SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Water Conditions Summary

Draft

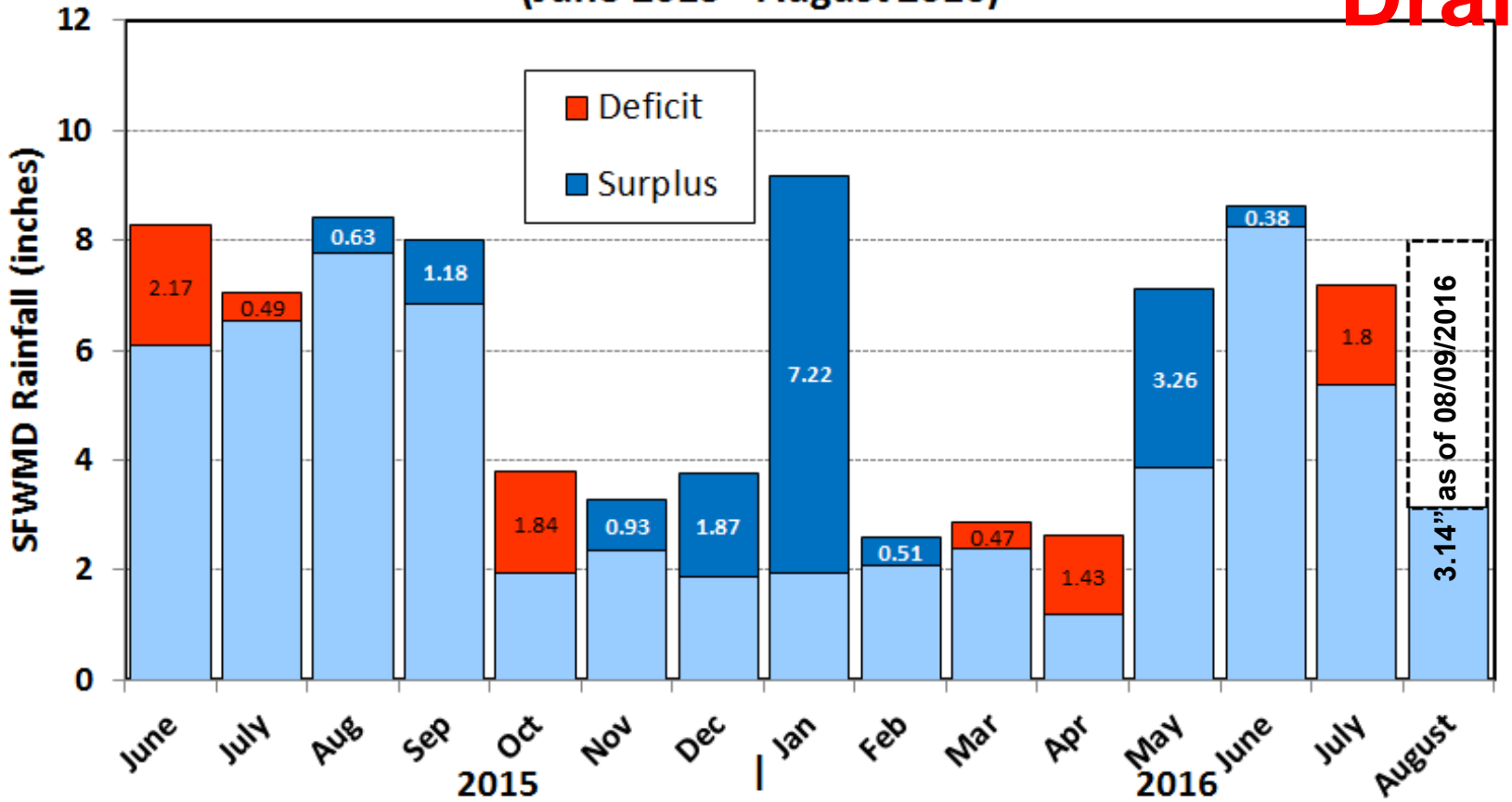
South Florida Water Management District Governing Board Meeting
August 11, 2016

John P. Mitnik, PE
Division Director
Operations, Engineering and Construction

SFWMD Rainfall Distribution Comparison

(June 2015 - August 2016)

