

Application of the Lake Okeechobee Regulation Schedule (LORS2008) on 2/28/2022 (ENSO Condition: La Niña)

Lake Okeechobee Net Inflow Outlook:

The Lake Okeechobee Net Inflow Outlook has been computed using 4 methods: Croley's method¹, the SFWMD empirical method², a sub-sampling of La Nina years³ and a sub-sampling of warm years of the Atlantic Multi-decadal Oscillation (AMO) in combination with La Nina ENSO years⁴. 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 ^{1*}		SFWMD Empirical Method ²		Sub-sampling of La Nina ENSO Years ³		Sub-sampling of AMO Warm + La Nina ENSO Years ⁴	
	Value (ft)	<u>Condition</u>	Value (ft)	<u>Condition</u>	Value (ft)	<u>Condition</u>	Value (ft)	<u>Condition</u>
Current (Feb-Jul)	N/A	N/A	0.59	Normal	0.20	Dry	0.36	Dry
Multi Seasonal (Feb-Oct)	N/A	N/A	2.57	Wet	2.10	Normal	1.98	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:

-1598 cfs 14-day running average for Lake Okeechobee Net Inflow through 2/28/2022. According to the classification in Tributary Hydrologic Conditions table, this condition is Dry.

-2.83 for Palmer Drought Index on 2/28/2022.

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

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

LORS2008 Classification Tables:

Lake Okeechobee Stage on 2/28/2022:

Lake Okeechobee Stage: **14.59 feet**

Lake Okeechobee Management Zone/Band		Bottom Elevation (feet, NGVD)	Current Lake Stage
High Lake Management Band		17.25	
Operational Band	High sub-band	16.64	
	Intermediate sub-band	15.77	
	Low sub-band	13.50	← 14.59 ft
Base Flow sub-band		12.60	
Beneficial Use sub-band		11.86	
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

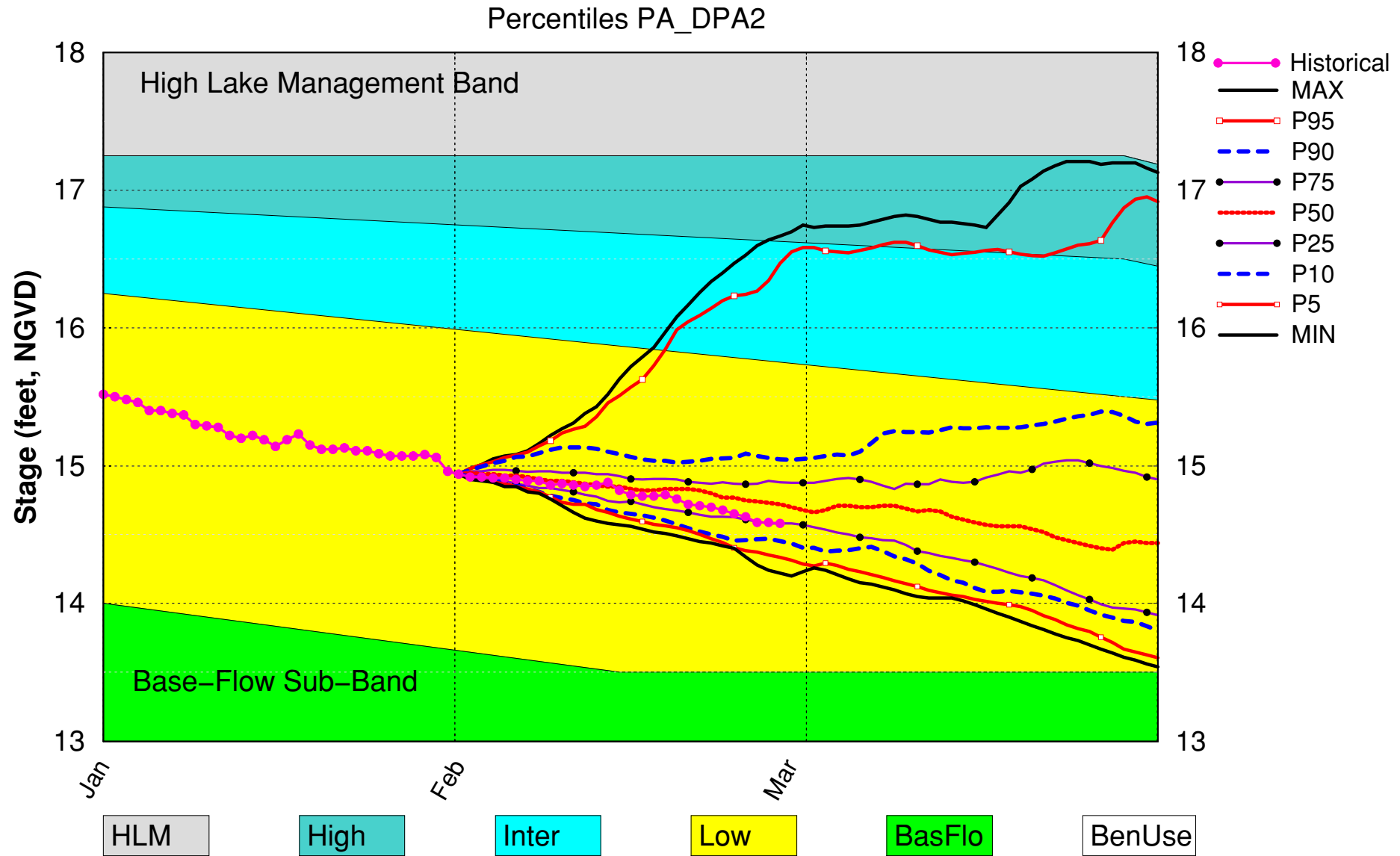
Up to 450 cfs at S-79 and up to 200 cfs at S-80.

