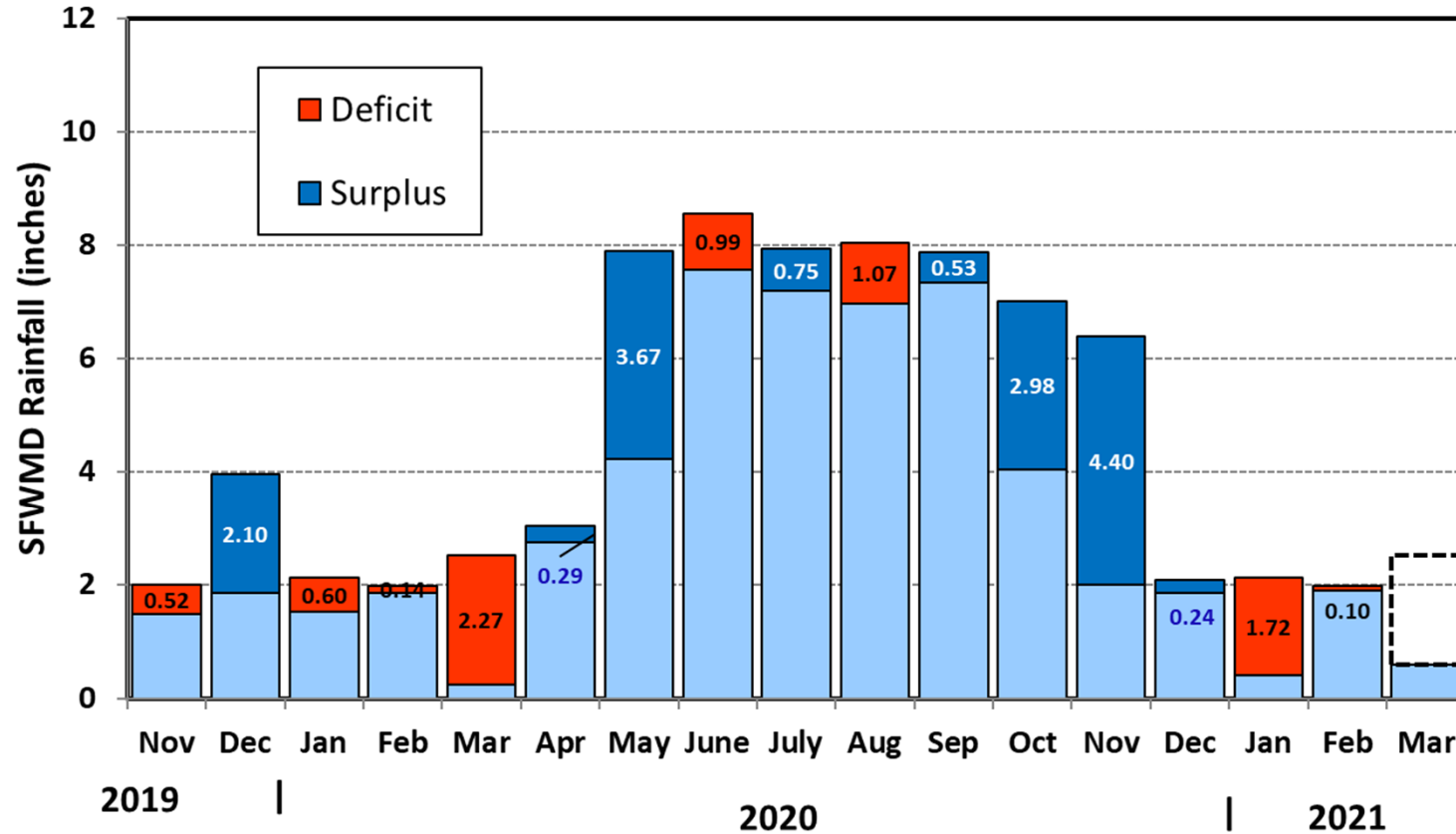


# Water Conditions Summary

**South Florida Water Management District  
Governing Board Meeting  
March 11, 2021**

John P. Mitnik, PE  
Chief District Engineer  
Assistant Executive Director

## SFWMD Rainfall Distribution Comparison (Nov 2019 - Mar 2021)



### District Wide Average Rainfall

Month	Average (inches)
Jan	2.12
Feb	1.98
Mar	2.51
Apr	2.74
May	4.21
Jun	8.55
Jul	7.18
Aug	8.03
Sep	7.34
Oct	4.03
Nov	1.99
Dec	1.84

Wet  
Season

#### 2019-2020 DRY SEASON.

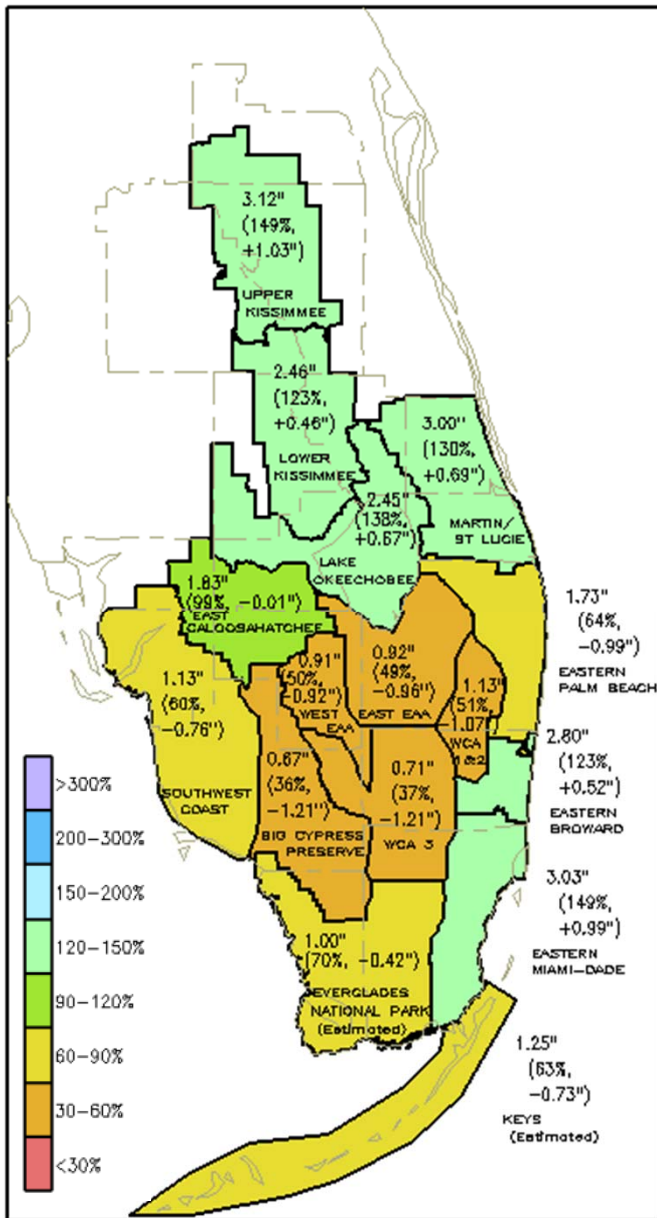
- Sep. 18, 2019 to May 15, 2020, 73% or Normal
- Driest March in 89 years of record
- May was ~ 187% of normal

