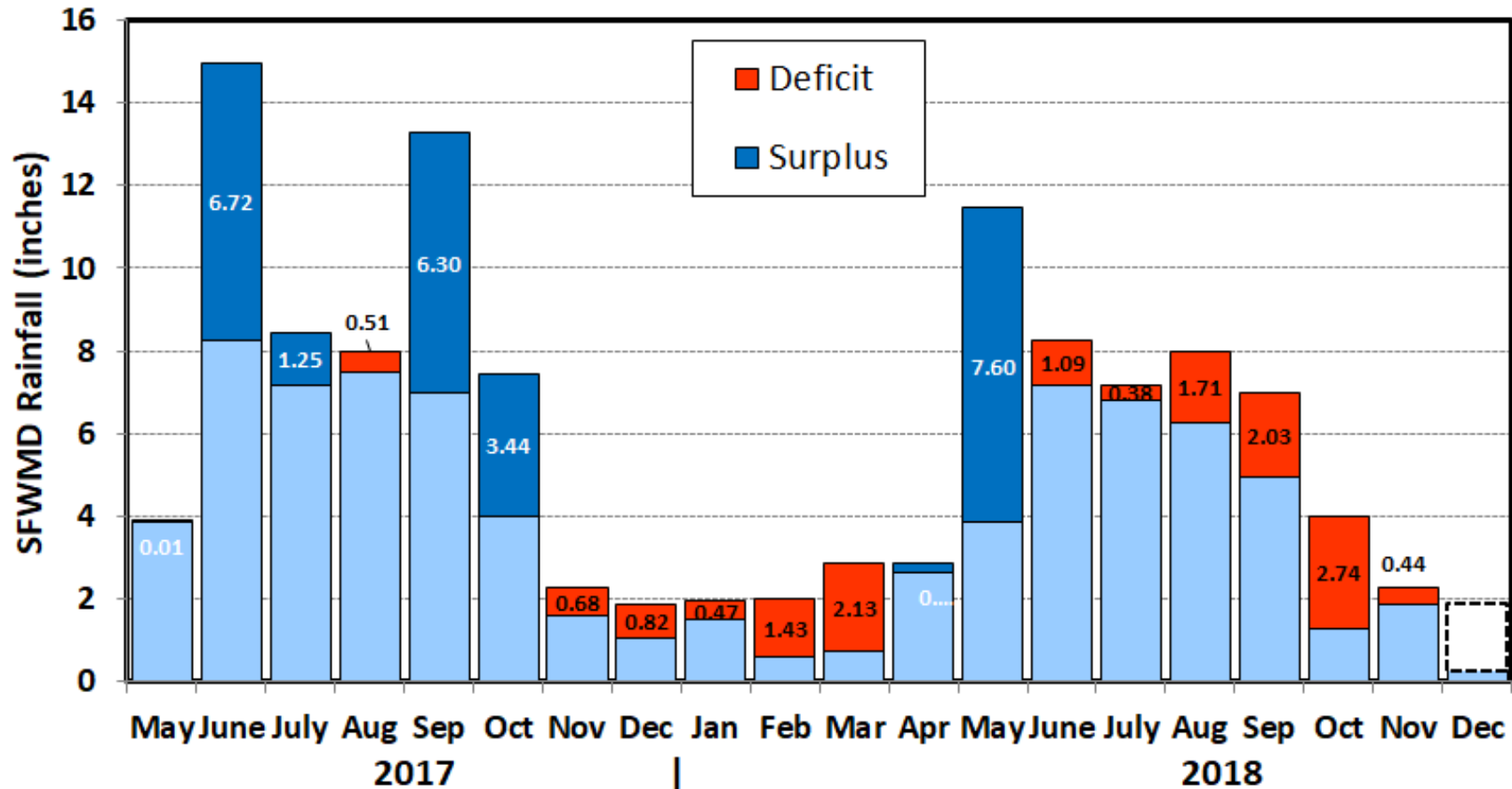


Water Conditions Summary

**South Florida Water Management District
WRAC Meeting
December 6, 2018**

**John P. Mitnik, PE
Chief District Engineer**

SFWMD Rainfall Distribution Comparison (May 2017 - December 2018)



2017 WET SEASON:

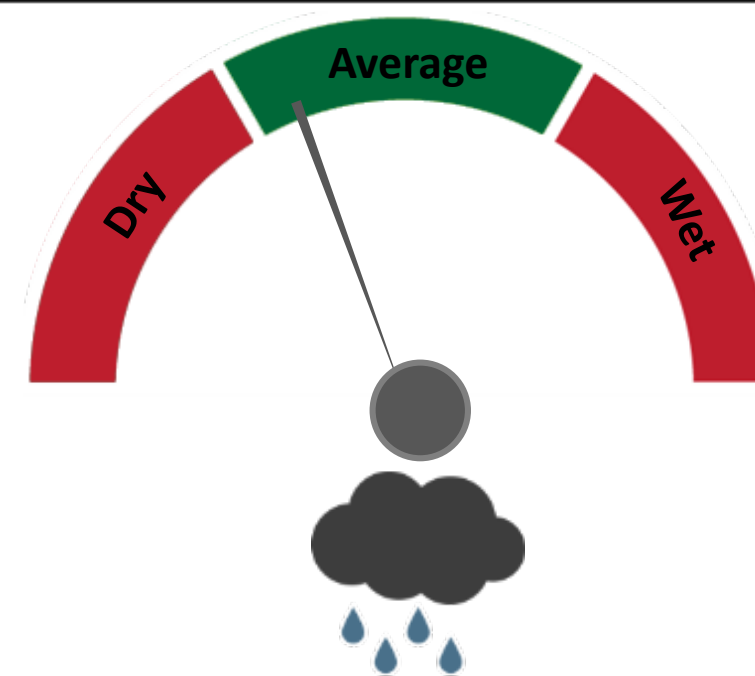
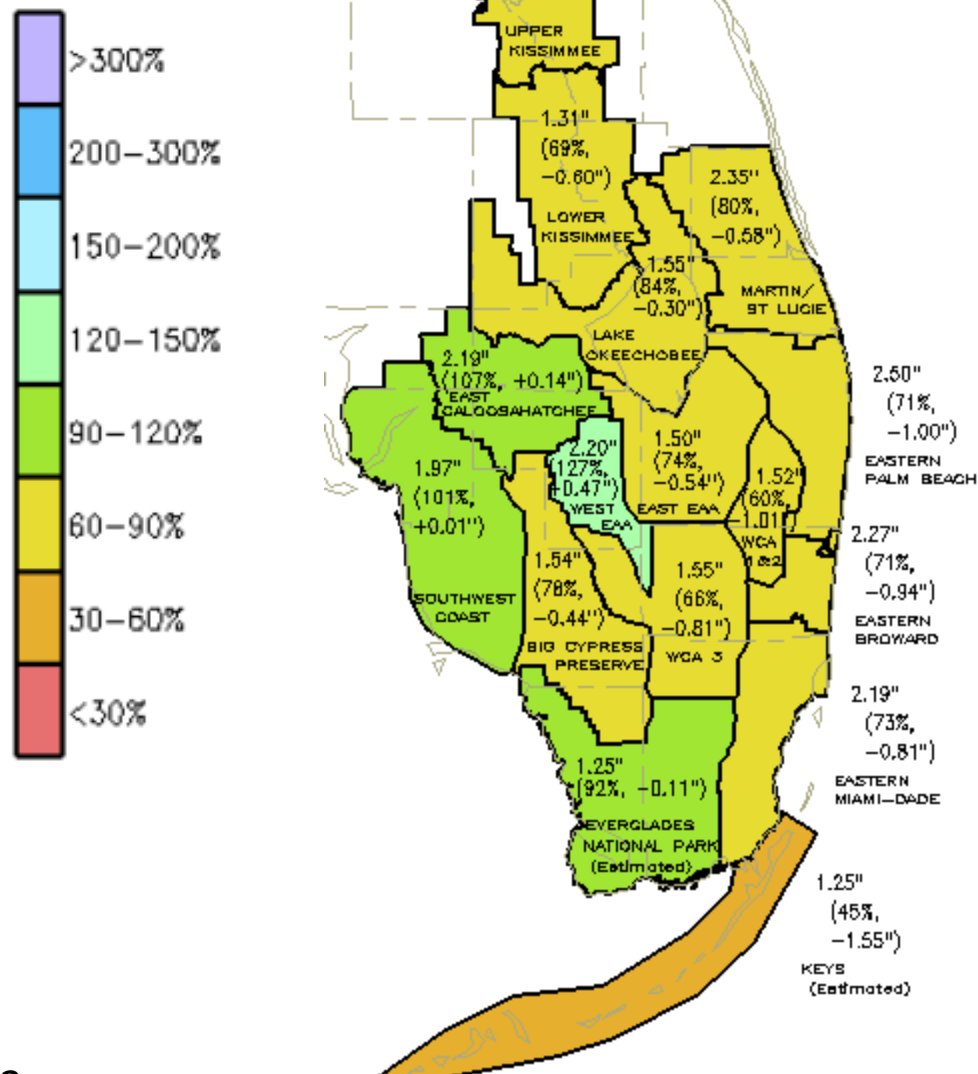
- June, September and October 2017 were ~ 190% average
- Hurricane Irma Impact ~ 8.5"
- TS Philippe ~ 2.4"

