

Water Conditions Summary

South Florida Water Management District
Governing Board Meeting

January 10, 2013

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

SFWMD

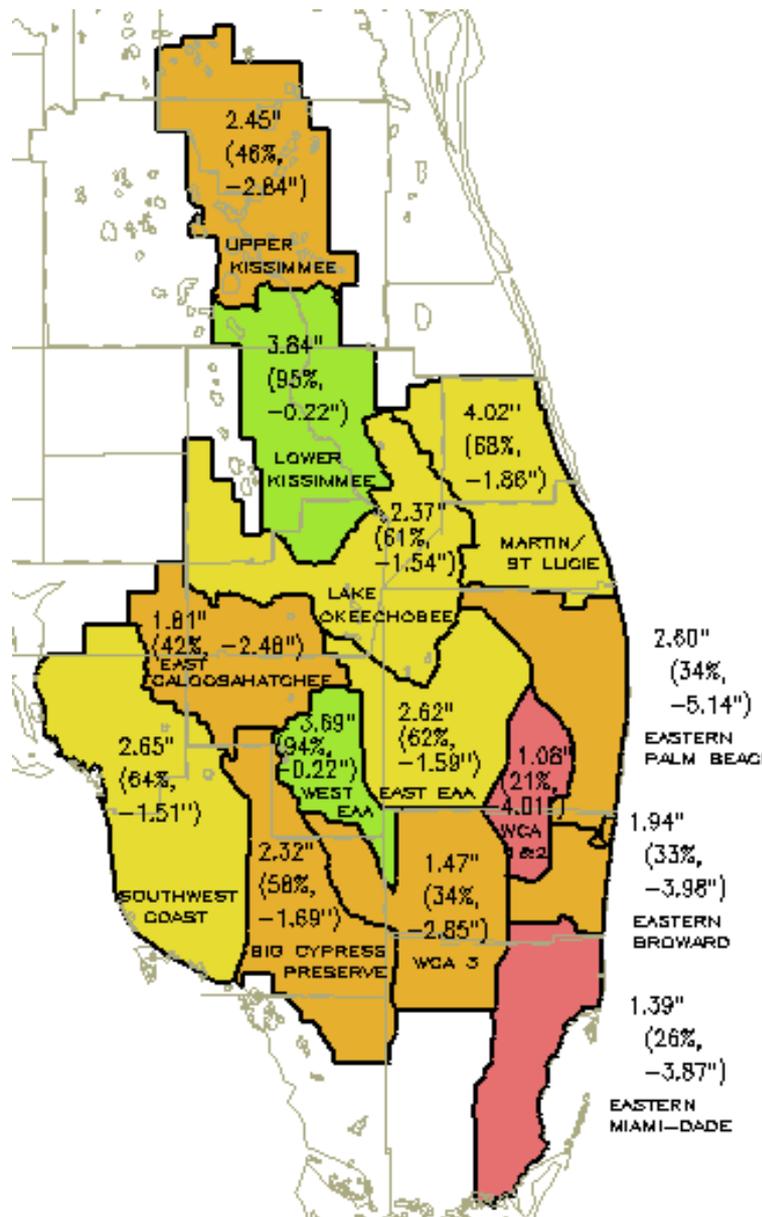
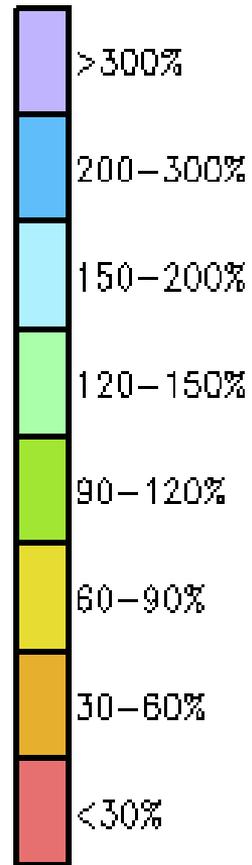
Dry Season Rainfall

2 Nov 2012 – 8 Jan 2013

DISTRICT-WIDE: 2.54"
(54% of Avg, or -2.15")

All basins below average:

- **Lowest**
 - WCA-1 and WCA-2 21% of average
 - Eastern Miami-Dade 26% of average
- **Closest to average**
 - Lower Kissimmee with 95% and West EAA with 94% of average

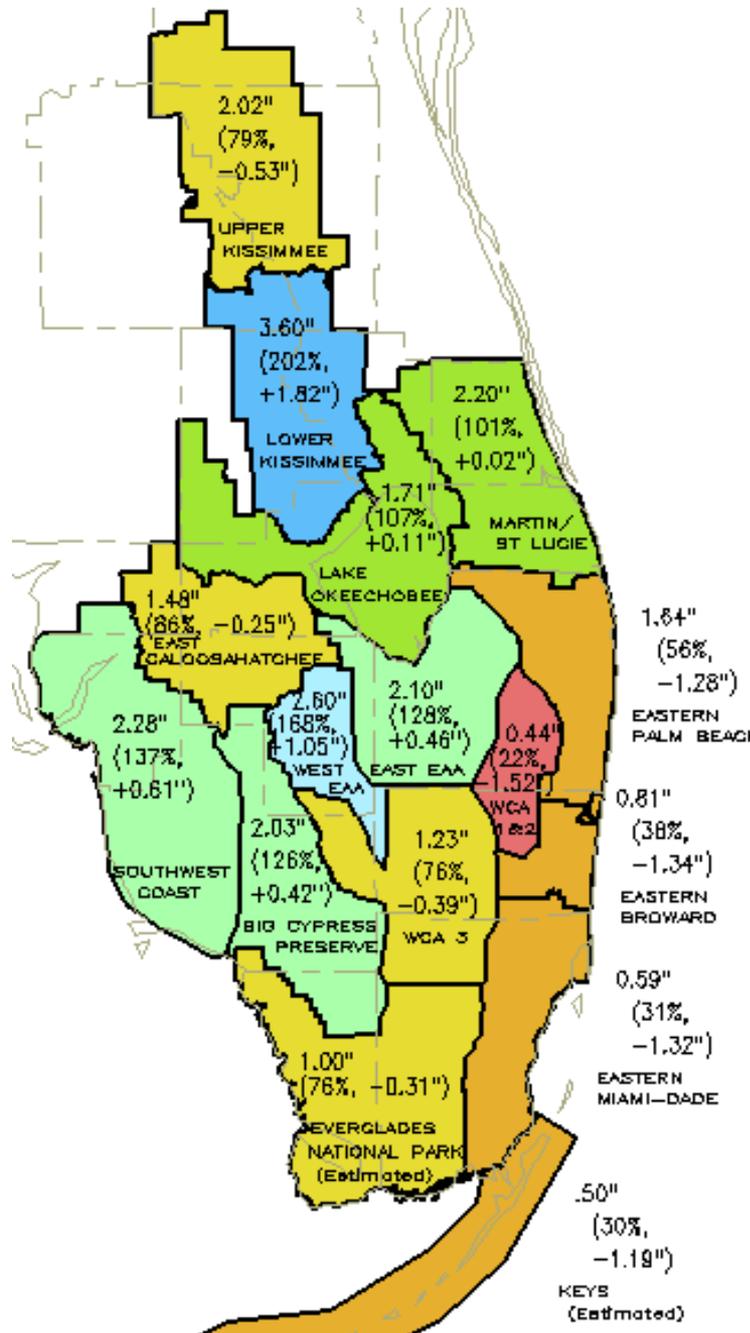
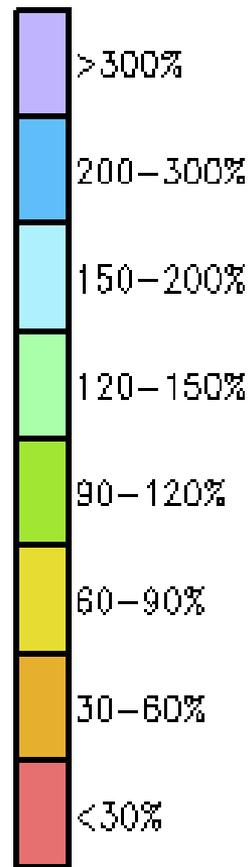


