

Application of the Lake Okeechobee Regulation Schedule (LORS2008) on 06/05/2023 (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 Neutral ENSO Years**		Sub-sampling of AMO Warm + Neutral ENSO Years***	
	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	2.80	Very Wet	2.92	Very Wet	4.11	Very Wet
Multi Seasonal (Jun-Apr)	N/A	N/A	3.06	Wet	3.61	Wet	4.42	Very 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:

4593 cfs 14-day running average for Lake Okeechobee Net Inflow through 06/04/2023. According to the classification in Tributary Hydrologic Conditions table, this condition is Wet.

-2.16 for Palmer Drought Index on 06/03/2023.

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

The wetter of the two conditions above is **Wet**.

LORS2008 Classification Tables:

Lake Okeechobee Stage on 06/05/2023:

Lake Okeechobee Stage: **13.98 feet**

Lake Okeechobee Management Zone/Band		Bottom Elevation (feet, NGVD)	Current Lake Stage
High Lake Management Band		16.01	
Operational Band	High sub-band	15.52	
	Intermediate sub-band	15.03	
	Low sub-band	13.04	← 13.98 ft
Base Flow sub-band		12.60	
Beneficial Use sub-band		10.56	
Water Shortage Management Band			

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 3000 cfs at S-79 and up to 1170 cfs at S-80.

LORS2008 Implementation on 06/05/2023 (ENSO Condition- Neutral Watch):

Status for week ending 06/05/2023:

