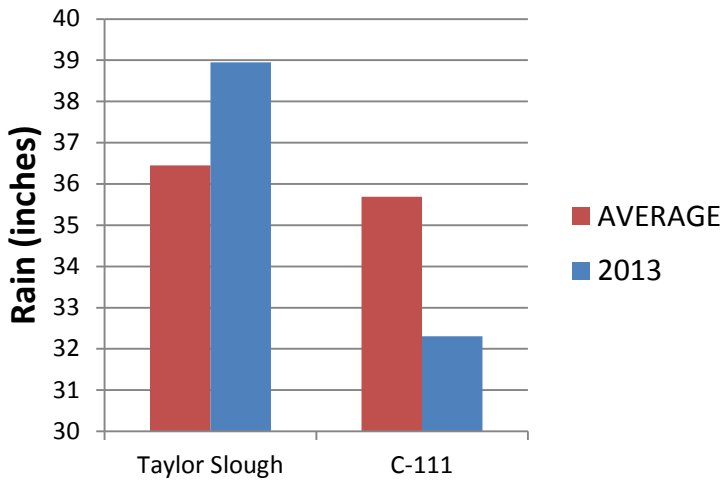


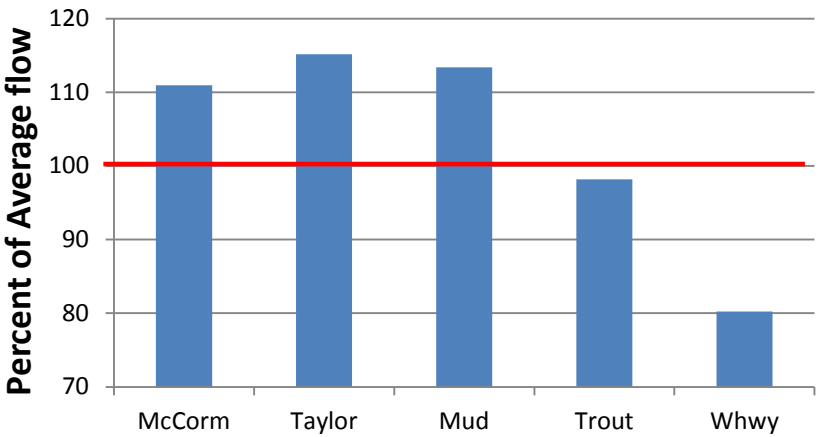
Florida Bay Update

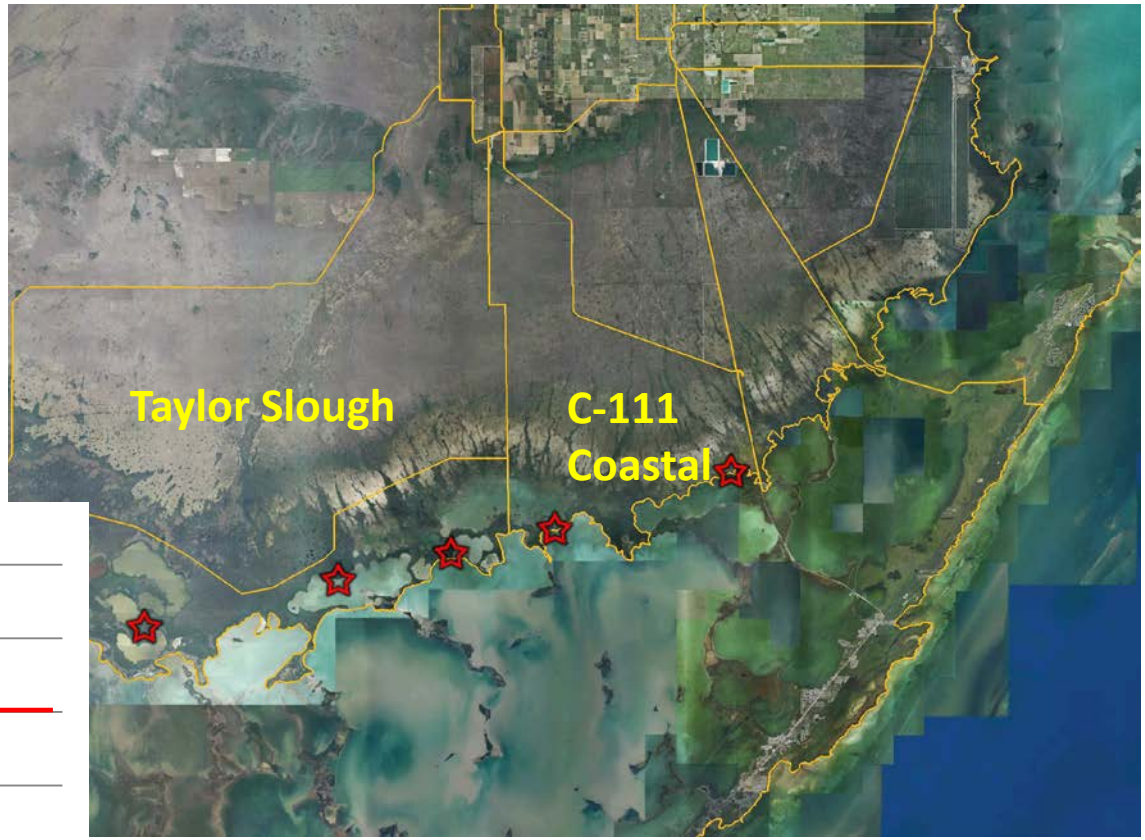


