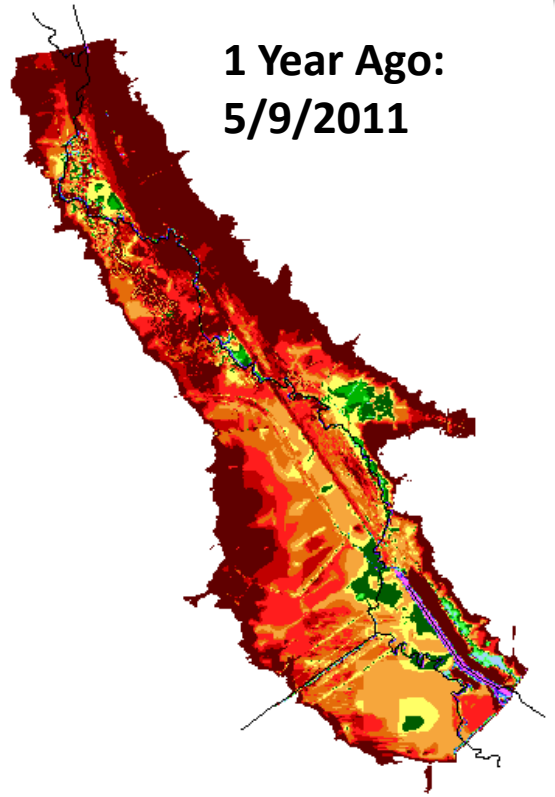
Governing Board Meeting
May 10, 2012

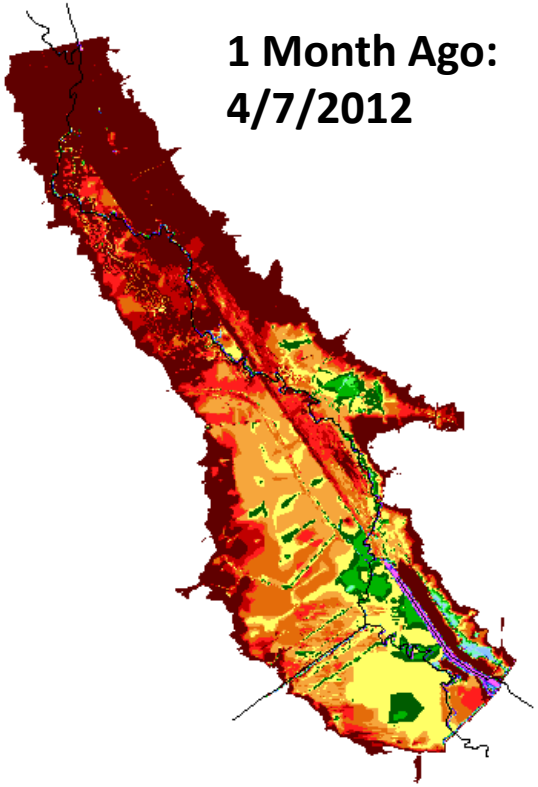
Ecological Conditions Update

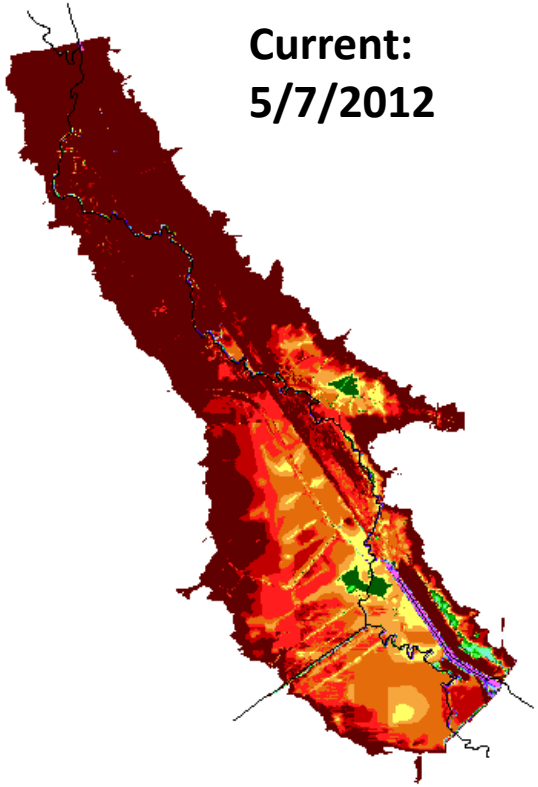
Terrie Bates
Director, Water Resources Division

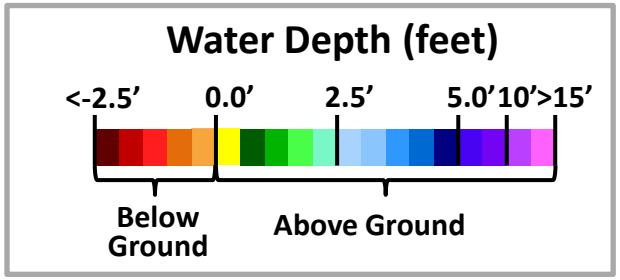
Kissimmee River (Pool C)

Monthly Water Depth Maps



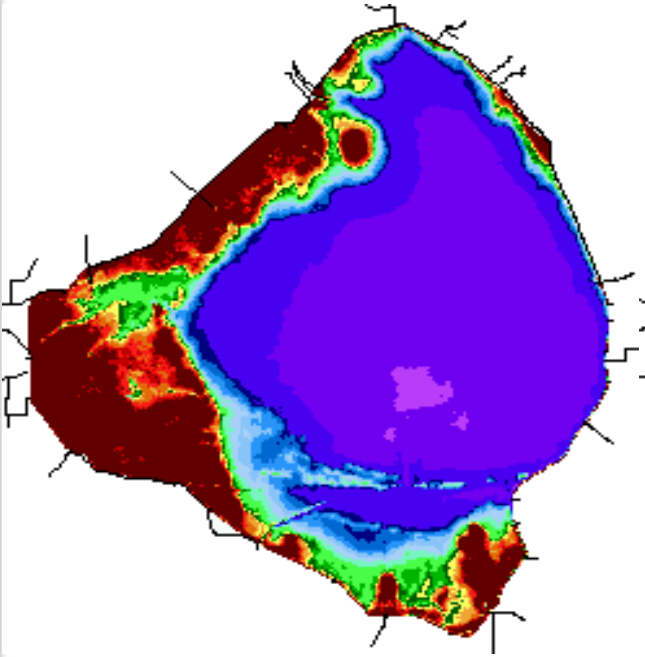






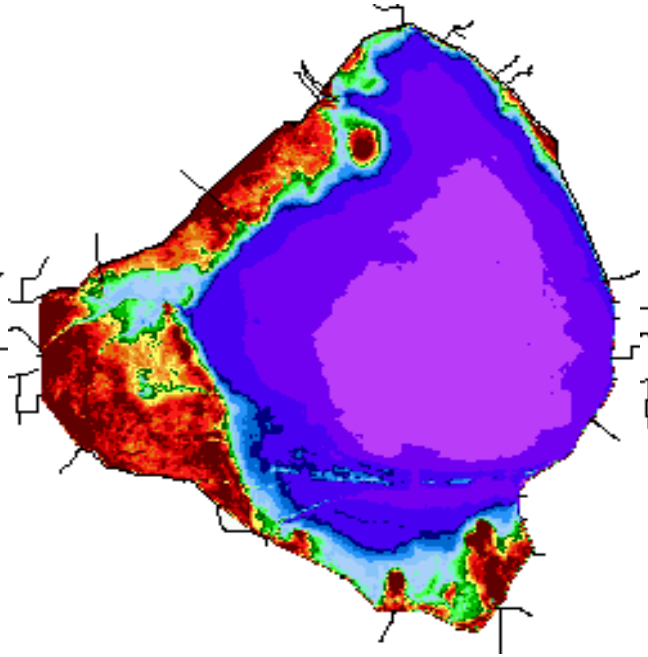
Lake Okeechobee
Water Depth Timeseries Maps

