

# Application of the Lake Okeechobee Regulation Schedule (LORS2008) on 06/06/2022 (ENSO Condition: La Niña)

## Lake Okeechobee Net Inflow Outlook:

The Lake Okeechobee Net Inflow Outlook has been computed using 4 methods: Croley's method<sup>1</sup>, the SFWMD empirical method<sup>2</sup>, a sub-sampling of La Nina years<sup>3</sup> and a sub-sampling of warm years of the Atlantic Multi-decadal Oscillation (AMO) in combination with La Nina ENSO years<sup>4</sup>. The results for Croley's method and the SFWMD empirical method are based on the CPC Outlook.

Table of the Lake Okeechobee Net Inflow Outlooks in feet of equivalent depth. All methods are updated on a weekly basis with observed net inflow for the current month.

Season	Croley's Method <sup>1*</sup>		SFWMD Empirical Method <sup>2</sup>		Sub-sampling of La Nina ENSO Years <sup>3</sup>		Sub-sampling of AMO Warm + La Nina ENSO Years <sup>4</sup>	
	Value (ft)	<u>Condition</u>	Value (ft)	<u>Condition</u>	Value (ft)	<u>Condition</u>	Value (ft)	<u>Condition</u>
Current (Jun-Nov)	N/A	N/A	2.81	Very Wet	2.67	Very Wet	2.59	Very Wet
Multi Seasonal (Jun-Apr)	N/A	N/A	3.24	Wet	2.85	Wet	2.23	Normal

\*Croley's Method Not Produced for This Report

See Seasonal and Multi-Seasonal tables for the classification of Lake Okeechobee Outlooks.

The recommended methods and values for estimating the Lake Okeechobee Net Inflow Outlook are shaded and should be used in the LORS2008 Release Guidance Flow Charts.

\*\*Sub-sampling is a weighted average of ENSO conditions based on the ENSO forecast used.

## ***Tributary Hydrologic Conditions Graph:***

**1780 cfs** 14-day running average for Lake Okeechobee Net Inflow through 06/06/2022. According to the classification in Tributary Hydrologic Conditions table, this condition is Near Normal.

**-2.47** for Palmer Drought Index on 06/06/2022.

According to the classification in Tributary Hydrologic Conditions table, this condition is Dry.

The wetter of the two conditions above is **Near Normal**.

## **LORS2008 Classification Tables:**

### **Lake Okeechobee Stage on 06/06/2022:**

Lake Okeechobee Stage: **12.75 feet**

Lake Okeechobee Management Zone/Band		Bottom Elevation (feet, NGVD)	Current Lake Stage
High Lake Management Band		16.02	
Operational Band	High sub-band	15.52	
	Intermediate sub-band	15.04	
	Low sub-band	13.05	
Base Flow sub-band		12.60	← 12.75 ft
Beneficial Use sub-band		11.45	
Water Shortage Management Band		10.63	

**Part C of LORS2008: Discharge to WCAs**

No releases to WCAs.

**Part D of LORS2008: Discharge to Tide**

Up to 450 cfs at S-79 and up to 200 cfs at S-80.

**Lake Okeechobee Releases to the Caloosahatchee Estuary  
for 2008 LORS Baseflow & for Environmental Water Supply**

Guidance for Lake Okeechobee Releases to the Caloosahatchee Estuary indicates no S77 release to the Caloosahatchee Estuary unless the Governing Board recommends otherwise.

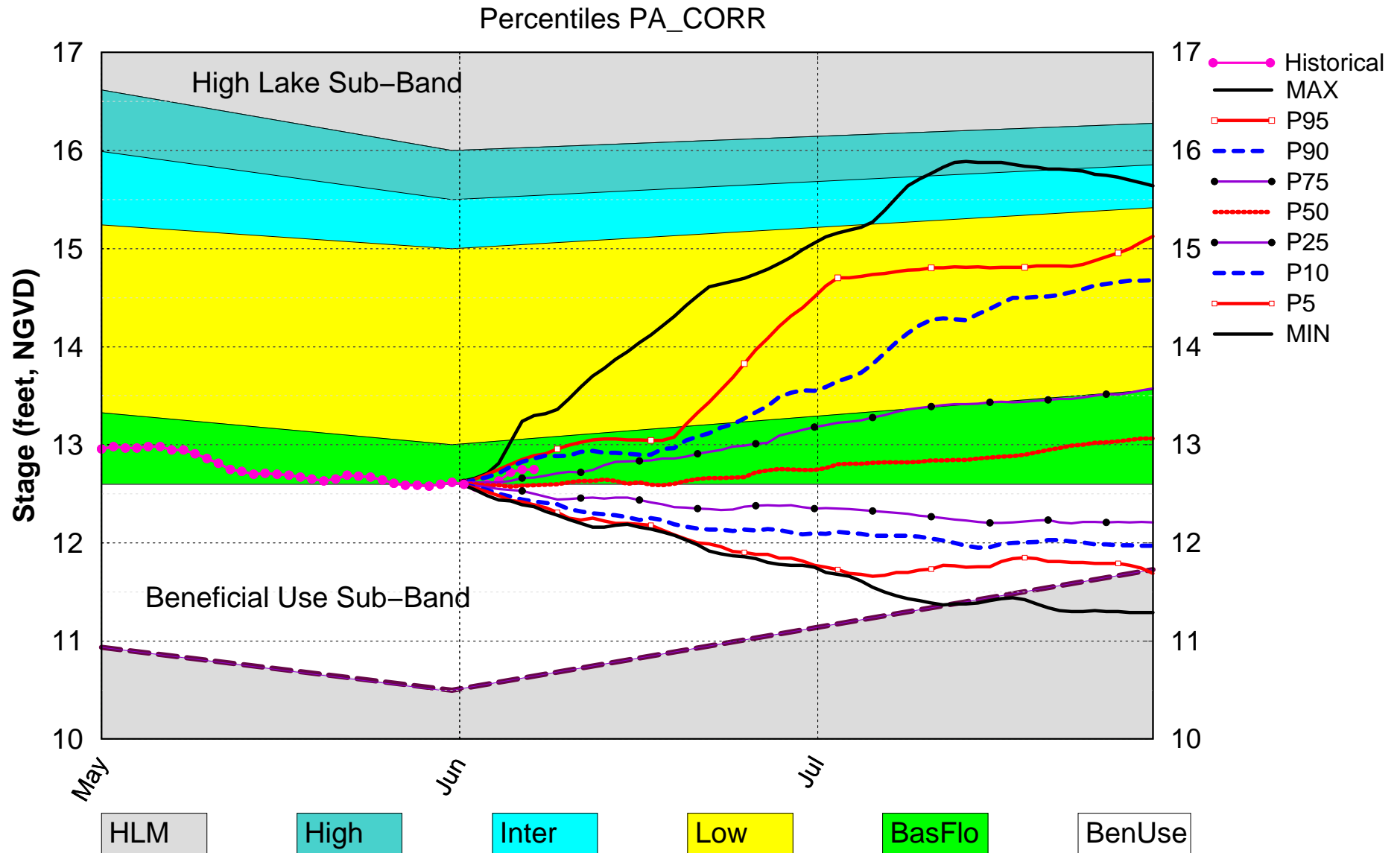
**LORS2008 Implementation on 06/06/2022 (ENSO Condition- La Nina Watch):****Status for week ending 06/06/2022:****Water Supply Risk Evaluation**

