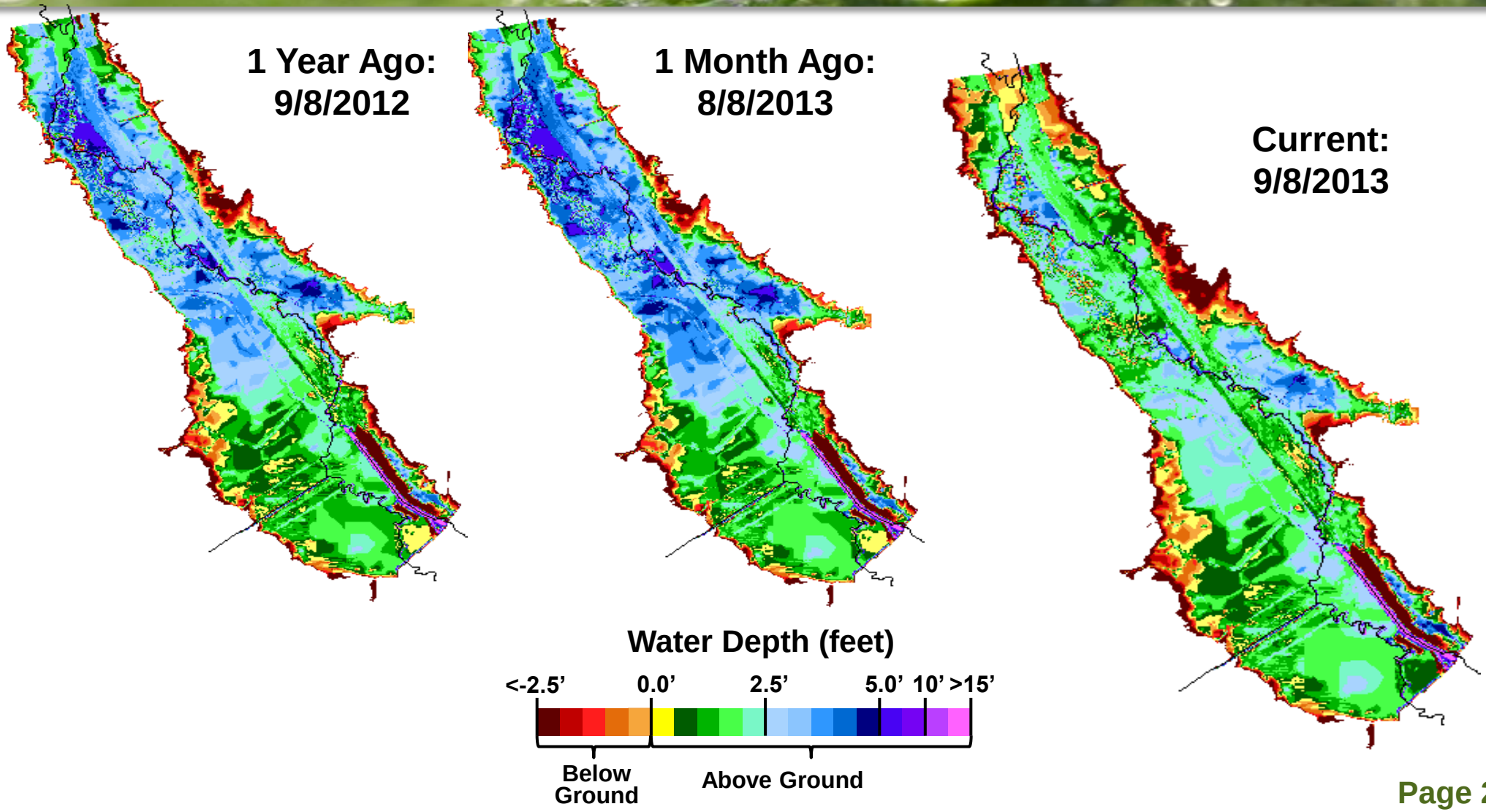
Governing Board Meeting
September 12, 2013

ECOLOGICAL CONDITIONS UPDATE

Terrie Bates
Director, Water Resources Division

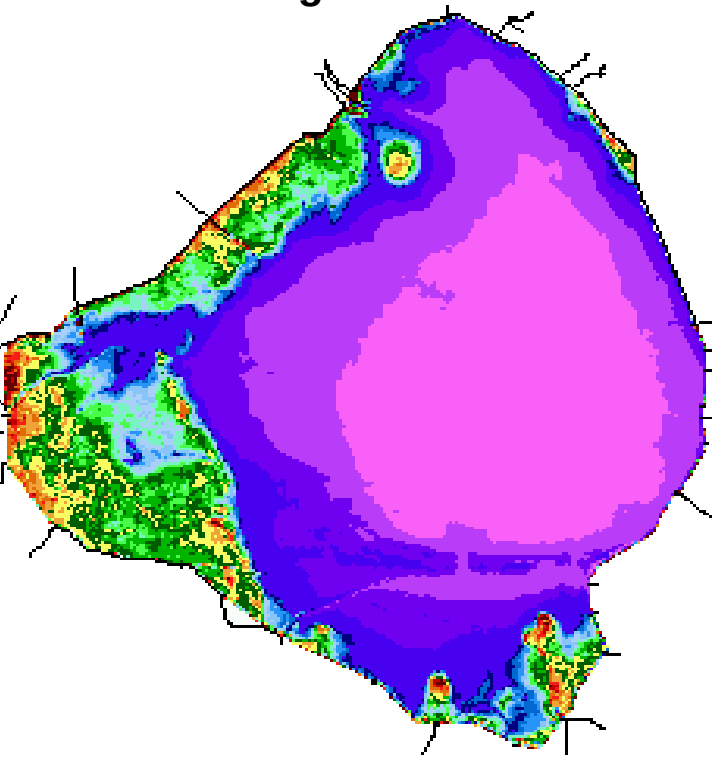
Kissimmee River (Pool C)

Monthly Water Depth Maps



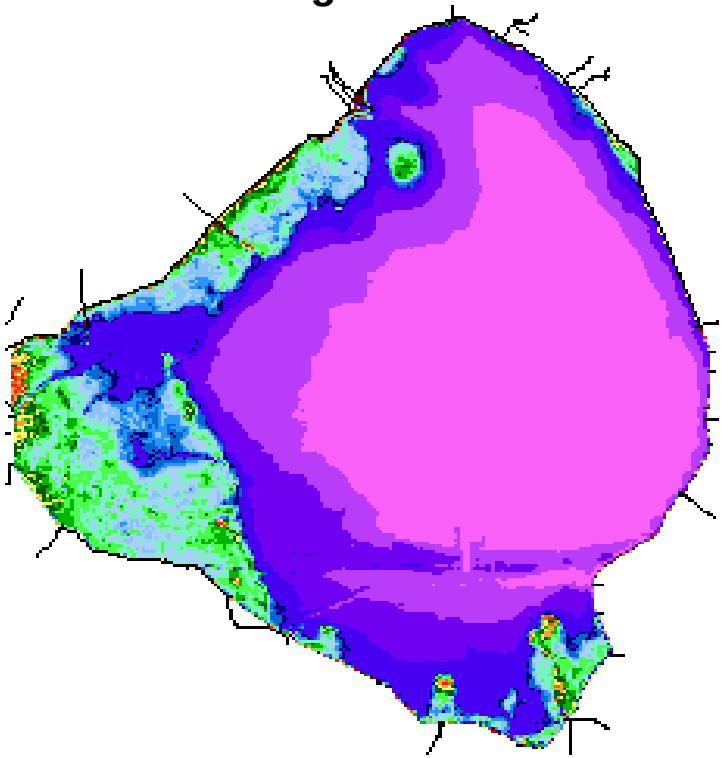
Lake Okeechobee
Water Depth Timeseries Maps

1 Year Ago: 9/9/2012



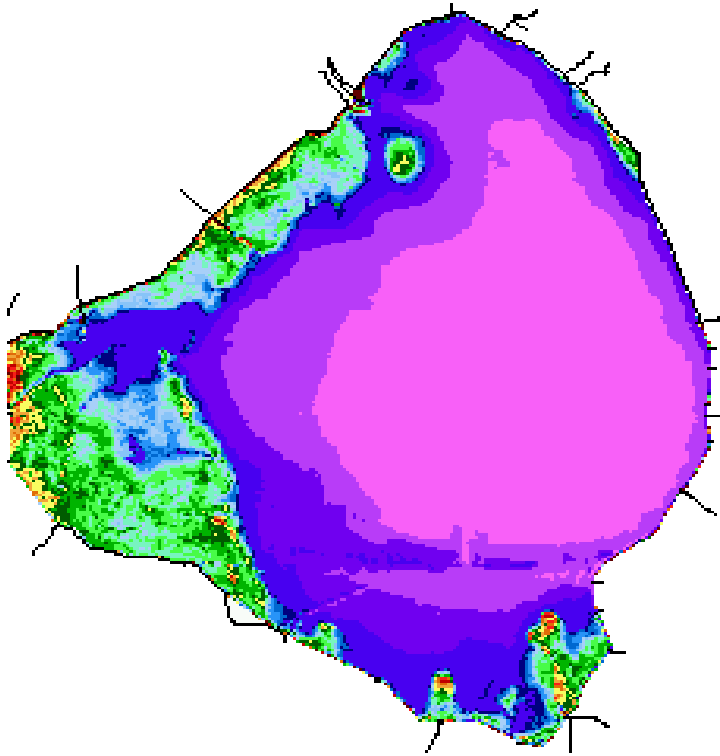
(14.78 ft NGVD29)

1 Month Ago: 8/10/2013



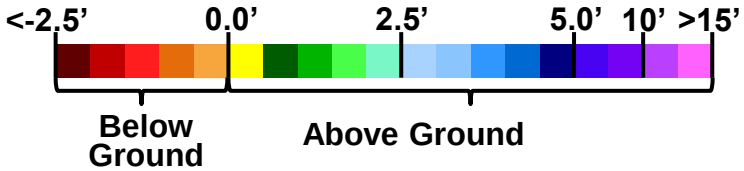
(16.05 ft NGVD29)

