Water Conditions Summary

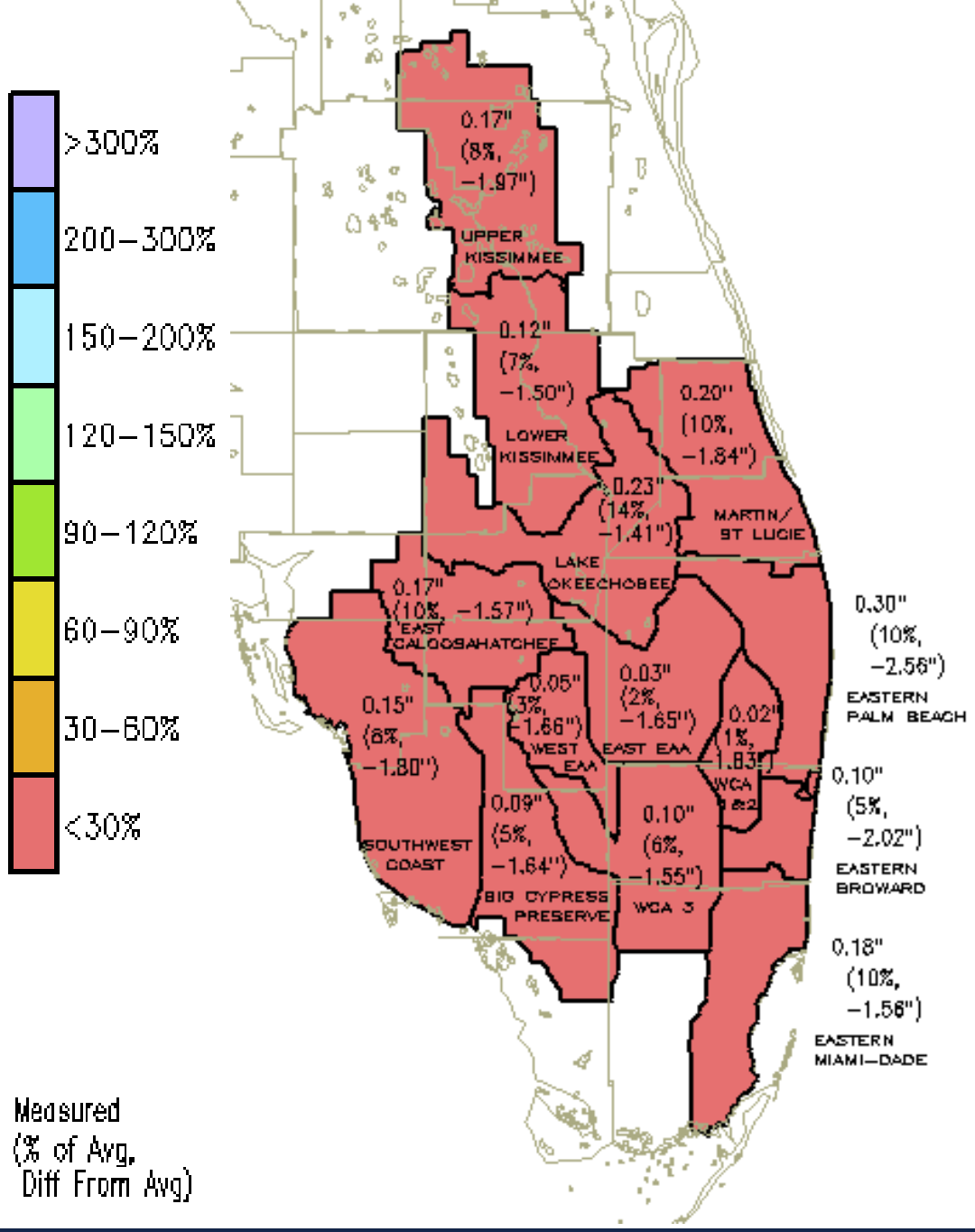
South Florida Water Management District
Governing Board Meeting

February 9, 2012

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

SFWMD 2011
January Rainfall
02Dec2011 – 01Jan2012

DISTRICT-WIDE: 0.16”
(9% of Avg, or -1.71”)



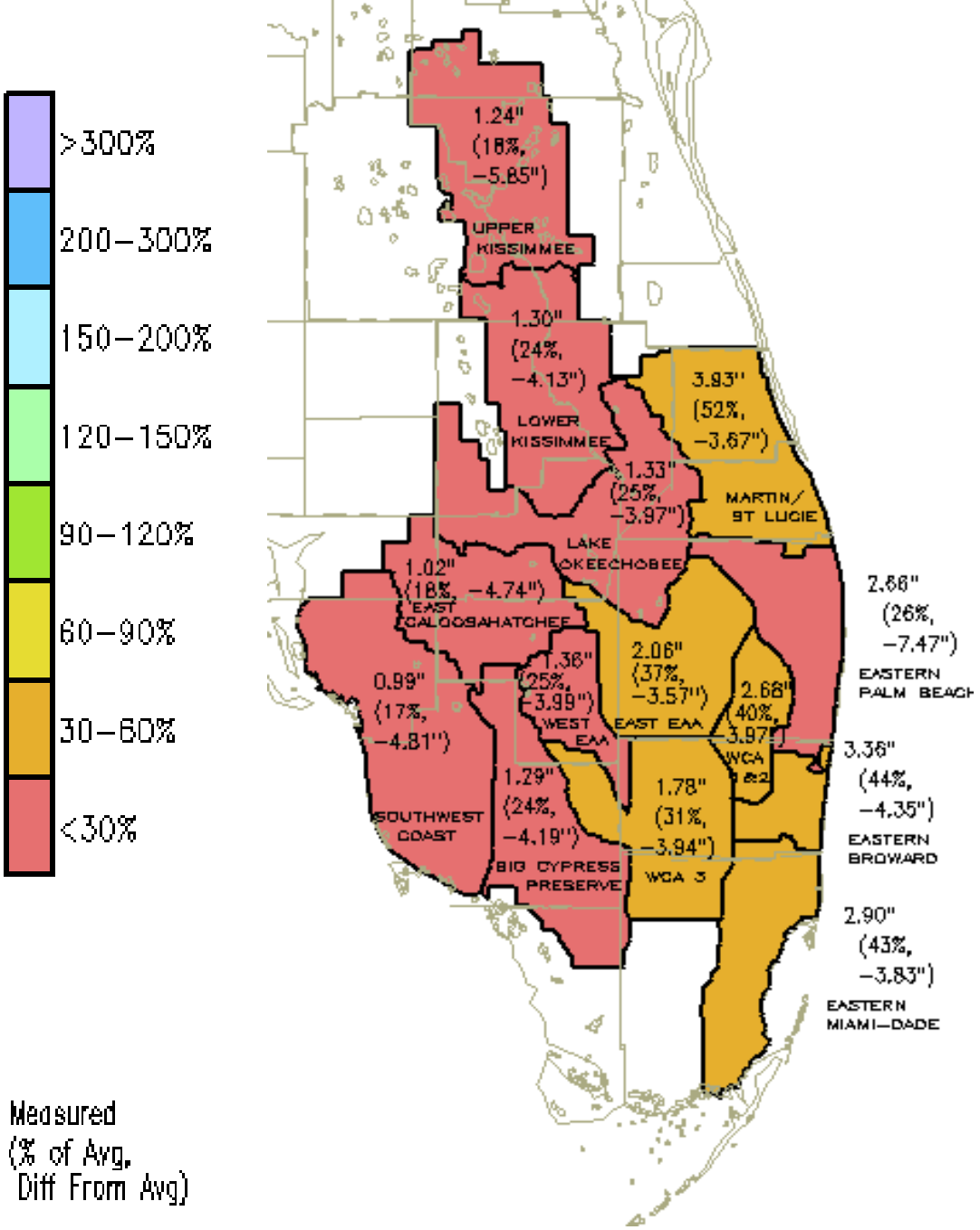
- **Less that 10% of average rainfall in majority of basins**