Area	Indicator	Value	Color Coded Scoring Scheme
LOK	Projected LOK Stage for the next two months	Base Flow	M
	Palmer Drought Index for LOK Tributary Conditions	-2.47 (Extremely Dry)	H
	CPC Precipitation Outlook	1 month: Above Normal	L
		3 months: Normal	L
	LOK Seasonal Net Inflow Outlook	2.67 ft	L
	ENSO Forecast	Normal to extremely wet	
	LOK Multi-Seasonal Net Inflow Outlook	2.85 ft	M
	ENSO Forecast	Normal	
WCAs	WCA 1: Site 1-8C	Above Line 1 (16.51 ft)	L
	WCA 2A: Site S-11B	Above Line 1 (12.25 ft)	L
	WCA-3A: 3 Station Average (Sites 63, 64, and 65)	Above Line 1 (9.30 ft)	L
LEC	Service Area 1	Year-Round Irrigation Rule in effect	L
	Service Area 2	Year-Round Irrigation Rule in effect	L
	Service Area 3	Year-Round Irrigation Rule in effect	L

Note: The water supply risk classification based on the Palmer index, as well as the LOK seasonal and multi-seasonal net inflow outlooks use slightly different classification intervals than those used by the 2008-LORS.

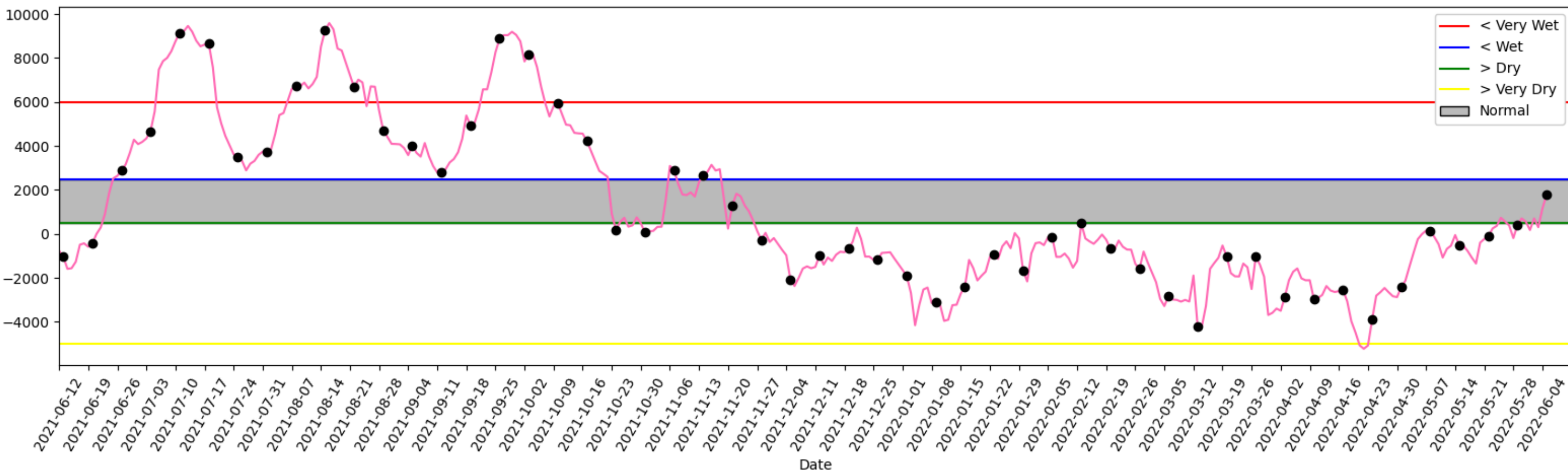
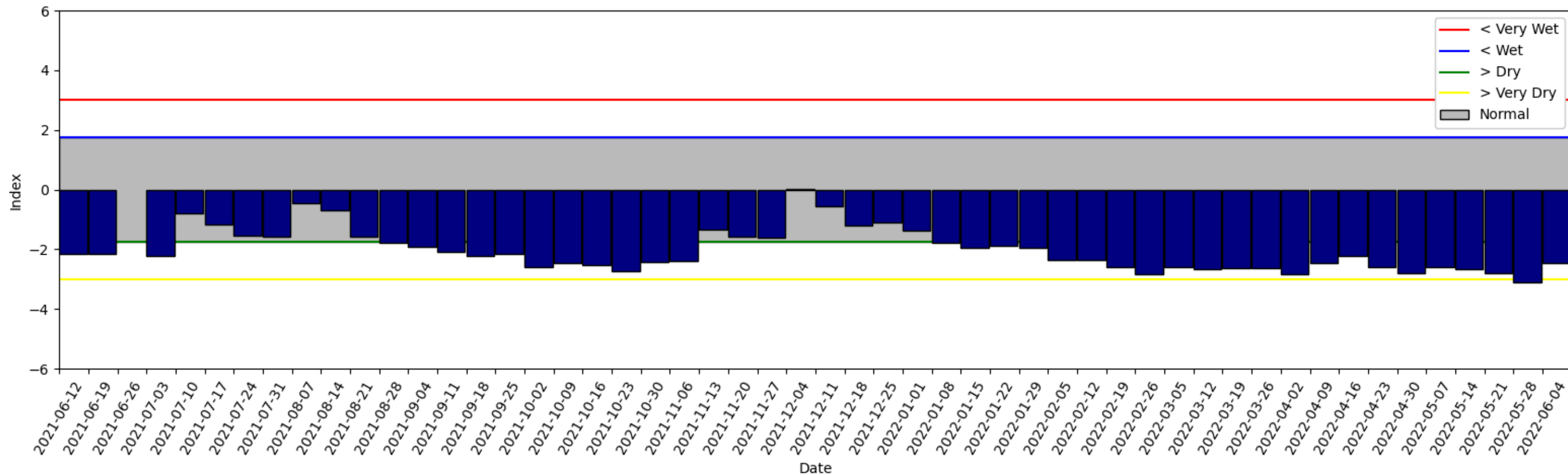
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# Lake Okeechobee SFWMM June 2022 Position Analysis



