

MEMORANDUM

TO: John Mitnik, Assistant Executive Director
THROUGH: Peter Kwiatkowski, Section Administrator, Resource Evaluation
FROM: SFWMD Staff Water Supply Advisory Team
DATE: August 1, 2023
SUBJECT: Water Supply Report

District-wide Conditions

About 80 percent the United States Geological Survey (USGS) real-time wells in the Kissimmee Basin (KB) are in the median and upper percentile ranges for this time of year. The wells in the Upper KB are mostly completed in the Floridan aquifer and the wells in the Lower KB are surficial aquifer system wells. Surface and groundwater levels increased in half of the KB stations over the last seven days.

Upper East Coast (UEC) surface and groundwater levels showed mixed trends during the last week. Stages in UEC canals C-23, C-24, and C-25 are 21.27, 19.41, and 18.29 feet, all above the fourteen feet agricultural cut-off. About 65 percent the UEC wells are in the median and upper percentile ranges for this time of year.

Approximately 40 percent of the surface and groundwater stations in the Lower East Coast recorded increases over the past seven days. About 95 percent of the LEC surficial aquifer system stations are in the median and upper percentile ranges for this time of year.

Groundwater levels decreased in about 65 percent of the Lower West Coast (LWC) stations over the last week. Approximately 65 percent of the surficial aquifer system wells are in the lower percentile ranges for this time of year. Almost 60 percent of the Lower Tamiami aquifer wells are in the lower percentile ranges for this time of year. All but one of the Sandstone aquifer wells are in the lower percentile ranges. Approximately 70 percent of the Mid-Hawthorn aquifer wells are in the lower percentile ranges for this time of year.

Figure 1 shows a statistical comparison between current groundwater levels and long-term historical monthly average groundwater levels at representative wells throughout the District.