Measured
 (% of Avg,
 Diff From Avg)

SFWMD 2012 December Rainfall

(Dec 2 2012 – Jan 1 2013)

**DISTRICT-WIDE: 1.93"
(102% of Avg or +0.04"")**



- Basins in the central portion of the District are above average rainfall
 - West EAA 168%
 - SW Coast 137%
- Basins in the northern and southern portions of District are below average
 - WCA-1 and WCA-2 22%

Measured
(% of Avg,
Diff From Avg)

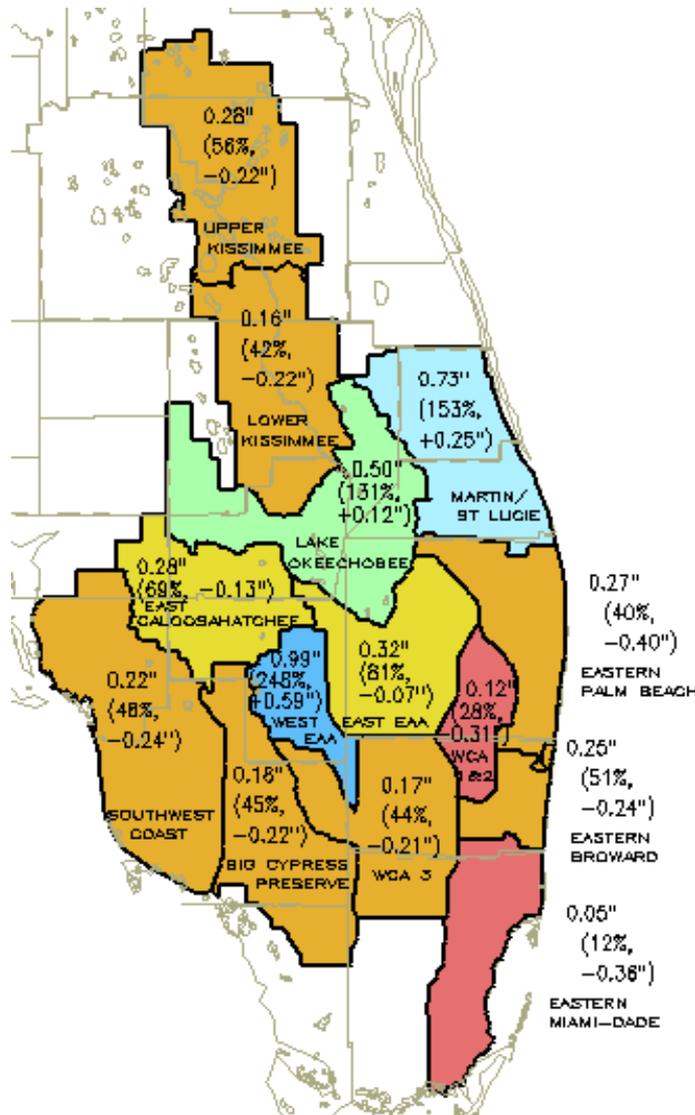
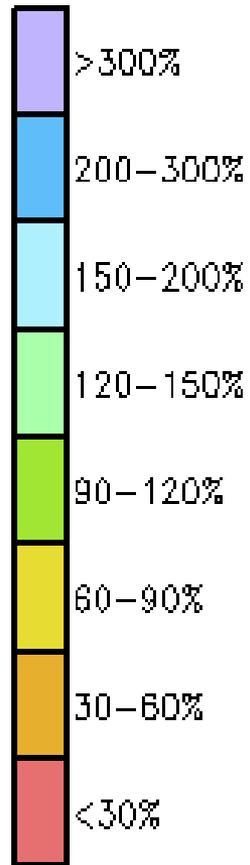
KEYS
(Estimated)

SFWMD 2012 January Rainfall

(Jan 2 - 8, 2013)

