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Water Conditions Summary

South Florida Water Management District
Governing Board Meeting
August 13, 2020

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

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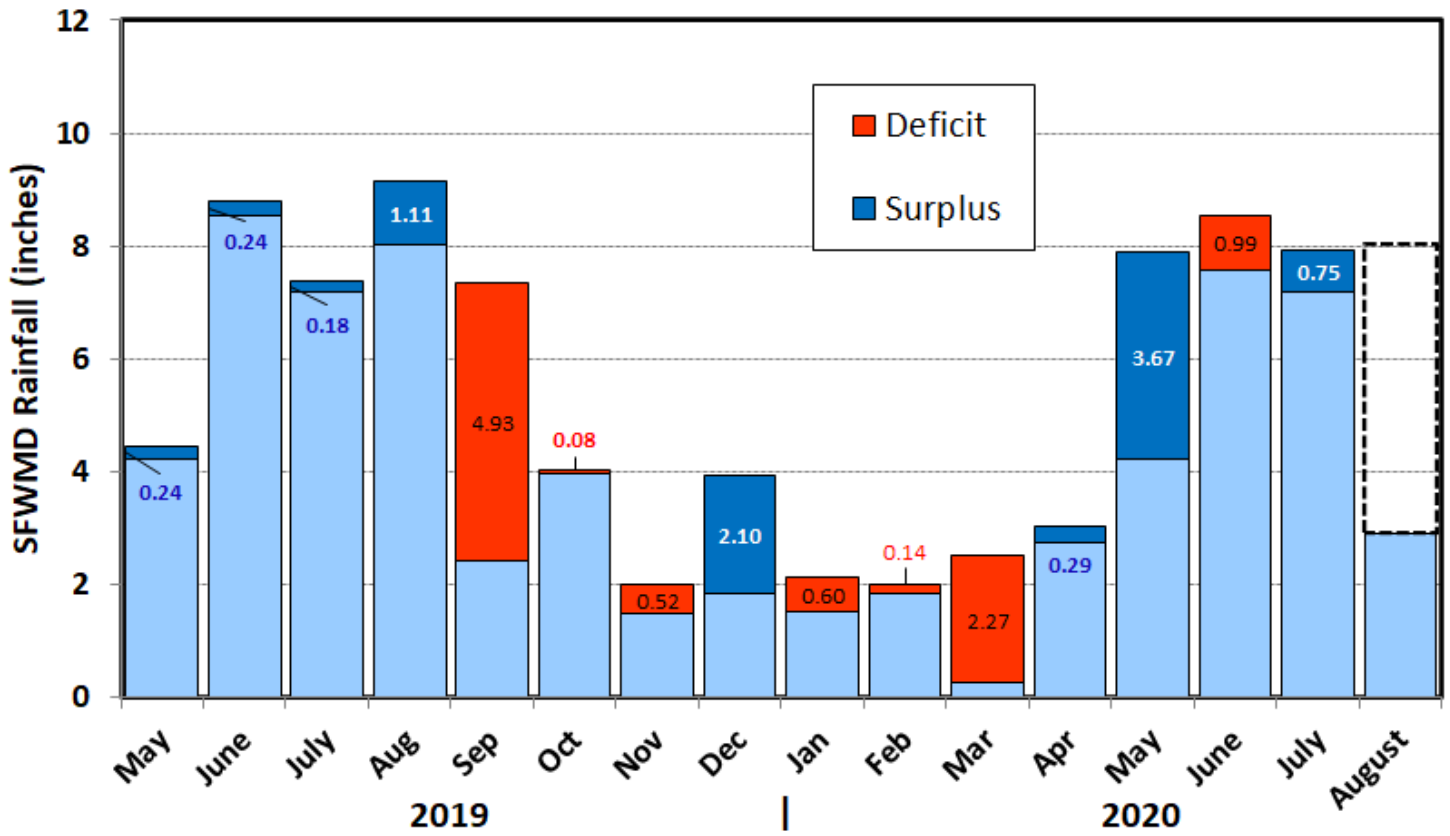

District Wide Average Rainfall

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 WET SEASON
- May to August had above average rainfall
- August was 14% above average.
- Driest September in the 88-year POR.
- Earliest end in POR: Sep. 16, 2019.

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.
- About 22.88" since May 15
- July had above average rainfall
- August rainfall to date is about average

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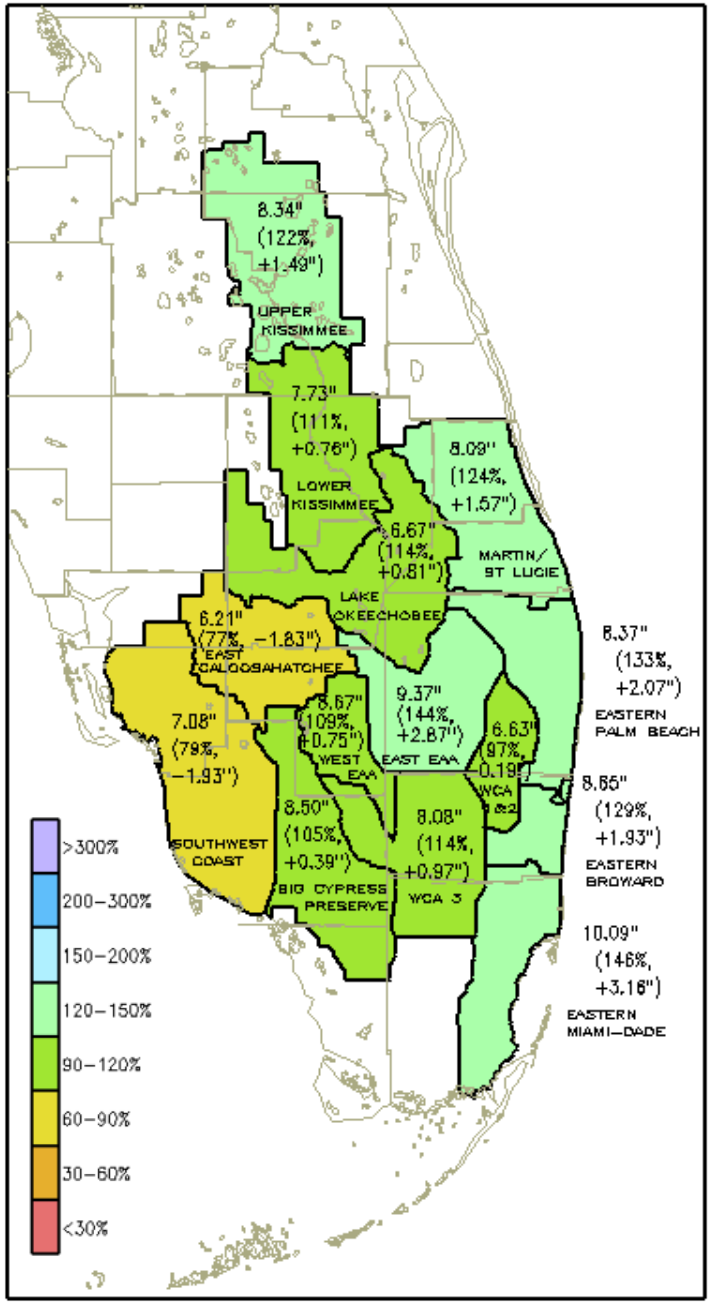


July 2020 Rainfall

DISTRICT-WIDE: 7.93”

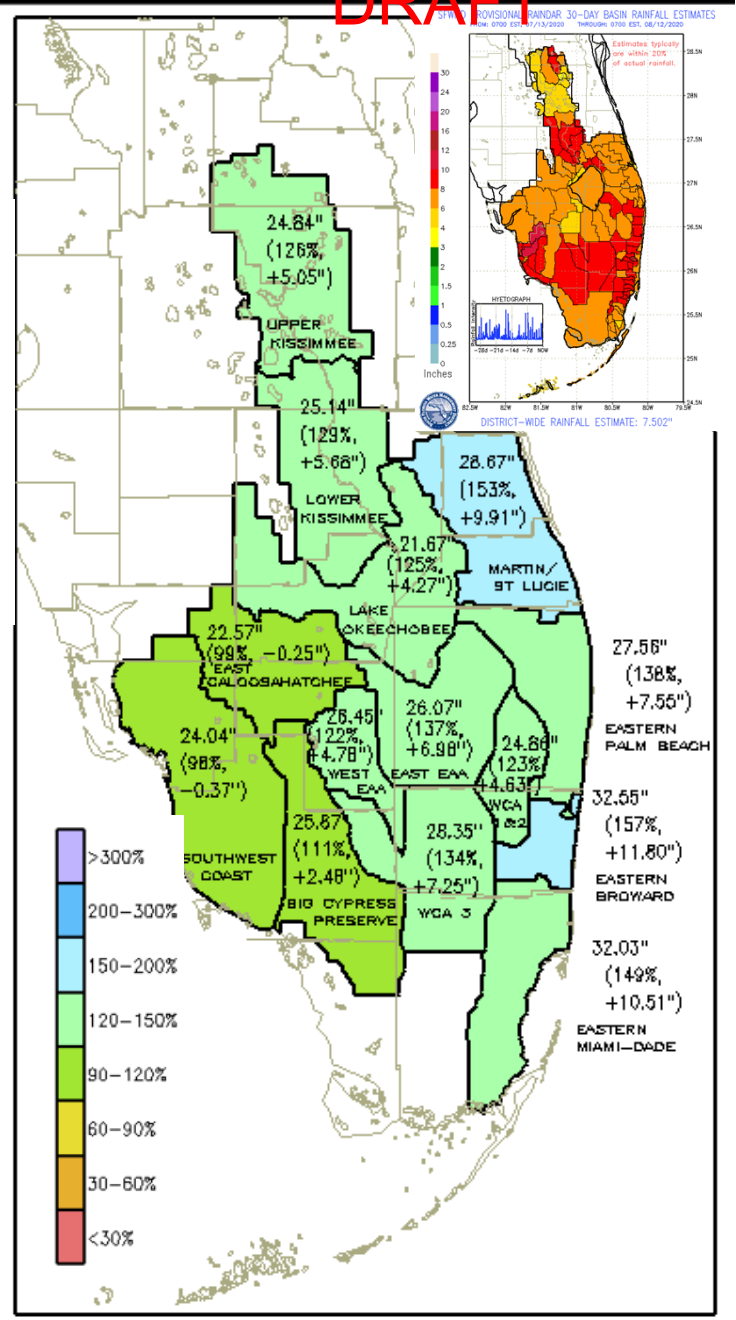
- 110 % of average, +0.75” surplus
- Variability 146% to 77%
- Areas in the West Coast have received less rainfall
- Highest rainfall accumulation is estimated for Eastern Miami–Dade at +3.16”
- Lowest deficit at Southwest Coast with -1.93”