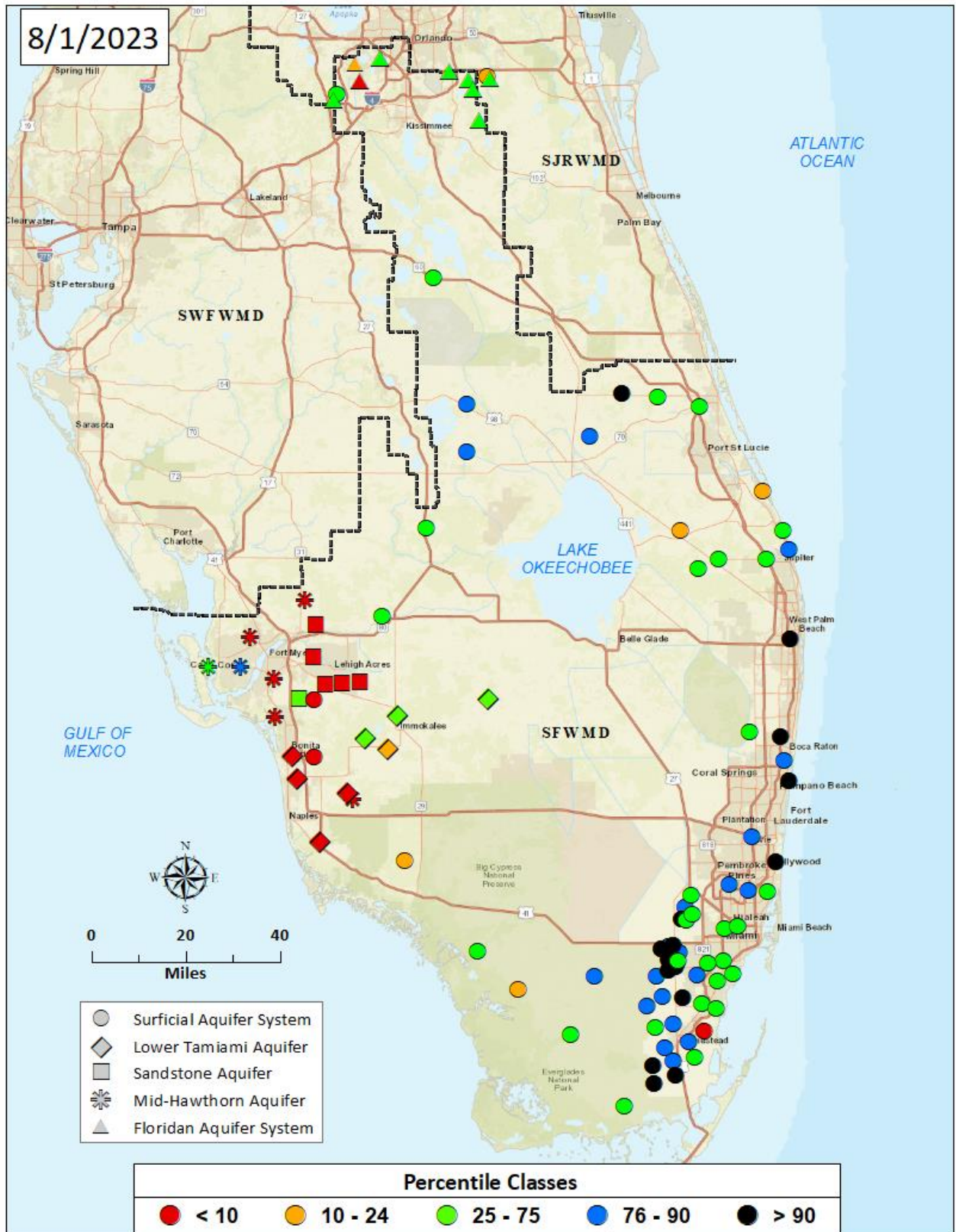


Figure 1. Current Groundwater Level Conditions

Water Supply Technical Input to LORS2008

The projected LOK stage for the next two months is Low Sub-Band, and the risk to water supply is categorized as “low”. The Palmer Drought Index for Lake Okeechobee (LOK) Tributary Conditions was -3.02 which is classified as “Extremely Dry” and is in the “high” risk category for water supply. The Climate Prediction Center’s (CPC) Precipitation Outlook is projected as “equal chances” for one month and the three months, leaving both in the “low” risk category. The LOK Seasonal Net Inflow Outlook is “normal to extremely wet” and is in the “low” risk for water supply. The LOK Multi-Seasonal Net Inflow Outlook is in the “wet” range with “low” risk to water supply. The stages in WCA 1, WCA-2, and WCA-3 are all above line 1 and are in the “low” risk category. The Year-Round Irrigation Rule is in effect for the three LEC Service Areas. All three LEC Service Areas are in the “low” risk category for water supply. **Figure 2** summarizes the water supply risk indicators.

LORS2008 Implementation on 07/31/2023 (ENSO Condition- El Niño):
Status for week ending 07/31/2023*:

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	-3.02 (Extremely Dry)	H	
	CPC Precipitation Outlook	1 month: Equal Chances		L
		3 months: Equal Chances		L
	LOK Seasonal Net Inflow Outlook	2.72 ft	L	
	ENSO Forecast	Normal to Extremely Wet	L	
	LOK Multi-Seasonal Net Inflow Outlook	3.71 ft	L	
ENSO Forecast	Wet	L		
WCAs	WCA 1: Site 1-8C	Above Line 1 (16.10 ft)	L	
	WCA 2A: Site 2-17	Above Line 1 (12.90 ft)	L	
	WCA-3A: 3 Station Average (Sites 63, 64, and 65)	Above Line 1 (10.24 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.

*- S80 flow data for July 25 & 26 is not available from USACE Daily Reports and was substituted with alternative data source from USGS. WCA 1 site 1-8C had no reported data on July 31 and was substituted with the reported value from July 30. WCA 3 site 63 had inconsistent reporting, the average of only sites 64 and 65 were used for this report.

Figure 2. Water Supply Risk Indicators