

MEMORANDUM

TO: John Mitnik, Assistant Executive Director

THROUGH: Peter Kwiatkowski, Section Administrator, Resource Evaluation

FROM: SFWMD Staff Water Supply Advisory Team

DATE: August 16, 2022

SUBJECT: Water Supply Report

District-wide Conditions

Figure 1 shows a statistical comparison between current groundwater levels and groundwater levels for this time last year at representative wells throughout the District that collect real-time groundwater levels.

The water levels in about two-thirds of the United States Geological Survey (USGS) real-time wells in the Kissimmee Basin (KB) within the District boundaries are in the lower percentile ranges for this time of year (Figure 1). 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 at every station in the Kissimmee Basin over the last seven days. Floridan aquifer well OSF-70R is in the “red” caution zone.

All the Upper East Coast (UEC) stations groundwater stations decreased over the last week while all the surface water stations increased. Stages in the UEC canals C-23, C-24, and C-25 are 21.34, 19.41, and 20.18 feet, all above the fourteen feet agricultural cut-off. Eighty percent of the UEC surficial aquifer stations are in the lower percentile ranges for this time of year (Figure 1), and surficial aquifer system well STL-213 is in the “yellow” caution zone.

About 70 percent of the surface and groundwater stations in the Lower East Coast (LEC) recorded decreasing trends over the past seven days. S-177 (C-111 basin) and EVER4 (ENP) are in the “yellow” caution zone, and S-176 (C-111 basin) is in the “red” caution zone. The majority the LEC surficial aquifer system stations are in the median and upper percentile ranges for this time of year (Figure 1).

In the Lower West Coast (LWC), about 70 percent of the groundwater stations increased over the last week. About 60 percent of the surficial aquifer system wells and 80 percent of the Lower Tamiami aquifer wells are at median levels or higher for this time of year, with the remainder in the lower percentile ranges (Figure 1). Sixty percent of the Sandstone aquifer wells are in the lower percentile ranges and 70 percent of the Mid-Hawthorn aquifer wells are in the lower percentile ranges (Figure 1). Mid-Hawthorn aquifer well L-742 in Ft Myers is in the “yellow” caution zone and Mid-Hawthorn aquifer well L-4820 in North Cape Coral is in the “red” caution zone.