1 Year Ago: 05/07/2011



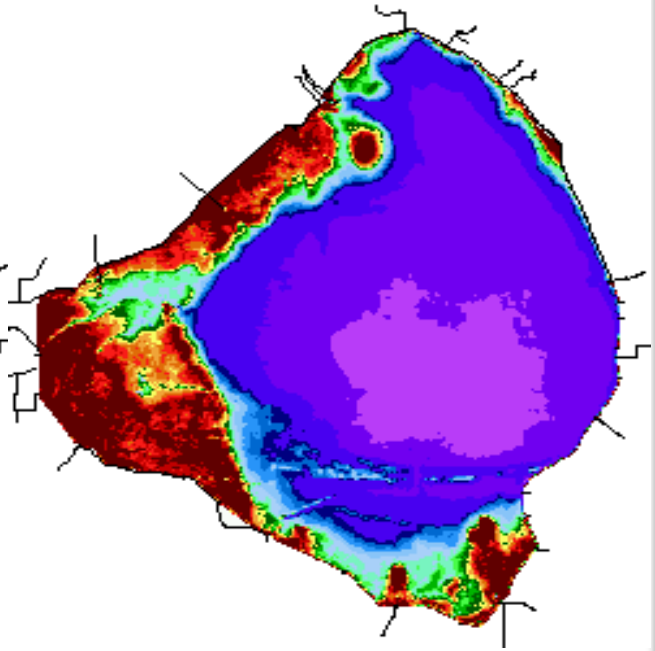
(10.76ft NGVD29)

1 Month Ago: 04/07/2012

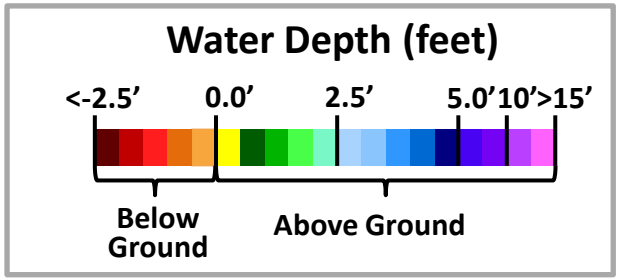


(12.08 ft NGVD29)

Current: 05/07/2012



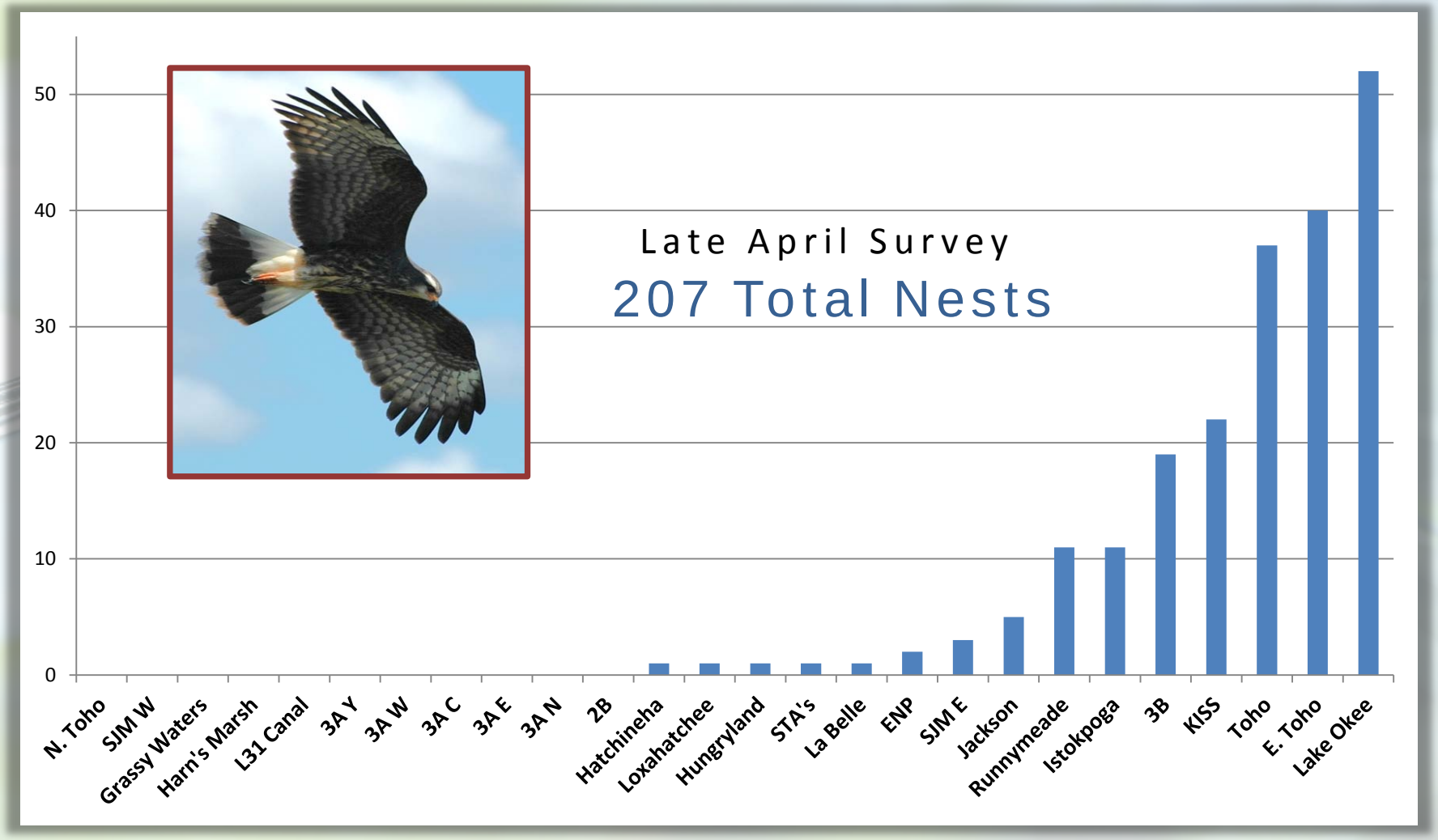
(11.57 ft NGVD29)



