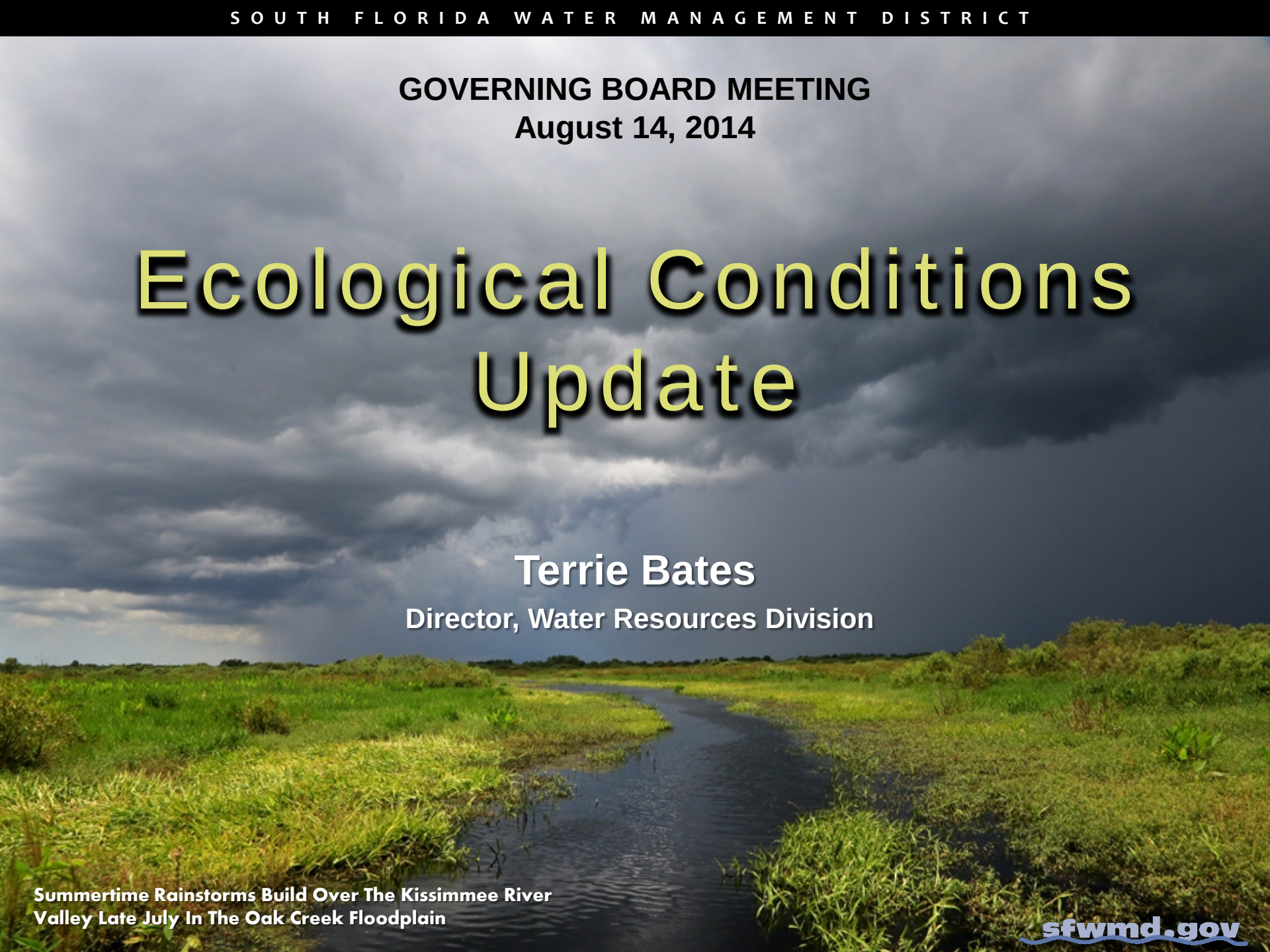
GOVERNING BOARD MEETING
August 14, 2014

Ecological Conditions Update

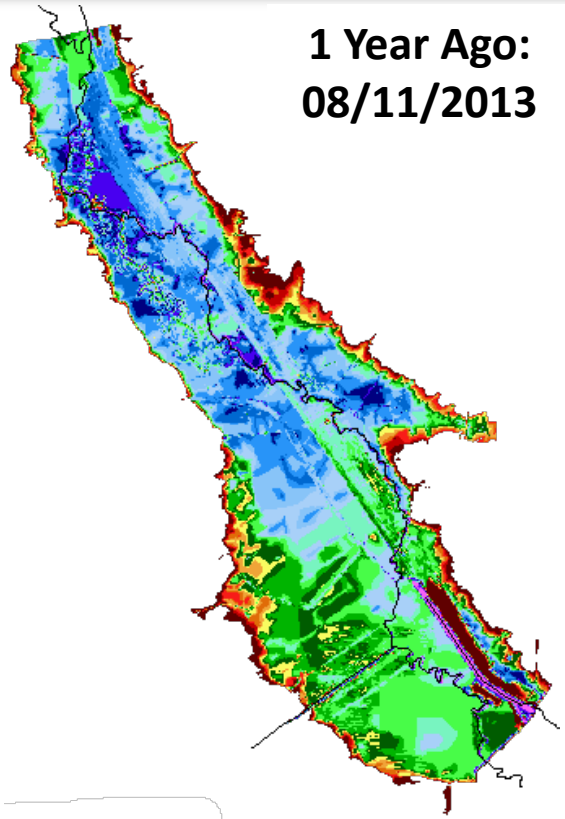
Terrie Bates
Director, Water Resources Division



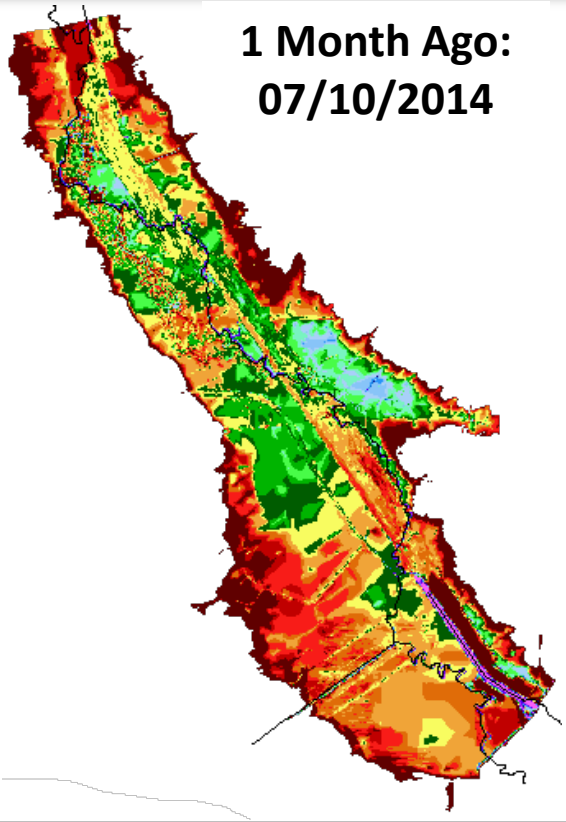
Summertime Rainstorms Build Over The Kissimmee River Valley Late July In The Oak Creek Floodplain

