

LORS2008 Implementation on 11/02/2009 (El Nino Condition):

Water Supply Department Technical Input

Water Supply Outlook:

District wide, Raindar rainfall 0.098" for the week ending 11/03/2009. Lake stage on 11/02/2009 is 14.06 ft, down 0.08 ft from last week.

The updated November 2009 SFWMM Position Analysis [percentile graph](#) and [tracking chart](#) for Lake Okeechobee show that the current lake stage is in the Base Flow Band.

The LORS2008 tributary [indices](#) are classified as normal. The PDSI indicates normal condition and the LONIN is dry. The classification is based on the wettest of the two.

Water Supply Risk Evaluation

Area	Indicator	Value	Color Coded Scoring Scheme
LOK	Projected LOK Stage for the next two months	Base Flow	L
	Palmer Index for LOK Tributary Conditions	-1.49 (Near Normal)	L
	CPC Precipitation Outlook	1 month: Above Normal 3 months: Above Normal	L
	LOK Seasonal Net Inflow Forecast AMO warm/ENSO El Nino	2.10 ft (Very Wet)	L
	LOK Multi-Seasonal Net Inflow Forecast AMO warm/ENSO El Nino	6.04 ft (Very Wet)	L
WCAs	WCA 1: 3 Station Average (3 Station 1-7, 1-8T, and 1-9 Average)	Above Line 1 (16.52ft)	L
	WCA 2A: Site 2-17	Above Line 1 (12.87 ft)	L
	WCA-3A: 3 Station Average (3 Station 63, 64, and 65)	Above Line1 (10.31 ft)	L
LEC	Service Area 1	Two days per week watering	L
	Service Area 2	Two days per week watering	L
	Service Area 3	Two days per week watering	L

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Application of the Lake Okeechobee Regulation Schedule (LORS2008) on 11/02/2009 (El Niño Condition)

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 El Nino warm years³ and a sub-sampling of warm years of the Atlantic Multidecadal Oscillation (AMO) in combination with El Nino 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 El Nino ENSO Years ³		Sub-sampling of AMO Warm + El Nino ENSO Years ⁴	
	Value (ft)	Condition	Value (ft)	Condition	Value (ft)	Condition	Value (ft)	Condition
Current (Nov-Apr)	0.58	Dry	0.70	Dry	1.62	Wet	2.10	Very Wet
Multi Seasonal (Nov-Oct)	5.08	Wet	3.41	Wet	3.88	Wet	6.04	Very Wet

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.

[Tributary Hydrologic Conditions Graph:](#)

-1899 cfs 14 day running average for Lake Okeechobee Net Inflow through 11/01/2009.

According to the classification in [Tributary Hydrologic Conditions](#) table, this condition is Dry.

-1.49 for Palmer Index on 10/30/2009.

According to the classification in [Tributary Hydrologic Conditions](#) table, this condition is Near Normal.

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

LORS2008 Classification Tables:

Lake Okeechobee Stage on 11/02/2009

Lake Okeechobee Stage: **14.06 feet**

[USACE Report for Lake Okeechobee](#)

[Lake Okeechobee Stage Hydrograph](#)

Lake Okeechobee Management Zone/Band		Bottom Elevation (feet, NGVD)	Current Lake Stage
High Lake Management Band		17.25	
Operational Band	High sub-band	16.88	
	Intermediate sub-band	16.25	
	Low sub-band	14.50	
Base Flow sub-band		12.86	← 14.06
Beneficial Use sub-band		12.70	
Water Shortage Management Band			

Part C of LORS2008: Discharge to WCA's

Release Guidance Flow Chart Outcome: Maximum releases to WCAs if desirable or with minimum impacts to the Everglades.

