

Water Conditions Summary

South Florida Water Management District
Governing Board Meeting

November 15, 2012

Tommy B. Strowd, P.E., Director
Operations, Maintenance & Construction Division

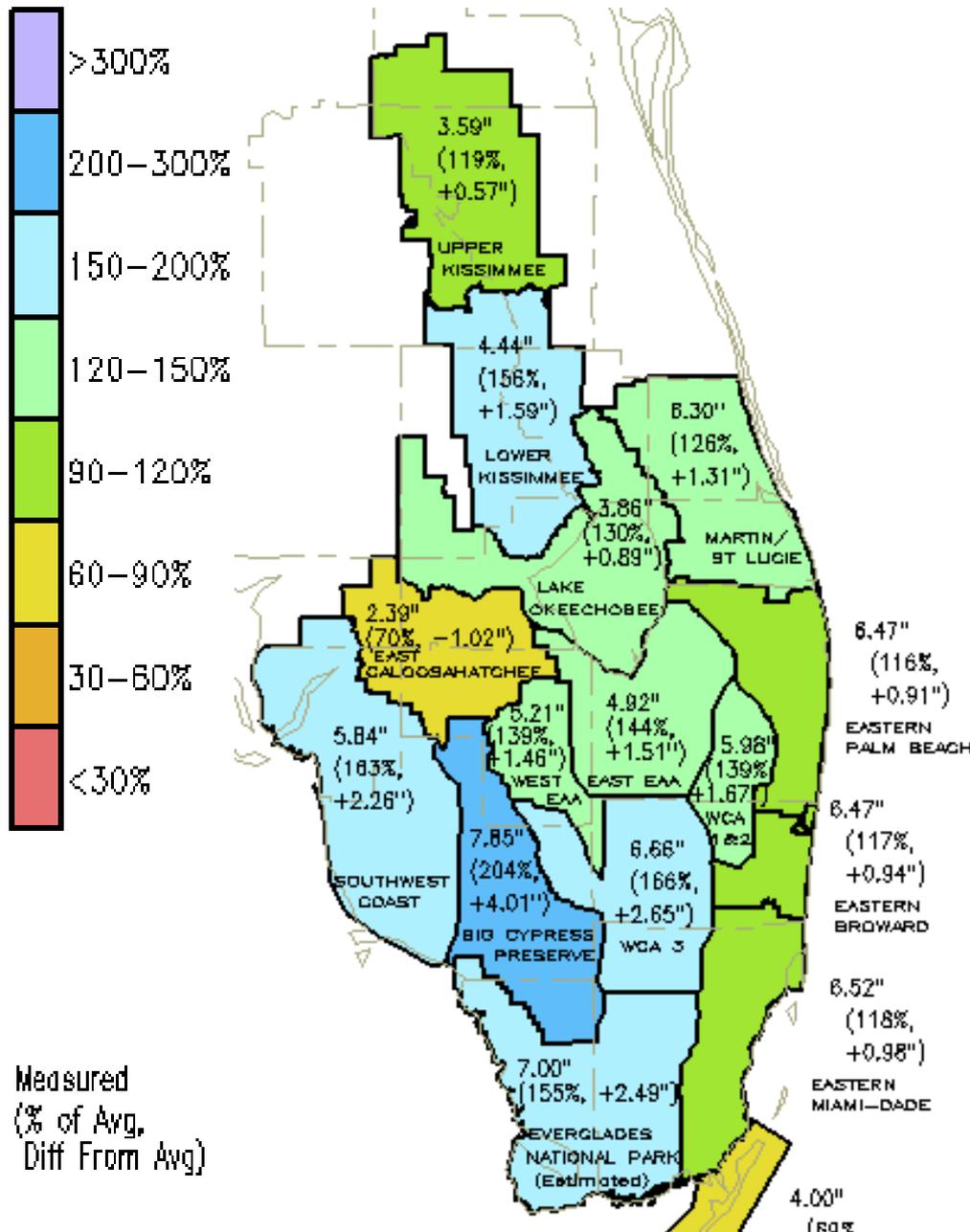
SFWMD 2012

October Rainfall

(2-October to 1-November 2012)

DISTRICT-WIDE: 5.32"
(141% of Avg, or +1.54")

- All areas were above average with the exception of East Caloosahatchee
- Big Cypress Preserve is 104% above average
- WCA3 is 66% above average
- East Caloosahatchee is 30% below average