- **Driest January from Orlando to the Florida Keys since recordkeeping began in 1932**

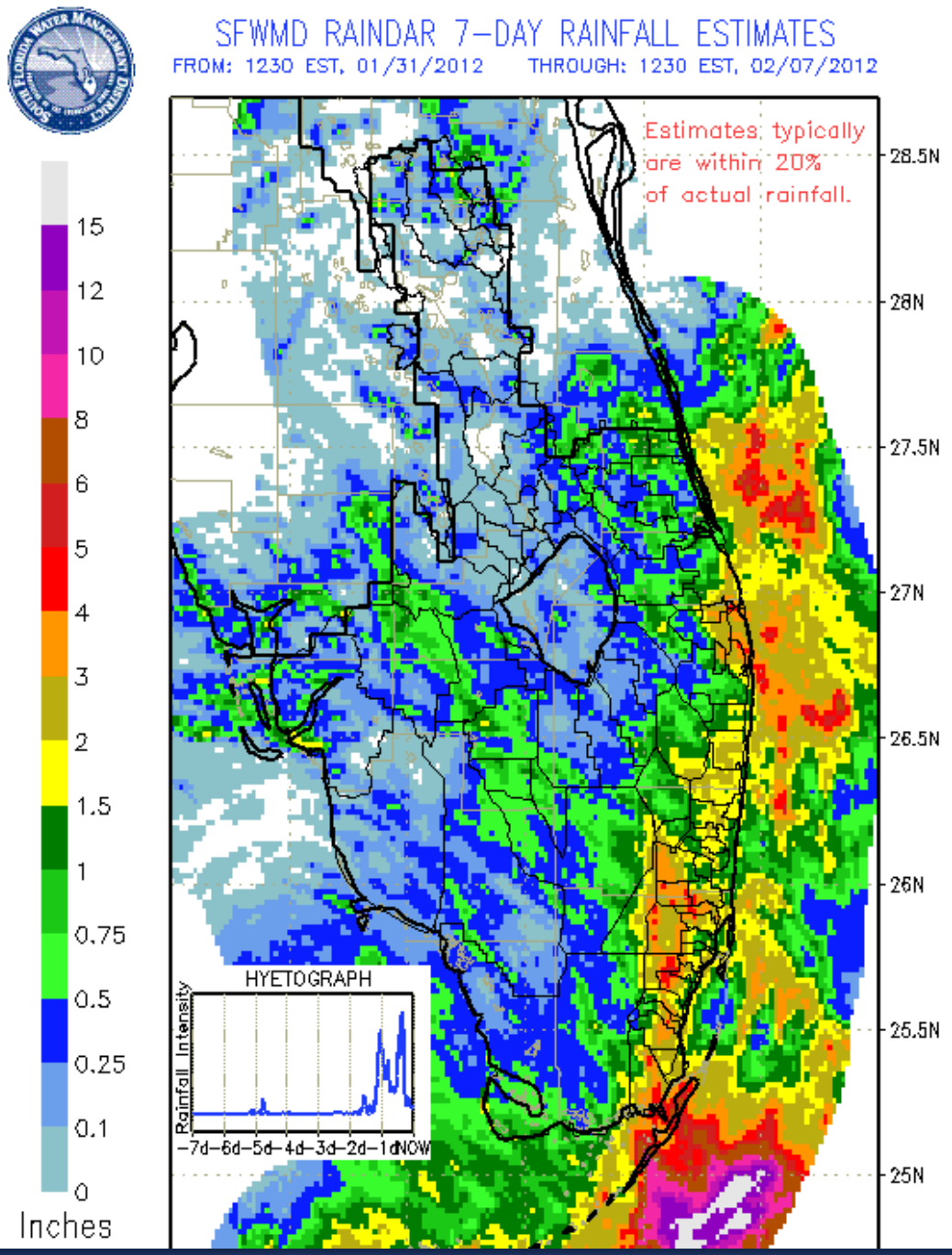
SFWMD 2011-12
Dry Season Rainfall

02Nov2011 – 02 Feb 2012

DISTRICT-WIDE: 1.81” (29% of Avg, or –4.45”)



- All Basins received less than average rainfall so far this dry season
- Palm Beach County has the largest deficient at -7.5 inches
- Above average rainfall in most basin in October is still a benefiting the regional water resources despite the dryer conditions thus far as compared to last year at this time:
- 2011 Nov – Jan 4.8” (78% of Avg, or – 1.38 “)



February 2012 Rainfall

31-Dec-2011 – 07-Feb-2012

- **About 0.7 inches during first week of February**
- **Highest rainfall along the lower east coast**
  - **3”-4” in n.e. Palm Bch Co**
  - **up to 3.7” in Broward**
  - **3”-4.5” in Miami Dade**