Part D of LORS2008: Discharge to Tidewater

Release Guidance Flow Chart Outcome: S-79 Up to 450 cfs and S-80 Up to 200 cfs

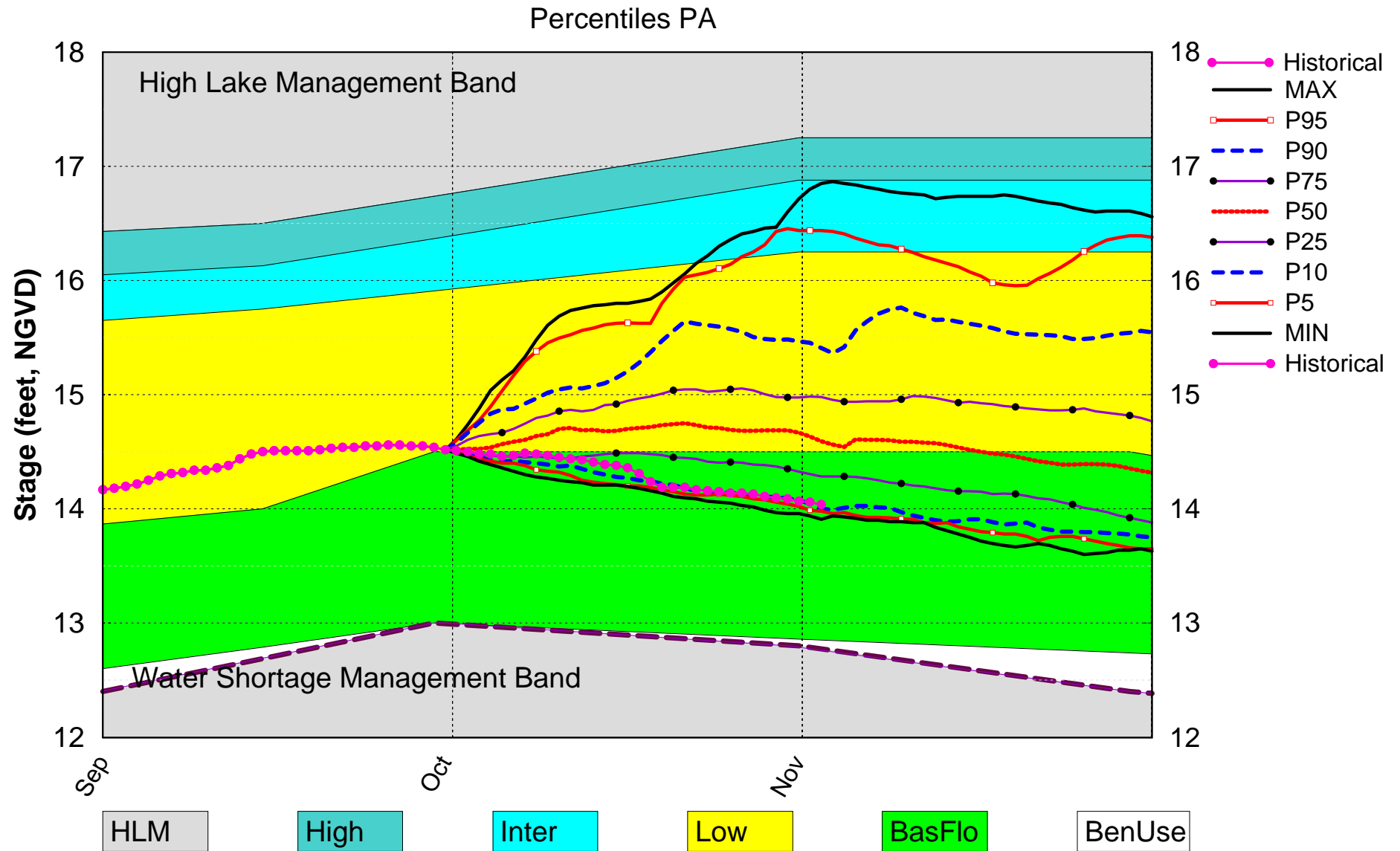
Technical Input Summaries from:

- [Lake Okeechobee Division](#)
- [Coastal Ecosystems](#)
- [Everglades Ecosystems Division](#)
- [Water Supply Department](#)
- [Water Resource Management Release Recommendation](#)
- [Kissimmee Watershed Environmental Conditions](#)
- [Operations Department](#)

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[Back to U.S. Army Corps of Engineers LORSS Homepage](#)

