

MEMORANDUM

TO: John Mitnik, Assistant Executive Director

THROUGH: Peter Kwiatkowski, Section Administrator, Resource Evaluation

FROM: SFWMD Staff Water Supply Advisory Team

DATE: October 24, 2023

SUBJECT: Water Supply Report

District-wide Conditions

Almost 60 percent of 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 water levels decreased in about 90 percent of the KB stations over the last seven days.

Upper East Coast (UEC) surface water levels increased and groundwater levels decreased during the last week. Stages in UEC canals C-23, C-24, and C-25 are 21.75, 19.85, and 20.95 feet, all above the fourteen feet agricultural cut-off. About half of the UEC wells are in the median percentile range for this time of year.

Approximately 95 percent of the surface and groundwater stations in the Lower East Coast recorded decreases over the past seven days. About 90 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 all the Lower West Coast (LWC) stations over the last week. About two-thirds of the surficial aquifer system wells are in the median and upper percentile ranges for this time of year. Almost 40 percent of the Lower Tamiami aquifer wells are in the median and upper percentile ranges. About 60 percent of the Sandstone and 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.

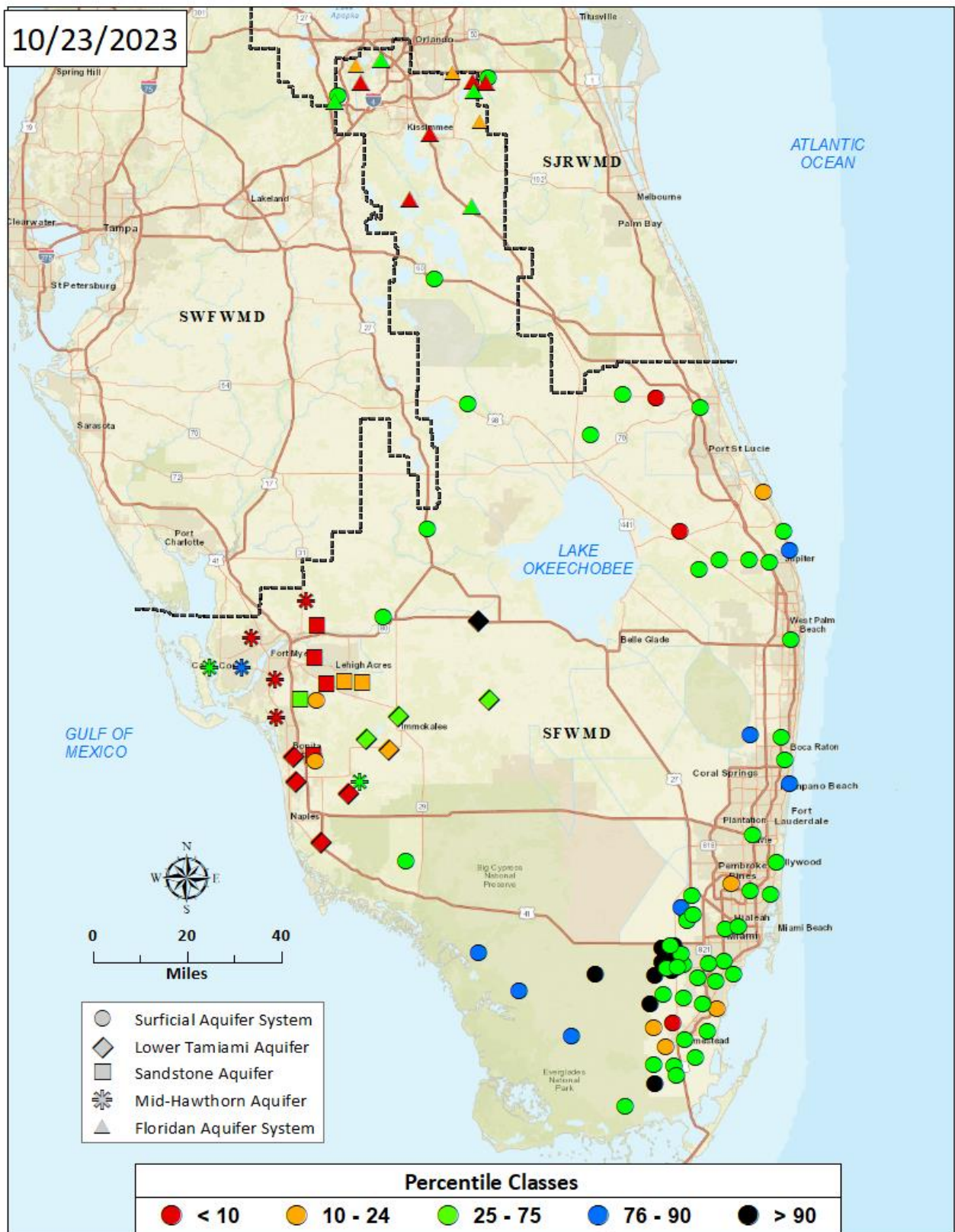


Figure 1. Current Groundwater Level Conditions

Water Supply Technical Input to LORS2008

The projected LOK stage for the next two months is Intermediate Sub-Band, and the risk to water supply is categorized as “low”. The Palmer Drought Index for Lake Okeechobee (LOK) Tributary Conditions is -2.19 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 “above normal” for the one month and 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 “normal” range with “moderate” 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 10/23/2023 (ENSO Condition- El Niño):

Status for week ending 10/23/2023*:

Water Supply Risk Evaluation

Area	Indicator	Value	Color Coded Scoring Scheme
LOK	Projected LOK Stage for the next two months	Intermediate Sub-band	L
	Palmer Drought Index for LOK Tributary Conditions	-2.19 (Extremely Dry)	H
	CPC Precipitation Outlook	1 month: Above Normal	L
		3 months: Above Normal	L
	LOK Seasonal Net Inflow Outlook	2.17 ft	L
	ENSO Forecast	Normal to Extremely Wet	L
	LOK Multi-Seasonal Net Inflow Outlook	2.26 ft	M
WCAs	WCA 1: 3 Station Average (Sites 1-7, 1-8T, and 1-9)	Above Line 1 (17.25 ft)	L
	WCA 2A: Site 2-17	Above Line 1 (13.51 ft)	L
	WCA-3A: 3 Station Average (Sites 63, 64, and 65)	Above Line 1 (11.22 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.

*- L8 Canal Pt flow data for 10/11 & 10/12 is not available from USACE Daily Reports and was substituted with alternative data sources from USGS. Water Supply Risk Evaluation LOK Multi-Seasonal Net Inflow Outlook is based on 7-month window. LORS2008 release guidance is using a 12-month window for evaluation.

Figure 2. Water Supply Risk Indicators