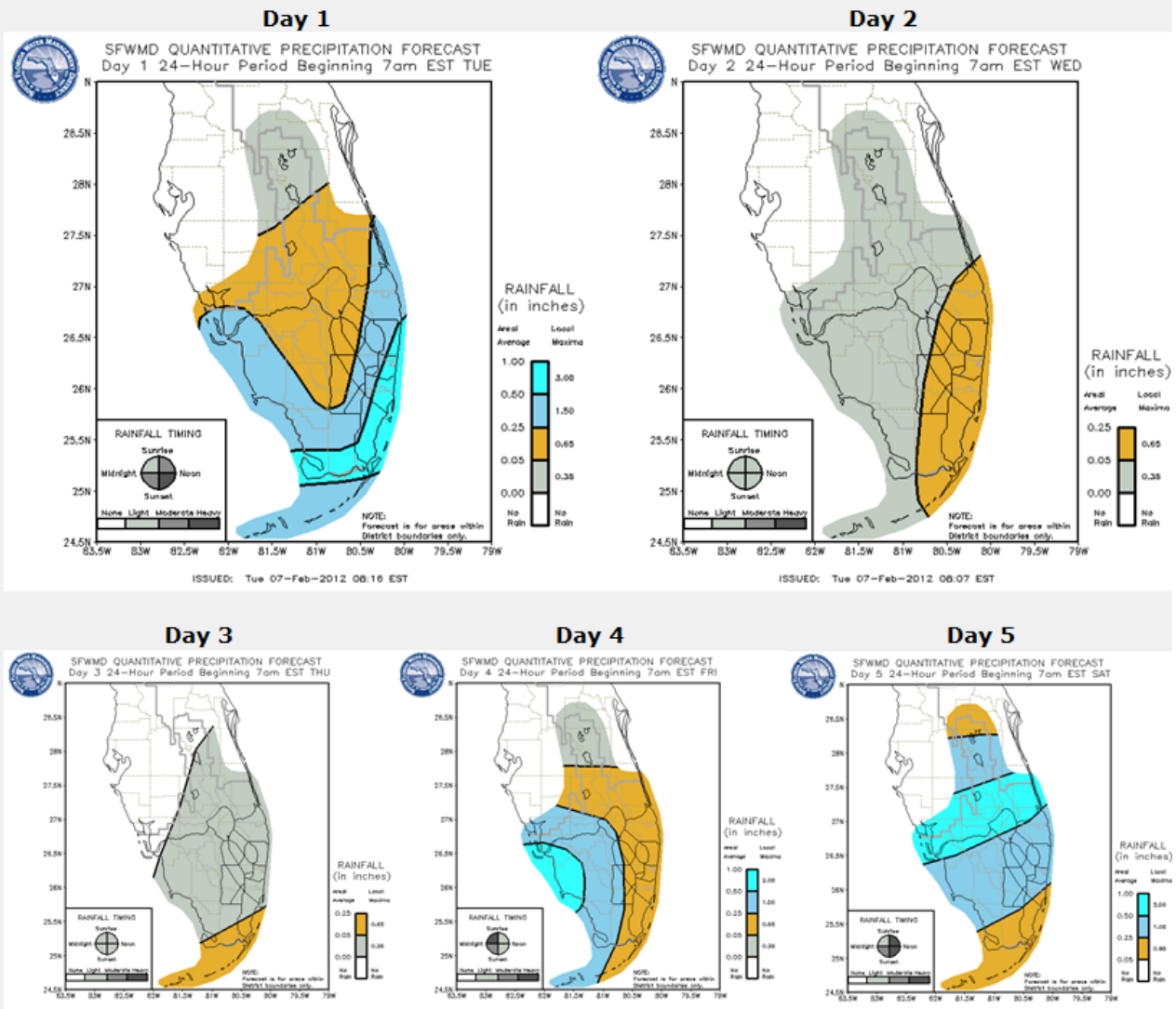
C-102 Basin Homestead
Flooding conditions for Farms located West of SW. 112 Ave & South of SW. 268 ST
Feb. 7, 2012

C-102 Basin Homestead
Flooding conditions of farms South of 268 ST. & SW. 107 Ave
Feb. 7, 2012

C-102N Basin Homestead
Flooding conditions of farms West of SW. 112 Ave & SW. 248 ST.
Feb. 7, 2012

SFWMD Forecast

Quantitative Precipitation Forecast (QPF)



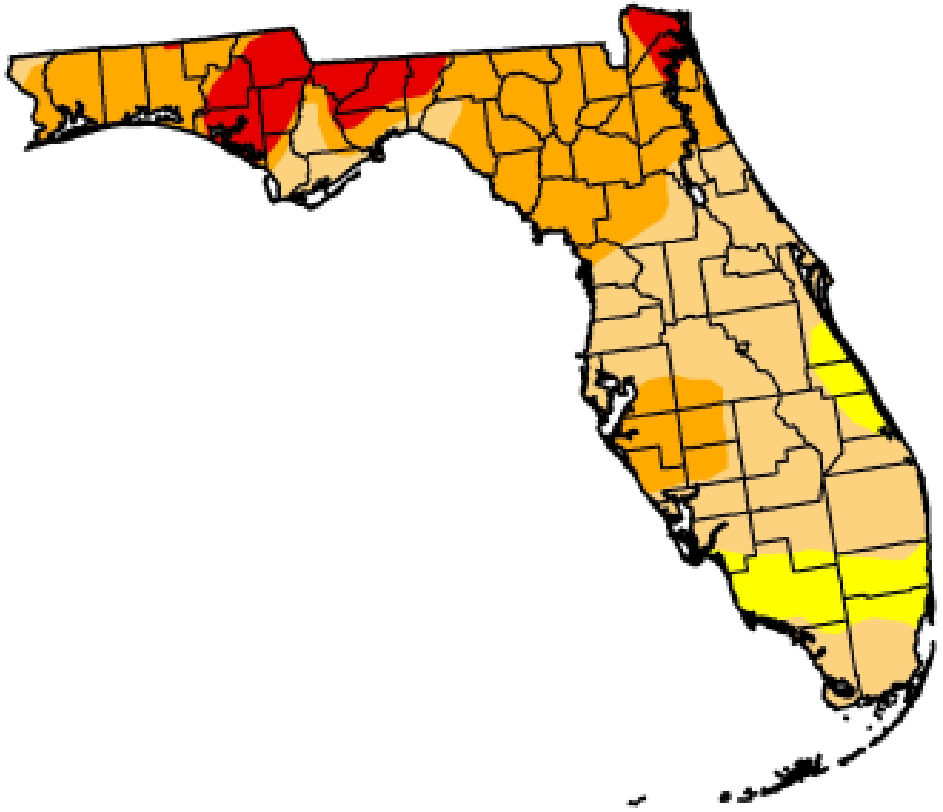
U.S. Drought Monitor

January 31, 2012
Valid 7 a.m. EST

Florida

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	90.50	45.06	9.22	0.00
Last Week (01/24/2012 map)	0.00	100.00	85.28	33.03	9.22	0.00
3 Months Ago (11/01/2011 map)	62.98	37.02	26.16	18.36	7.98	0.00
Start of Calendar Year (12/27/2011 map)	38.81	61.19	27.41	12.84	2.61	0.00
Start of Water Year (09/27/2011 map)	43.12	56.88	28.83	16.85	7.85	0.00
One Year Ago (01/25/2011 map)	0.17	99.83	87.73	54.25	20.96	0.00