SFWMD

Wet Season Rainfall

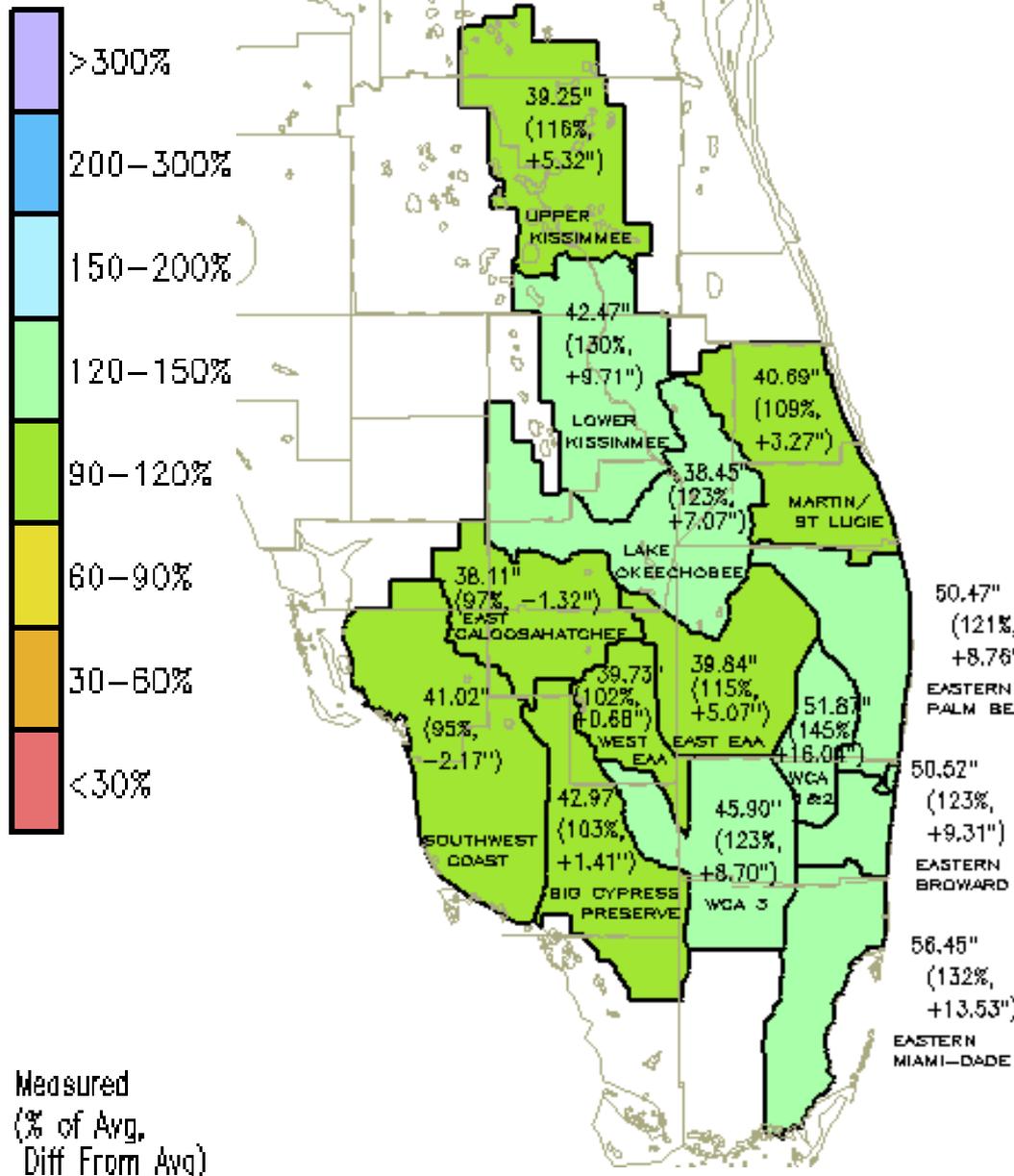
8 May – 9 November 2012

**DISTRICT-WIDE: 42.87"
(115% of Avg, or +5.46")**

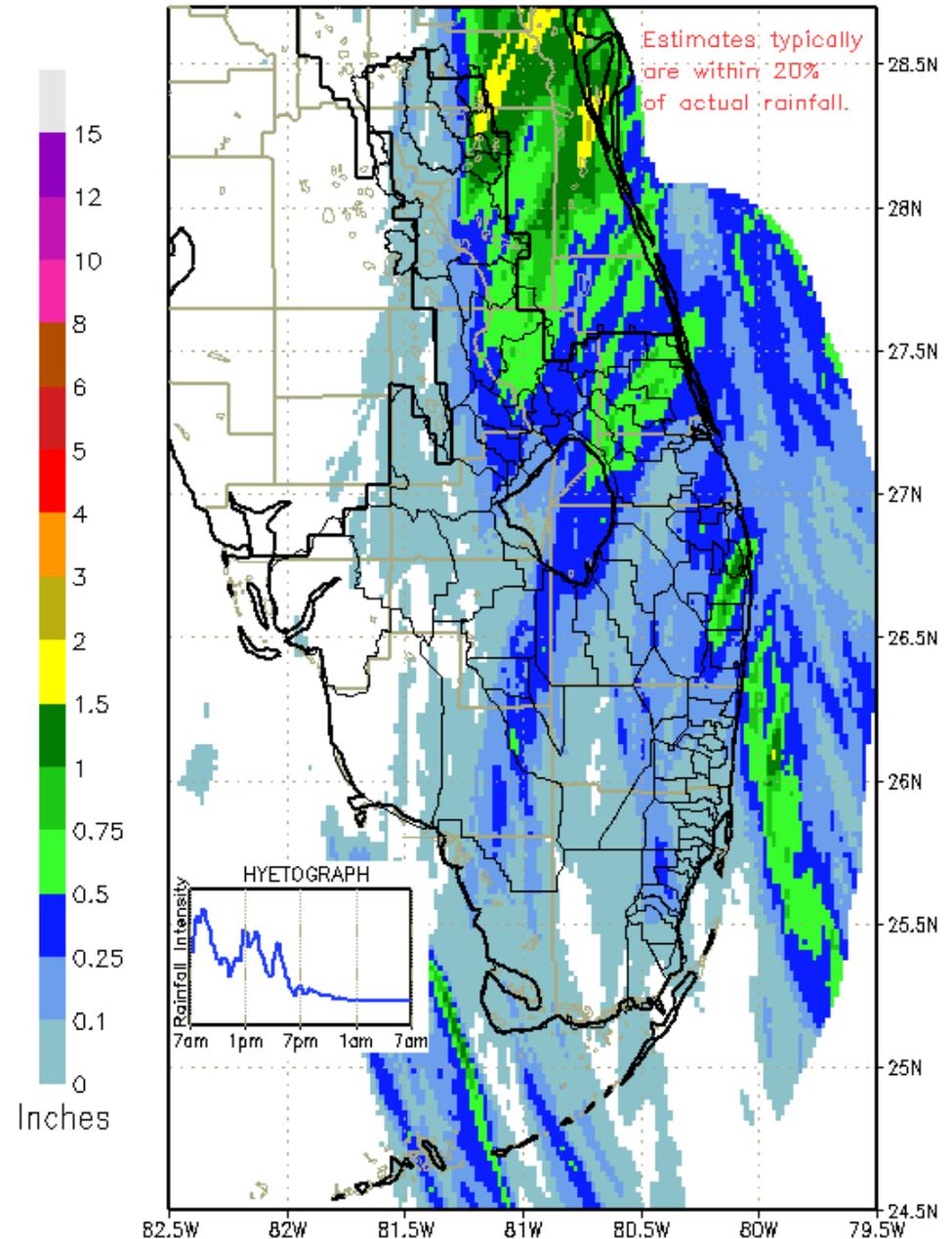
Most basins above average:

- Upper Kissimmee + 5.3"
- Lower Kissimmee + 9.7"
- Lake Okeechobee + 7.1"
- WCA 1 & 2 + 16.0"
- Eastern PB Co + 8.8"
- Miami-Dade + 13.5"

Southwest Coast and East Caloosahatchee are below average



TS Sandy



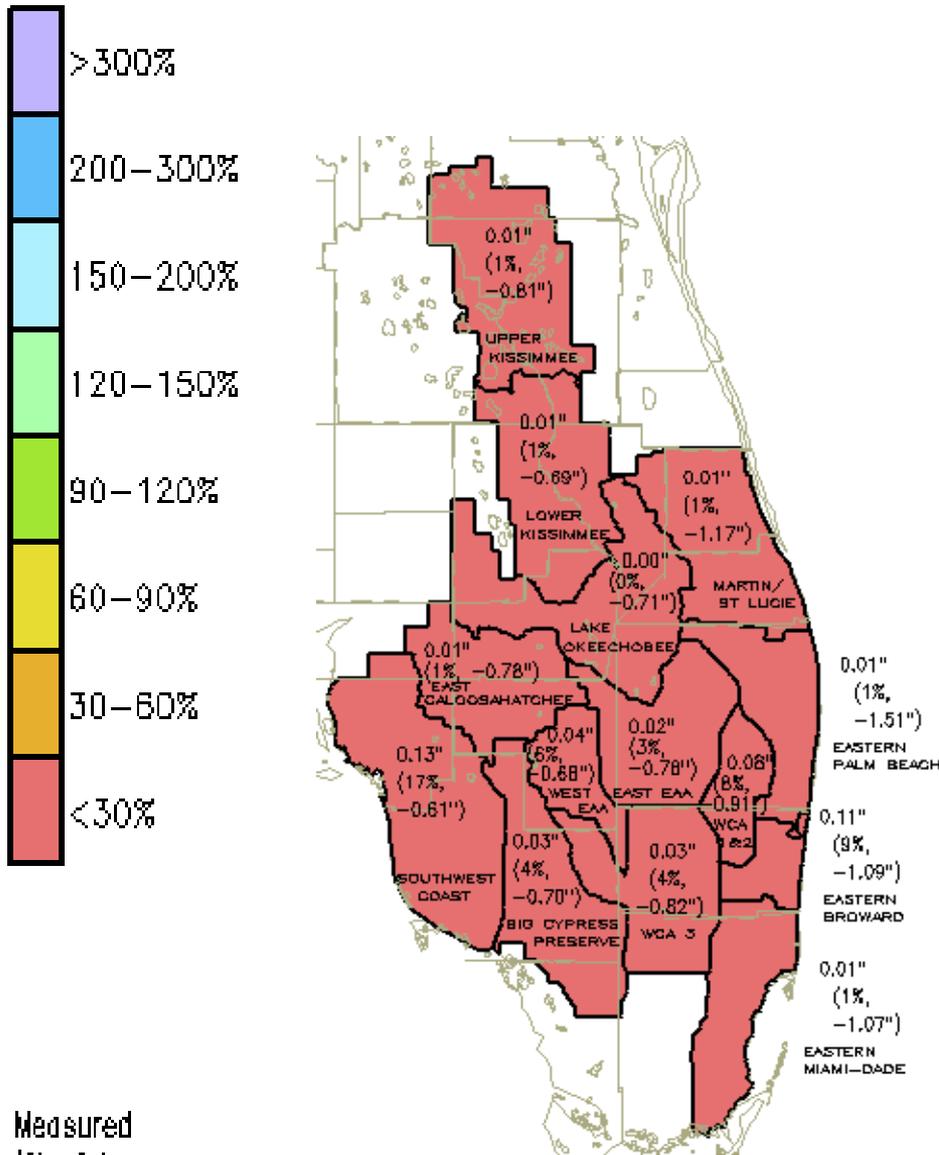
SFWMD 2012

November Rainfall

(2 November to 12 November 2012)

