

## MEMORANDUM

**TO:** John Mitnik, Assistant Executive Director

**THROUGH:** Peter Kwiatkowski, Section Administrator, Resource Evaluation

**FROM:** SFWMD Staff Water Supply Advisory Team

**DATE:** August 20, 2024

**SUBJECT:** Water Supply Report

### **District-wide Conditions**

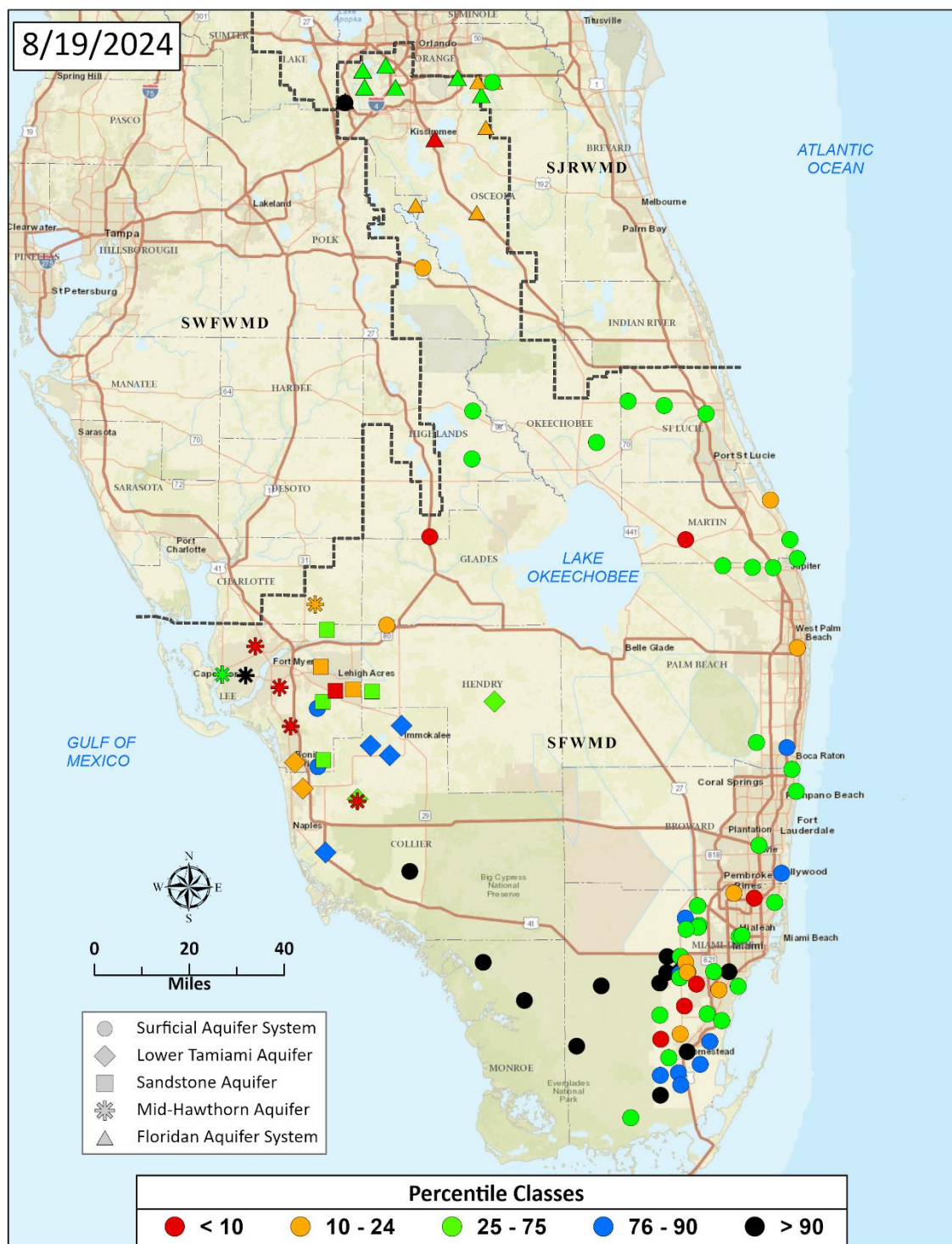
Approximately 40% of United States Geological Survey (USGS) real-time wells in the Kissimmee Basin (KB) are in the lower percentile ranges for this time of year. The wells in the Upper KB are mostly completed in the Floridan aquifer and the wells in the Lower KB are surficial aquifer system wells. Surface and groundwater water levels decreased in 75% of the KB stations over the last seven days.

Upper East Coast (UEC) surface water levels and groundwater levels showed mixed trends during the last week. Stages in UEC canals C-23, C-24, and C-25 are 19.22, 17.30, and 17.11 feet NAVD88 respectively. 70% of the UEC surficial aquifer system wells are in the median and upper percentile ranges for this time of year.

Approximately 70% of the surface and groundwater stations in the Lower East Coast recorded increases over the past seven days. 80% of the LEC surficial aquifer system stations are in the median and upper percentile ranges for this time of year.

Groundwater levels decreased in approximately 80% of the Lower West Coast (LWC) stations over the last week. Approximately 80% of the surficial aquifer system wells are in the median and upper percentile ranges for this time of year. Approximately 70% of the Lower Tamiami aquifer wells are in the median and upper percentile ranges for this time of the year. Approximately 60% of the Sandstone aquifer wells are in the median and upper percentile ranges for this time of year. Approximately 70% 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 LOSOM**

***Please note that Lake Okeechobee System Operating Manual (LOSOM) has replaced LORS08.***

The projected LOK stage for the next two months is Zone-D, and the risk to water supply is currently uncategorized as the caution ranges are being evaluated. The Palmer Drought Index for Lake Okeechobee (LOK) Tributary Conditions is -2.04 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 “above normal” for the three months, leaving the one month outlook in the “low” risk category and the three months outlook 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 stage in WCA 1 is above line 1 and is in the “low” risk category. The stage in WCA 2A is above line 1 and in the “low” risk category. The stage in WCA-3 is above line 1 and is 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.

### **6. Water Supply Risk Evaluation:**

**Status for week ending 8/19/2024\*:**

Area	Indicator	Value	Color Coded Scoring Scheme
LOK	Projected LOK Stage for the next two months	Zone-D	TBD
	Palmer Drought Index for LOK Tributary Conditions	-2.04 (Extremely Dry)	H
	CPC Precipitation Outlook	1 month: Above Normal	L
		3 months: Above Normal	L
	LOK Seasonal Net Inflow Outlook	2.08 ft	L
	ENSO Forecast	Normal to Extremely Wet	L
	LOK Multi-Seasonal Net Inflow Outlook	1.96 ft	M
WCAs	ENSO Forecast	Normal	M
	WCA 1: 3 Station Average (Sites 1-7, 1-8T, and 1-9)	Above Line 1 (16.49 ft) (14.99 ft NAVD88)	L
	WCA 2A: Site 2-17	Above Line 1 (12.75 ft) (11.25 ft NAVD88)	L
	WCA-3A: 3 Station Average (Sites 63, 64, and 65)	Above Line 1 (10.67 ft) (9.17 ft NAVD88)	L

\* S-80 flow data for 8/8-8/9, and 8/12-8/15 is not available from USACE Daily Reports and was assumed to be 0. WCA1, WCA2A, and WCA3A NAVD88 offset of -1.5 is based on Final Regulation Schedule Conversion (5/19/2020). An updated Table A-9 that classifies Lake Okeechobee projected stage for the next two months is forthcoming to meet the updated regulation schedule under LOSOM.

**Figure 2. Water Supply Risk Indicators**