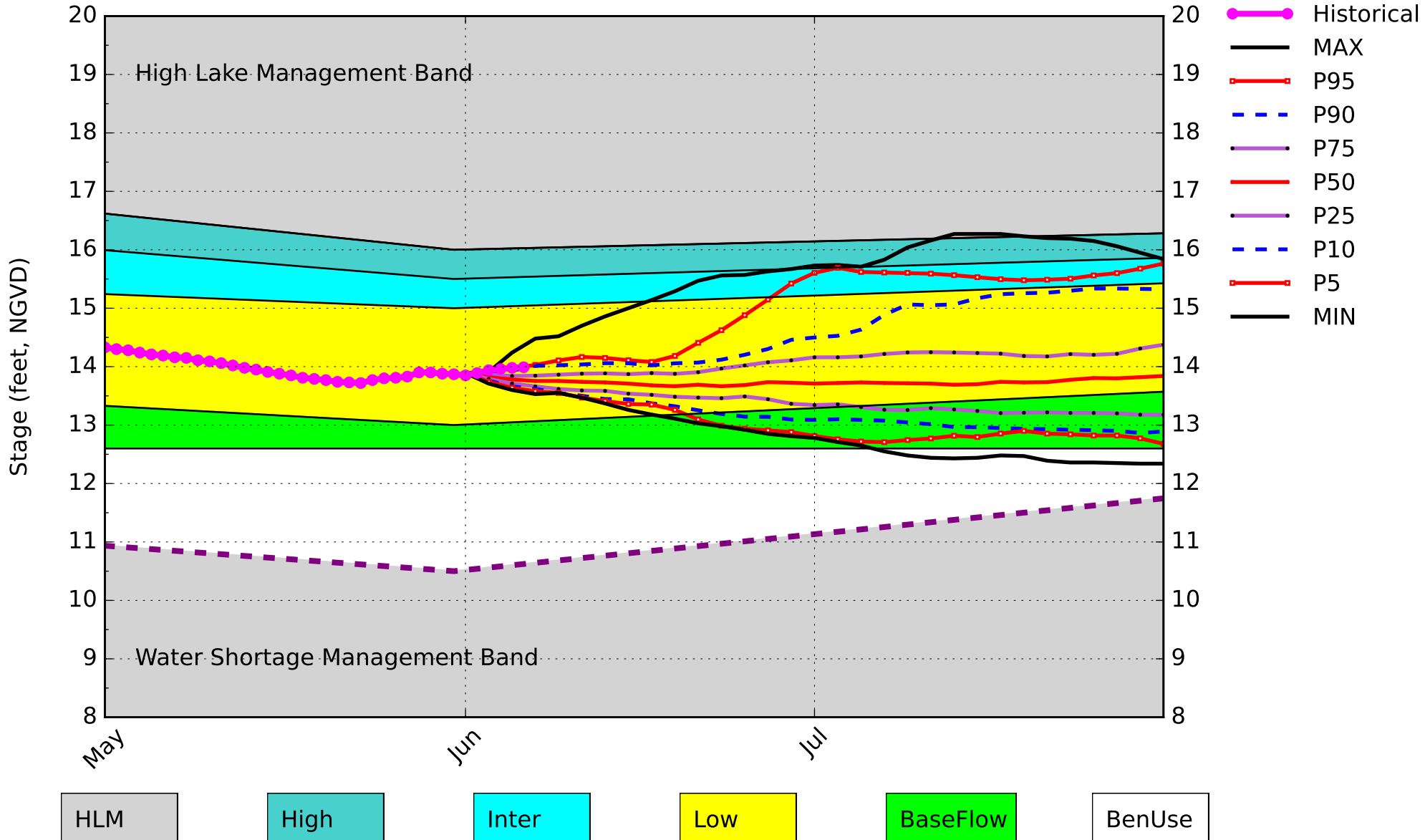
Water Supply Risk Evaluation

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	-2.16 (Extremely Dry)	H
	CPC Precipitation Outlook	1 month: Above Normal	L
		3 months: Above Normal	L
	LOK Seasonal Net Inflow Outlook	2.92 ft	L
	ENSO Forecast	Normal to Extremely Wet	
	LOK Multi-Seasonal Net Inflow Outlook	3.61 ft	L
	ENSO Forecast	Wet	
WCAs	WCA 1: 3 Station Average (Site 1-8C)	Above Line 1 (16.26 ft)	L
	WCA 2A: Site S-11B	Above Line 1 (11.52 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.

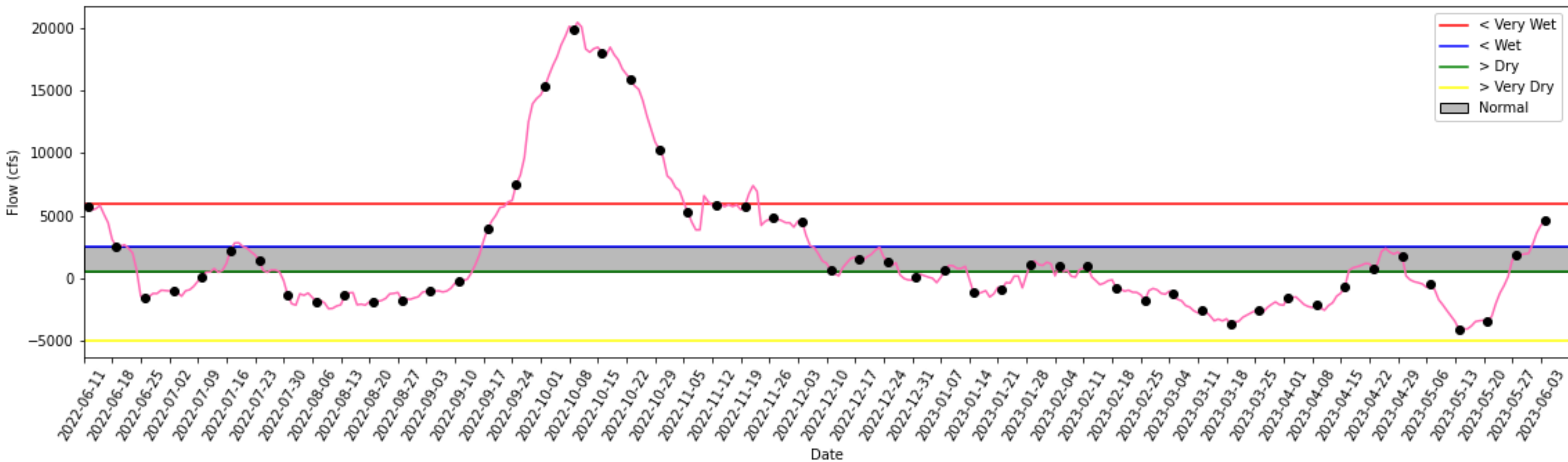
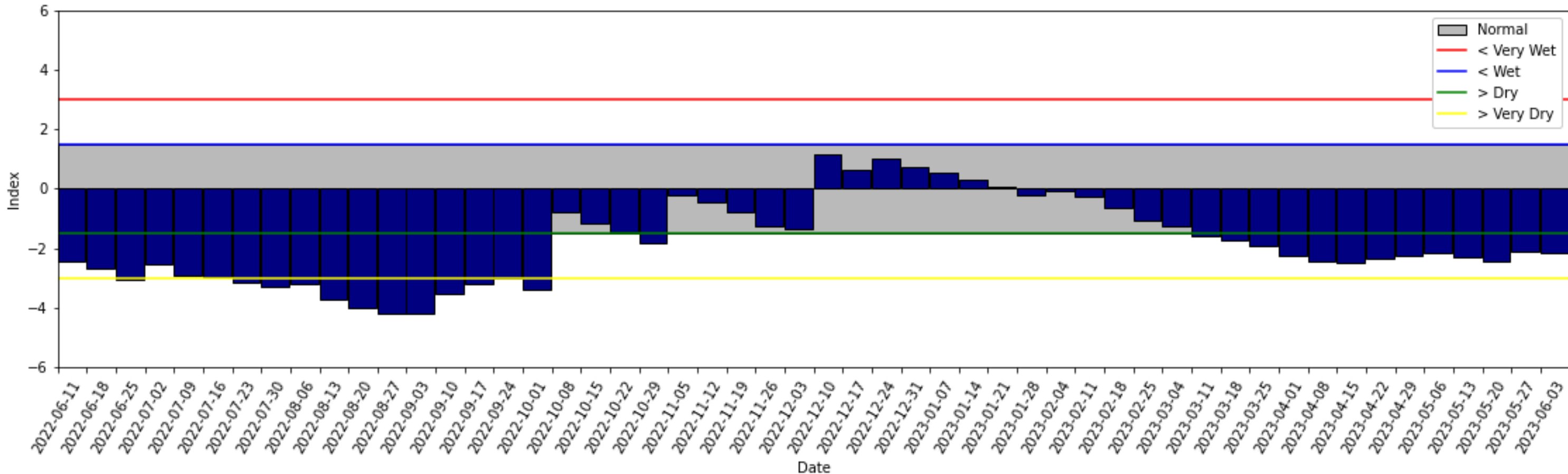
Lake Okeechobee SFWMM June 2023 Position Analysis

