

Application of the Lake Okeechobee Regulation Schedule (LORS2008) on 7/22/2024 (ENSO Condition: Neutral)

Lake Okeechobee Net Inflow Outlook:

The Lake Okeechobee Net Inflow Outlook has been computed using methods described in the LORS2008 Water Control Plan: Croley's method, the SFWMD empirical method, a sub-sampling of Neutral years and a sub-sampling of warm years of the Atlantic Multi-decadal Oscillation (AMO) in combination with Neutral ENSO years. 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*		SFWMD Empirical Method		Sub-sampling of El Niño ENSO Years**		Sub-sampling of AMO Warm + El Niño ENSO Years***	
	Value (ft)	<u>Condition</u>	Value (ft)	<u>Condition</u>	Value (ft)	<u>Condition</u>	Value (ft)	<u>Condition</u>
Current (Jul-Dec)	N/A	N/A	1.91	Wet	2.03	Very Wet	3.49	Very Wet
Multi Seasonal (Jul-Apr)	N/A	N/A	2.13	Normal	1.93	Normal	3.68	Wet

*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 IRI ENSO forecast published.

***Sub-sampling based on combination of ENSO and AMO conditions. For this predominant ENSO categorization is used instead of weights.

Tributary Hydrologic Conditions:

1503 cfs 14-day running average for Lake Okeechobee Net Inflow through 7/22/2024. According to the classification in Tributary Hydrologic Conditions table, this condition is Near Normal.

-2.70 for Palmer Drought Index on 7/20/2024. 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 7/22/2024:

Lake Okeechobee Stage: **13.56 feet (NGVD29), 12.31 (NAVD88) ***

Lake Okeechobee Management Zone/Band		Bottom Elevation feet, NGVD (feet NAVD)	Current Lake Stage
High Lake Management Band		16.24 (14.99)	
Operational Band	High sub-band	15.80 (14.55)	
	Intermediate sub-band	15.36 (14.11)	
	Low sub-band	13.48 (12.23)	← 13.56 ft (12.31)
Base Flow sub-band		12.60 (11.35)	
Beneficial Use sub-band		11.53 (10.28)	
Water Shortage Management Band			

*Lake Okeechobee Stage NAVD88 offset of -1.25 is based on Final Regulation Schedule Conversion (5/19/2020).

Part C of LORS2008: Discharge to WCAs

Up to Maximum Practicable to the WCAs if desirable or with minimum Everglades impact; otherwise, 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.

LORS2008 Implementation on 7/22/2024 (ENSO Condition- Neutral):

Status for week ending 7/22/2024*:

Water Supply Risk Evaluation

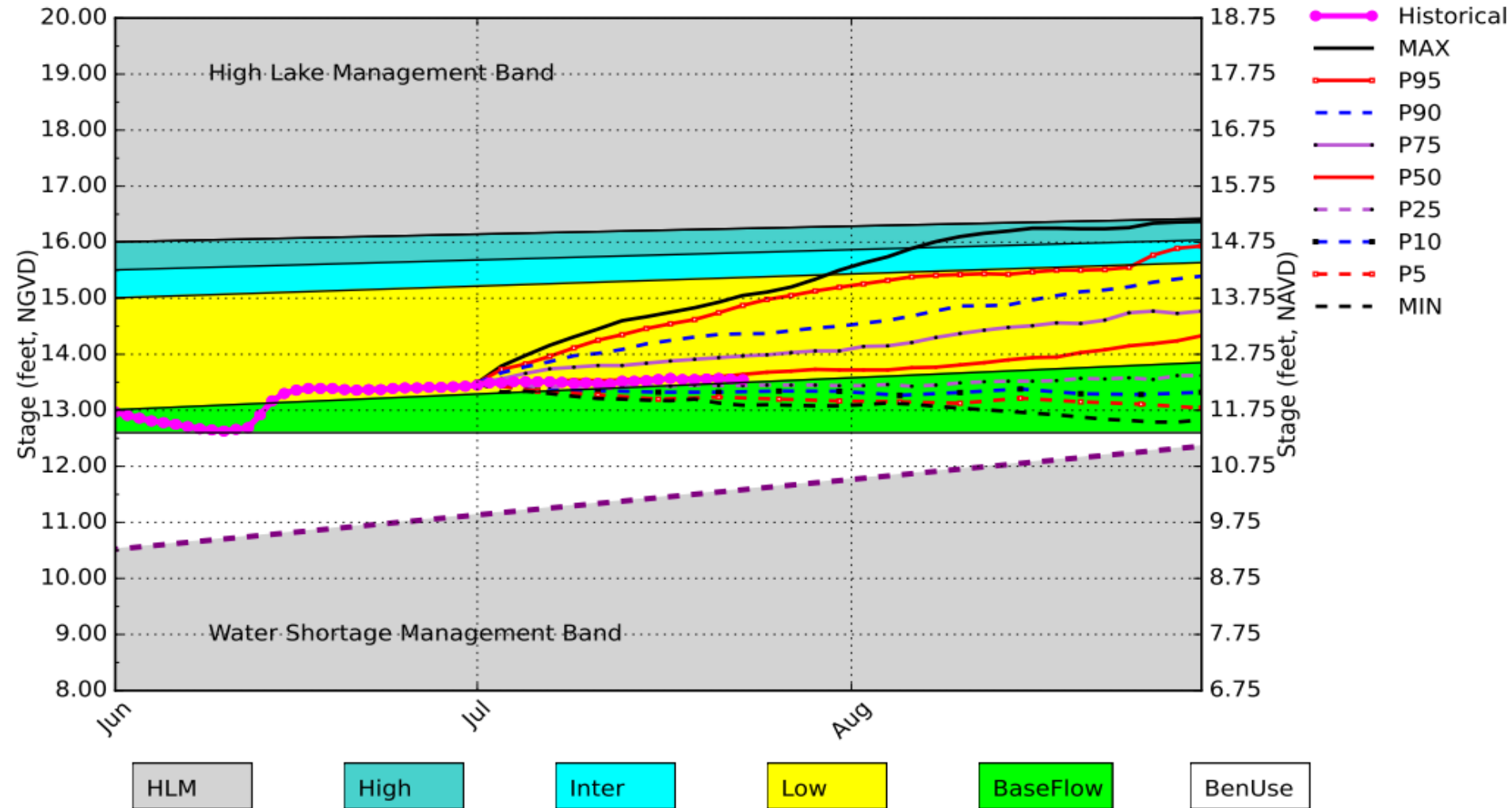
Area	Indicator	Value	Color Coded Scoring Scheme
LOK	Projected LOK Stage for the next two months	Low Sub-band	L
	Palmer Drought Index for LOK Tributary Conditions	-2.70 (Extremely Dry)	H
	CPC Precipitation Outlook	1 month: Above Normal	L
		3 months: Above Normal	L
	LOK Seasonal Net Inflow Outlook	2.03 ft	L
	ENSO Forecast	Normal to Extremely Wet	
	LOK Multi-Seasonal Net Inflow Outlook	1.93 ft	M
ENSO Forecast	Normal		
WCAs	WCA 1: 3 Station Average (Sites 1-7, 1-9, and 1-8T)	Above Line 1 (16.42 ft) (14.92 ft NAVD88)	L
	WCA 2A: Site 2-17	Above Line 1 (12.21 ft) (10.71 ft NAVD88)	L
	WCA-3A: 3 Station Average (Sites 63, 64, and 65)	Above Line 1 (10.78 ft) (9.28 ft NAVD88)	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.