Current: 9/9/2013



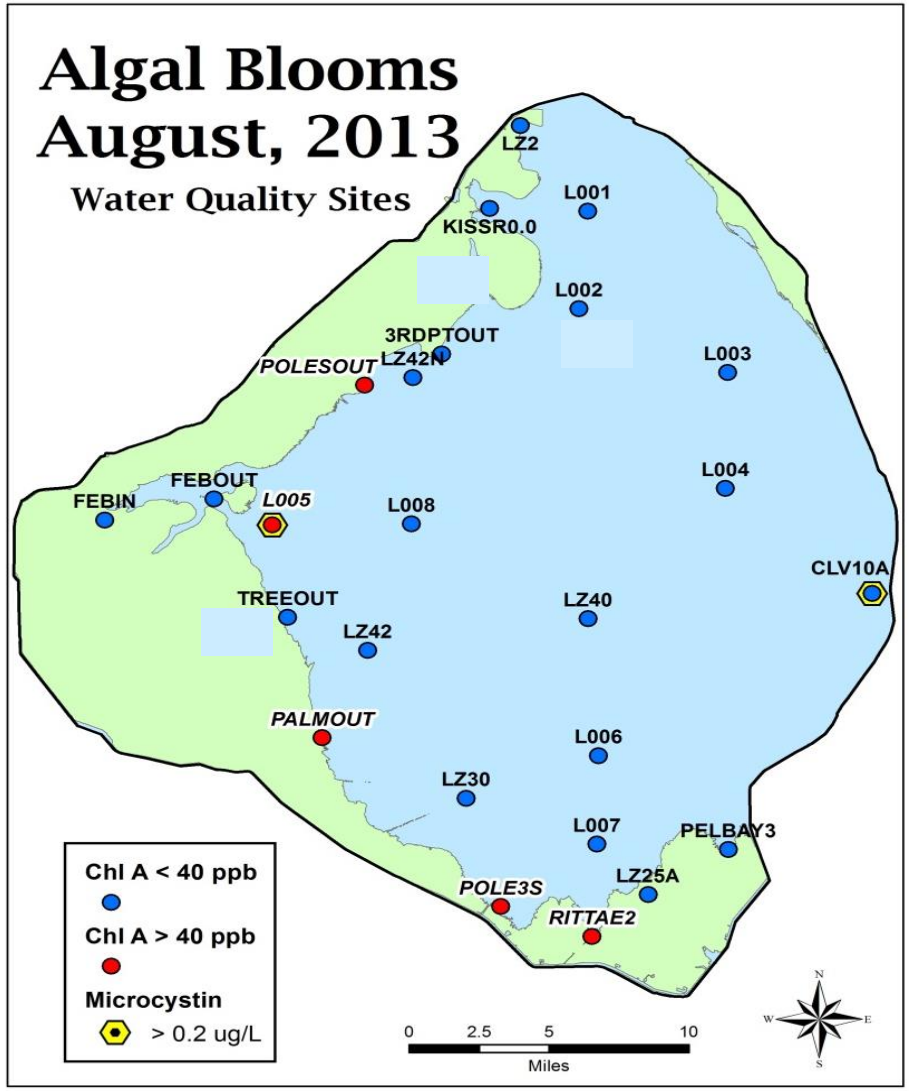
Current Stage
(15.49 ft NGVD29)

Water Depth (feet)

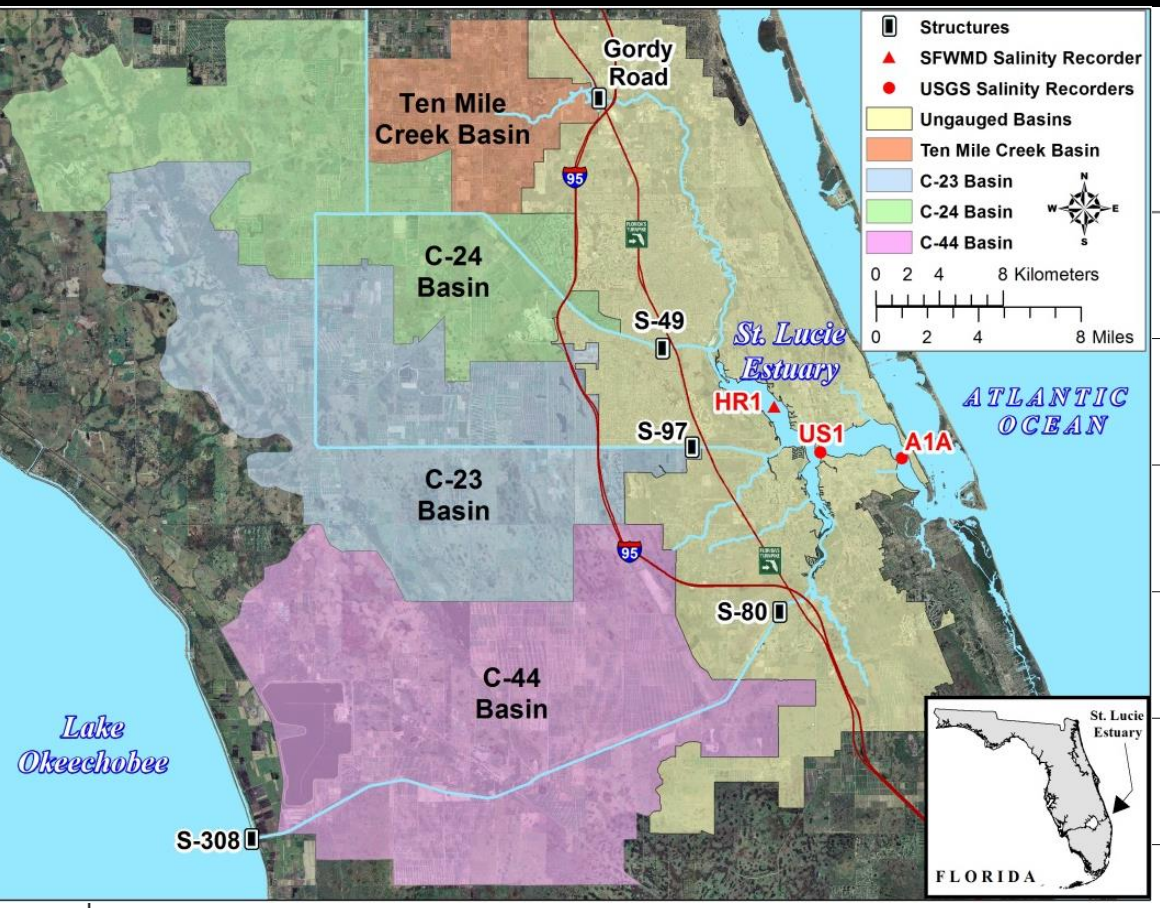


Lake Okeechobee Water Quality

Parameter	May	June	July	Aug
Lakewide TP ppb	111	82	95	89
Nearshore TP ppb	76	62	85	85
Lakewide TSS ppm	23	11	9	7
Nearshore TSS ppm	14	9	4	5

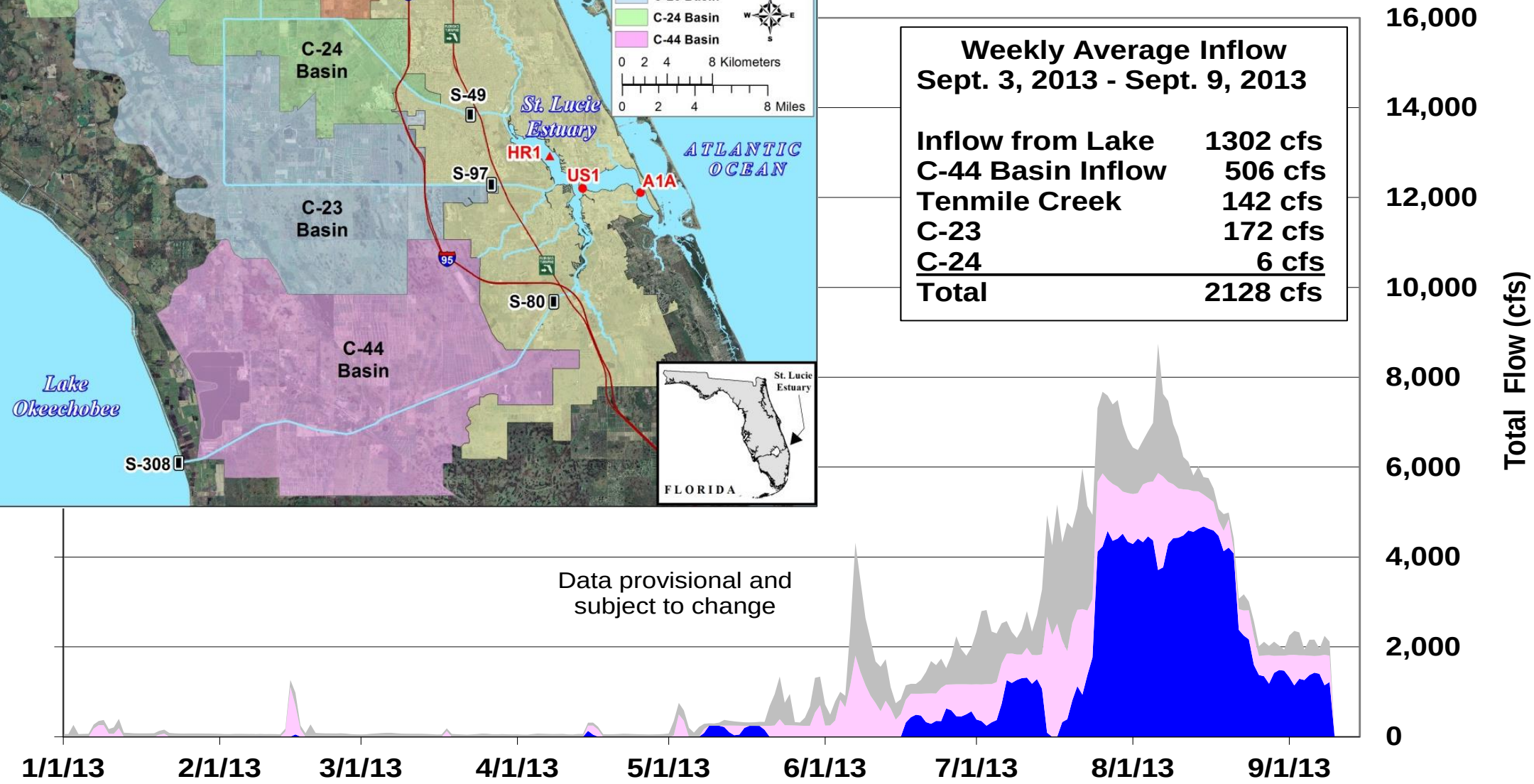


St. Lucie Estuary



Weekly Average Inflow
Sept. 3, 2013 - Sept. 9, 2013

Inflow from Lake	1302 cfs
C-44 Basin Inflow	506 cfs
Tenmile Creek	142 cfs
C-23	172 cfs
C-24	6 cfs
Total	2128 cfs