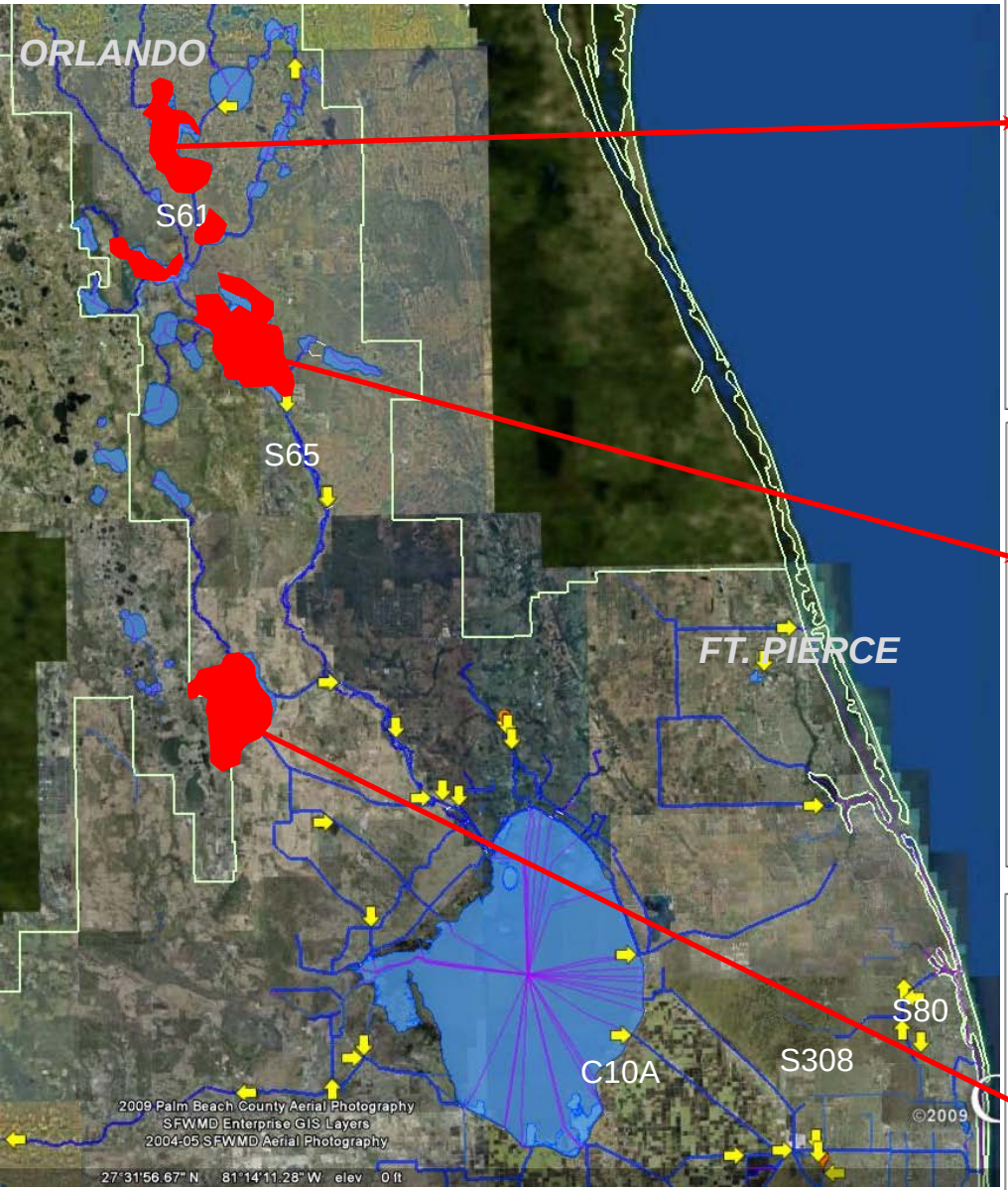
Intensity:

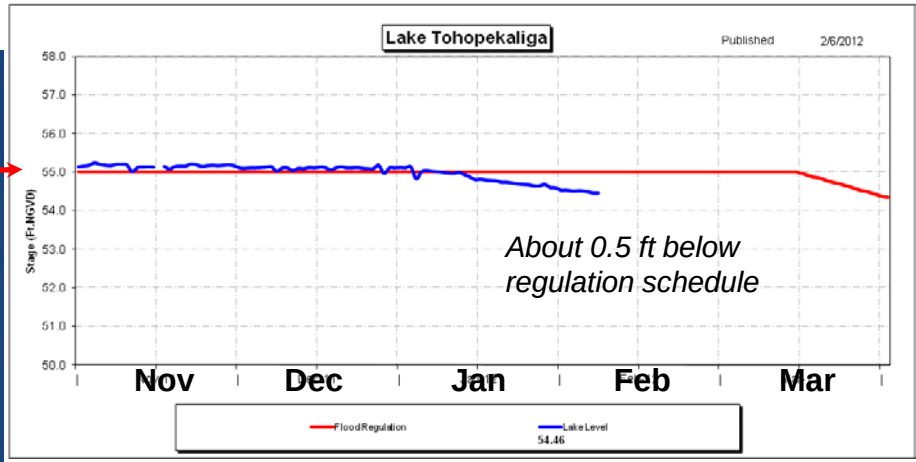
- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

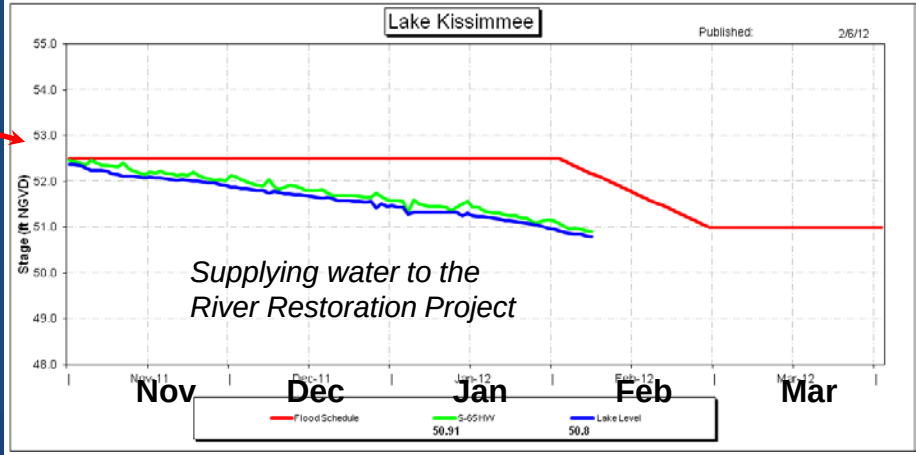
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