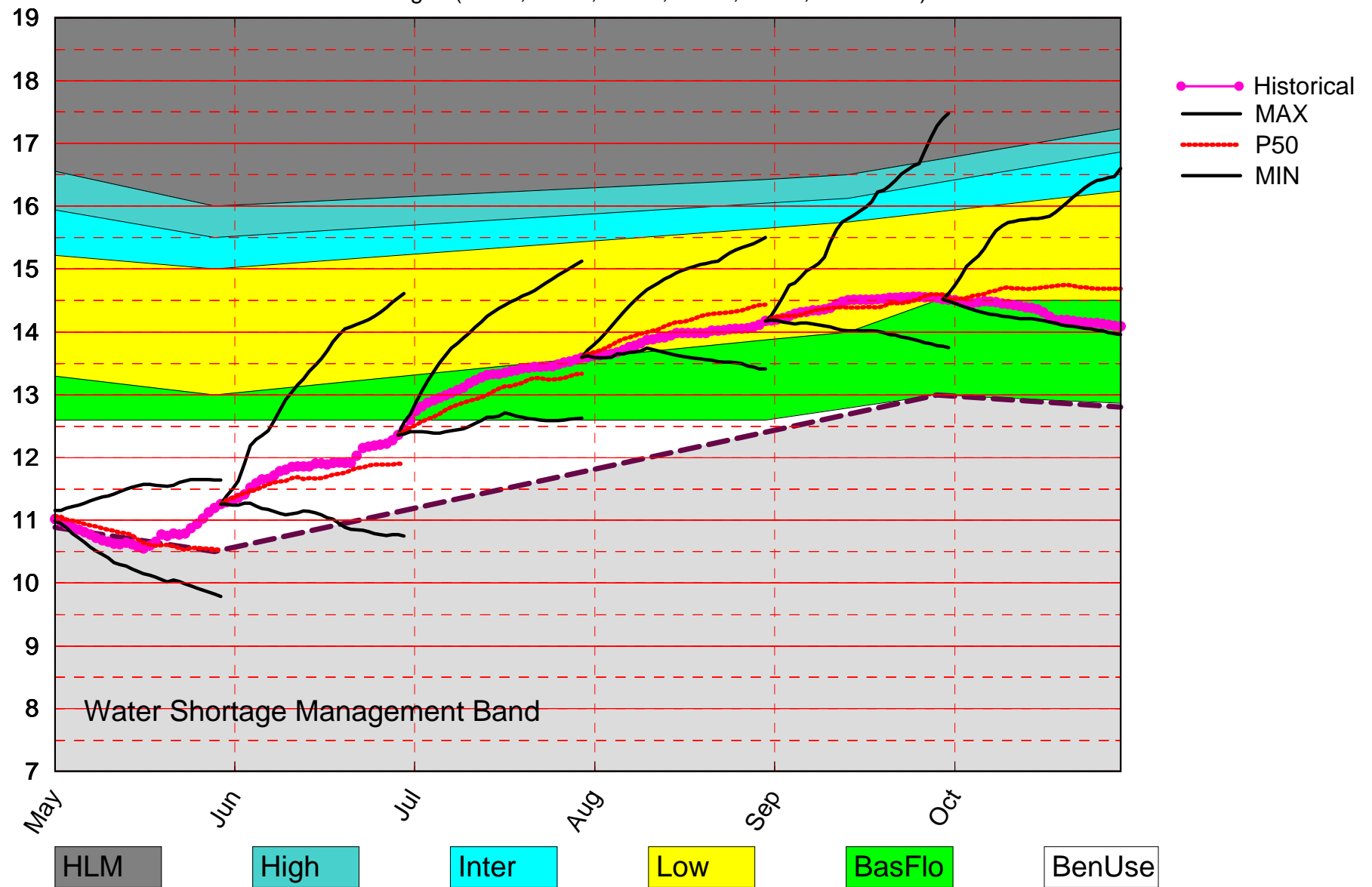
Lake Okeechobee SFWMM October 2009 Position Analysis



(See assumptions on the Position Analysis Results website)