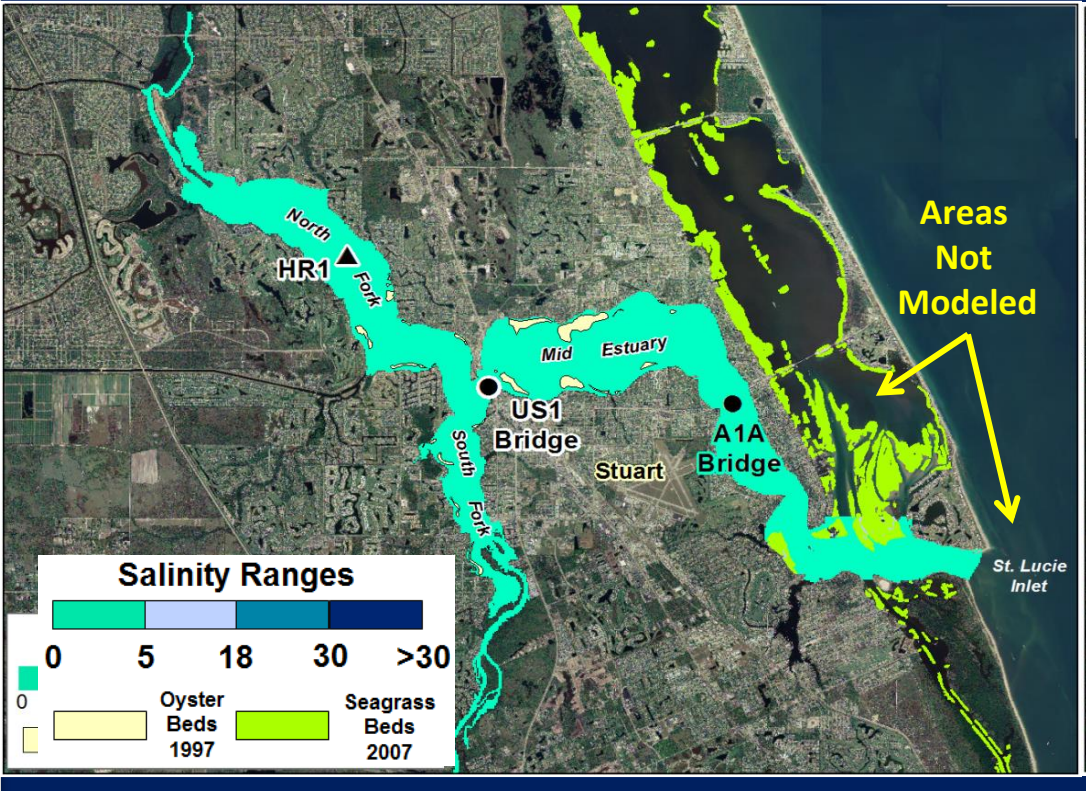


*Does not include runoff from the tidal basin or groundwater

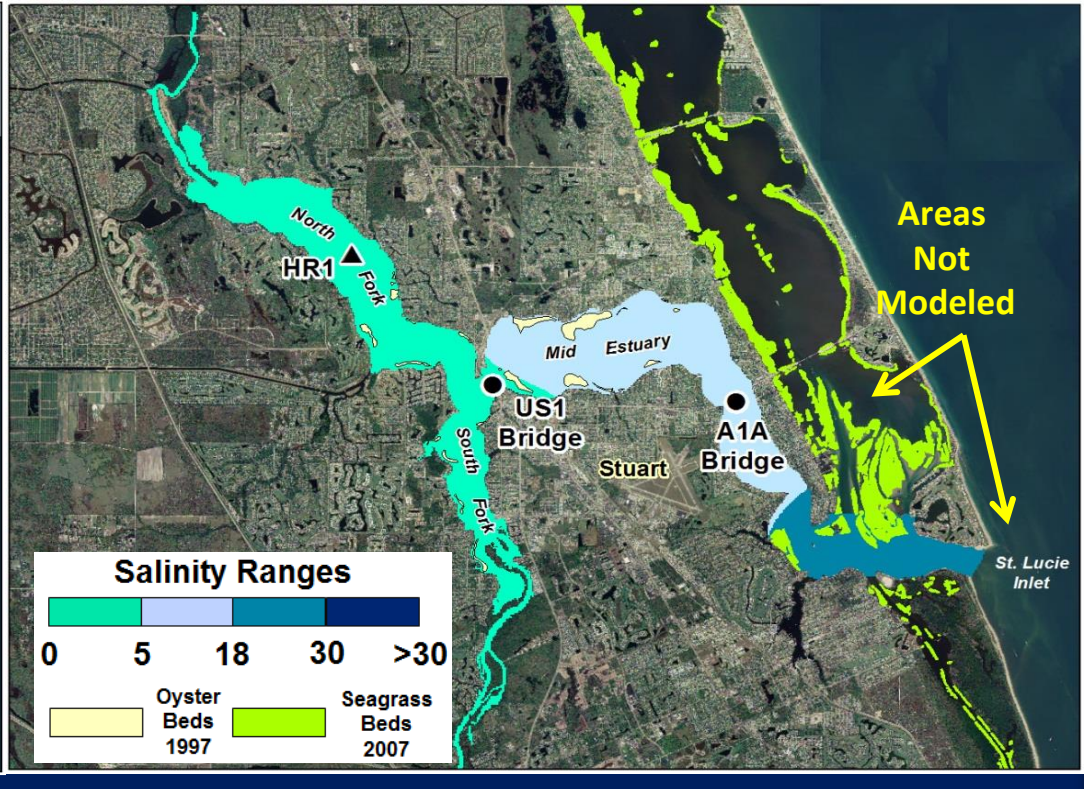
St. Lucie Estuary

Salinity Conditions

August 9, 2013

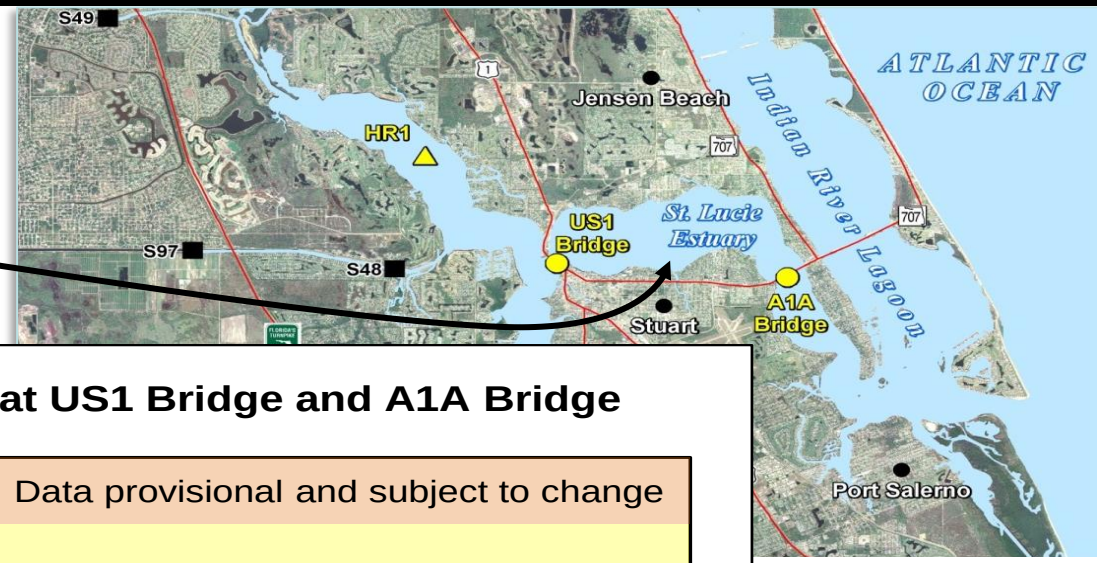


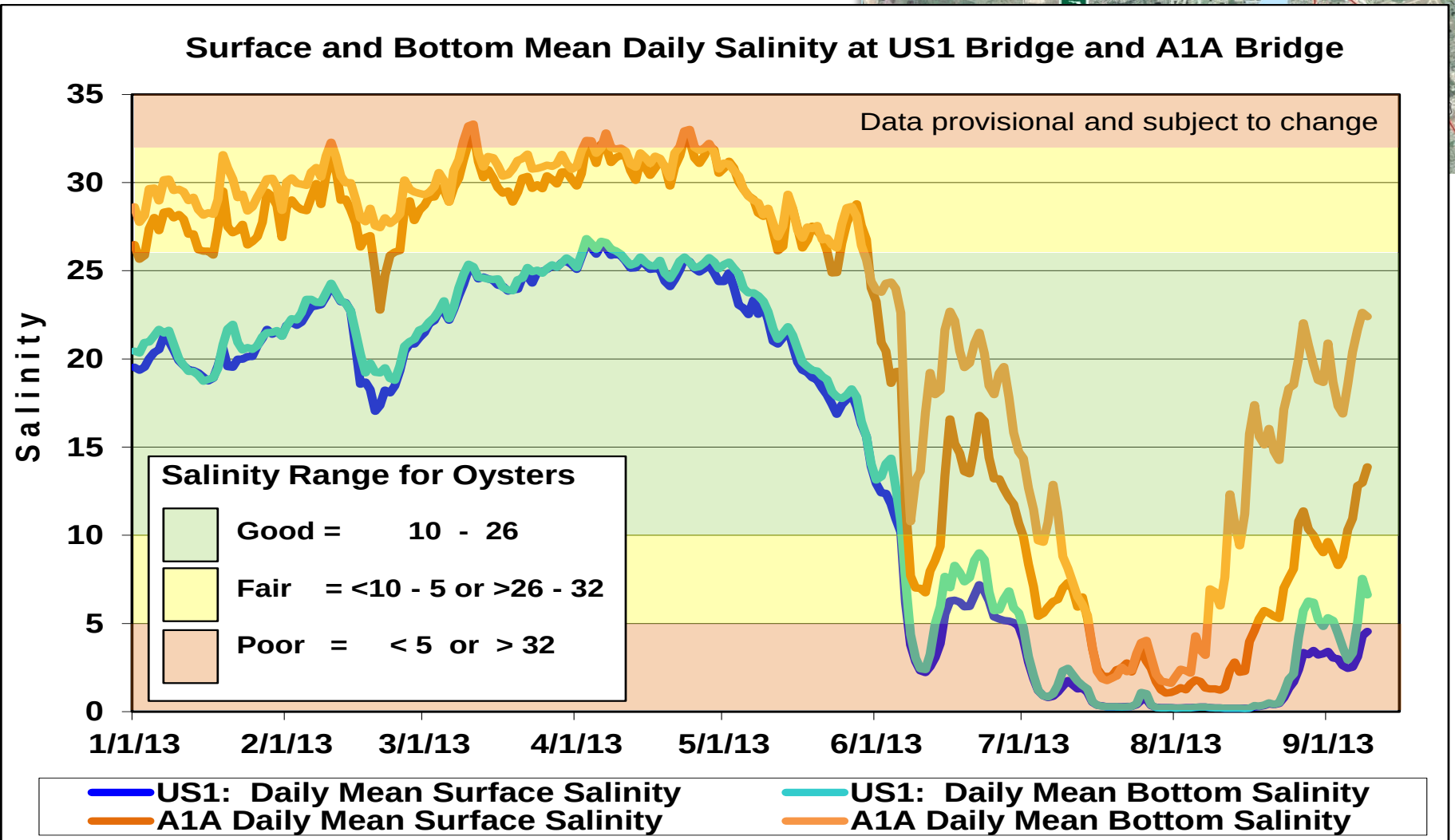
September 9, 2013