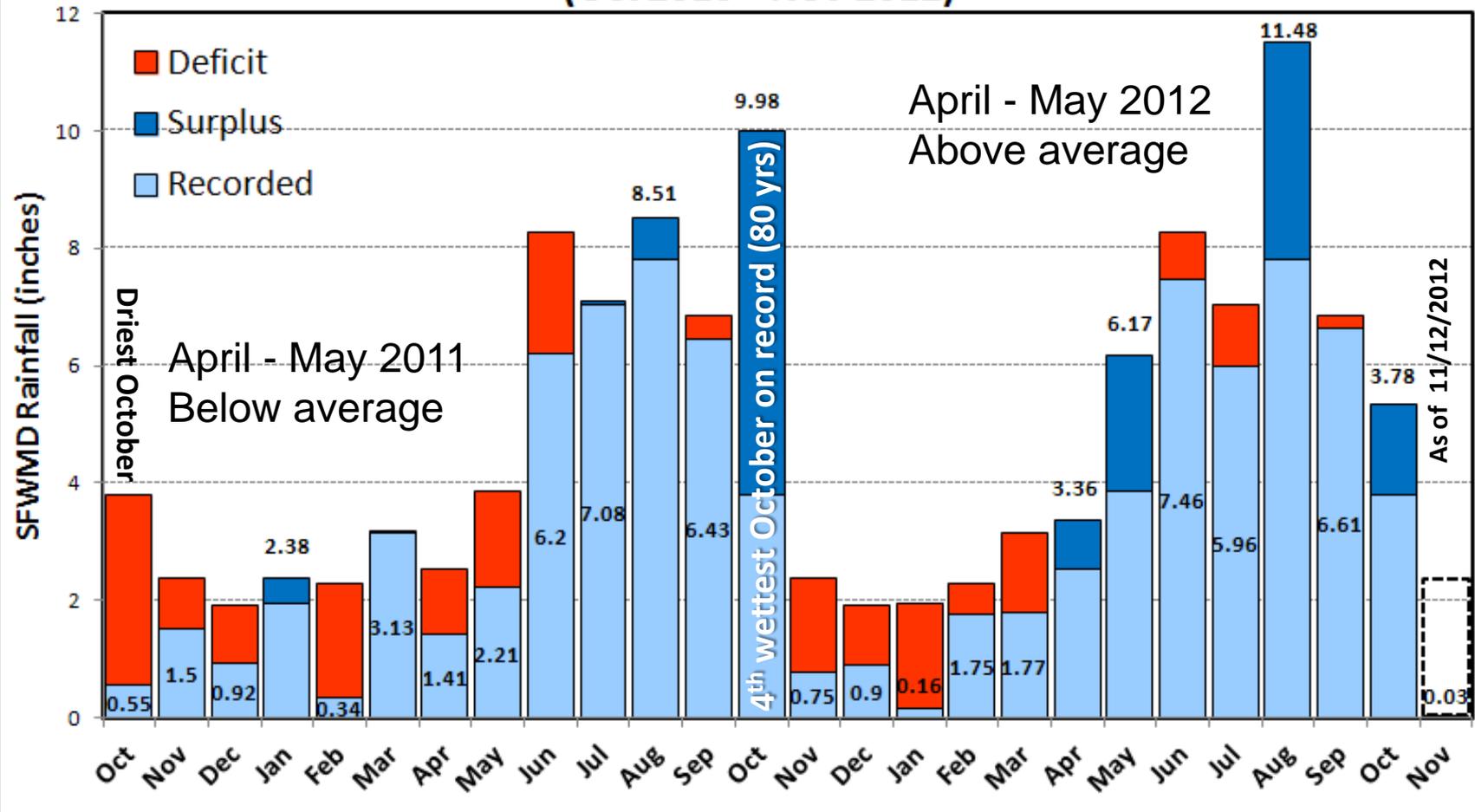
**DISTRICT-WIDE:"
(3% of Avg, or -0.84")**

- Entire District is below average for about the first half of November



Measured
(% of Avg.,
Diff From Avg)

SFWMD Rainfall Distribution Comparison (Oct 2010 - Nov 2012)



2011-12 DRY SEASON:

- Record dry in Upper Kissimmee (98 yrs)
- Ended up close to average

2011 WET SEASON:

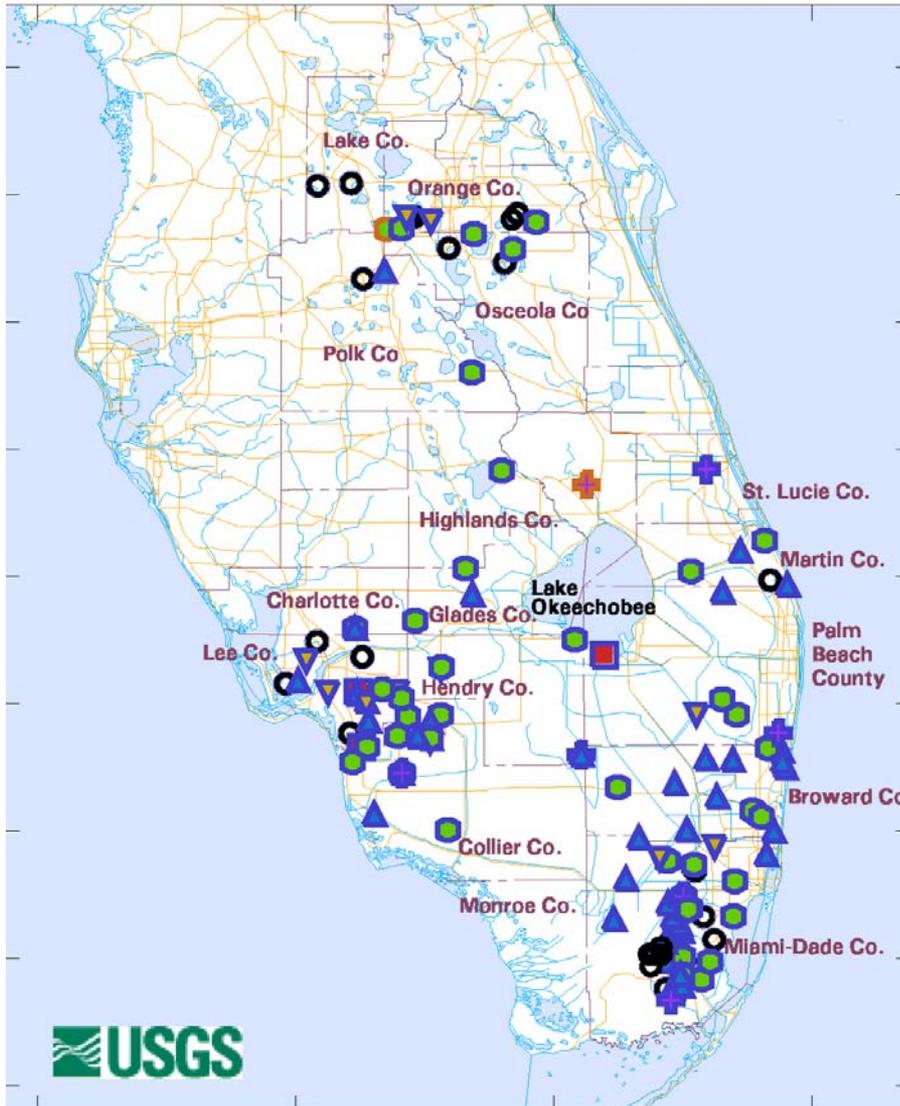
- latest start (June 12) in at least 20 years
- 3 Big Rain Days in October (2.3", 2.3" & 1.7")

2012 WET SEASON:

- started early with wet May, followed by dry June and July . TS Isaac brought August rainfall high above average.
- ended up above average.