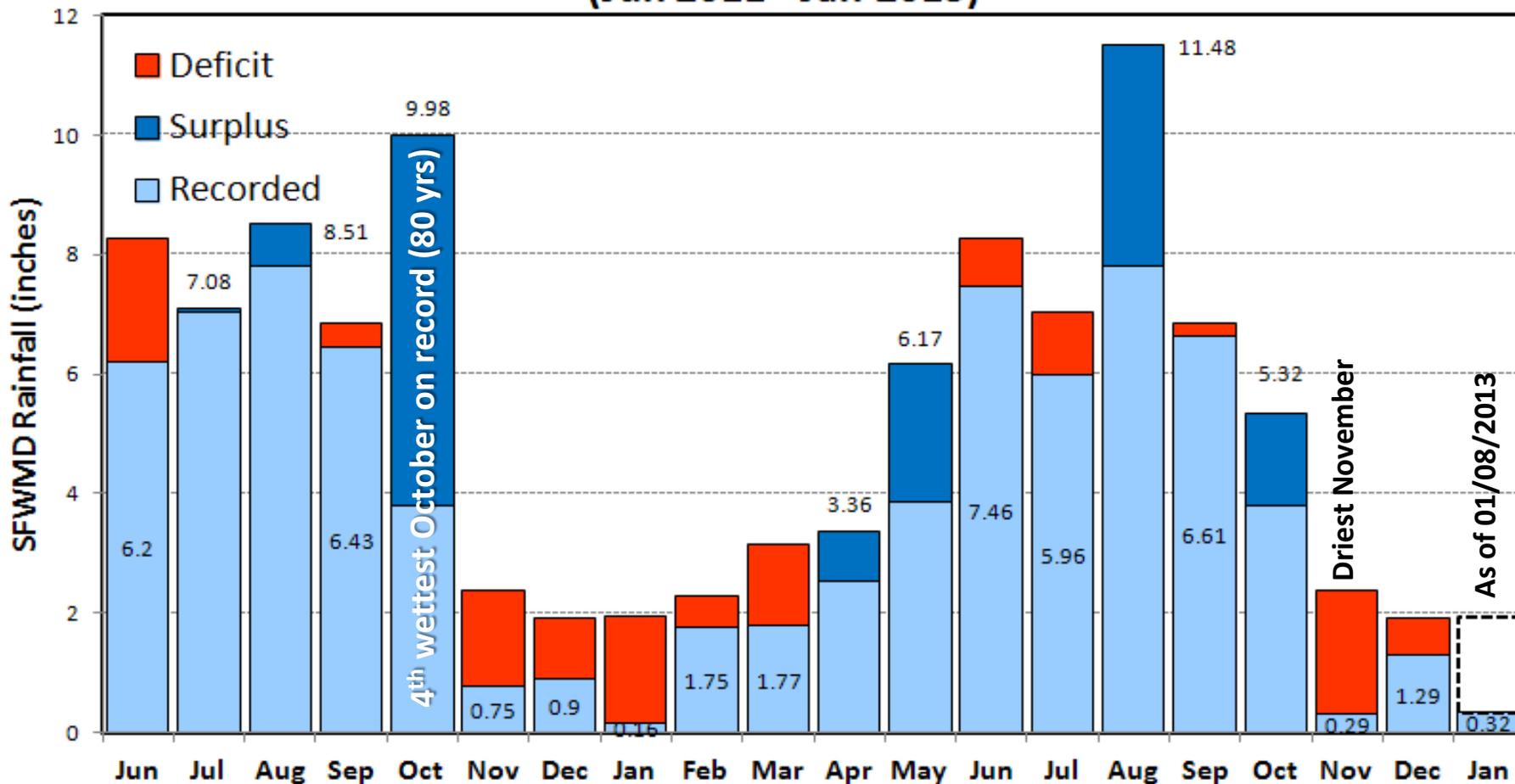
**DISTRICT-WIDE: 0.32"
(73% of Avg, or -0.12")**

- All basins, with the exception of 3, are below average
- West EAA, Lake Okeechobee and Martin/St. Lucie
- Lowest is Miami-Dade with 125 of average



Measured
(% of Avg,
Diff From Avg)

SFWMD Rainfall Distribution Comparison (Jun 2011 - Jan 2013)



2011-12 DRY SEASON:

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

2012-13 DRY SEASON:

- Driest November since 1932
- Below average so far

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.

U.S. Drought Monitor

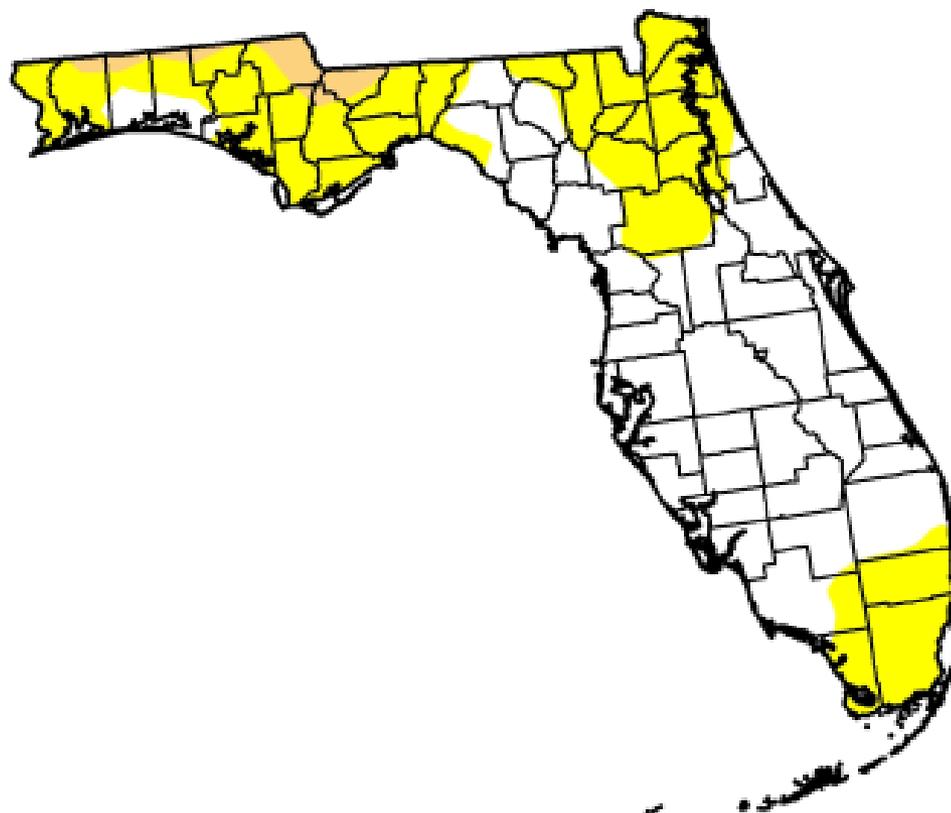
January 1, 2013

Valid 7 a.m. EST

Florida

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	56.86	43.14	3.13	0.00	0.00	0.00
Last Week (12/25/2012 map)	56.86	43.14	3.13	0.00	0.00	0.00
3 Months Ago (10/02/2012 map)	100.00	0.00	0.00	0.00	0.00	0.00
Start of Calendar Year (01/01/2013 map)	56.86	43.14	3.13	0.00	0.00	0.00
Start of Water Year (09/25/2012 map)	100.00	0.00	0.00	0.00	0.00	0.00
One Year Ago (12/27/2011 map)	38.81	61.19	27.41	12.84	2.61	0.00