Wet Season Rainfall

15 May 2020 - Present

DISTRICT-WIDE: ~25.89”

- 125% of average, + 5.13” surplus
- Areas in the West Coast have received less rainfall
- All areas are 98% to 157% of average
- Highest is Eastern Broward with 157%
- Lowest is Southwest Coast with 98%



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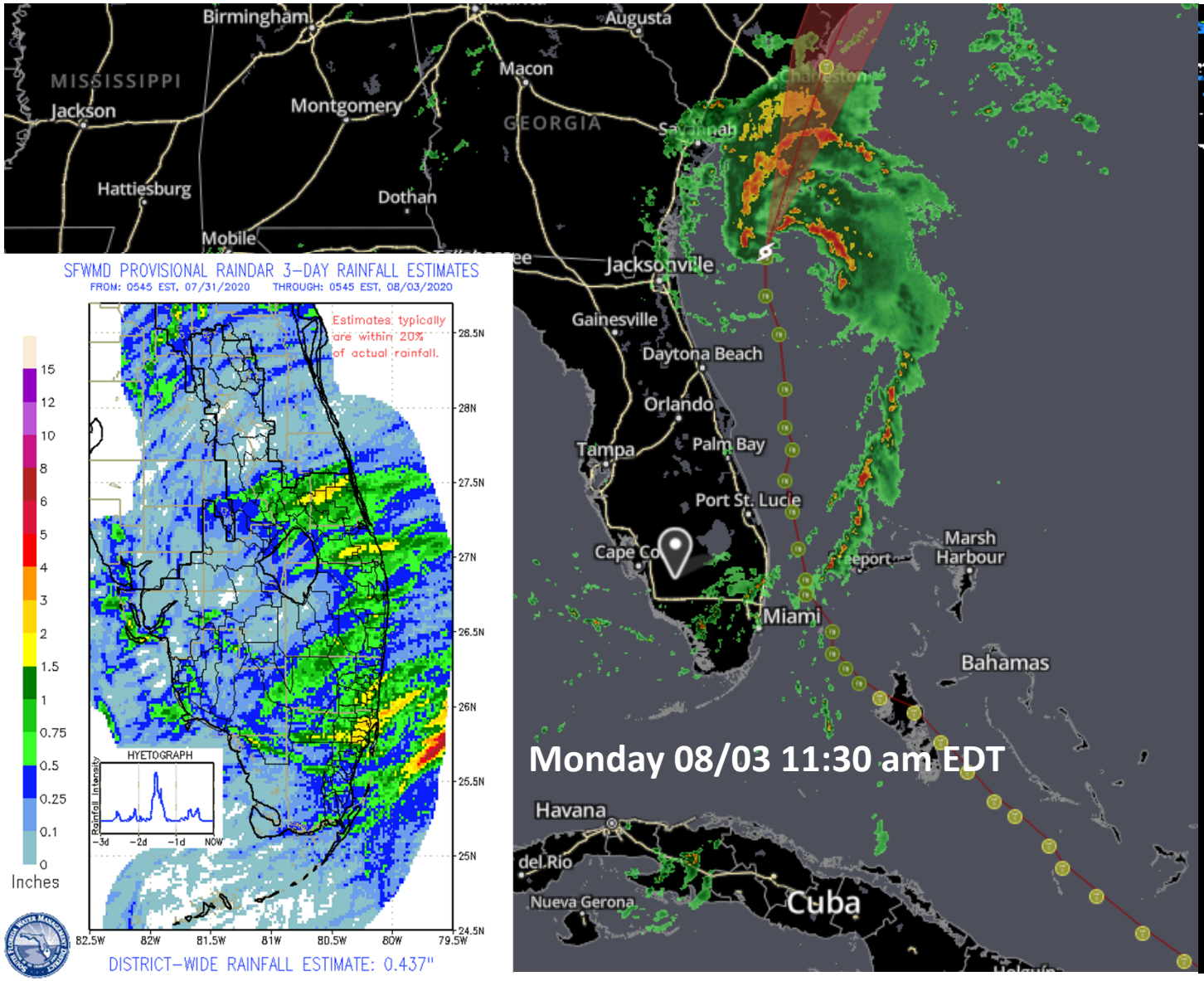
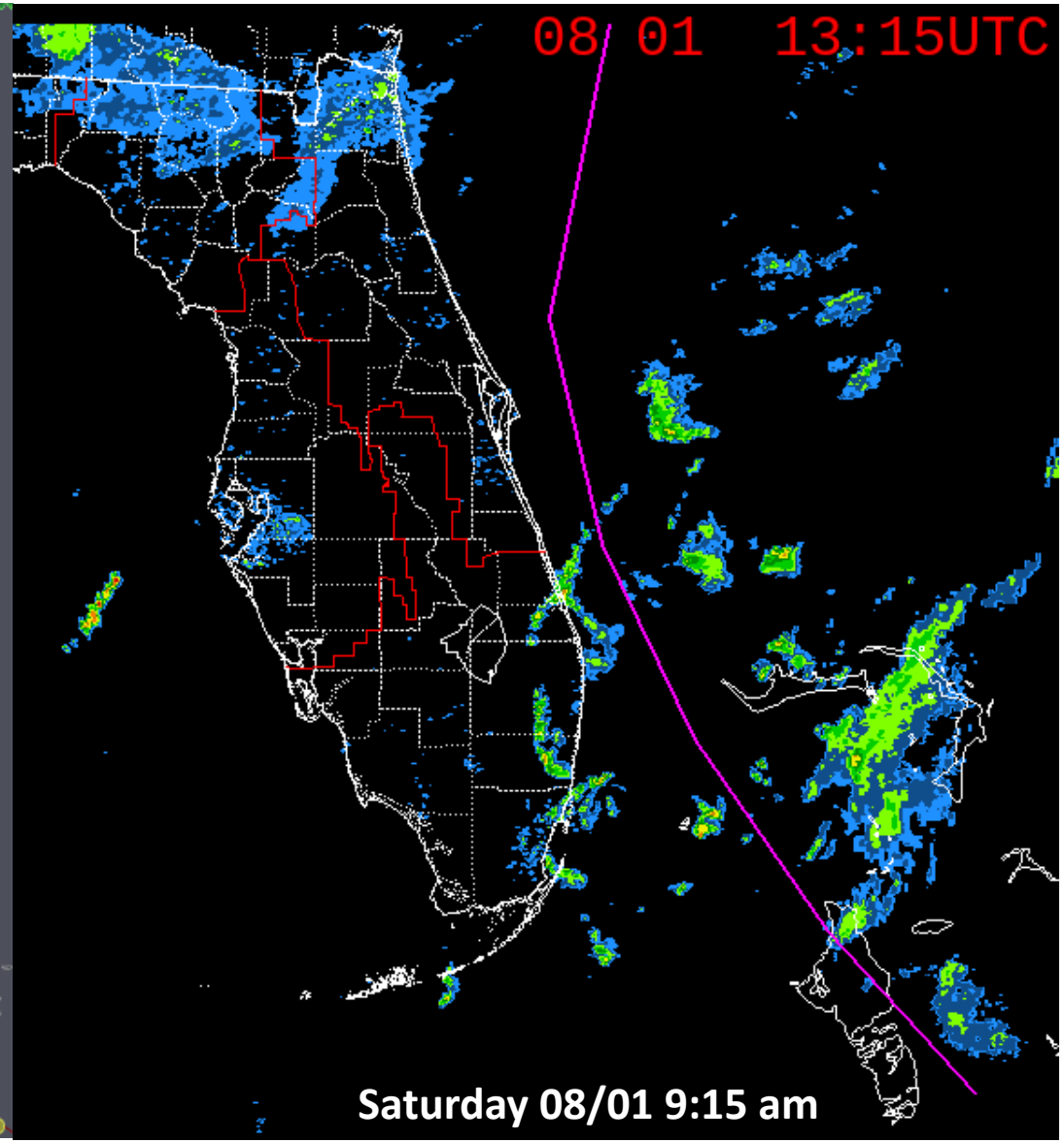
Tropical Storm/Hurricane Isaias