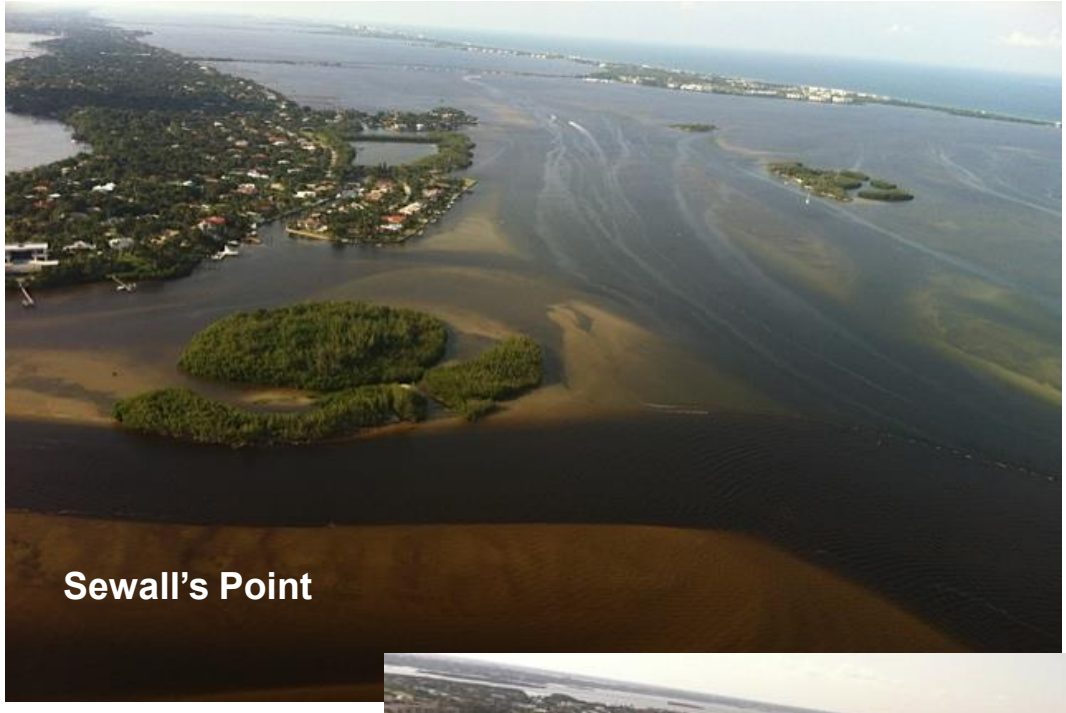


St. Lucie Estuary

- Major oyster beds are located between the US1 and A1A Bridges
- Salinity has fallen below 5 in this area

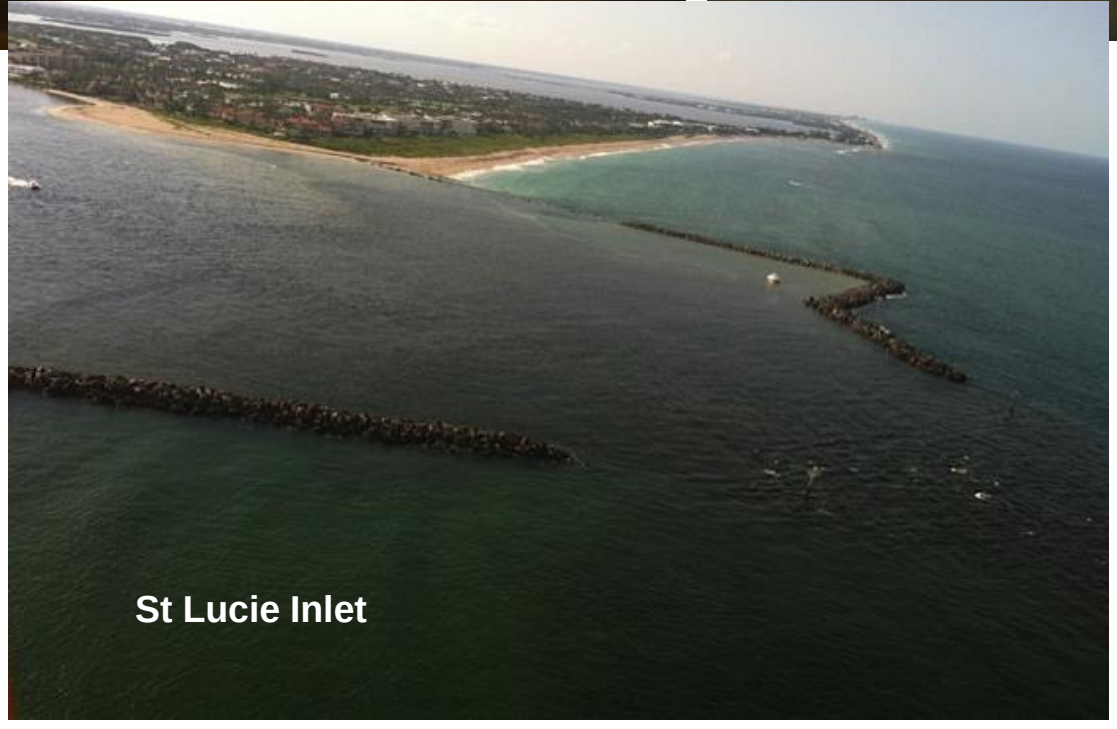






Sewall's Point

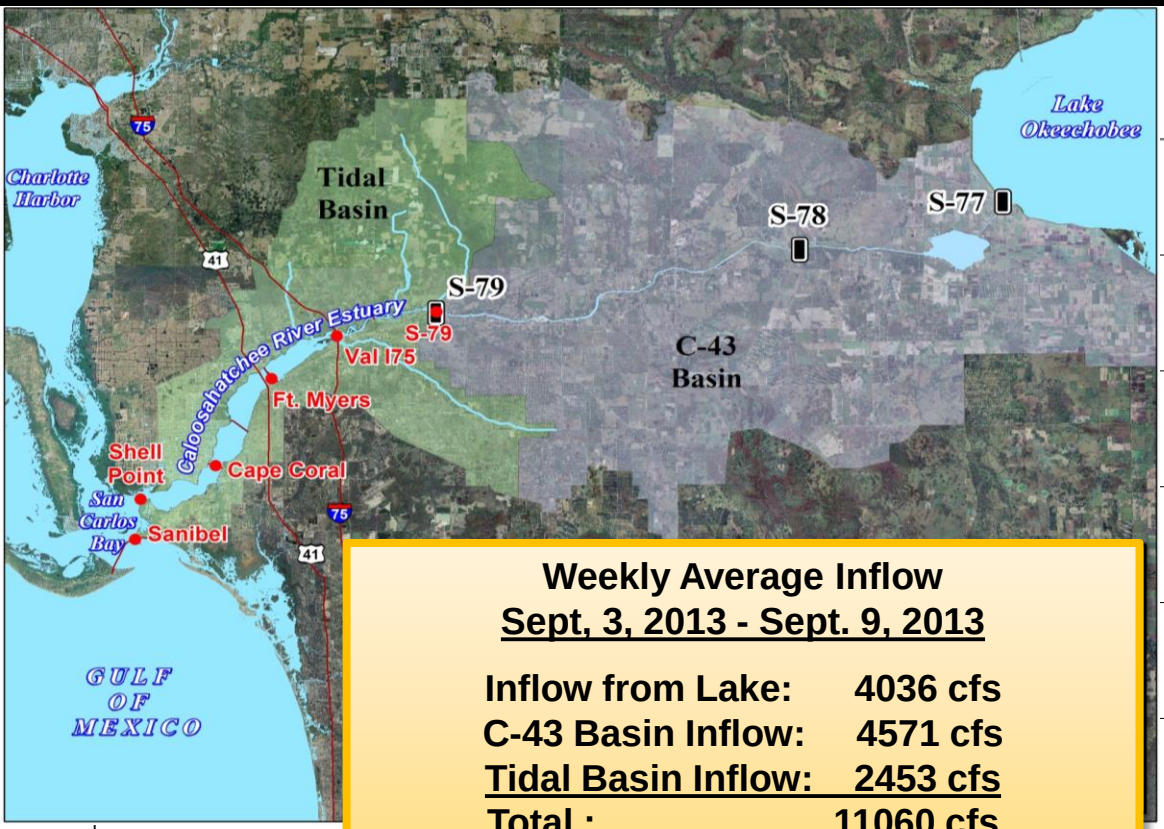
Seagrass beds between Jensen and Sewall's Point/Sailfish Point area