#### 2020 WET SEASON

- Started May 15, 2020.
- Jul and Sep had above average rainfall.
- October rainfall was well above normal.
- Overall slightly above normal

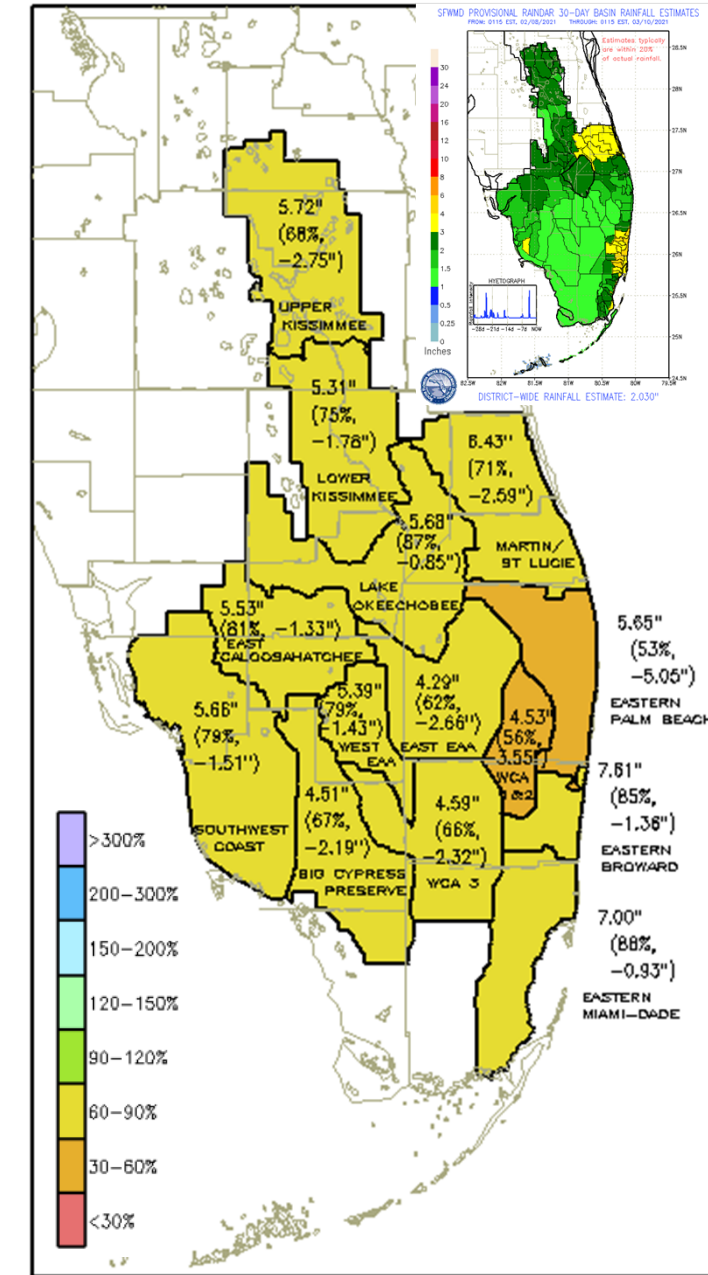
#### 2020-2021 DRY SEASON.