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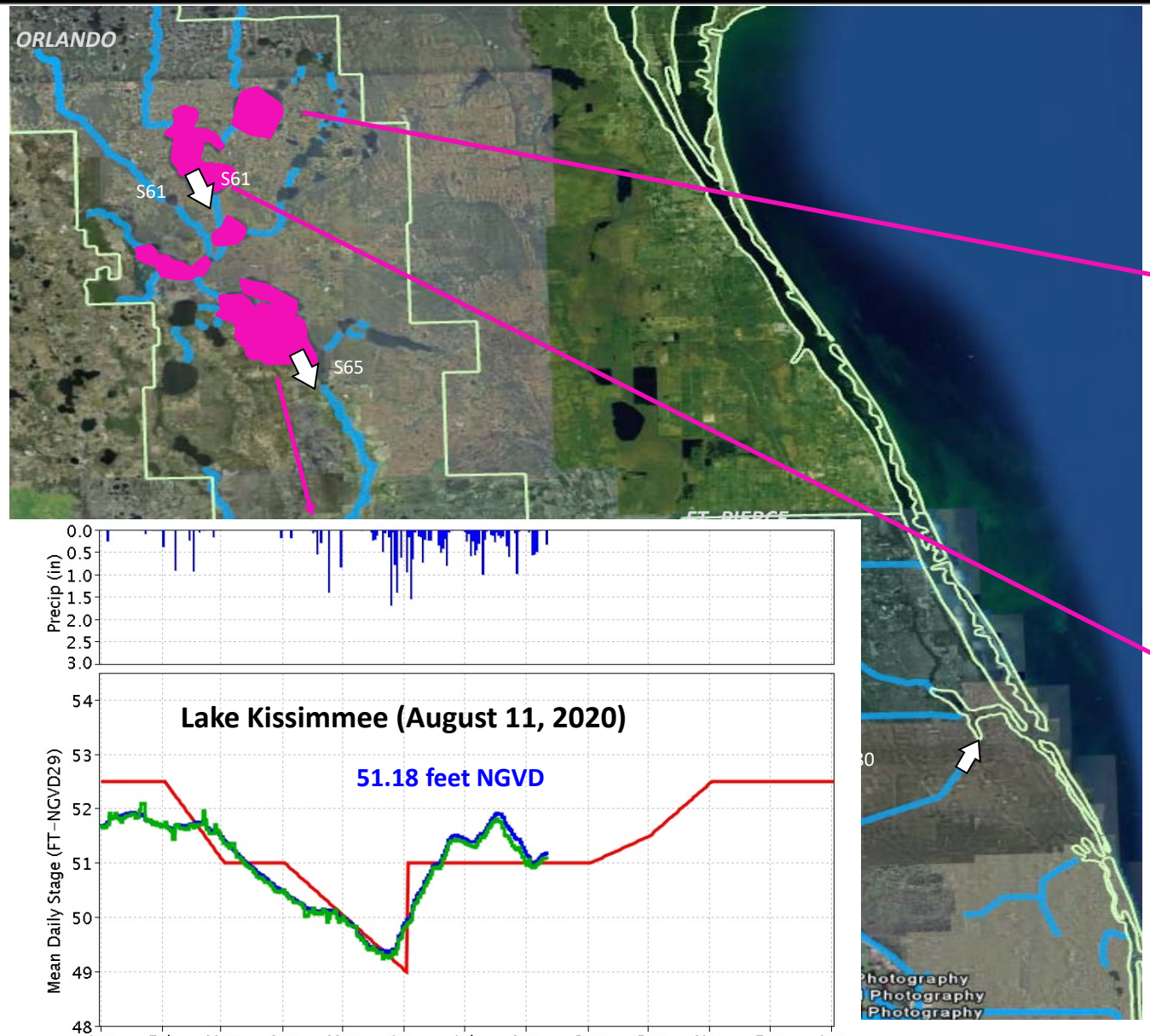
ORLANDO
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Photography
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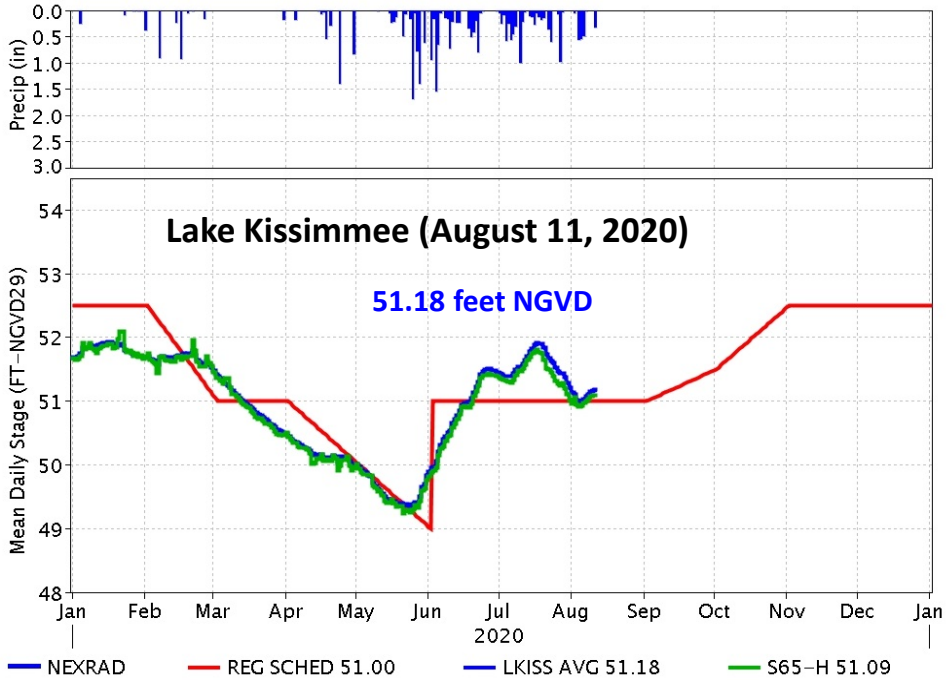
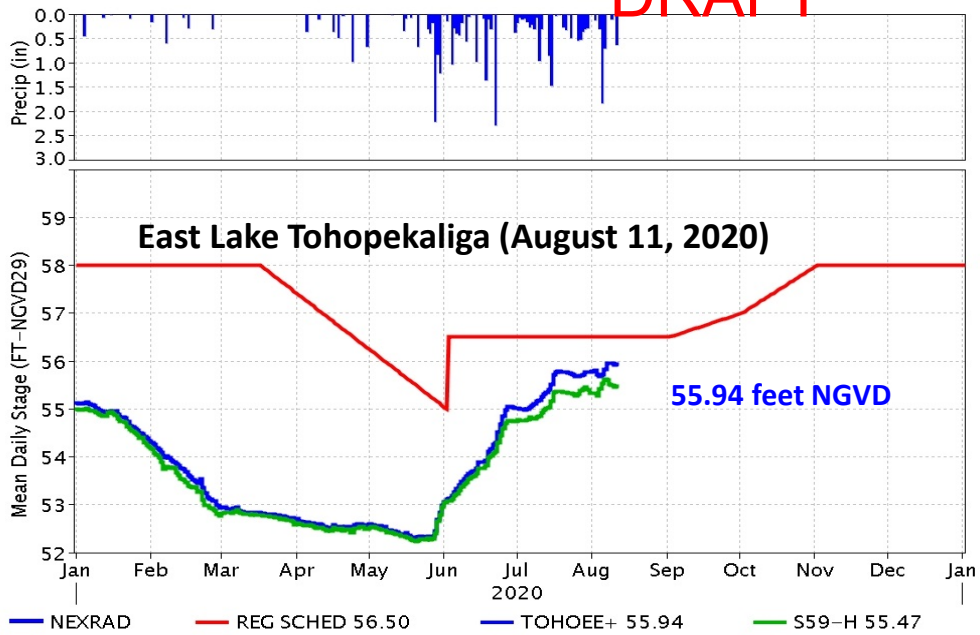
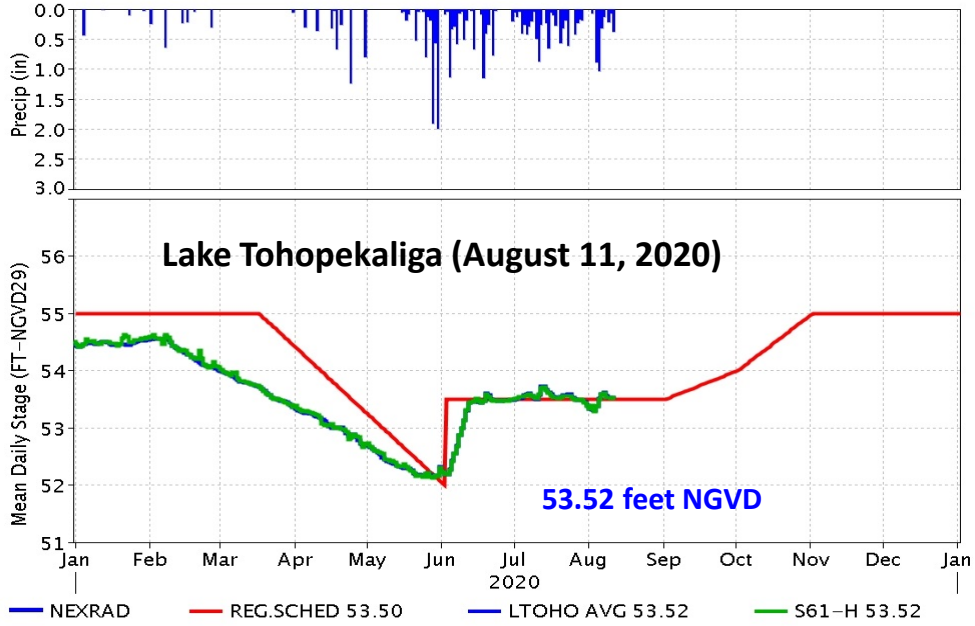