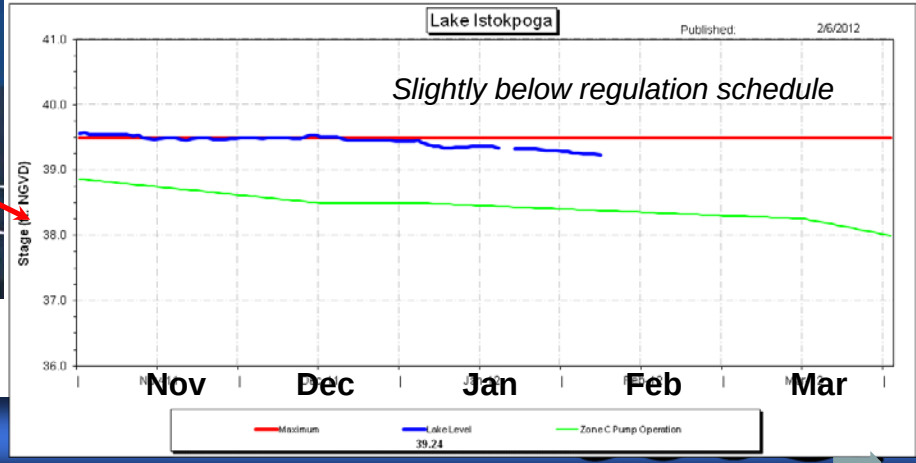
http://droughtmonitor.unl.edu

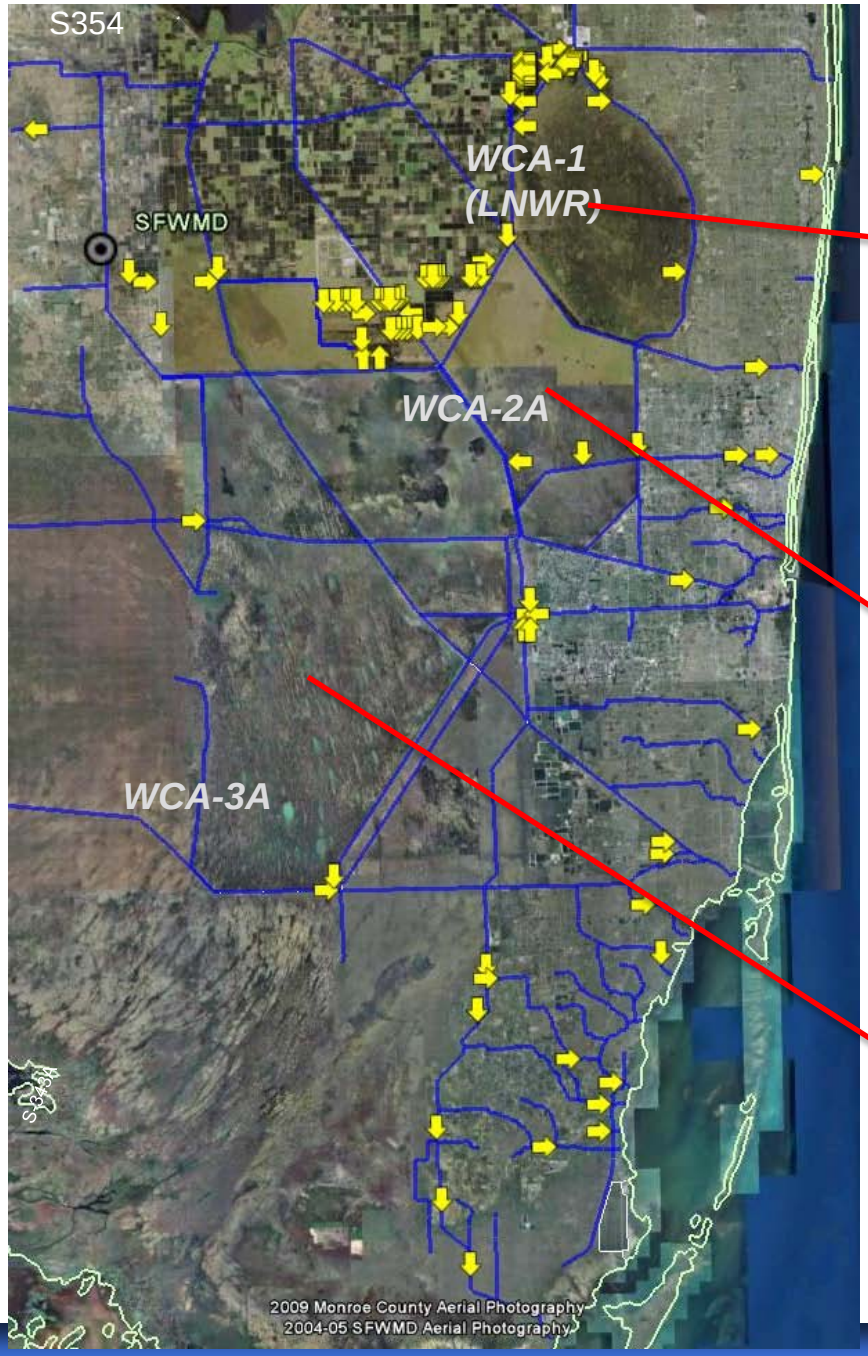
Released Thursday, February 2, 2012
Eric Luebehusen, USDA

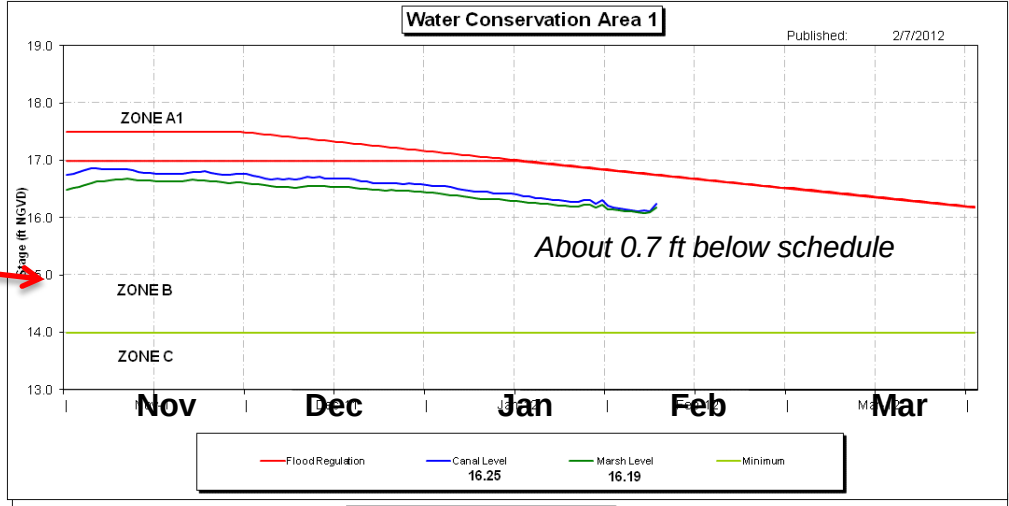

ORLANDO
S61
S65
FT. PIERCE
S80
S308
C10A
2009 Palm Beach County Aerial Photography
SFWMD Enterprise GIS Layers
2004-05 SFWMD Aerial Photography
©2009
27°31'56.67" N 81°14'11.28" W elev 0 ft