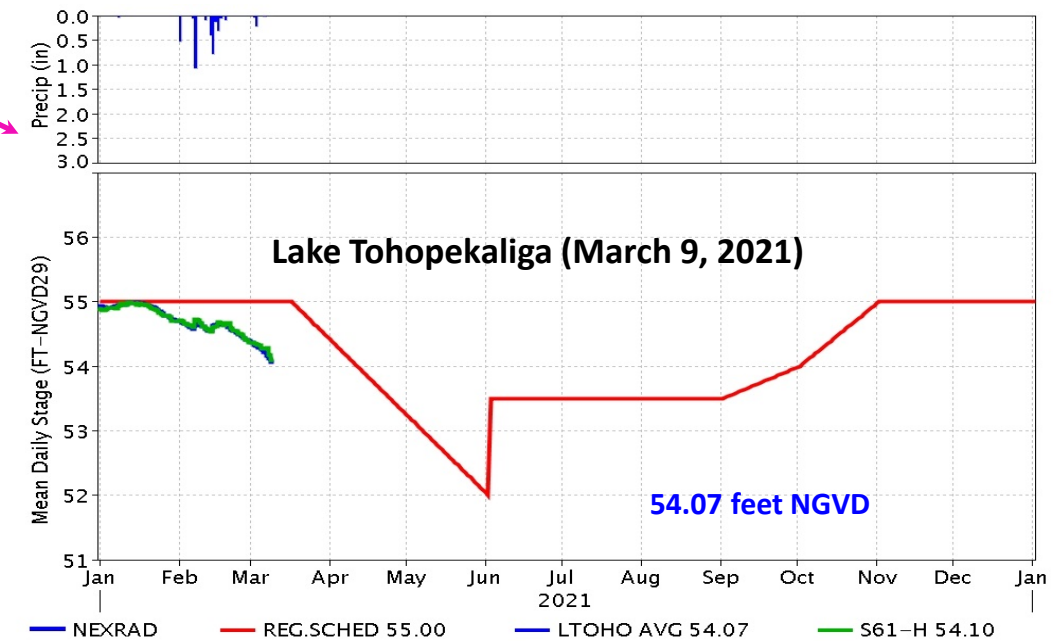
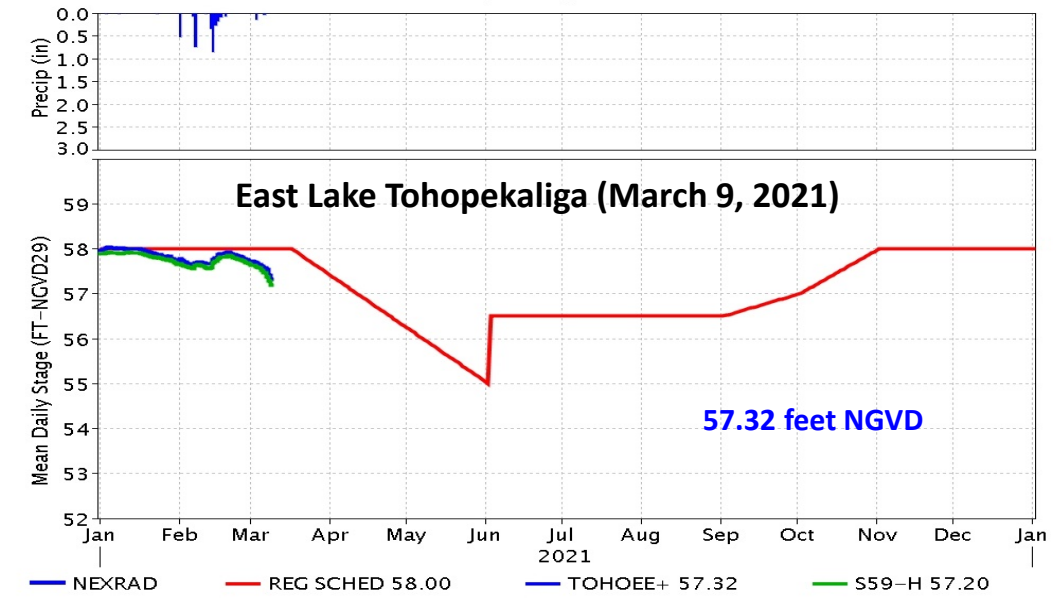
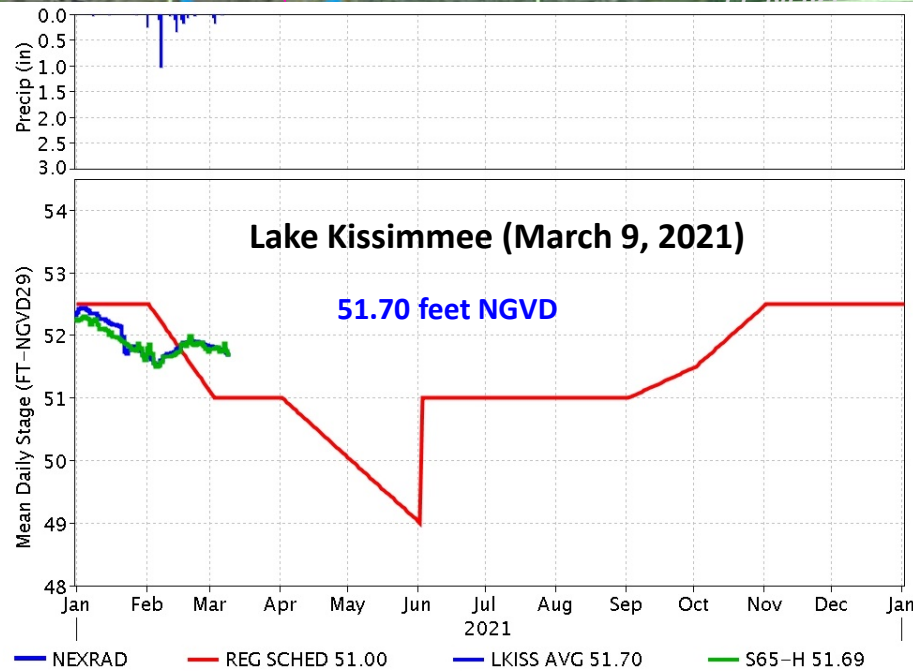
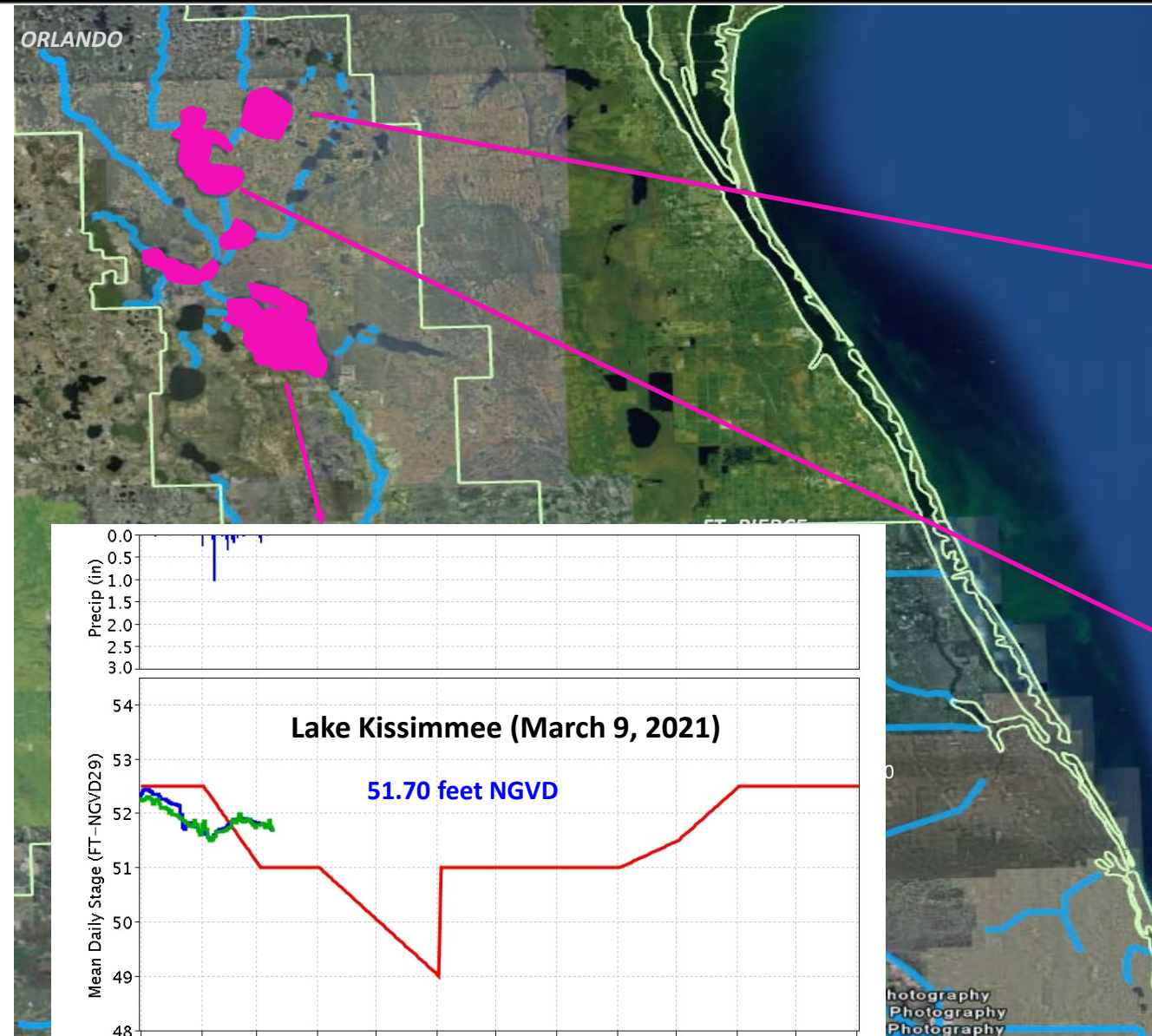
- Nov rainfall was in excess of 300% of normal
- Dec rainfall near normal
- Jan was extremely (bottom 10% of POR)
- Feb was near normal