Intensity:

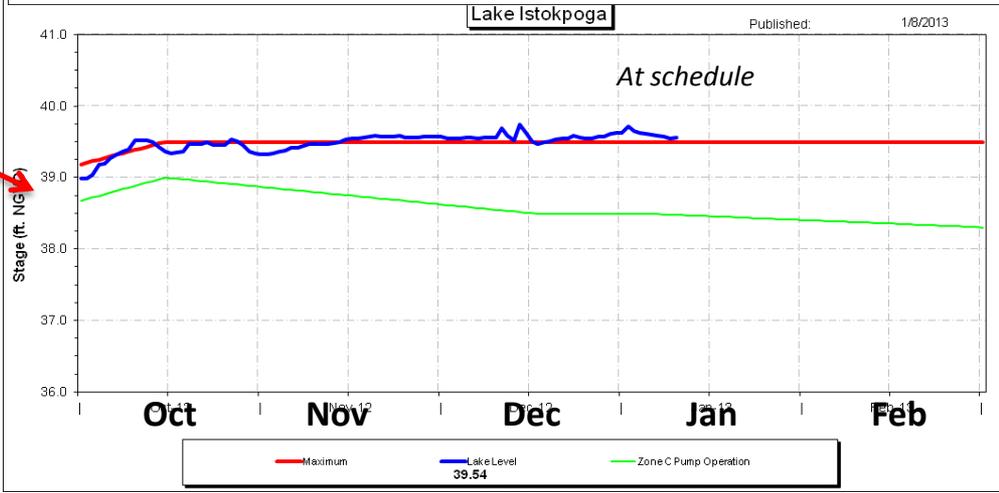
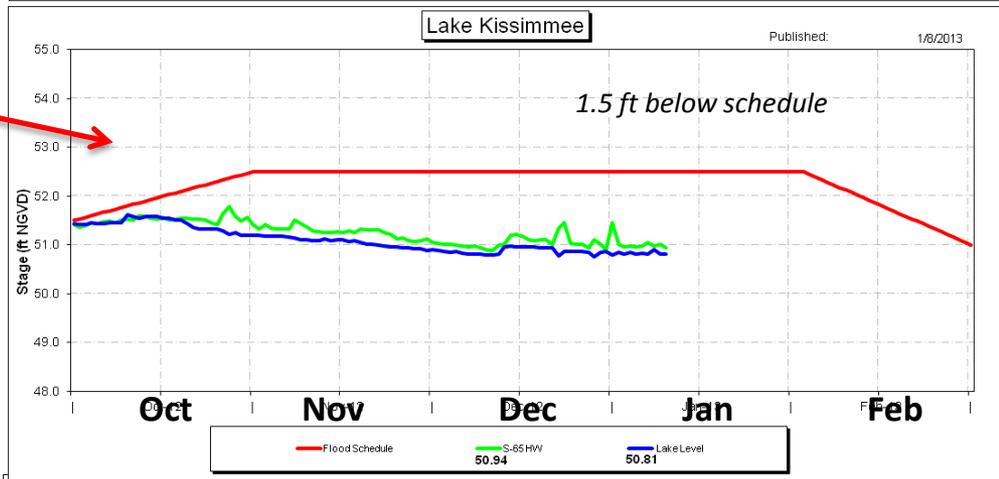
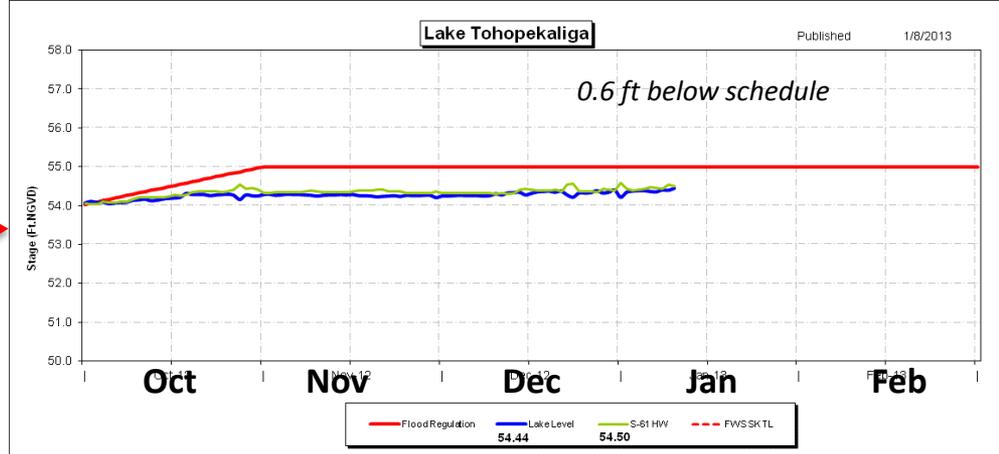
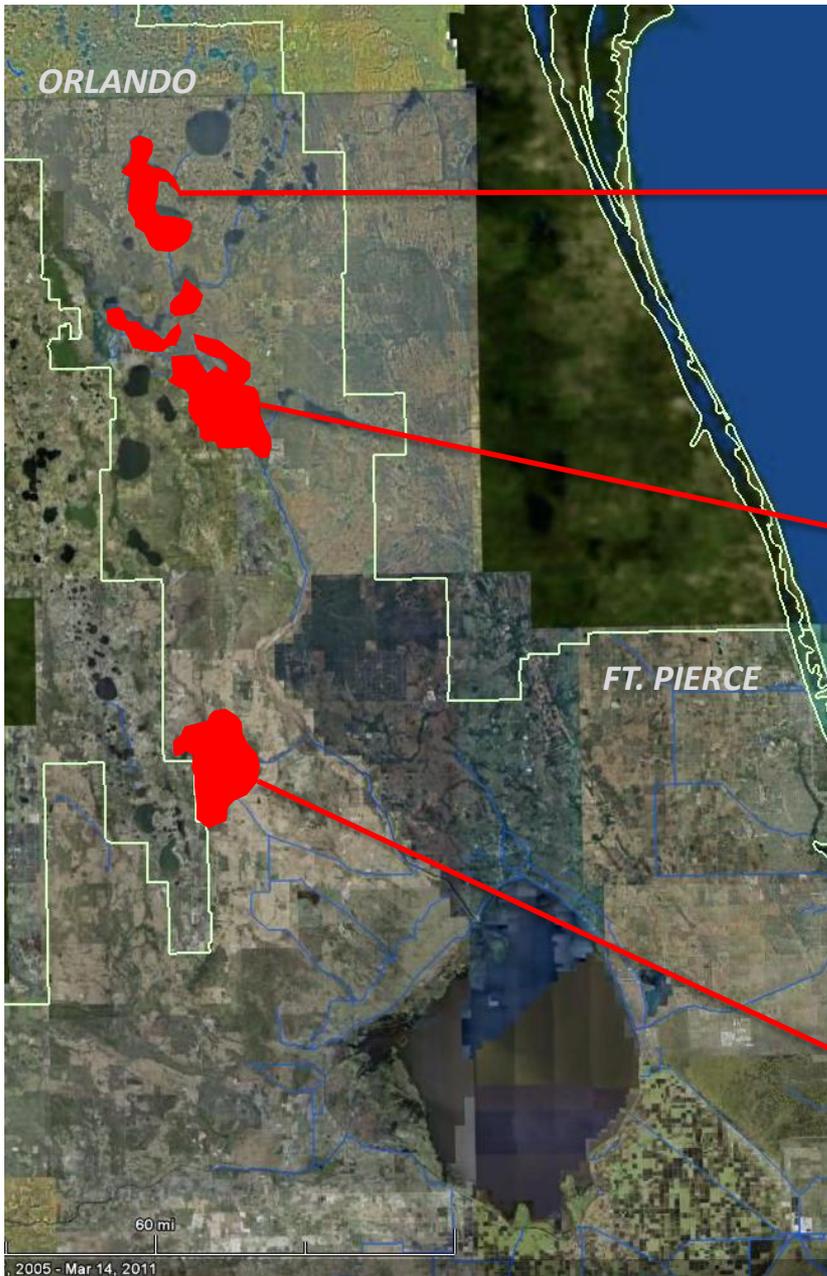
-  D0 Abnormally Dry
-  D1 Drought - Moderate
-  D2 Drought - Severe
-  D3 Drought - Extreme
-  D4 Drought - Exceptional