* S-80 flow data for 7/16-7/17, 7/19-7/20 is not available from USACE Daily Reports and was assumed to be 0. S-308 flow data for 7/18-7/21 is not available from USACE Daily Reports and was assumed to be 0. WCA1, WCA2A, and WCA3A NAVD88 offset of -1.5 is based on Final Regulation Schedule Conversion (5/19/2020).

Lake Okeechobee SFWMM July 2024 Position Analysis

Percentiles PA

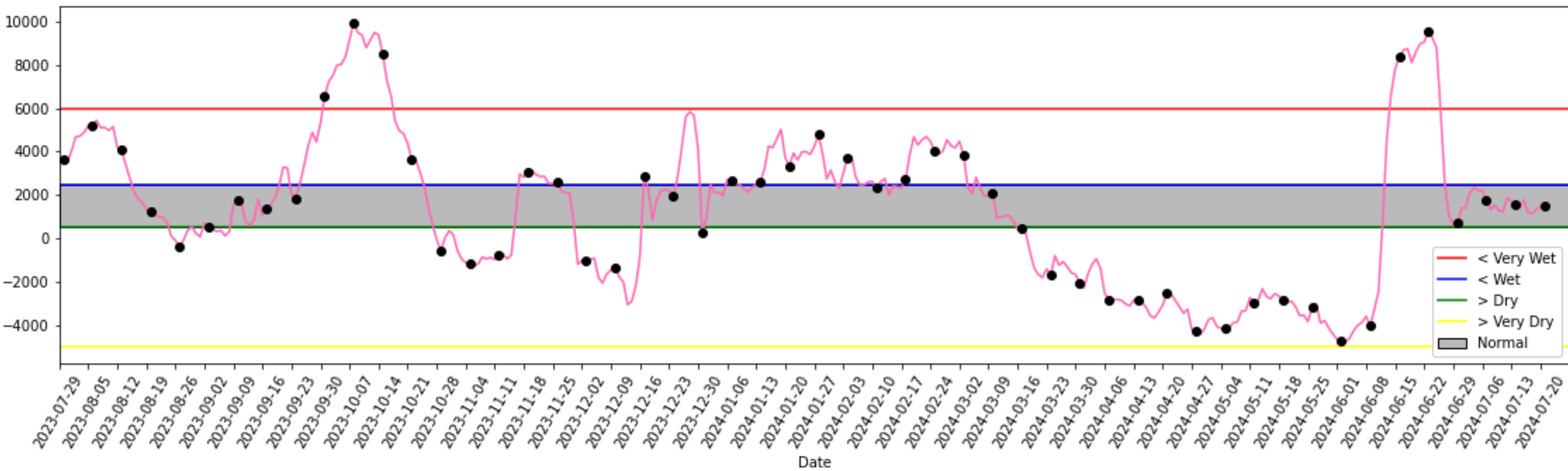
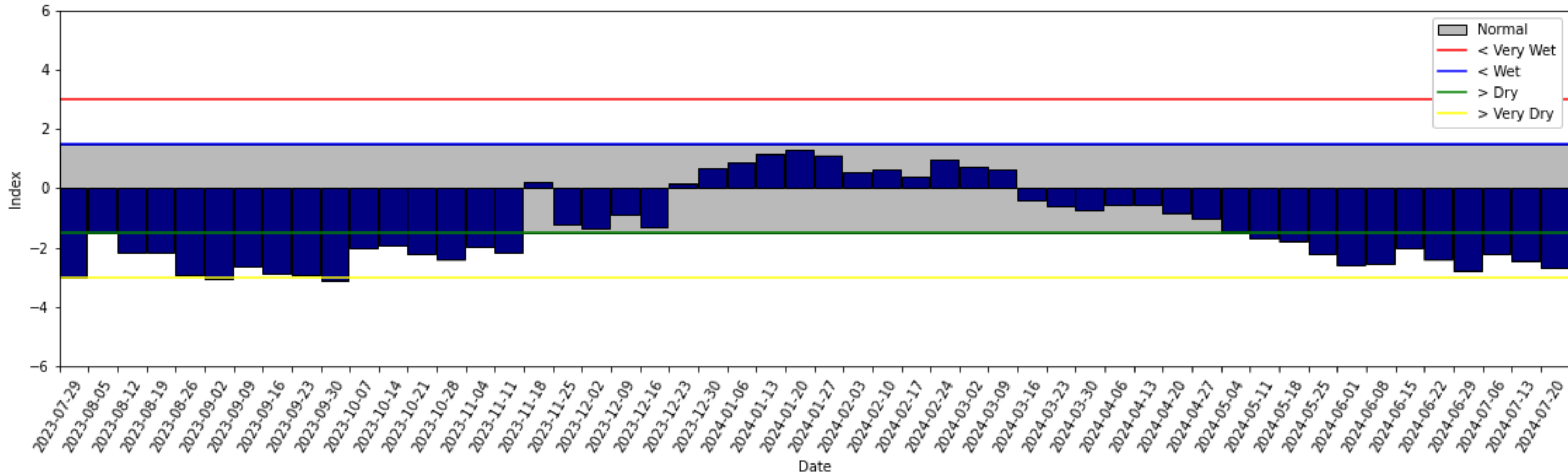


(See assumptions on the Position Analysis Results website)

07/23/24 08:08:06

* Lake Okeechobee stage NAVD88 offset of -1.25 is based on Final Regulation Schedule Conversion (5/19/2020).