LORS2008 Implementation on 02/28/2022 (ENSO Condition- La Nina Watch):**Status for week ending 02/28/2022:****Water Supply Risk Evaluation**

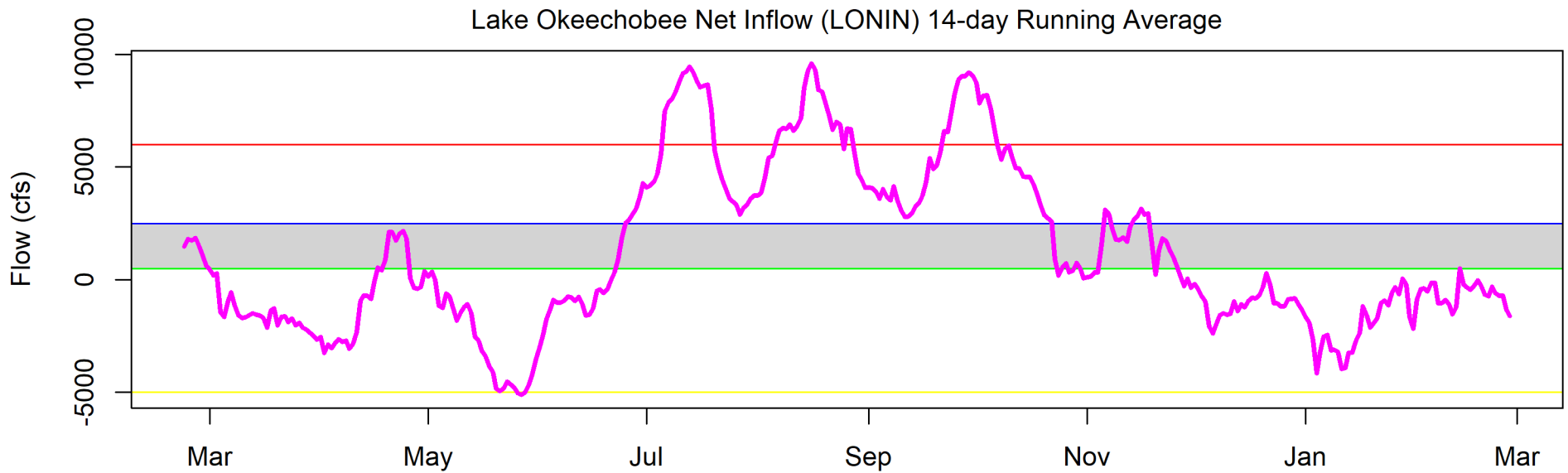
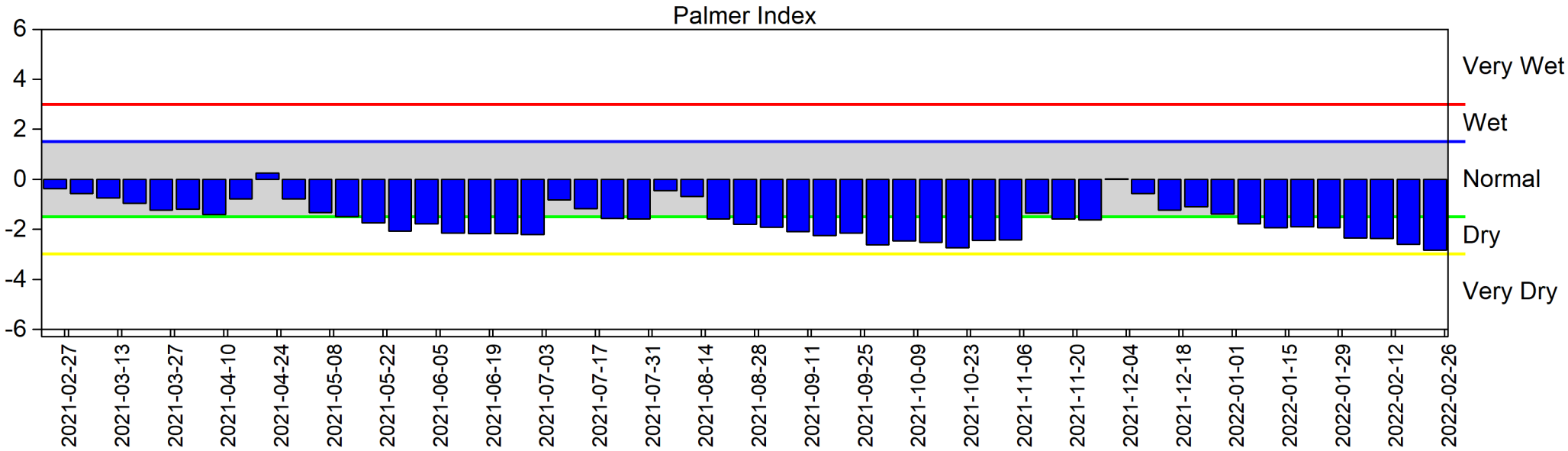
Area	Indicator	Value	Color Coded Scoring Scheme
LOK	Projected LOK Stage for the next two months	Low Sub-band	M
	Palmer Drought Index for LOK Tributary Conditions	-2.83 (Extremely Dry)	H
	CPC Precipitation Outlook	1 month: Below Normal	H
		3 months: Below Normal	M
	LOK Seasonal Net Inflow Outlook	0.18 ft	M
	ENSO Forecast	Dry	
	LOK Multi-Seasonal Net Inflow Outlook	2.10 ft	M
	ENSO Forecast	Normal	
WCAs	WCA 1: 3 Station Average (Sites 1-7, 1-8T and 1-9)	Above Line 1 (16.80 ft)	L
	WCA 2A: Site 2-17	Above Line 1 (12.24 ft)	L
	WCA-3A: 3 Station Average (Sites 63, 64, and 65)	Above Line 1 (9.32 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 Feb 2022 Position Analysis