St Lucie Inlet

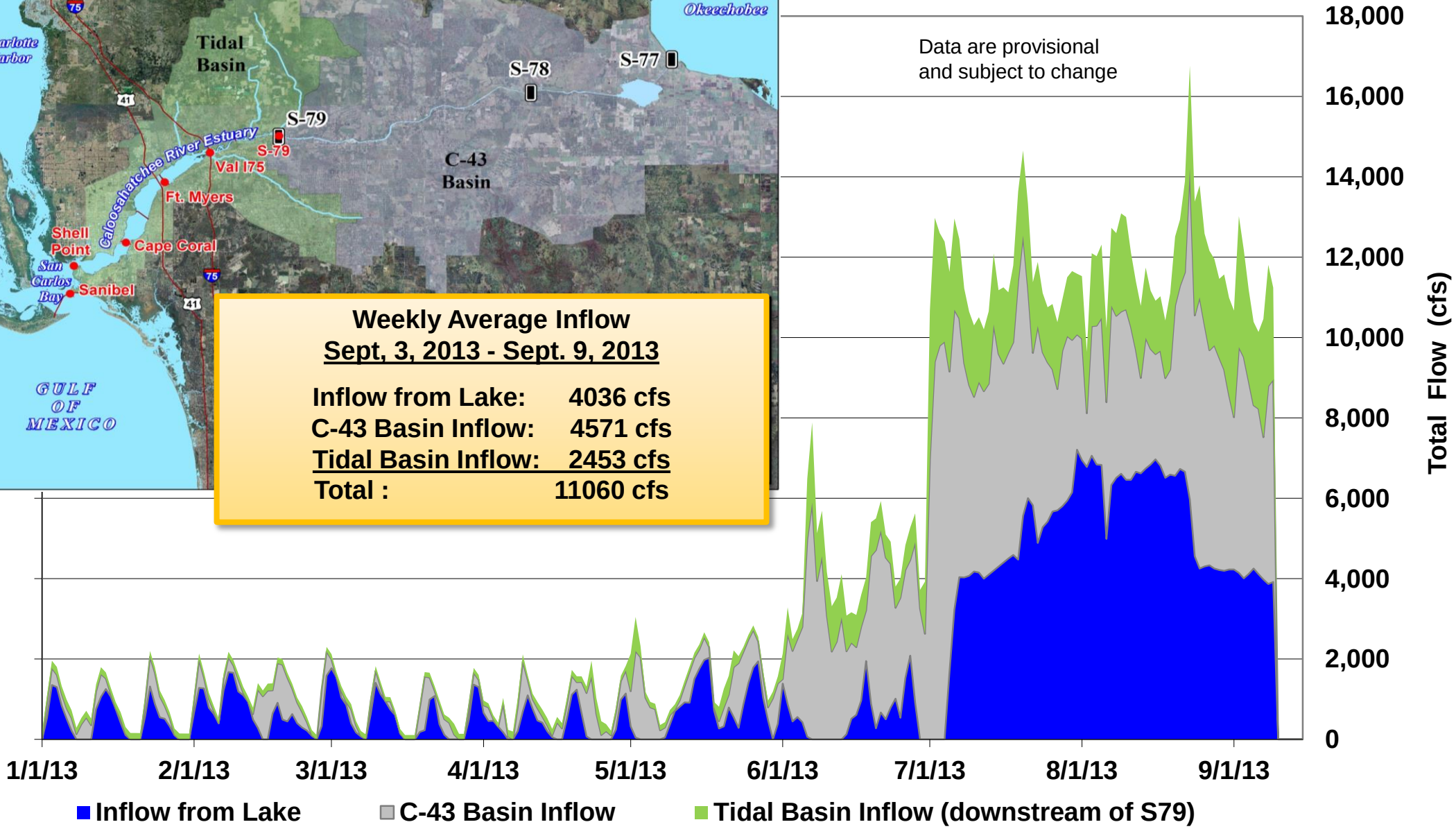
9-8-13 Photos by Jacqui Thurlow-Lippisch

Caloosahatchee Estuary



Weekly Average Inflow
Sept, 3, 2013 - Sept. 9, 2013

Inflow from Lake:	4036 cfs
C-43 Basin Inflow:	4571 cfs
Tidal Basin Inflow:	2453 cfs
Total :	11060 cfs