Draft

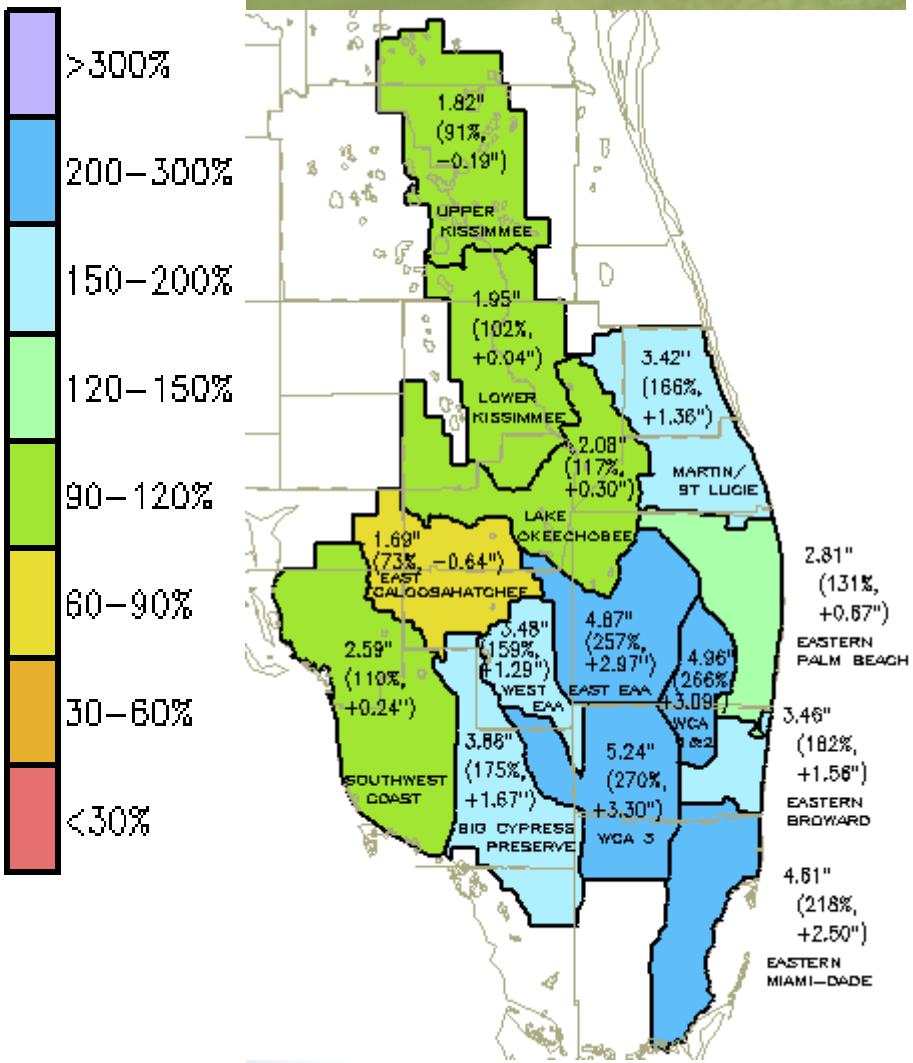


2015 WET SEASON:

- Driest May-July since 2004
- Ended below average

2015-16 DRY AND 2016 EARLY WET SEASON:

- Nov 2015-Jan 2016 wettest since 1932
- Jan 2016 wettest since 1932
- Second wettest May since 1976
- Dry season 2015-16 168% above average
- 2016 Wet season is slightly below average



Measured
(% of Avg,
Diff From Avg)

SFWMD

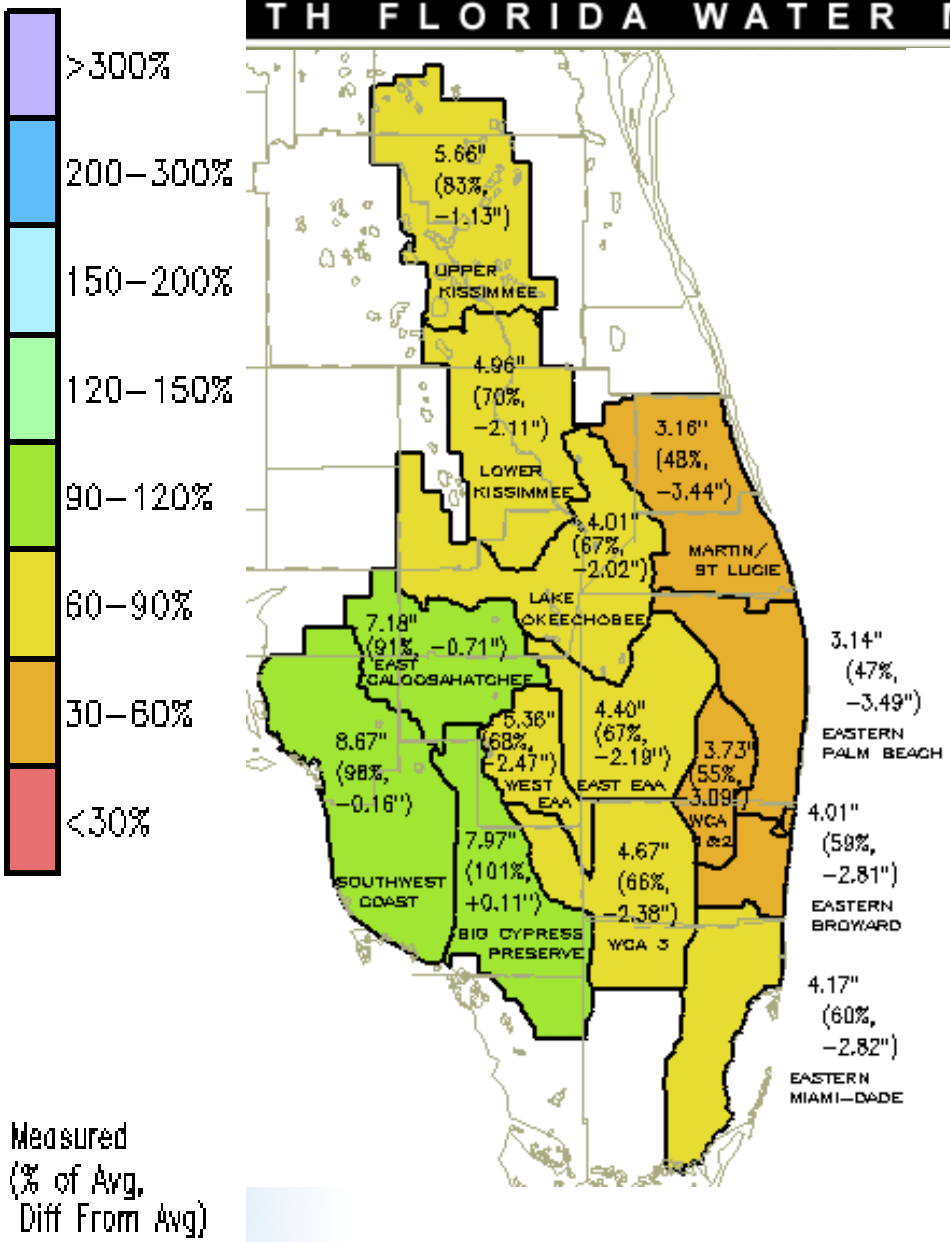
August 2016 Rainfall

Draft

(02-Aug to 09-Aug-2016)