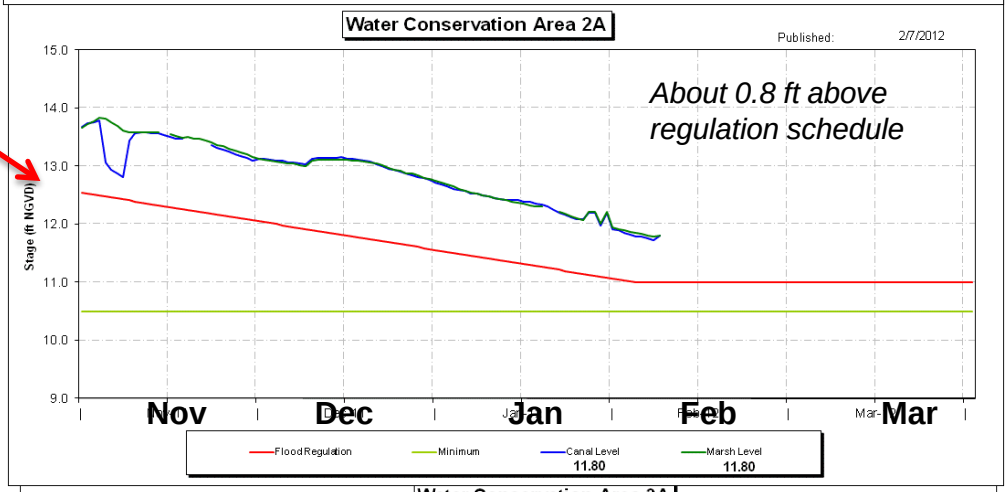

Lake Tohopekaliga
Published 2/6/2012
Stage (Ft.NGVD)
58.0
57.0
56.0
55.0
54.0
53.0
52.0
51.0
50.0
About 0.5 ft below
regulation schedule
Nov
Dec
Jan
Feb
Mar
Flood Regulation
Lake Level
54.46

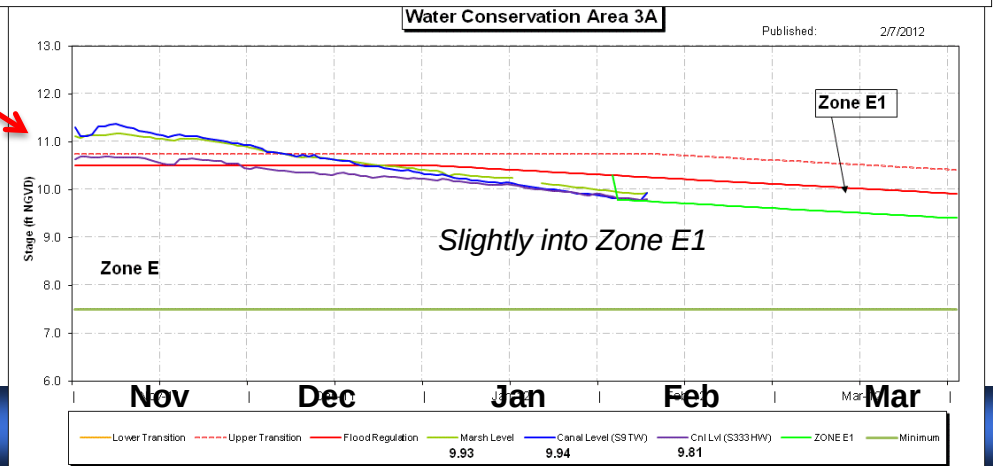

Lake Kissimmee
Published: 2/6/12
Stage (ft NGVD)
55.0
54.0
53.0
52.0
51.0
50.0
49.0
48.0
Supplying water to the
River Restoration Project
Nov
Dec
Jan
Feb
Mar
Flood Schedule
S-65HW
Lake Level
50.91
50.8


Lake Istokpoga
Published: 2/6/2012
Stage (ft NGVD)
41.0
40.0
39.0
38.0
37.0
36.0
Slightly below regulation schedule
Nov
Dec
Jan
Feb
Mar
Maximum
Lake Level
Zone C Pump Operation
39.24

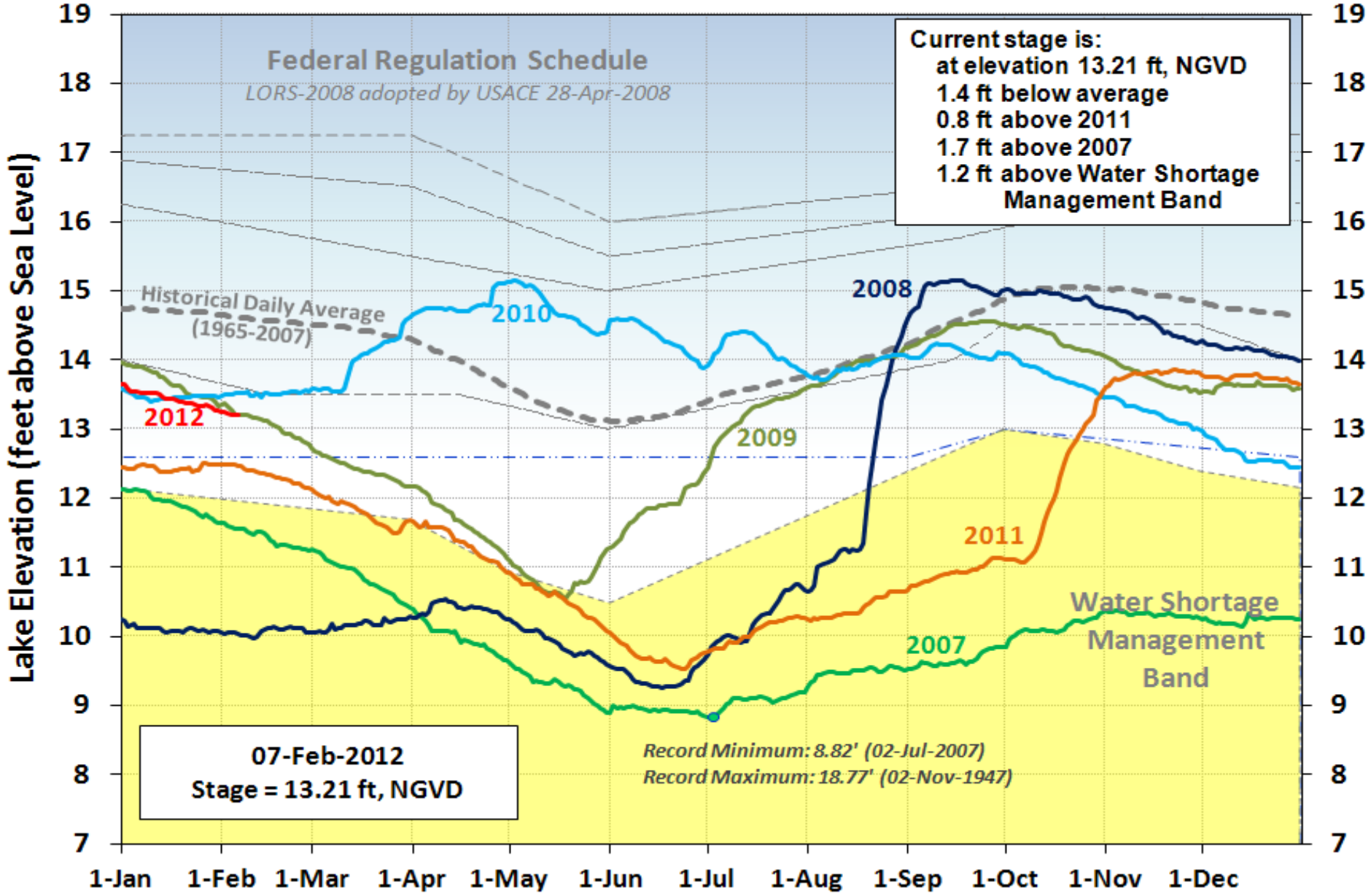

S354
WCA-1
(LNWR)
SFWMD
WCA-2A
WCA-3A
2009 Monroe County Aerial Photography
2004-05 SFWMD Aerial Photography