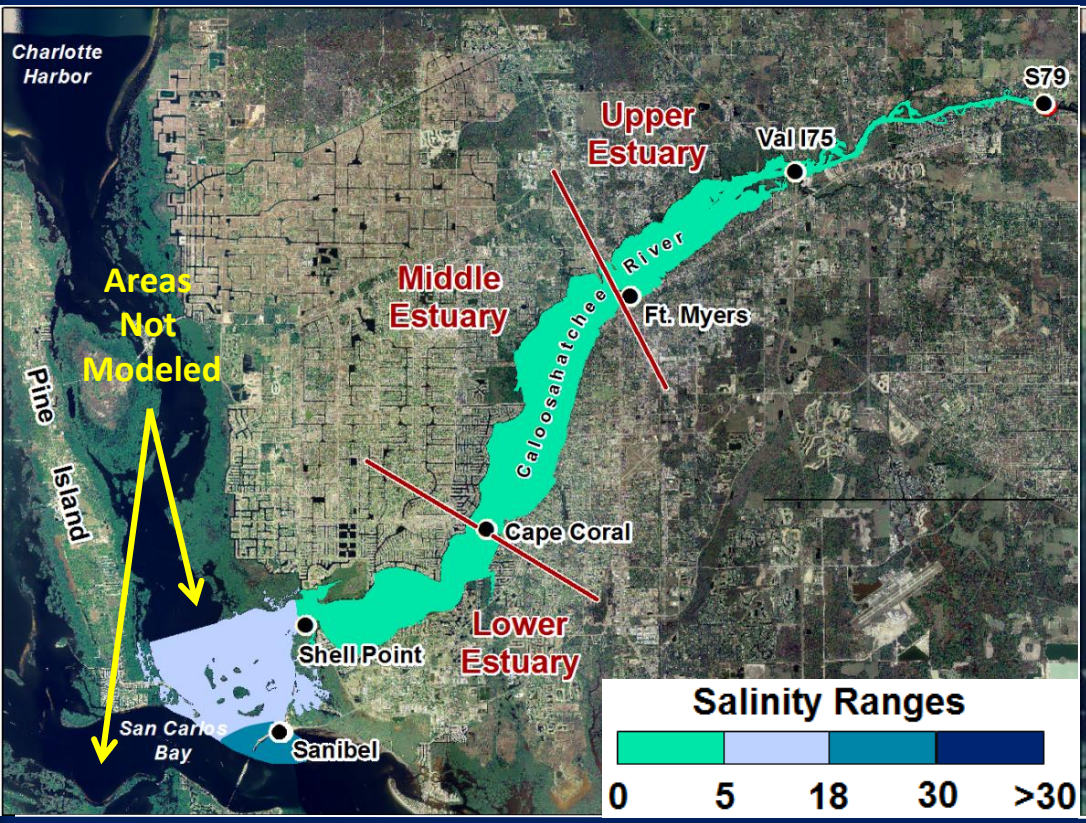


*Does not include direct overland runoff from the tidal basin or groundwater

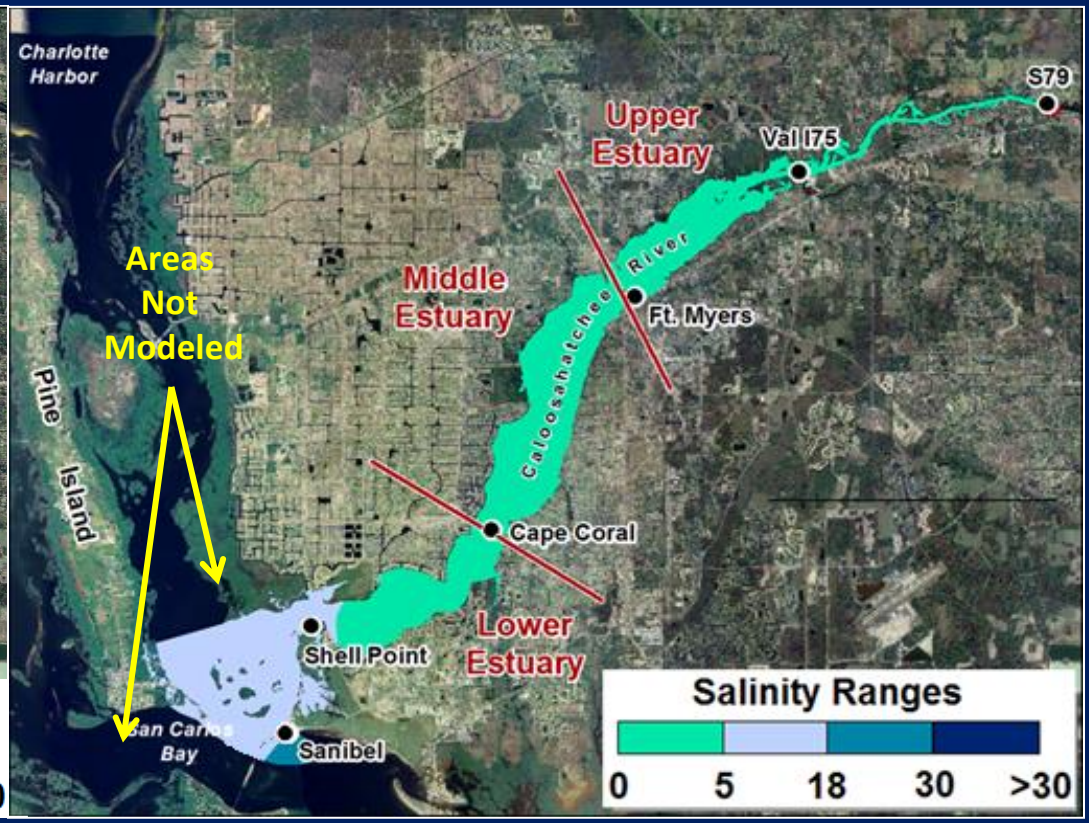
Caloosahatchee Estuary

Salinity Conditions

August 9, 2013

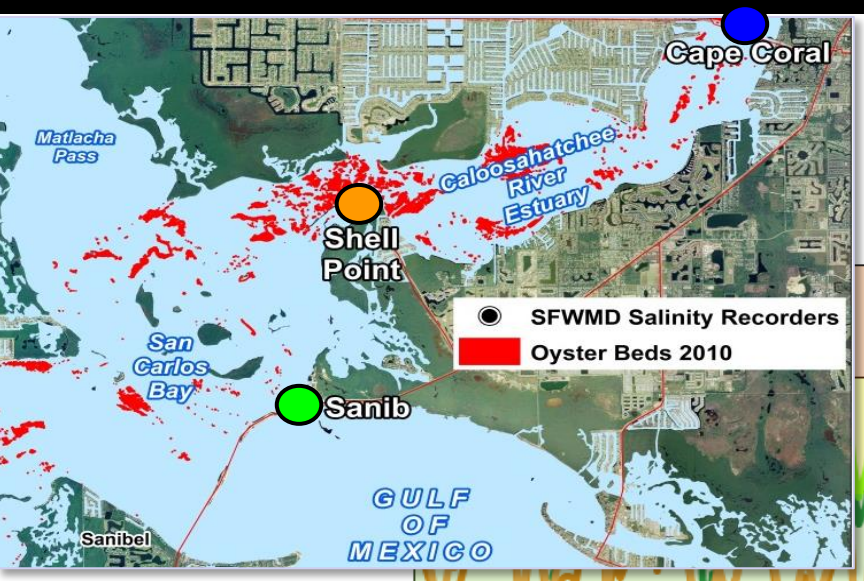


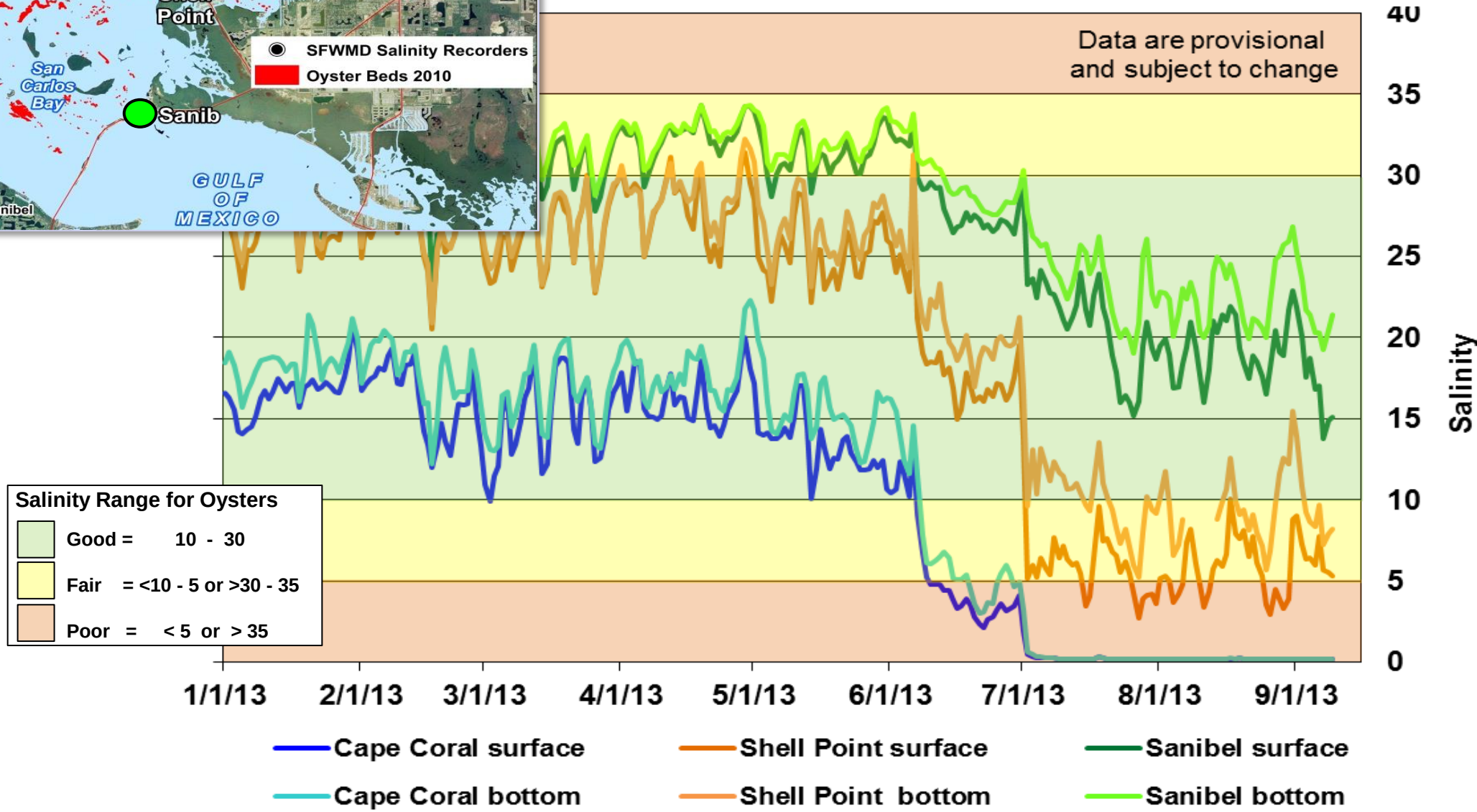
September 9, 2013



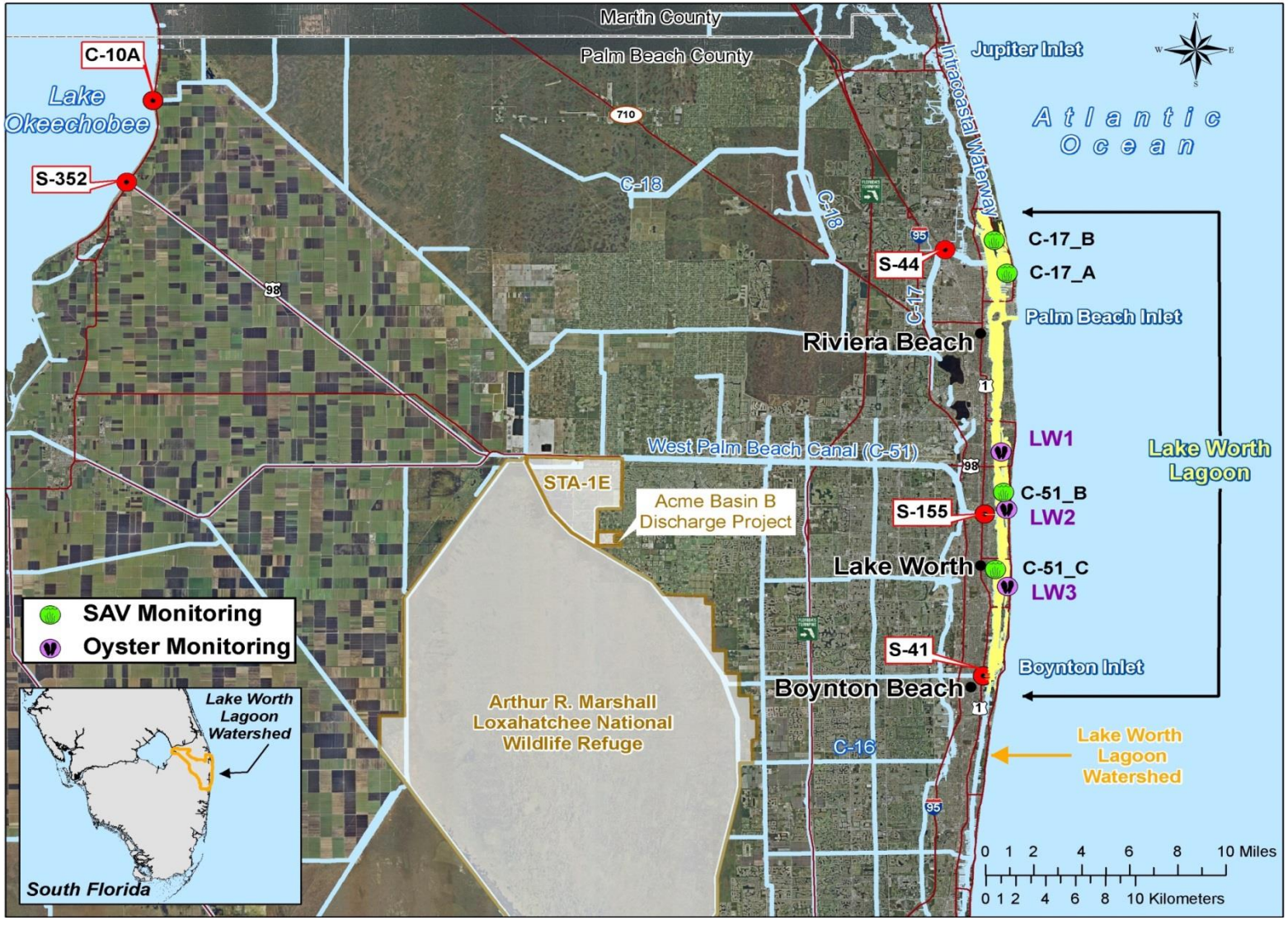
Caloosahatchee Estuary

Surface and Bottom Mean Salinity at
3 monitoring stations in the Caloosahatchee Estuary