Percentiles PA



(See assumptions on the Position Analysis Results website)

Tributary Basin Condition Indicators as of June 04 2023



2008 LORS

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

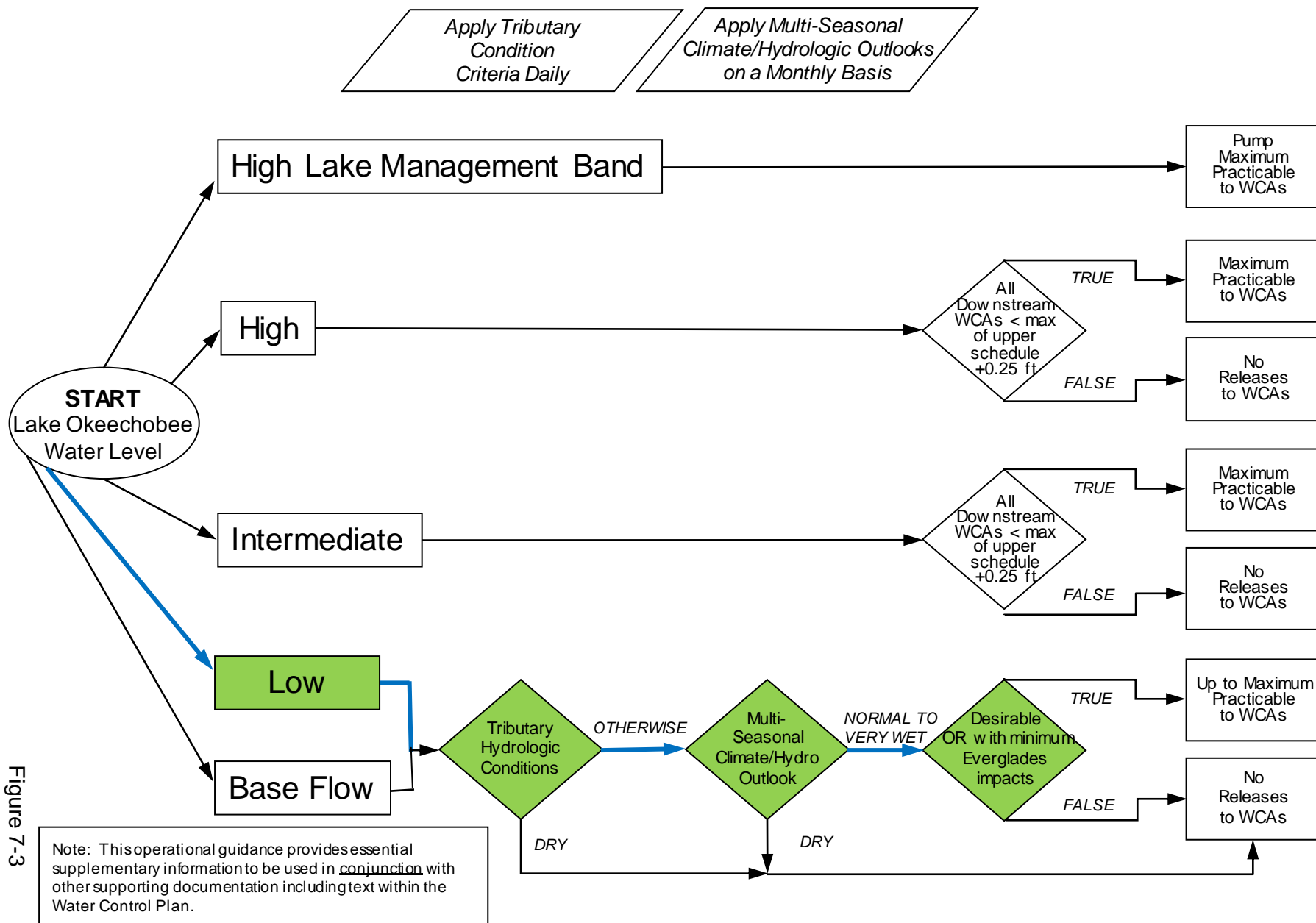


Figure 7-3

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

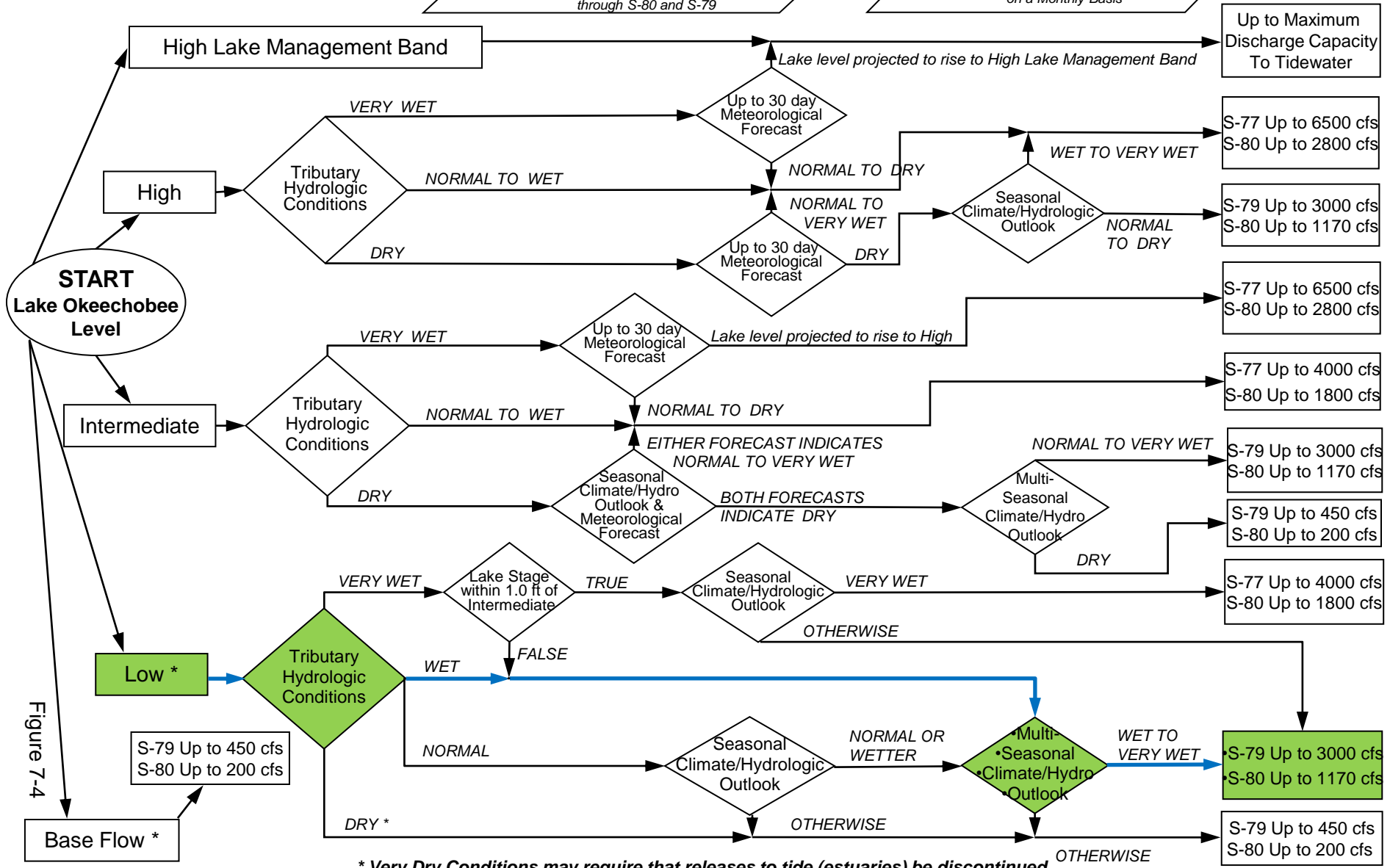
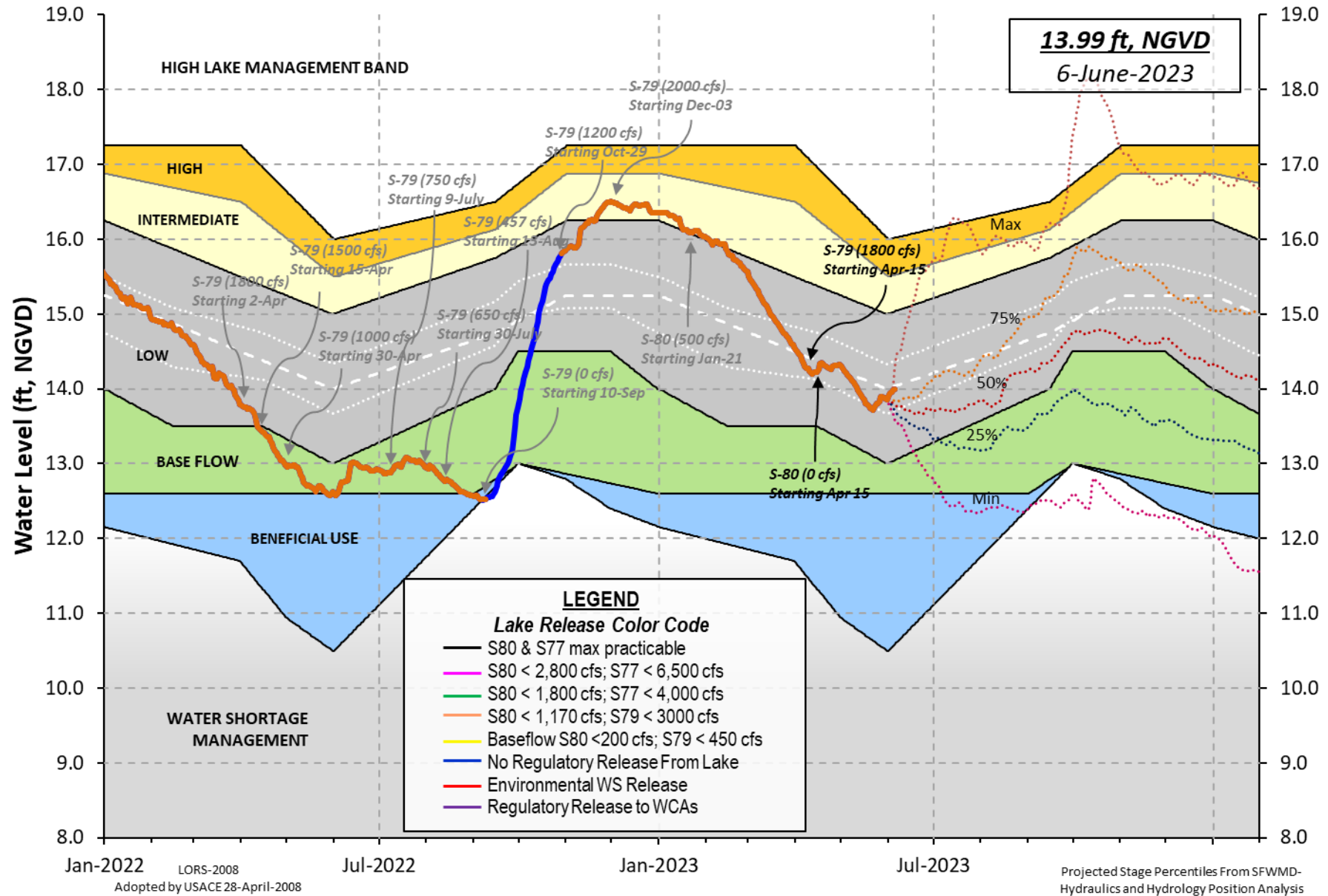