DISTRICT-WIDE: 3.14”
152% of Avg, or +1.08”)

- Most of August rainfall has been concentrated on the Everglades and the Eastern urban areas.
- WCAs have received about 270% of the average for this time of the year



SFWMD

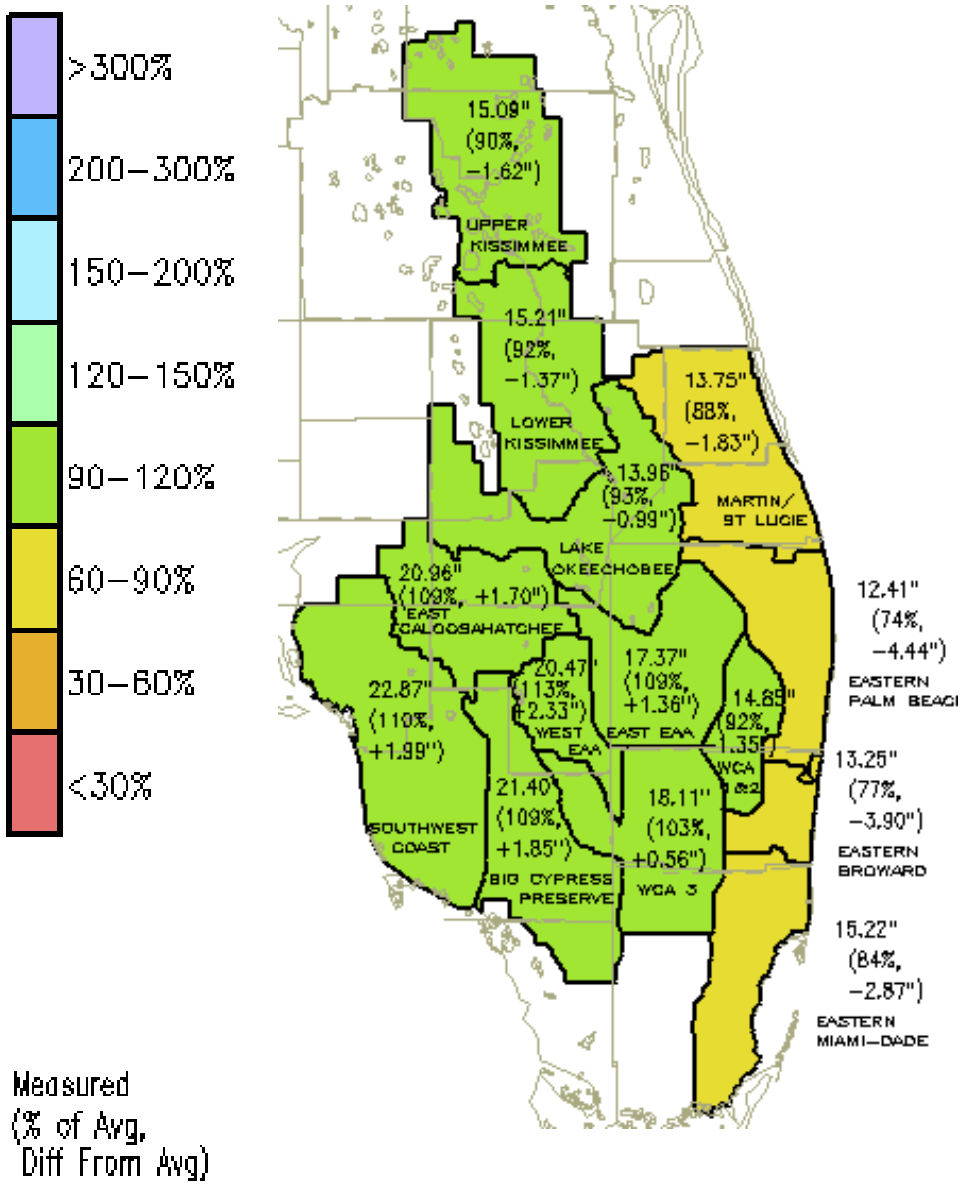
July 2016 Rainfall

Draft

(02-Jul to 01-Aug-2016)

DISTRICT-WIDE: 5.38” 75% of Avg, or -1.80”)

- Only Big Cypress Preserve is slightly above average
- Lower East Coast with the exception of Eastern Miami-Dade, WCA-1 and WCA-2, are less than 60% of average
- District wide driest July since 1999
- Palm Beach County driest July since 1992