Water Conservation Area 1
Published: 2/7/2012
ZONE A1
ZONE B
ZONE C
Stage (ft NGVD)
About 0.7 ft below schedule
Nov
Dec
Jan
Feb
Mar
Flood Regulation
Canal Level
16.25
Marsh Level
16.19
Minimum


Water Conservation Area 2A
Published: 2/7/2012
Stage (ft NGVD)
About 0.8 ft above
regulation schedule
Nov
Dec
Jan
Feb
Mar
Flood Regulation
Minimum
Canal Level
11.80
Marsh Level
11.80


Water Conservation Area 3A
Published: 2/7/2012
Zone E1
Zone E
Stage (ft NGVD)
Slightly into Zone E1
Nov
Dec
Jan
Feb
Mar
Lower Transition
Upper Transition
Flood Regulation
Marsh Level
9.93
Canal Level (S9 TW)
9.94
Cnl Lvl (S333 HW)
9.81
ZONE E1
Minimum

Lake Okeechobee Water Level Comparison

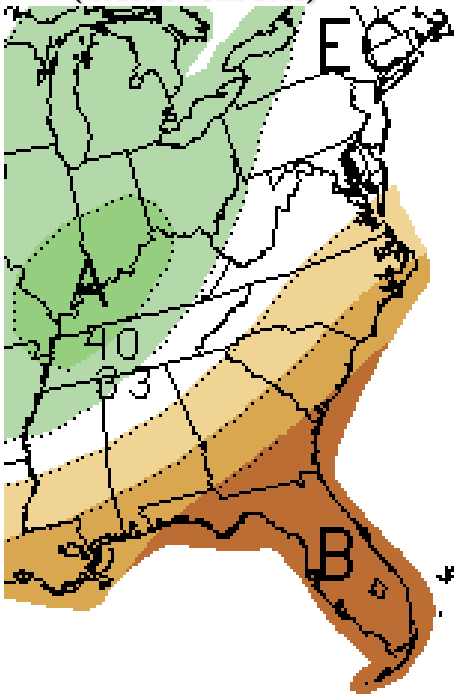


U. S. Seasonal Precipitation Outlook

National Climate Prediction Center (CPC)

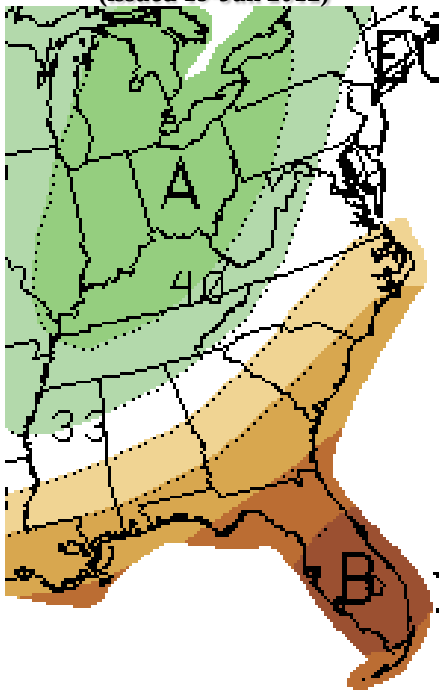
Feb 2012

(issued 31-Jan 2012)



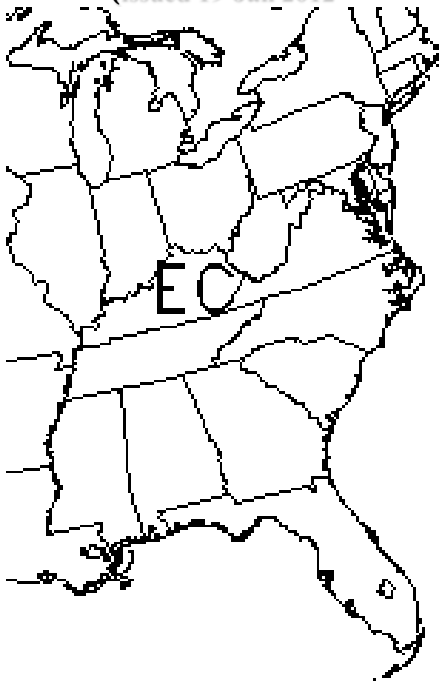
Feb - Apr 2012

(issued 19-Jan 2012)