Figure 7-4

* Very Dry Conditions may require that releases to tide (estuaries) be discontinued (NORMAL TO DRY)

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 04 JUN 2023

Okeechobee Lake Regulation	Elevation (ft-NGVD)	Last Year (ft-NGVD)	2YRS Ago (ft-NGVD)
*Okeechobee Lake Elevation	13.98	12.72	12.78 (Official Elv)
Bottom of High Lake Mngmt=	16.01	Top of Water Short Mngmt=	10.56
Currently in Operational Management Band			
Simulated Average LORS2008 [1965-2000]	11.96		
Difference from Average LORS2008	2.02		
04JUN (1965-2007) Period of Record Average	13.12		
Difference from POR Average	0.86		

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

++Navigation Depth (Based on 2007 Channel Condition Survey) Route 1 \diamond 7.92'
 ++Navigation Depth (Based on 2008 Channel Condition Survey) Route 2 \diamond 6.12'
 Bridge Clearance = 49.37'

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

L001	L005	L006	LZ40	S4	S352	S308	S133
13.95	14.01	14.02	13.92	14.09	14.11	13.64	13.78

*Combination Okeechobee Avg-Daily Lake Average = 13.98
 (*See Note)

Okeechobee Inflows (cfs):

S65E	454	S65EX1	0	Fisheating Cr	88
S154	44	S191	0	S135 Pumps	88
S84	741	S133 Pumps	97	S2 Pumps	0
S84X	263	S127 Pumps	79	S3 Pumps	0
S71	367	S129 Pumps	59	S4 Pumps	0
S72	58	S131 Pumps	78	C5	0
Total Inflows:	2415				

Okeechobee Outflows (cfs):

S135 Culverts	0	S354	0	S77	4
S127 Culverts	0	S351	0	S308	-1
S129 Culverts	0	S352	0		
S131 Culverts	0	L8 Canal Pt	-199		
Total Outflows:	-195				

***S77 structure flow is being used to compute Total Outflow.
 ***S308 structure flow is being used to compute Total Outflow.