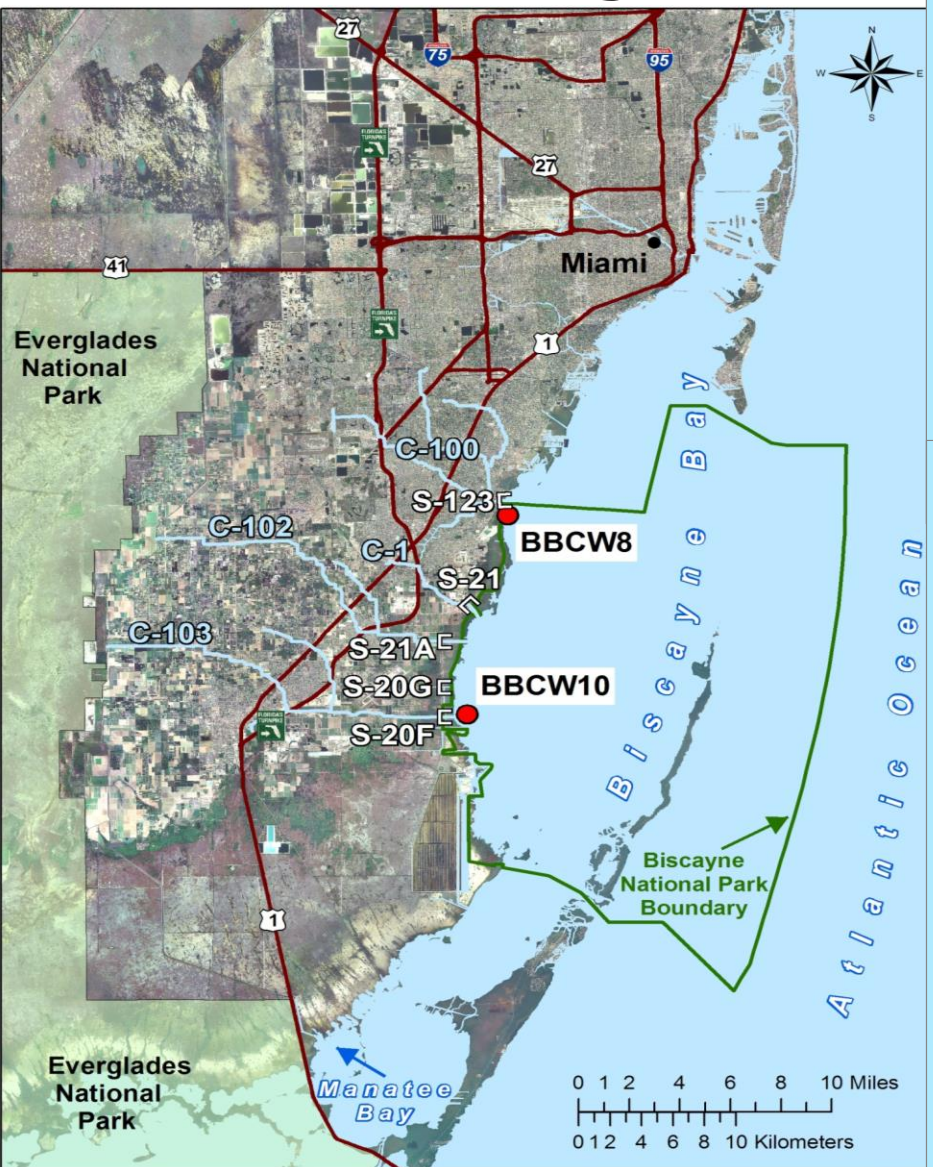


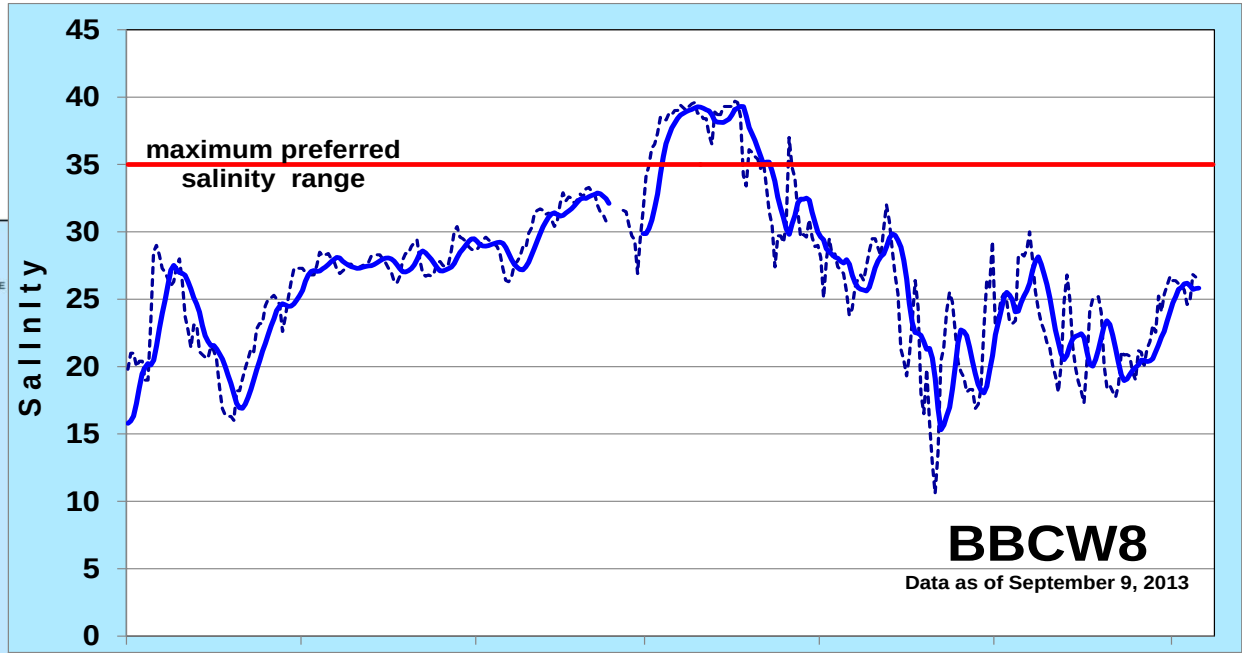


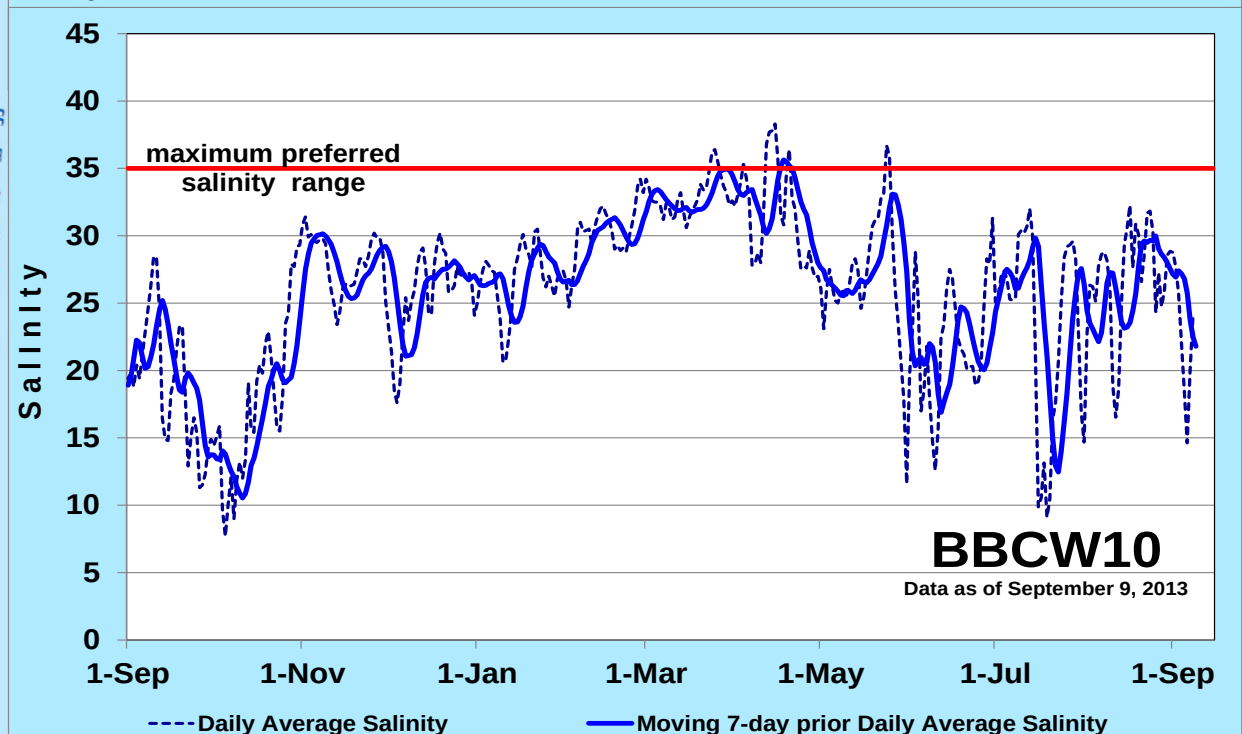
Lake Worth Lagoon



Biscayne Bay Salinity



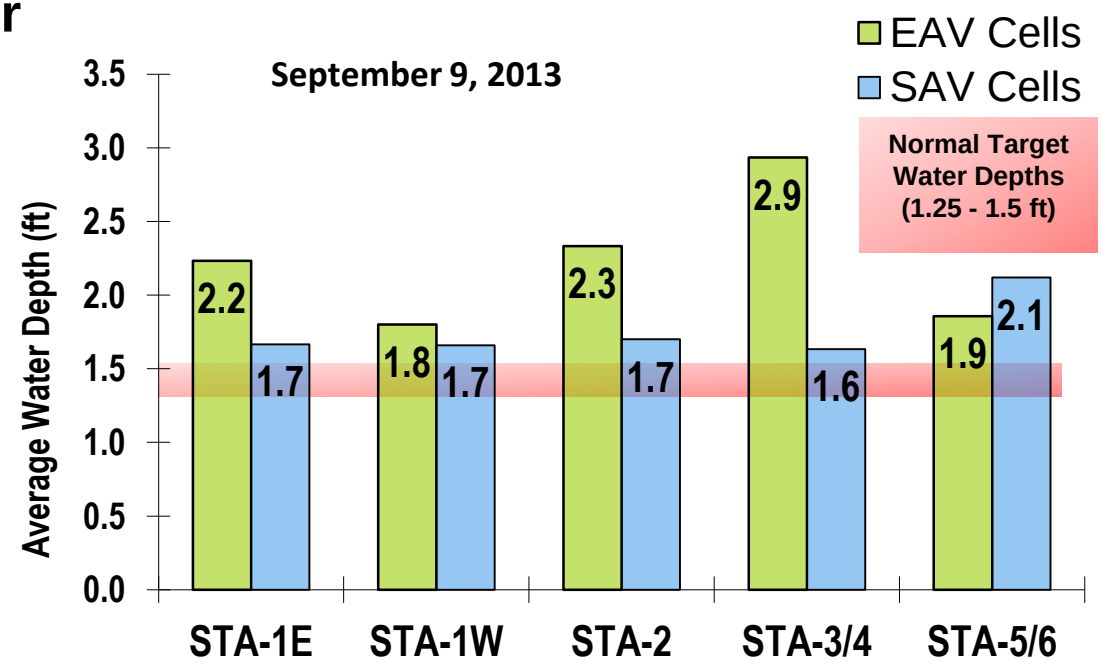




Storm Water Treatment Areas

Water levels, Lake Okeechobee Releases & Compartment B & C Areas Operational

- **Water depths slightly above target for most Emergent Aquatic Vegetation (EAV) & Submerged Aquatic Vegetation (SAV) dominated cells**
  - Water levels high in STA-3/4 EAV cells
- **Lake Okeechobee Regulatory water releases directed towards STA-1E continue**
- **Entire Compartment B & C Buildout Areas are now completely on-line**
  - Final flow-way in STA-5/6 (Flow-way 5) passed start-up criteria (July 30, 2013)



Stormwater Treatment Areas: Snail Kites & Exotic Apple Snail Infestation

Snail Kite in flight

STA	Snail Kite Nests (Cell & Number Nests)
STA- 1E	Cell 4N: 4 Snail Kite nests
STA-5/6	Cell 3B: 3 Snail Kite nests