Precip (in)
Lake Kissimmee (August 11, 2020)
51.18 feet NGVD
Mean Daily Stage (FT-NGVD29)
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan
2020
NEXRAD
REG SCHED 51.00
LKISS AVG 51.18
S65-H 51.09


Precip (in)
East Lake Tohopekaliga (August 11, 2020)
55.94 feet NGVD
Mean Daily Stage (FT-NGVD29)
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan
2020
NEXRAD
REG SCHED 56.50
TOHOEE+ 55.94
S59-H 55.47


Precip (in)
Lake Tohopekaliga (August 11, 2020)
53.52 feet NGVD
Mean Daily Stage (FT-NGVD29)
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan
2020
NEXRAD
REG.SCHED 53.50
LTOHO AVG 53.52
S61-H 53.52

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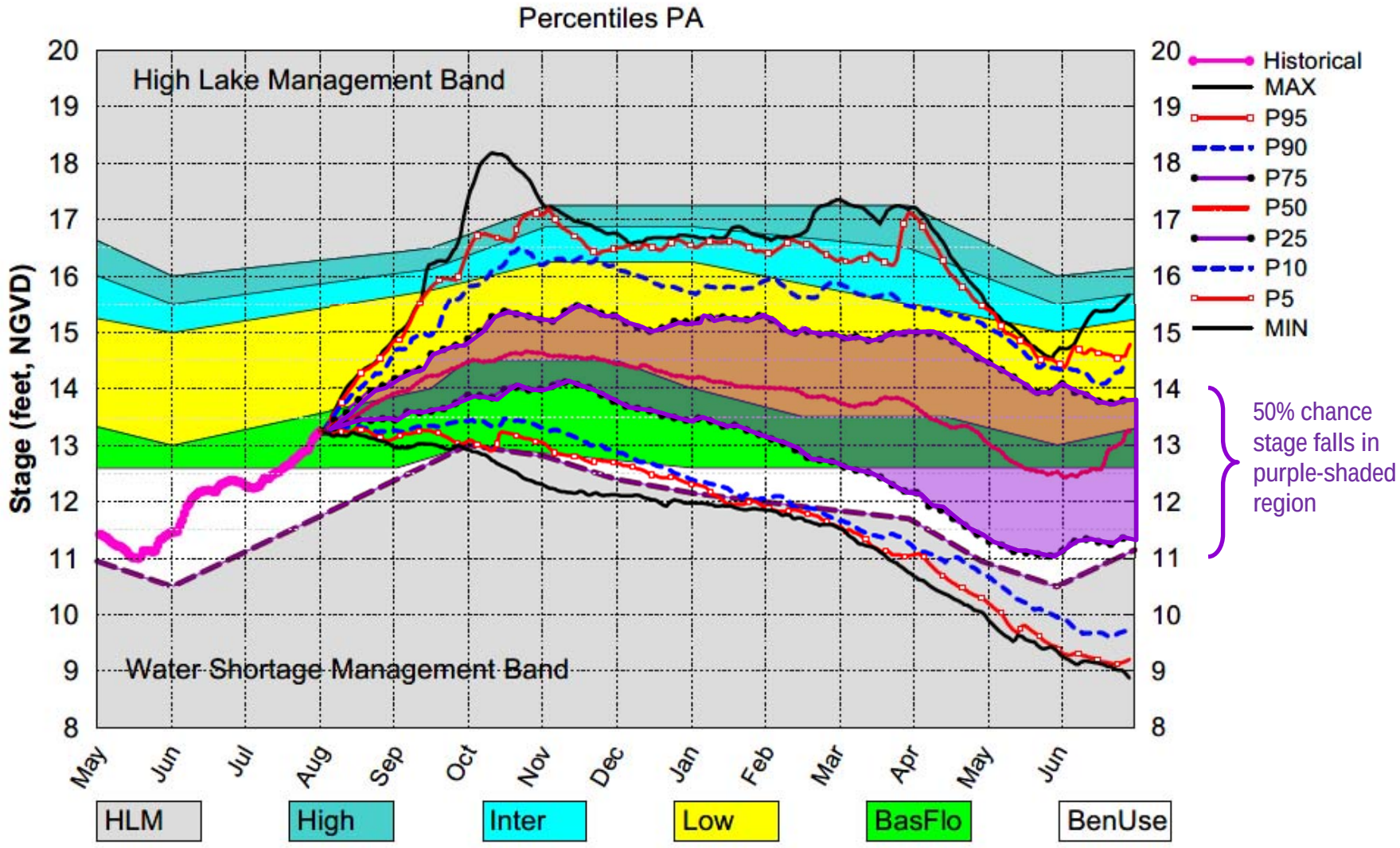
Lake Okeechobee SFWMM Aug 2020 Position Analysis



(See assumptions on the Position Analysis Results website)

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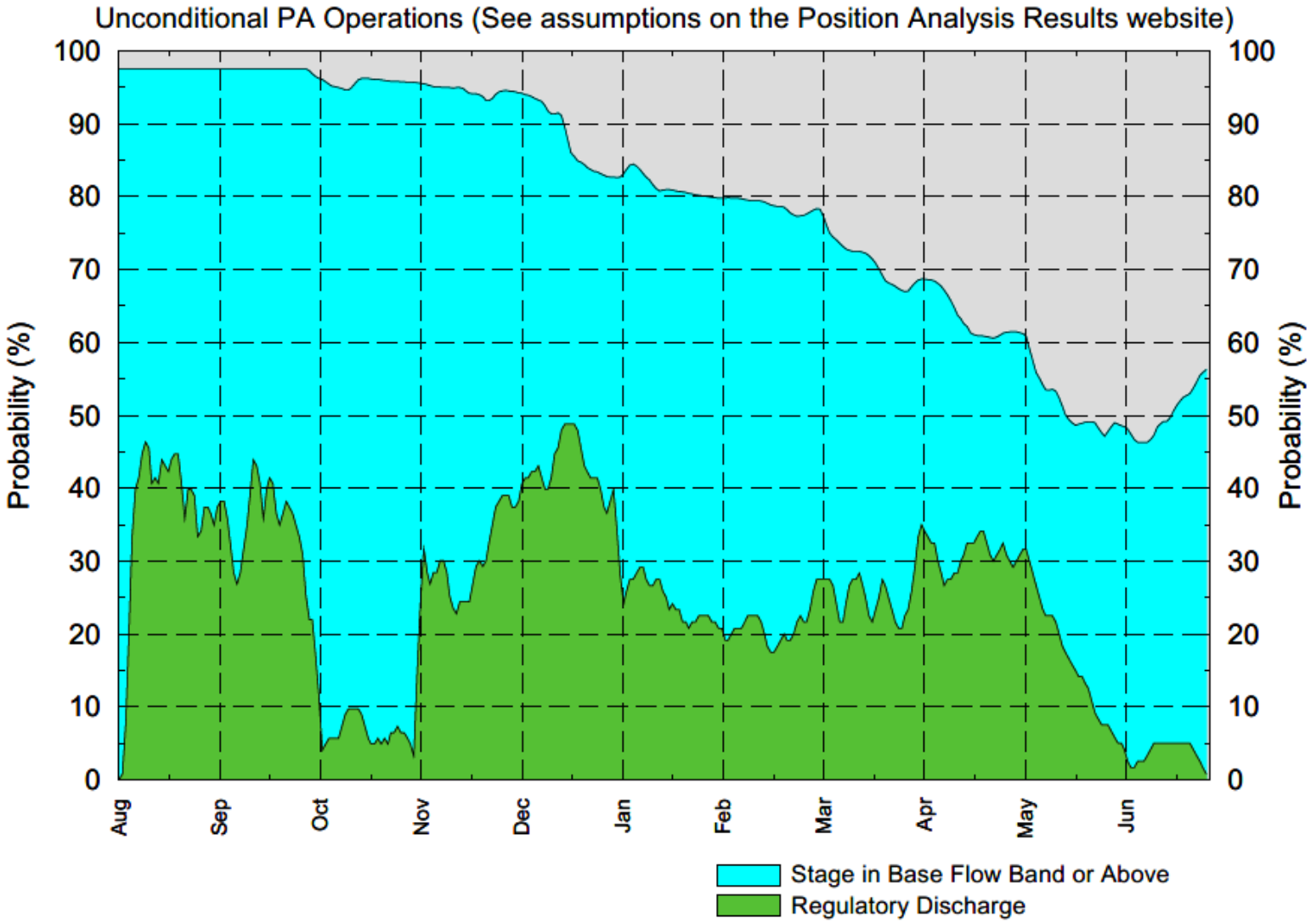
August 2020 Dynamic Position Analysis