SFWMD

2016 Wet Season Rainfall

Draft

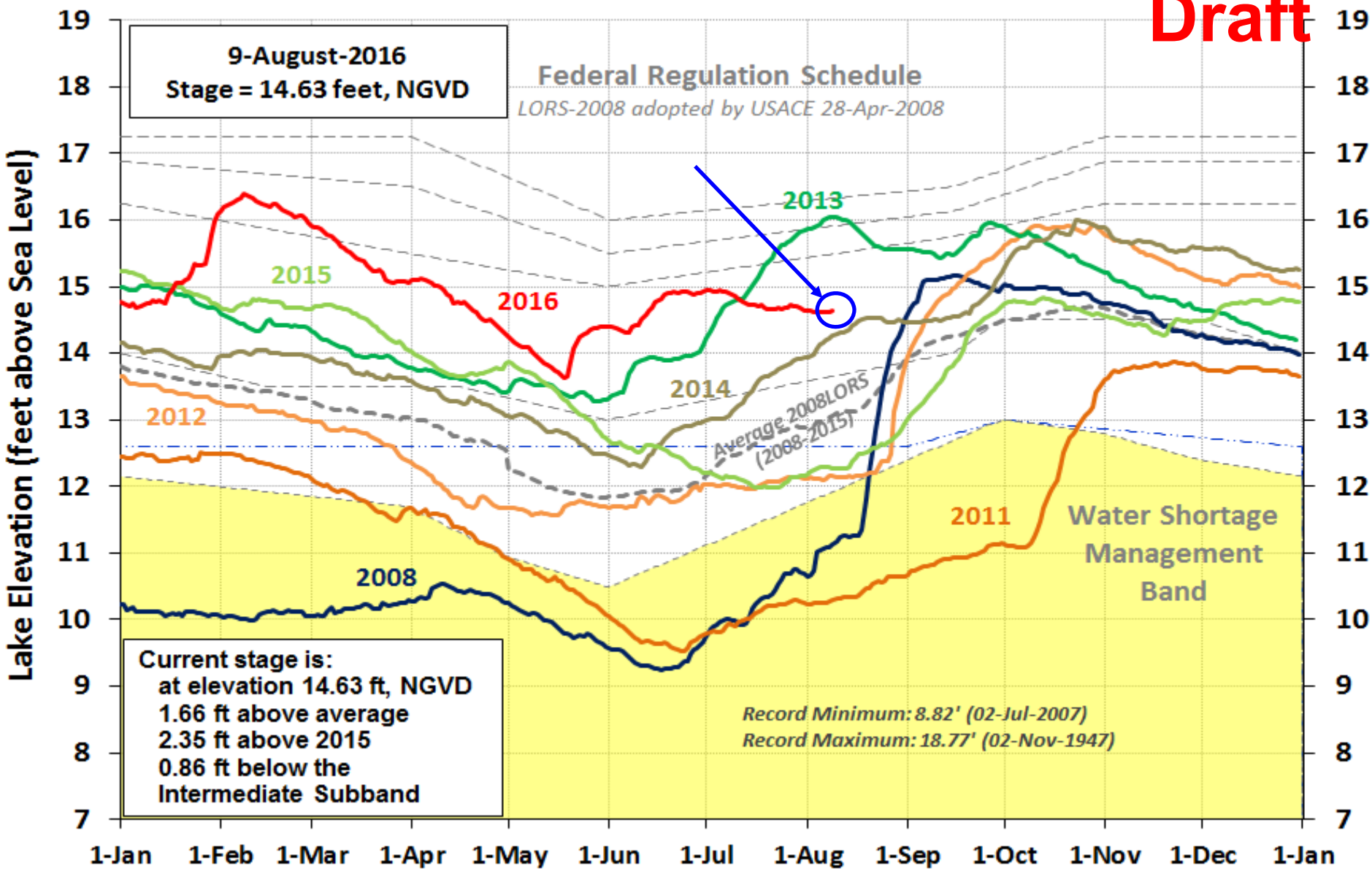
(02-Jun-2016 to 09-Aug-2016

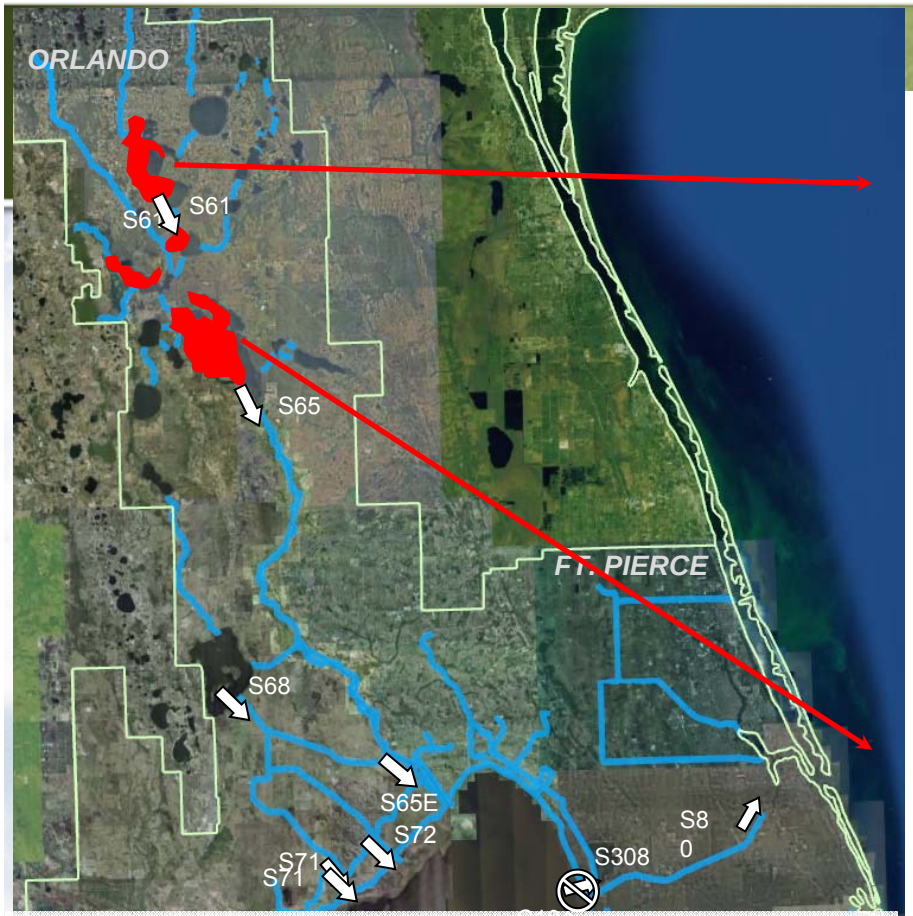
DISTRICT-WIDE: 17.15”