2017-2018 DRY SEASON:

- Below average
- April was first month above average after 5 dry months
- Wettest May in the POR

2018 WET SEASON – 2019-2018 DRY SEASON

- All months in the wet season had below average rainfall
- November 2018 was below Normal
- About 0.25" rainfall for December 2018 to date

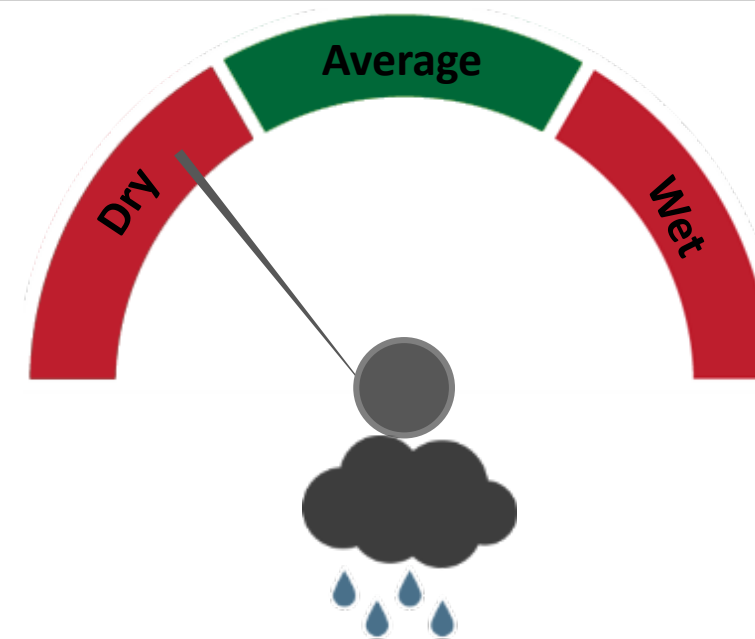
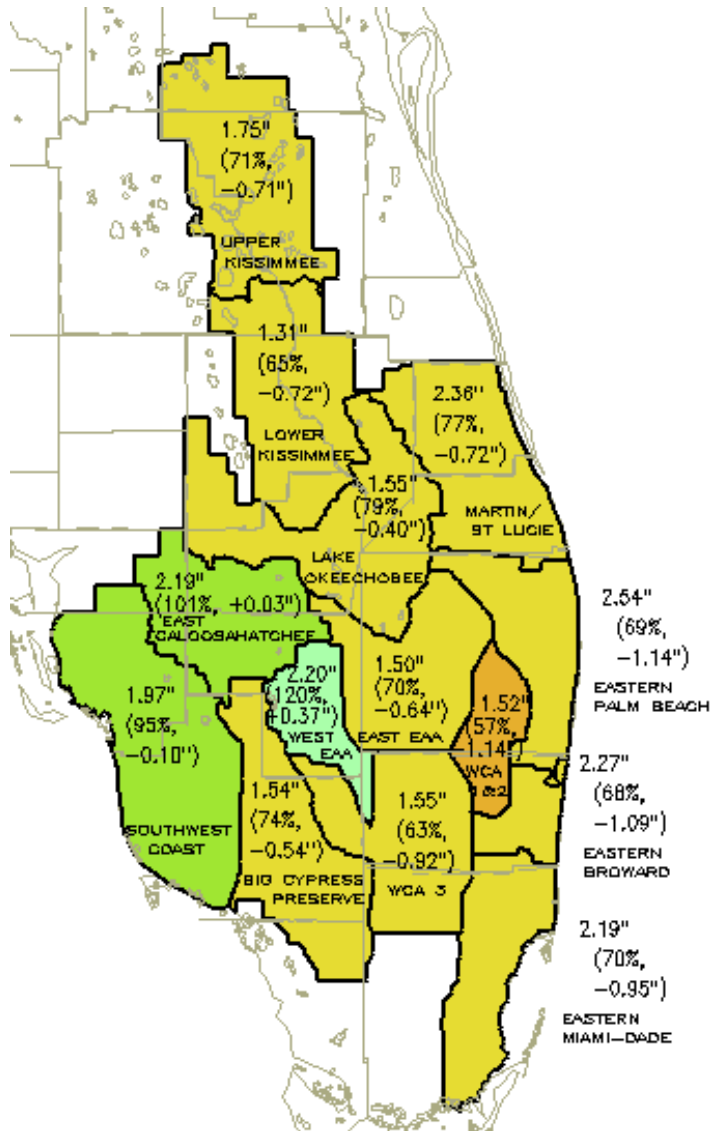
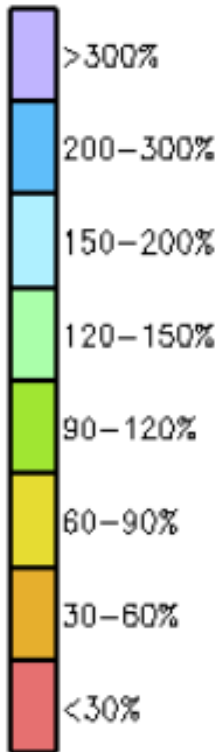


SFWMD

NOVEMBER 2018

DISTRICT-WIDE: 1.85"

- Below average: 81% or -0.44"
- Central-West areas tend to be above or near normal
- Most of remaining areas are 60-90% of normal
- Florida Keys are ~ 45% of normal
- Maximum surplus is West EAA +0.47"
- Maximum deficit is -1.01" for WCA-1 and WCA-2
- Eastern Palm Beach deficit is -1.00"