Lake Okeechobee – LORS2008 Releases to the WCA's



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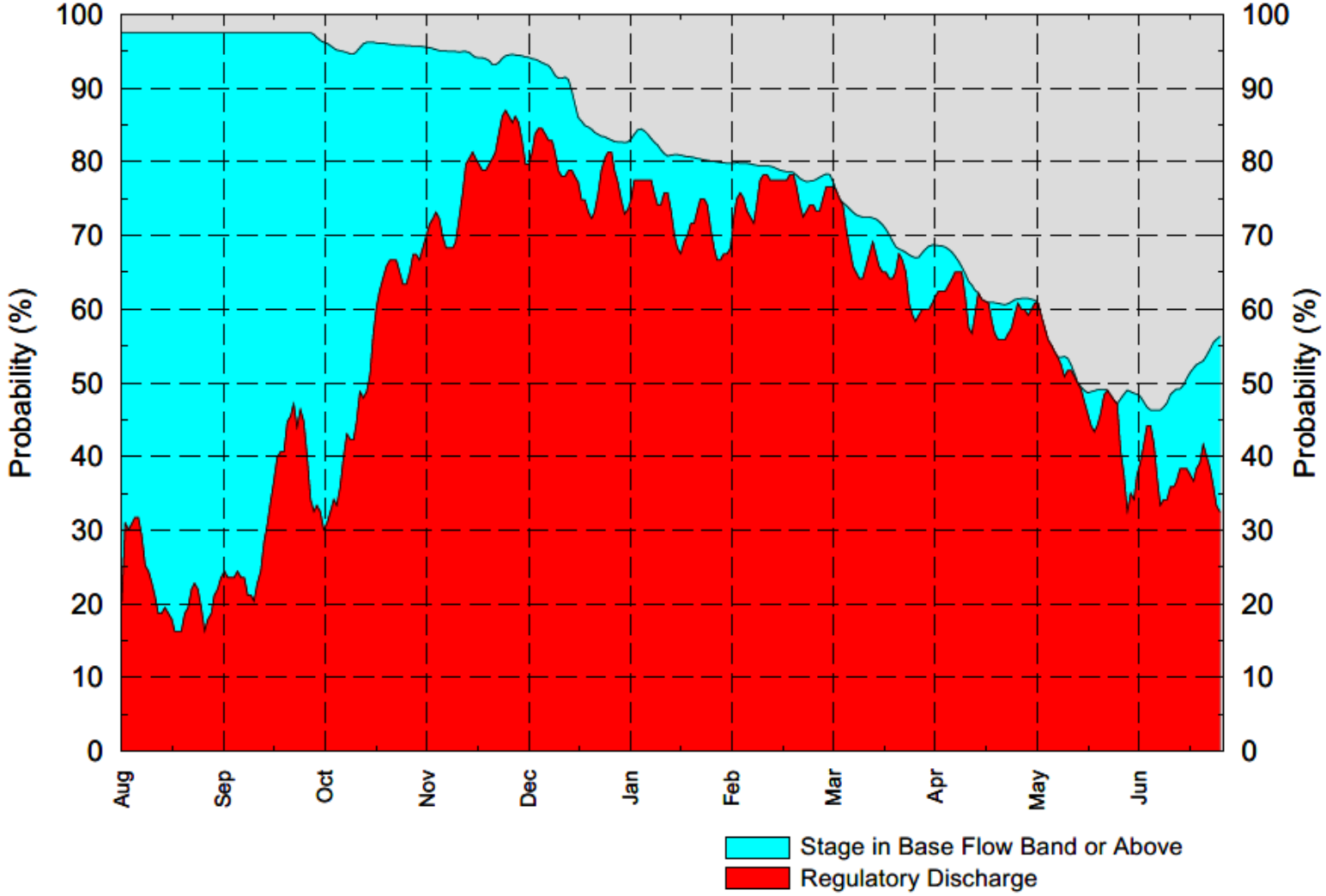
July 2020 Dynamic Position Analysis

Lake Okeechobee – LORS2008 Releases to the Estuaries

Unconditional PA Operations (See assumptions on the Position Analysis Results website)



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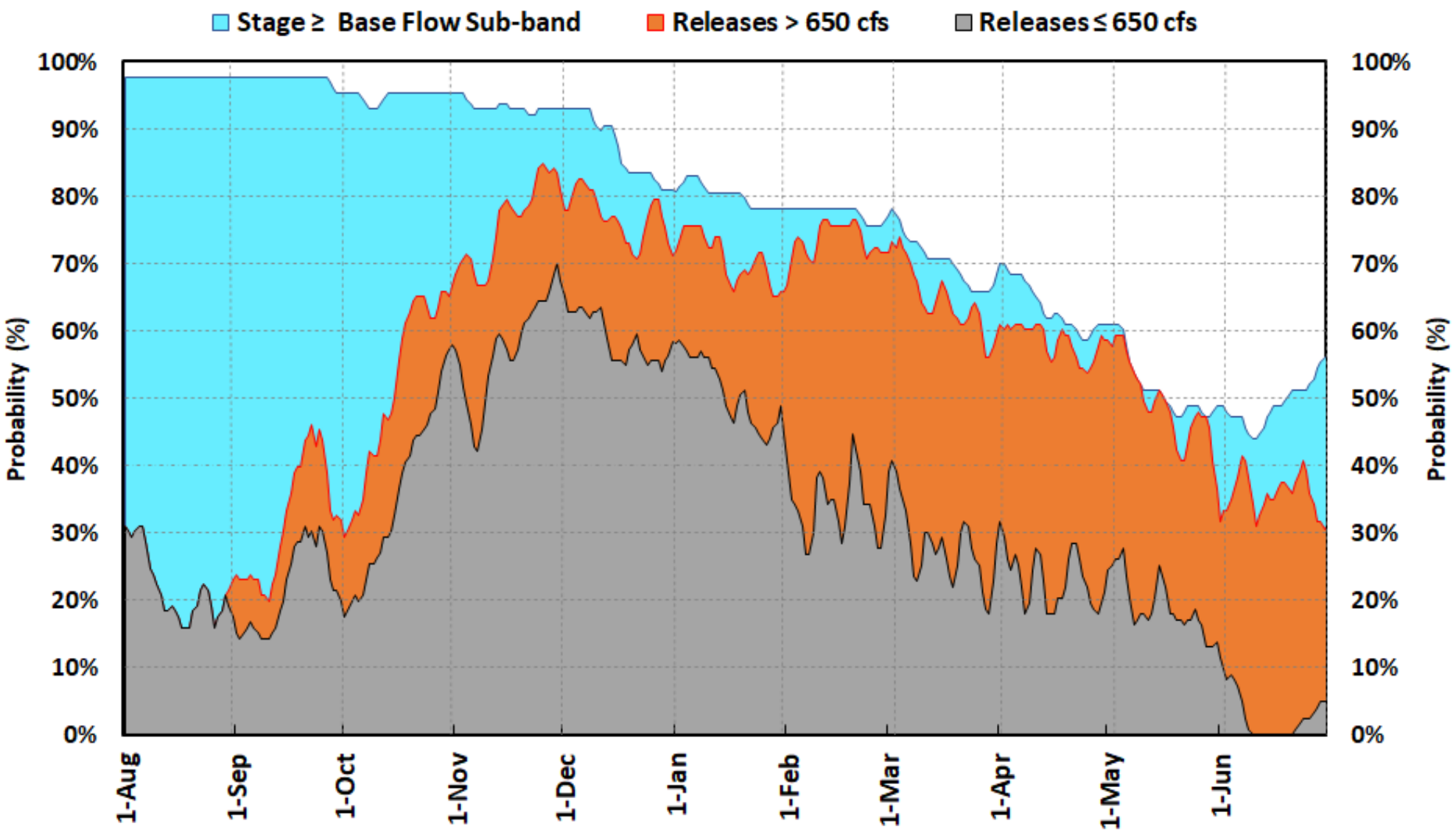
Aug 2020 PA - Likelihood of Releases to the Caloosahatchee Estuary



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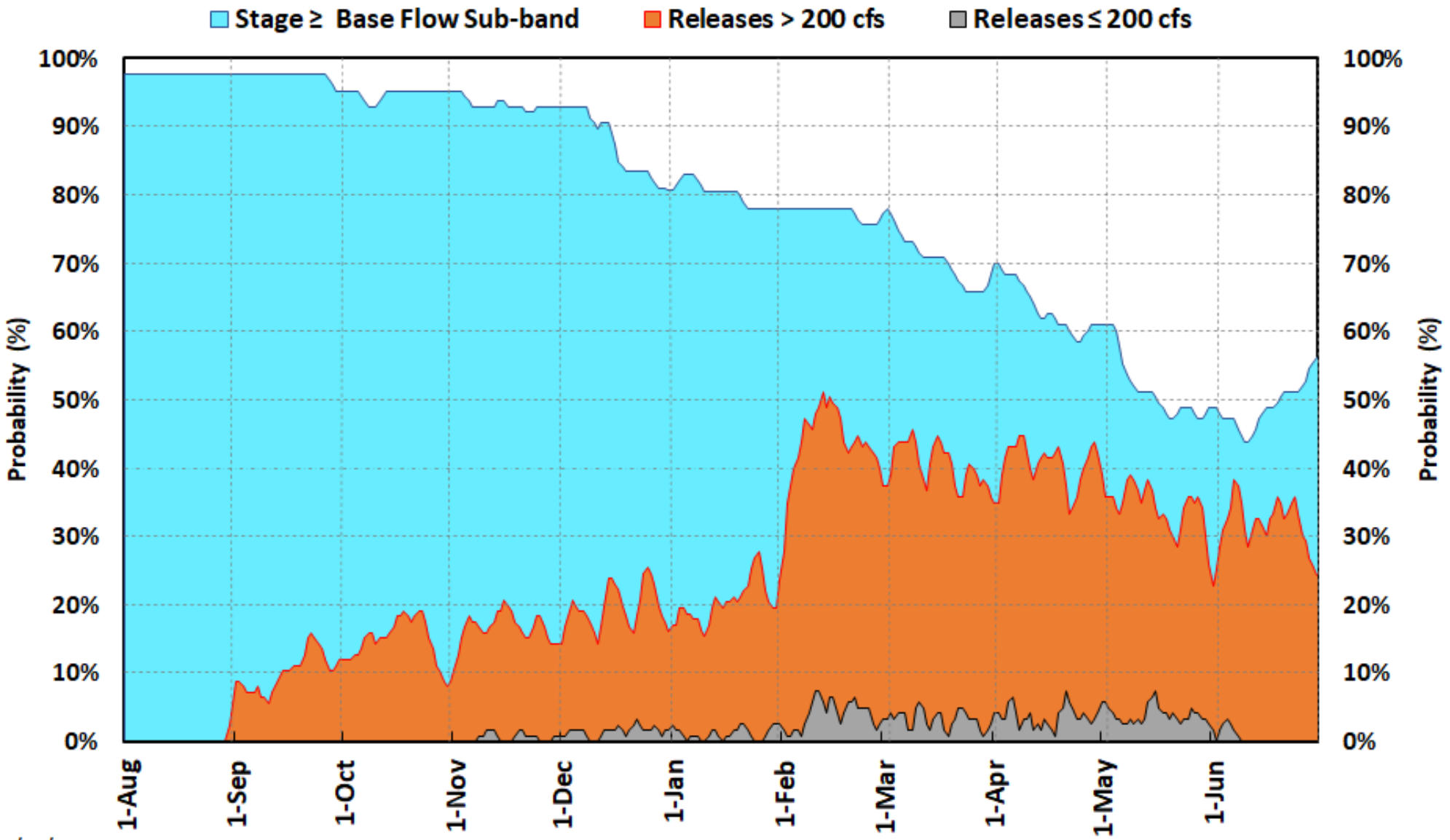
Aug 2020 PA - Likelihood of Releases to the St. Lucie Estuary