Kissimmee River (Pool C)

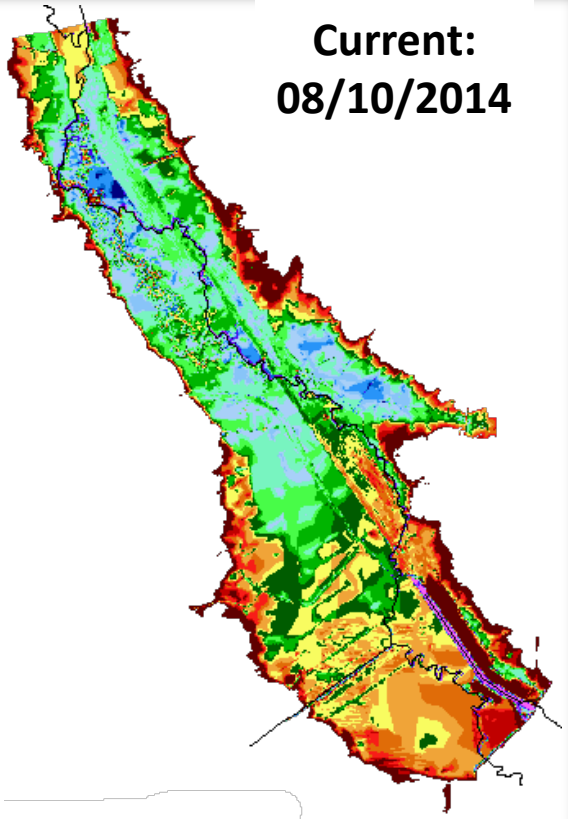
Monthly Water Depth Maps



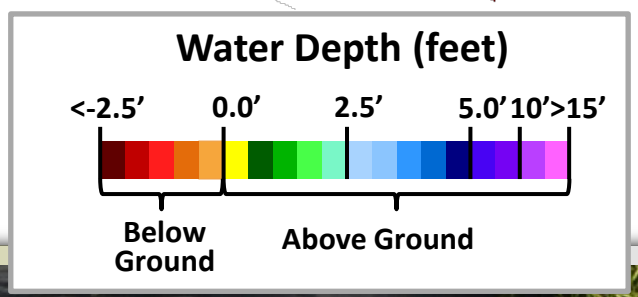
1 Year Ago:
08/11/2013



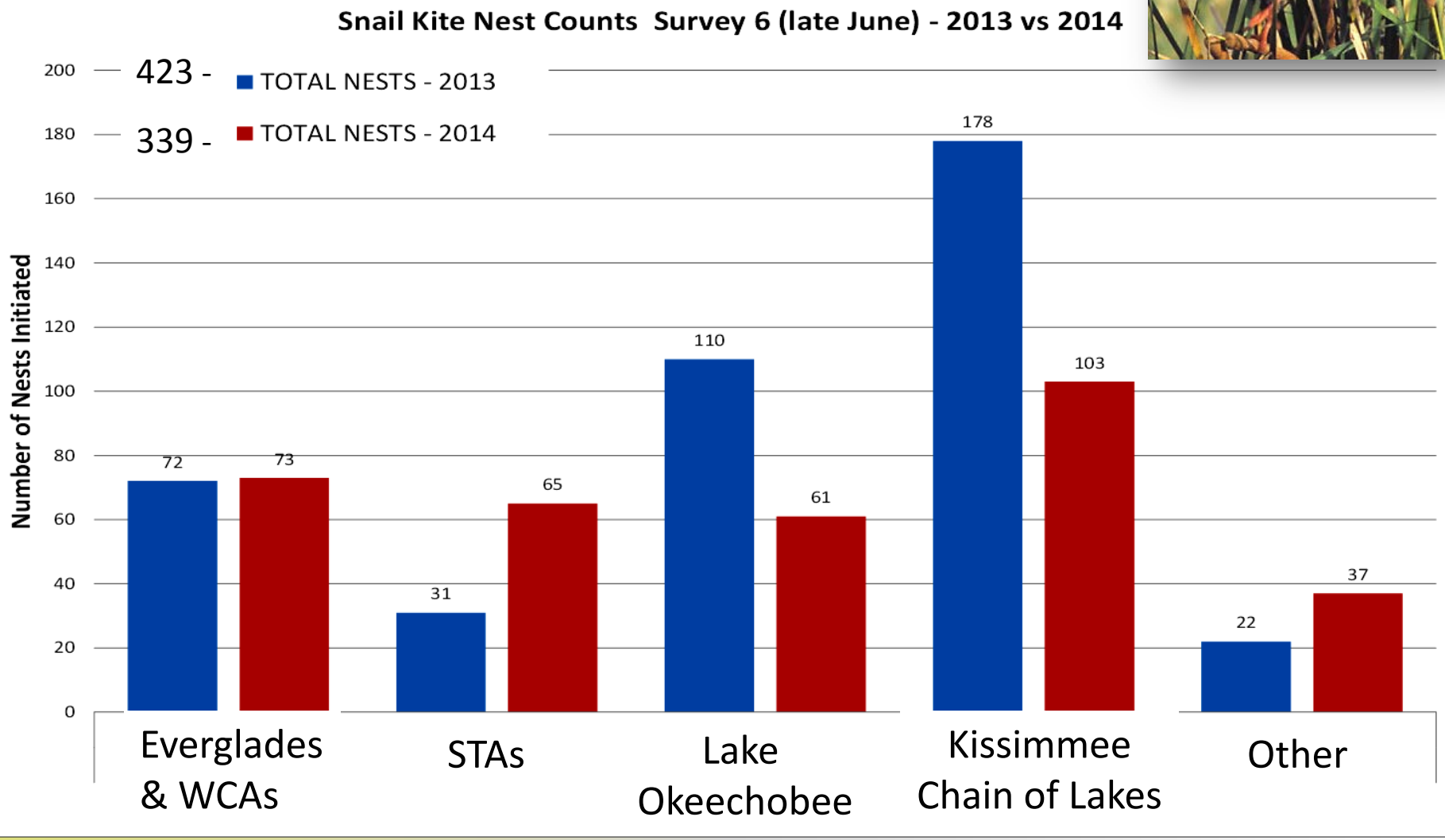
1 Month Ago:
07/10/2014



Current:
08/10/2014



Systemwide Snail Kite Nesting



Micco Run in the Kissimmee River
(the formation of a meander cutoff)

Micco Run in the Kissimmee River
(the formation of a meander cutoff)
March 31, 2014