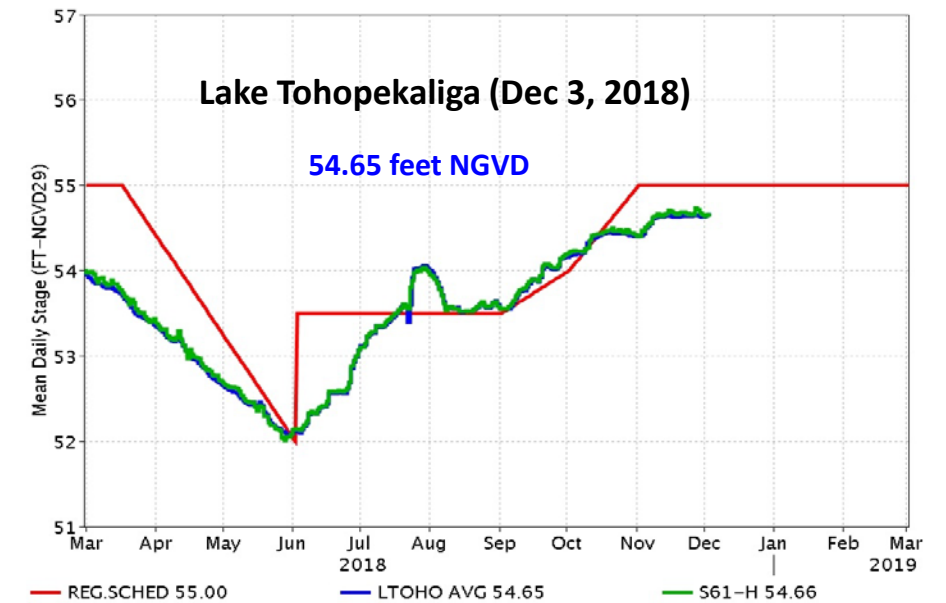
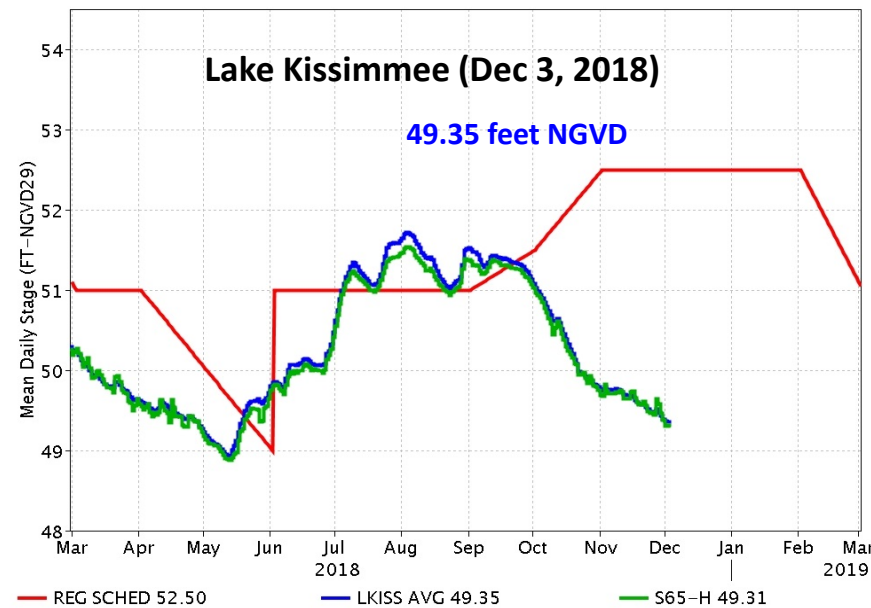
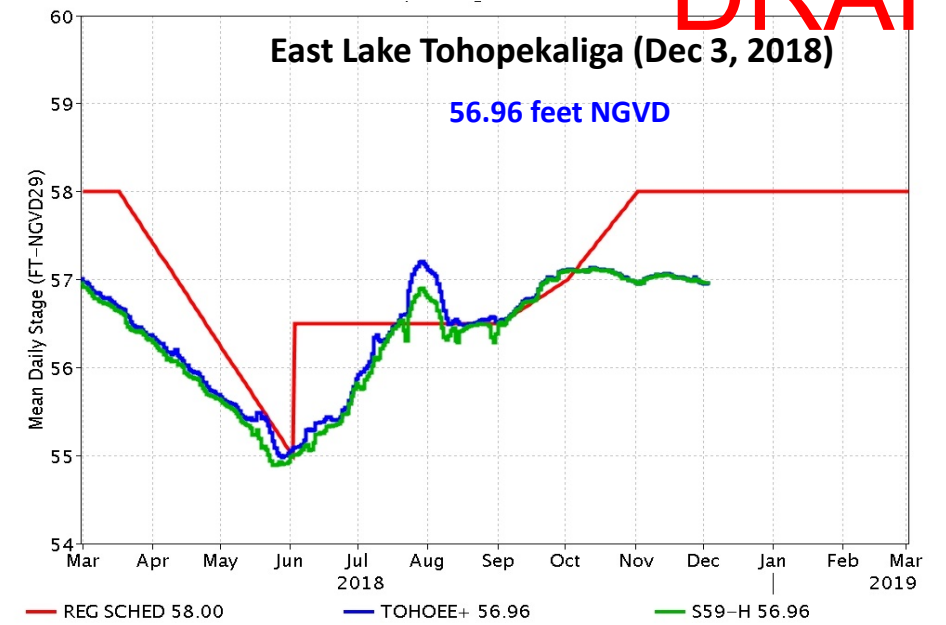
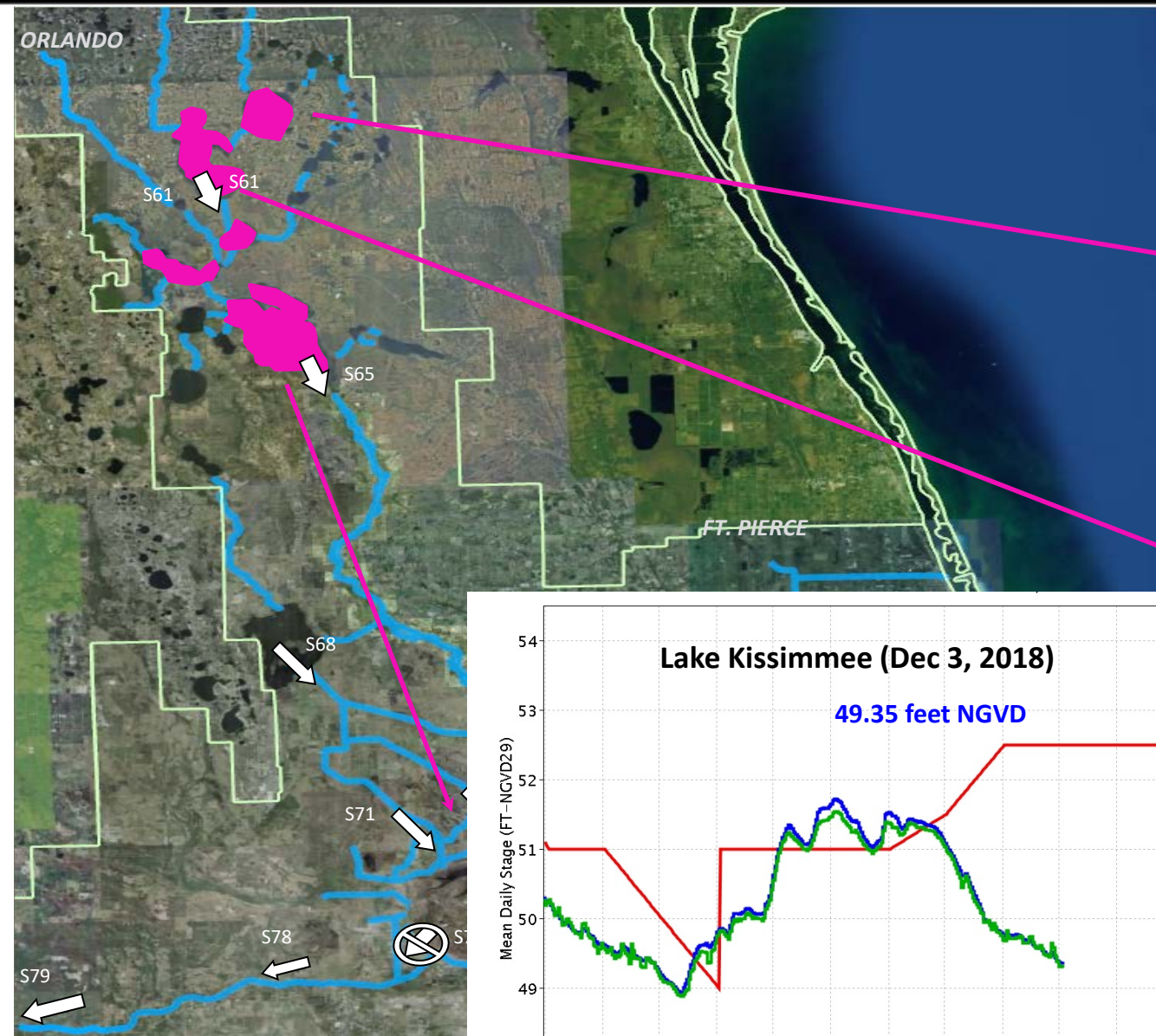
SFWMD