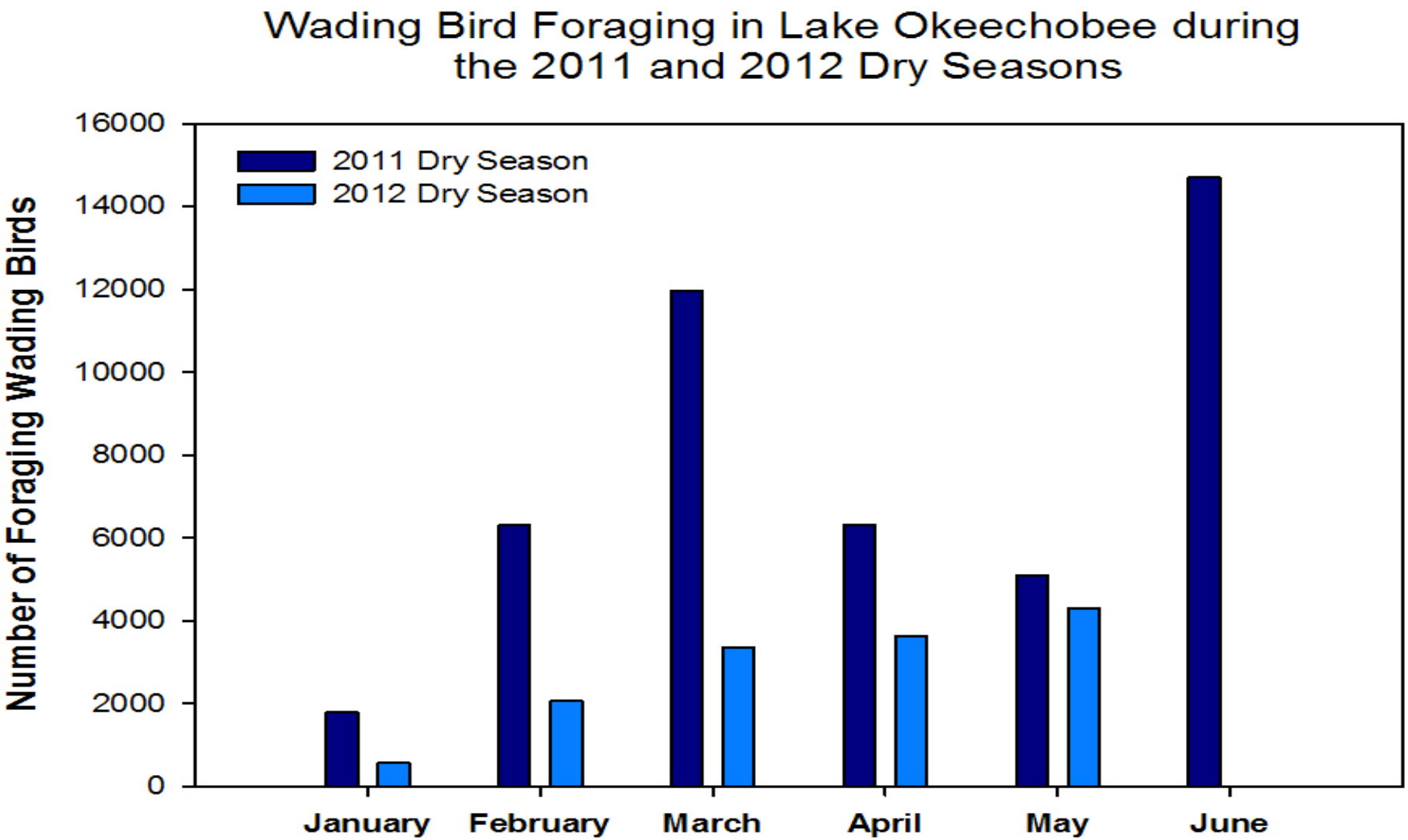
Current Lake Level:
11.58 ft NGVD29

5/9/12

Regional Snail Kite Nesting Activity



Lake Okeechobee
Wading Bird Survey

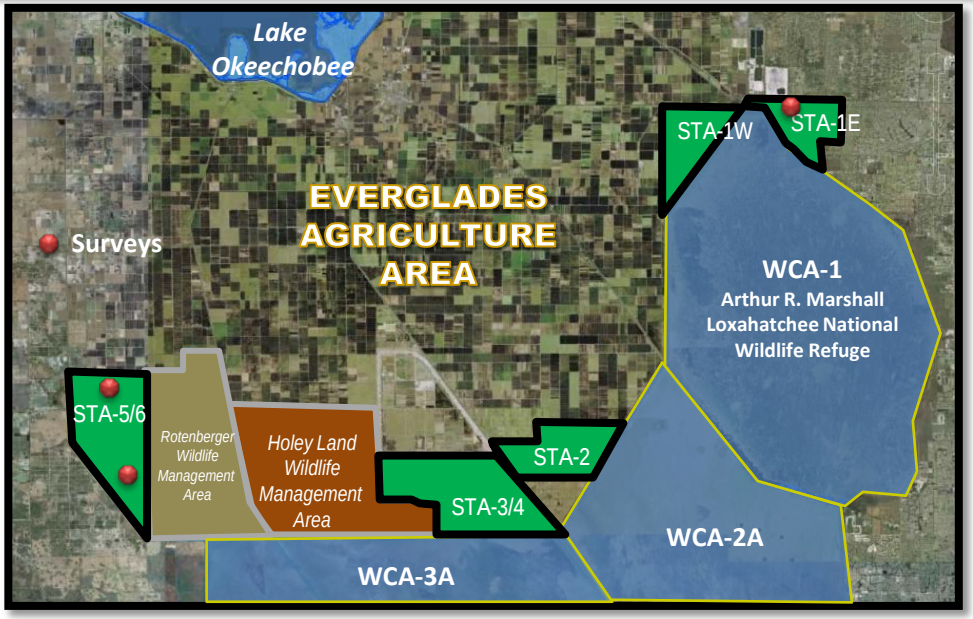


Stormwater Treatment Areas

Dry Season Management Activities

- Vegetation enhancements & activities continue
- Routine vegetation control on-going

Stormwater Treatment Areas
Bird Nesting Surveys



Black-necked Stilt Nesting Season Levee Surveys (Number nests)

STA	Apr-11	Apr-12
STA-1E	4	4
STA-1W	0	0
STA-2	0	0
Compartment B	NS	0
STA-3/4	0	0
STA-5	NS	0
Compartment C	NS	3
STA-6	0	1
Total	**4**	**8**

NS - Not Surveyed

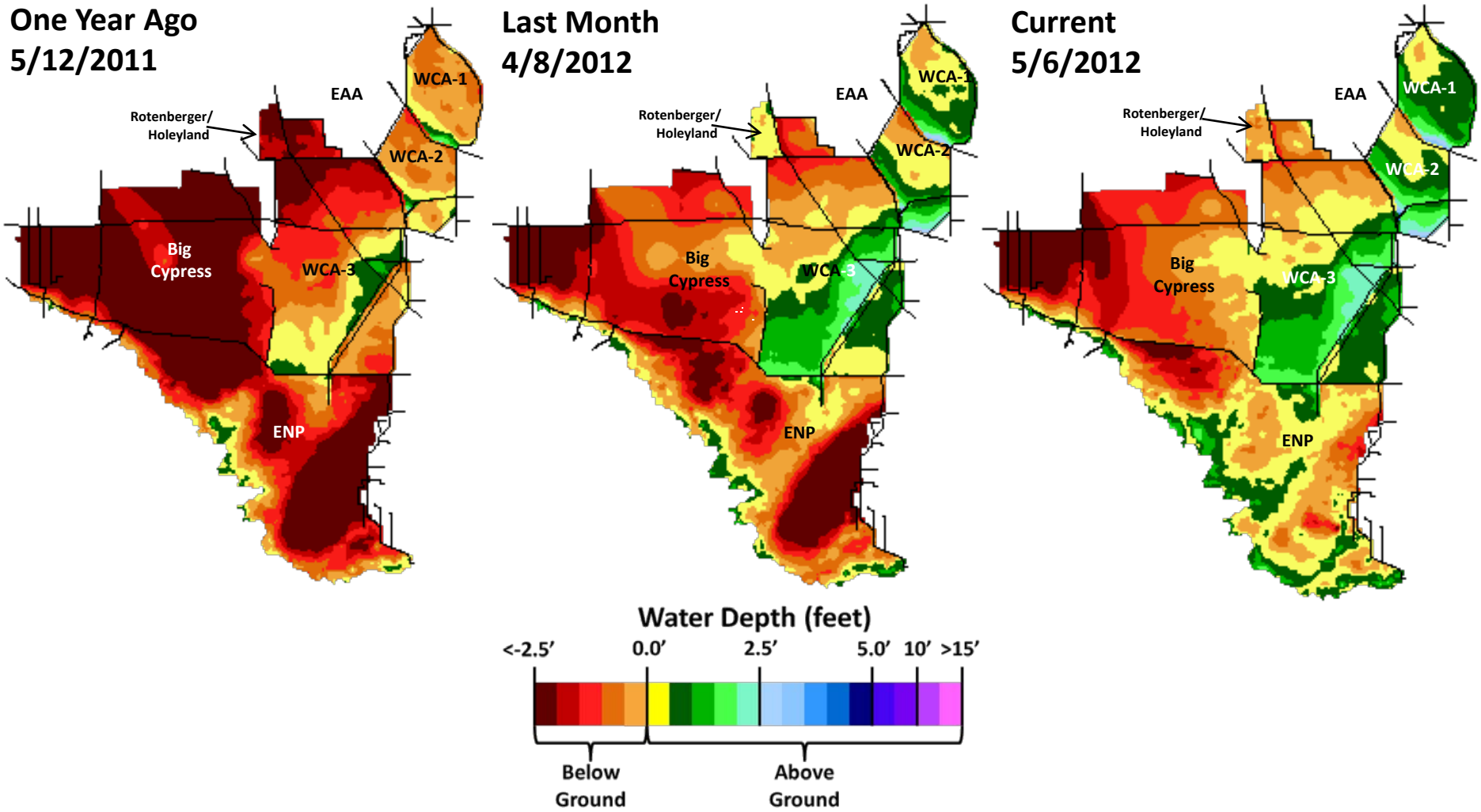
Note: nests found in Apr 2012 are located in treatment cells considered to be non-active