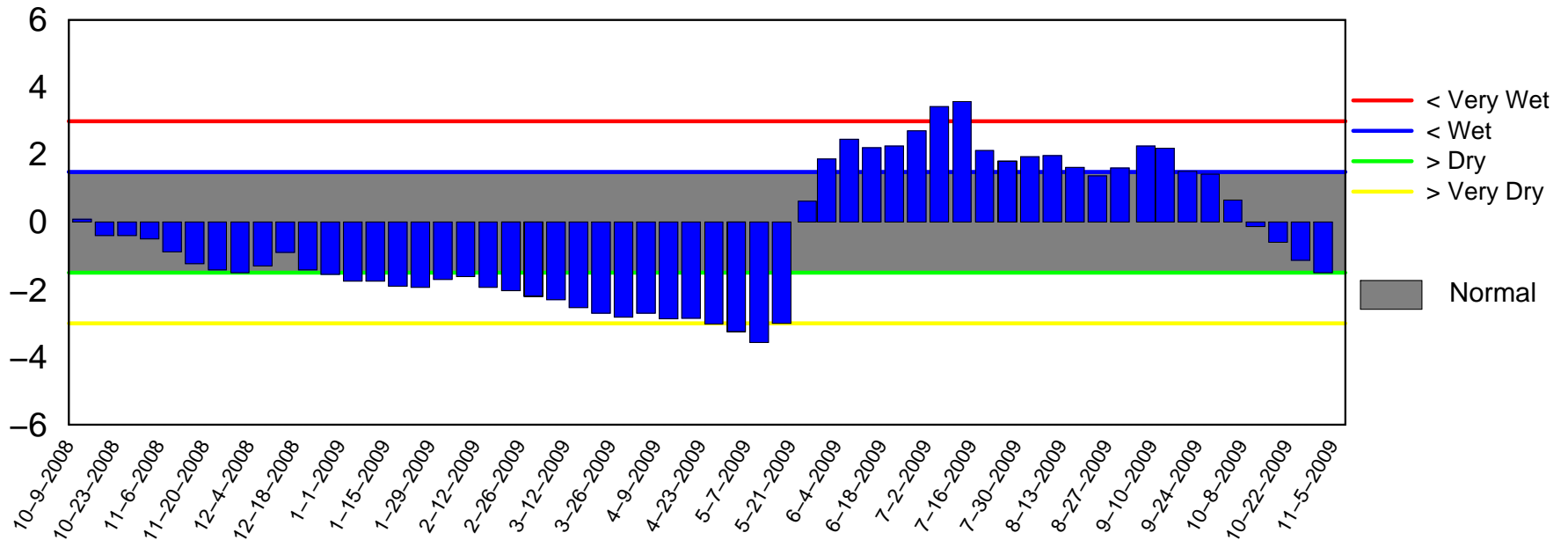
Lake Okeechobee Position Analysis Comparisons May 2009 – Oct 2009

Initialization Stages (11.14; 11.26; 12.36; 13.60; 14.17; 14.52 feet)