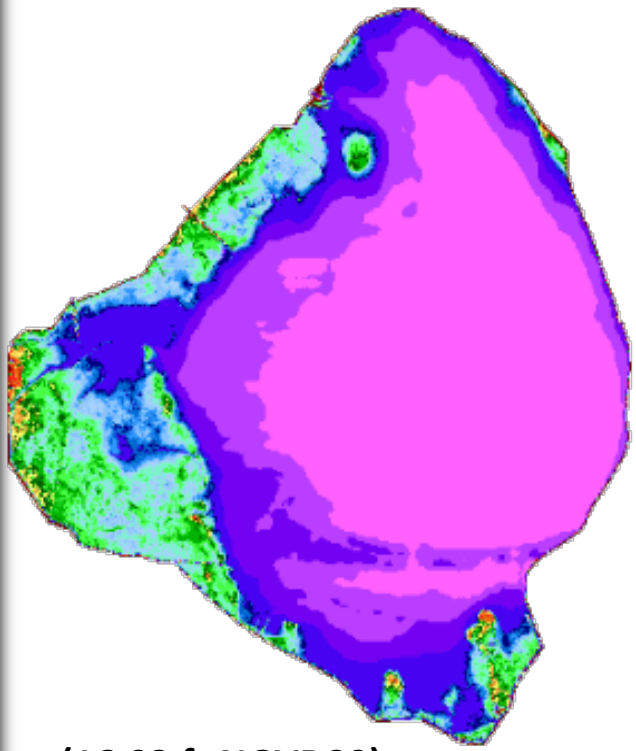
Micco Run in the Kissimmee River
(the formation of a meander cutoff)
May 13, 2014

Micco Run in the Kissimmee River
(the formation of a meander cutoff)
July 16, 2014

Micco Run in the Kissimmee River
(the formation of a meander cutoff)
August 12, 2014

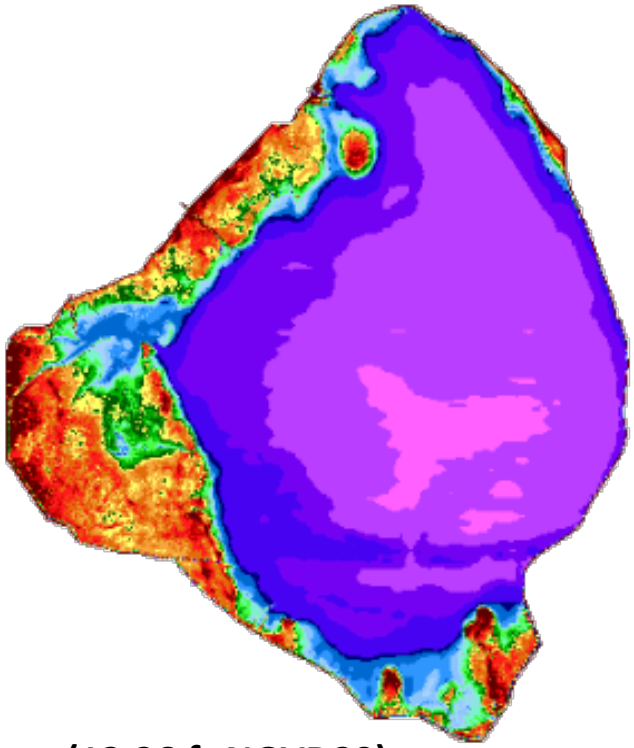
Lake Okeechobee
Water Depth Timeseries Maps

1 Year Ago: 8/11/2013



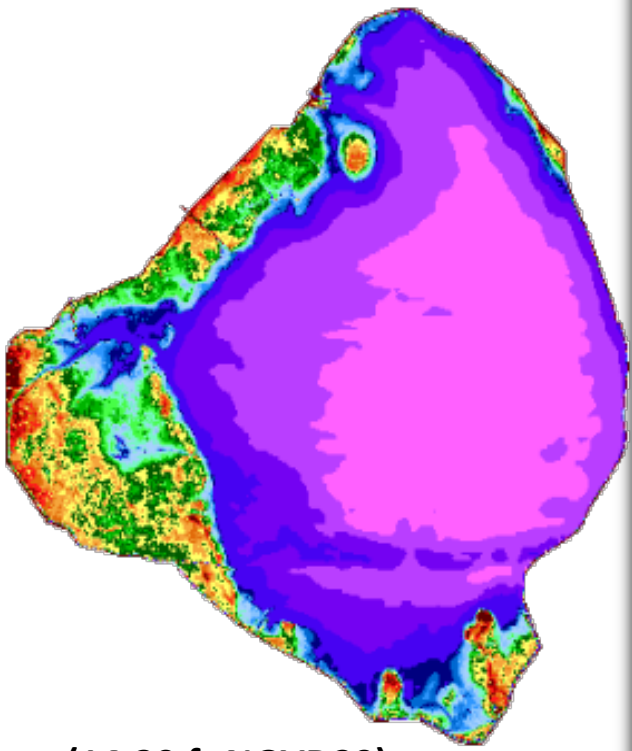
(16.03 ft NGVD29)

1 Month Ago: 7/12/2014

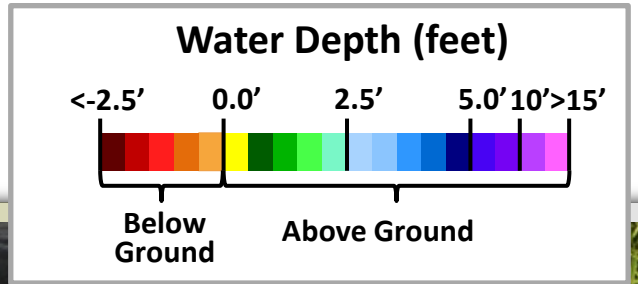


(13.26 ft NGVD29)

Current: 8/11/2014



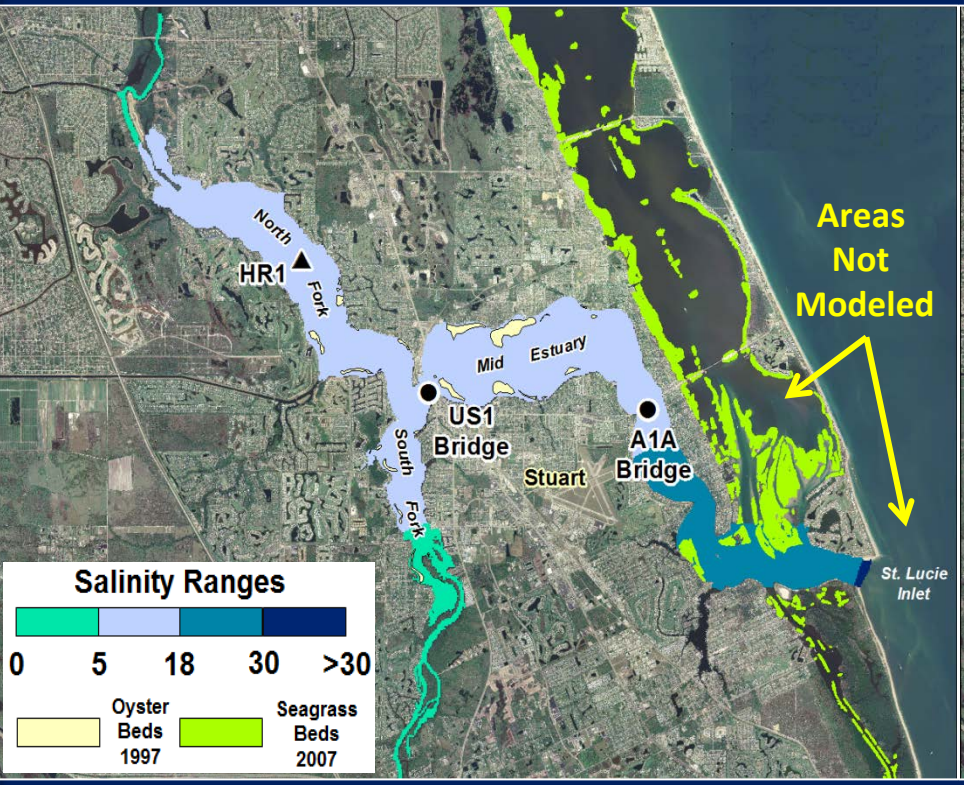
(14.30 ft NGVD29)