Avian Protection Surveys

Black-Necked Stilt nesting

- STA-1E - 4 nests
- STA-5/STA-6 Compartment C - 4 nests

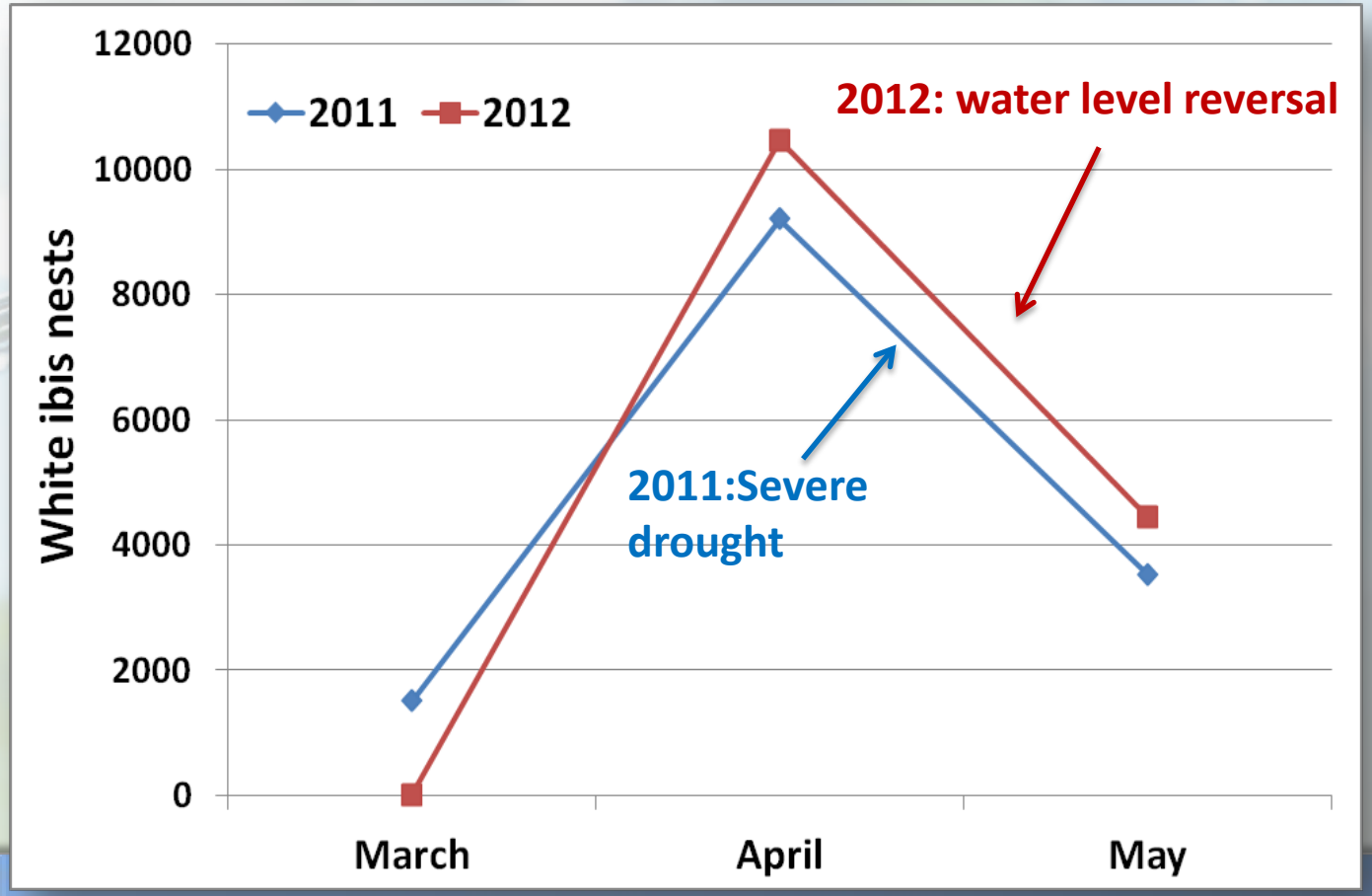
Greater Everglades
Water Depth Monthly Snapshots