(See assumptions on the Position Analysis Results website)

Tributary Basin Condition Indicators as of June 05 2022



# 2008 LORS

## Part C: Establish Allowable Lake Okeechobee Releases to the Water Conservation Areas

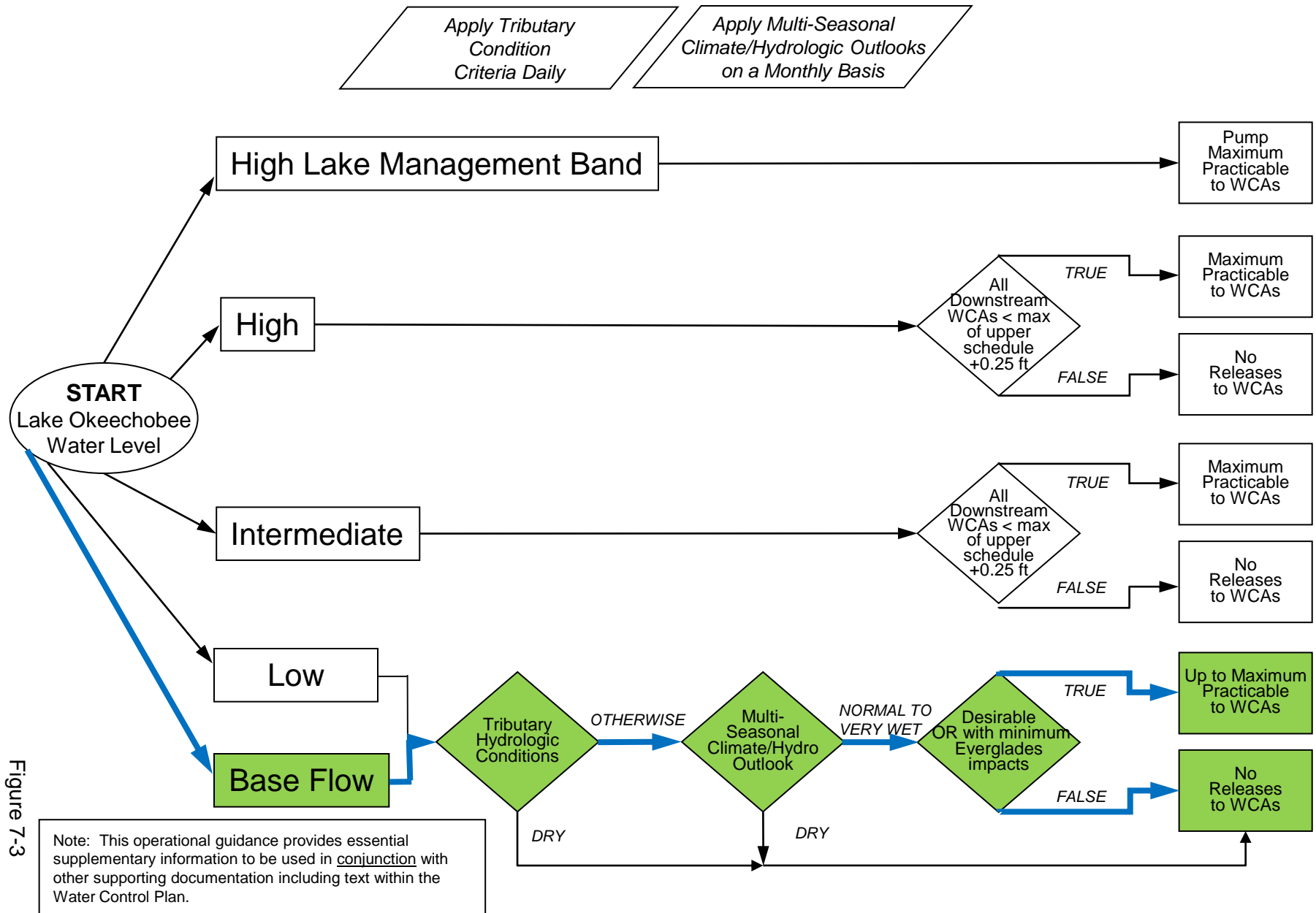
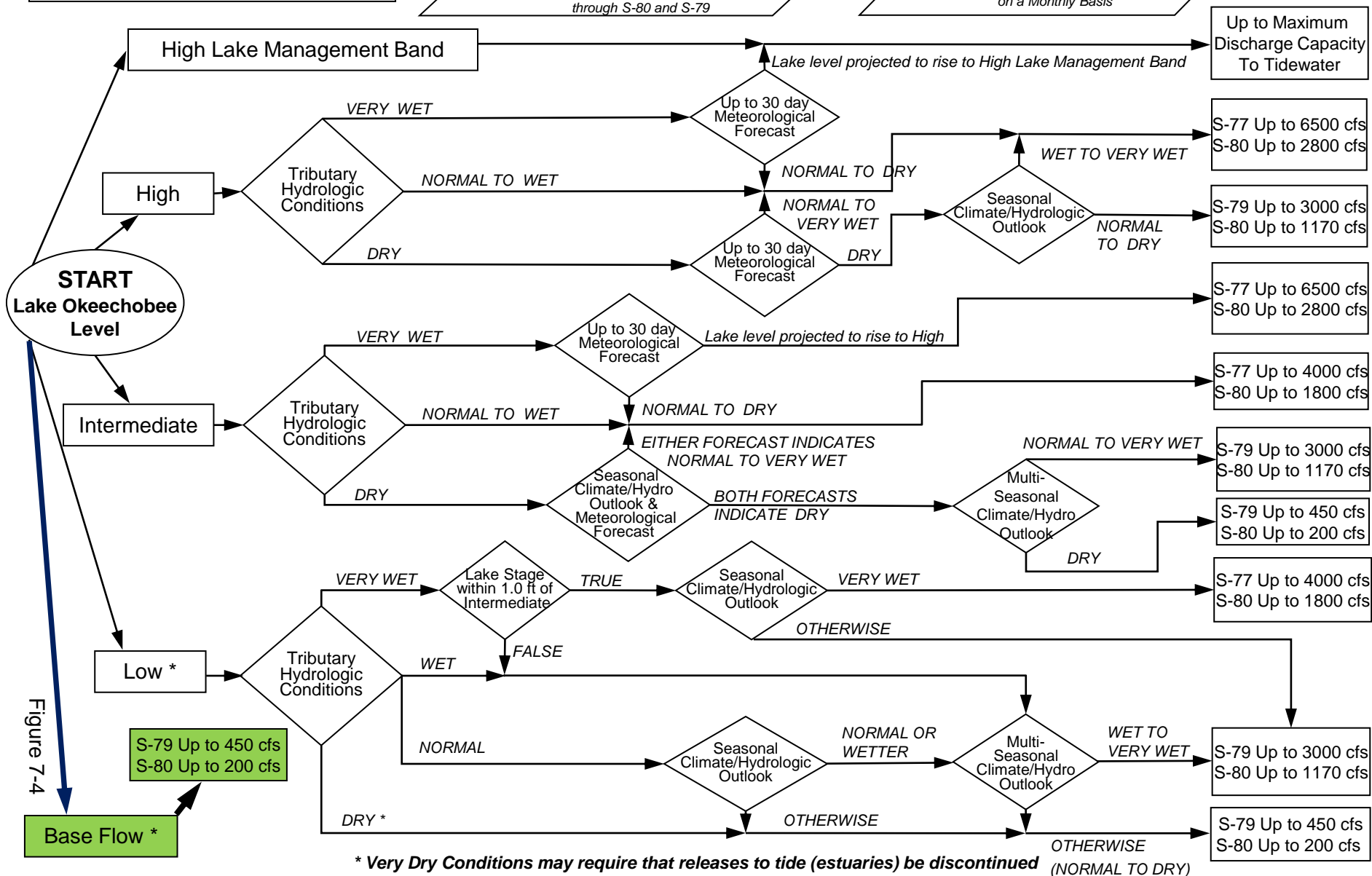


