

MEMORANDUM

TO: John Mitnik, Assistant Executive Director

THROUGH: Peter Kwiatkowski, Section Administrator, Resource Evaluation

FROM: SFWMD Staff Water Supply Advisory Team

DATE: January 16, 2024

SUBJECT: Water Supply Report

District-wide Conditions

All 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 increased in about 85 percent of the KB stations over the last seven days.

Upper East Coast (UEC) groundwater levels showed mixed trends and surface water levels decreased during the last week. Stages in UEC canals C-23, C-24, and C-25 are 21.54, 19.84, and 21.24 feet, all above the fourteen feet agricultural cut-off. About 85 percent of the UEC wells are in the median and upper percentile ranges for this time of year.

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

Groundwater levels increased in all but one of the Lower West Coast (LWC) stations over the last week. All of the surficial aquifer system, Lower Tamiami aquifer and Sandstone aquifer wells are in the median and upper percentile ranges for this time of year. 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.

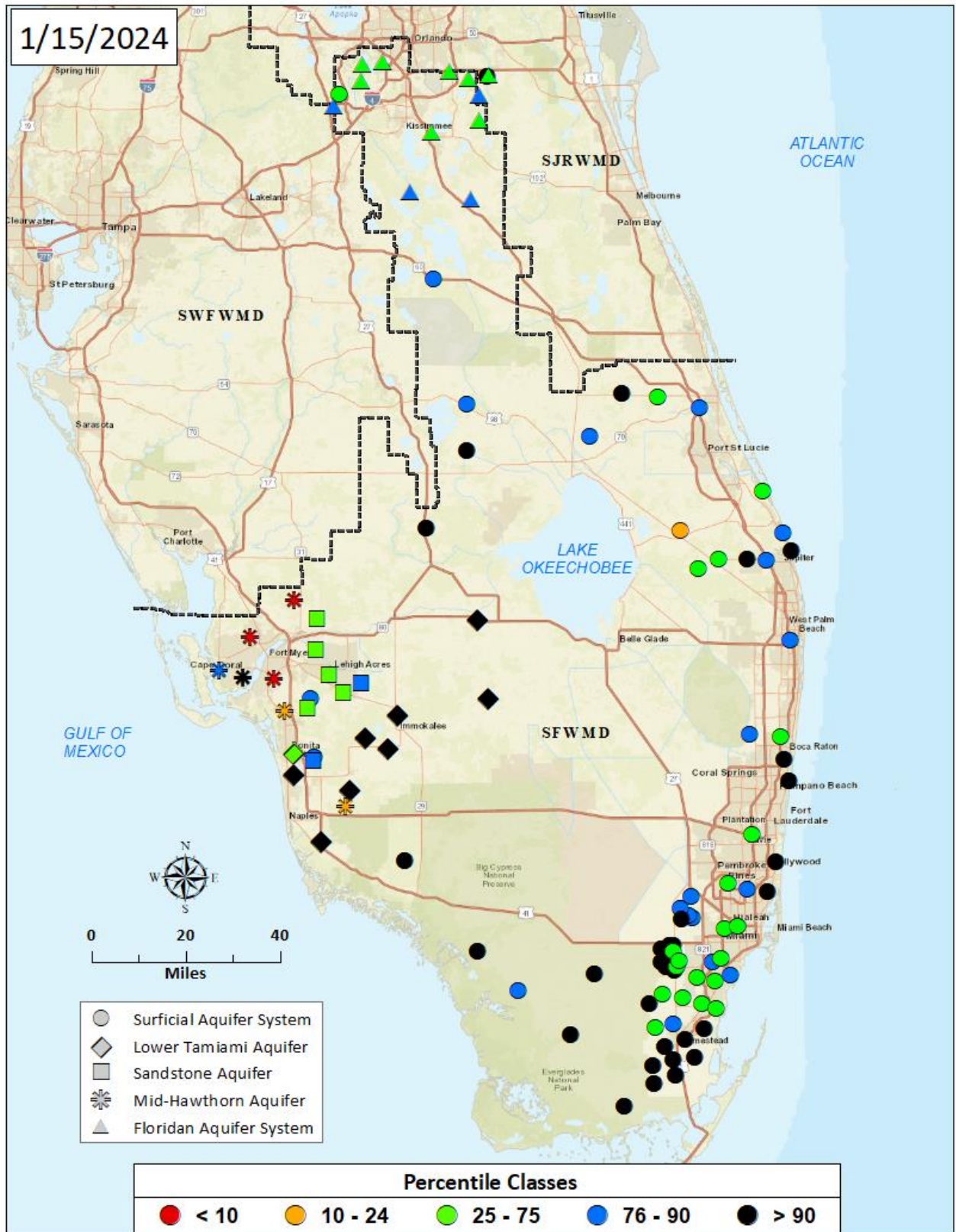


Figure 1. Current Groundwater Level Conditions

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 “moderate”. The Palmer Drought Index for Lake Okeechobee (LOK) Tributary Conditions is 1.13 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 “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 “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 1/15/2024 (ENSO Condition- El Niño):

Status for week ending 1/15/2024*:

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	1.13 (Normal to Extremely Wet)	L
	CPC Precipitation Outlook	1 month: Above Normal	L
		3 months: Above Normal	L
	LOK Seasonal Net Inflow Outlook	1.53 ft	L
	ENSO Forecast	Normal to Extremely Wet	L
	LOK Multi-Seasonal Net Inflow Outlook	3.84 ft	L
Wet		L	
WCAs	WCA 1: Site 1-8C	Above Line 1 (17.40 ft)	L
	WCA 2A: Site 2-17	Above Line 1 (12.95 ft)	L
	WCA-3A: 3 Station Average (Sites 63, 64, and 65)	Above Line 1 (10.69 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 January 10 – January 14, 2024, and S308 flow data for January 12 – January 14, 2024, is not available from USACE Daily Reports and was assumed to be 0. S77 flow data for January 12 – January 14, 2024, was substituted with alternative data sources from USGS. WCA1, 2, and 3 elevation data is not available from January 12 – January 14, 2024, was substituted with the last reported date from January 11, 2024.

Figure 2. Water Supply Risk Indicators