Greater Everglades

Everglades Wading Bird Update May 2012

✓White ibis nesting was unsuccessful in 2011 & 2012 for different reasons



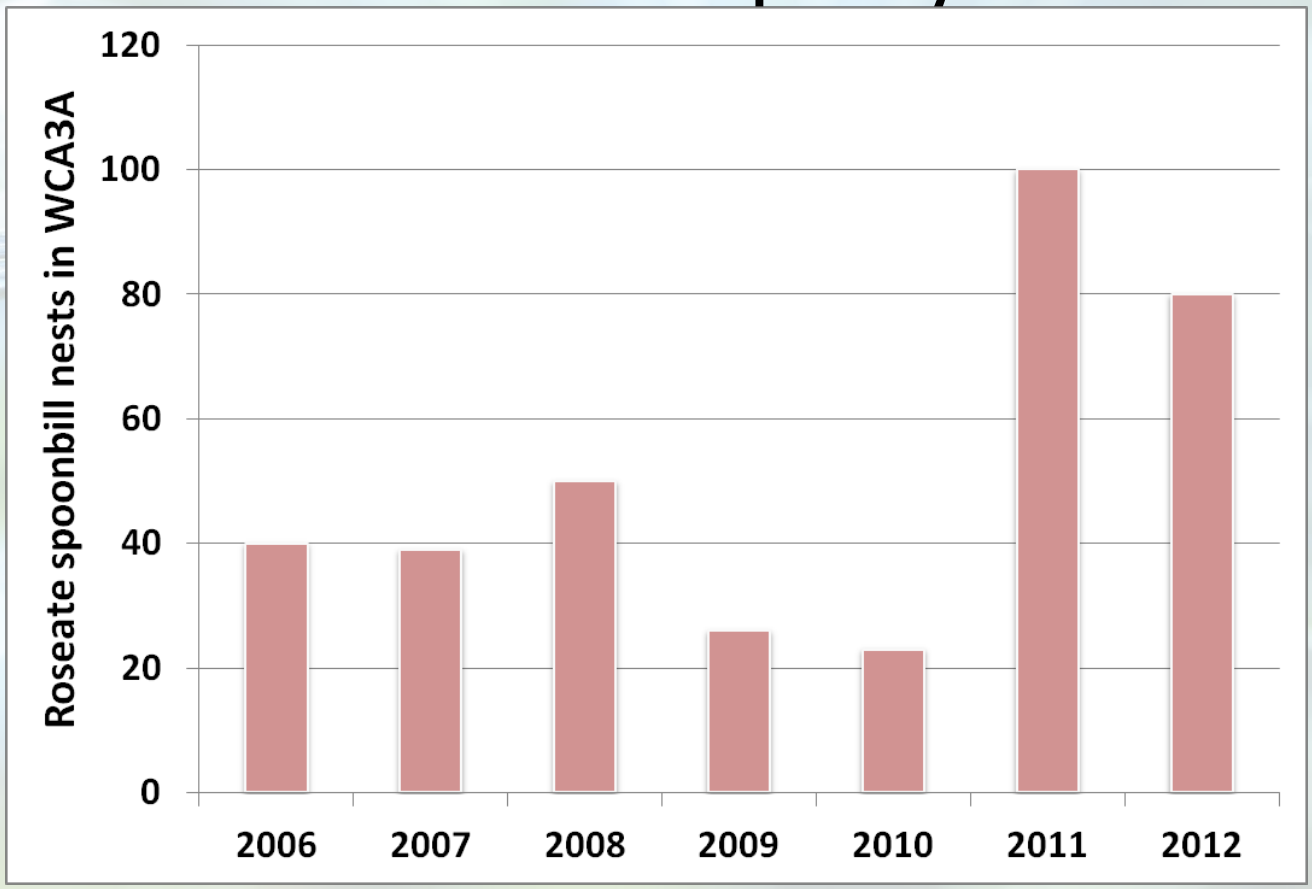
Photos: J. Curzon, R. Bennett

Greater Everglades

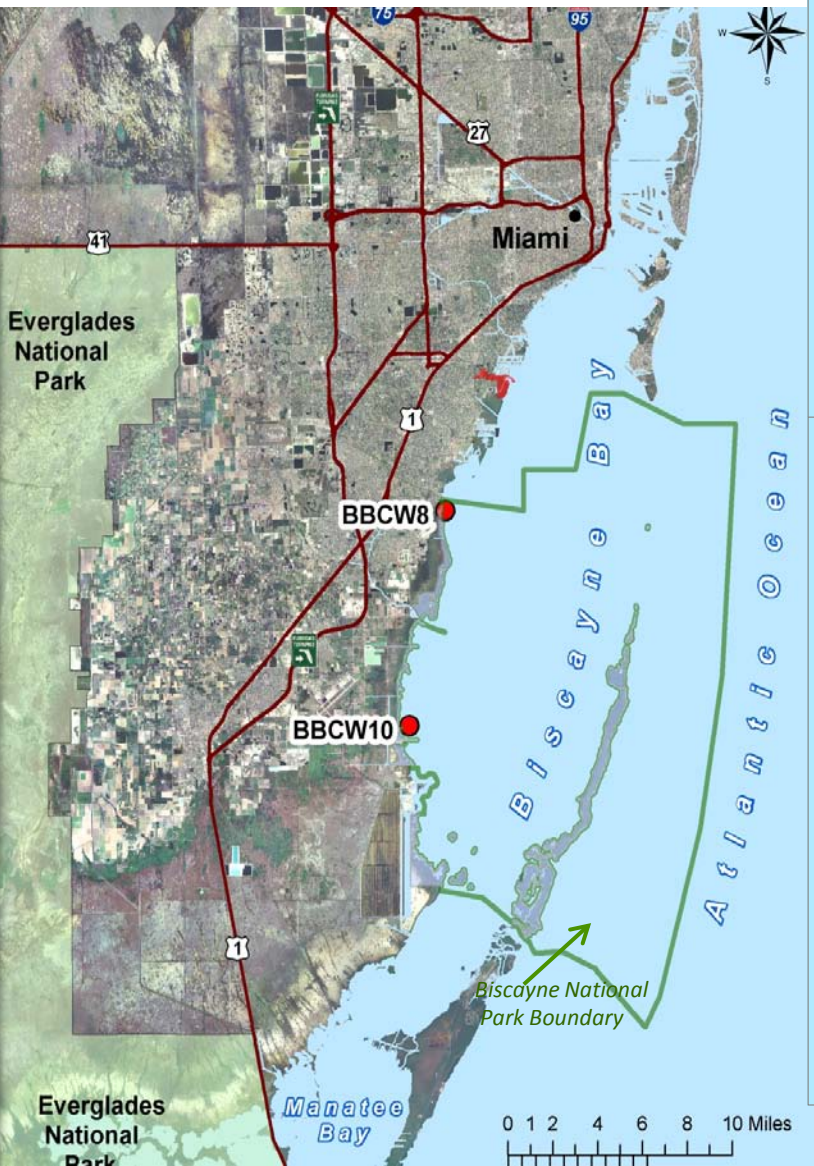
Everglades Wading Bird Update May 2012 (cont)

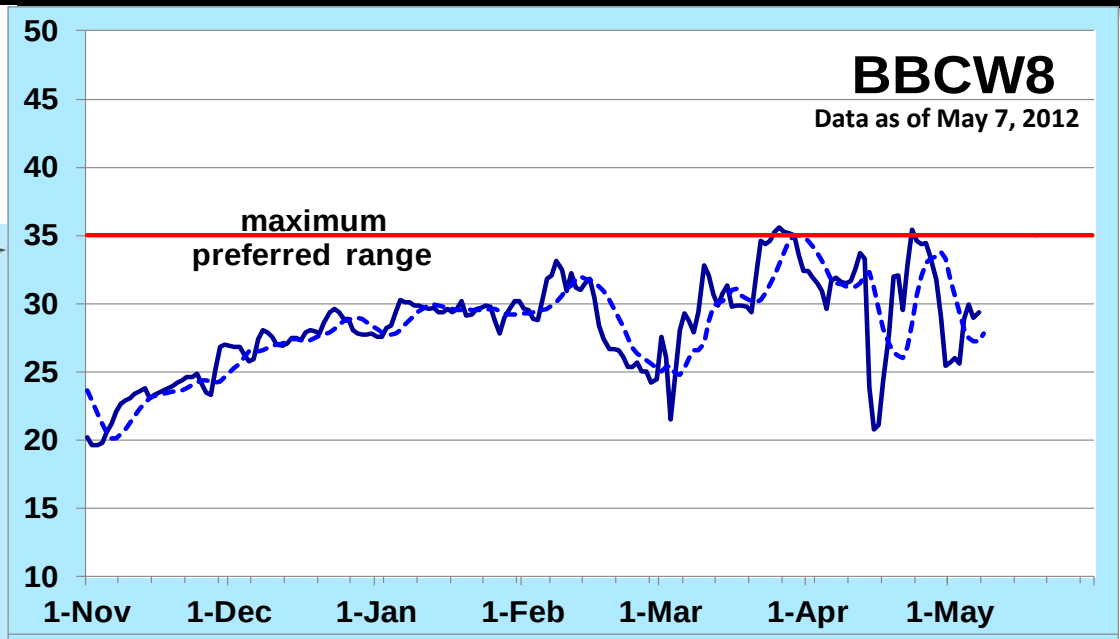
Photos: R. Bennett

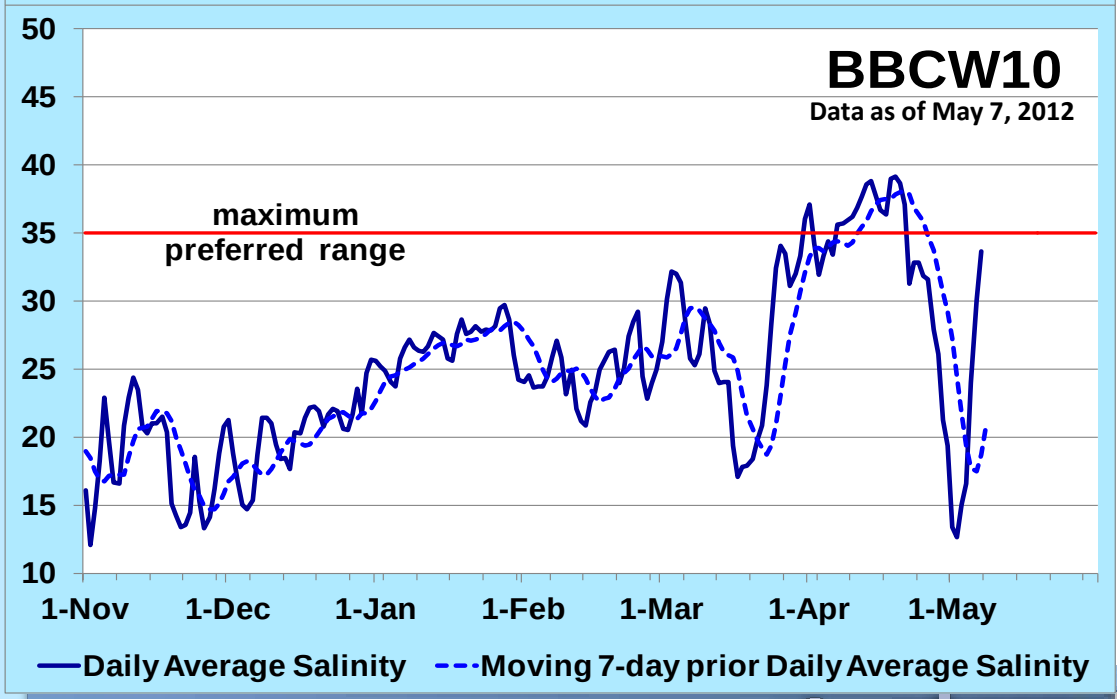
Spoonbill nesting has increased in the WCAs over past 2 years