Okeechobee Pan Evaporation (inches):

S77	0.00	S308	0.28
Average Pan Evap x 0.75 Pan Coefficient = 0.11" = 0.01'			

Lake Average Precipitation using NEXRAD: = -NR-" = -NR-'

Evaporation - Precipitation: = -NR-" = -NR-'
 Evaporation - Precipitation using Lake Area of 730 square miles

is equal to -NR-
 Lake Okeechobee (Change in Storage) Flow is 4235 cfs or 8400 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:	13.37	13.89	97	0	13	24	25	44	(cfs)		
S193:											
S191:	18.46	13.95	0	0.0	0.0	0.0					
S135 Pumps:	13.33	14.03	88	19	32	38	0		(cfs)		
S135 Culverts:			0	0.0	0.0						
North West Shore											
S65E:	21.01	14.01	454	0.3	0.1	0.0	0.2	0.2	0.4		
S65EX1:	21.01	14.01	0								
S127 Pumps:	13.42	13.78	79	37	44	0	0	0	(cfs)		
S127 Culvert:			0	0.0							
S129 Pumps:	12.97	14.04	59	38	19	0			(cfs)		
S129 Culvert:			0	0.0							
S131 Pumps:	13.06	-NR-	78	-NR-	-NR-				(cfs)		
S131 Culvert:			0								
Fisheating Creek											
nr Palmdale		30.97	88								
nr Lakeport											
C5:		-NR-	0	-NR-	-NR-	-NR-					
South Shore											
S4 Pumps:	12.36	-NR-	0	0	0	0			(cfs)		
S169:		-NR-	-NR-	-NR-	-NR-	-NR-					
S310:	14.14		-198								
S3 Pumps:	10.73	14.16	0	0	0	0			(cfs)		
S354:	14.16	10.73	0	0.0	0.0						
S2 Pumps:	10.46	14.29	0	0	0	0	0		(cfs)		
S351:	14.29	10.46	0	0.0	0.0	0.0					
S352:	14.07	9.86	0	0.0	0.0						
C10A:	-NR-	-NR-		-NR-	-NR-	-NR-	-NR-	-NR-			
L8 Canal PT		14.36	-199								

S351 and S352 Temporary Pumps/S354 Spillway

S351:	10.46	14.29	0	-NR-	-NR-	-NR-	-NR-	-NR-	-NR-		
S352:	9.86	14.07	0	-NR-	-NR-	-NR-	-NR-				
S354:	10.73	14.16	0	-NR-	-NR-	-NR-	-NR-				

Caloosahatchee River (S77, S78, S79)

S47B:	14.27	12.41		0.0	0.0						
S47D:	12.47	11.34	35	0.0							
S77:											
Spillway and Sector Preferred Flow:	14.04	11.06	0	0.0	0.0	0.0	0.0				
Flow Due to Lockages+:				4							

S78:

Spillway and Sector Flow:
 11.22 3.36 1918 1.0 0.0 2.5 1.5
 Flow Due to Lockages+: 13

S79:

Spillway and Sector Flow:
 3.52 0.88 2987 0.0 0.0 1.5 2.0 2.5 2.5 1.5 0.0
 Flow Due to Lockages+: 7
 Percent of flow from S77 0%
 Chloride (ppm) 0

St. Lucie Canal (S308, S80)

S308:

Spillway and Sector Preferred Flow:
 13.81 14.13 0 0.0 0.0 0.0 0.0
 Flow Due to Lockages+: -1

S153: 18.95 13.91 0 0.0 0.0

S80:

Spillway and Sector Flow:
 14.24 2.98 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
 Flow Due to Lockages+: 19
 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:	-NR-	0.00	0.00	213	2
S78:	-NR-	0.00	0.00	124	6
S79:	-NR-	0.00	0.00	41	3
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	53	2
S80:	-NR-	0.00	0.00	12	3
Okeechobee Average (Sites S78, S79 and S80 not included)	-NR-	0.00	0.00		

Oke Nexrad Basin Avg	-NR-	0.00	0.00		

Okeechobee Lake Elevations 04 JUN 2023 13.98 Difference from 04JUN23
 04JUN23 -1 Day = 03 JUN 2023 13.96 -0.02

04JUN23	-2 Days =	02 JUN 2023	13.94	-0.04
04JUN23	-3 Days =	01 JUN 2023	13.89	-0.09
04JUN23	-4 Days =	31 MAY 2023	13.85	-0.13
04JUN23	-5 Days =	30 MAY 2023	13.87	-0.11
04JUN23	-6 Days =	29 MAY 2023	13.88	-0.10
04JUN23	-7 Days =	28 MAY 2023	13.90	-0.08
04JUN23	-30 Days =	05 MAY 2023	14.19	0.21
04JUN23	-1 Year =	04 JUN 2022	12.72	-1.26
04JUN23	-2 Year =	04 JUN 2021	12.78	-1.20