Figure 7-3

## Part D: Establish Allowable Lake Okeechobee Releases to Tide (Estuaries)

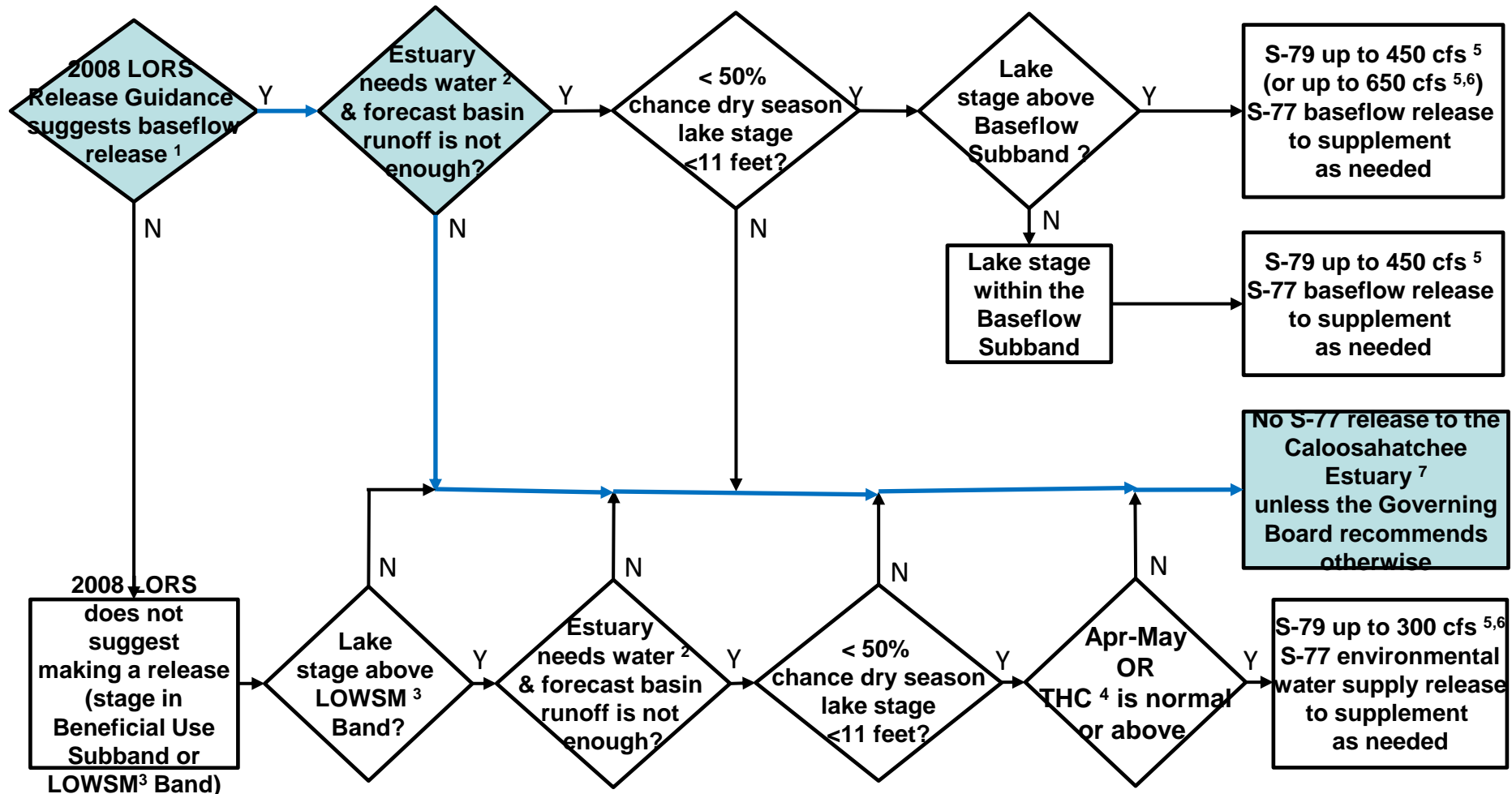
*When conducting Base Flow releases,  
flows can be distributed East and West  
up to 650 cfs as needed  
to minimize impacts or provide benefits  
through S-80 and S-79*

*Apply Meteorological Forecasts on a Weekly Basis; apply Seasonal and Multi-Seasonal Climate/Hydrologic Outlooks on a Monthly Basis*





# Flowchart to Guide Recommendations for Lake Okeechobee Releases to the Caloosahatchee Estuary for 2008 LORS Baseflow & for Environmental Water Supply (revised 9-Aug-2012)



<sup>1</sup>The 2008 LORS Release Guidance (Part D) can suggest baseflow releases in the Intermediate, Low, or Baseflow Subbands.

<sup>2</sup>Estuary "needs" water when the 30-day moving average salinity at I-75 bridge is projected to exceed 5 practical salinity units (psu) within 2 weeks.