Tributary Basin Condition Indicators as of July 21 2024



2008 LORS

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

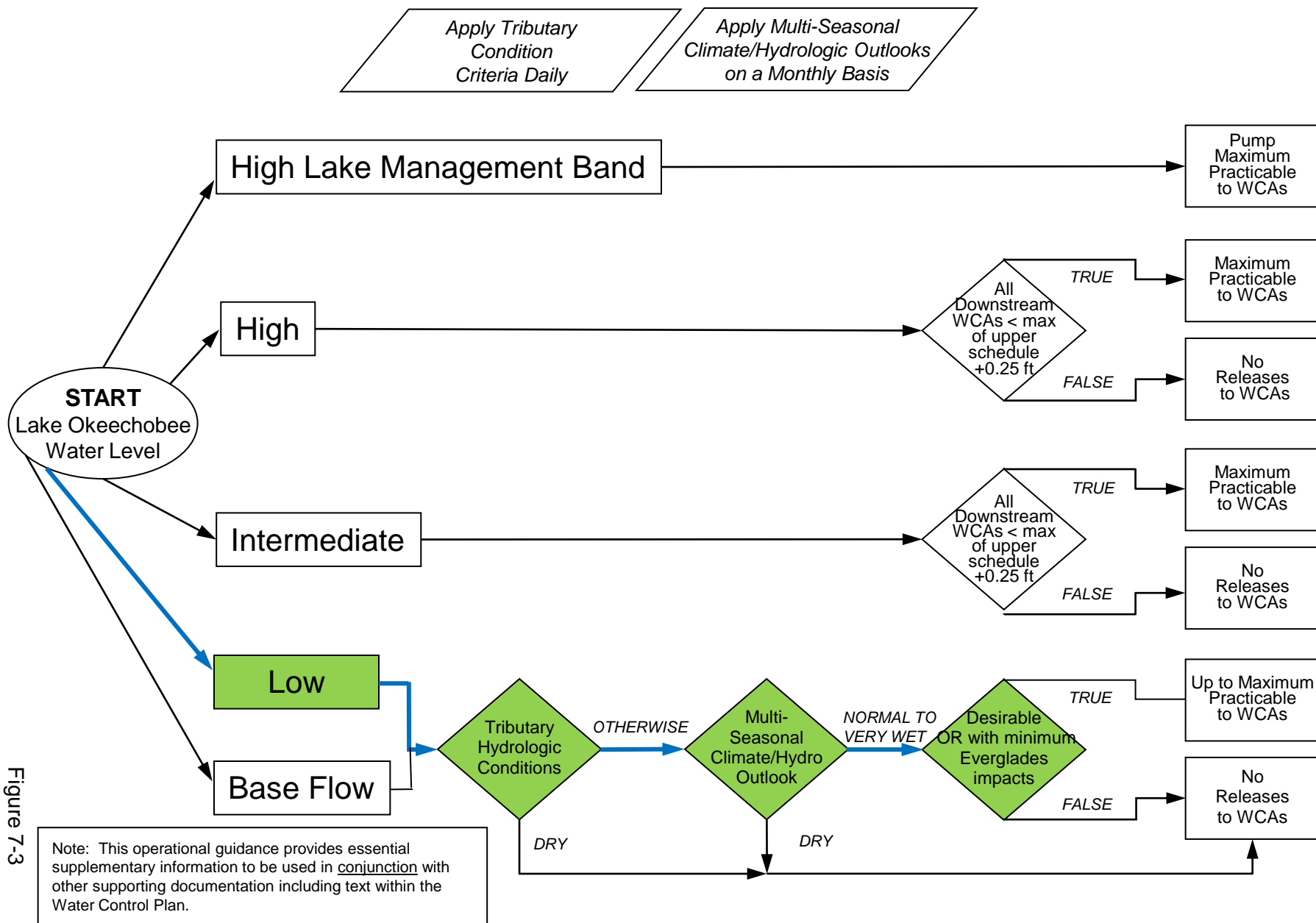


Figure 7-3

2008 LORS

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

Note: This operational guidance provides essential supplementary information to be used in conjunction with other supporting documentation including text within the Water Control Plan.