Dry Season Rainfall

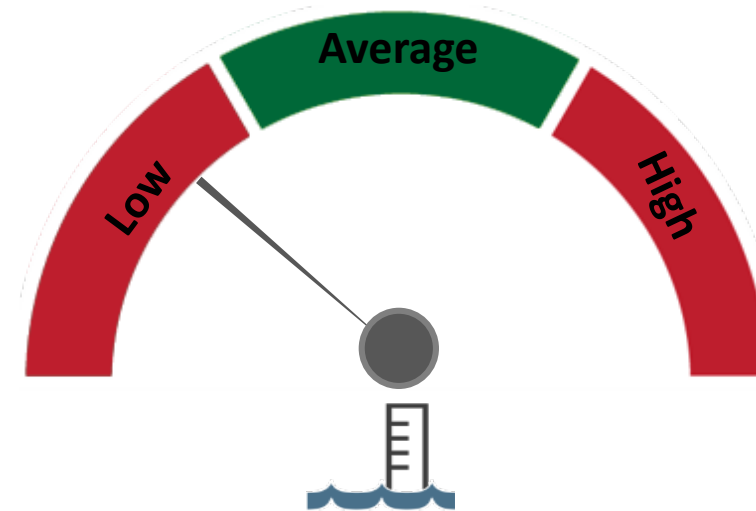
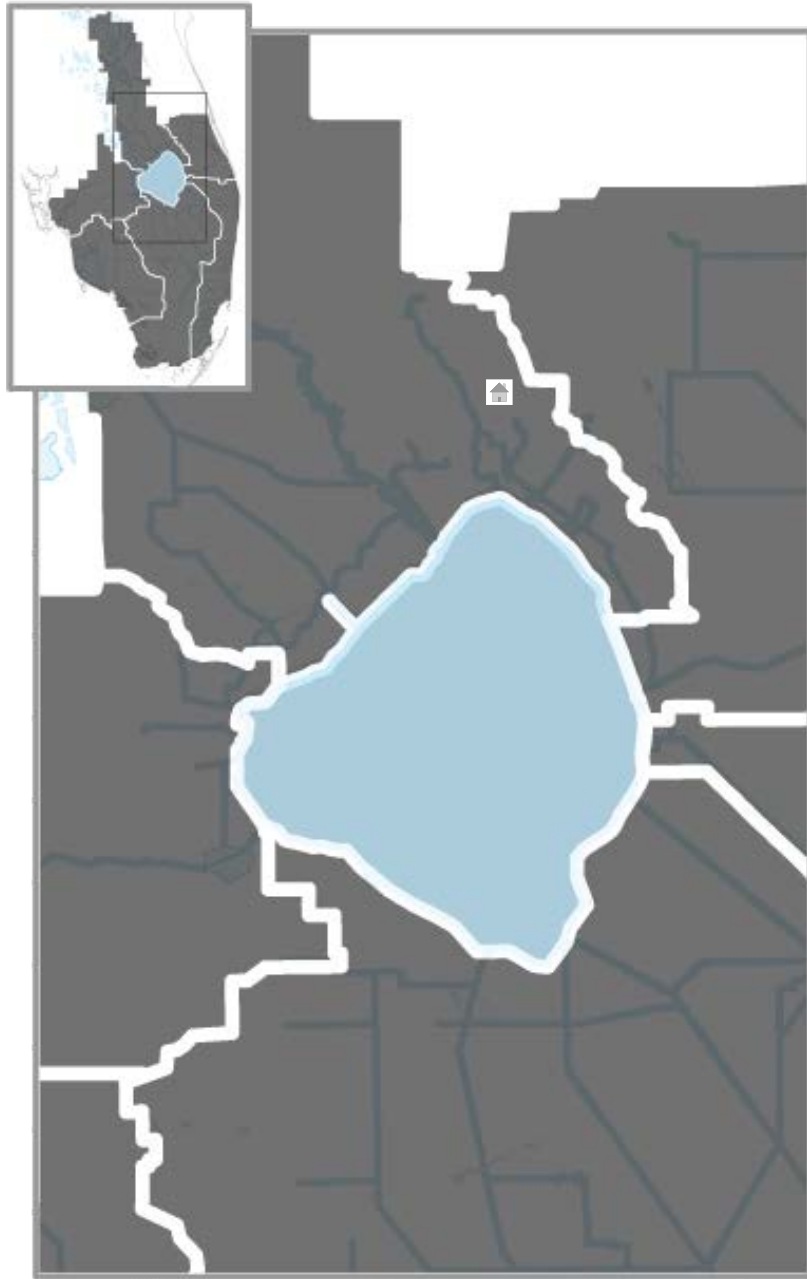
02-Nov, 2018 to 03-Dec, 2018

DISTRICT-WIDE: 1.85"