<sup>3</sup>LOWSM = Lake Okeechobee Water Shortage Management.

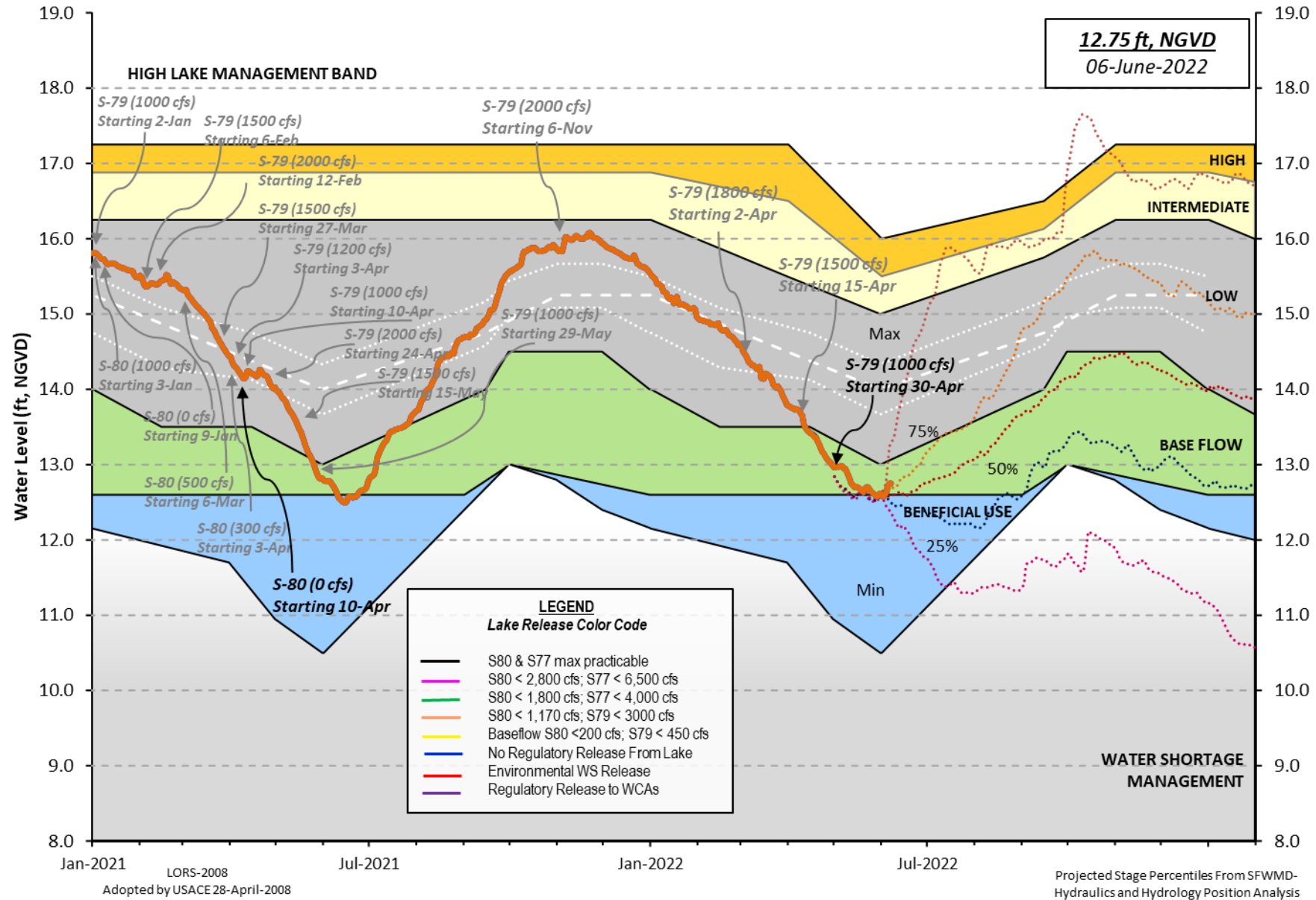
<sup>4</sup>Tributary Hydrologic Condition (THC) is based on classification of Lake Okeechobee Net Inflow and Palmer Index.

<sup>5</sup>Can release less than the "up to" limit if lower release is sufficient to reach or sustain desired estuary salinity; cfs = cubic feet per second.

<sup>6</sup>After reviewing conditions in Water Conservation Areas (WCAs), Stormwater Treatment Areas (STAs), ENP, St. Lucie Estuary and Lake Okeechobee.

<sup>7</sup>Should this condition be reached, the Governing Board will be briefed at their next regularly scheduled meeting as part of the State of the Water Resources agenda item.

# Lake Okeechobee Water Level History and Projected Stages



U. S. Army Corps of Engineers, Jacksonville District  
Lake Okeechobee and Vicinity Report  
\*\* Preliminary Data - Subject to Revision \*\*

Data Ending 2400 hours    06 JUN 2022

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Okeechobee Lake Regulation	Elevation	Last Year	2YRS Ago
	(ft-NGVD)	(ft-NGVD)	(ft-NGVD)
*Okeechobee Lake Elevation	12.75	12.75	11.92 (Official Elv)
Bottom of High Lake Mngmt= 16.02    Top of Water Short Mngmt= 10.60			
Currently in Operational Management Band			
Simulated Average LORS2008 [1965-2000]		11.97	
Difference from Average LORS2008		0.78	
06JUN (1965-2007) Period of Record Average		13.13	
Difference from POR Average		-0.38	

Today Lake Okeechobee elevation is determined from the 4 Int & 4 Edge stations

++Navigation Depth (Based on 2007 Channel Condition Survey) Route 1 ÷ 6.69'  
++Navigation Depth (Based on 2008 Channel Condition Survey) Route 2 ÷ 4.89'  
Bridge Clearance = 49.73'

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4 Interior and 4 Edge Okeechobee Lake Average (Avg-Daily values):

L001	L005	L006	LZ40	S4	S352	S308	S133
12.76	12.76	12.73	12.74	12.71	12.83	12.75	12.72

\*Combination Okeechobee Avg-Daily Lake Average = 12.75  
(\*See Note)

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Okeechobee Inflows (cfs):

S65E	330	S65EX1	0	Fisheating Cr	0
S154	0	S191	0	S135 Pumps	0
S84	71	S133 Pumps	0	S2 Pumps	0
S84X	27	S127 Pumps	0	S3 Pumps	0
S71	0	S129 Pumps	0	S4 Pumps	0
S72	66	S131 Pumps	0	C5	0
Total Inflows:	494				

Okeechobee Outflows (cfs):