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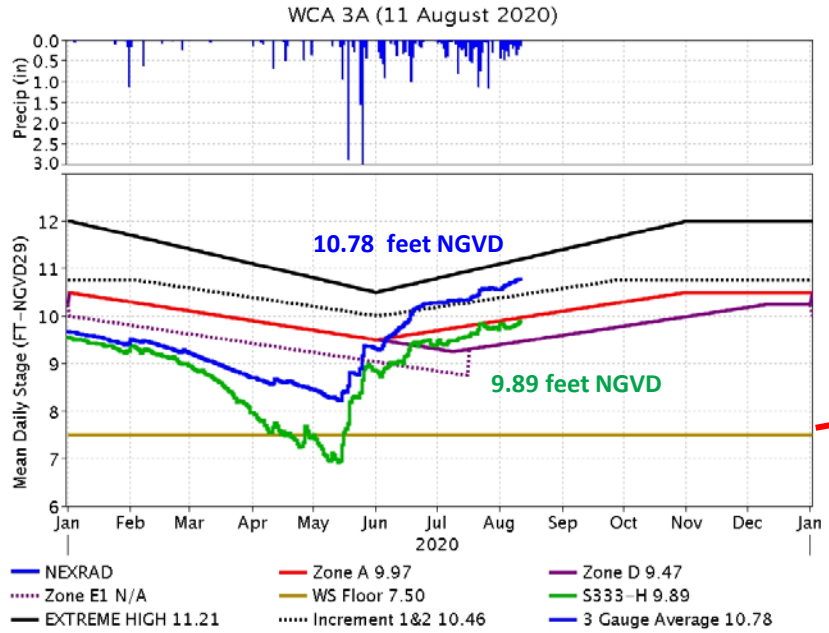
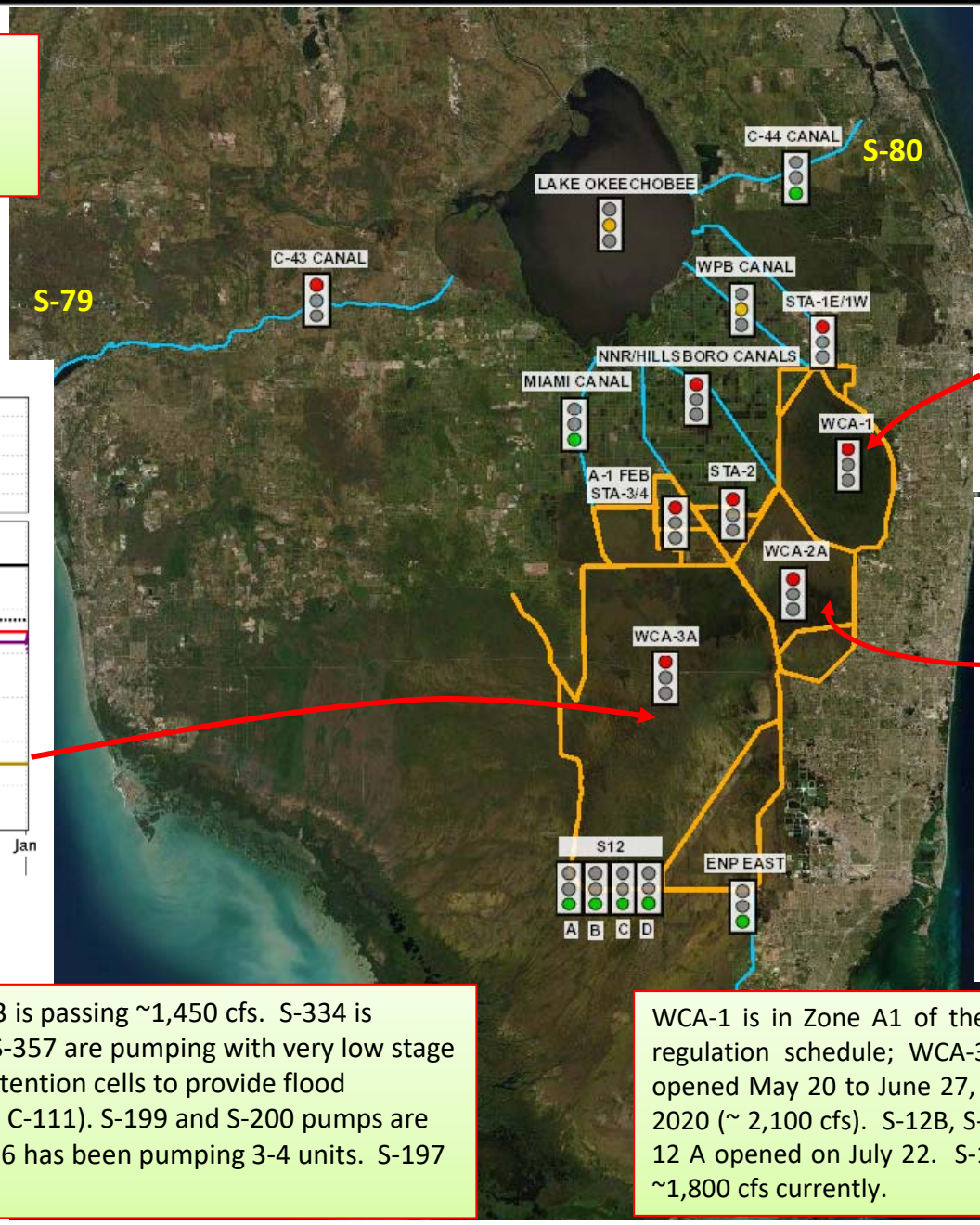
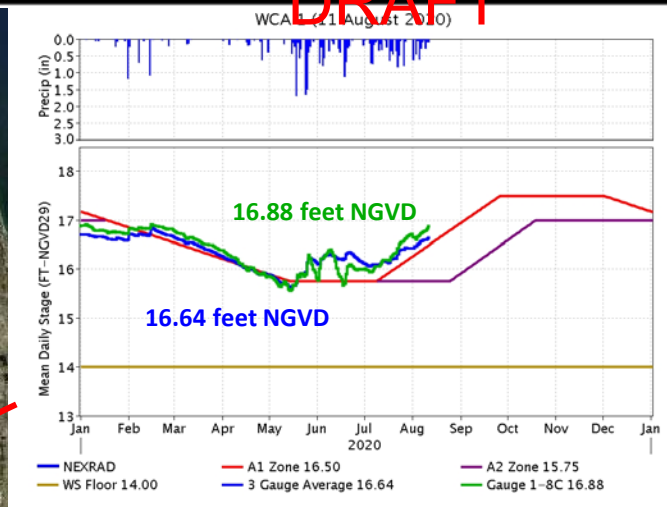
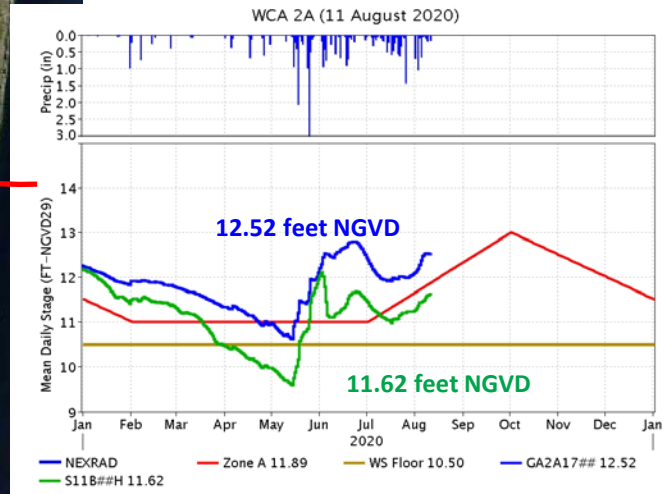
Lake Okeechobee stage is in the Low Sub-band of LORS-2008 Regulation schedule. The USACE is implementing a 650 cfs pulse release to the Caloosahatchee Estuary. No Lake regulatory south releases being implemented currently.