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

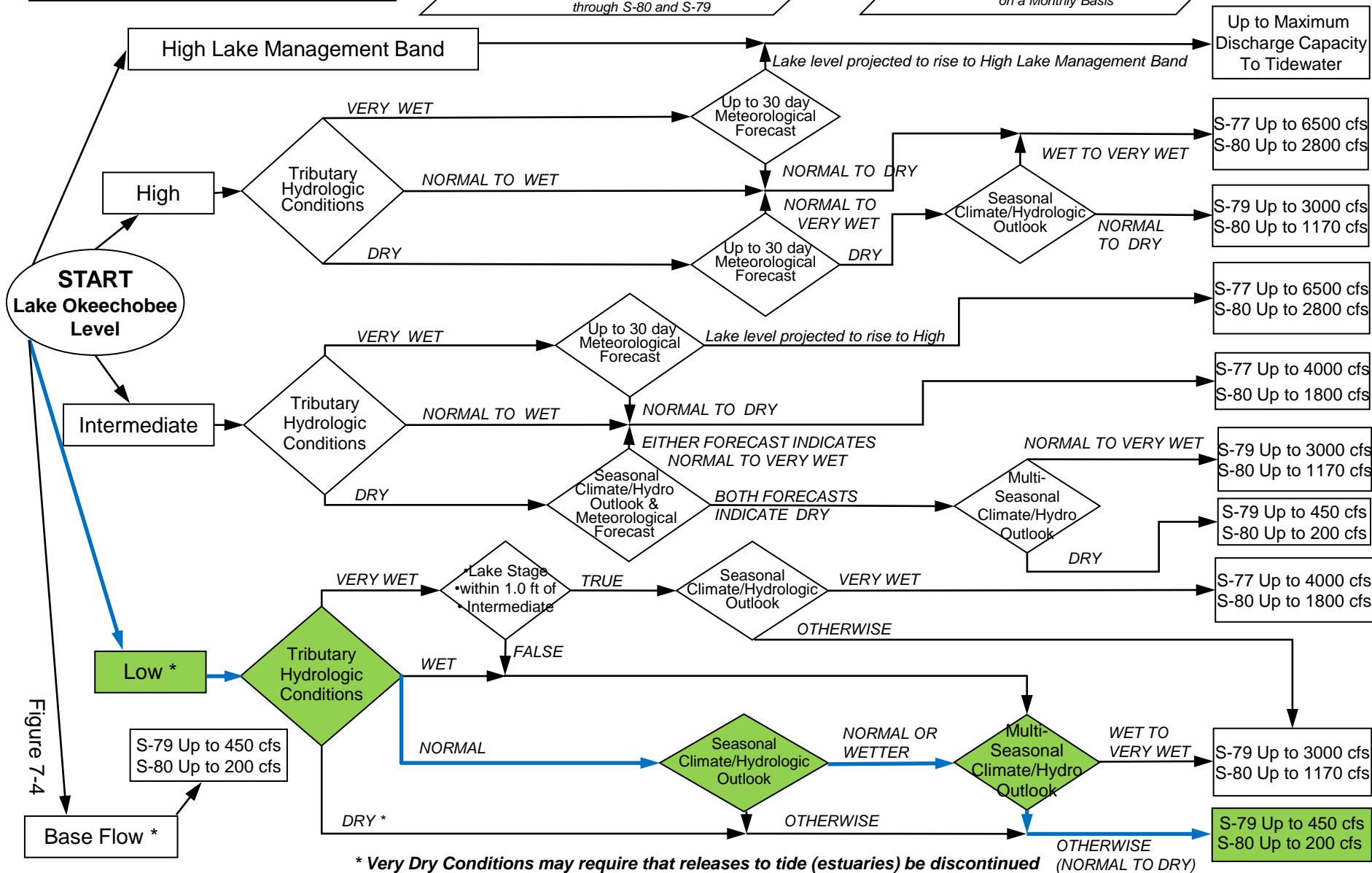
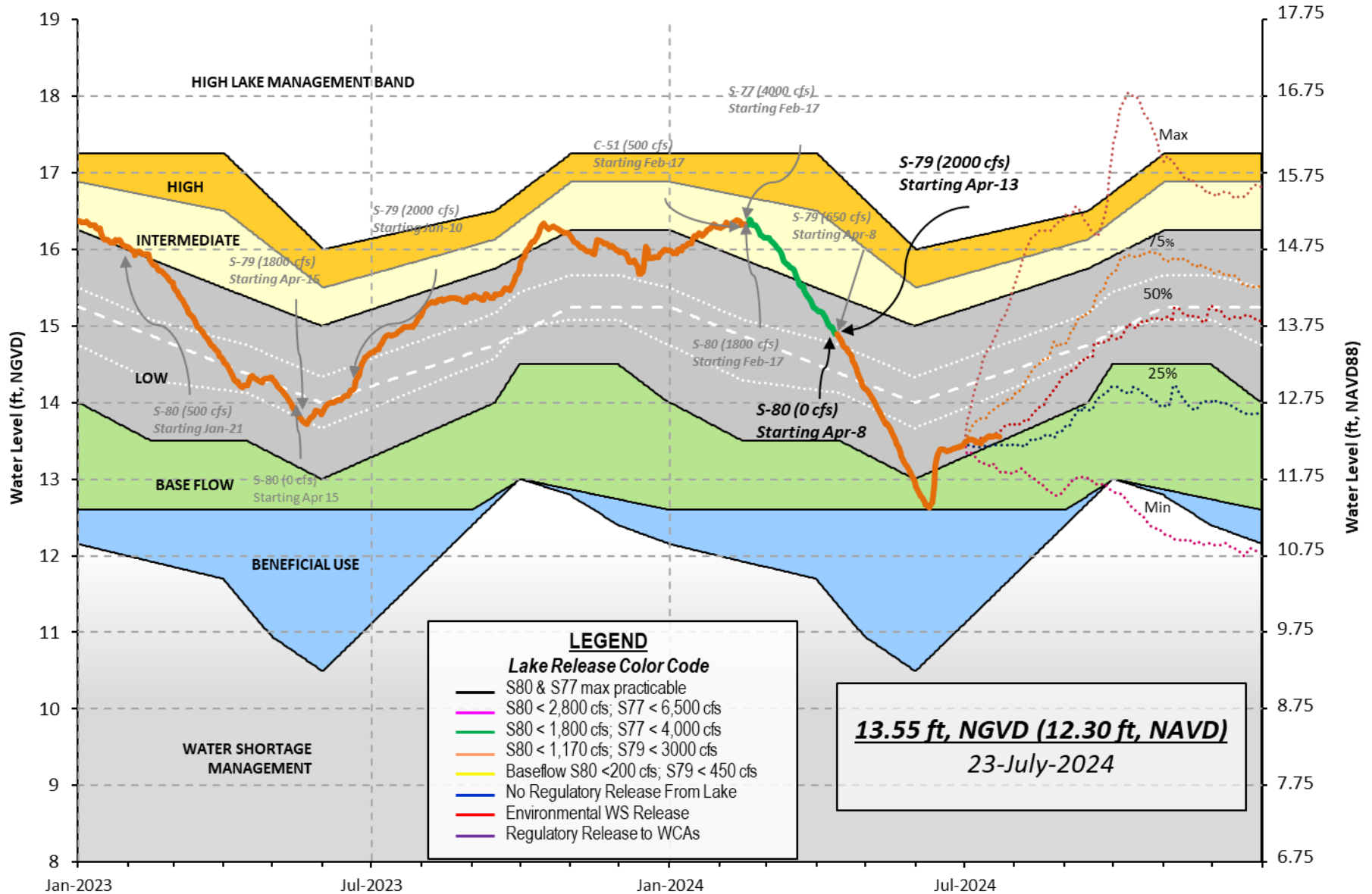


Figure 7-4

Lake Okeechobee Water Level History and Projected Stages



Stage is plotted in NGVD. Please use the left axis for water level history and projected stages. Lake Okeechobee stage NAVD88 offset of -1.25 is based on Final Regulation Schedule Conversion (5/19/2020).

is equal to -NR-
 Lake Okeechobee (Change in Storage) Flow is -2118 cfs or -4200 AC-FT