S135 Culverts	0	S354	0	S77	2
S127 Culverts	0	S351	0	S308	-189
S129 Culverts	0	S352	0		
S131 Culverts	0	L8 Canal Pt	-NR-		
Total Outflows:	-187				

S4 Pumps:	12.94	-NR-	0	0	0	0	(cfs)
S169:	12.66	12.77	-NR-	-NR-	-NR-	-NR-	
S310:	12.63		-245				

S3 Pumps:	10.25	12.57	0	0	0	0		(cfs)
S354:	12.57	10.25	0	0.0	0.0			
S2 Pumps:	10.39	13.46	0	0	0	0	0	(cfs)
S351:	13.46	10.39	0	0.0	0.0	0.0		
S352:	12.80	9.79	0	0.0	0.0			
C10A:	-NR-	12.88		8.0	8.0	8.0	0.0	0.0
L8 Canal PT		12.94	-NR-					

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S351 and S352 Temporary Pumps/S354 Spillway

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S351:	10.39	13.46	0	-NR--NR--NR--NR--NR--NR-
S352:	9.79	12.80	0	-NR--NR--NR--NR-
S354:	10.25	12.57	0	-NR--NR--NR--NR-

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Caloosahatchee River (S77, S78, S79)

S47B:	13.21	11.18		0.0	0.0
S47D:	11.15	11.18	4	5.0	

S77:

Spillway and Sector Preferred Flow:

	12.91	11.06	0	0.0	0.0	0.0	0.0
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Flow Due to Lockages+: 2

S78:

Spillway and Sector Flow:

	11.06	2.92	1042	1.5	0.0	0.0	1.0
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Flow Due to Lockages+: 16

S79:

Spillway and Sector Flow:

	3.07	1.73	2607	0.0	0.0	2.0	2.0	2.0	2.0	0.0
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0.0

Flow Due to Lockages+: 8

Percent of flow from S77 0%

Chloride (ppm) 0

St. Lucie Canal (S308, S80)

S308:

Spillway and Sector Preferred Flow:

	12.73	13.77	-185	0.0	0.0	0.0	0.0
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Flow Due to Lockages+: -4

S153:	18.90	13.68	0	0.0	0.0
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S80:

Spillway and Sector Flow:

	13.92	0.83	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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Flow Due to Lockages+: 20

Percent of flow from S308 NA %

Steele Point Top Salinity (mg/ml) \*\*\*\*

Steele Point Bottom Salinity (mg/ml) \*\*\*\*

Speedy Point Top Salinity (mg/ml) \*\*\*\*

Speedy Point Bottom Salinity (mg/ml) \*\*\*\*

+ Flow Due to lockages is computed utilizing average daily headwater and tailwater along with total number of lockages for the day to calculate a volume which is then converted to an average discharge in cfs.  
 ++ Preferred flow is determined from either the spillway discharge or the below flow meter daily

----- Wind ---					
Daily Precipitation Totals Speed (mph)	1-Day (inches)	3-Day (inches)	7-Day (inches)	Direction (Degø)	
S133 Pump Station:	-NR-	0.00	0.00		
S193:	-NR-	0.00	0.00	-NR-	-NR-
Okeechobee Field Station:	-NR-	0.00	0.00		
S135 Pump Station:	-NR-	0.00	0.00		
S127 Pump Station:	-NR-	0.00	0.00		
S129 Pump Station:	-NR-	0.00	0.00		
S131 Pump Station:	-NR-	0.00	0.00		
S77:	0.00	0.13	2.82	276	1
S78:	0.00	0.00	0.00	304	0
S79:	0.00	0.05	5.08	331	2
S4 Pump Station:	-NR-	0.00	0.00		
Clewiston Field Station:	-NR-	0.00	0.00		
S3 Pump Station:	-NR-	0.00	0.00		
S2 Pump Station:	-NR-	0.00	0.00		
S308:	0.12	0.16	1.67	153	6
S80:	0.94	1.31	4.47	181	3
Okeechobee Average (Sites S78, S79 and S80 not included)	0.06	0.02	0.35		
Oke Nexrad Basin Avg	-NR-	0.00	0.00		

Okeechobee Lake Elevations	06 JUN 2022	12.75	Difference from
06JUN22			
06JUN22 -1 Day =	05 JUN 2022	12.75	0.00
06JUN22 -2 Days =	04 JUN 2022	12.72	-0.03
06JUN22 -3 Days =	03 JUN 2022	12.63	-0.12
06JUN22 -4 Days =	02 JUN 2022	12.60	-0.15
06JUN22 -5 Days =	01 JUN 2022	12.57	-0.18
06JUN22 -6 Days =	31 MAY 2022	12.60	-0.15
06JUN22 -7 Days =	30 MAY 2022	12.62	-0.13
06JUN22 -30 Days =	07 MAY 2022	12.95	0.20
06JUN22 -1 Year =	06 JUN 2021	12.75	0.00
06JUN22 -2 Year =	06 JUN 2020	11.92	-0.83

Long Term Mean 30day Avearge ET for Lake Alfred (Inches) = -NR-

Lake Okeechobee Net Inflow (LONIN)  
 Average Flow over the previous 14 days | Avg-Daily Flow

06JUN22	Today =	06 JUN 2022	1815	TUE		0
06JUN22	-1 Day =	05 JUN 2022	1722	MON		5899
06JUN22	-2 Days =	04 JUN 2022	1342	SUN		17343
06JUN22	-3 Days =	03 JUN 2022	584	SAT		5748
06JUN22	-4 Days =	02 JUN 2022	547	FRI		6150
06JUN22	-5 Days =	01 JUN 2022	-188	THU		-5705
06JUN22	-6 Days =	31 MAY 2022	239	WED		-3513
06JUN22	-7 Days =	30 MAY 2022	382	TUE		4146
06JUN22	-8 Days =	29 MAY 2022	3	MON		-NR-
06JUN22	-9 Days =	28 MAY 2022	-17	SUN		-NR-
06JUN22	-10 Days =	27 MAY 2022	363	SAT		1727
06JUN22	-11 Days =	26 MAY 2022	148	FRI		20
06JUN22	-12 Days =	25 MAY 2022	246	THU		-5339
06JUN22	-13 Days =	24 MAY 2022	130	WED		-4696