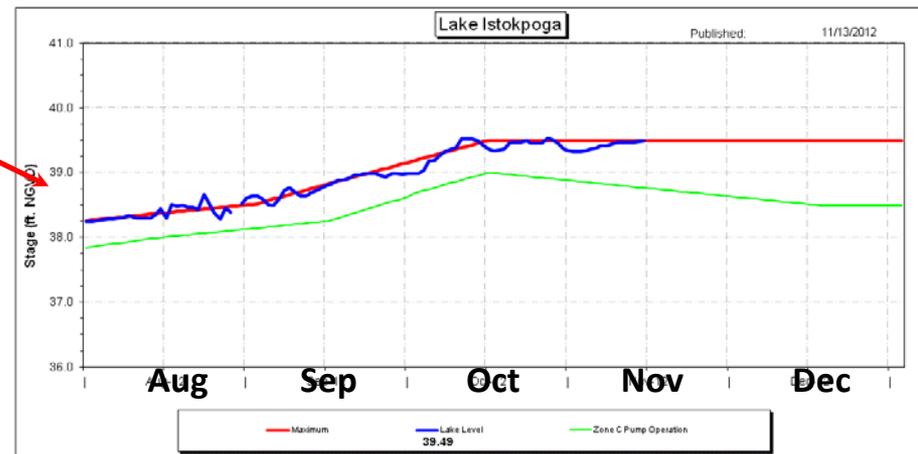
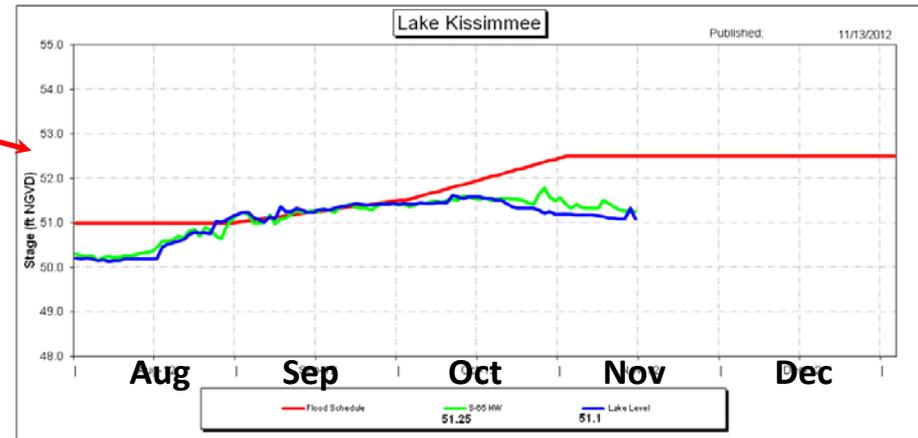
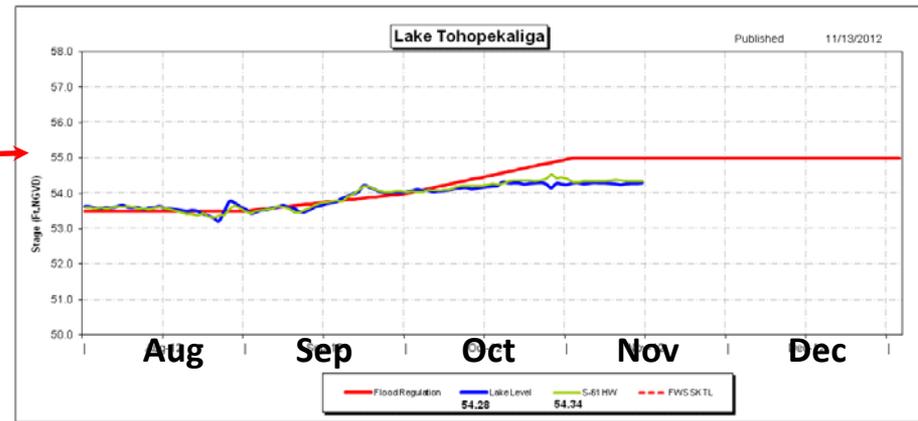
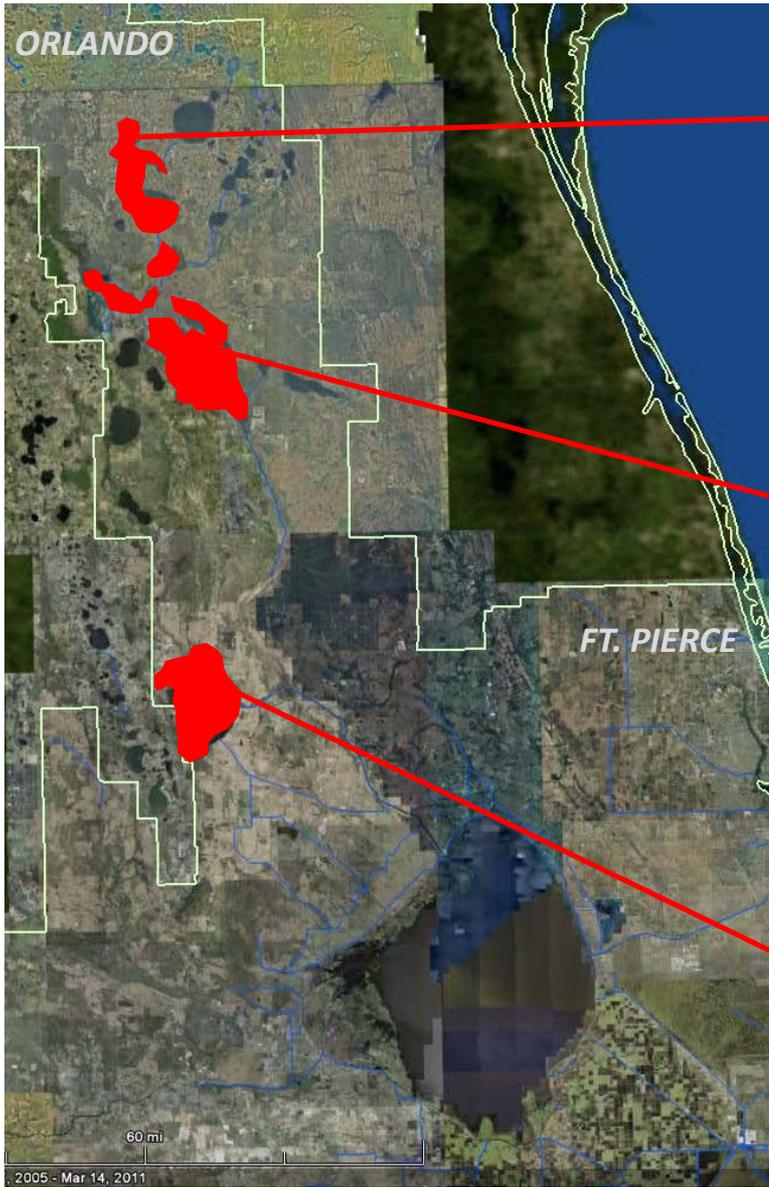
Groundwater Levels

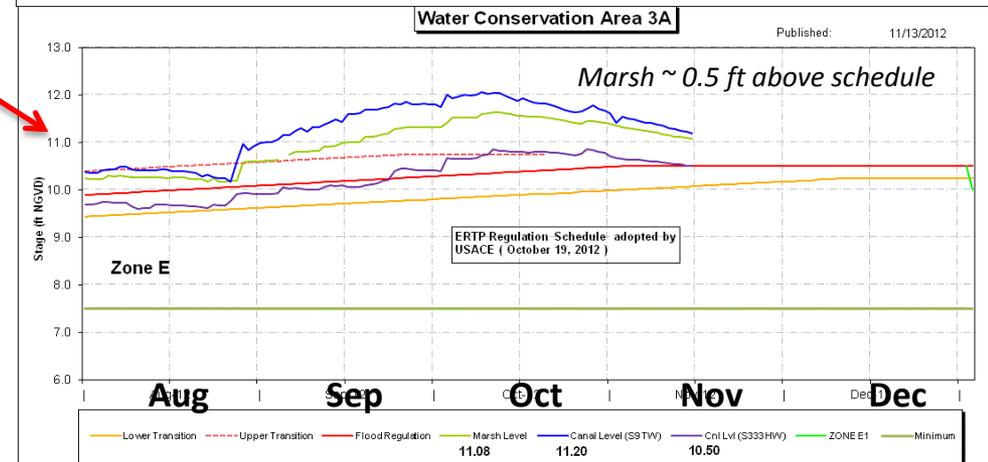
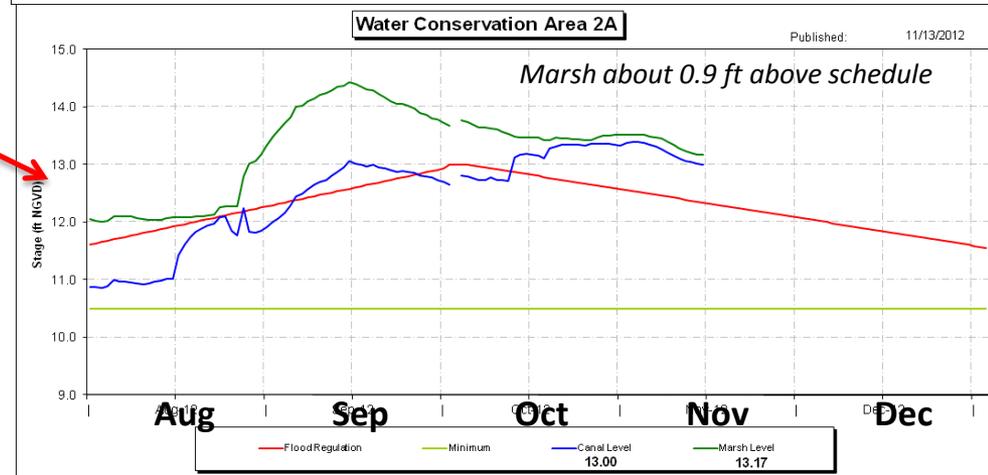
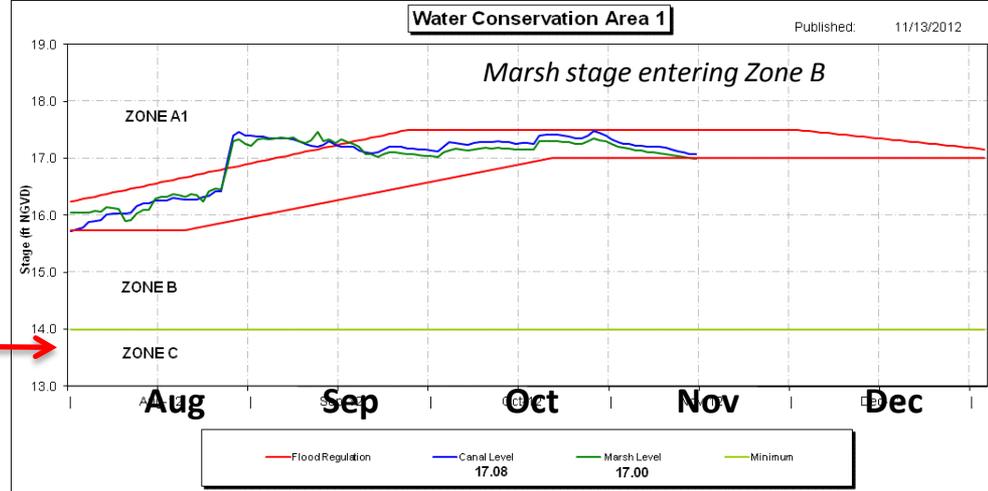
Water levels at selected sites in South Florida
Based on PROVISIONAL DATA, as of November 13, 2012