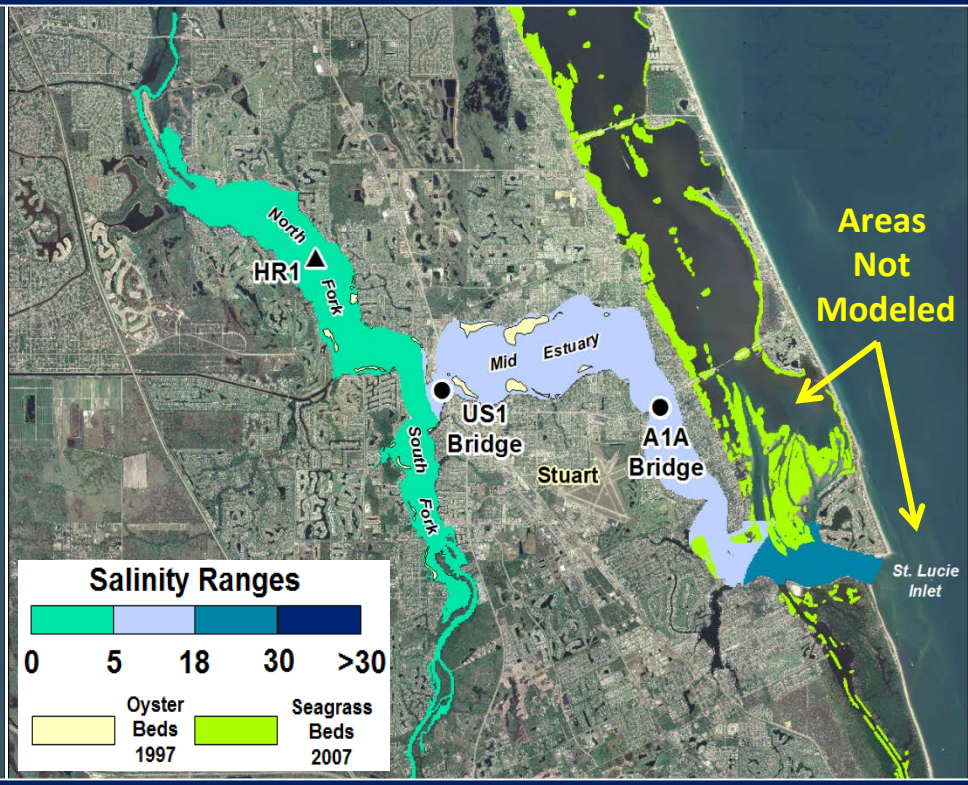
St. Lucie Estuary

Salinity Conditions

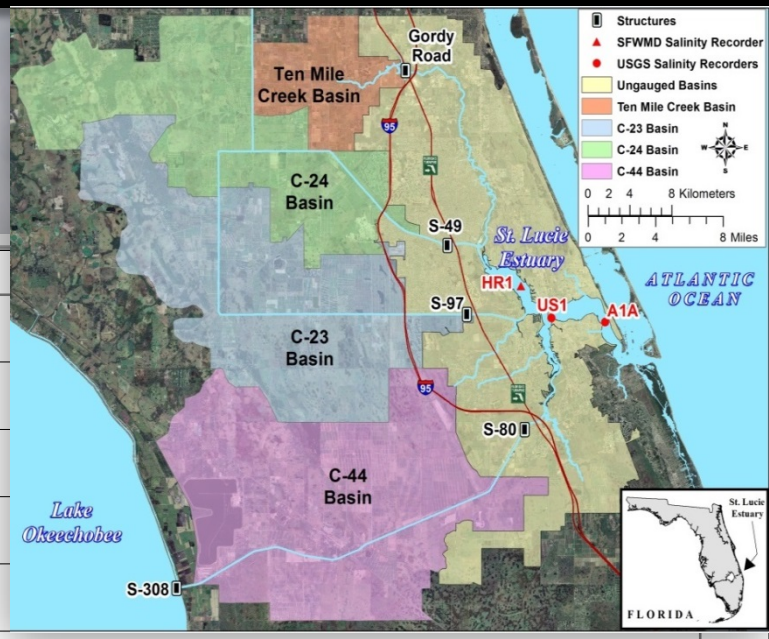
July 7, 2014



August 11, 2014



St. Lucie Estuary



Weekly Average Inflow
Aug. 5, 2014 - Aug. 11, 2014

Inflow from Lake	0 cfs
C-44 Basin Inflow	282 cfs
Tenmile Creek	106 cfs
C-23	594 cfs
C-24	469 cfs
Tidal Basin Inflow	904 cfs
Total	2355 cfs

Data provisional and subject to change

Total Flow (cfs)

7,000
6,500
6,000
5,500
5,000
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0