### Dry Season Rainfall 19 Nov – Mar 09 **DISTRICT-WIDE: ~5.47"**

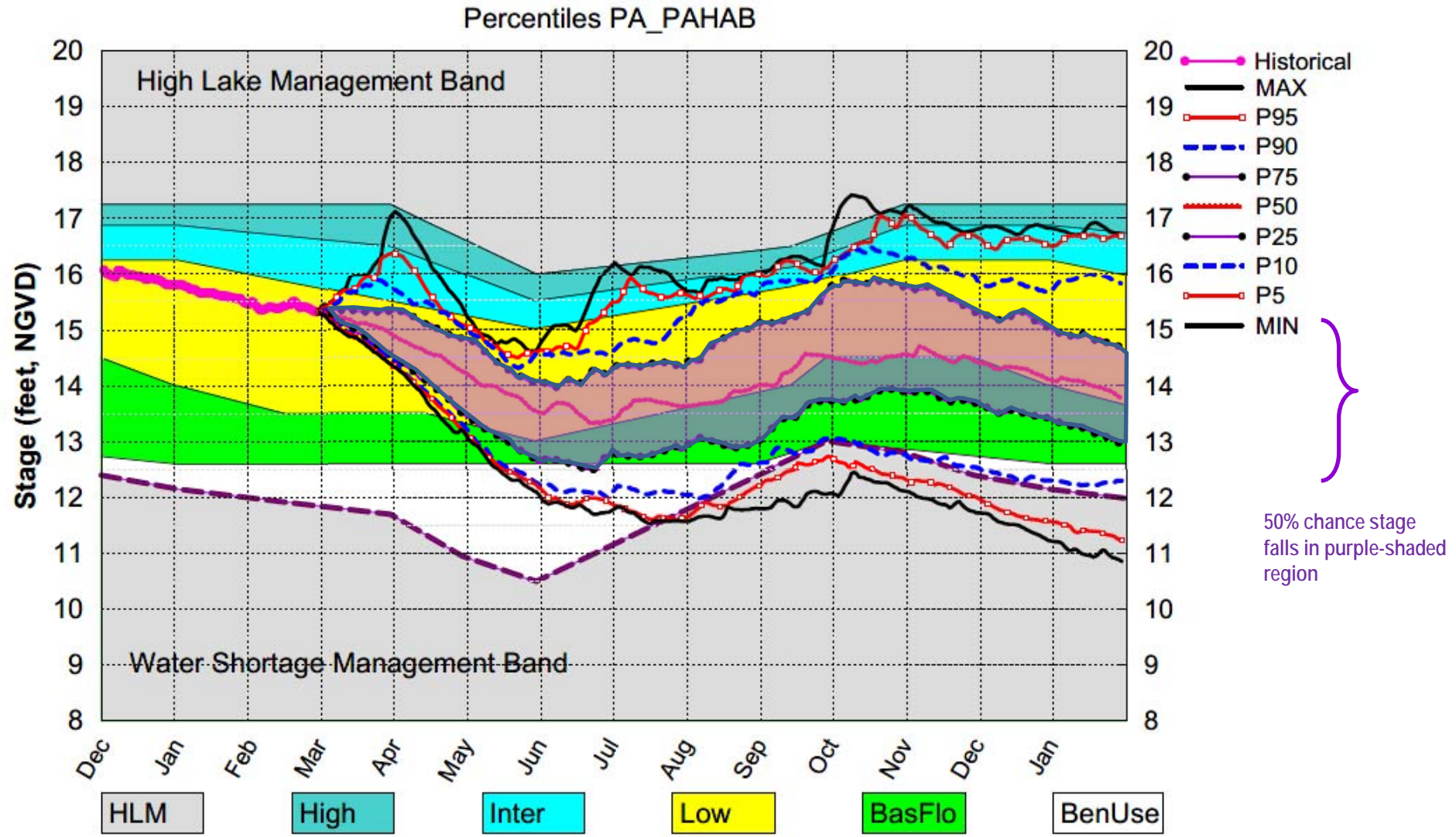
- 72 % of average, -2.11" deficit
- All areas show rainfall deficit
- Highest rainfall for Eastern Miami-Dade and Lake Okeechobee near 90% of Normal
- Easter Palm Beach is the lowest with 53% of Normal







# Lake Okeechobee SFWMM Mar 2021 Position Analysis

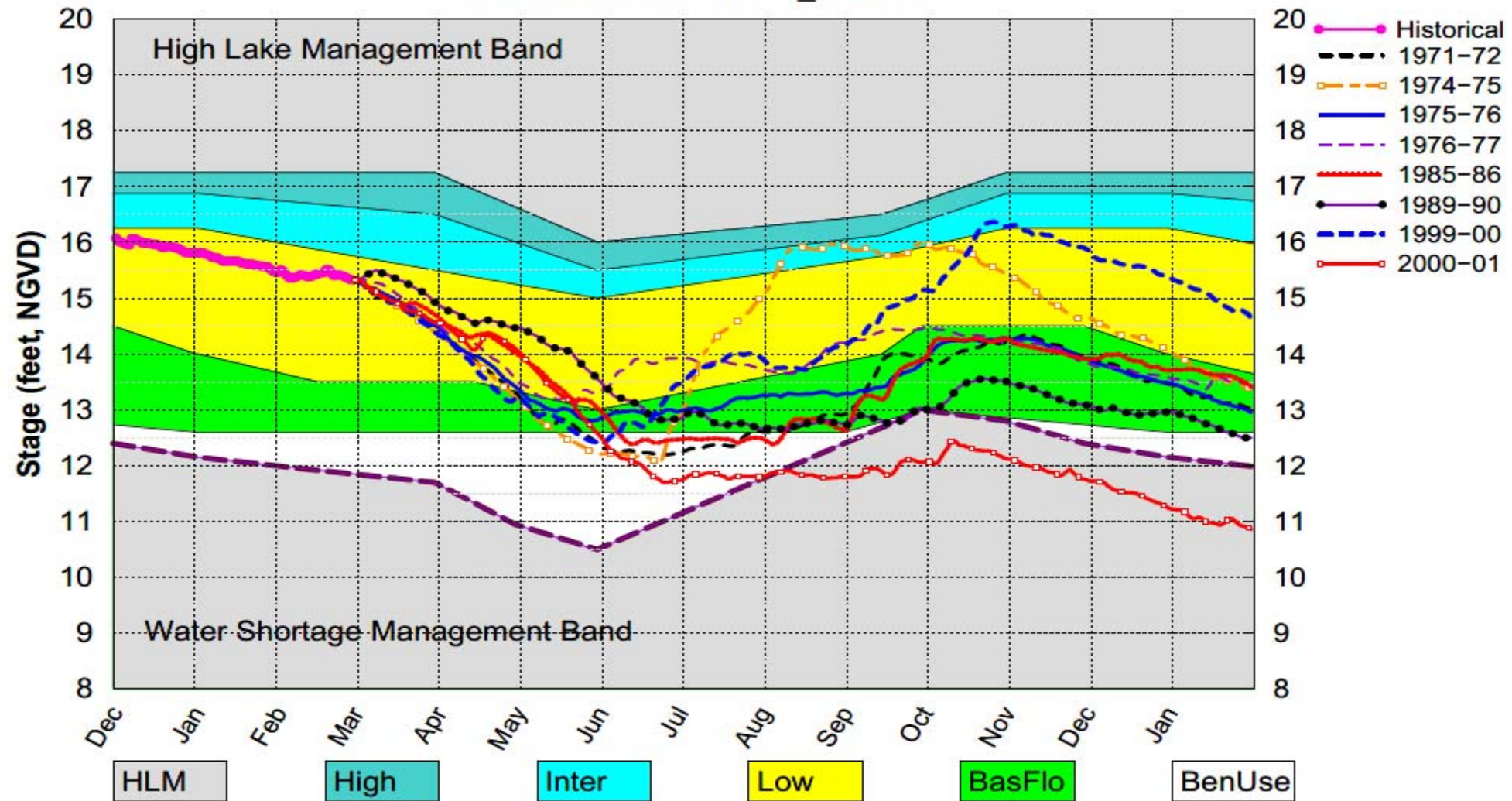


(See assumptions on the Position Analysis Results website)