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S65E						
Average Flow over previous 14 days				Avg-Daily Flow		
06JUN22	Today=	06 JUN 2022	645	TUE		388
06JUN22	-1 Day =	05 JUN 2022	690	MON		400
06JUN22	-2 Days =	04 JUN 2022	712	SUN		448
06JUN22	-3 Days =	03 JUN 2022	766	SAT		378
06JUN22	-4 Days =	02 JUN 2022	828	FRI		358
06JUN22	-5 Days =	01 JUN 2022	897	THU		480
06JUN22	-6 Days =	31 MAY 2022	963	WED		648
06JUN22	-7 Days =	30 MAY 2022	1021	TUE		715
06JUN22	-8 Days =	29 MAY 2022	1076	MON		768
06JUN22	-9 Days =	28 MAY 2022	1132	SUN		749
06JUN22	-10 Days =	27 MAY 2022	1184	SAT		869
06JUN22	-11 Days =	26 MAY 2022	1232	FRI		914
06JUN22	-12 Days =	25 MAY 2022	1281	THU		958
06JUN22	-13 Days =	24 MAY 2022	1331	WED		956

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S65EX1						
Average Flow over previous 14 days				Avg-Daily Flow		
06JUN22	Today=	06 JUN 2022	0	TUE		0
06JUN22	-1 Day =	05 JUN 2022	0	MON		0
06JUN22	-2 Days =	04 JUN 2022	0	SUN		0
06JUN22	-3 Days =	03 JUN 2022	0	SAT		0
06JUN22	-4 Days =	02 JUN 2022	0	FRI		0
06JUN22	-5 Days =	01 JUN 2022	0	THU		0
06JUN22	-6 Days =	31 MAY 2022	0	WED		0
06JUN22	-7 Days =	30 MAY 2022	0	TUE		0
06JUN22	-8 Days =	29 MAY 2022	0	MON		0
06JUN22	-9 Days =	28 MAY 2022	0	SUN		0
06JUN22	-10 Days =	27 MAY 2022	0	SAT		0
06JUN22	-11 Days =	26 MAY 2022	0	FRI		0
06JUN22	-12 Days =	25 MAY 2022	0	THU		0
06JUN22	-13 Days =	24 MAY 2022	0	WED		0

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— Lake Okeechobee Outlets Last 14 Days

			S-77	Below S-77	S-78	S-79
			Discharge	Discharge	Discharge	Discharge
			(ALL DAY)	(ALL-DAY)	(ALL DAY)	(ALL DAY)
DATE			(AC-FT)	(AC-FT)	(AC-FT)	(AC-FT)
06 JUN 2022			4	423	2071	5151
05 JUN 2022			0	286	2989	6679
04 JUN 2022			0	-55	3659	8661
03 JUN 2022			5	67	2543	5220
02 JUN 2022			6	44	958	1689
01 JUN 2022			3	-220	1096	1865
31 MAY 2022			222	56	1157	1894
30 MAY 2022			547	554	1676	2049
29 MAY 2022			-NR-	1949	1718	2315
28 MAY 2022			-NR-	3065	1691	2415
27 MAY 2022			2966	3155	1719	2090
26 MAY 2022			2038	2093	989	1682
25 MAY 2022			1856	1885	1001	1658
24 MAY 2022			1662	1689	1022	1743

			S-310	S-351	S-352	S-354	L8 Canal Pt
			Discharge	Discharge	Discharge	Discharge	Discharge
			(ALL DAY)	(ALL DAY)	(ALL DAY)	(ALL DAY)	(ALL DAY)
DATE			(AC-FT)	(AC-FT)	(AC-FT)	(AC-FT)	(AC-FT)
06 JUN 2022			-486	0	0	0	-NR-
05 JUN 2022			-536	0	0	0	-NR-
04 JUN 2022			-318	0	0	0	-NR-
03 JUN 2022			-300	0	0	0	-NR-
02 JUN 2022			-275	0	0	0	-NR-
01 JUN 2022			-182	0	0	0	-NR-
31 MAY 2022			-51	0	0	0	-NR-
30 MAY 2022			-39	0	0	0	-NR-
29 MAY 2022			57	654	0	0	-NR-
28 MAY 2022			69	1122	0	522	-NR-
27 MAY 2022			140	353	0	21	-NR-
26 MAY 2022			180	1495	0	0	-NR-
25 MAY 2022			427	1922	0	250	-NR-
24 MAY 2022			271	31	0	27	-NR-

			S-308	Below S-308	S-80
			Discharge	Discharge	Discharge
			(ALL DAY)	(ALL-DAY)	(ALL-DAY)
DATE			(AC-FT)	(AC-FT)	(AC-FT)
06 JUN 2022			-333	-NR-	41
05 JUN 2022			-167	-NR-	41
04 JUN 2022			-0	-NR-	570
03 JUN 2022			1392	-NR-	38
02 JUN 2022			2620	-NR-	50
01 JUN 2022			2795	-NR-	33
31 MAY 2022			2857	-NR-	27
30 MAY 2022			2462	-NR-	31
29 MAY 2022			1736	-NR-	31
28 MAY 2022			2350	-NR-	41
27 MAY 2022			2015	-NR-	38
26 MAY 2022			3284	-NR-	30
25 MAY 2022			3274	-NR-	43
24 MAY 2022			2629	-NR-	50



\*\*\* NOTE: Discharge (ALL DAY) is computed using Spillway, Sector Gate  
and  
Lockages Discharges from 0015 hrs to 2400 hrs.

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(I) - Flows preceded by "I" signify an instantaneous  
flow computed from the single value reported for the day