Rainfall Plan calls for MAXIMUM releases from WCA-3A. S-333 is passing ~1,450 cfs. S-334 is closed. L-29 canal constraint is 8.3-8.5 feet NGVD. S-331 and S-357 are pumping with very low stage settings to help 8.5 SMA. District continues to operate the detention cells to provide flood mitigation and seepage management for the SDCS (L-31N and C-111). S-199 and S-200 pumps are running with no Cape Sable Seaside Sparrow limitations. S-356 has been pumping 3-4 units. S-197 remains closed. S-152 is in the process of being opened.

WCA-1 is in Zone A1 of the regulation schedule; WCA-2A is in Zone A of the regulation schedule; WCA-3A is in Zone A of its regulation schedule. S-10s opened May 20 to June 27, and July 31 to August 3. S-11s opened on May 26, 2020 (~ 2,100 cfs). S-12B, S-343 A and B, and S-344 were opened on July 15. S-12 A opened on July 22. S-12 C&D opened on June 1, 2020 . All S-12s passing ~1,800 cfs currently.

System considerations for sending water south for the period 08/04/2020 to 08/10/2020

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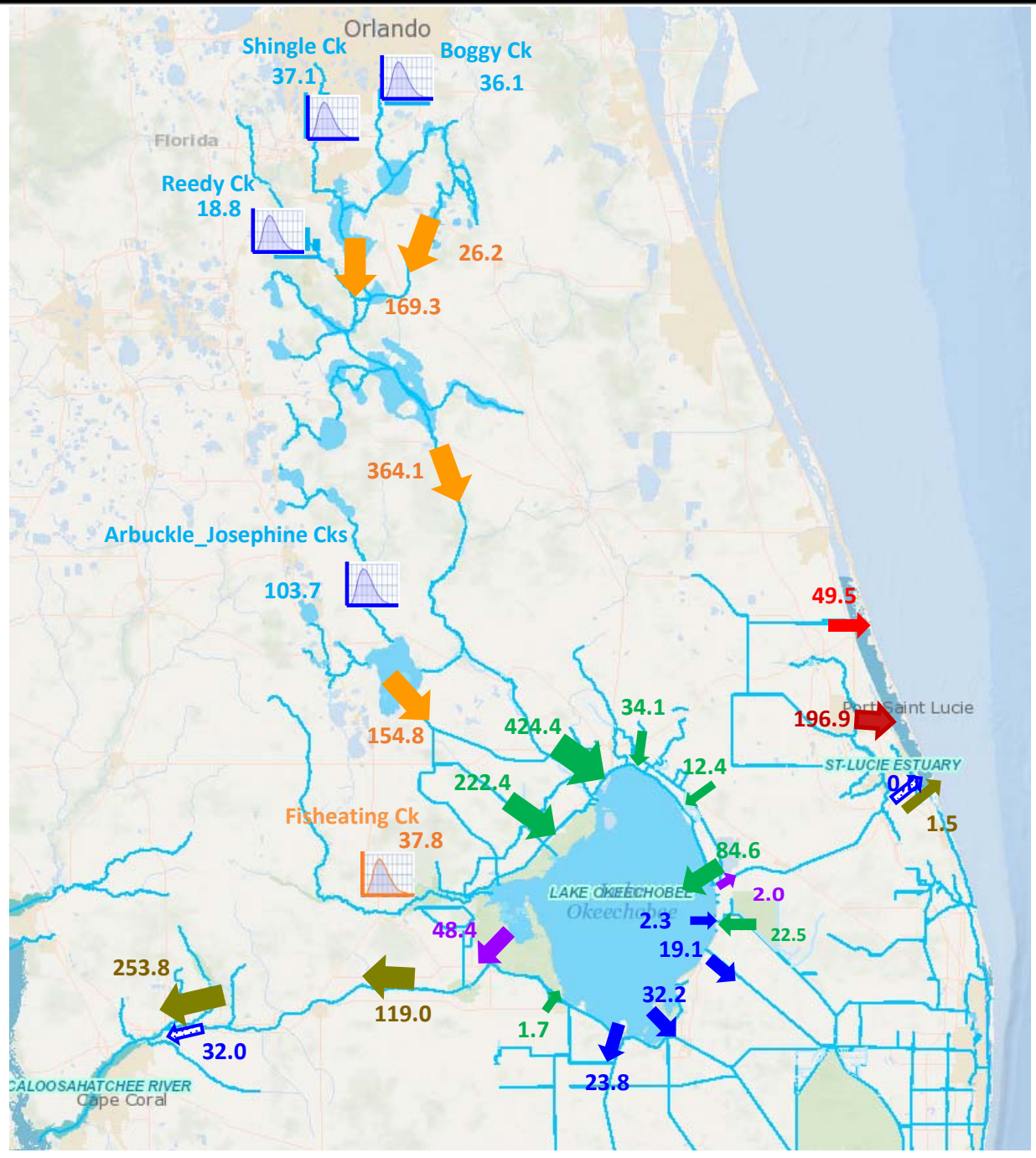

SFWMD – Selected Release Volumes for the Period May 1, 2020 to August 11, 2020

(volumes in 1,000 acre-feet)

Symbol	Description	Volume (1,000 acre- feet)	
		Season to Date	Last Month
	Upper Kissimmee to Lower Kissimmee	364.1	230.5
	Inflows to Lake Okeechobee (including Fisheating Creek)	840.0	488.0
	Lake Releases and Basin Runoff	255.3	78.3
	Lake Releases East and West	50.4	3.6
	Lake Flood Control to Estuaries	32.0	3.6
	Total Lake Releases South	77.4	0.3
	Releases to Indian River Lagoon	49.5	15.0
	Upper East Coast discharges to St. Lucie Estuary	196.9	66.1
	Uncontrolled flows - Creeks (does not include Fisheating Creek)	195.8	93.4

1,000 acre-feet = 325.9 Million Gallons

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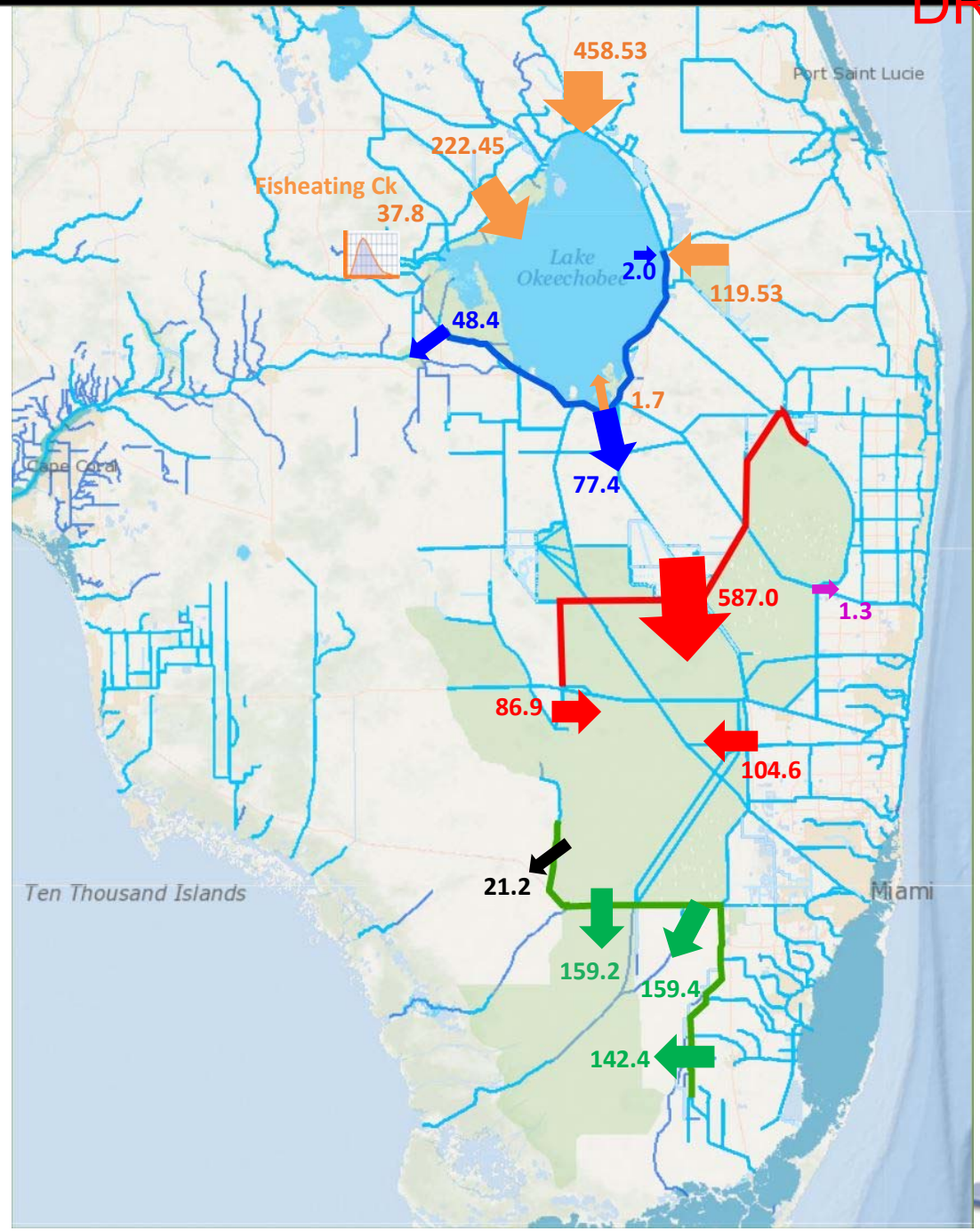
SFWMD –Volumes Flowing Down the System
May 1, 2020 to August 11, 2020
(volumes in 1,000 acre-feet)