Water level compared to historical data, without trend analysis:

-  Insufficient information available to compute water-level statistics
-  In lowest 10 percent of past water elevations
-  Within lowest 10 to 30 percent of past water elevations
-  Within 20 percent of the median of past water elevations
-  Within highest 10 to 30 percent of past water elevations
-  In highest 10 percent of past water elevations





2012 Seasonal Agricultural Drawdown

Canal drawdown was initiated on October 15th in South Miami-Dade County according to the following schedule:

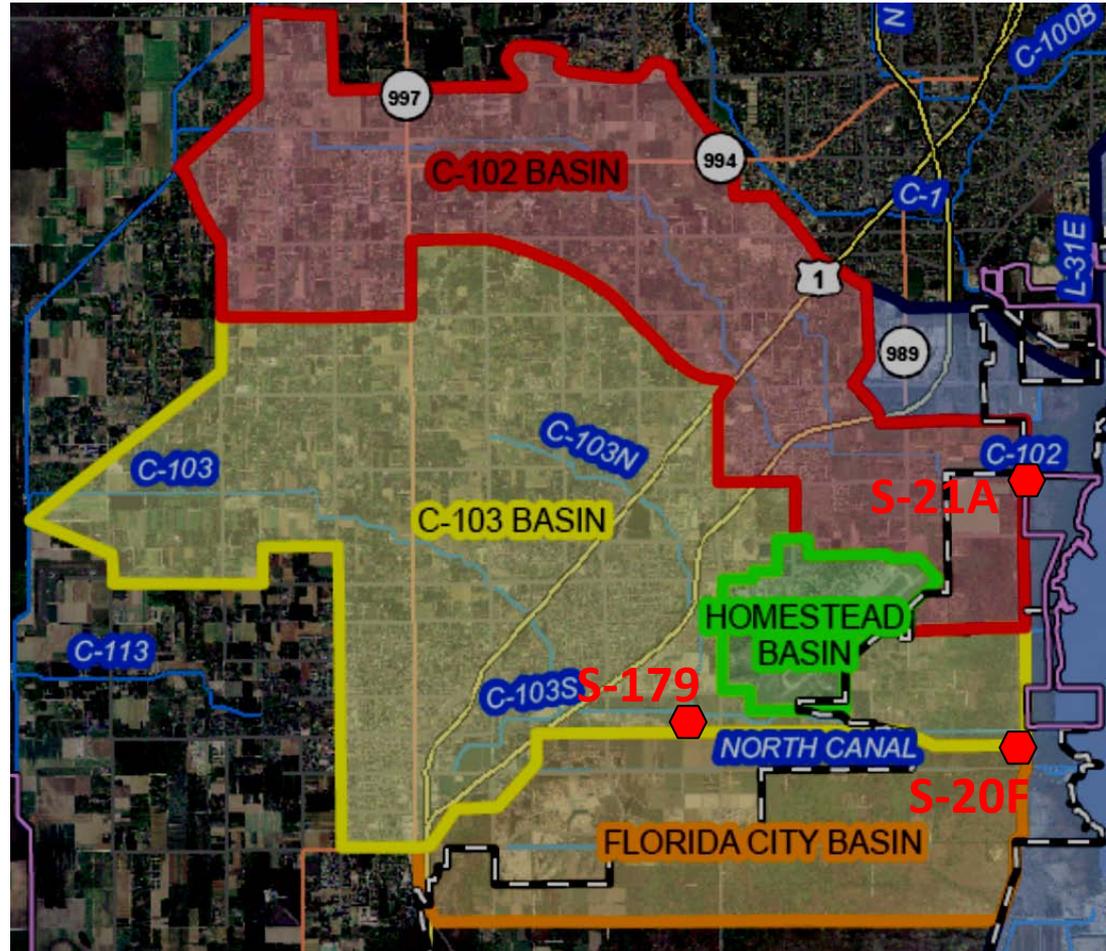
C-102 Basin: October 15th - changed structure S-21A to Low range;
open at 1.4 ft., close at 1.0 ft.

C-103 Basin: October 15th - changed structure S-20F to Low range;
open at 1.4 ft., close at 1.0 ft.

Changed structure S-179 to Low range;
open at 3.1 and close at 2.7

Conference calls with stakeholders have been held on Oct. 31st and Nov. 7. Next bi-weekly conference call will be on Nov. 21.