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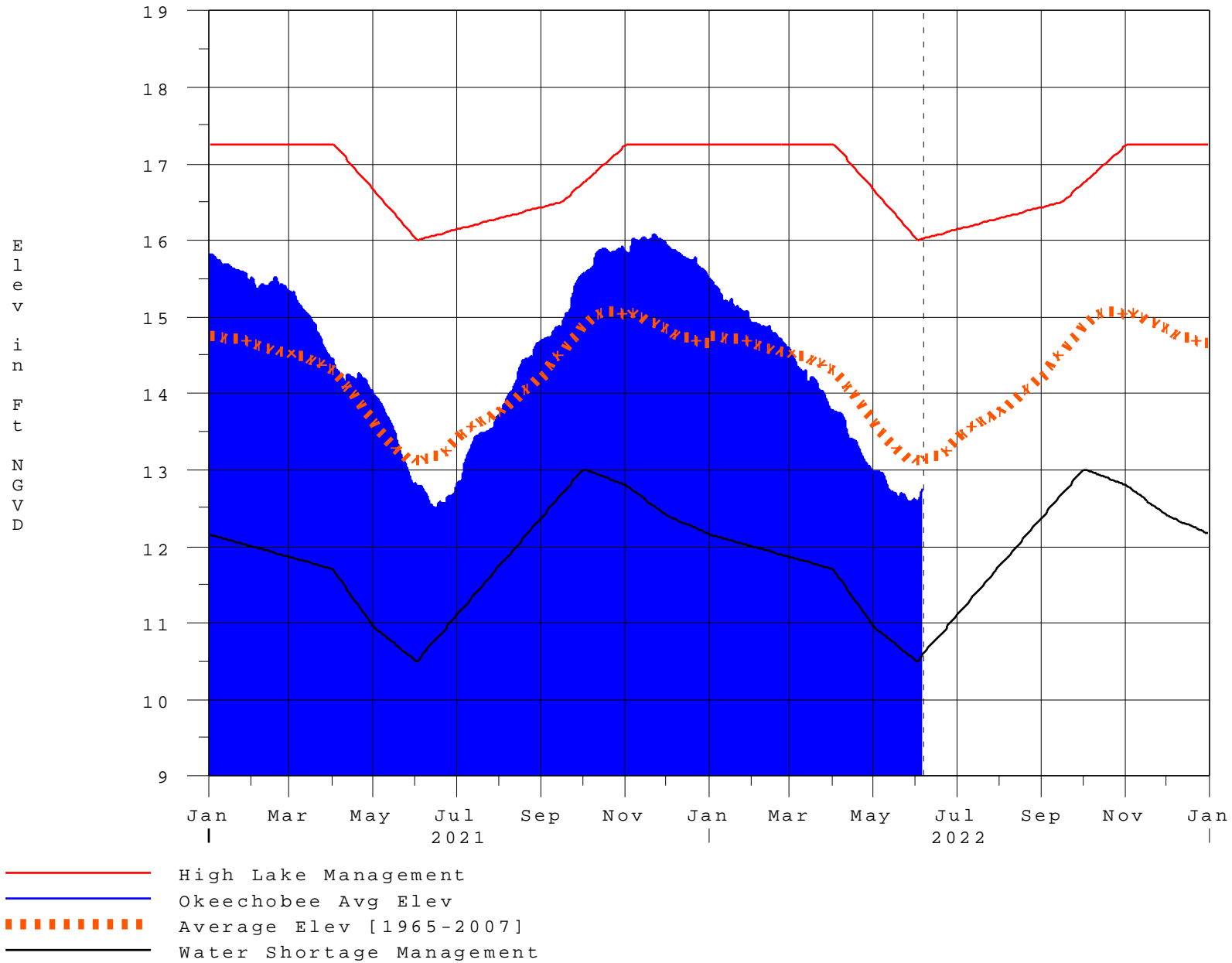
\* On 11 May 1999, Lake Okeechobee Elevation was switched from  
Instantaneous 2400 value to an average-daily lake average.  
On 14 Mar 2001, due to the isolation of various gages within the  
standard  
10 stations, the average of the interior 4 station gages was used  
as the Lake Okeechobee Elevation.  
On 05 November 2010, Lake Okeechobee Elevation was switched to a 9 gage  
mix of interior and edge gages to obtain a more reliable representation  
of the lake level.  
On 09 May 2011, Lake Okeechobee Elevation was switched to a 8 gage  
mix of interior and edge gages to obtain a more reliable representation  
of the lake level due to isolation of S135 from low lake levels.  
Today Lake Okechobee elevation is determined from the 4 Int & 4 Edge  
stations  
++ For more information see the Jacksonville District Navigation website  
at <http://www.saj.usace.army.mil/>  
\$ For information regarding Lake Okeechobee Service Area water  
restrictions  
please refer to [www.sfwmd.gov](http://www.sfwmd.gov)

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Report Generated 07JUN2022 @ 23:39 \*\* Preliminary Data - Subject to Revision  
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# Lake Okeechobee

06JUN22 11:17:26



# Classification Tables

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Supplemental Tables used in conjunction with the LORS2008 Release

Guidance Flow Charts

- [Class Limits for Tributary Hydrologic Conditions](#)

Table K-2 in the Lake Okeechobee Water Control Plan

- [6-15 Day Precipitation Outlook Categories](#)

Table ?? in the Lake Okeechobee Water Control Plan

- [Classification of Lake Okeechobee Net Inflow for Seasonal Outlook](#)

Table K-3 in the Lake Okeechobee Water Control Plan

- [Classification of Lake Okeechobee Net Inflow for Multi-Seasonal Outlook](#)

Table K-4 in the Lake Okeechobee Water Control Plan

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[\*\*Back to Lake Okeechobee Operations Main Page\*\*](#)

[\*\*Back to U.S. Army Corps of Engineers Lake Okeechobee Operations Homepage\*\*](#)

Tributary Hydrologic Classification*	Palmer Index Class Limits	2-wk Mean L.O. Net Inflow Class Limits
Very Wet	3.0 or greater	Greater $\geq$ 6000 cfs
Wet	1.5 to 2.99	2500 - 5999 cfs
Near Normal	-1.49 to 1.49	500 - 2499 cfs
Dry	-2.99 to -1.5	-5000 – 500 cfs
Very Dry	-3.0 or less	Less than -5000 cfs

\* use the wettest of the two indicators

## Classification of Lake Okeechobee Net Inflow Seasonal Outlook\*

<b>Lake Net Inflow Prediction  [million acre-feet]</b>	<b>Equivalent Depth**  [feet]</b>	<b>Lake Okeechobee  Net Inflow  Seasonal Outlook</b>
> 0.93	> 2.0	Very Wet
0.71 to 0.93	1.51 to 2.0	Wet
0.35 to 0.70	0.75 to 1.5	Normal
< 0.35	< 0.75	Dry

**\*\*Volume-depth conversion based on average lake surface area of 467,000 acres**

## Classification of Lake Okeechobee Net Inflow Multi-Seasonal Outlook\*

<b>Lake Net Inflow Prediction</b>  <b>[million acre-feet]</b>	<b>Equivalent Depth**</b>  <b>[feet]</b>	<b>Lake Okeechobee  Net Inflow  Multi-Seasonal Outlook</b>
> 2.0	> 4.3	Very Wet
1.18 to 2.0	2.51 to 4.3	Wet
0.5 to 1.17	1.1 to 2.5	Normal
< 0.5	< 1.1	Dry

**\*\*Volume-depth conversion based on average lake surface area of 467,000 acres**

## **6-15 Day Precipitation Outlook Categories\***

<b>6-15 Day Precipitation Outlook Categories</b>	<b>WSE Decision Tree Categories</b>
Above Normal	Wet to Very Wet
Normal	Normal
Below Normal	Dry

**\* Corresponds to Table 7-6 in the Lake Okeechobee Water Control Plan**