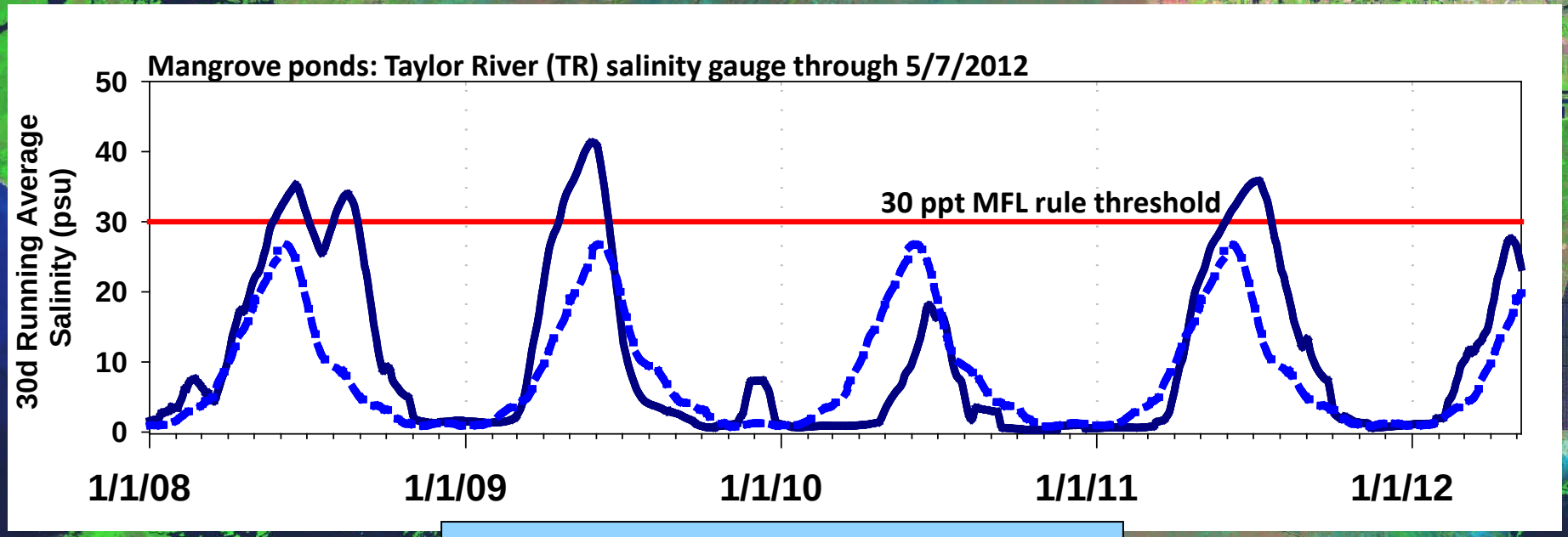
Biscayne Bay Salinity



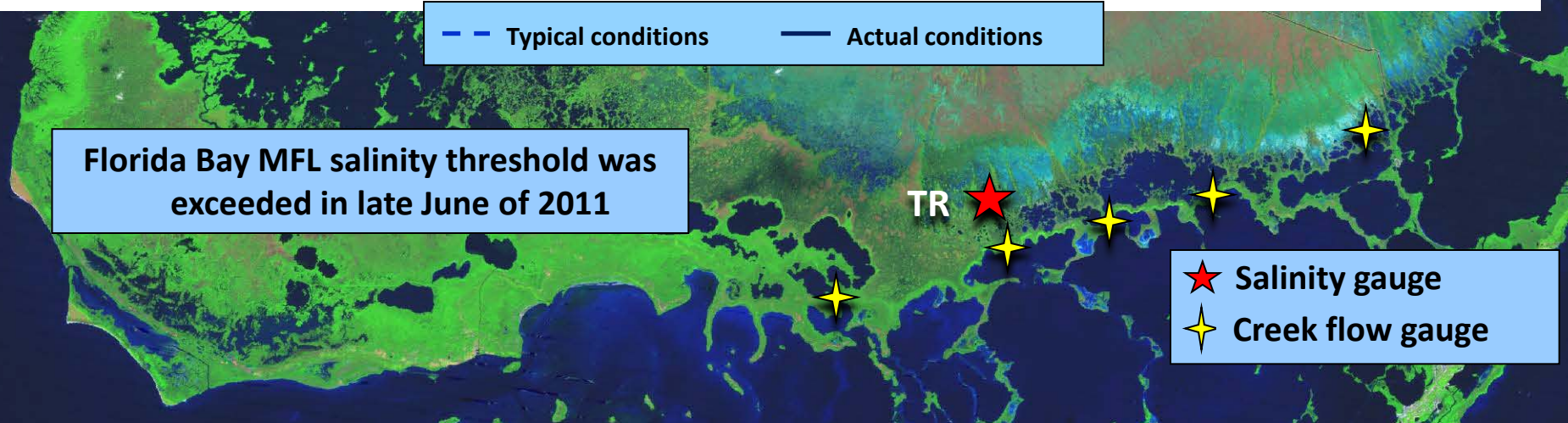




Tracking Salinity in Florida Bay



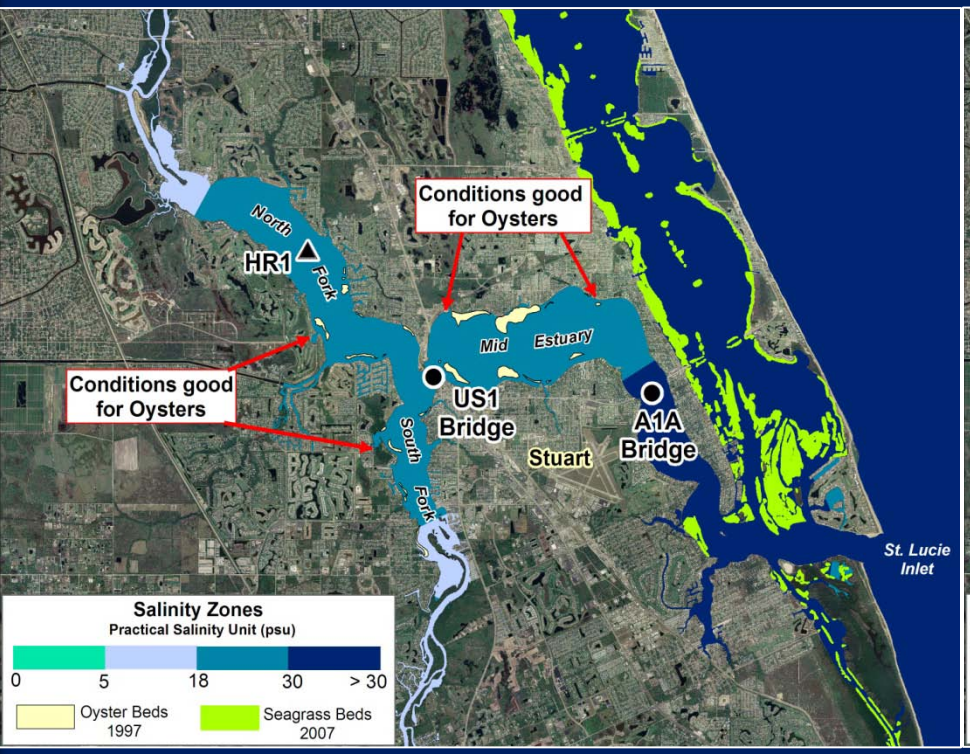
Florida Bay MFL salinity threshold was exceeded in late June of 2011