(See assumptions on the Position Analysis Results website)



2008 LORS

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

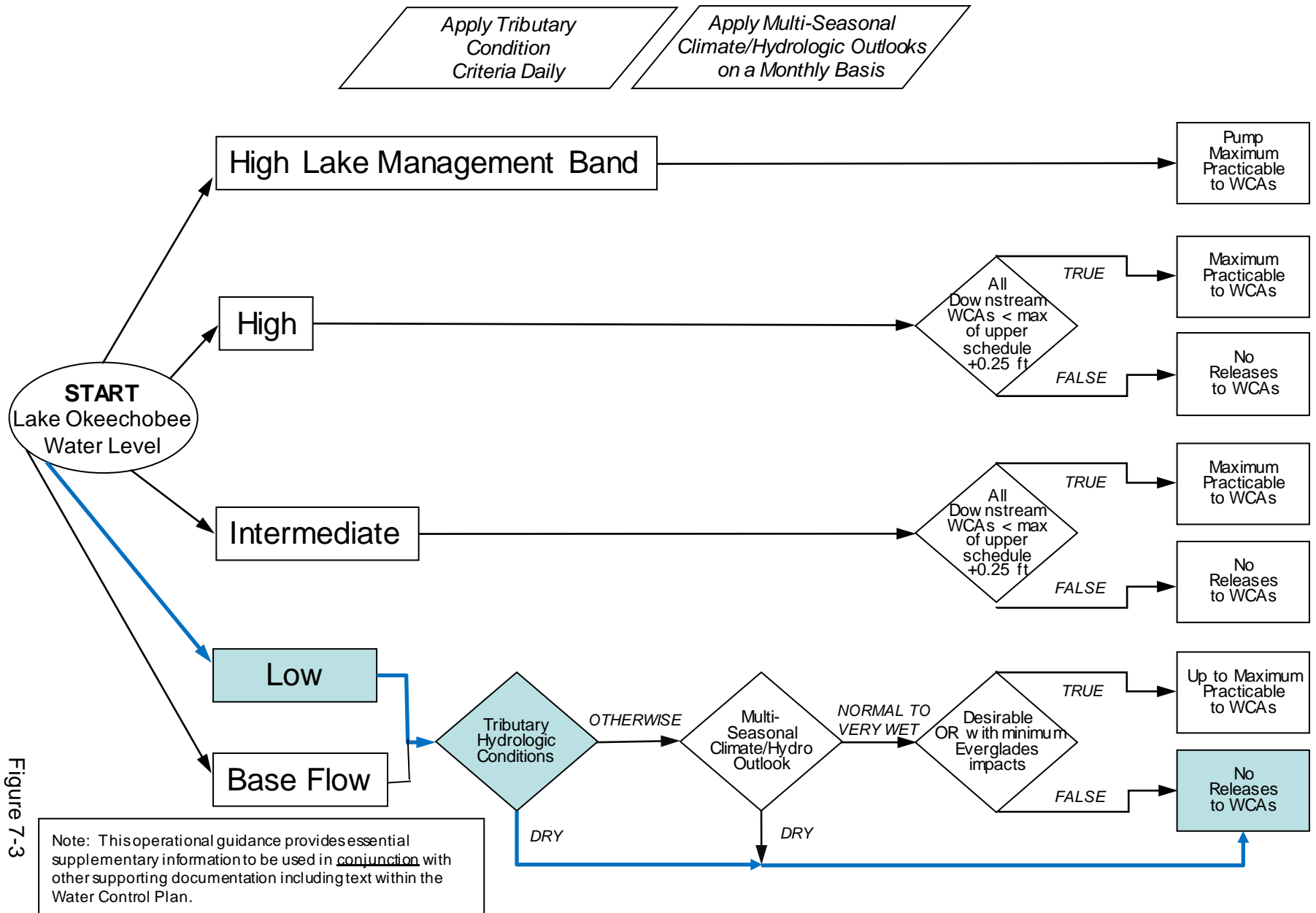
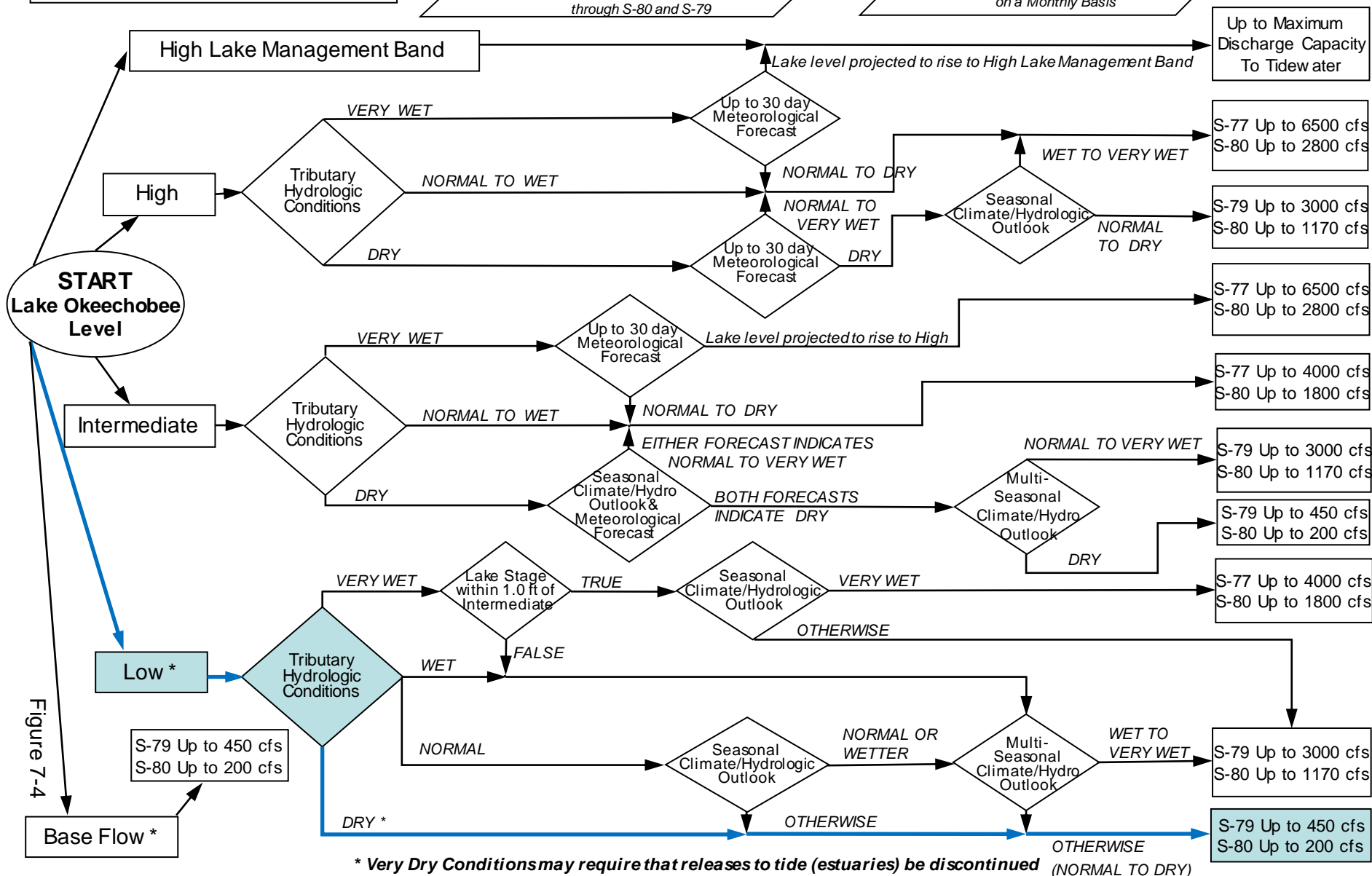