98% of Avg, or -0.34”)

- **District rainfall slightly below average for the first 70 days of the 2016 wet season**
- **Lower East Coast areas are substantially below normal (88% to 74%)**
- **All other areas north and west are in the range 90%-120% of average**

Lake Okeechobee Water Level Comparison

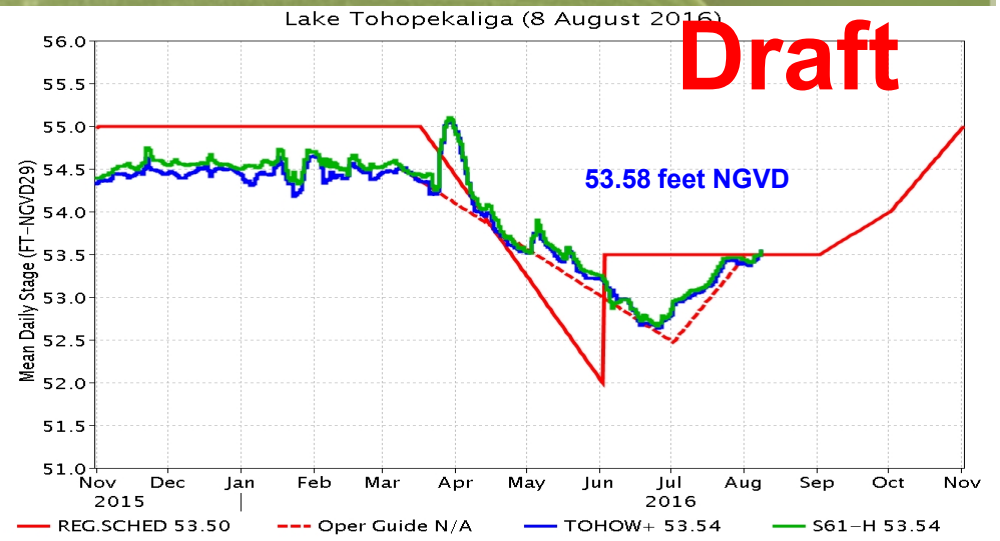




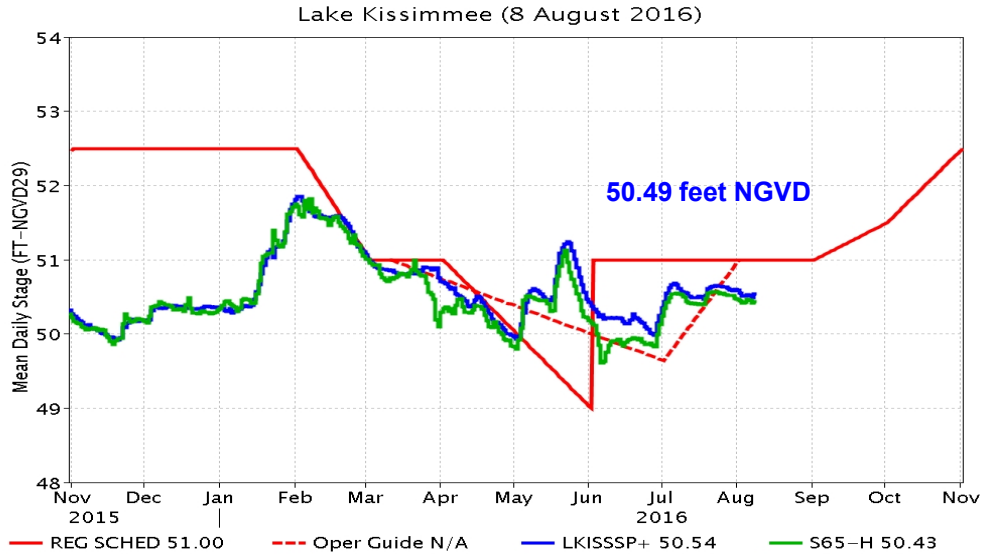
Kissimmee Basin

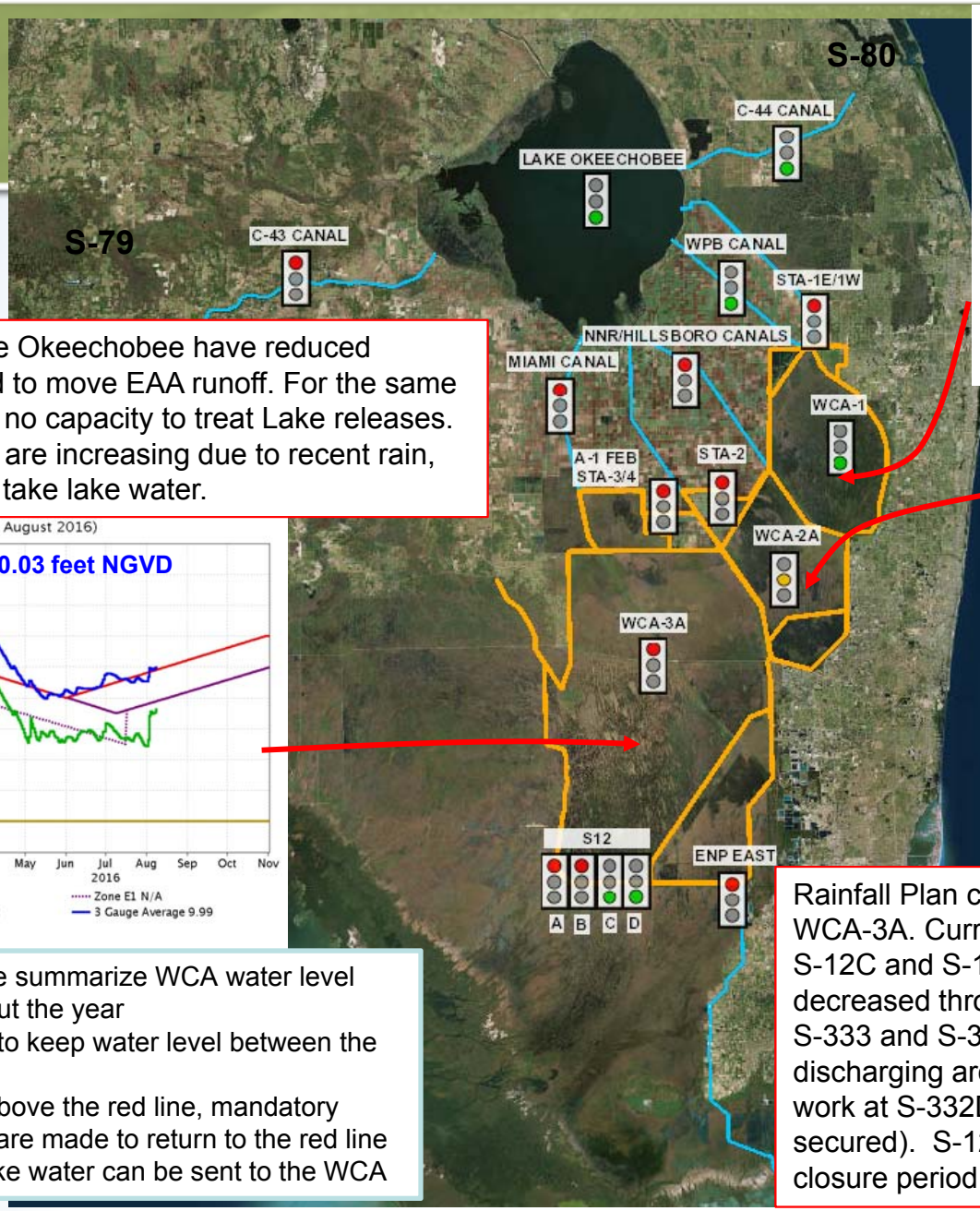
- Stages at Kissimmee-Cypress-Hatchineha are ~0.5 ft below schedule (summer pool elevation).