- Map very similar to November 2018

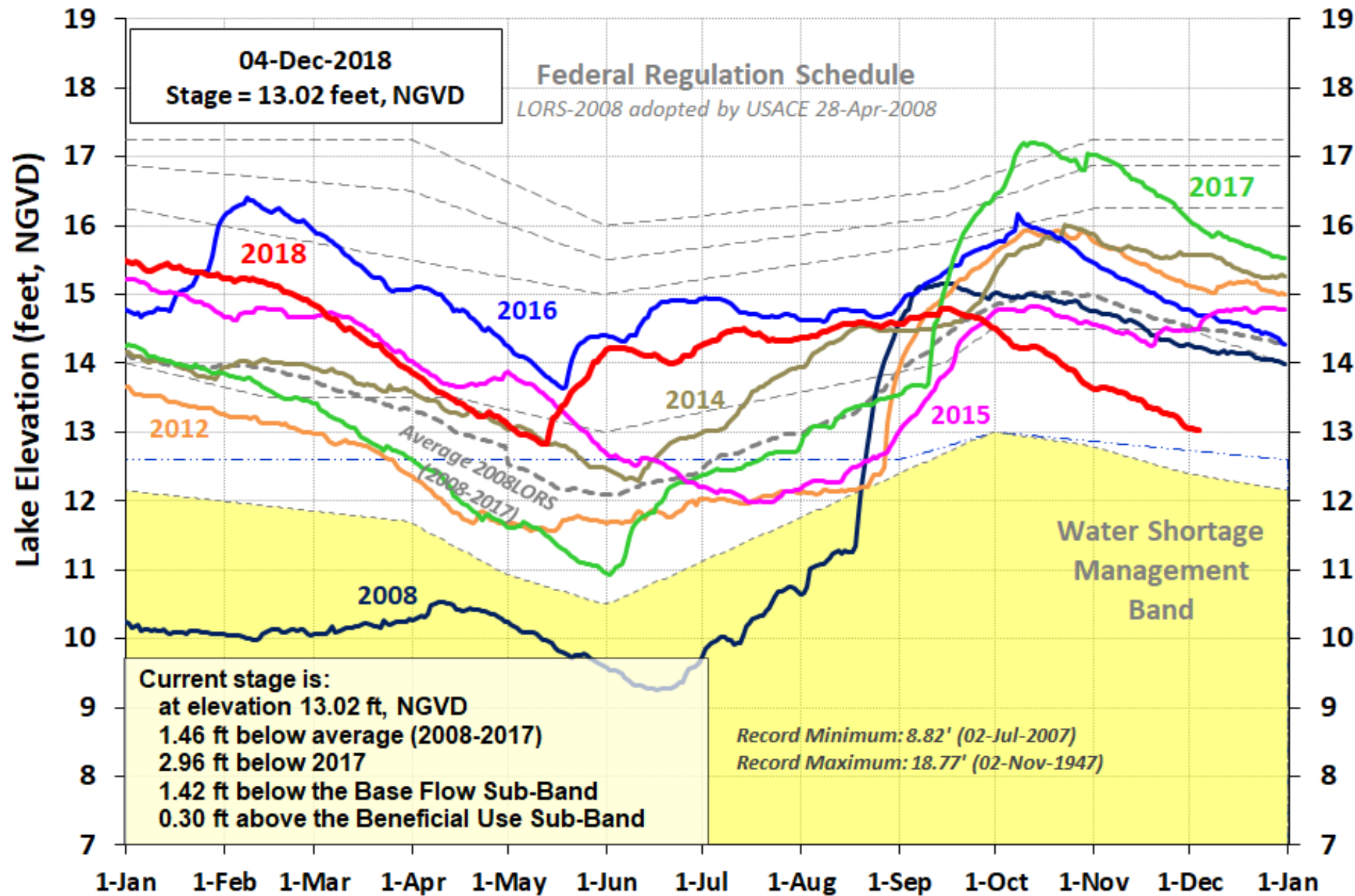


Lake Okeechobee Water Level

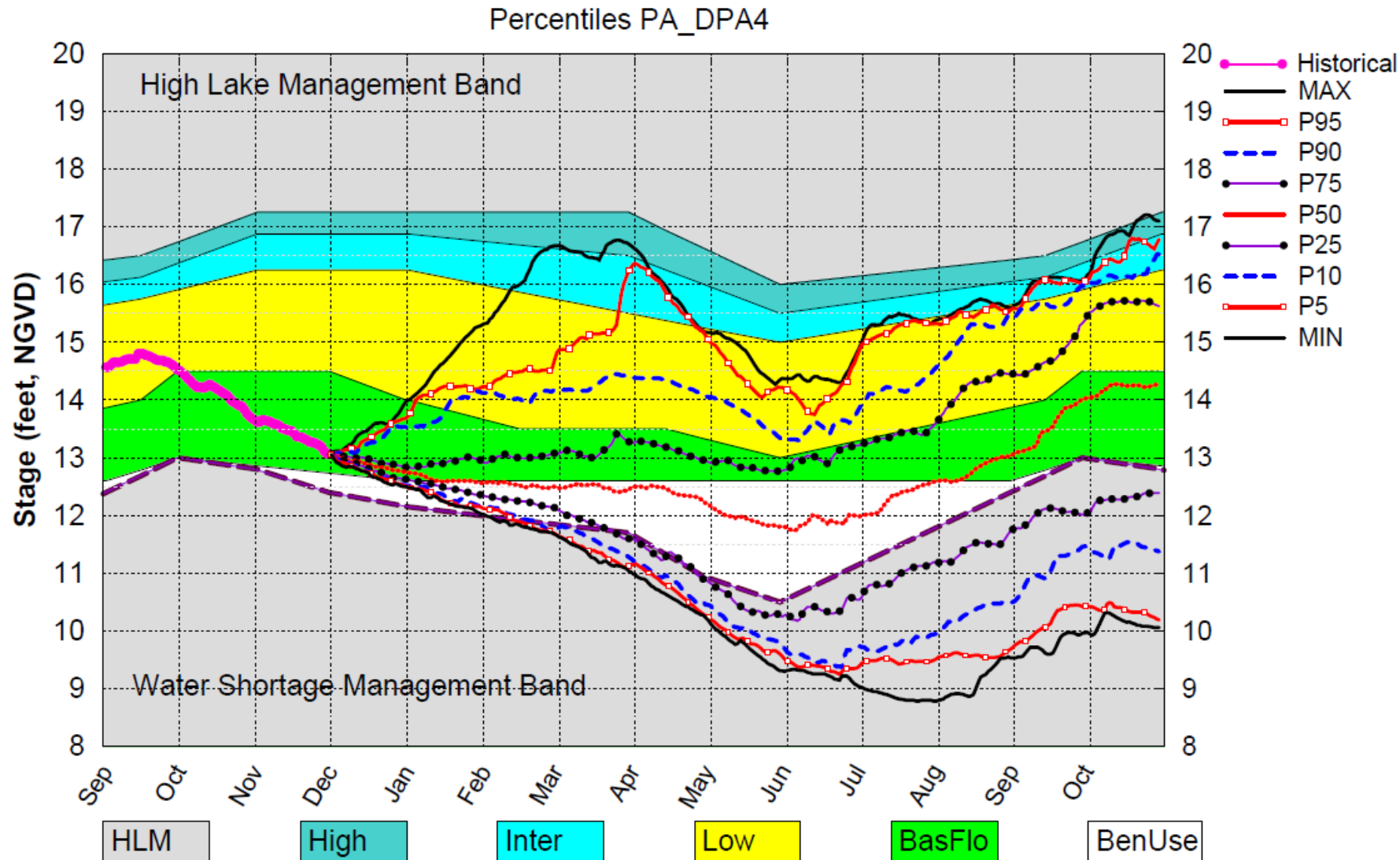


- Lake stage is 13.02 feet NGVD as of 12/04/2018 and in the Base flow Sub-band of LORS 2008
- Lake level decreased by 0.63 feet during the preceding 30 days and by 0.20 feet in the last 7 days
- USACE terminated regulatory flows at S-80 on Oct. 5
- For the current week LORS 2008 is suggesting
 - No releases south to the WCAs
 - 450 cfs measured at S-79 to the Caloosahatchee Estuary and 200 cfs measured at S-80 to the St. Lucie Estuary
- USACE is utilizing Operational Flexibility within LORS2008 to deliver a pulse release of 1,000 cfs average flow to the Caloosahatchee Estuary