Figure 7-3

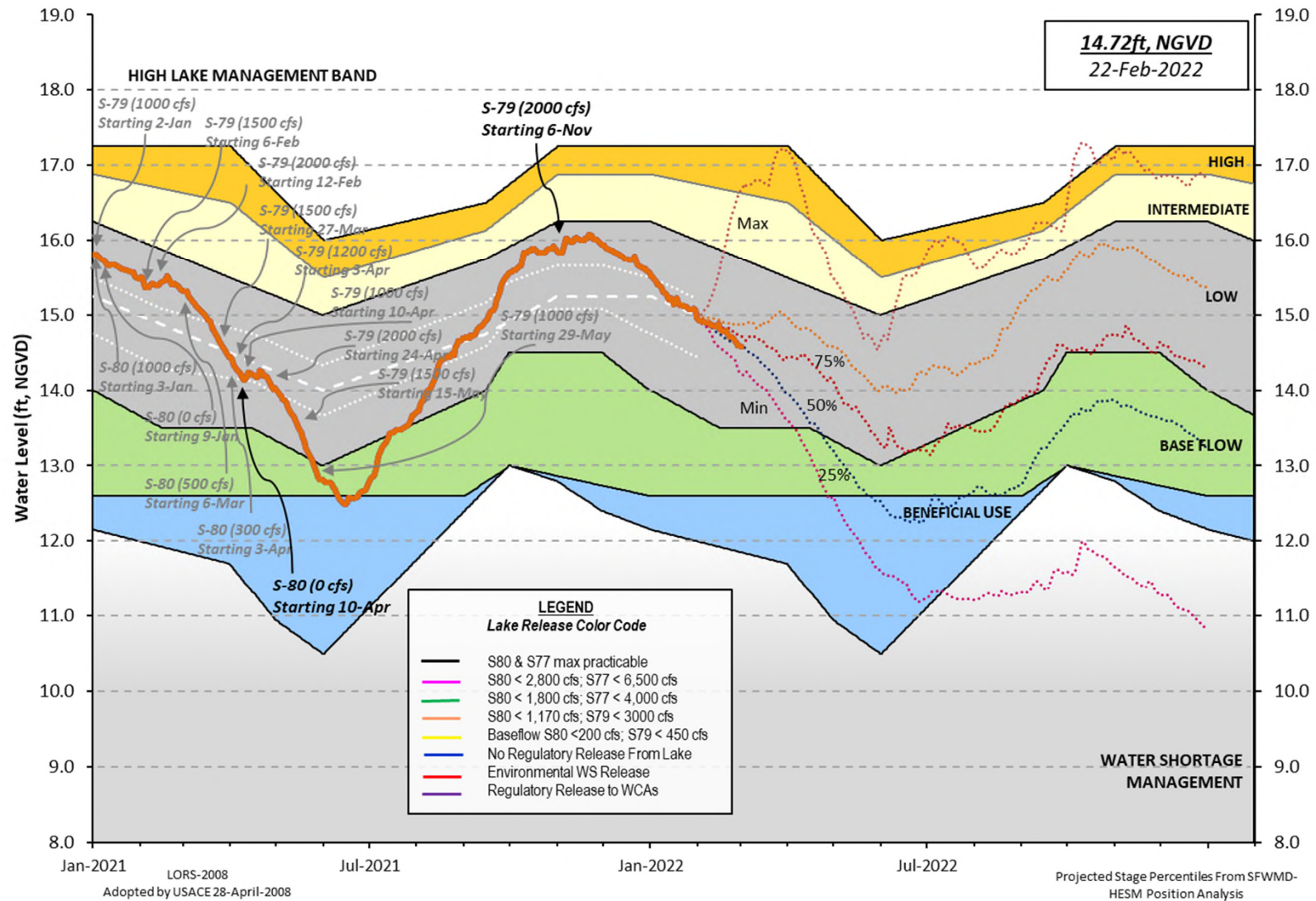
Part D: Establish Allowable Lake Okeechobee Releases to Tide (Estuaries)

*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



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 27 FEB 2022

Okeechobee Lake Regulation	Elevation	Last Year	2YRS Ago
	(ft-NGVD)	(ft-NGVD)	(ft-NGVD)
*Okeechobee Lake Elevation	14.59	15.34	12.75 (Official Elv)
Bottom of High Lake Mngmt= 17.25 Top of Water Short Mngmt= 11.86			
Currently in Operational Management Band			
Simulated Average LORS2008 [1965-2000]		13.32	
Difference from Average LORS2008		1.27	
27FEB (1965-2007) Period of Record Average		14.53	
Difference from POR Average		0.06	

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

++Navigation Depth (Based on 2007 Channel Condition Survey) Route 1 ÷ 8.53'
 ++Navigation Depth (Based on 2008 Channel Condition Survey) Route 2 ÷ 6.73'
 Bridge Clearance = 49.33'