- Stages at East Toho and Toho are ~ 0.1 ft below schedule (summer pool elevation).
- All other very close to summer pool elevation.
- Discharge over the past week at S65 averaged 650 cfs and 1,200 cfs at S65E

Lake Tohopekaliga (08 Aug 2016)

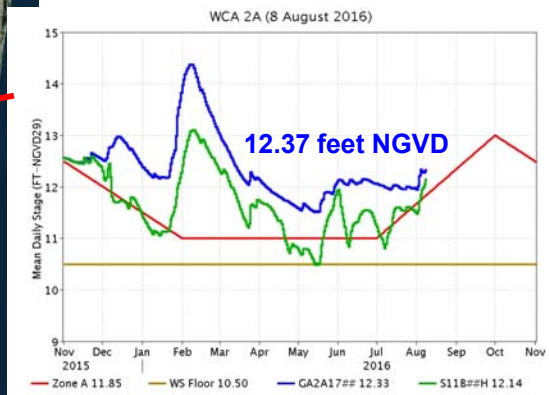


Lake Kissimmee (08 Aug 2016)





Canals south of Lake Okeechobee have reduced capacity due to need to move EAA runoff. For the same reasons, STAs have no capacity to treat Lake releases. Stages in the WCAs are increasing due to recent rain, reducing capacity to take lake water.