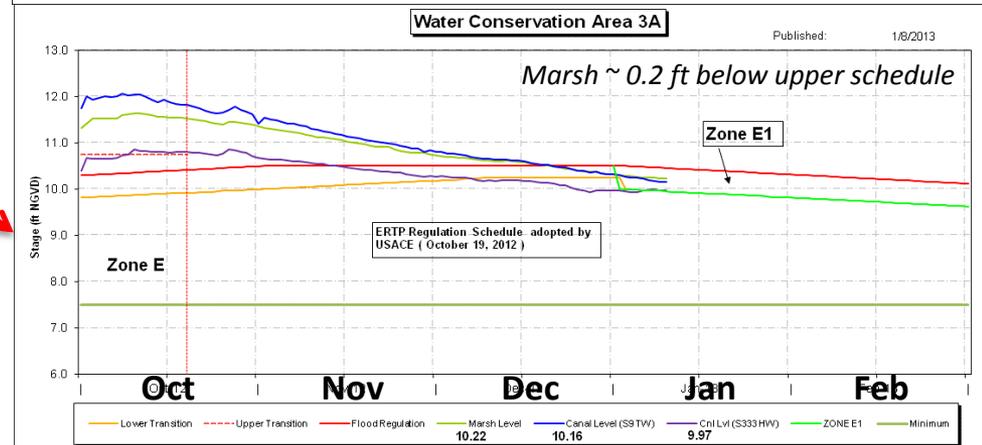
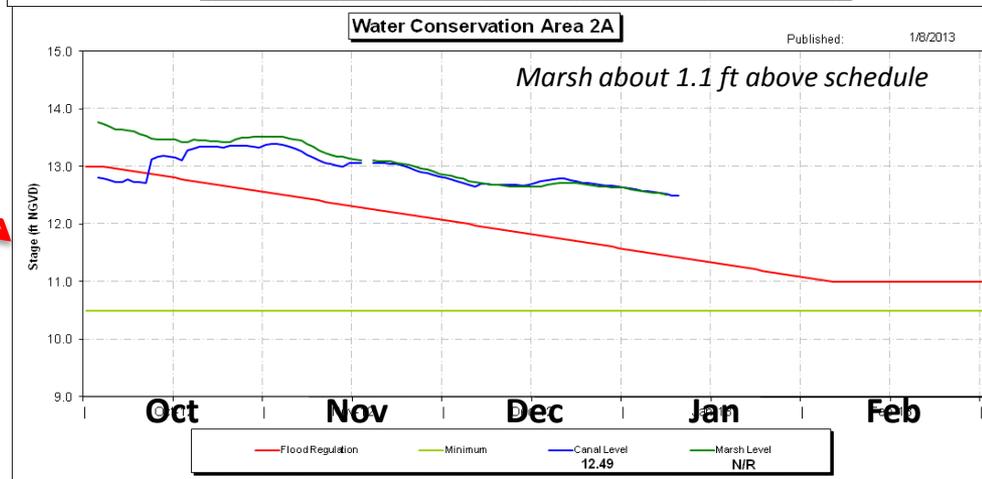
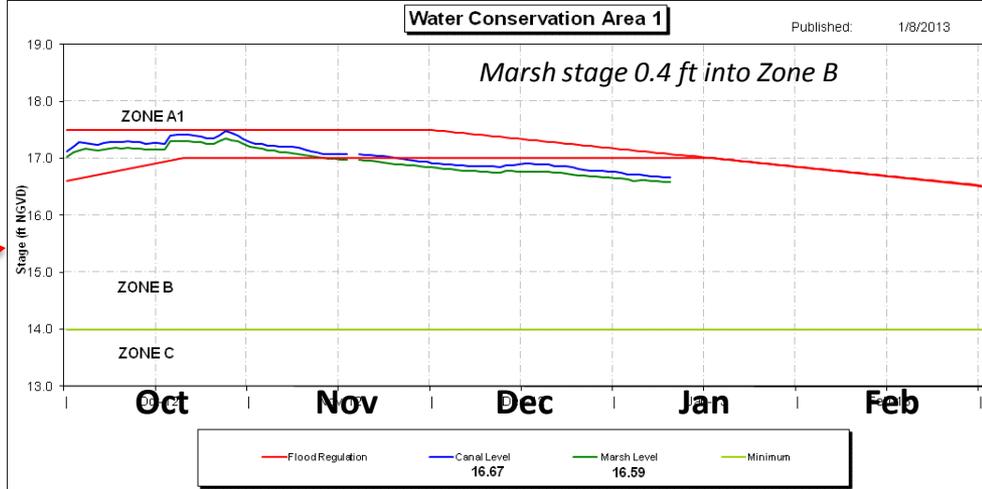
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://droughtmonitor.unl.edu>