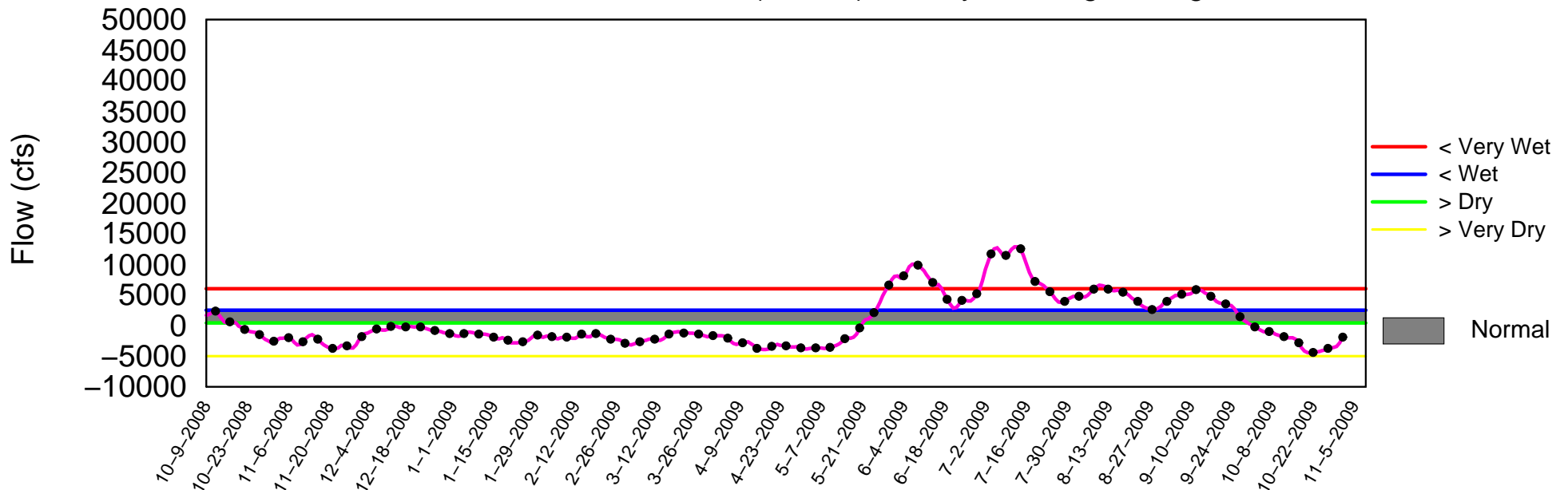


Tributary Basin Condition Indicators as of November 2 2009

Palmer Index



Lake Okeechobee Net Inflow (LONIN) 14-day Running Average



Mon Nov 02 18:25:33 EST 2009

2008 LORS

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

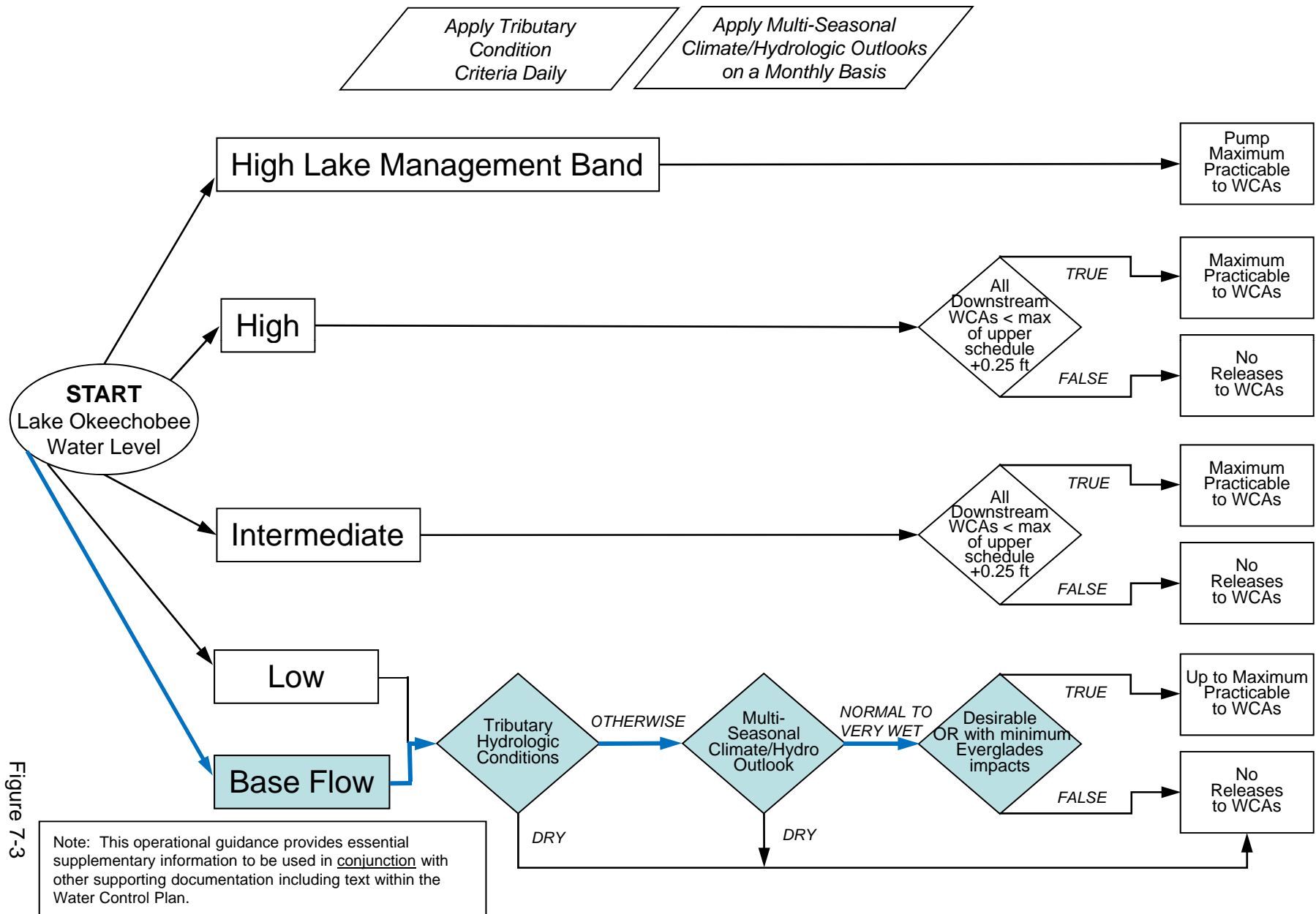


Figure 7-3

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