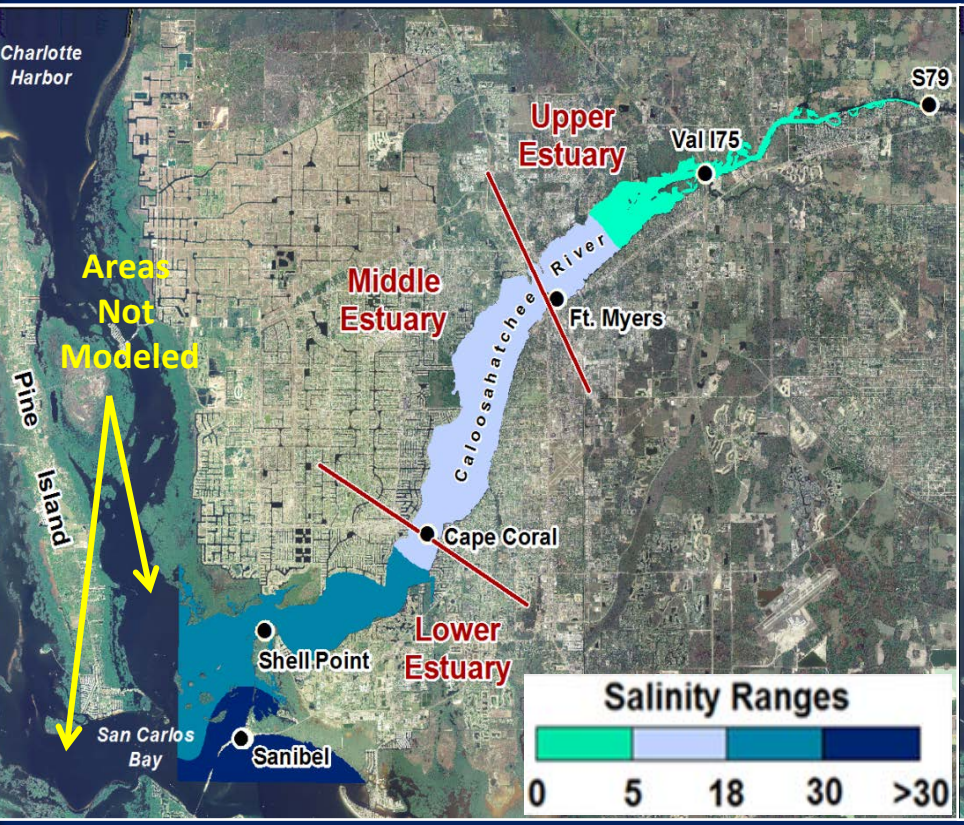
1-Jan 1-Feb 1-Mar 1-Apr 1-May 1-Jun 1-Jul 1-Aug

Inflow from Lake | C-44 Basin Runoff | Inflow from C-24, C23, and Tenmile Creek | Tidal Basin Inflow

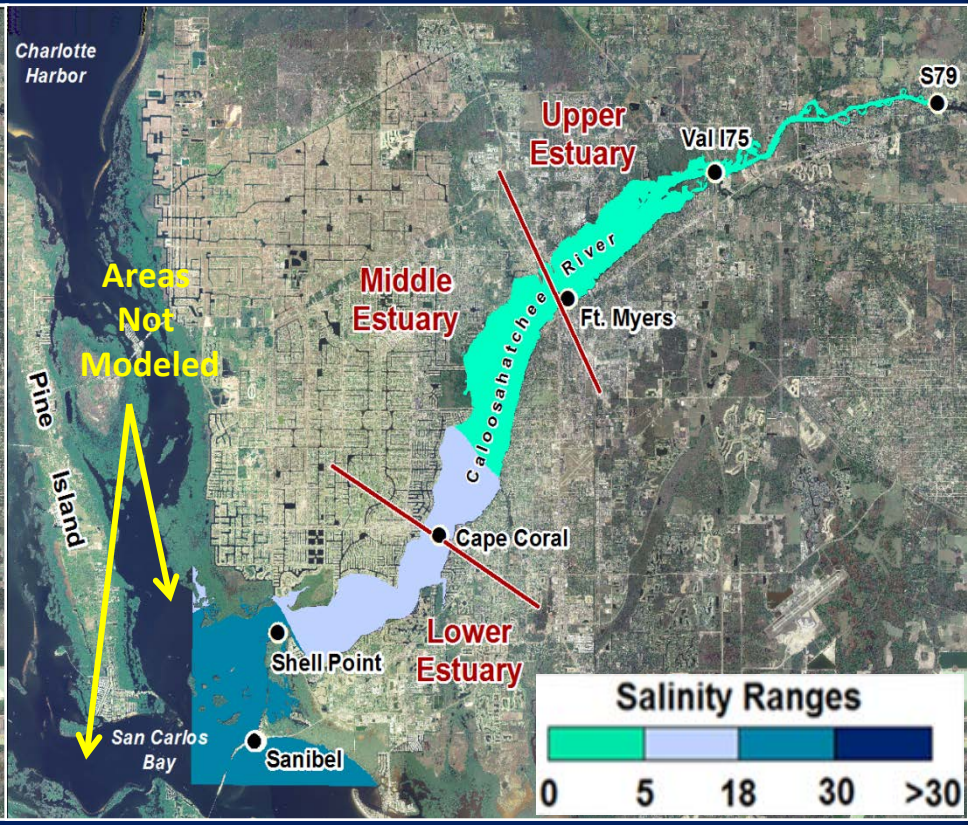
Caloosahatchee Estuary

Salinity Conditions

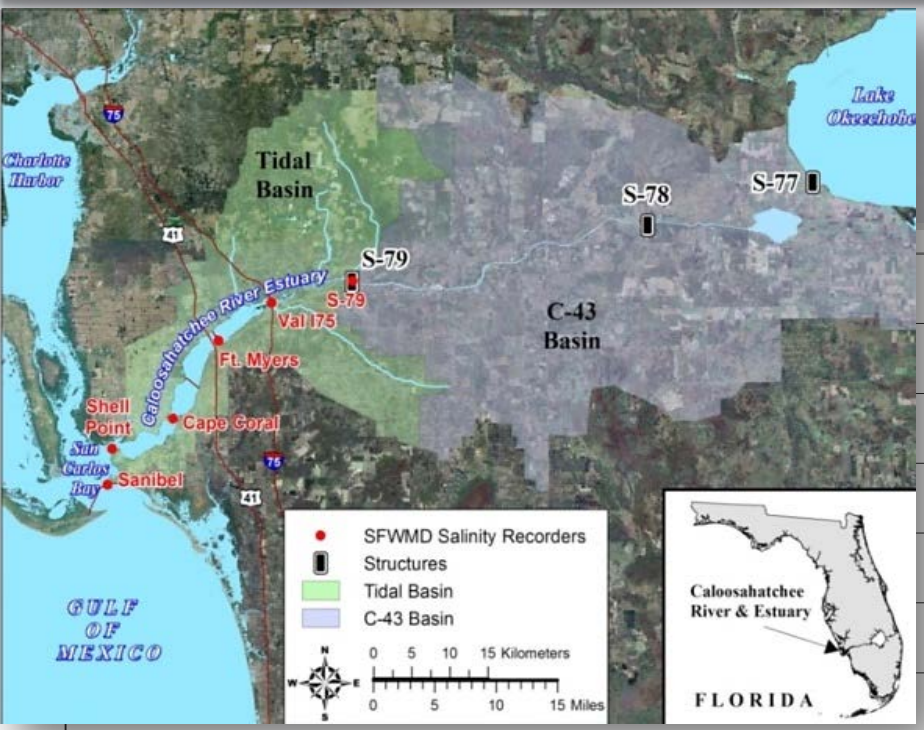
July 7, 2014



August 11, 2014



Caloosahatchee Estuary



Weekly Average Inflow
Aug. 5, 2014 - Aug. 11, 2014

Inflow from Lake:	0 cfs
C-43 Basin Inflow:	3097 cfs
Tidal Basin Inflow:	1833 cfs
Total :	4930 cfs