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

L001	L005	L006	LZ40	S4	S352	S308	S133
14.53	14.56	14.58	14.57	-NR-	14.72	14.60	14.51

*Combination Okeechobee Avg-Daily Lake Average = 14.59
 (*See Note)

Okeechobee Inflows (cfs):

S65E	599	S65EX1	0	Fisheating Cr	1
S154	0	S191	0	S135 Pumps	0
S84	0	S133 Pumps	0	S2 Pumps	0
S84X	0	S127 Pumps	0	S3 Pumps	0
S71	0	S129 Pumps	0	S4 Pumps	0
S72	0	S131 Pumps	0	C5	0
Total Inflows:		600			

Okeechobee Outflows (cfs):

S135 Culverts	-NR-	S354	127	S77	1749
S127 Culverts	0	S351	889	S308	0
S129 Culverts	0	S352	4		
S131 Culverts	0	L8 Canal Pt	-NR-		
Total Outflows:		2769			

S3 Pumps:	10.40	14.73	0	0	0	0		(cfs)
S354:	14.73	10.40	127	0.1	0.4			
S2 Pumps:	10.56	-NR-	0	-NR-	-NR-	-NR-	-NR-	(cfs)
S351:	-NR-	10.56	889	1.1	1.1	0.8		
S352:	14.77	10.32	4	0.0	0.0			
C10A:	-NR-	14.34		8.0	8.0	8.0	0.0	0.0
L8 Canal PT		14.34	-NR-					

S351 and S352 Temporary Pumps/S354 Spillway

S351:	10.56	-NR-	889	-NR-	-NR-	-NR-	-NR-	-NR-	-NR-
S352:	10.32	14.77	4	-NR-	-NR-	-NR-	-NR-		
S354:	10.40	14.73	127	-NR-	-NR-	-NR-	-NR-		

Caloosahatchee River (S77, S78, S79)

S47B:	13.36	12.45		1.4	1.9
S47D:	12.32	11.30	0	0.0	

S77:

Spillway and Sector Preferred Flow:

14.23	11.19	1748	2.5	2.5	2.5	0.0
-------	-------	------	-----	-----	-----	-----

Flow Due to Lockages+: 1

S78:

Spillway and Sector Flow:

11.17	3.02	1379	0.5	0.0	2.5	1.0
-------	------	------	-----	-----	-----	-----

Flow Due to Lockages+: 20

S79:

Spillway and Sector Flow:

3.19	2.15	1902	0.0	0.0	1.5	2.0	2.0	1.5	0.0
------	------	------	-----	-----	-----	-----	-----	-----	-----

0.0

Flow Due to Lockages+: 12

Percent of flow from S77 92%

Chloride (ppm) 0

St. Lucie Canal (S308, S80)

S308:

Spillway and Sector Preferred Flow:

14.69	14.17	0	0.0	0.0	0.0	0.0
-------	-------	---	-----	-----	-----	-----

Flow Due to Lockages+: 0

S153:	18.99	13.96	8	0.1	0.5
-------	-------	-------	---	-----	-----

S80:

Spillway and Sector Flow:

14.21	0.29	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-------	------	---	-----	-----	-----	-----	-----	-----	-----

Flow Due to Lockages+: 0

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	1-Day	3-Day	7-Day	Direction	
Speed	(inches)	(inches)	(inches)	(Degø)	
(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:	4.19	4.19	4.19	296	5
S78:	2.14	2.14	2.14	288	3
S79:	6.93	6.93	6.93	125	1
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:	2.81	2.81	2.81	301	12
S80:	4.05	4.05	4.05	292	5
Okeechobee Average	3.50	0.54	0.54		
(Sites S78, S79 and S80 not included)					

Oke Nexrad Basin Avg	-NR-	0.00	0.00		

Okeechobee Lake Elevations	27 FEB 2022	14.59	Difference from
27FEB22			
27FEB22 -1 Day =	26 FEB 2022	14.59	0.00
27FEB22 -2 Days =	25 FEB 2022	14.63	0.04
27FEB22 -3 Days =	24 FEB 2022	14.65	0.06
27FEB22 -4 Days =	23 FEB 2022	14.68	0.09
27FEB22 -5 Days =	22 FEB 2022	14.70	0.11
27FEB22 -6 Days =	21 FEB 2022	14.71	0.12
27FEB22 -7 Days =	20 FEB 2022	14.72	0.13
27FEB22 -30 Days =	28 JAN 2022	15.08	0.49
27FEB22 -1 Year =	27 FEB 2021	15.34	0.75
27FEB22 -2 Year =	27 FEB 2020	12.75	-1.84