	Headwater Elevation (ft-msl)	Tailwater Elevation (ft-msl)	Disch (cfs)	----- Gate Positions -----							
				#1 (ft)	#2 (ft)	#3 (ft)	#4 (ft)	#5 (ft)	#6 (ft)	#7 (ft)	#8 (ft)
(I) see note at bottom											
North East Shore											
S133 Pumps:	13.43	13.45	0	0	0	0	0	-NR-			(cfs)
S193:											
S191:	18.55	13.44	61	0.1	0.0	0.1					
S135 Pumps:	13.29	13.44	0	0	0	0	0				(cfs)
S135 Culverts:			0	0.0	0.0						
North West Shore											
S65E:	21.01	13.31	450	0.2	-0.0	0.4	0.2	0.4	0.0		
S65EX1:	21.01	13.31	0								
S127 Pumps:	13.17	13.48	0	0	0	0	0	0			(cfs)
S127 Culvert:			0	0.0							
S129 Pumps:	12.80	13.59	0	0	0	0					(cfs)
S129 Culvert:			0	0.0							
S131 Pumps:	12.93	13.23	47	50	0						(cfs)
S131 Culvert:			0								
Fisheating Creek											
nr Palmdale		32.13	353								
nr Lakeport											
S282	13.54	13.57		0.0	0.0	0.1					
South Shore											
S4 Pumps:	11.85	15.33	0	0	0	0					(cfs)
S169:	13.49	5.85	0	0.0	0.0	0.0					
S310:			-NR-								
S3 Pumps:	9.55	13.54	0	0	0	0					(cfs)
S354:	13.54	9.55	0	0.0	0.0						
S2 Pumps:	10.06	13.53	0	0	0	0	0				(cfs)
S351:	13.53	10.06	0	0.0	0.0	0.0					
S352:	13.74	9.35	0	0.0	0.0						
S271:	13.73	13.71		9.5	9.7	-NR-		8.5			
L8 Canal PT		13.44	81								

S351 and S352 Temporary Pumps/S354 Spillway

S351:	10.06	13.53	0	-NR-	-NR-	-NR-	-NR-	-NR-	-NR-		
S352:	9.35	13.74	0	-NR-	-NR-	-NR-	-NR-				
S354:	9.55	13.54	0	-NR-	-NR-	-NR-	-NR-				

Caloosahatchee River (S77, S78, S79)

S47B:	12.32	12.00		0.0	0.0						
S47D:	12.06	11.37	0	0.0							
S77:											
Spillway and Sector Preferred Flow:											
	13.49	11.23	336	0.5	0.5	0.5	0.5				
Flow Due to Lockages+:			1								

S78:

Spillway and Sector Flow:
 11.26 3.11 746 0.0 2.5 0.0 0.0
 Flow Due to Lockages+: 8

S79:
 Spillway and Sector Flow:
 3.25 1.01 2324 0.0 0.0 0.0 3.0 3.0 3.0 0.0 0.0
 Flow Due to Lockages+: 6
 Percent of flow from S77 14%
 Chloride (ppm) 0

St. Lucie Canal (S308, S80)

S308:
 Spillway and Sector Preferred Flow:
 -NR- -NR- -NR- 0.0 0.0 0.0 0.0
 Flow Due to Lockages+: -NR-

S153: 18.86 13.81 125 0.5 0.0

S80:
 Spillway and Sector Flow:
 14.04 1.40 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
 Flow Due to Lockages+: 14
 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

Daily Precipitation Totals	1-Day (inches)	3-Day (inches)	7-Day (inches)	----- Wind -----	
				Direction (Deg)	Speed (mph)
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	0.00	0.15	335	-NR-
S78:	0.00	0.00	0.00	288	1
S79:	0.00	0.00	1.75	22	0
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:	-NR-	0.00	0.00	-NR-	-NR-
S80:	0.00	0.04	0.16	-NR-	-NR-
Okeechobee Average (Sites S78, S79 and S80 not included)	0.00	0.00	0.01		

Oke Nexrad Basin Avg	-NR-	0.00	0.00		

Okeechobee Lake Elevations 21 JUL 2024 13.56 Difference from 21JUL24
 21JUL24 -1 Day = 20 JUL 2024 13.57 0.01

21JUL24	-2 Days =	19 JUL 2024	13.56	0.00
21JUL24	-3 Days =	18 JUL 2024	13.55	-0.01
21JUL24	-4 Days =	17 JUL 2024	13.55	-0.01
21JUL24	-5 Days =	16 JUL 2024	13.57	0.01
21JUL24	-6 Days =	15 JUL 2024	13.55	-0.01
21JUL24	-7 Days =	14 JUL 2024	13.53	-0.03
21JUL24	-30 Days =	21 JUN 2024	13.37	-0.19
21JUL24	-1 Year =	21 JUL 2023	14.98	1.42
21JUL24	-2 Year =	21 JUL 2022	13.06	-0.50