Data are provisional and subject to change

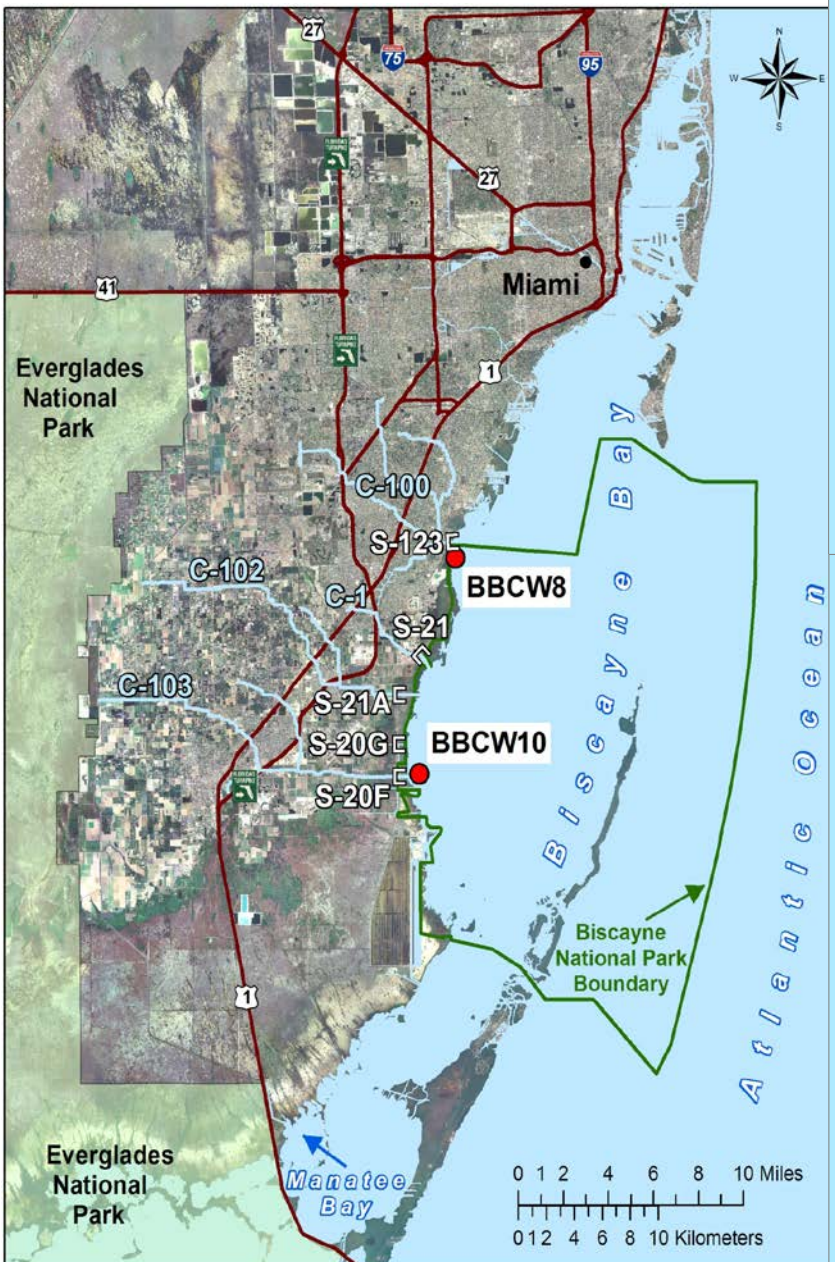
Total Flow (cfs)

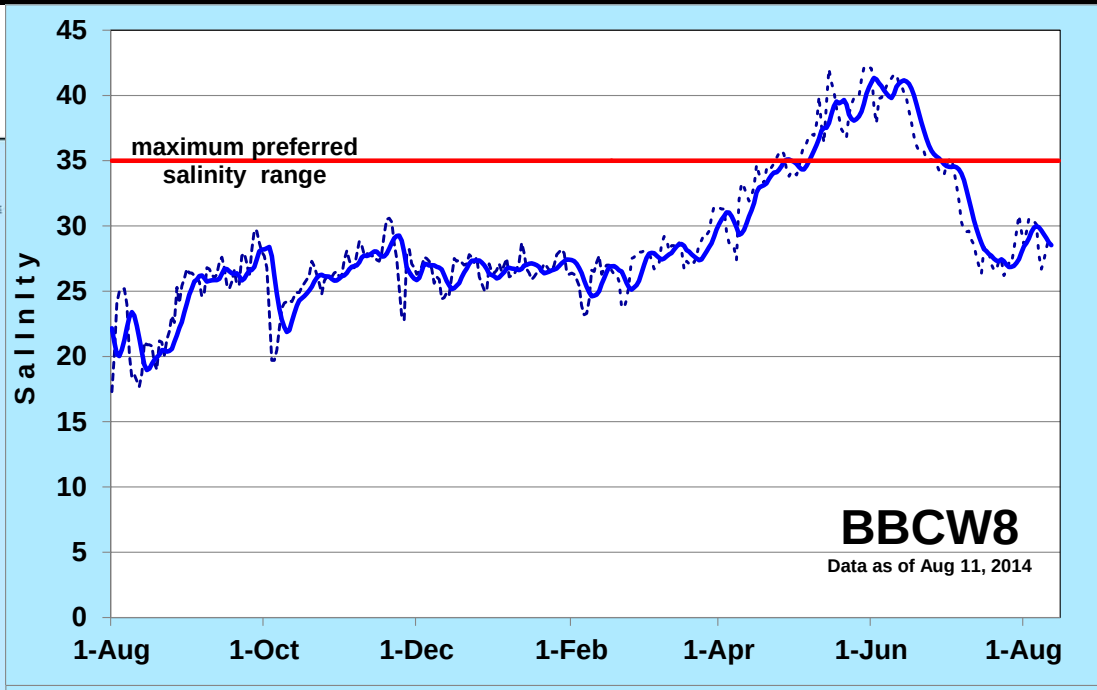
7,000
6,500
6,000
5,500
5,000
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0