May – Jul 2012

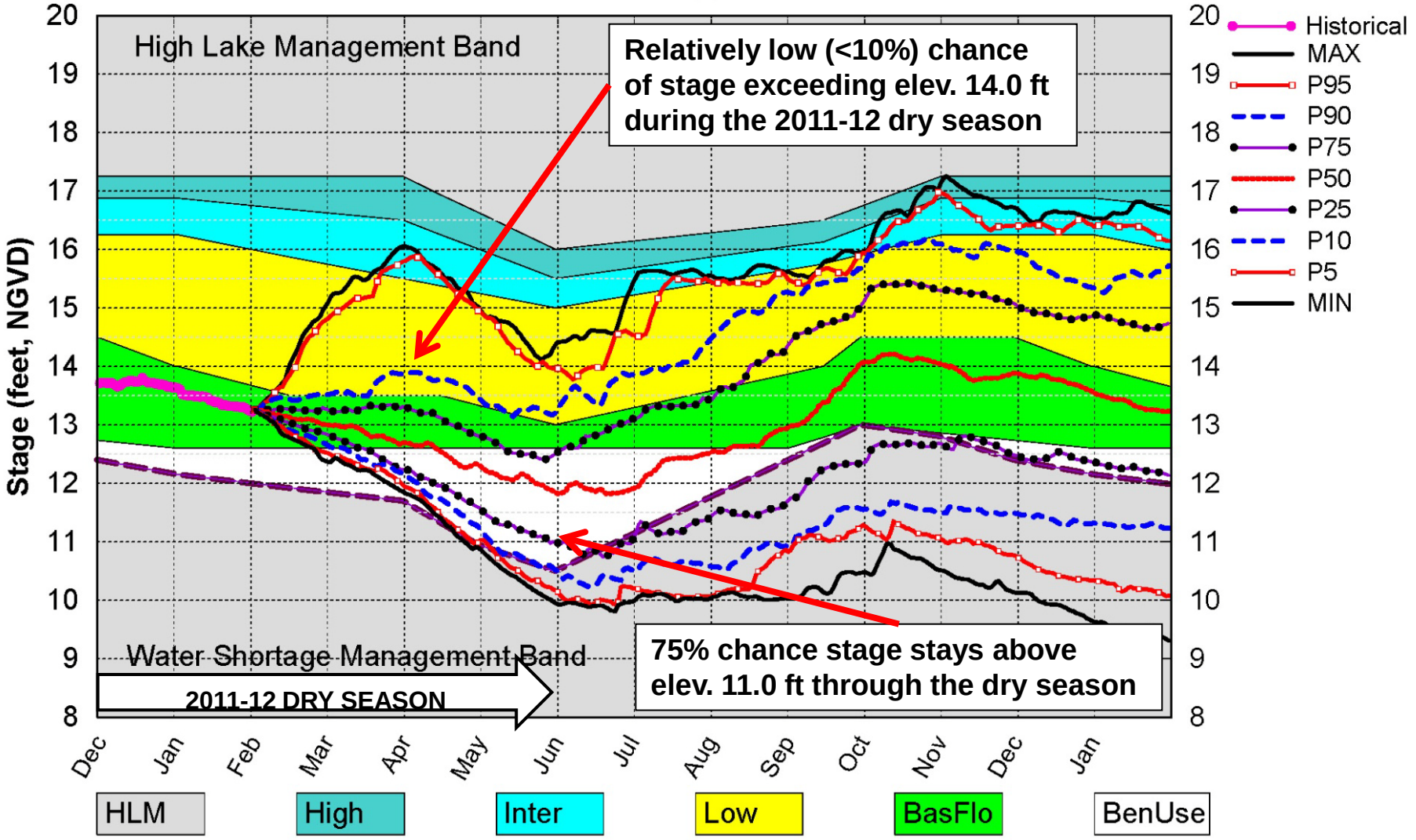
(issued 19-Jan 2012



The current CPC precipitation outlook for central and southern Florida is for increased chances of below-normal (B) rainfall for the reminder of the 2011-12 dry season. Feb - Apr shows highest probabilities (>50%)

Lake Okeechobee SFWMM February 2012 Position Analysis

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

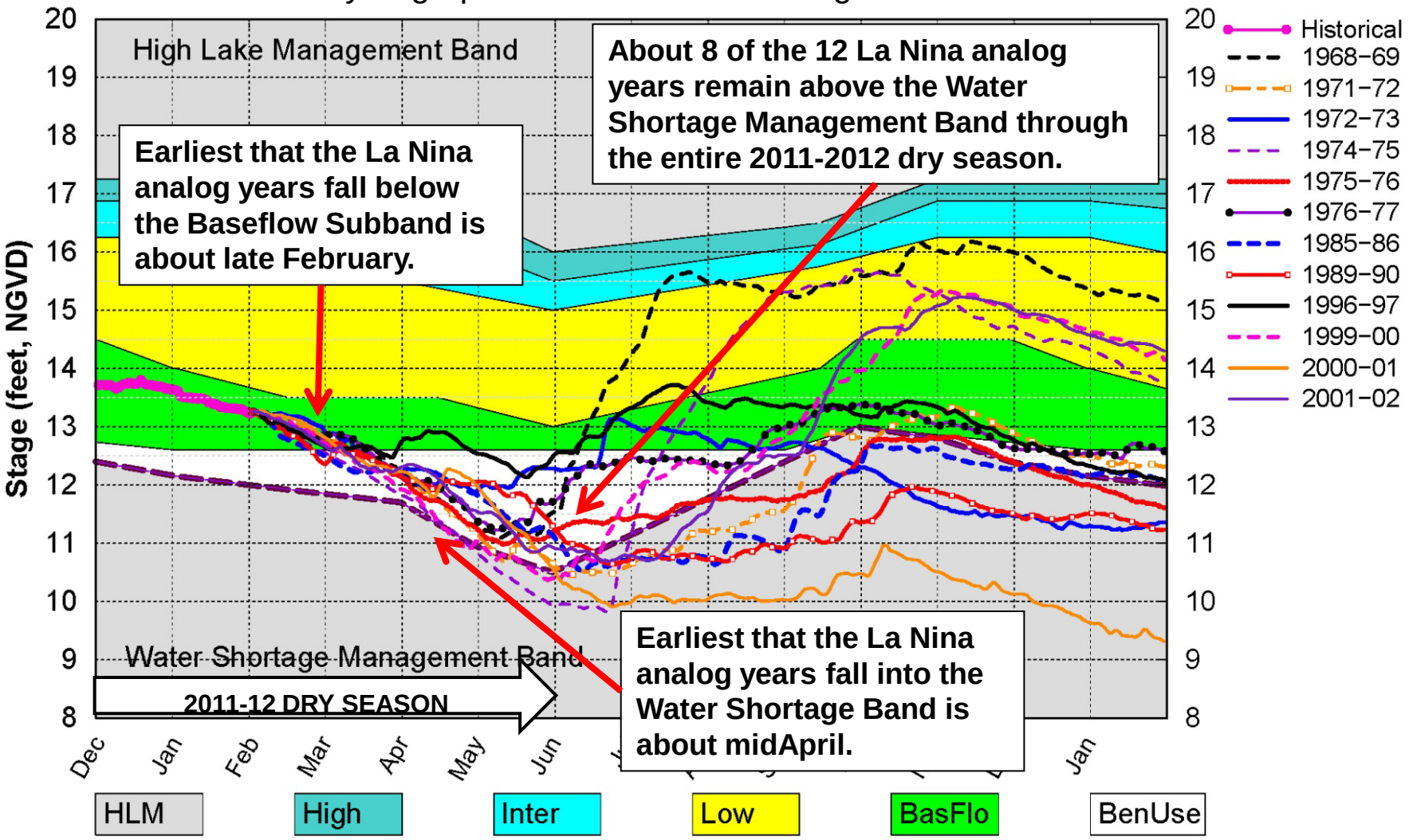


(See assumptions on the Position Analysis Results website)

Mon Feb 6 14:59:09 2012

Lake Okeechobee SFWMM February 2012 Position Analysis

Hydrographs for 12 La Nina Analog Years



(See assumptions on the Position Analysis Results website)

Mon Feb 6 14:59:42 2012

Lake Okeechobee: Current Operations

- **USACE's Lake O Regulation Schedule (2008 LORS)**
  - Stage is within the Baseflow Subband
  - Release guidance suggests:
    - up to baseflow releases at S-79 (450) and S-80 (200)
    - No releases to the WCAs (Dry Tributary Hydrologic Conditions)
- **SFWMD's Lake O Adaptive Protocol (2010)**
  - Release guidance currently suggests up to 450 cfs baseflow releases to the Caloosahatchee Estuary
    - Lake Stage is in the Baseflow Subband
    - Val I75 Salinity forecast (30-day moving avg) > 5 psu within next two weeks
    - Less than 50% chance Lake stage will fall below elevation 11.0 ft during the dry season
  - Feb 8th: SFWMD requested the USACE to initiate 9th consecutive week of 450 cfs baseflow releases

Questions