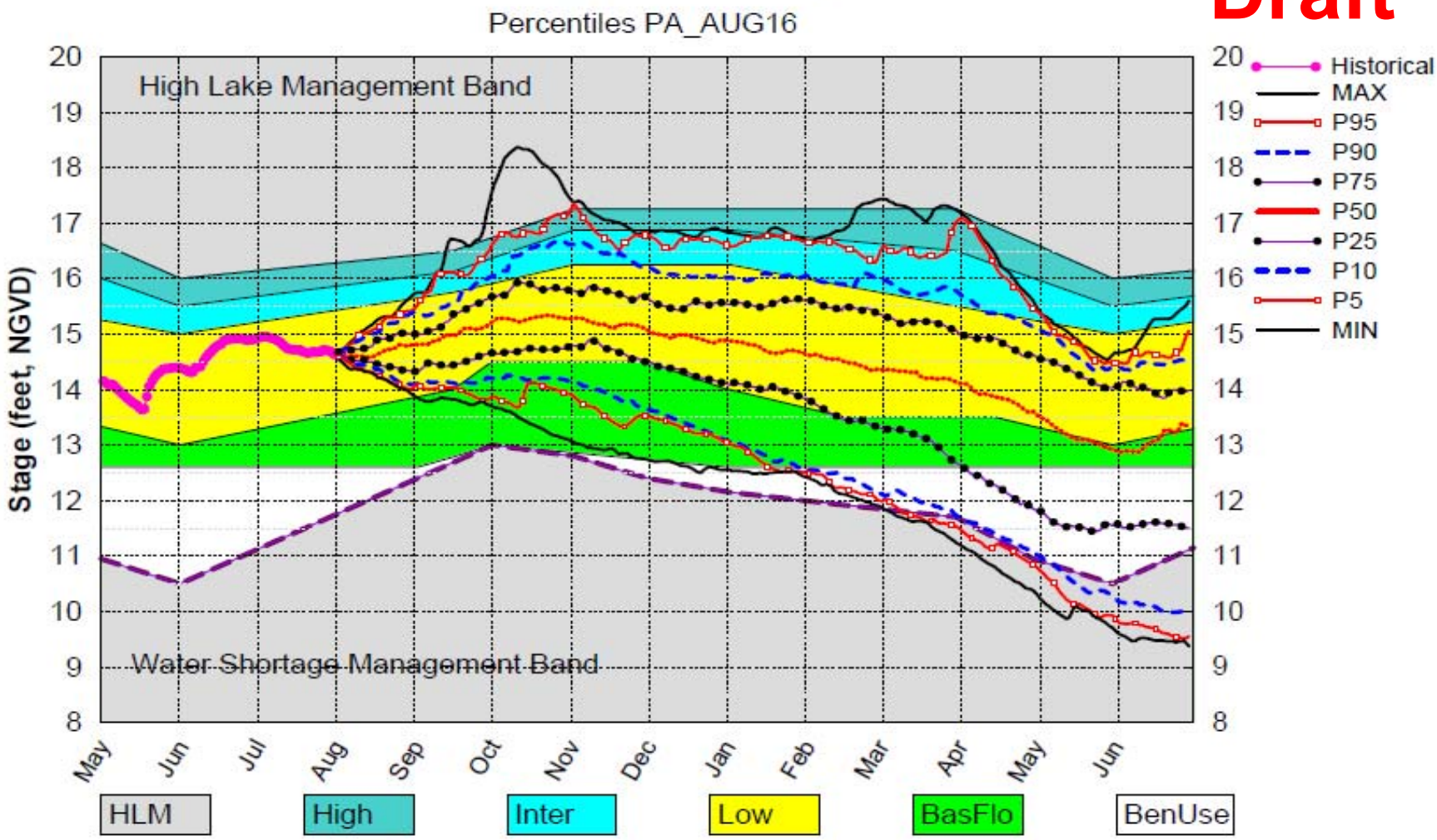


- Regulation Schedule summarize WCA water level thresholds throughout the year
- Current objective is to keep water level between the red and purple lines
- If water levels rise above the red line, mandatory regulatory releases are made to return to the red line and no additional lake water can be sent to the WCA

Rainfall Plan calls for maximum releases from WCA-3A. Currently discharging ~ 860 cfs through S-12C and S-12D. S-333 flows to NESRS have decreased through the week. Currently matching S-333 and S-334 flows ~ 350 cfs. S-197 is discharging around 350 cfs supporting construction work at S-332D High Cell (Pump station is secured). S-12A, S-12B, S-343A&B and S-344 closure period extended to August 15.

Lake Okeechobee SFWMM August 2016 Dynamic Position Analysis

Draft



(See assumptions on the Position Analysis Results website)