Florida Bay MFL salinity threshold was exceeded in late June of 2011

Florida Bay Update

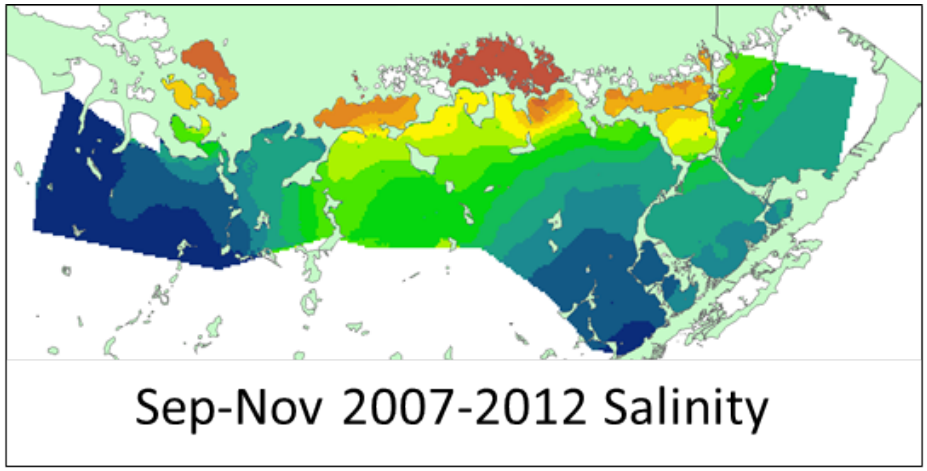