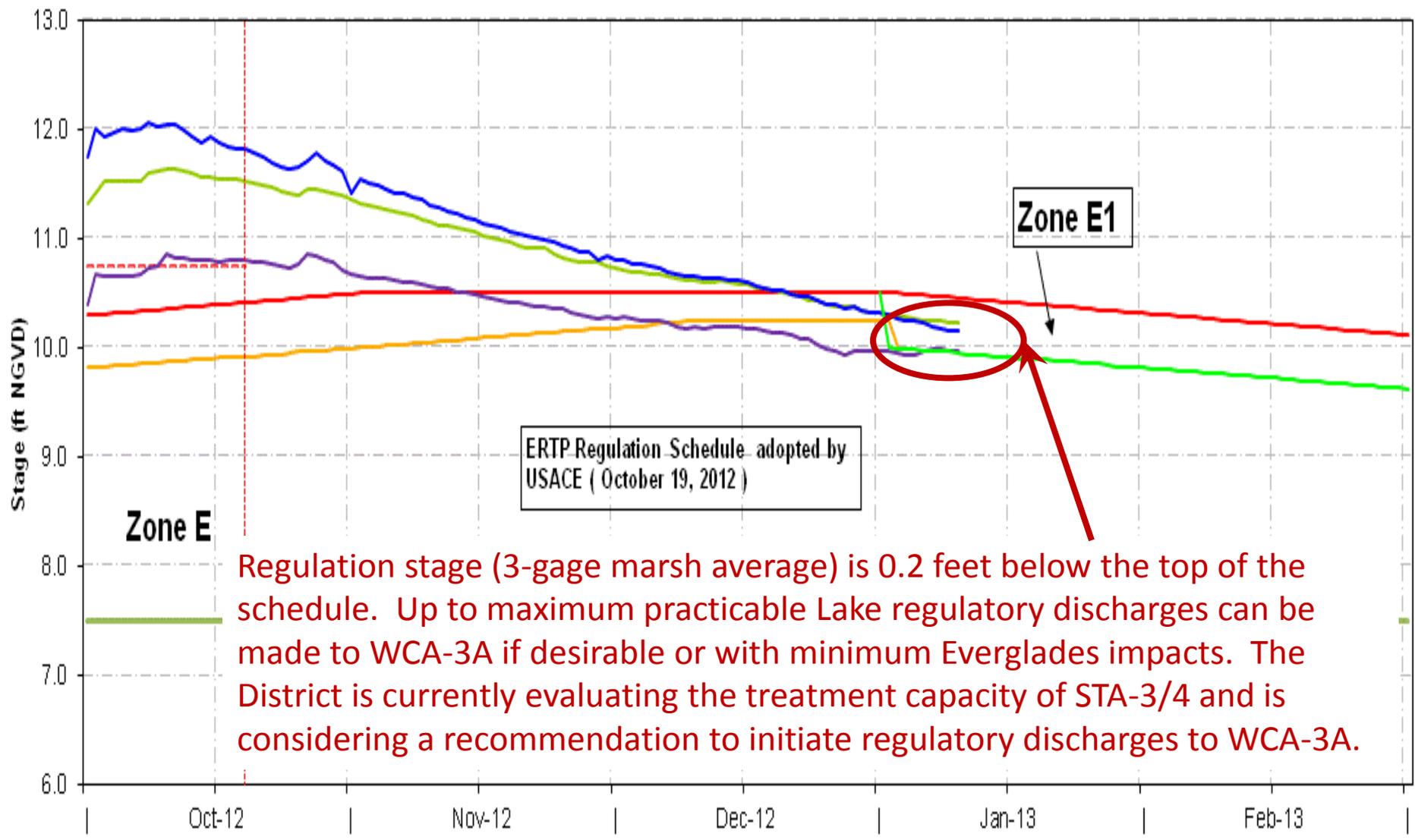
Released Thursday, January 3, 2013
Richard Heim, National Climatic Data Center, NOAA