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

27FEB22	Today =	27 FEB 2022	-966	MON	3014
27FEB22	-1 Day =	26 FEB 2022	-799	SUN	-4781
27FEB22	-2 Days =	25 FEB 2022	-238	SAT	952
27FEB22	-3 Days =	24 FEB 2022	-335	FRI	-941
27FEB22	-4 Days =	23 FEB 2022	-319	THU	443
27FEB22	-5 Days =	22 FEB 2022	-93	WED	1523
27FEB22	-6 Days =	21 FEB 2022	-406	TUE	1553
27FEB22	-7 Days =	20 FEB 2022	-558	MON	-5556
27FEB22	-8 Days =	19 FEB 2022	-170	SUN	-3211
27FEB22	-9 Days =	18 FEB 2022	68	SAT	5232
27FEB22	-10 Days =	17 FEB 2022	-158	FRI	2510
27FEB22	-11 Days =	16 FEB 2022	-192	THU	608
27FEB22	-12 Days =	15 FEB 2022	-90	WED	-3644
27FEB22	-13 Days =	14 FEB 2022	43	TUE	-11233

—

—

S65E					
Average Flow over previous 14 days					Avg-Daily Flow
27FEB22	Today=	27 FEB 2022	1100	MON	684
27FEB22	-1 Day =	26 FEB 2022	1142	SUN	844
27FEB22	-2 Days =	25 FEB 2022	1170	SAT	912
27FEB22	-3 Days =	24 FEB 2022	1194	FRI	1080
27FEB22	-4 Days =	23 FEB 2022	1206	THU	1089
27FEB22	-5 Days =	22 FEB 2022	1218	WED	1130
27FEB22	-6 Days =	21 FEB 2022	1225	TUE	1165
27FEB22	-7 Days =	20 FEB 2022	1230	MON	1162
27FEB22	-8 Days =	19 FEB 2022	1233	SUN	1175
27FEB22	-9 Days =	18 FEB 2022	1237	SAT	1210
27FEB22	-10 Days =	17 FEB 2022	1240	FRI	1208
27FEB22	-11 Days =	16 FEB 2022	1236	THU	1244
27FEB22	-12 Days =	15 FEB 2022	1230	WED	1243
27FEB22	-13 Days =	14 FEB 2022	1228	TUE	1249

—

—

S65EX1					
Average Flow over previous 14 days					Avg-Daily Flow
27FEB22	Today=	27 FEB 2022	0	MON	0
27FEB22	-1 Day =	26 FEB 2022	0	SUN	0
27FEB22	-2 Days =	25 FEB 2022	0	SAT	0
27FEB22	-3 Days =	24 FEB 2022	0	FRI	0
27FEB22	-4 Days =	23 FEB 2022	0	THU	0
27FEB22	-5 Days =	22 FEB 2022	0	WED	0
27FEB22	-6 Days =	21 FEB 2022	0	TUE	0
27FEB22	-7 Days =	20 FEB 2022	0	MON	0
27FEB22	-8 Days =	19 FEB 2022	0	SUN	0
27FEB22	-9 Days =	18 FEB 2022	0	SAT	0
27FEB22	-10 Days =	17 FEB 2022	0	FRI	0
27FEB22	-11 Days =	16 FEB 2022	0	THU	0
27FEB22	-12 Days =	15 FEB 2022	0	WED	0
27FEB22	-13 Days =	14 FEB 2022	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)
27 FEB 2022		3458	3415	2772	3796
26 FEB 2022		3699	3653	2701	4036
25 FEB 2022		3760	3506	2901	3917
24 FEB 2022		3896	3975	3165	3937
23 FEB 2022		4447	3374	2994	3763
22 FEB 2022		3455	3514	2728	3894
21 FEB 2022		3476	3525	3000	4031
20 FEB 2022		3202	3290	3425	4114
19 FEB 2022		3624	3569	2991	4115
18 FEB 2022		3372	2550	2904	4063
17 FEB 2022		2953	3167	2938	3487
16 FEB 2022		3003	3226	2946	3535
15 FEB 2022		3591	3524	3460	3858
14 FEB 2022		3411	3261	3432	4056

		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)
27 FEB 2022		280	1762	8	252	-NR-
26 FEB 2022		150	1973	164	353	-NR-
25 FEB 2022		131	2815	584	415	-NR-
24 FEB 2022		91	2654	679	605	-NR-
23 FEB 2022		136	1001	333	599	-NR-
22 FEB 2022		120	716	59	630	-NR-
21 FEB 2022		13	1238	74	367	-NR-
20 FEB 2022		-1	162	0	316	-NR-
19 FEB 2022		181	301	0	331	-NR-
18 FEB 2022		65	199	0	466	-NR-
17 FEB 2022		119	0	0	0	-NR-
16 FEB 2022		196	0	0	328	-NR-
15 FEB 2022		94	0	0	0	-NR-
14 FEB 2022		64	0	0	0	-NR-