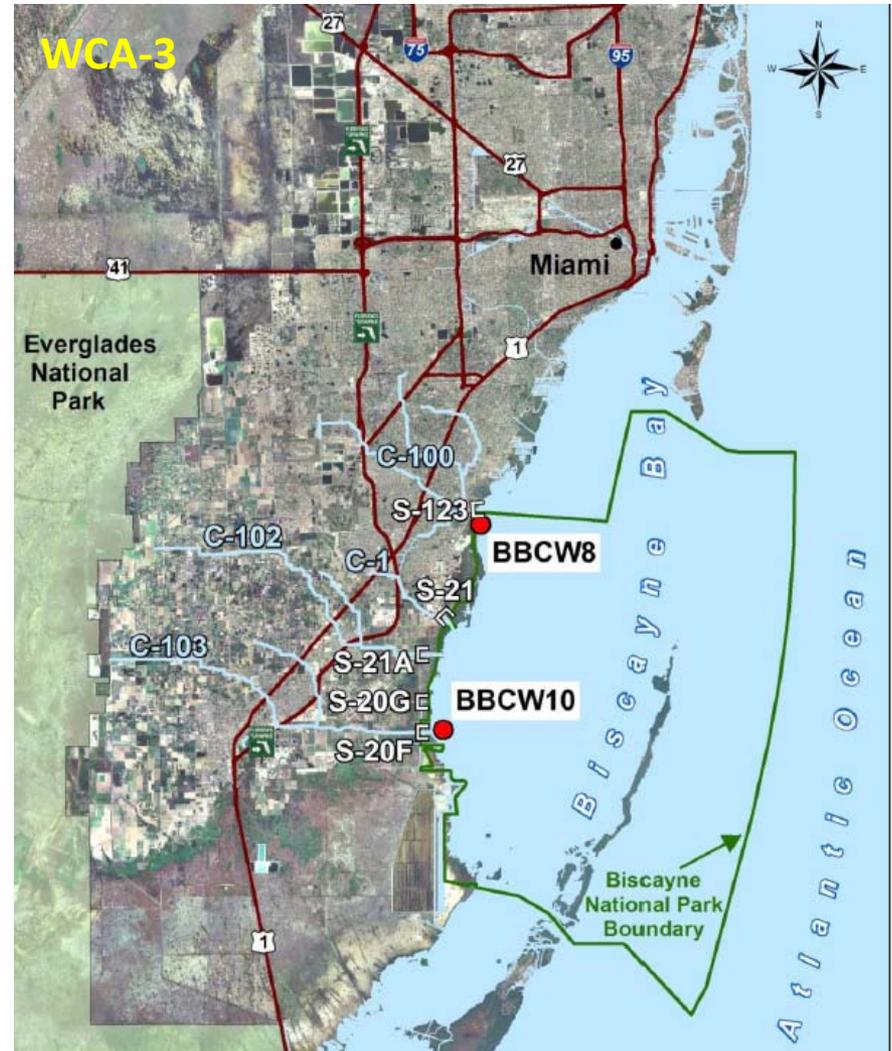
Drawdown is progressing normally



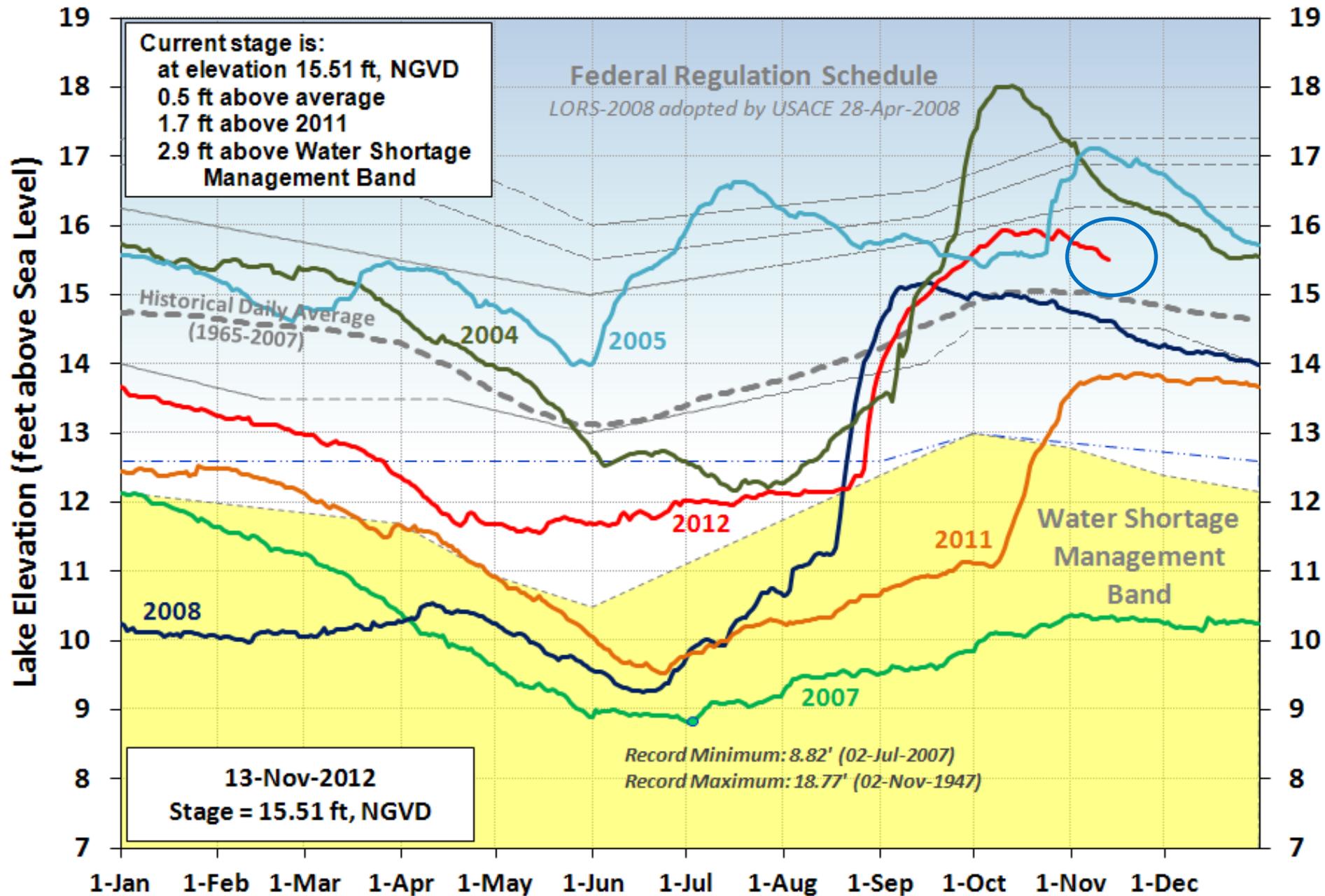
2012 Pilot Test

Fresh Water Releases to Biscayne Bay

- SFWMD is developing a process to conduct pilot test
- Steps:
 - SFWMD staff held first internal meeting
 - SFWMD met with staff from ENP and BBNP to discuss release priorities
 - ENP agrees to the deliveries to BBNP as long as WCA-3A stage is in the flood control zone of the regulation schedule or releases through a previously closed WCA-3A structure could be used (e.g. S-12B closure)



Lake Okeechobee Water Level Comparison

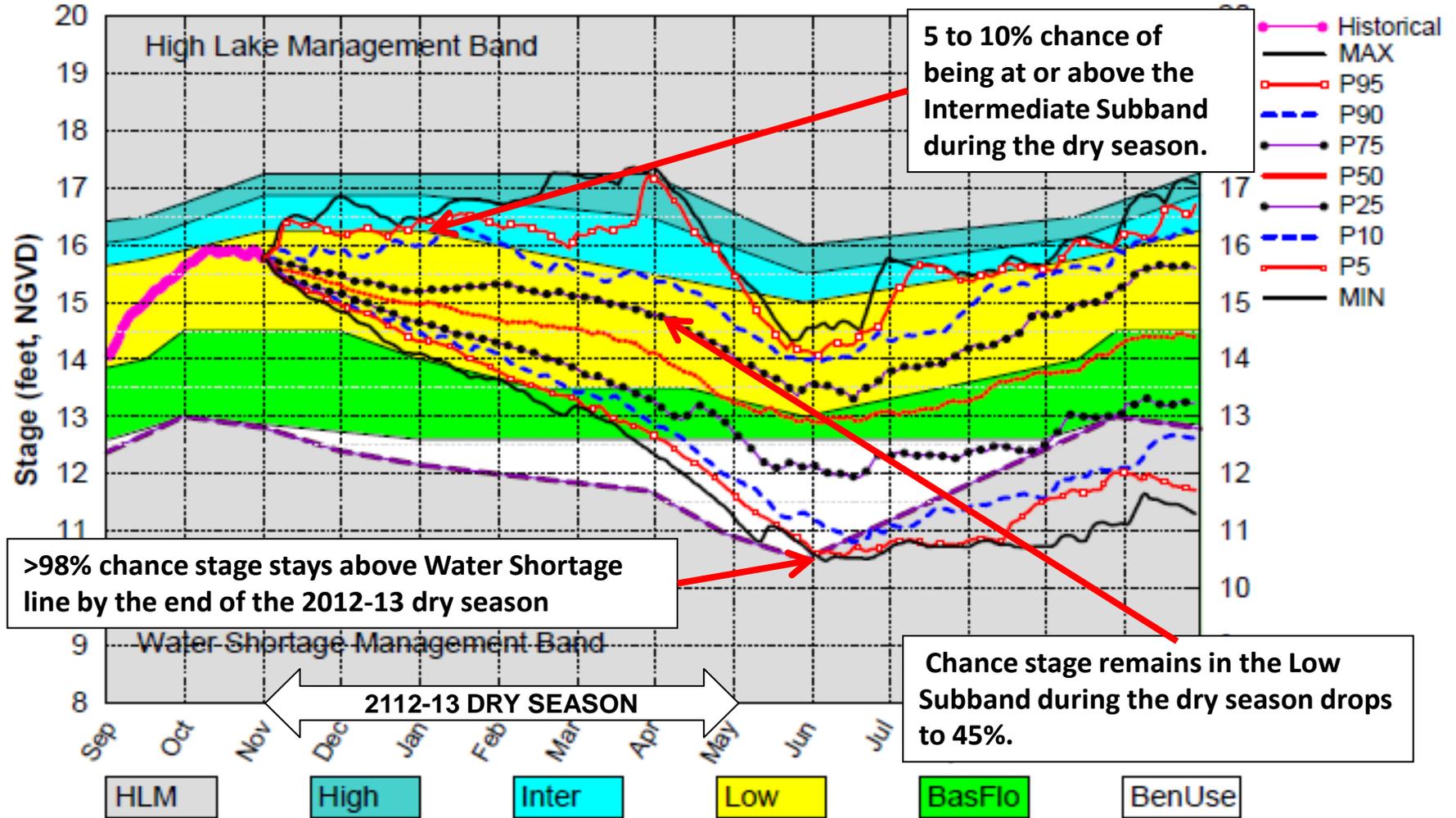


Lake Okeechobee: Current Operations

- **USACE's Lake O Regulation Schedule (2008 LORS)**
 - Stage (15.48 ft, NGVD) is near the middle of the Low Subband
 - Tributary Hydrologic Conditions are in the normal classification
 - Seasonal Lake inflow outlook is dry (reduced chance of El Nino)
 - Multi-Seasonal Lake inflow outlook is in the wet classification
 - Release guidance currently suggests up to 450 cfs at S-79, and up to 200 cfs at S-80
 - USACE began reducing release rates 18-Oct when the stage stopped rising
 - S80 closed 7-Nov
 - S79 releases transitioning to 450 cfs
- **SFWMD's Lake O Adaptive Protocol (2010)**
 - Will be the basis for SFWMD recommendations as the Lake stage recedes into the Baseflow Subband of the 2008 LORS.