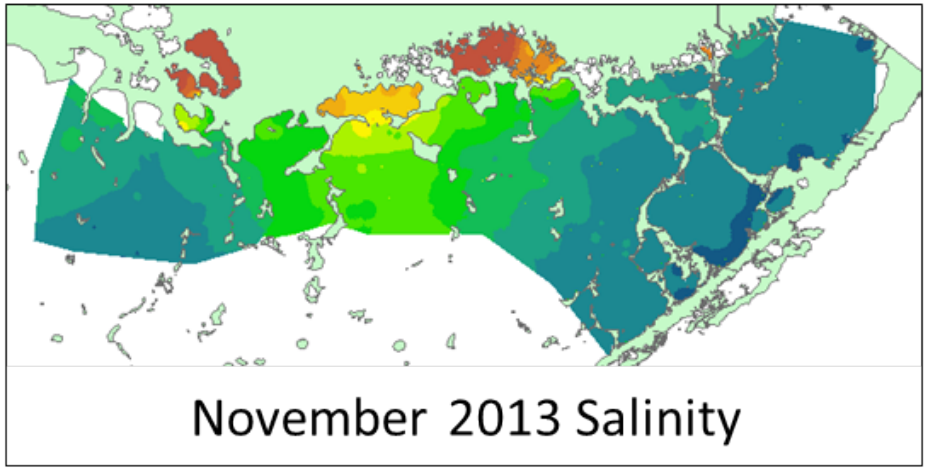




Florida Bay Update

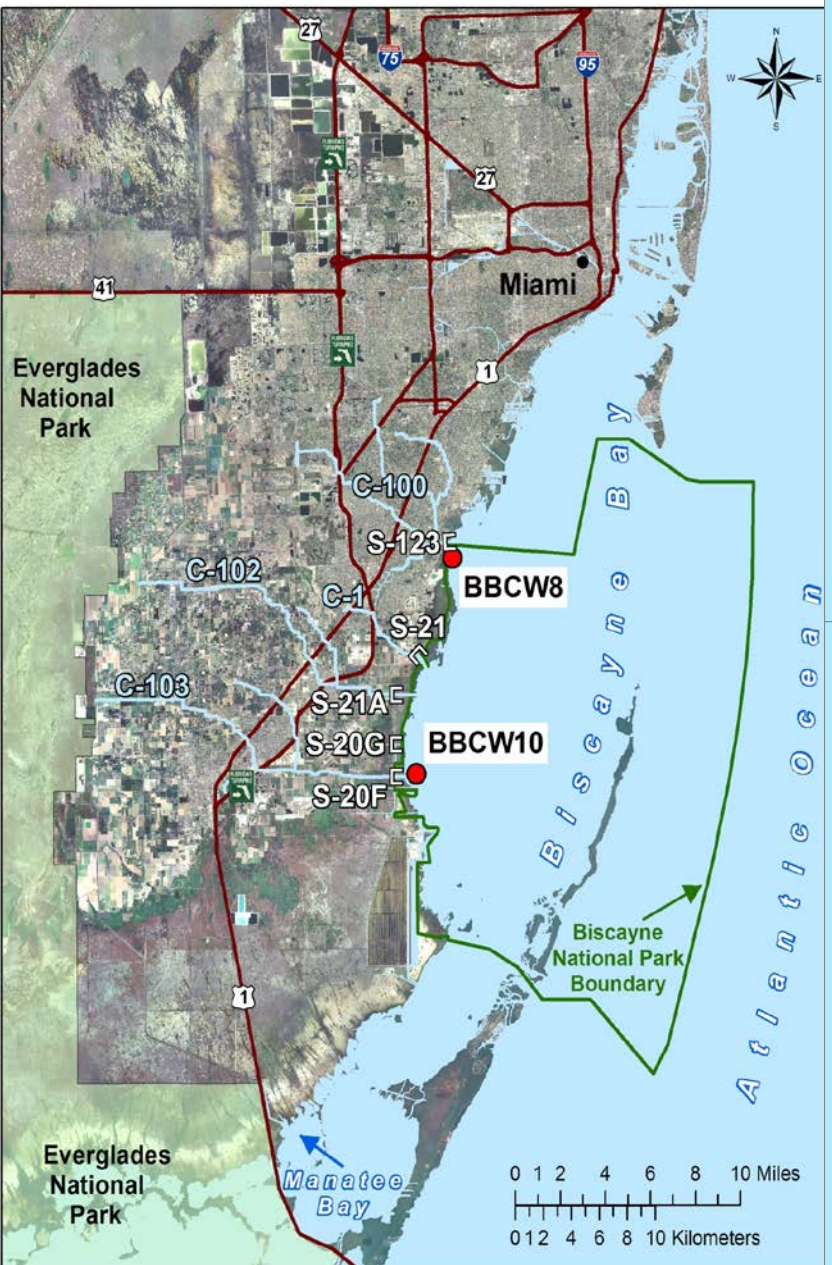
Salinities at End of Wet Season*