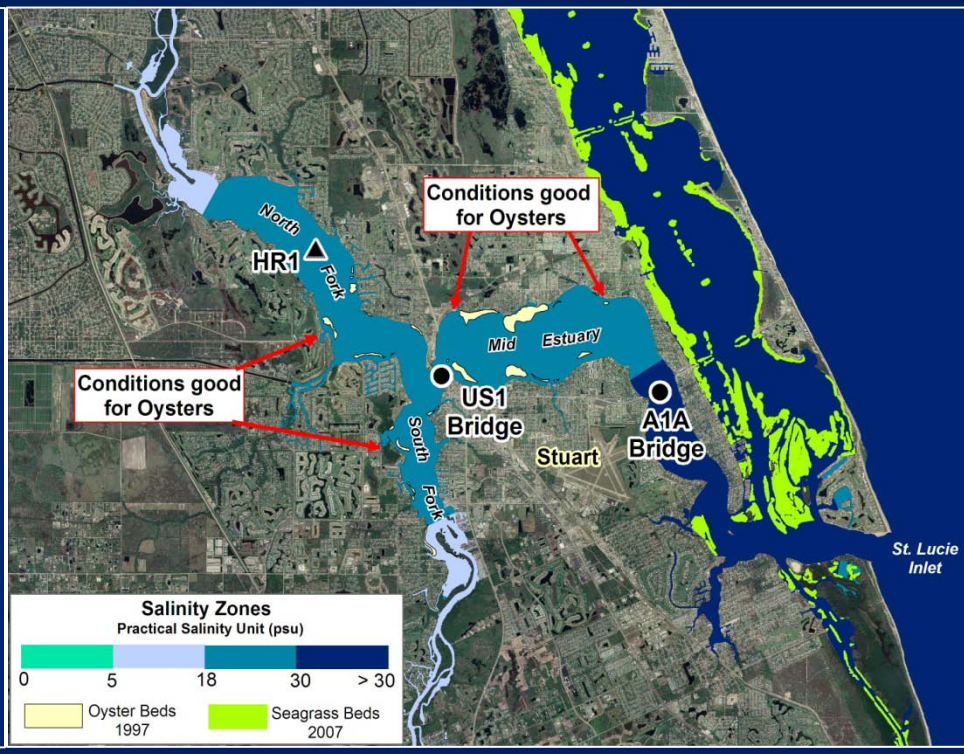
St. Lucie Estuary

Salinity Conditions

April 9, 2012



May 7, 2012

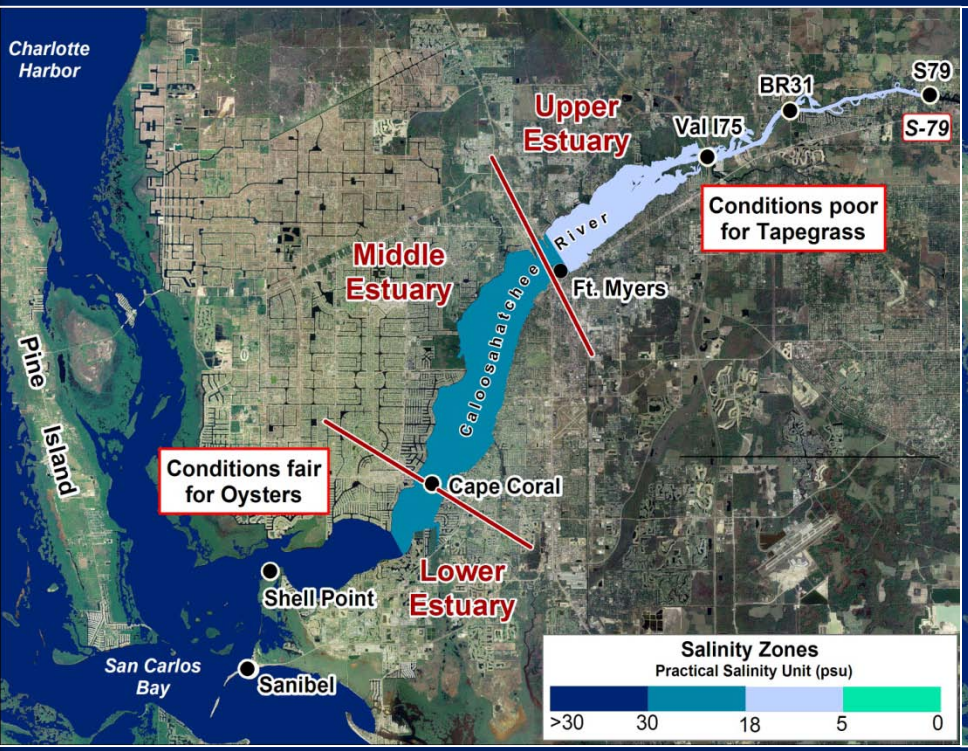


NOTE: Good Range for Oysters: 10 – 30

Caloosahatchee Estuary

Salinity Conditions

April 9, 2012



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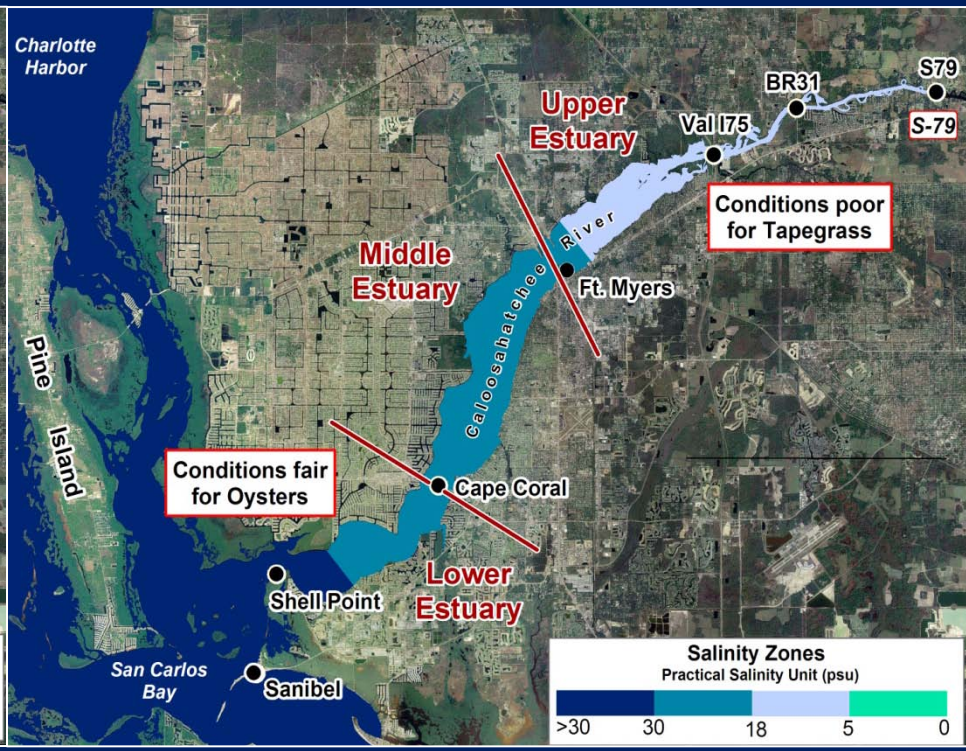
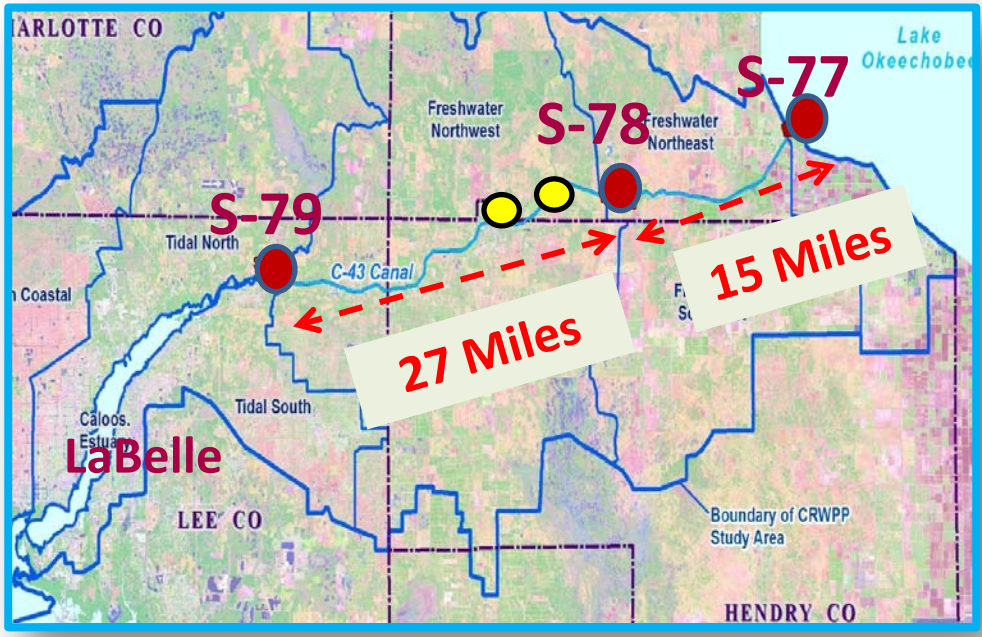