		S-308	Below S-308	S-80
		Discharge	Discharge	Discharge
		(ALL DAY)	(ALL-DAY)	(ALL-DAY)
DATE		(AC-FT)	(AC-FT)	(AC-FT)
27 FEB 2022		0	-NR-	0
26 FEB 2022		630	-NR-	0
25 FEB 2022		-NR-	-NR-	0
24 FEB 2022		2386	-NR-	0
23 FEB 2022		2398	-NR-	0
22 FEB 2022		1946	-NR-	0
21 FEB 2022		1763	-NR-	0
20 FEB 2022		1736	-NR-	0
19 FEB 2022		1659	-NR-	0
18 FEB 2022		1852	-NR-	0
17 FEB 2022		1839	-NR-	0
16 FEB 2022		1841	-NR-	0
15 FEB 2022		1818	-NR-	0
14 FEB 2022		143	-NR-	0

*** 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

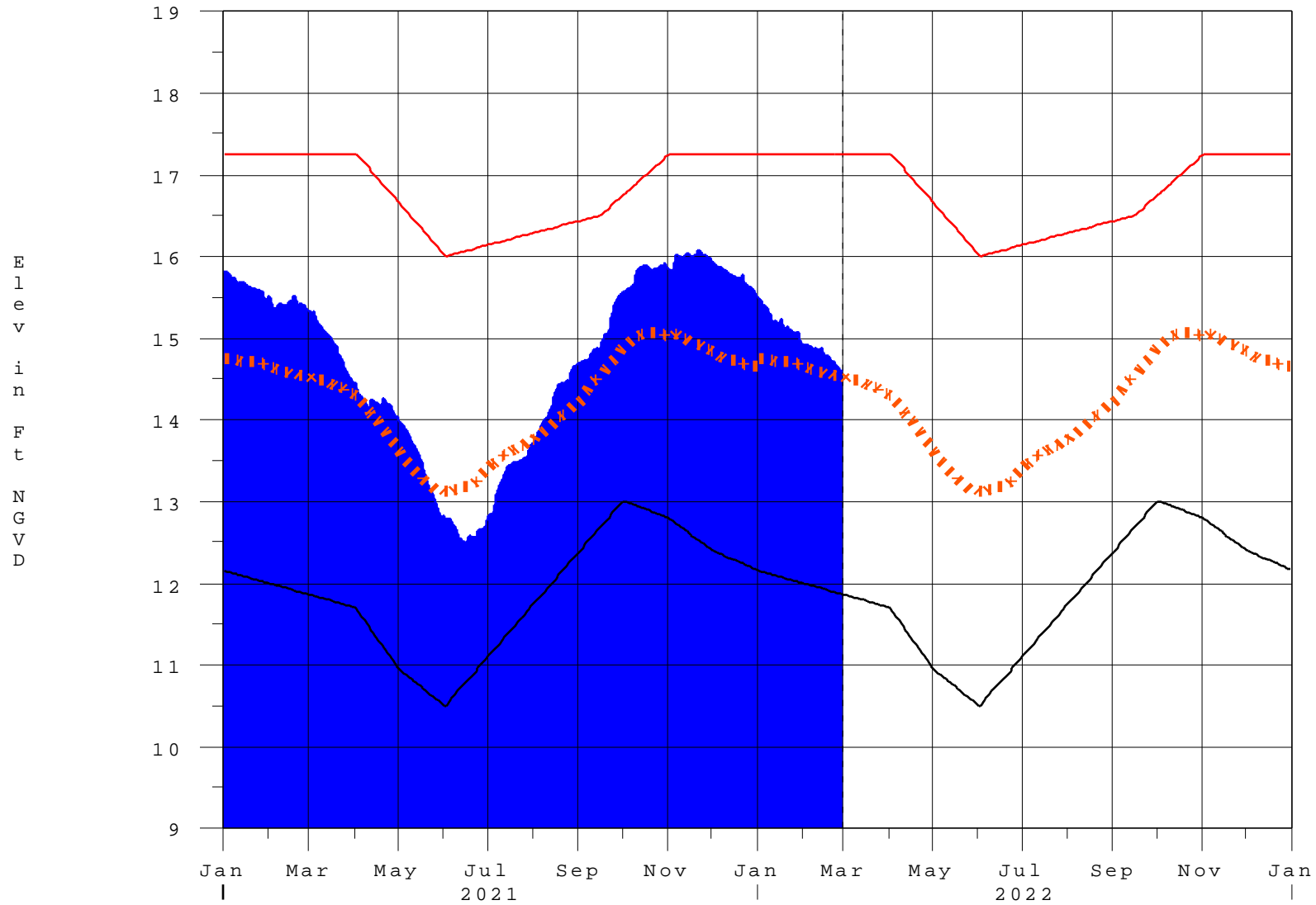
—

* 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

—
Report Generated 28FEB2022 @ 15:38 ** Preliminary Data - Subject to Revision
**

Lake Okeechobee

28FEB22 17:00:22



- 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**

Under Construction