Symbol	Description	Volume (1,000 acre- feet)	
		Season to Date	Last Month
	Lake Okeechobee Inflows	840.0	488.0
	Lake Okeechobee Outflows	127.8	3.9
	WCAs Inflows	778.5	317.4
	ENP / Detention Cell Inflows	461.0	253.1
	WCAs to East	1.3	0.2



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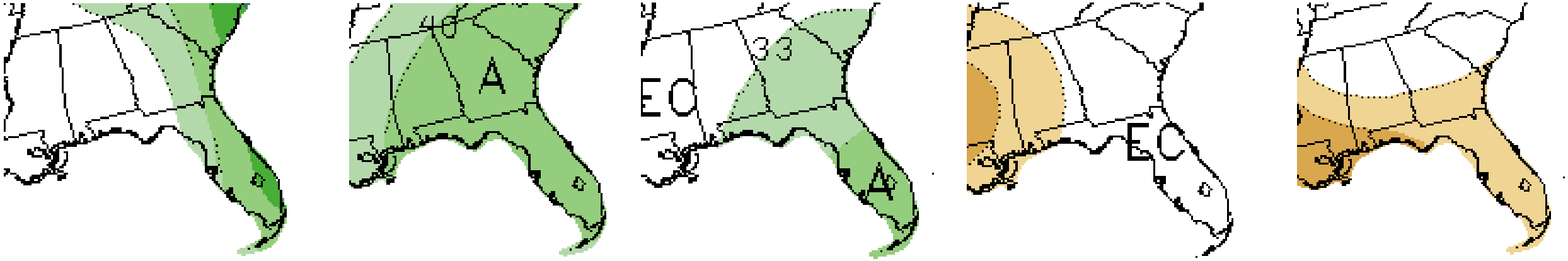
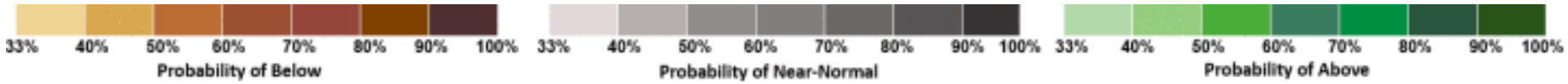
CPC Precipitation Outlook for South Florida



Aug 2020 | Aug-Oct | Sep-Nov | Oct-Dec | Nov-Jan

- The most recent CPC precipitation outlooks for August 2020 shows substantially increased chances of above normal rainfall for the east area of the District from Martin/St. Lucie to Broward County and increased chances of above normal rainfall for the remainder of the District.
- The 3-month outlook windows of Aug-Oct and Sep-Nov call for increased chances of above-normal rainfall for the District.
- Outlook for the 3-month window of Oct-Dec calls for equal chances of above-normal, normal, and below-normal rainfall.
- For the first half of the 2020-2021 dry season, the forecast indicates increased chances of below normal rainfall.
- The outlook corresponding to the transition months from dry to wet season in 2021 shows increased chances of above normal rainfall.



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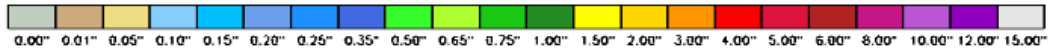
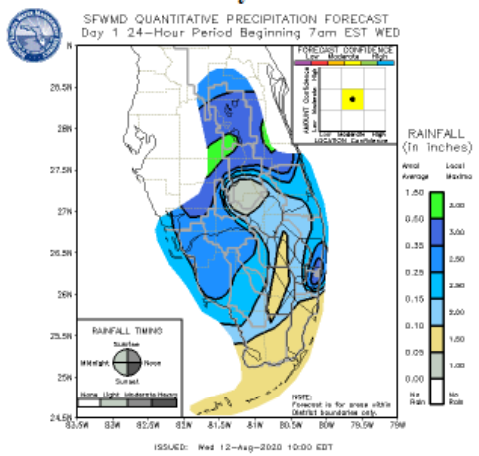
Posted 08/12/2020

Daily Quantitative Precipitation Forecasts



Day 1



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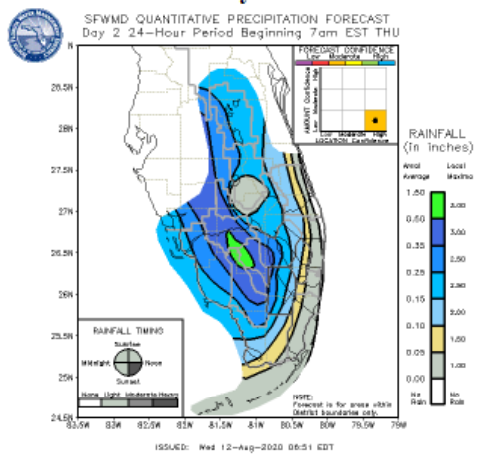

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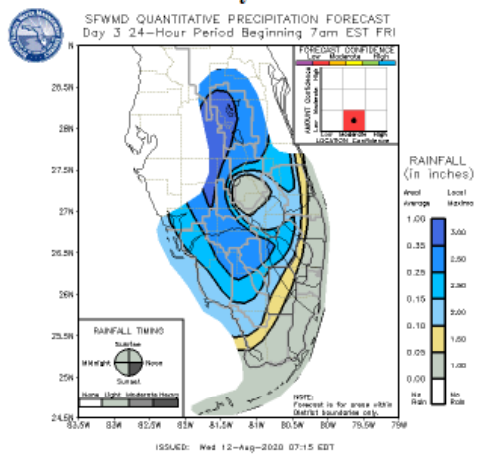

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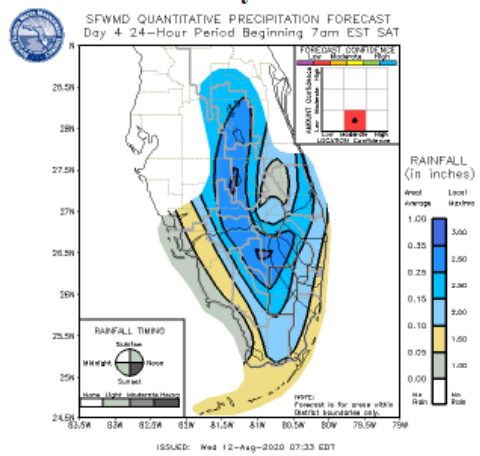

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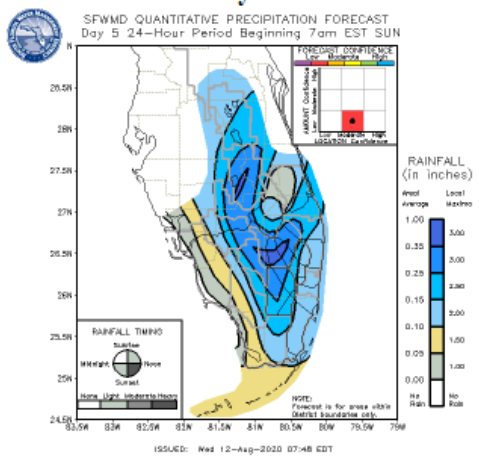

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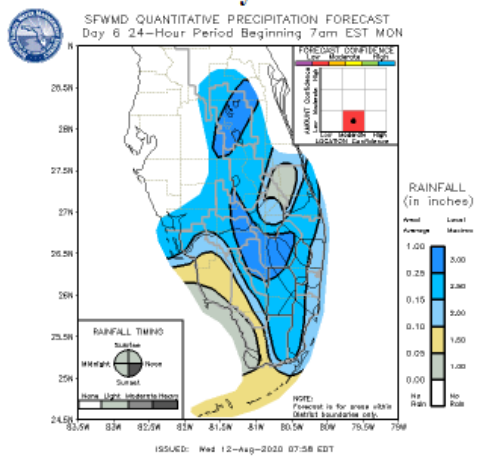
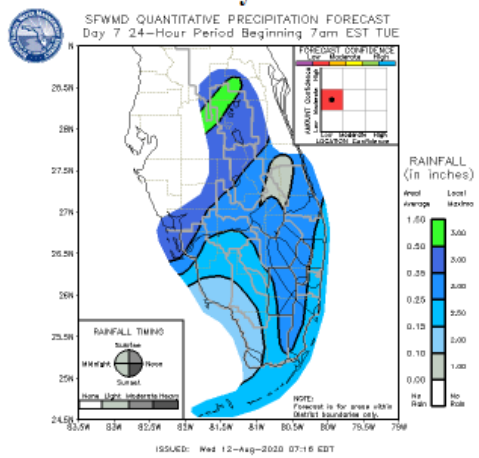
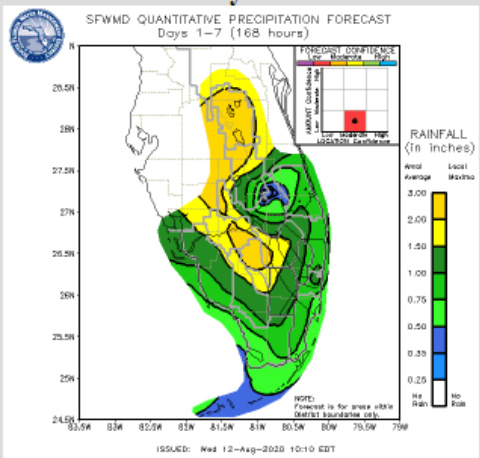


Day 7



7-Day Total