Lake Okeechobee Water Level Comparison

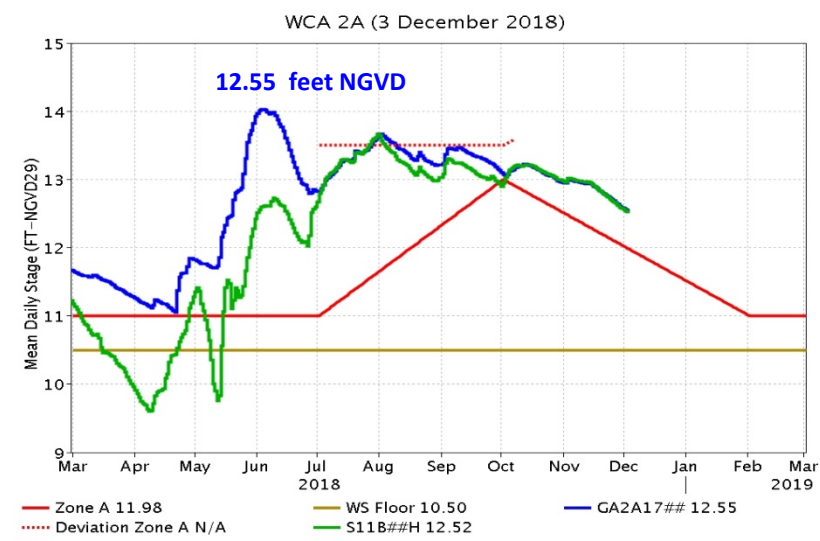
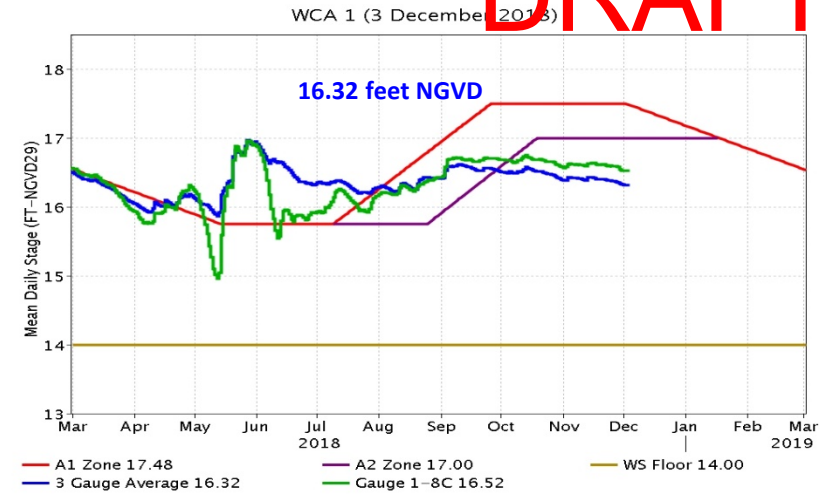
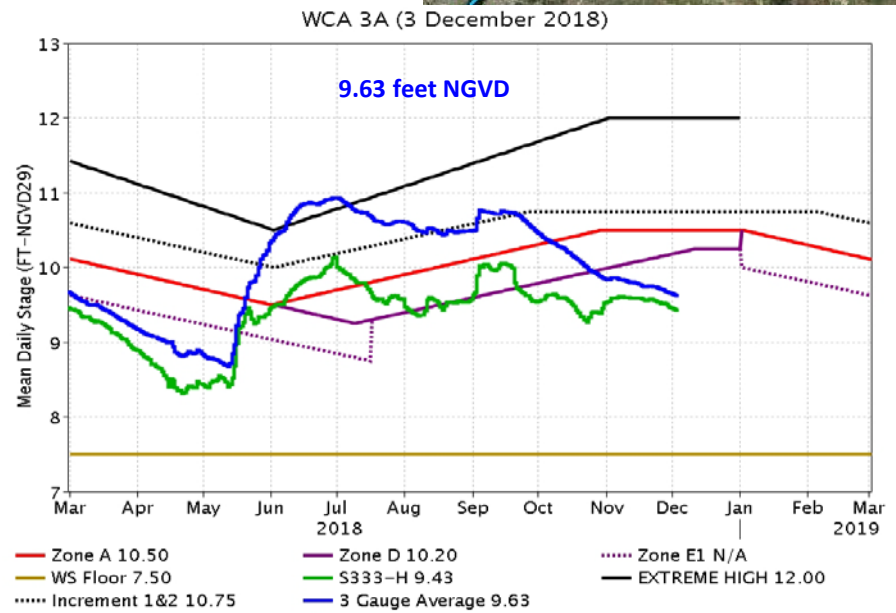
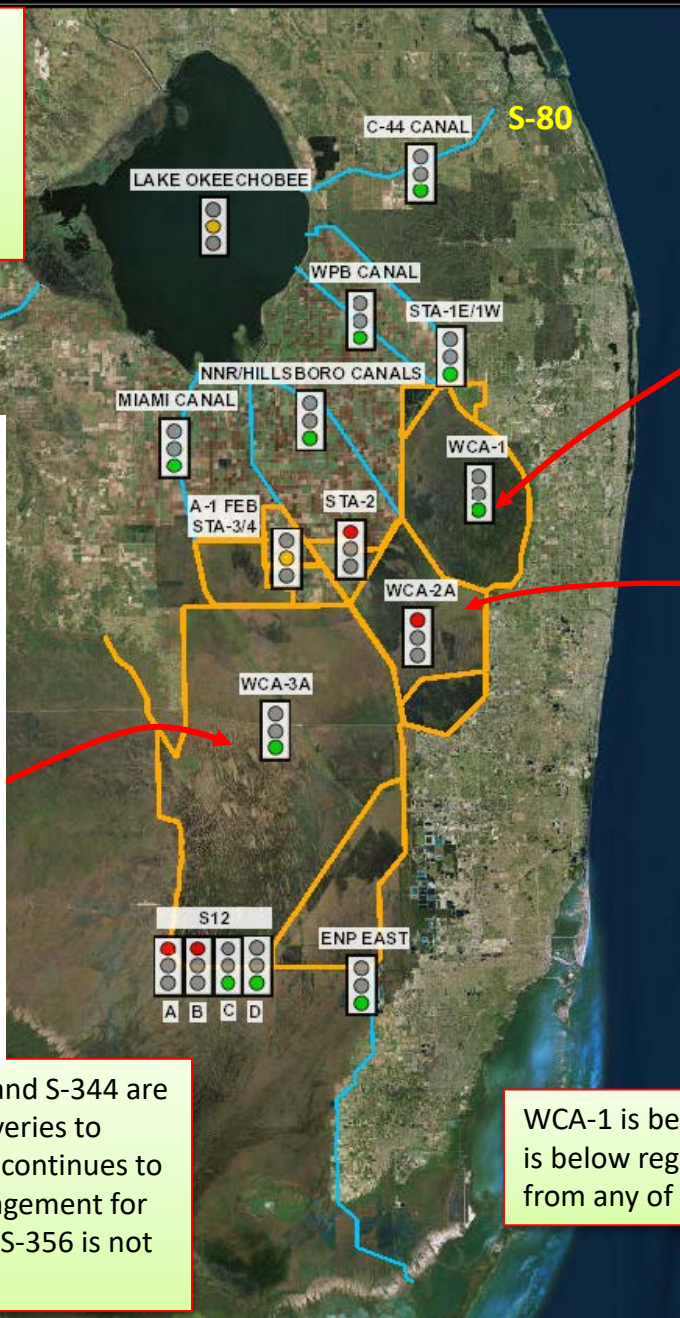


Lake Okeechobee SFWMM Dec 2018 Position Analysis



(See assumptions on the Position Analysis Results website)

Lake Okeechobee stage is in the Base Flow Sub-Band. LORS2008 calls for 450 cfs @ S-79, 200 cfs @ S-80 and no releases to the WCAs. Using Operational Flexibility under LORS2008 the USACE is implementing no regulatory releases to St. Lucie Estuary, 1,000 cfs measured at S-79 to the Caloosahatchee Estuary, and maximum practicable regulatory releases from Lake Okeechobee south to the WCAs.