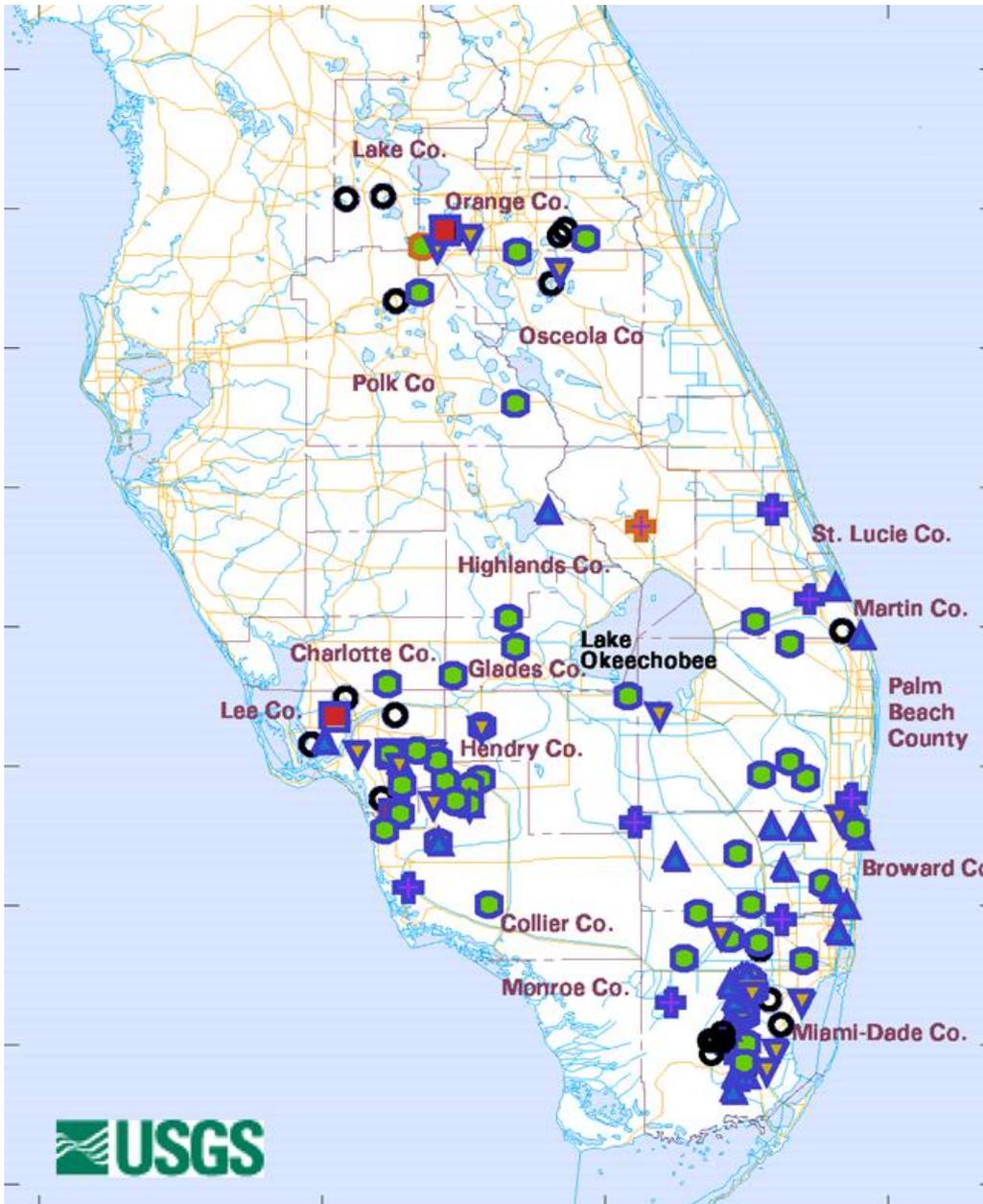
Water Conservation Area 3A

Published: 1/8/2013



Groundwater Levels

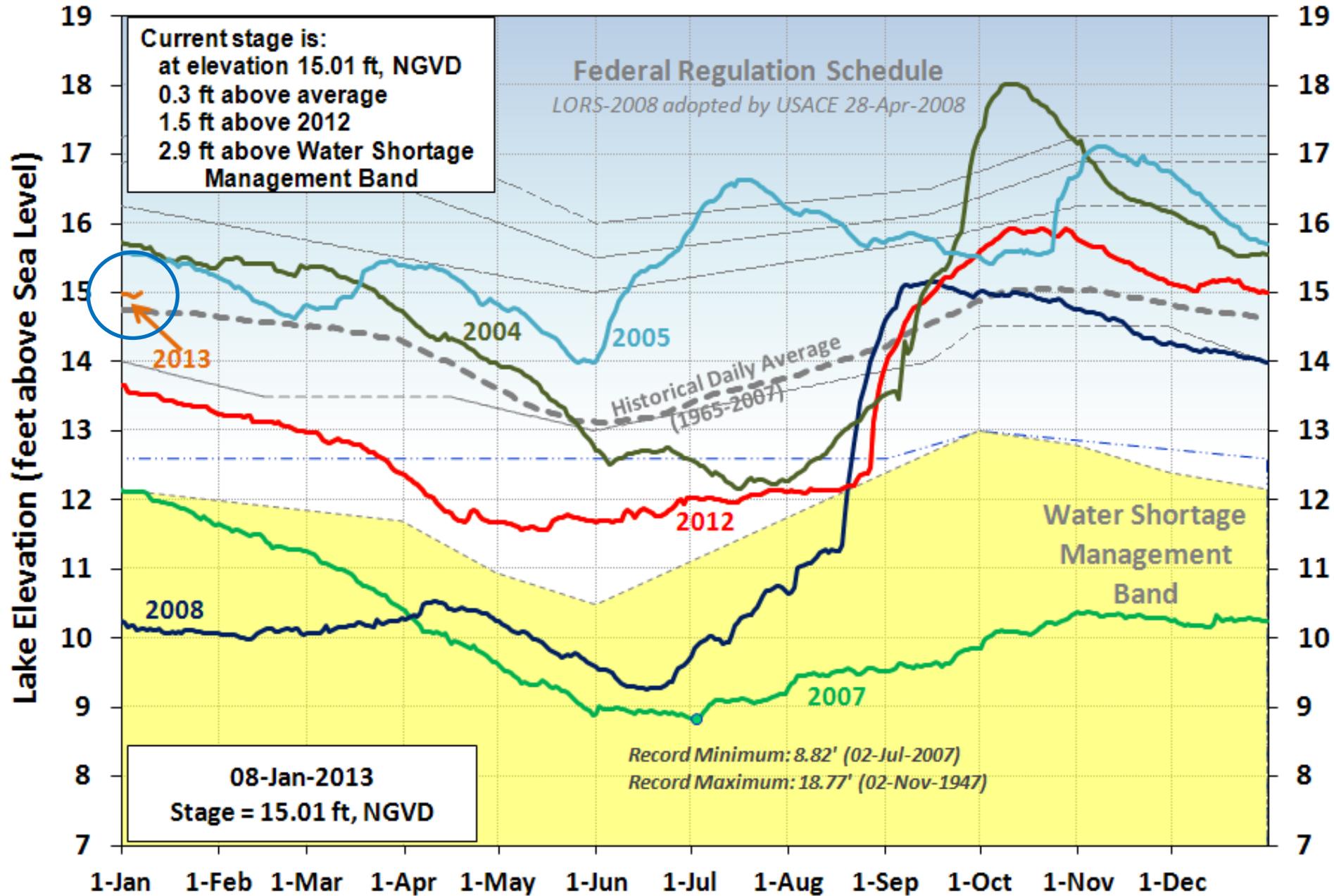
Water levels at selected sites in South Florida
Based on PROVISIONAL DATA, as of January 8, 2013



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

Lake Okeechobee Water Level Comparison



South Miami-Dade Current Operations

- Pilot test for supplemental water releases into Biscayne Bay was conducted Nov. 20 – Dec. 4
- Seasonal Agricultural Drawdown is proceeding normally
- Refilling of gap adjacent to L-67 Extension canal is taking place this week
- The District has implemented special operations to divert excess water from the C-2/C-3/C-4 canals to Biscayne Bay