To protect the nests, stage & access restrictions are in place

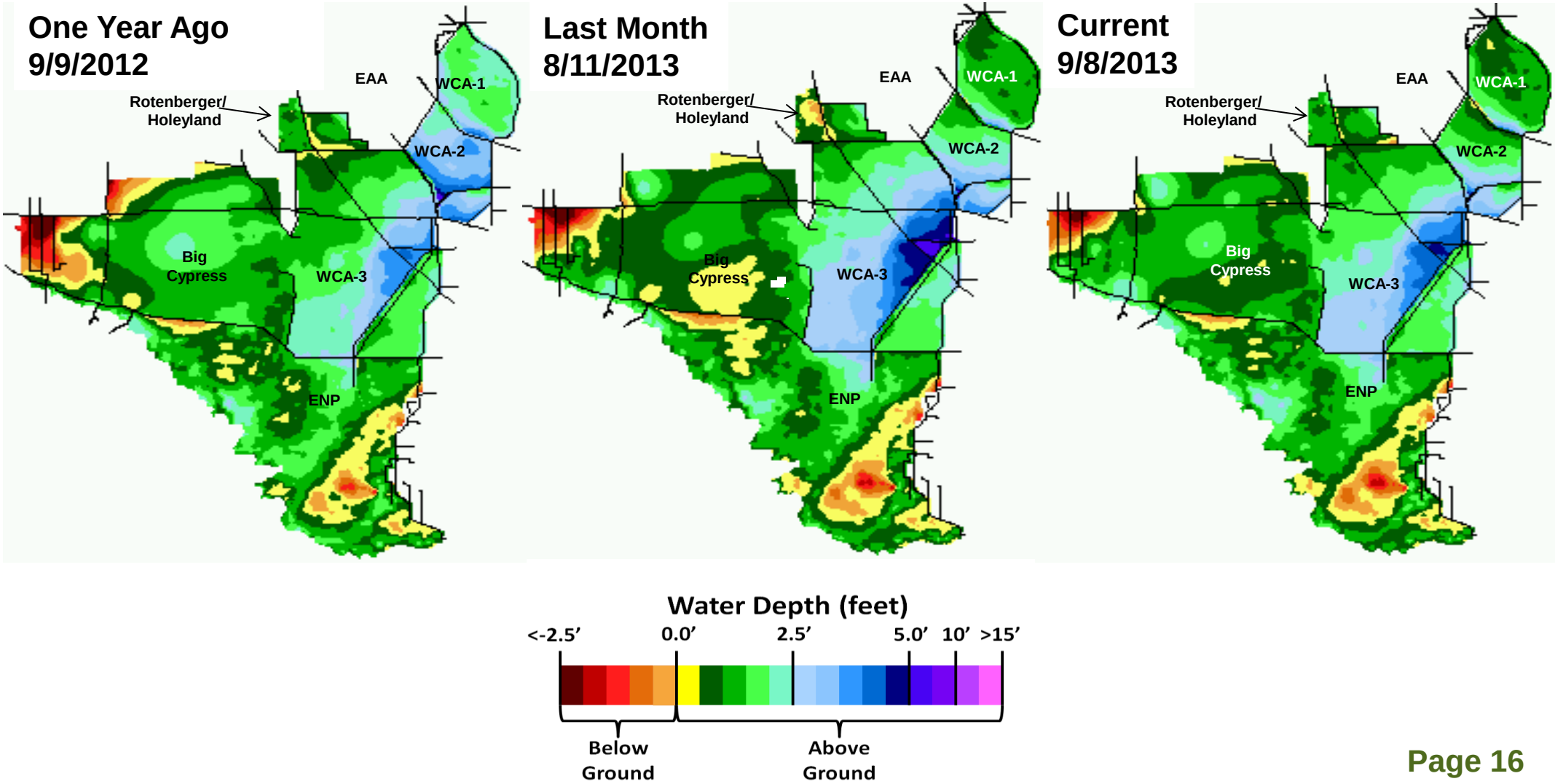
Apple Snail egg masses on Cattails

STA-1E Snail Infestation

Multidisciplinary team formed to identify causes for apple snail population explosion & management options

- Water quality appears to be stabilizing
- # snail eggs appears to be declining

Greater Everglades
Water Depth Monthly Snapshots



Greater Everglades
Conditions in the Everglades

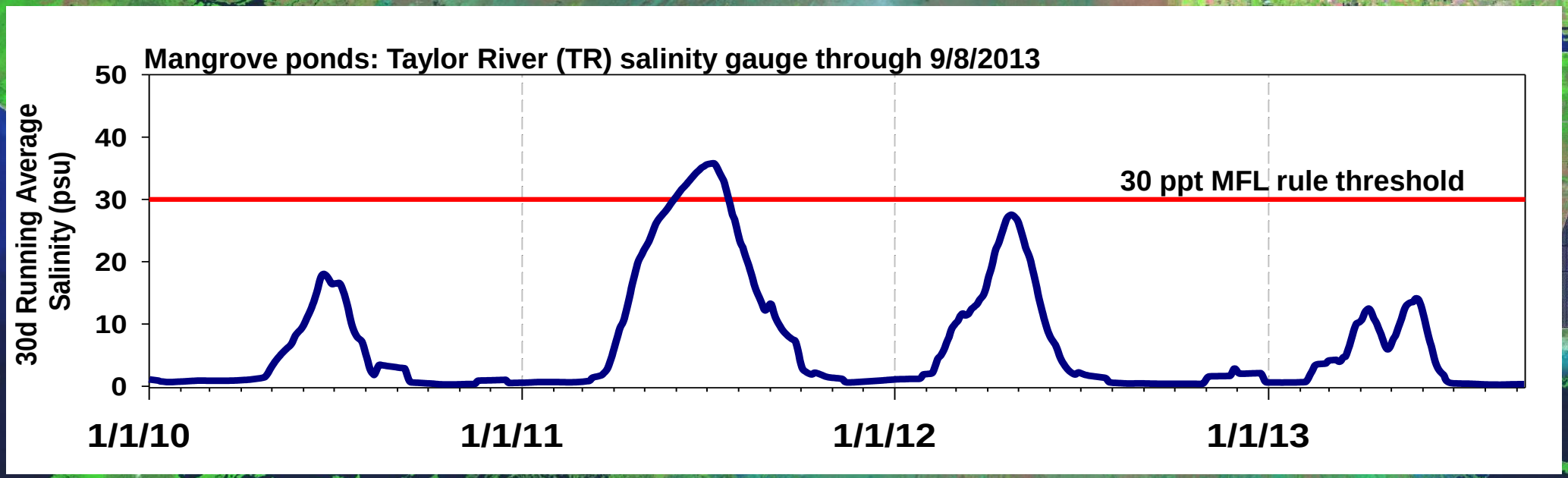
- Water levels remain relatively high, but are appropriate for wetlands vegetation and aquatic wildlife.
- Water levels slowly receding in WCA3

Deer stranded on levee, photo by FWC

Elevated water levels in WCAs; photo

- USFWS reports snail kites continue to nest in WCA-3 with 7 nests still active.
- 78 nesting attempts this year – the most in WCA-3 since 2006 - with 20 successful nests so far

Florida Bay Update



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

QUESTIONS?

July 17, 2013