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
21JUL24	Today =	21 JUL 2024	1757 MON	-NR-
21JUL24	-1 Day =	20 JUL 2024	1407 SUN	-NR-
21JUL24	-2 Days =	19 JUL 2024	1290 SAT	-NR-
21JUL24	-3 Days =	18 JUL 2024	1209 FRI	-NR-
21JUL24	-4 Days =	17 JUL 2024	1220 THU	-3175
21JUL24	-5 Days =	16 JUL 2024	1811 WED	5381
21JUL24	-6 Days =	15 JUL 2024	1453 TUE	5417
21JUL24	-7 Days =	14 JUL 2024	1662 MON	2572
21JUL24	-8 Days =	13 JUL 2024	1783 SUN	22
21JUL24	-9 Days =	12 JUL 2024	1961 SAT	10920
21JUL24	-10 Days =	11 JUL 2024	1329 FRI	-968
21JUL24	-11 Days =	10 JUL 2024	1398 THU	-1235
21JUL24	-12 Days =	09 JUL 2024	1640 WED	2610
21JUL24	-13 Days =	08 JUL 2024	1465 TUE	-3974

S65E

		Average Flow over previous 14 days		Avg-Daily Flow
21JUL24	Today=	21 JUL 2024	505 MON	526
21JUL24	-1 Day =	20 JUL 2024	520 SUN	472
21JUL24	-2 Days =	19 JUL 2024	543 SAT	432
21JUL24	-3 Days =	18 JUL 2024	569 FRI	436
21JUL24	-4 Days =	17 JUL 2024	598 THU	456
21JUL24	-5 Days =	16 JUL 2024	616 WED	447
21JUL24	-6 Days =	15 JUL 2024	626 TUE	432
21JUL24	-7 Days =	14 JUL 2024	629 MON	502
21JUL24	-8 Days =	13 JUL 2024	628 SUN	465
21JUL24	-9 Days =	12 JUL 2024	627 SAT	585
21JUL24	-10 Days =	11 JUL 2024	612 FRI	498
21JUL24	-11 Days =	10 JUL 2024	609 THU	610
21JUL24	-12 Days =	09 JUL 2024	592 WED	724
21JUL24	-13 Days =	08 JUL 2024	565 TUE	485

S65EX1

		Average Flow over previous 14 days		Avg-Daily Flow
21JUL24	Today=	21 JUL 2024	0 MON	0
21JUL24	-1 Day =	20 JUL 2024	0 SUN	0
21JUL24	-2 Days =	19 JUL 2024	0 SAT	0
21JUL24	-3 Days =	18 JUL 2024	0 FRI	0
21JUL24	-4 Days =	17 JUL 2024	0 THU	0
21JUL24	-5 Days =	16 JUL 2024	0 WED	0
21JUL24	-6 Days =	15 JUL 2024	0 TUE	0
21JUL24	-7 Days =	14 JUL 2024	0 MON	0
21JUL24	-8 Days =	13 JUL 2024	0 SUN	0
21JUL24	-9 Days =	12 JUL 2024	0 SAT	0
21JUL24	-10 Days =	11 JUL 2024	0 FRI	0
21JUL24	-11 Days =	10 JUL 2024	0 THU	0
21JUL24	-12 Days =	09 JUL 2024	0 WED	0
21JUL24	-13 Days =	08 JUL 2024	0 TUE	0

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)
21 JUL 2024	666	-NR-	1497	4632
20 JUL 2024	663	-NR-	1509	4510
19 JUL 2024	662	-NR-	1487	5900
18 JUL 2024	1168	-NR-	1671	4090
17 JUL 2024	2097	-NR-	2070	4947
16 JUL 2024	2285	-NR-	2017	4841
15 JUL 2024	2266	-NR-	2687	5502
14 JUL 2024	853	-NR-	2728	4871
13 JUL 2024	2	-NR-	10	3576
12 JUL 2024	963	-NR-	1104	3411
11 JUL 2024	1997	-NR-	1776	4711
10 JUL 2024	1365	-NR-	2049	3960
09 JUL 2024	991	-NR-	2066	5430
08 JUL 2024	315	-NR-	1467	4553

	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)
21 JUL 2024	-NR-	0	0	0	161
20 JUL 2024	-NR-	0	0	0	162
19 JUL 2024	-NR-	0	0	0	162
18 JUL 2024	-NR-	0	0	0	162
17 JUL 2024	-NR-	0	0	0	162
16 JUL 2024	-NR-	0	0	0	163
15 JUL 2024	-NR-	0	0	0	162
14 JUL 2024	-NR-	0	0	0	162
13 JUL 2024	-NR-	0	0	0	162
12 JUL 2024	-NR-	0	0	0	164
11 JUL 2024	-NR-	0	0	0	162
10 JUL 2024	-NR-	0	0	0	159
09 JUL 2024	-NR-	0	0	0	160
08 JUL 2024	-NR-	0	0	0	162

	S-308	Below S-308	S-80
	Discharge	Discharge	Discharge
	(ALL DAY)	(ALL-DAY)	(ALL-DAY)
DATE	(AC-FT)	(AC-FT)	(AC-FT)
21 JUL 2024	-NR-	-NR-	28
20 JUL 2024	-NR-	-NR-	-NR-
19 JUL 2024	-NR-	-NR-	-NR-
18 JUL 2024	-NR-	-NR-	16
17 JUL 2024	-2	-NR-	-NR-
16 JUL 2024	-3	-NR-	-NR-
15 JUL 2024	-3	-NR-	28
14 JUL 2024	-3	-NR-	32
13 JUL 2024	-2	-NR-	32
12 JUL 2024	-1	-NR-	39
11 JUL 2024	-2	-NR-	34
10 JUL 2024	-2	-NR-	30
09 JUL 2024	-1	-NR-	26
08 JUL 2024	-2	-NR-	30