Mon Mar 8 11:14:30 2021

# Lake Okeechobee SFWMM Mar 2021 Position Analysis

All La Nina Years Plot PA\_PAHAB



(See assumptions on the Position Analysis Results website)

Mon Mar 8 11:15:08 2021

# LOSOM Update

- Listening session held on February 22<sup>nd</sup> to get input from PDT and public about their vision for **balance** in Lake Okeechobee
- Meeting held on March 8<sup>th</sup> to get input from PDT and public about **flexibility**
- Iteration 1 model results expected March 12<sup>th</sup>
  - Iteration 1 alternatives prioritize performance of a single objective
  - Model results will provide a larger suite of performance metrics used for more detailed analysis of each alternative's benefits
  - Recombine or modify components of Iteration 1 alternatives to build multiple alternatives that balance project purposes and objectives
  - There is more than one way to achieve balance
  - With input from PDT and the public, identify array of alternatives that are balanced, transition to Iteration 2

Development of Conceptual Plans  
(July 2020 – Oct 2020)

Evaluation of Conceptual Plans  
(Nov 2020 – Jan 2021)

Iteration 1: Initial Array of Lake  
Schedules (Jan 2021 – May 2021)

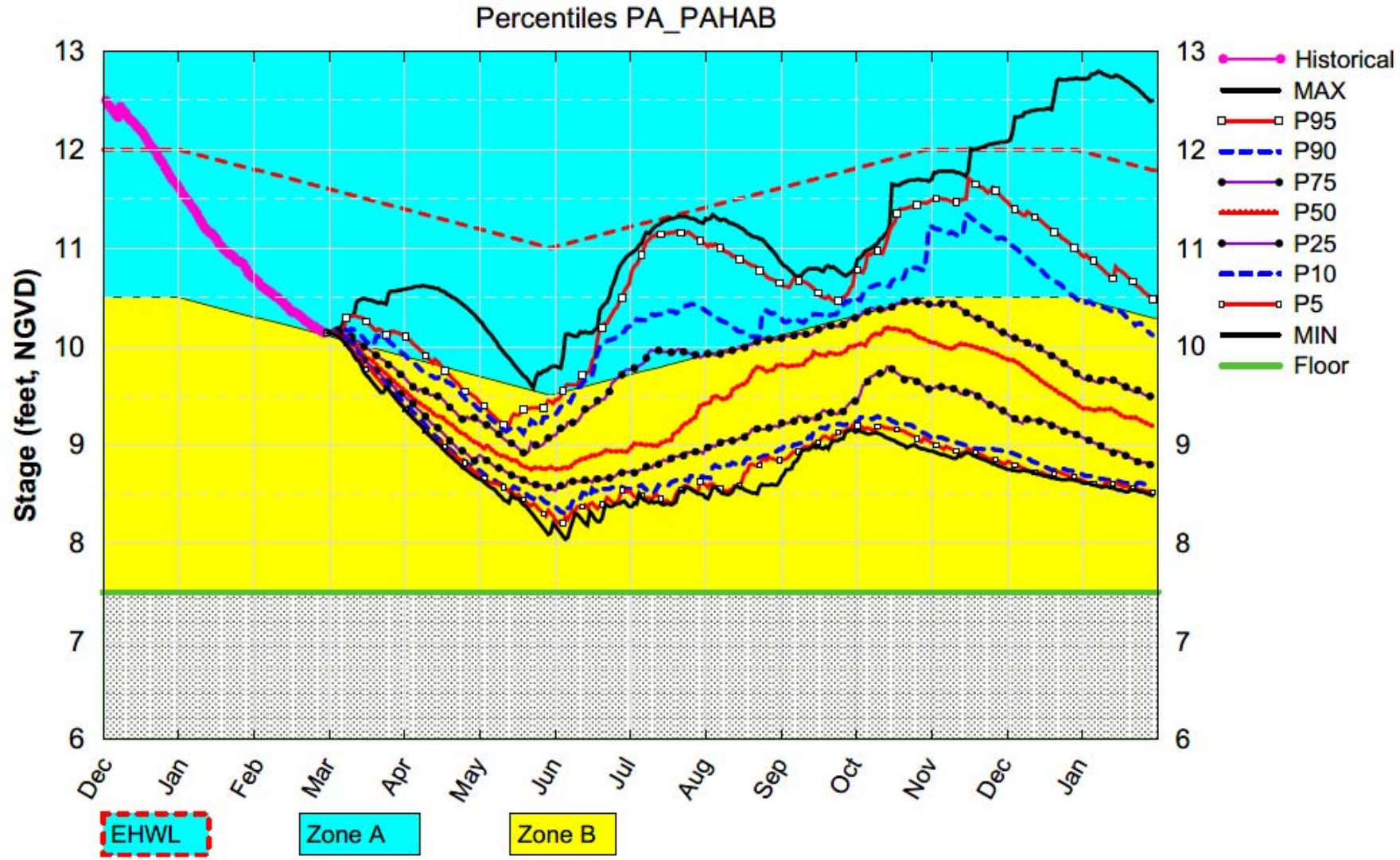
WE ARE  
HERE

Iteration 2: Balanced Array of Lake  
Schedules (May 2021 – July 2021)

Iteration 3: Recommended  
Schedule (Aug 2021 – Sept 2021)



## WCA3A SFWMM Mar 2021 Position Analysis



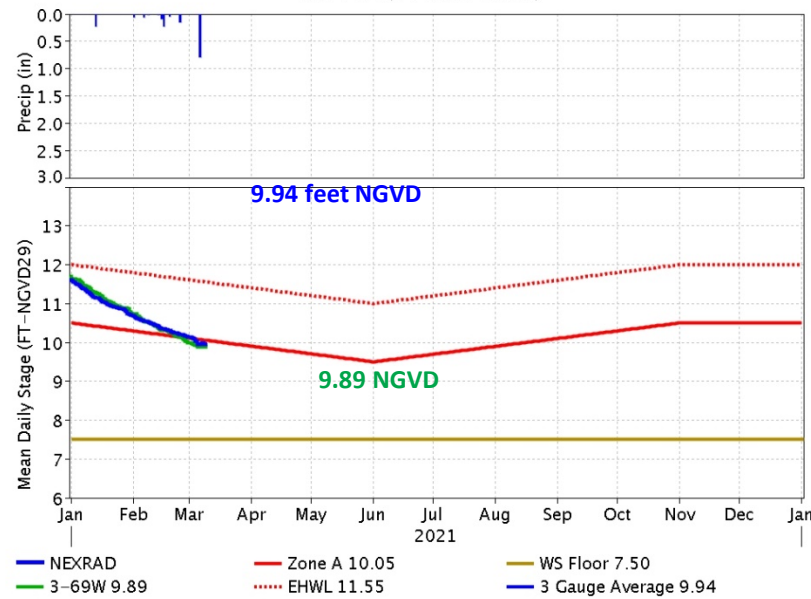
(See assumptions on the Position Analysis Results website)