Wed Aug 3 10:13:04 2016

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

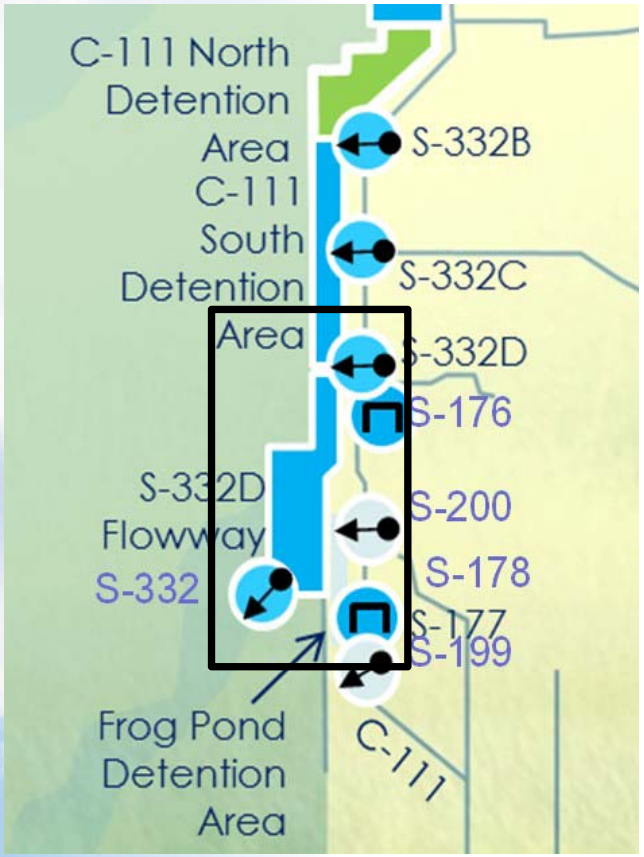
Draft

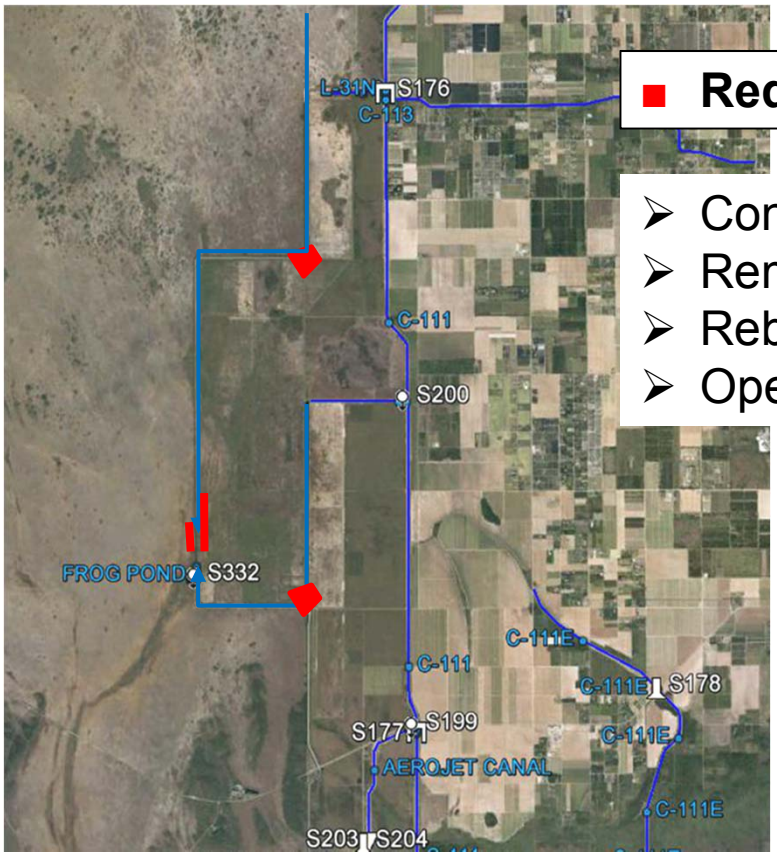
Moving Freshwater South to Florida Bay

sfwmd.gov

Proposed Features Required to Move Water South to Florida Bay

Draft

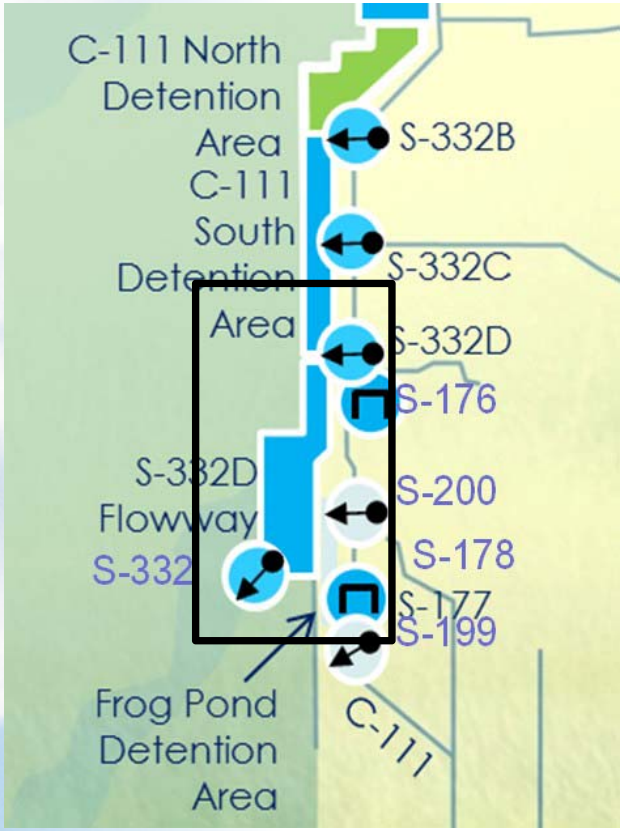


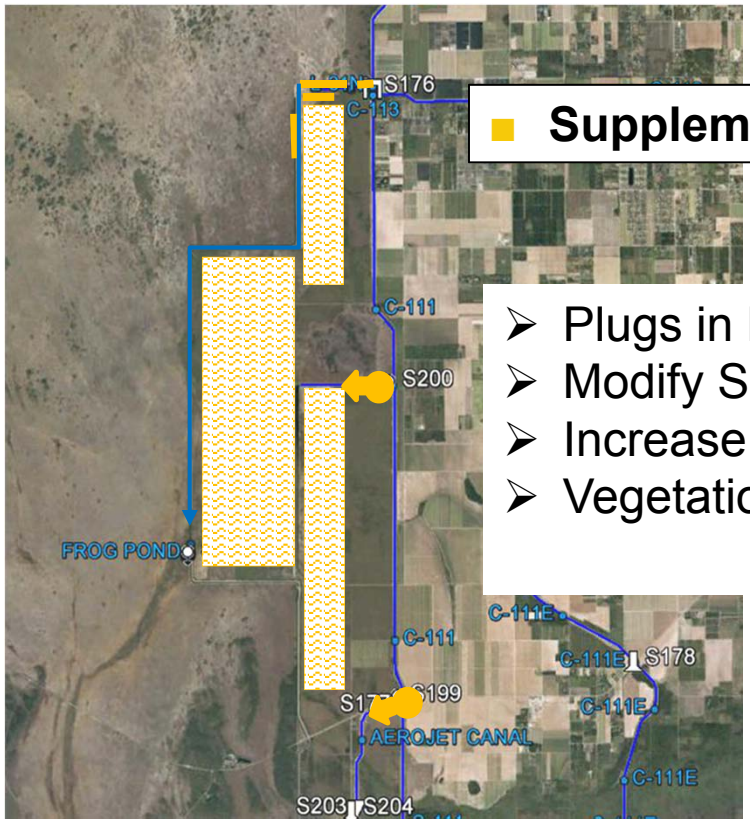


- **Required Features**
  - Connect canals
  - Remove Flap Gates
  - Rebuild Levee, Weir
  - Operate S-328

Supplemental Features to Move Water South to Florida Bay

Draft





- **Supplemental Features**
  - Plugs in L-31W
  - Modify S-332D Weir
  - Increase pump capacity
  - Vegetation management

Proposed Features Estimated Costs and Schedule

Draft

Required Features	Estimated Cost	Scheduled Completion
Connect Canals	$1 million	November
Rebuild Levee along L-31W Canal	$0.8 million	November
Remove Flap Gates at S-332i	-	August
Operate S-328 Structure	-	November
Total Cost Required Features	$1.8 million	

Supplemental Features	Estimated Cost	Scheduled Completion
Plugs in L31W at key locations	$1.4 million	November
Modify S-332D High Head Cell Weir	$0.1 million	Complete
Vegetation Management	-	Periodic
Total Cost Supplemental Features	$1.5 million	

Progress

Draft

Draft

Questions?