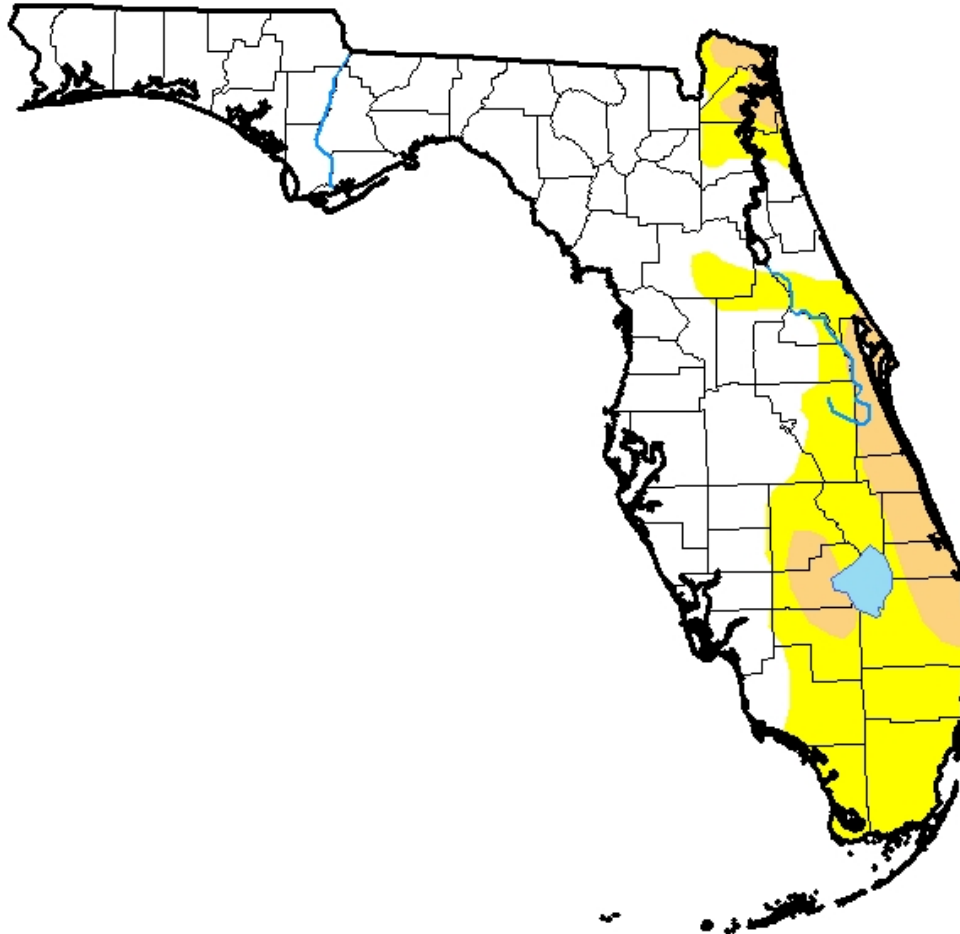


Rainfall Plan calls for no releases from WCA-3A. S-12s, S-343 A and B, and S-344 are all closed. S-333 and S-334 are passing ~ 240 cfs as supplemental deliveries to Taylor Slough. L-29 canal stage constraint is at 8.5 feet NGVD. District continues to operate the detention cells to provide flood control and seepage management for the SDCS (L-31N and C-111). SFWMD sending water to Taylor Slough. S-356 is not pumping.

WCA-1 is below schedule; WCA-2A is above regulation schedule; WCA-3A is below regulation schedule. No flood control releases are being made from any of the WCAs.. S-152 is releasing form WCA-3A to WCA-3B

U.S. Drought Monitor Florida

November 27, 2018
(Released Thursday, Nov. 29, 2018)
Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	64.40	35.60	9.44	0.00	0.00	0.00
Last Week 11-20-2018	64.40	35.60	9.44	0.00	0.00	0.00
3 Months Ago 08-28-2018	99.74	0.26	0.00	0.00	0.00	0.00
Start of Calendar Year 01-02-2018	72.59	27.41	22.39	0.00	0.00	0.00
Start of Water Year 09-25-2018	100.00	0.00	0.00	0.00	0.00	0.00
One Year Ago 11-28-2017	65.94	34.06	12.25	0.00	0.00	0.00

Intensity:

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

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

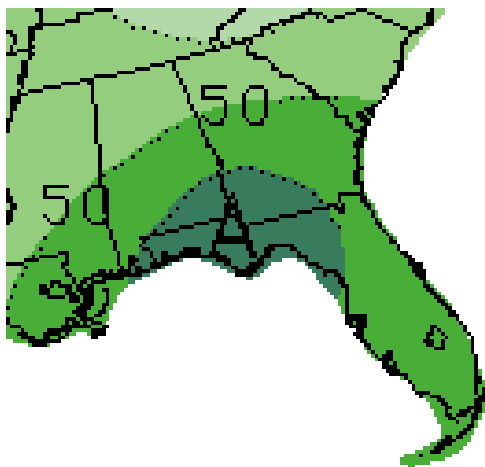
Author:

Richard Heim
NCEI/NOAA

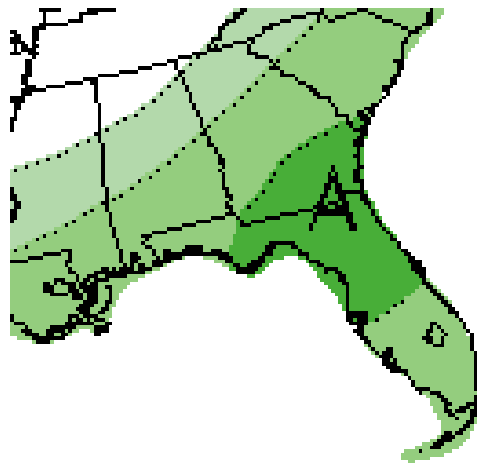


<http://droughtmonitor.unl.edu/>

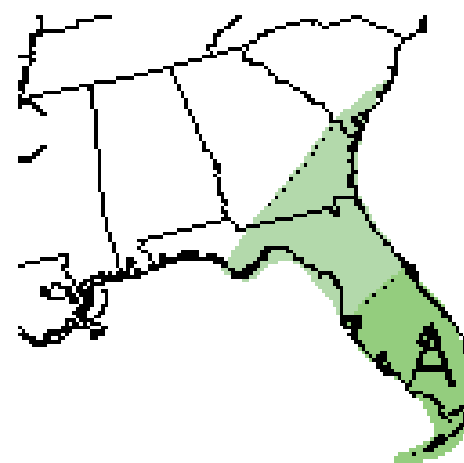
CPC Precipitation Outlook



Dec 2018



Dec 2018-Feb 2019

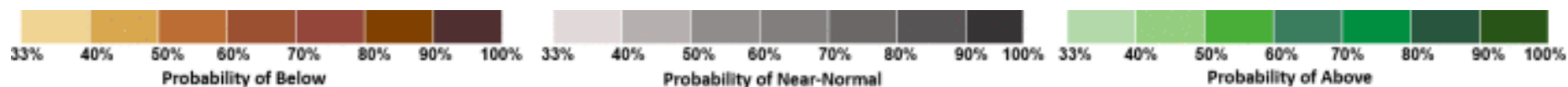


Apr-Jun 2019



May-Jul 2019

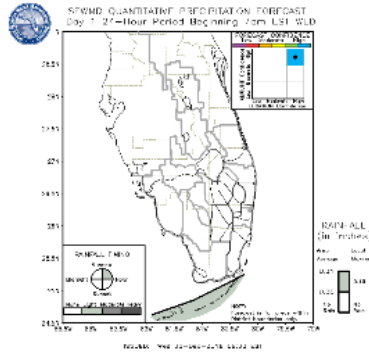
- The outlook for December 2018 is for substantially increased chances of above-normal rainfall (55%)
- The outlooks for all 3-month windows from Dec-Feb (2018) to Apr-Jun (2019) are for increased chances (45%) of above normal rainfall
- The outlook for the remainder of 2019 is for equal chances (EC) of above-normal, normal, and below-normal