Mon Mar 8 11:14:45 2021

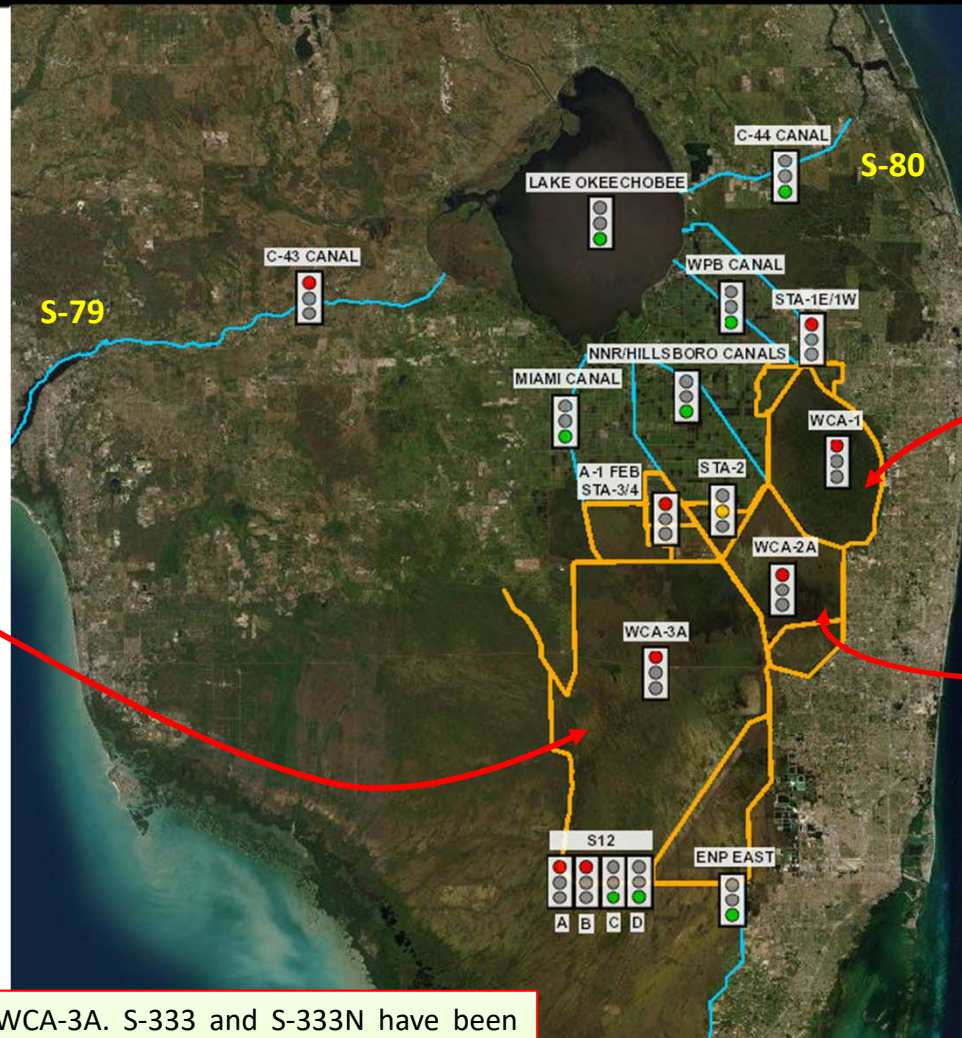


Lake Okeechobee stage is in the Low Sub-band of LORS-2008 Regulation schedule. USACE started to operate under HAB Deviation the beginning of February. USACE is currently implementing 2,000 cfs steady releases at S-79 and 500 cfs average pulse flows at S-80. For the current week, LORS 2008 Part D is recommending S-79 up to 450 cfs and 200 cfs at S-80. District is sending ~ 500 cfs to the WCAs.

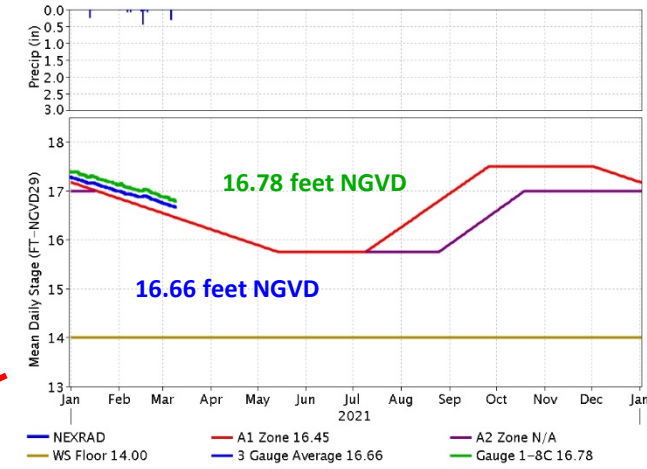
WCA 3A (9 March 2021)



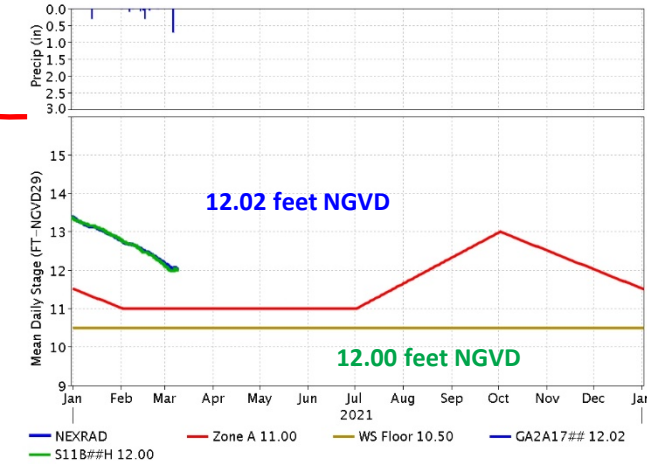
Note: With COP floor gauge switched from S333-H to 3-69W



WCA 1 (9 March 2021)