NOTE: Good Range for Oysters: 10 – 30 Optimal Range for Tape Grass: 0 – 5

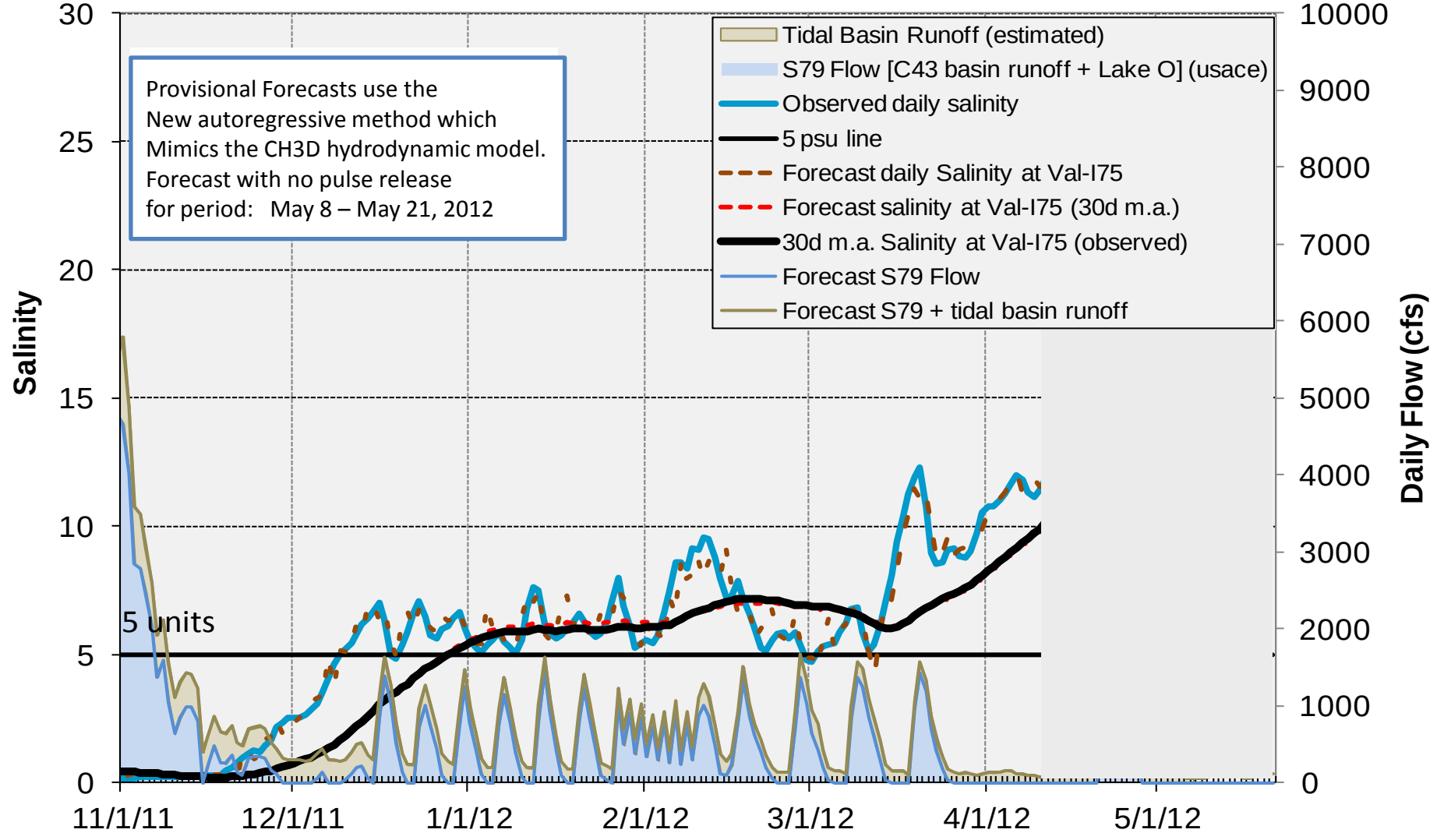
Caloosahatchee Estuary
Water Control Plan – Algae Mgmt

- Board direction to monitor WQ and, if conditions warrant, recommend release for algae management
- No microcystin toxins detected
- Some isolated areas of elevated chlorophyll-a levels between LaBelle & S-78
- 3-day, 2000 cfs pulse release timed to follow discharges from rainfall event



Caloosahatchee Estuary Flows and Salinity
Observed and Forecast Salinity at Val I-75

Forecast 1: S-79 =0 cfs & TBR = 100 cfs



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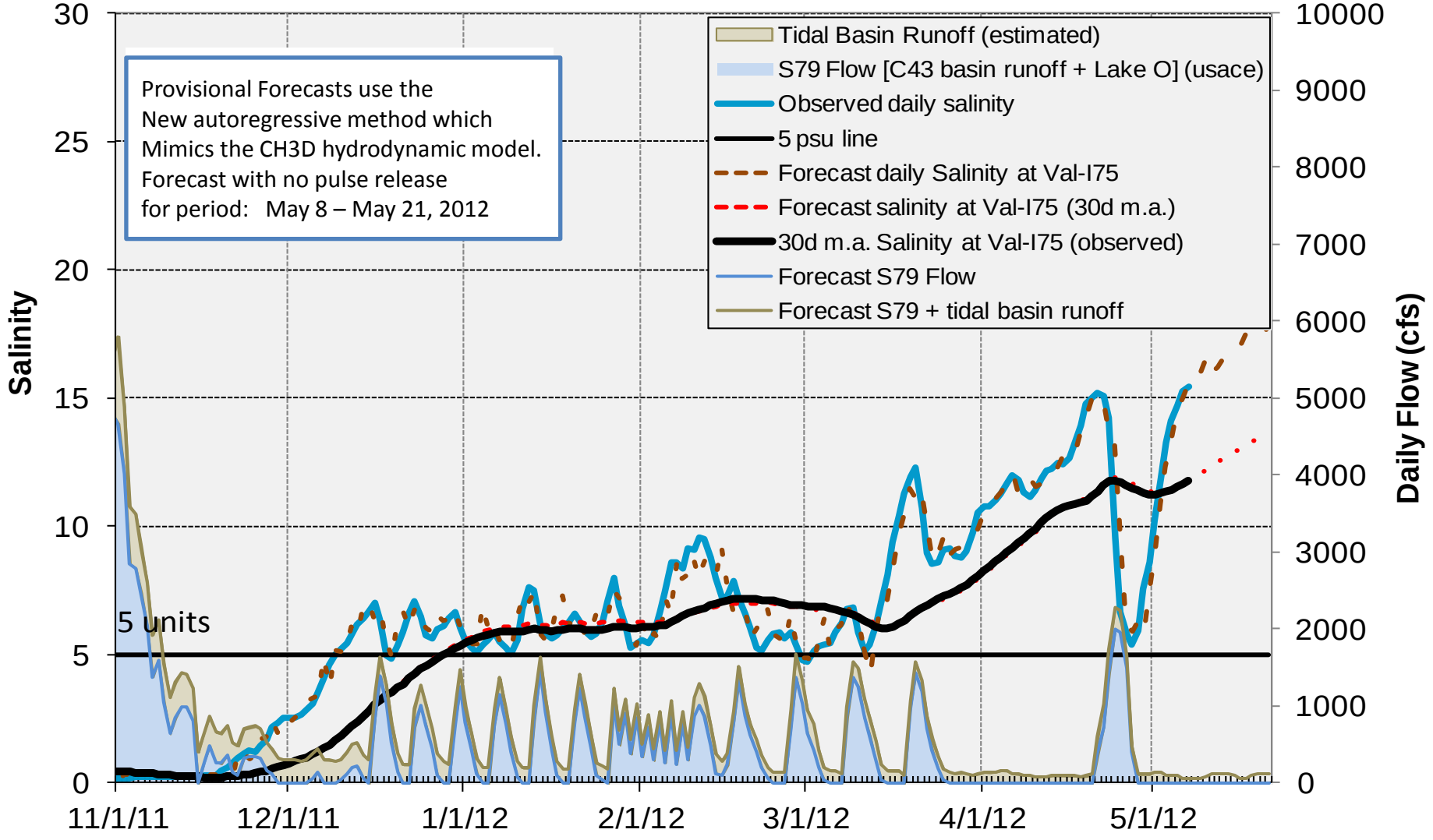

Caloosahatchee Estuary
Water Control Plan – Algae Mgmt

- **Periodic aerial inspection**
- **WQ sampling of 27 miles between S-78 & S-79 on Monday 5-7-12**
- **No widespread significant increase in chlorophyll-a between S-78 and S-79**
  - **Before release: 16.29 ug/l (avg)**
  - **After release: 15.54 ug/l (avg)**
- **No microcystin toxins detected**

Caloosahatchee Estuary
Water Control Plan – Algae Mgmt

Algae Bloom Management

Water Control Plan:

- Direct staff to continue to monitor WQ and, if conditions warrant, request the ACOE conduct a short duration pulse release to manage algal bloom conditions in the Caloosahatchee River under Additional Operational Flexibility provisions
- Monitoring response and potential to repeat

Chuck Hanlon

Limpkin (*Aramus guarauna*) chicks wait for a meal by Lake Freddy.
SFWMD headquarters, April 2012