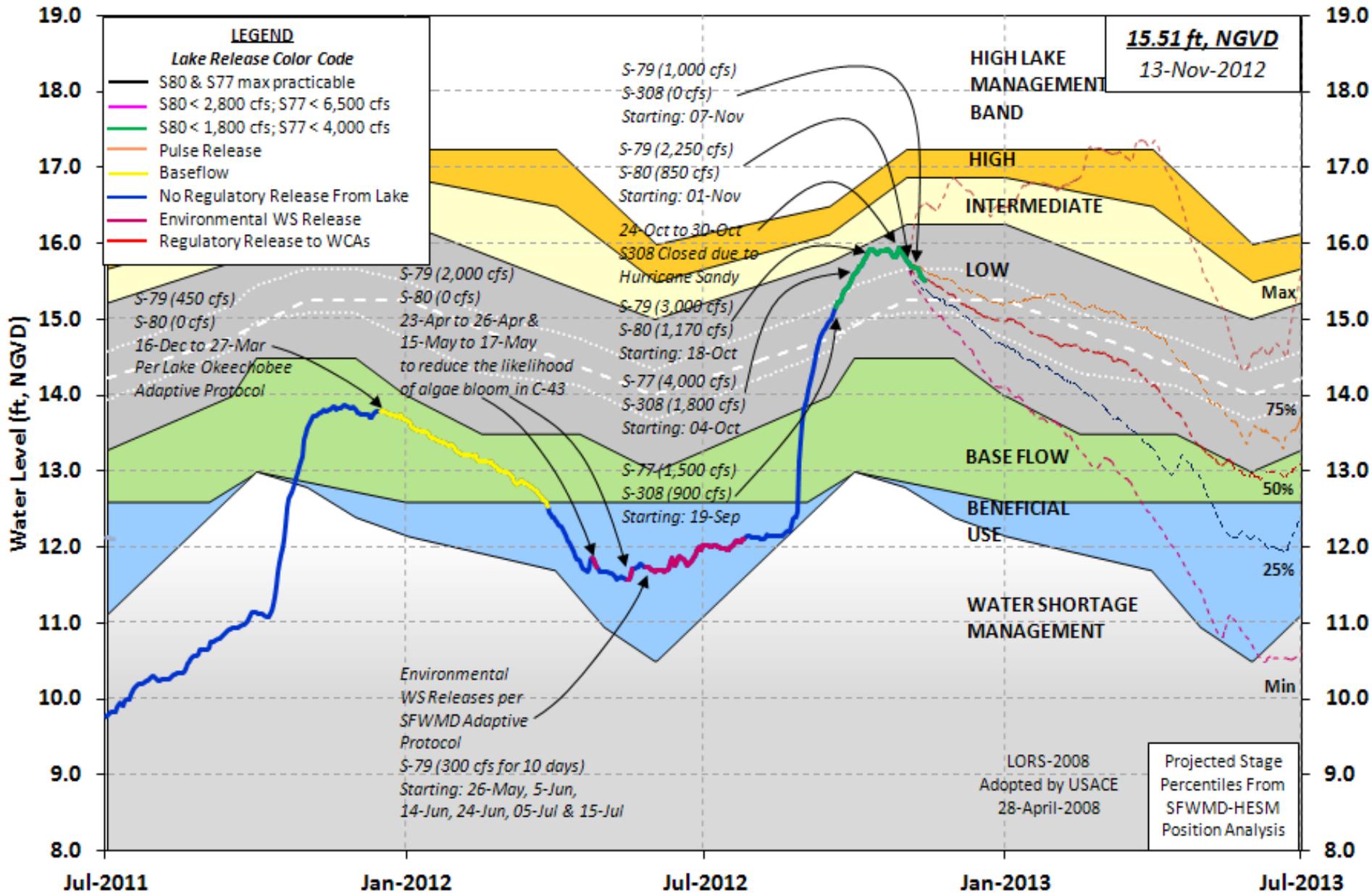
Lake Okeechobee SFWMM November 2012 Position Analysis

Percentiles based on 41 possible outcomes starting with Sep 10th initialization



(See assumptions on the Position Analysis Results website)

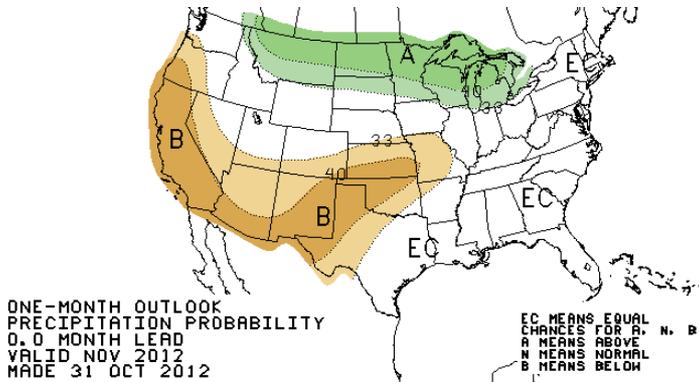
Lake Okeechobee Water Level History and Projected Stages



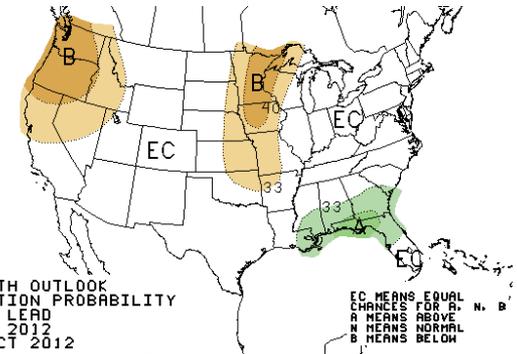
U. S. Seasonal Precipitation Outlook

National Climate Prediction Center (CPC)

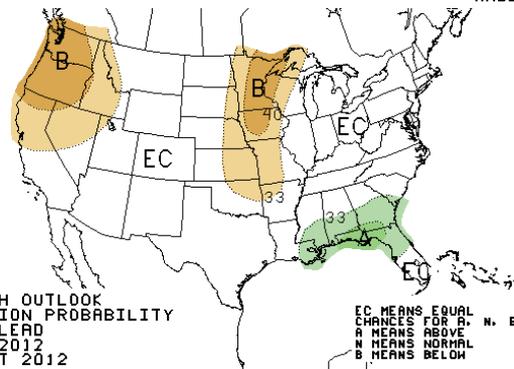
Nov 2012



Nov-Jan 2012



Oct-Nov 2012

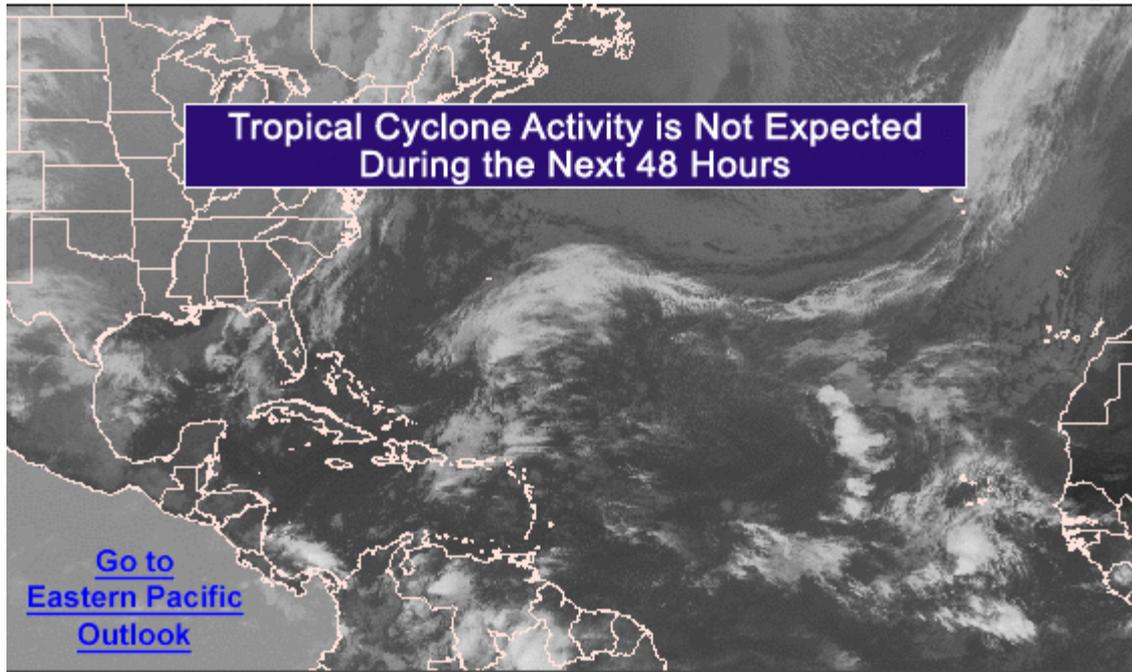


- The current CPC precipitation outlook for central and southern Florida is for equal chances (EC) of being above, normal or below for Nov and for the three month windows extending into the 2012-2013 dry season.



Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



700 AM EST TUE NOV 13 2012

Satellite Image: 0600 AM EST

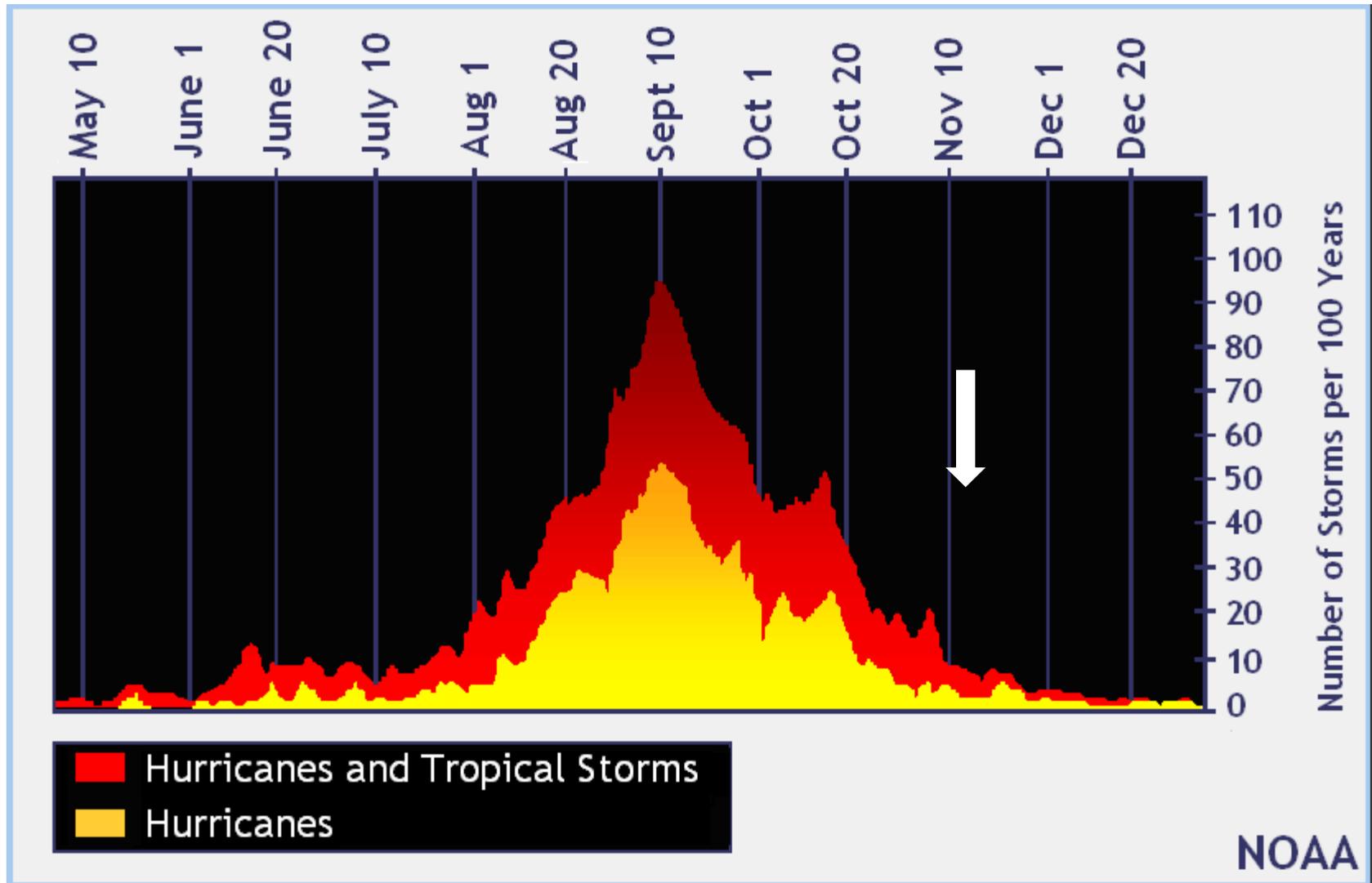
Outlined areas denote current position of systems discussed in the Tropical Weather Outlook. Color indicates probability of tropical cyclone formation within 48 hours.

 Low <30%

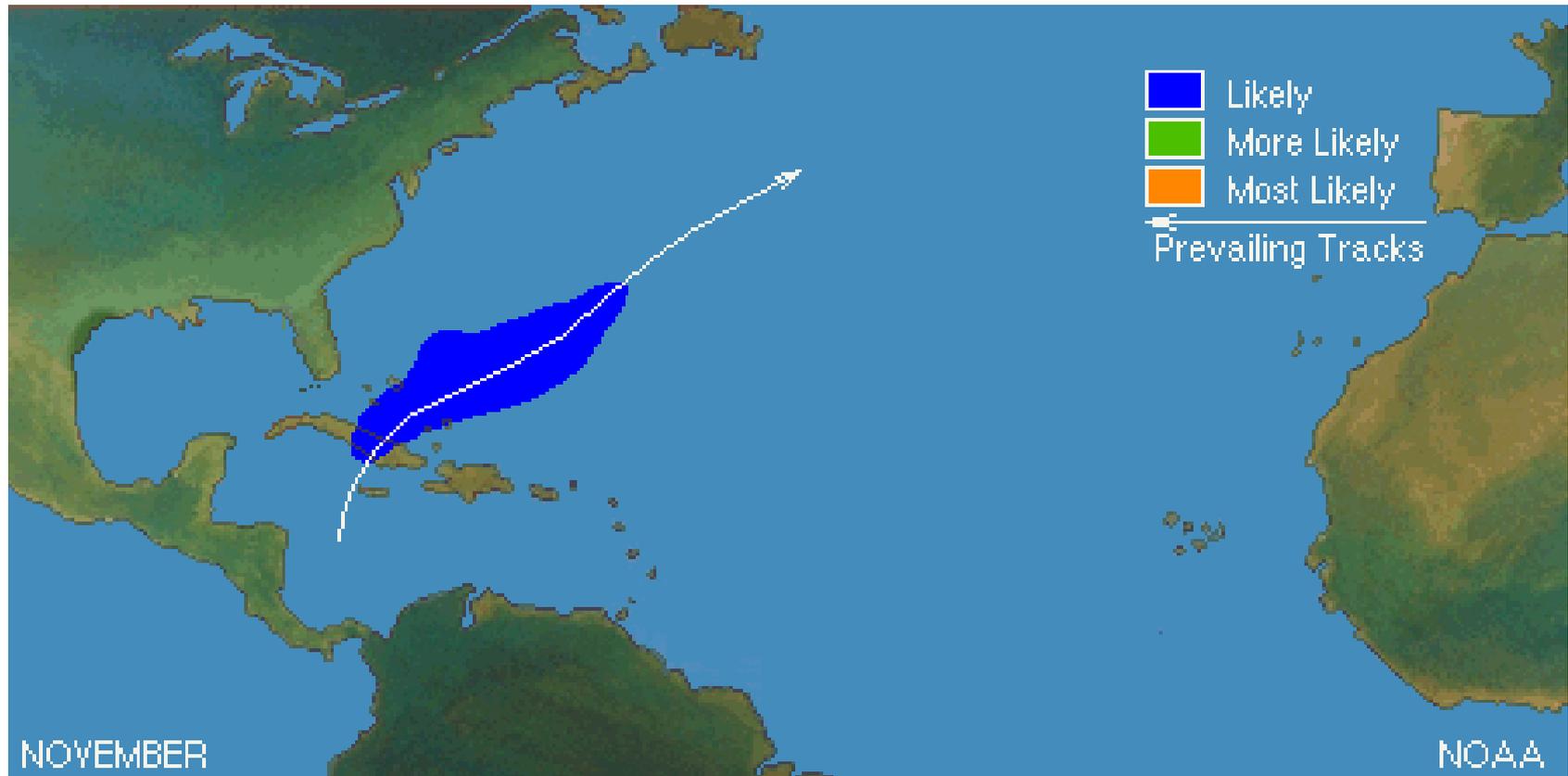
 Medium 30-50%

 High >50%

Peak of the Hurricane Season



Typical Areas of Hurricane Origin November



QUESTIONS?



SFWMD

10/09/2012

G-420 Pump #3 - Repairing Bell Housing Bolts - Miami-Dade County