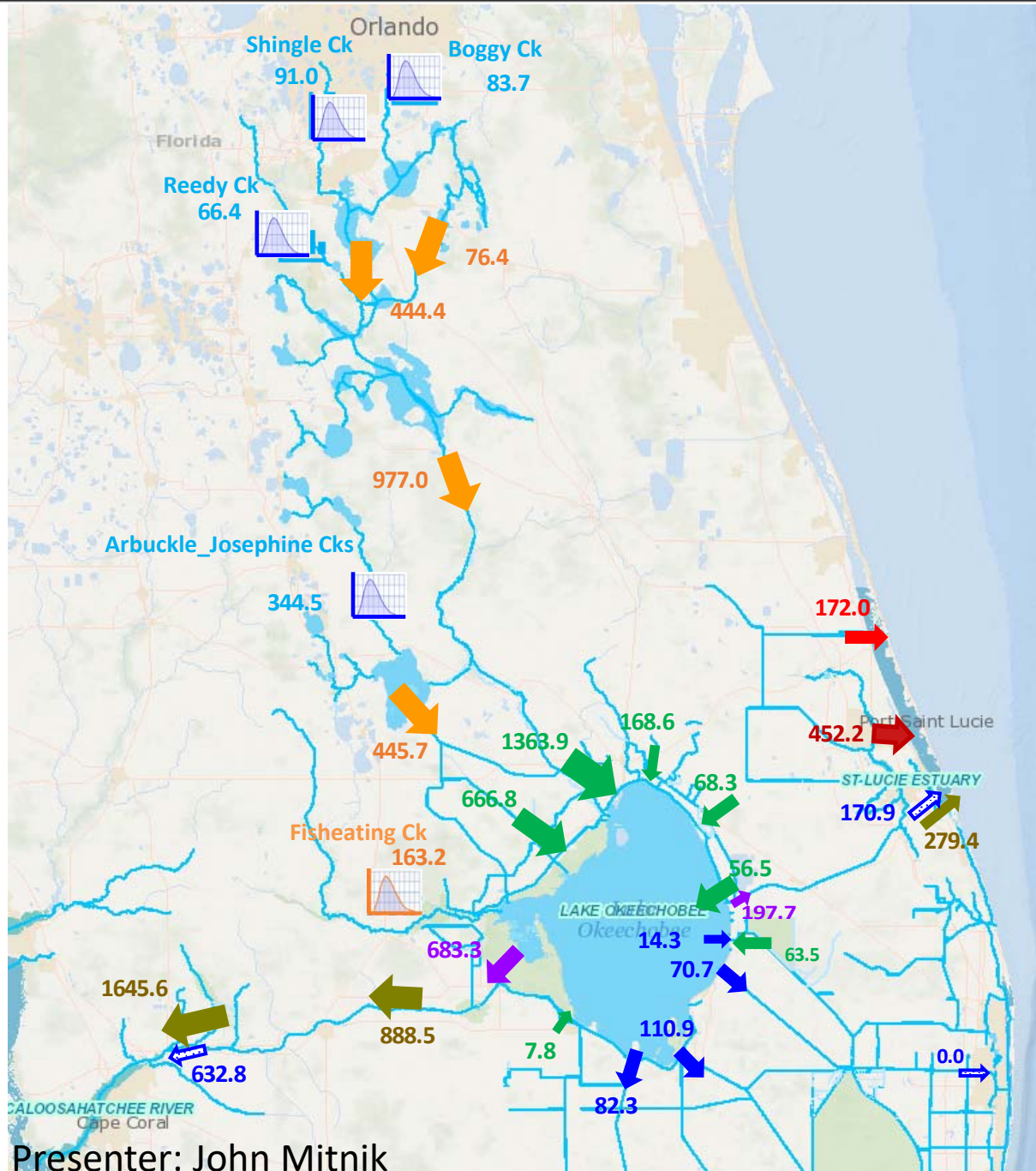
WCA 2A (9 March 2021)



Tamiami Trail Flow Formula calls for ~ 1,700 cfs releases from WCA-3A. S-333 and S-333N have been releasing since the middle of December (~ 1,250 cfs currently). L-29 stage constraint is at 8.5 feet NGVD. S-356 is pumping. S-331 and S-357 continue pumping. District continues to operate the detention cells to provide flood mitigation and seepage management for the SDCS (L-31N and C-111). S-199 is secured and S-200 pump is running but will need to be secured by the middle of March due to sparrow protection. District is implementing operations to accelerate sage recession at the Eastern side of ENP (Sparrow Sub-population D). S-197 has been closed since Dec 13, 2020.

WCA-1 is in Zone A1 of the regulation schedule; WCA-2A is in Zone A of the regulation schedule; WCA-3A stage crossed into Zone B of its regulation schedule around March 4. S-10s and S-11s are closed. S-12A closed Jan. 22 and S-12B closed Jan. 29. S-343A&B closed on Jan. 28. S-12C closed March 01 to facilitate Old Tamiami Trail road removal. S-12D is currently releasing around 500 cfs.











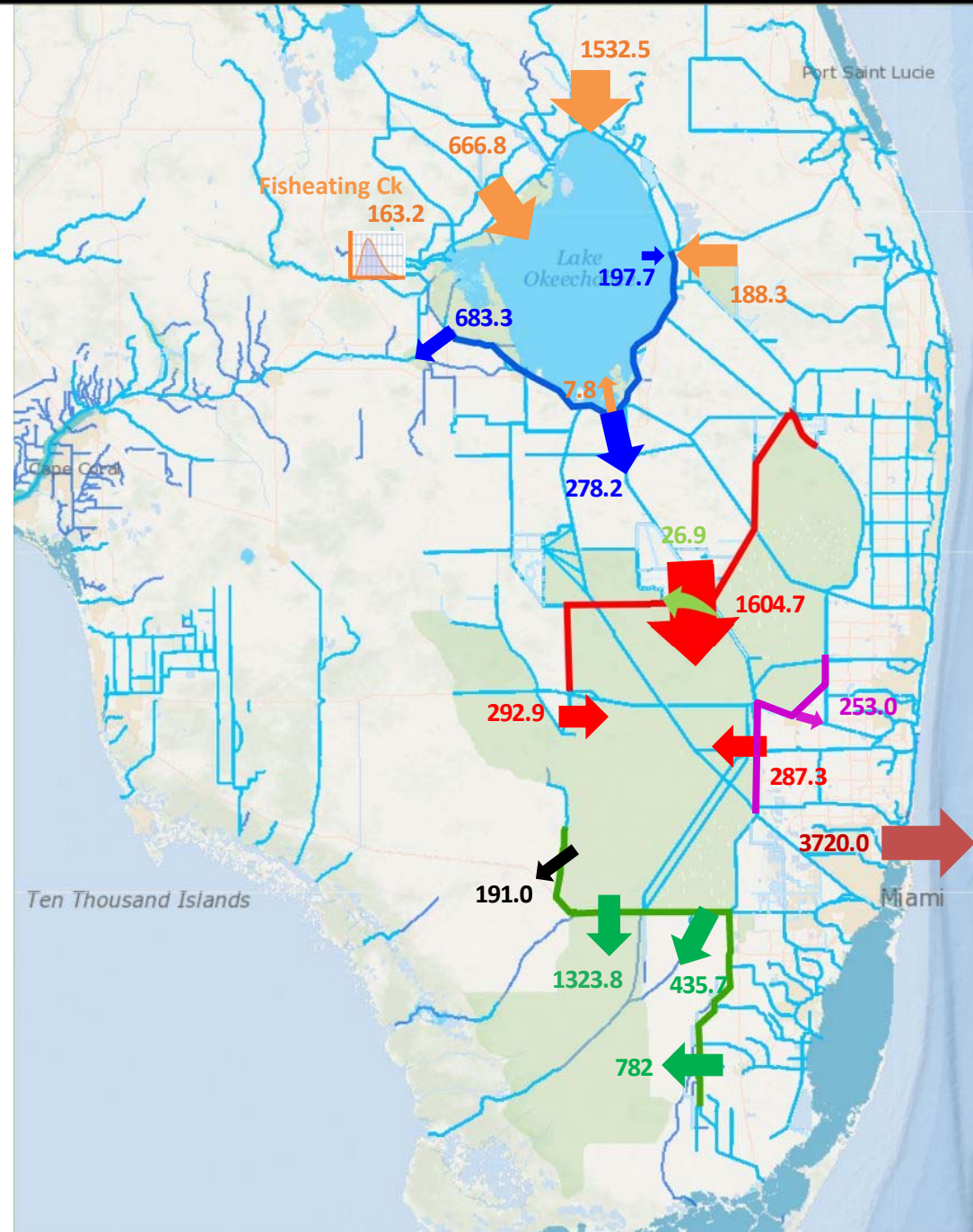
## SFWMD – Selected Release Volumes for the Period May 1, 2020 to March 9, 2021 (volumes in 1,000 acre-feet)