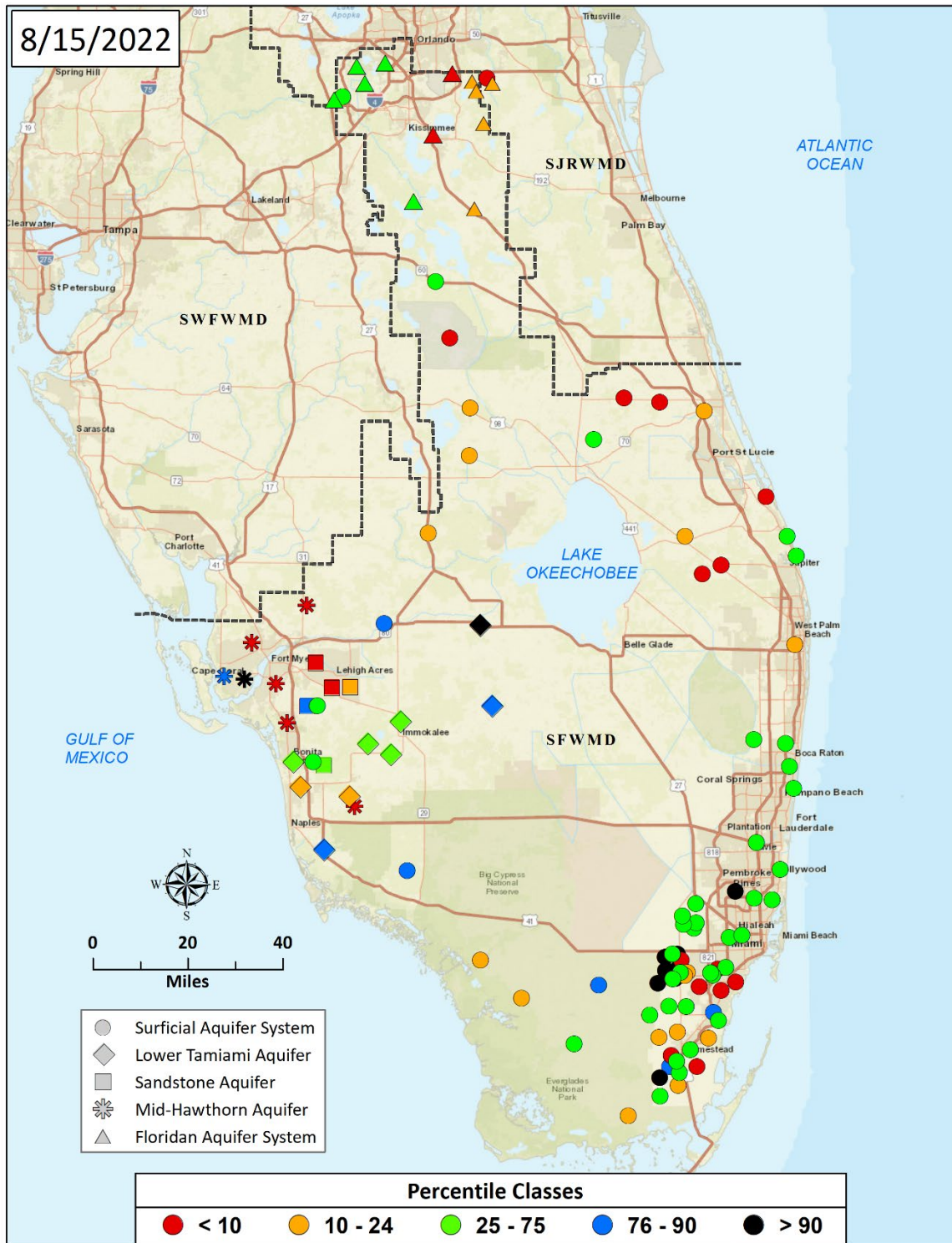


Figure 1. Map showing a statistical comparison between current groundwater levels and groundwater levels for this time last year

Water Supply Technical Input to LORS2008

The Palmer Index for Lake Okeechobee (LOK) Tributary Conditions was -3.71 on August 15, 2022 and is classified as “extremely dry,” and is in the “high” risk category for water supply. The projected LOK stage for the next two months is Base Flow, and the risk to water supply is categorized as “moderate.” The Climate Prediction Center’s (CPC) Precipitation Outlook is projected as “normal” for one month and “above normal” for three months, leaving the one-month outlook in the “low” risk category and three-month outlook in the “low” risk category. The LOK Seasonal Net Inflow Outlook is in the “normal to extremely wet” category and is in the “low” risk category. 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.

Figure 2. Water Supply Risk Indicators

LORS2008 Implementation on 08/15/2022 (ENSO Condition- La Niña Watch)*:

Status for week ending 08/15/2022:

Water Supply Risk Evaluation

Area	Indicator	Value	Color Coded Scoring Scheme
LOK	Projected LOK Stage for the next two months	Base Flow	M
	Palmer Drought Index for LOK Tributary Conditions	-3.71 (Extremely Dry)	H
	CPC Precipitation Outlook	1 month: Normal	L
		3 months: Above Normal	L
	LOK Seasonal Net Inflow Outlook	1.34 ft	L
	ENSO Forecast	Normal to extremely wet	L
	LOK Multi-Seasonal Net Inflow Outlook	1.30 ft	M
WCAs	ENSO Forecast	Normal	M
	WCA 1: Station Average (Sites 1-7, 1-8T, and 1-9)	Above Line 1 (16.35 ft)	L
	WCA 2A: Site 2-17	Above Line 1 (12.32 ft)	L
LEC	WCA-3A: 3 Station Average (Sites 63, 64, and 65)	Above Line 1 (9.64 ft)	L
	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.

*- Flows at S80 not reported from Aug 9, 2022 and were assumed to be zero