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

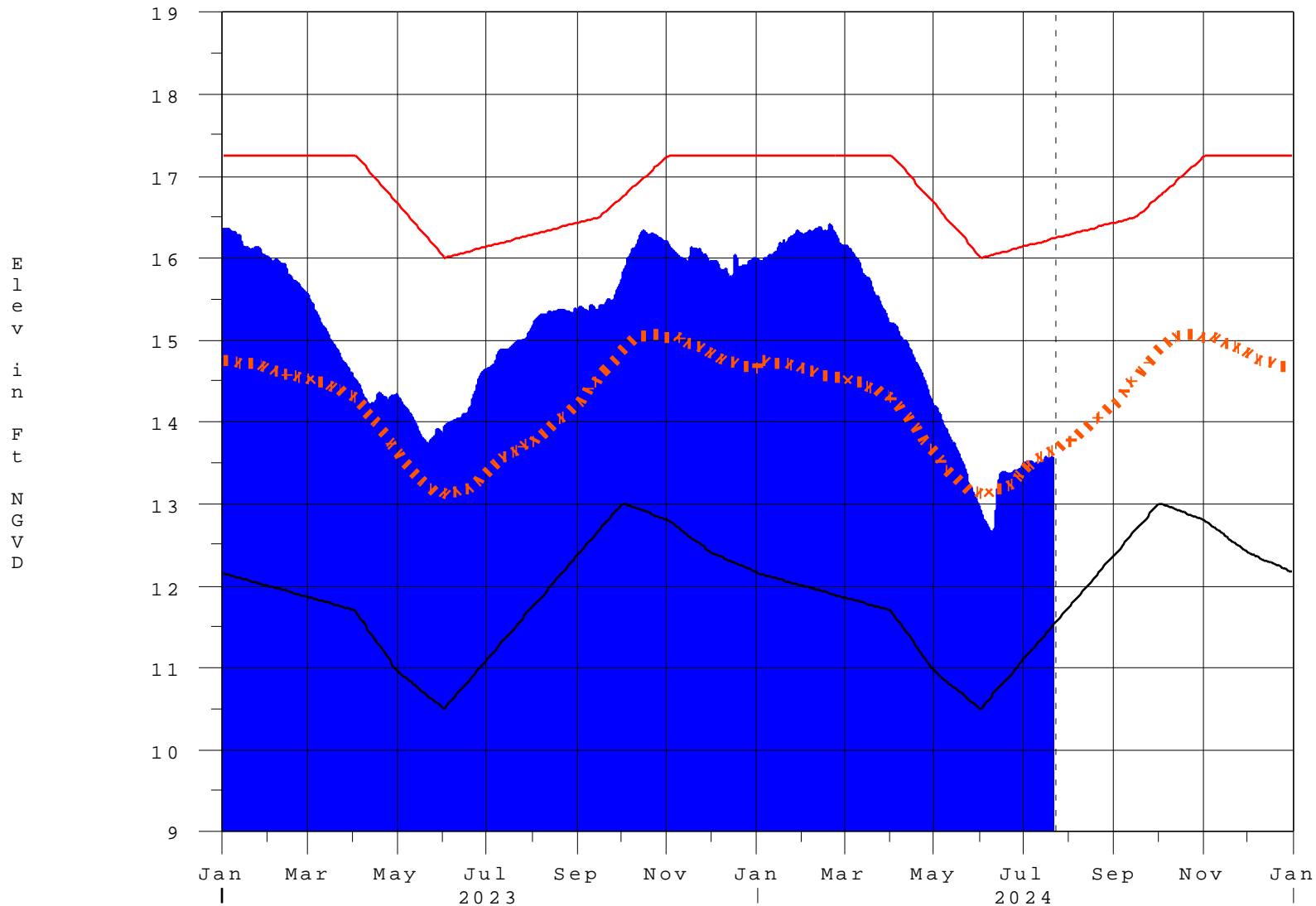
(I) - Flows preceded by "I" signify an instantaneous flow computed from the single value reported for the day

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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 Okeechobee 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

Report Generated 22JUL2024 @ 13:15 ** Preliminary Data - Subject to Revision **

Lake Okeechobee

22JUL24 13:00:15



- High Lake Management
- Okeechobee Avg Elev
- Average Elev [1965-2007]
- Water Shortage Management

Classification Tables

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 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*

Lake Net Inflow Prediction [million acre-feet]	Equivalent Depth** [feet]	Lake Okeechobee Net Inflow Seasonal Outlook
> 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*

Lake Net Inflow Prediction [million acre-feet]	Equivalent Depth** [feet]	Lake Okeechobee Net Inflow Multi-Seasonal Outlook
> 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*

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

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