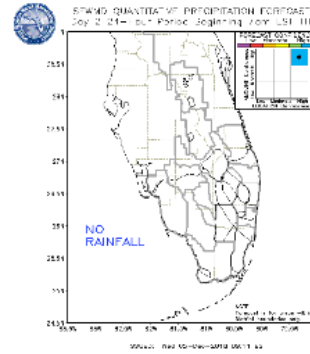
Daily Quantitative Precipitation Forecasts



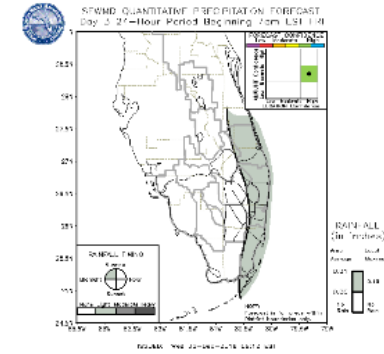
Day 1



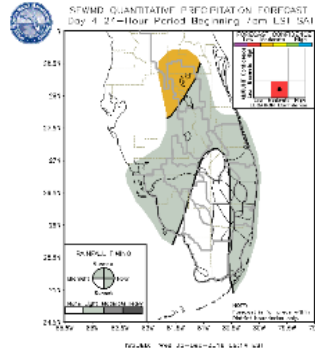
Day 2



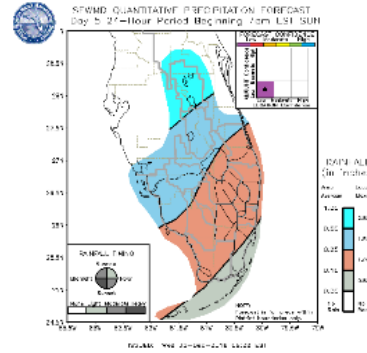
Day 3



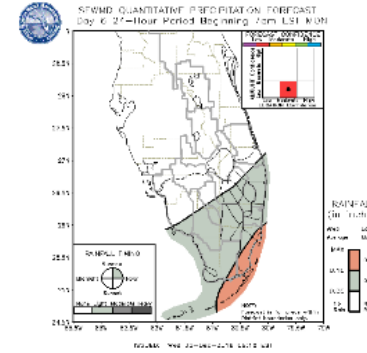
Day 4



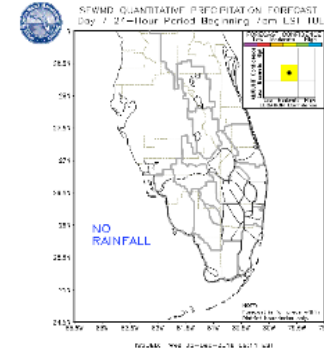
Day 5



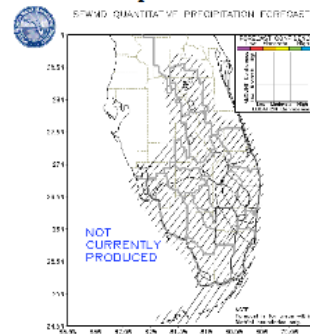
Day 6

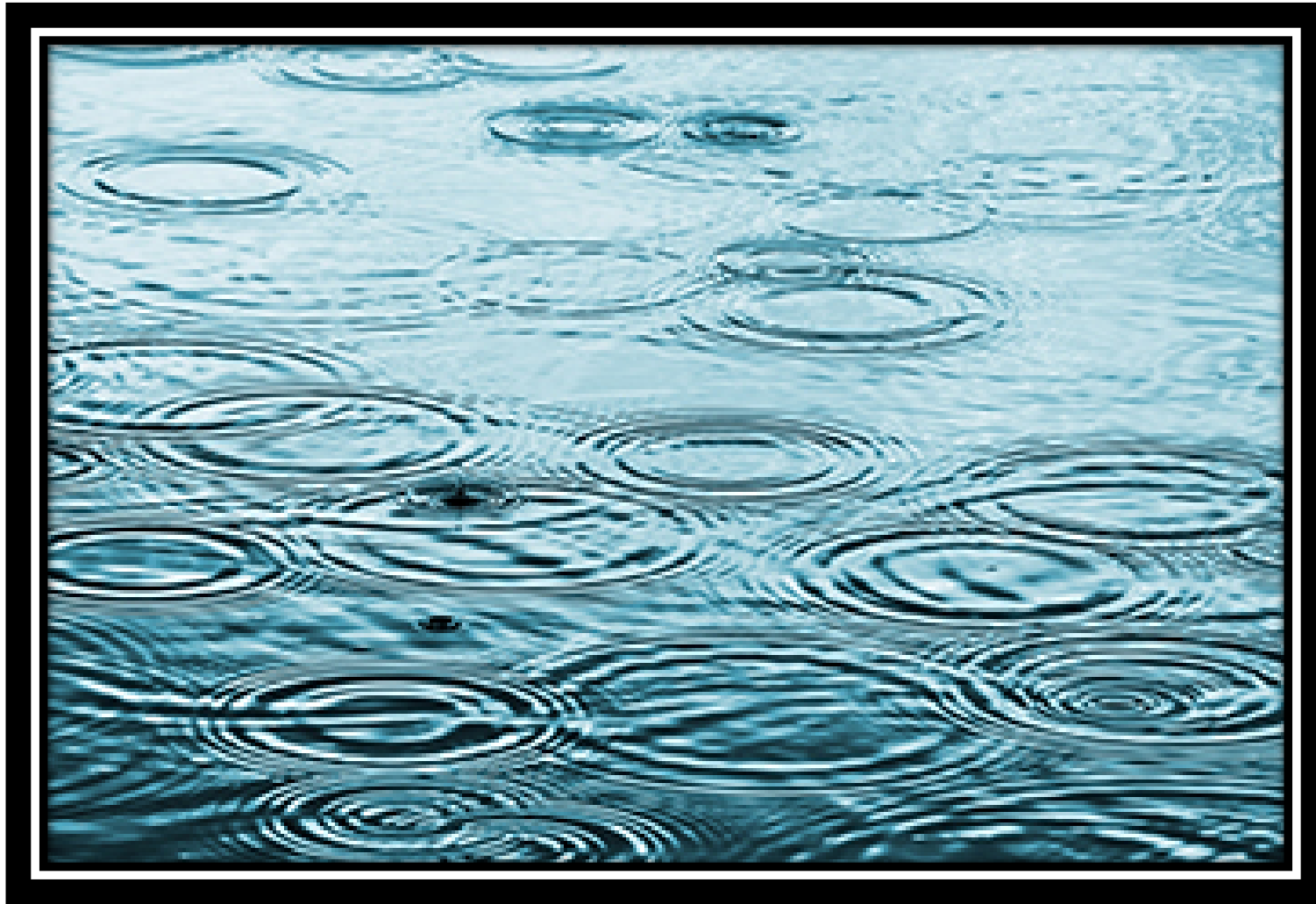


Day 7



Special Period





Questions