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
04JUN23	Today =	04 JUN 2023	4656 MON	4235
04JUN23	-1 Day =	03 JUN 2023	4272 SUN	4235
04JUN23	-2 Days =	02 JUN 2023	3649 SAT	10588
04JUN23	-3 Days =	01 JUN 2023	2733 FRI	9788
04JUN23	-4 Days =	31 MAY 2023	2021 THU	-2505
04JUN23	-5 Days =	30 MAY 2023	1986 WED	-1189
04JUN23	-6 Days =	29 MAY 2023	1895 TUE	-4187
04JUN23	-7 Days =	28 MAY 2023	1914 MON	115
04JUN23	-8 Days =	27 MAY 2023	1454 SUN	15128
04JUN23	-9 Days =	26 MAY 2023	138 SAT	4684
04JUN23	-10 Days =	25 MAY 2023	-582 FRI	2993
04JUN23	-11 Days =	24 MAY 2023	-1168 THU	8782
04JUN23	-12 Days =	23 MAY 2023	-1995 WED	12930
04JUN23	-13 Days =	22 MAY 2023	-3029 TUE	-412

S65E

Average Flow over previous 14 days				Avg-Daily Flow
04JUN23	Today=	04 JUN 2023	471 MON	533
04JUN23	-1 Day =	03 JUN 2023	461 SUN	567
04JUN23	-2 Days =	02 JUN 2023	453 SAT	587
04JUN23	-3 Days =	01 JUN 2023	434 FRI	507
04JUN23	-4 Days =	31 MAY 2023	414 THU	357
04JUN23	-5 Days =	30 MAY 2023	404 WED	274
04JUN23	-6 Days =	29 MAY 2023	402 TUE	270
04JUN23	-7 Days =	28 MAY 2023	402 MON	463
04JUN23	-8 Days =	27 MAY 2023	390 SUN	523
04JUN23	-9 Days =	26 MAY 2023	373 SAT	446
04JUN23	-10 Days =	25 MAY 2023	361 FRI	447
04JUN23	-11 Days =	24 MAY 2023	349 THU	540
04JUN23	-12 Days =	23 MAY 2023	330 WED	706
04JUN23	-13 Days =	22 MAY 2023	299 TUE	380

S65EX1

Average Flow over previous 14 days				Avg-Daily Flow
04JUN23	Today=	04 JUN 2023	0 MON	0
04JUN23	-1 Day =	03 JUN 2023	0 SUN	0
04JUN23	-2 Days =	02 JUN 2023	0 SAT	0
04JUN23	-3 Days =	01 JUN 2023	0 FRI	0
04JUN23	-4 Days =	31 MAY 2023	0 THU	0
04JUN23	-5 Days =	30 MAY 2023	0 WED	0
04JUN23	-6 Days =	29 MAY 2023	0 TUE	0
04JUN23	-7 Days =	28 MAY 2023	0 MON	0
04JUN23	-8 Days =	27 MAY 2023	0 SUN	0
04JUN23	-9 Days =	26 MAY 2023	0 SAT	0
04JUN23	-10 Days =	25 MAY 2023	0 FRI	0
04JUN23	-11 Days =	24 MAY 2023	0 THU	0
04JUN23	-12 Days =	23 MAY 2023	0 WED	0
04JUN23	-13 Days =	22 MAY 2023	0 TUE	0

Lake Okeechobee Outlets Last 14 Days

DATE	S-77 Discharge (ALL DAY) (AC-FT)	Below S-77 Discharge (ALL-DAY) (AC-FT)	S-78 Discharge (ALL DAY) (AC-FT)	S-79 Discharge (ALL DAY) (AC-FT)
04 JUN 2023	9	588	3806	5859
03 JUN 2023	9	624	5180	7666
02 JUN 2023	8	758	4207	5689
01 JUN 2023	2012	2614	3298	5821
31 MAY 2023	3112	3430	3600	4886
30 MAY 2023	-NR-	1842	3101	4601
29 MAY 2023	-NR-	95	1874	3092
28 MAY 2023	-NR-	229	1972	3224
27 MAY 2023	-NR-	606	1643	2582
26 MAY 2023	-NR-	891	1720	3447
25 MAY 2023	-NR-	1505	2758	4469
24 MAY 2023	-NR-	4340	3668	5211
23 MAY 2023	-NR-	4028	3252	4268
22 MAY 2023	-NR-	2325	1936	2395

DATE	S-310 Discharge (ALL DAY) (AC-FT)	S-351 Discharge (ALL DAY) (AC-FT)	S-352 Discharge (ALL DAY) (AC-FT)	S-354 Discharge (ALL DAY) (AC-FT)	L8 Canal Pt Discharge (ALL DAY) (AC-FT)
04 JUN 2023	-392	0	0	0	-394
03 JUN 2023	-457	0	0	0	-185
02 JUN 2023	-460	0	0	0	-111
01 JUN 2023	-350	0	0	0	-36
31 MAY 2023	-101	0	0	0	-49
30 MAY 2023	-117	0	0	0	-199
29 MAY 2023	-63	0	0	0	-219
28 MAY 2023	-268	0	0	0	-223
27 MAY 2023	-335	0	0	0	-233
26 MAY 2023	-201	0	0	0	-68
25 MAY 2023	-179	0	0	0	240
24 MAY 2023	-168	210	0	0	284
23 MAY 2023	99	266	0	23	290
22 MAY 2023	248	365	0	355	325