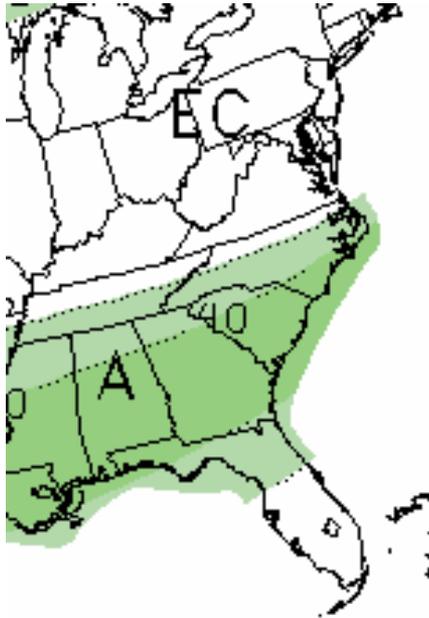
Lake Okeechobee: Current Operations

- **USACE's Lake O Regulation Schedule (2008 LORS)**
 - Stage (~15.0 ft, NGVD) is in the middle of the Low Subband
 - Release guidance currently suggests up to 450 cfs at S-79, and up to 200 cfs at S-80 to manage the Lake stage
 - Tributary Hydrologic Conditions are in the normal classification
 - Seasonal Lake inflow outlook is dry (neutral ENSO conditions)
 - 29-Dec-2012: USACE initiated another 650 cfs baseflow pulse release through S-79 and intends to continue baseflow releases per the 2008 LORS
 - Lake regulatory discharge to WCA-3A via STA-3/4 currently being considered and coordinated
- **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

U. S. Seasonal Precipitation Outlook

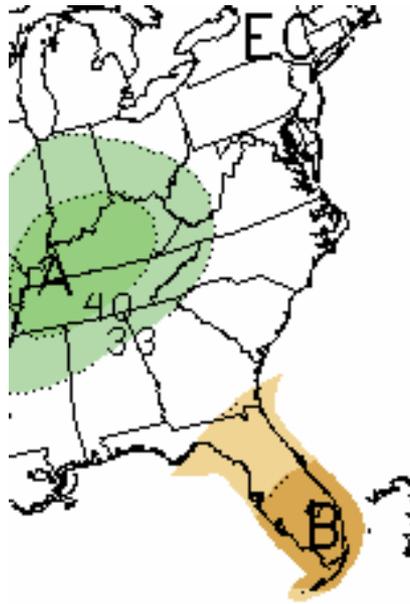
National Climate Prediction Center (CPC)

Jan 2013



Made 31-Dec-2012

Jan – Mar 2013



Made 20-Dec-2012

Mar-May 2013

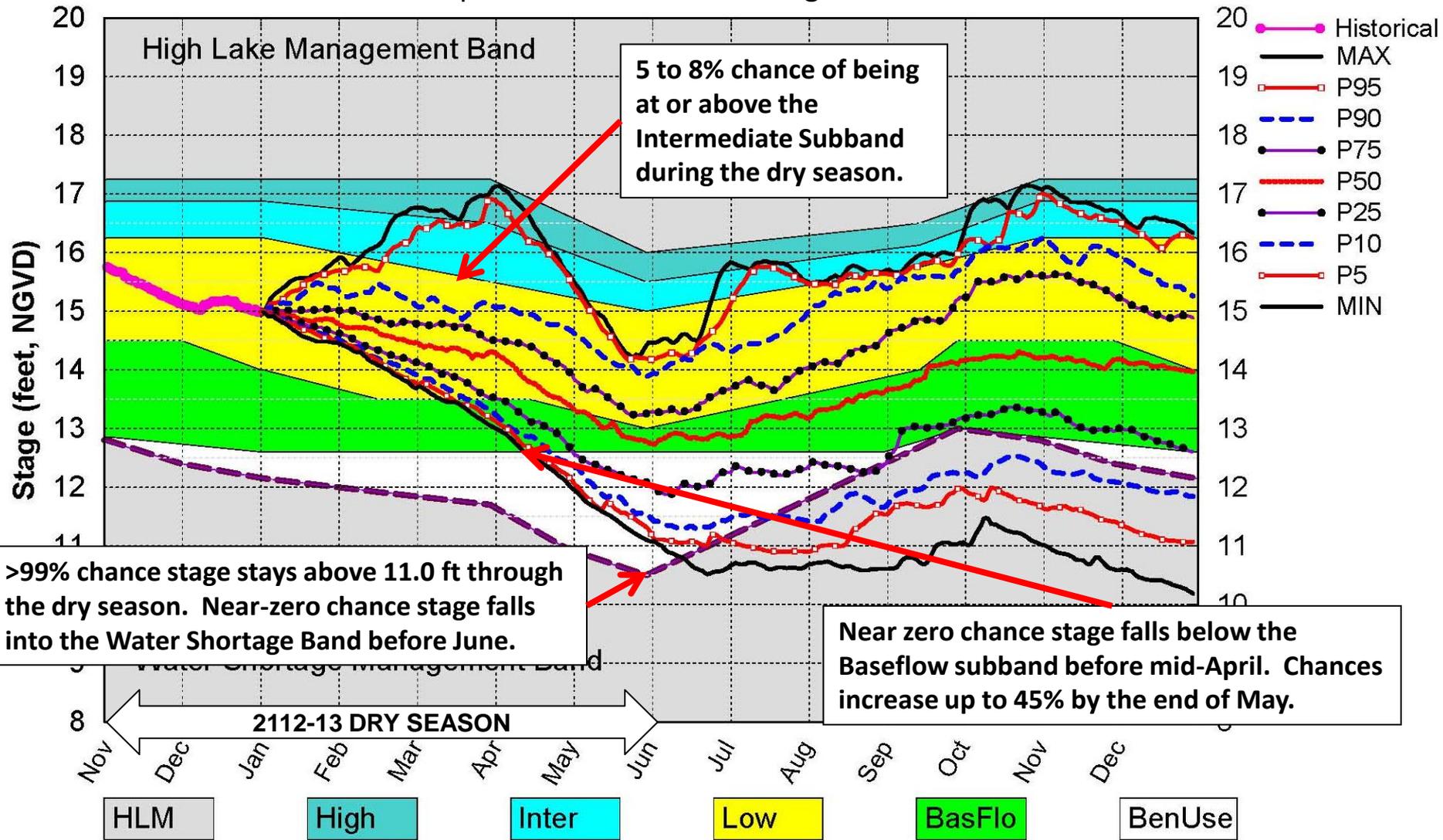


Made 20-Dec-2012

The recent CPC precipitation outlooks for the 2013 dry season indicate equal chances of Above-Normal (A), Below-Normal (B), and Normal rainfall for central and southern Florida. The exception is the Jan-Mar window which shows about a 40% chance of Below-Normal (B) rainfall.

Lake Okeechobee SFWMM January 2013 Position Analysis

Percentiles based on 41 possible outcomes starting with Dec 1st initialization



(See assumptions on the Position Analysis Results website)

Questions



Biscayne Bay