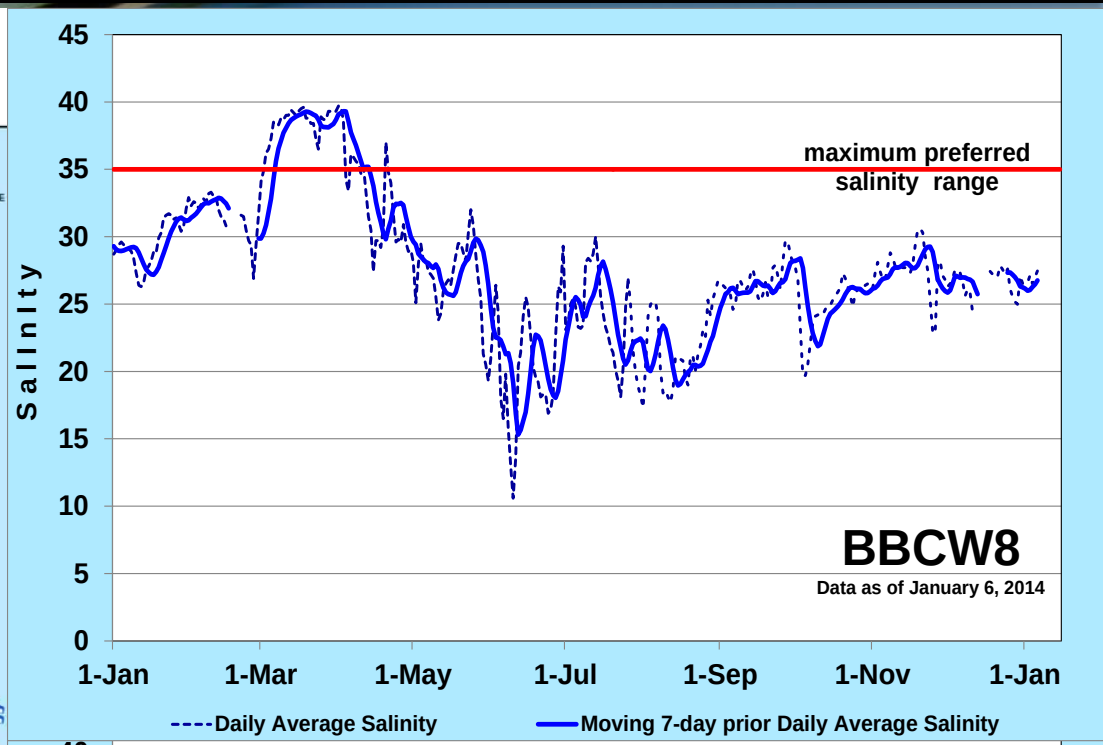


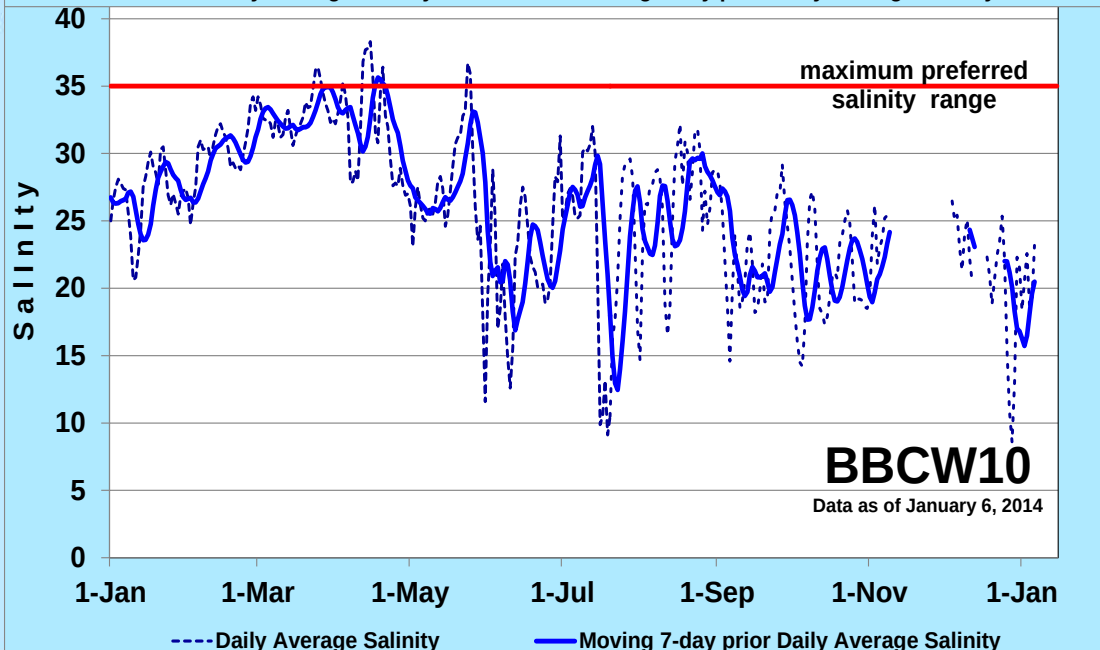


* Data source: Field surveys of salinity

Biscayne Bay







Questions?