DATE	S-308 Discharge (ALL DAY) (AC-FT)	Below S-308 Discharge (ALL-DAY) (AC-FT)	S-80 Discharge (ALL-DAY) (AC-FT)
04 JUN 2023	-2	-NR-	39
03 JUN 2023	-3	-NR-	42
02 JUN 2023	-4	-NR-	50
01 JUN 2023	-5	-NR-	44
31 MAY 2023	-5	-NR-	525
30 MAY 2023	-3	-NR-	48
29 MAY 2023	-5	-NR-	904
28 MAY 2023	-3	-NR-	46
27 MAY 2023	-6	-NR-	50
26 MAY 2023	-4	-NR-	25
25 MAY 2023	-2	-NR-	32
24 MAY 2023	-1	-NR-	36
23 MAY 2023	31	-NR-	40
22 MAY 2023	-1	-NR-	40

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

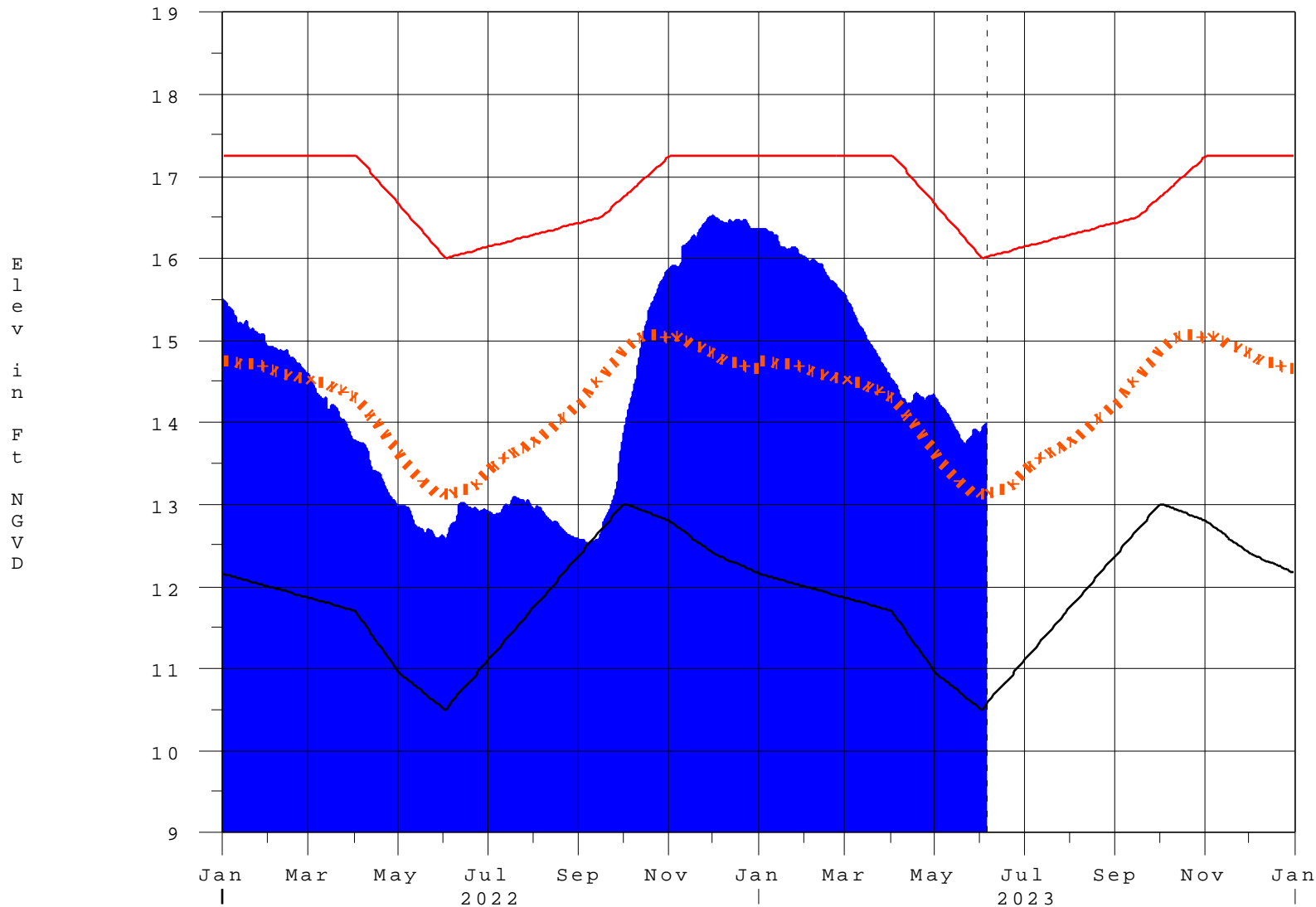
(I) - Flows preceded by "I" signify an instantaneous flow computed from the single value reported for the day

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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 05JUN2023 @ 09:07 ** Preliminary Data - Subject to Revision **

Lake Okeechobee

05JUN23 09:00:25



- 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

[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*

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