Symbol	Description	Volume (1,000 acre- feet)	
		Season to Date	Last Month
	Upper Kissimmee to Lower Kissimmee	977.0	51.4
	Inflows to Lake Okeechobee (including Fisheating Creek)	2558.6	147.2
	Lake Releases and Basin Runoff	1925.0	101.6
	Lake Releases East and West	881.0	71.5
	Lake Flood Control to Estuaries	803.7	60.2
	Total Lake Releases South	278.2	46.4
	Releases to Indian River Lagoon	172.0	8.1
	Upper East Coast discharges to St. Lucie Estuary	452.2	5.5
	Uncontrolled flows - Creeks (does not include Fisheating Creek)	585.6	17.5

1,000 acre-feet = 325.9 Million Gallons

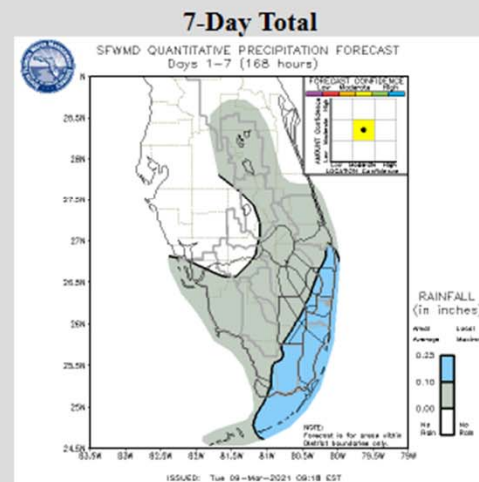
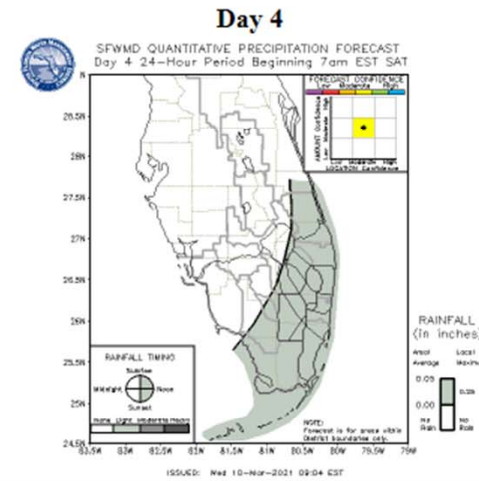
**SFWMD –Volumes Flowing  
Down the System  
May 1, 2020 to March 9, 2021**  
(volumes in 1,000 acre-feet)

Symbol	Description	Volume (1,000 acre- feet)	
		Season to Date	Last Month
	Lake Okeechobee Inflows	2558.6	147.2
	Lake Okeechobee Outflows	1159.2	117.9
	WCAs Inflows	2184.9	15.9
	ENP / Detention Cell Inflows	2541.5	183.0
	WCAs to East	253.0	1.7
	Flows to Intracoastal	3720.0	101.0

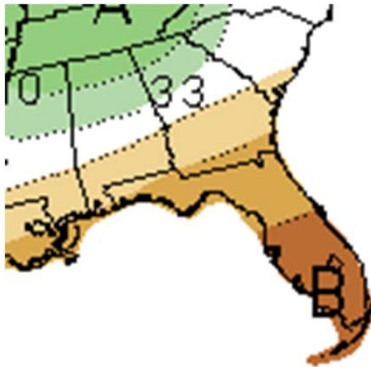




0.00 0.01 0.05 0.10 0.15 0.20 0.25 0.35 0.50 0.65 0.75 1.00 1.50 2.00 3.00 4.00 5.00 6.00 8.00 10.00 12.00 15.00



# CPC Precipitation Outlook for South Florida



Mar 2021



Mar-May



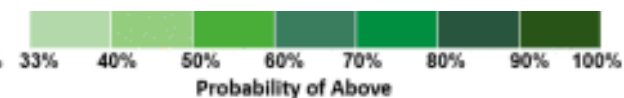
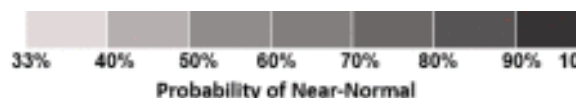
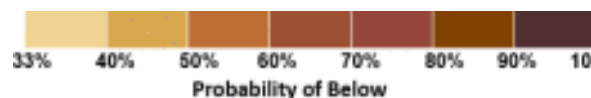
Apr-Jun



May-Jul

<https://www.cpc.ncep.noaa.gov/products/predictions/30day/>

- The most recent CPC precipitation outlook for Mar 2021 for south Florida is for substantially increased likelihood of below Normal rainfall. The 3-month window Mar-May calls for increased chances of below-normal rainfall.
- The outlook for the 3-month window Apr-Jun is for slightly increased chances of below-normal rainfall.
- The outlook for the 3-month window May-Jul is for is for equal chances of above-normal, normal, and below-normal rainfall.
- The outlook for the 2021 wet season 3-month windows of Jun-Sep through Aug-Oct is for slightly increased chances of above normal rainfall.



# U.S. Drought Monitor Florida

## March 2, 2021

(Released Thursday, Mar. 4, 2021)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	80.06	19.94	0.00	0.00	0.00	0.00
<b>Last Week</b> 02-23-2021	80.06	19.94	0.00	0.00	0.00	0.00
<b>3 Months Ago</b> 12-01-2020	99.23	0.77	0.00	0.00	0.00	0.00
<b>Start of Calendar Year</b> 12-29-2020	89.27	10.73	0.00	0.00	0.00	0.00
<b>Start of Water Year</b> 09-29-2020	100.00	0.00	0.00	0.00	0.00	0.00
<b>One Year Ago</b> 03-03-2020	60.53	39.47	2.73	1.02	0.00	0.00

### Intensity:

None	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate Drought	D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

### Author:

Brian Fuchs  
National Drought Mitigation Center



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

[sfwmd.gov](https://sfwmd.gov)