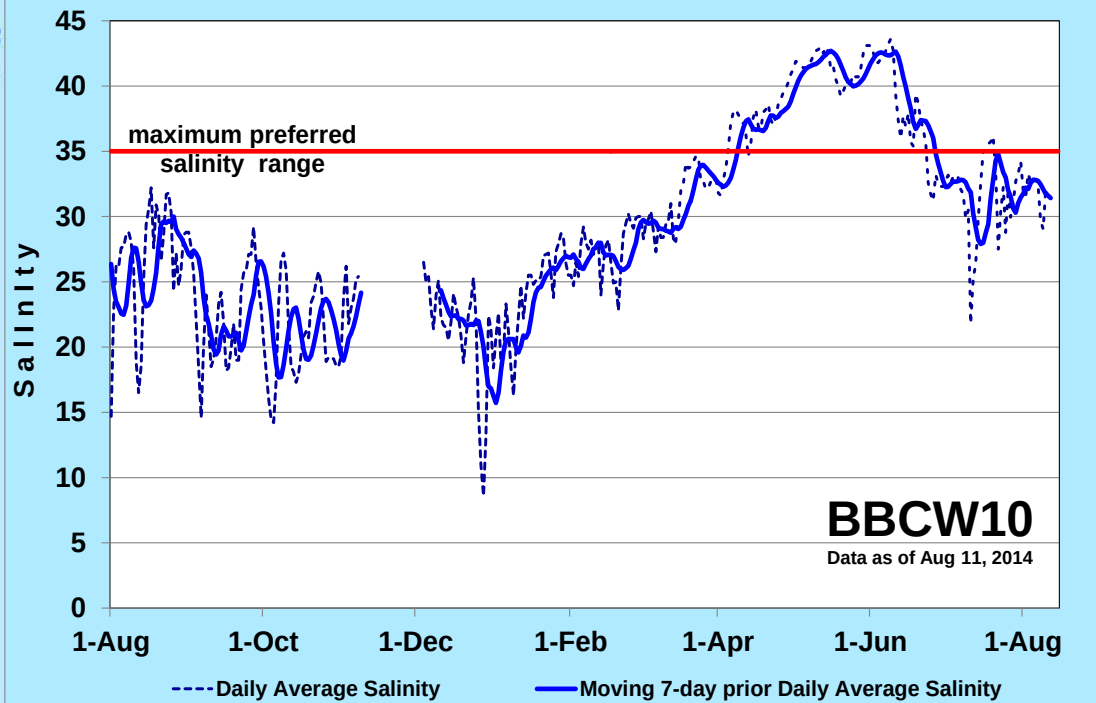
1-Jan 1-Feb 1-Mar 1-Apr 1-May 1-Jun 1-Jul 1-Aug

Inflow from Lake
C-43 Basin Inflow
Tidal Basin Inflow (downstream of S79)

Biscayne Bay Salinity

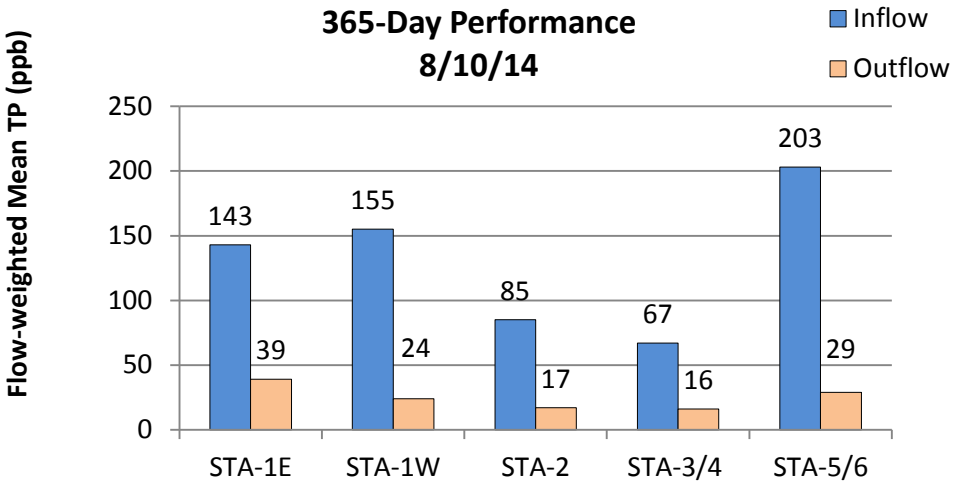


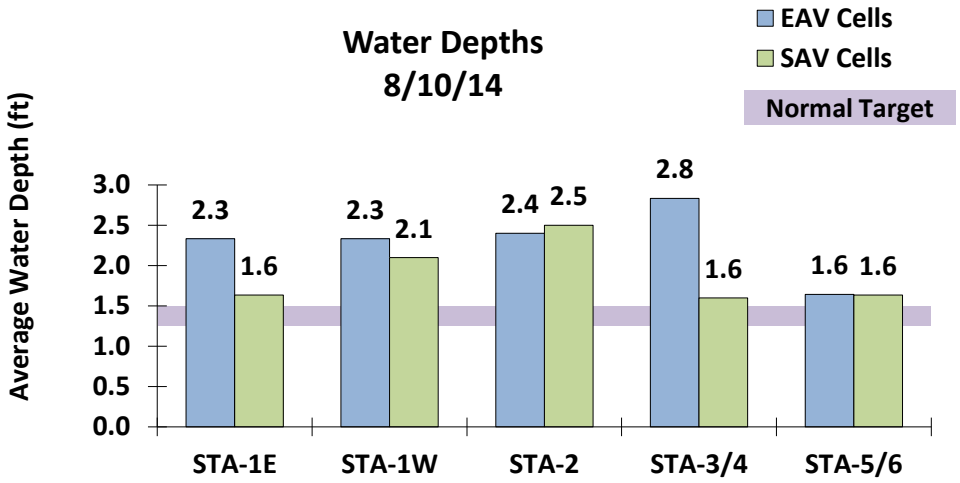




Stormwater Treatment Areas (STAs)
Current Conditions

- Most STA cells are above target water depths
  - Depths in some cells have been elevated (2.5 – 3') for an extended period
- Continued Lake Okeechobee regulatory releases
  - Deliveries to: STA-1E, STA-1W, STA-2, & STA-3/4
  - ~58,000 ac-ft treated (May 1 – Aug 6, 2014)
  - Staff currently monitor impact on vegetation & performance in STAs
    - Increased monitoring will be implemented to better assess impact

