

MEMORANDUM

TO: John Mitnik, Assistant Executive Director

THROUGH: Peter Kwiatkowski, Section Administrator, Resource Evaluation

FROM: SFWMD Staff Water Supply Advisory Team

DATE: April 23, 2024

SUBJECT: Water Supply Report

District-wide Conditions

80% of 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 all of the KB stations over the last seven days.

Upper East Coast (UEC) surface and groundwater levels decreased during the last week. Stages in UEC canals C-23, C-24, and C-25 are 20.32, 17.01, and 16.07 feet, all above the fourteen feet agricultural cut-off. About 50% of the UEC wells are in the median and upper percentile ranges for this time of year.

All of the surface and groundwater stations in the Lower East Coast recorded decreases over the past seven days. 90% 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 95 percent of the Lower West Coast (LWC) stations over the last week. All surficial aquifer system and Lower Tamiami aquifer wells are in the median and upper percentile ranges for this time of year. Approximately 70% of the Sandstone aquifer wells are in the median and upper percentile ranges for this time of the 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.

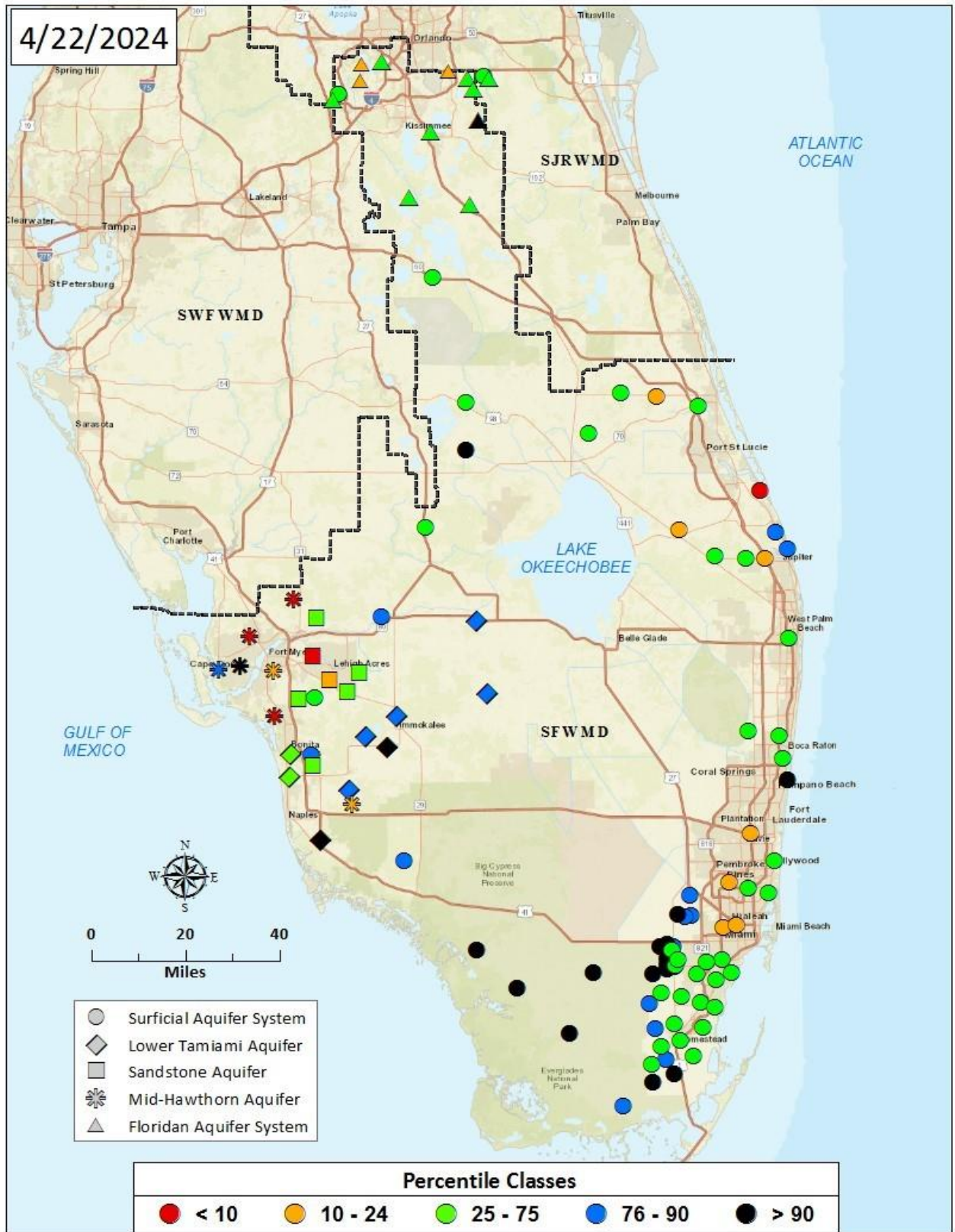


Figure 1. Current Groundwater Level Conditions

Water Supply Technical Input to LORS2008

The projected LOK stage for the next two months is Low Sub-Band, and the risk to water supply is categorized as “moderate”. The Palmer Drought Index for Lake Okeechobee (LOK) Tributary Conditions is -0.84 which is classified as “normal to extremely wet” and is in the “low” risk category for water supply. The Climate Prediction Center’s (CPC) Precipitation Outlook is projected as “equal chances” for the one month and “equal chances” for 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 “normal” range with “moderate” risk to water supply. The stages in WCA 1 and WCA-3 are all above line 1 and are in the “low” risk category. The stage for WCA 2A is below line 2 and in the “high” 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 4/22/2024 (ENSO Condition- El Niño):

Status for week ending 4/22/2024*:

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	-0.84 (Normal to Extremely Wet)	L
	CPC Precipitation Outlook	1 month: Equal chances	L
		3 months: Equal chances	L
	LOK Seasonal Net Inflow Outlook	1.64 ft	L
	ENSO Forecast	Normal to Extremely Wet	L
	LOK Multi-Seasonal Net Inflow Outlook	2.15 ft	M
ENSO Forecast	Normal	M	
WCAs	WCA 1: Site 1-8C	Above Line 1 (16.04 ft) (14.46 ft NAVD88)	L
	WCA 2A: Site S11B	Below Line 2 (10.95 ft) (9.43 ft NAVD88)	H
	WCA-3A: 3 Station Average (Sites 63, 64, and 65)	Above Line 1 (9.68 ft) (8.15 ft NAVD88)	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.

*- S-80 flow data for 4/12, 4/16,4/17, 4/20, and 4/21 is not available from USACE Daily Reports and was assumed to be 0.

Figure 2. Water Supply Risk Indicators