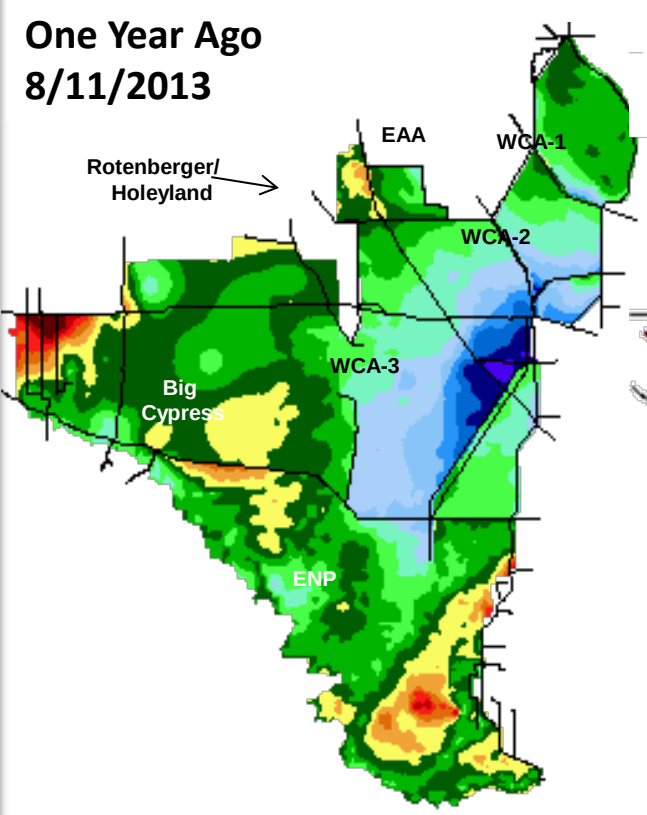


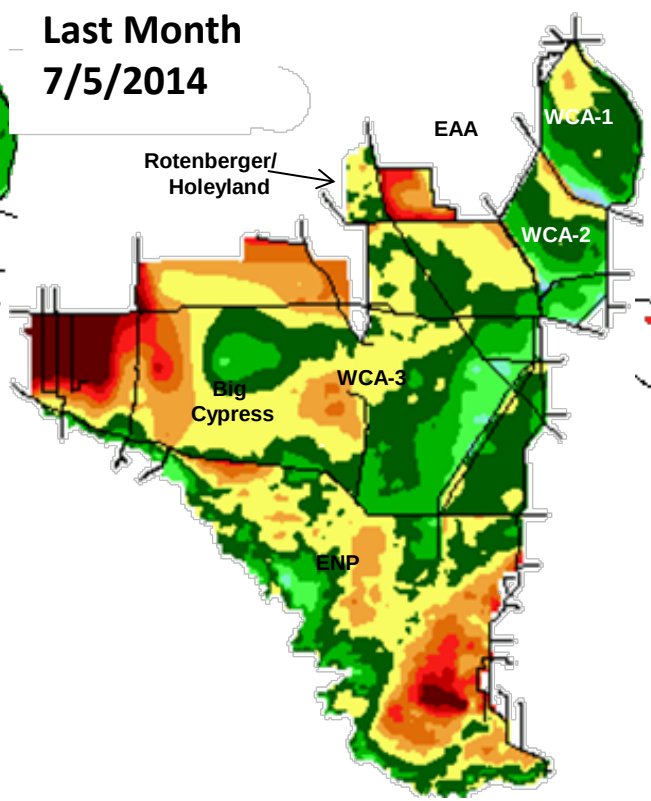


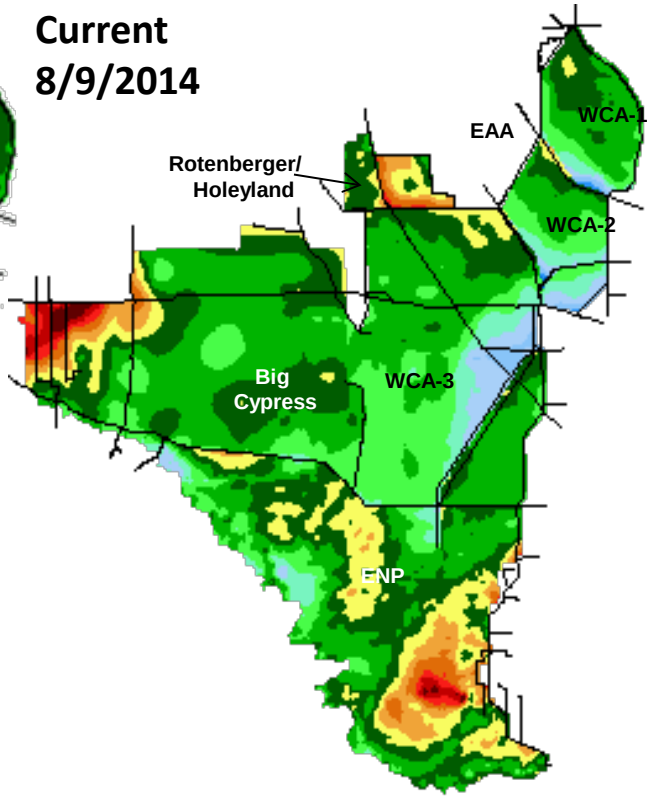
STA-1E Cells 1 & 2 were excluded due to off-line status; STA-5/6 Cell 5A excluded due to sensor problems .

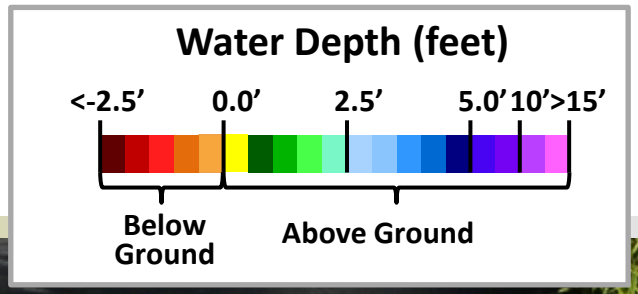
Preliminary data shown

Greater Everglades
Water Depth Monthly Snapshots

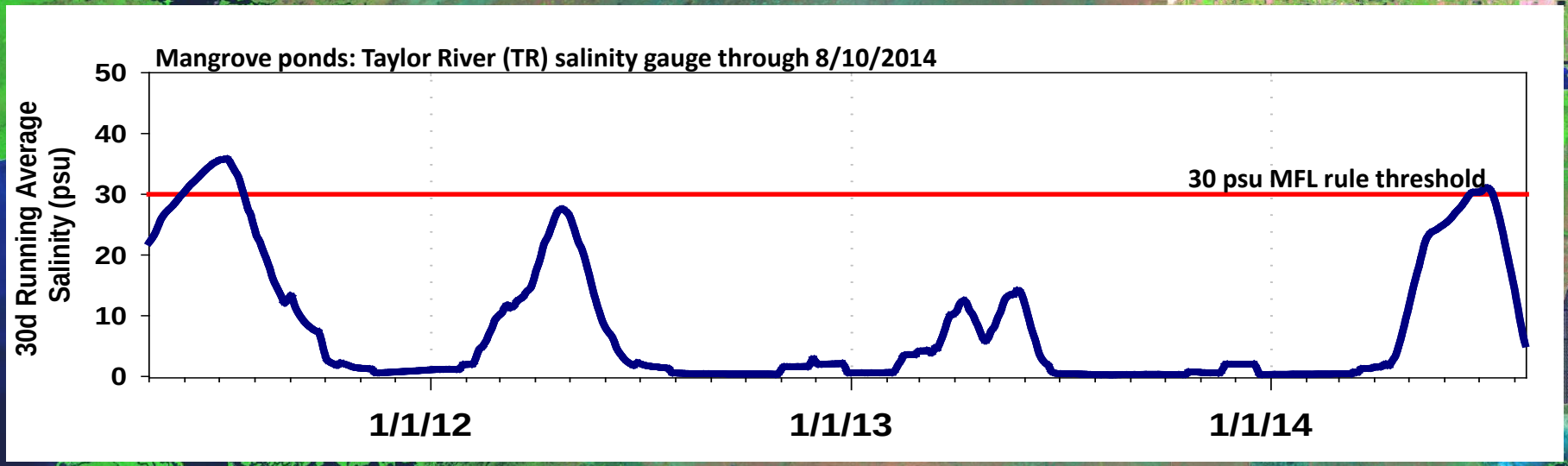








Florida Bay Update



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

TR

Salinity gauge

Creek flow gauge

Thank You!