

MEMORANDUM

TO: John Mitnik, Assistant Executive Director

THROUGH: Peter Kwiatkowski, Section Administrator, Resource Evaluation

FROM: SFWMD Staff Water Supply Advisory Team

DATE: December 14, 2021

SUBJECT: Water Supply Report

District-wide Conditions

Surface and groundwater levels showed mixed trends throughout the District over the last week. The majority of the United States Geological Survey (USGS) real-time wells in the Kissimmee Basin (KB) within the District boundaries are at median levels or higher for this time of year, with two wells in the lower percentile ranges for this time of year. The wells in the northern portion of the KB are mostly completed in the Floridan aquifer and the wells in southern KB in the surficial aquifer system. Surface and groundwater levels decreased in all the Kissimmee Basin stations except for S-61 and S-65, which increased by 0.01 ft and 0.04 ft, respectively.

Stages in the Upper East Coast (UEC) canals C-23, C-24, and C-25 are 21.93, 20.54, and 20.67 feet, all above the fourteen feet agricultural cut-off. About 90% of UEC surficial aquifer stations are at median or higher levels, with the remainder in the lower percentile ranges for this time of year. Water levels decreased over the last seven days at about 70% of the Lower East Coast stations. All but one of the Biscayne aquifer wells are at median levels and higher for this time of year. Groundwater levels are on the low side in the C-111 Basin.

Groundwater levels decreased in about 90% of the Lower West Coast (LWC) stations since last week. About 85% the surficial aquifer and Lower Tamiami wells are at median levels and higher for this time of year. Approximately 20% of the Sandstone aquifer wells are in the lower percentile ranges, and the remainder are in the median and higher ranges. All the Mid-Hawthorn aquifer monitor wells decreased since last week; however, 66% of these wells are in the lower percentile ranges, with the remainder recording median to upper percentile range water levels for this time of year. **Figure 1** summarizes current conditions.

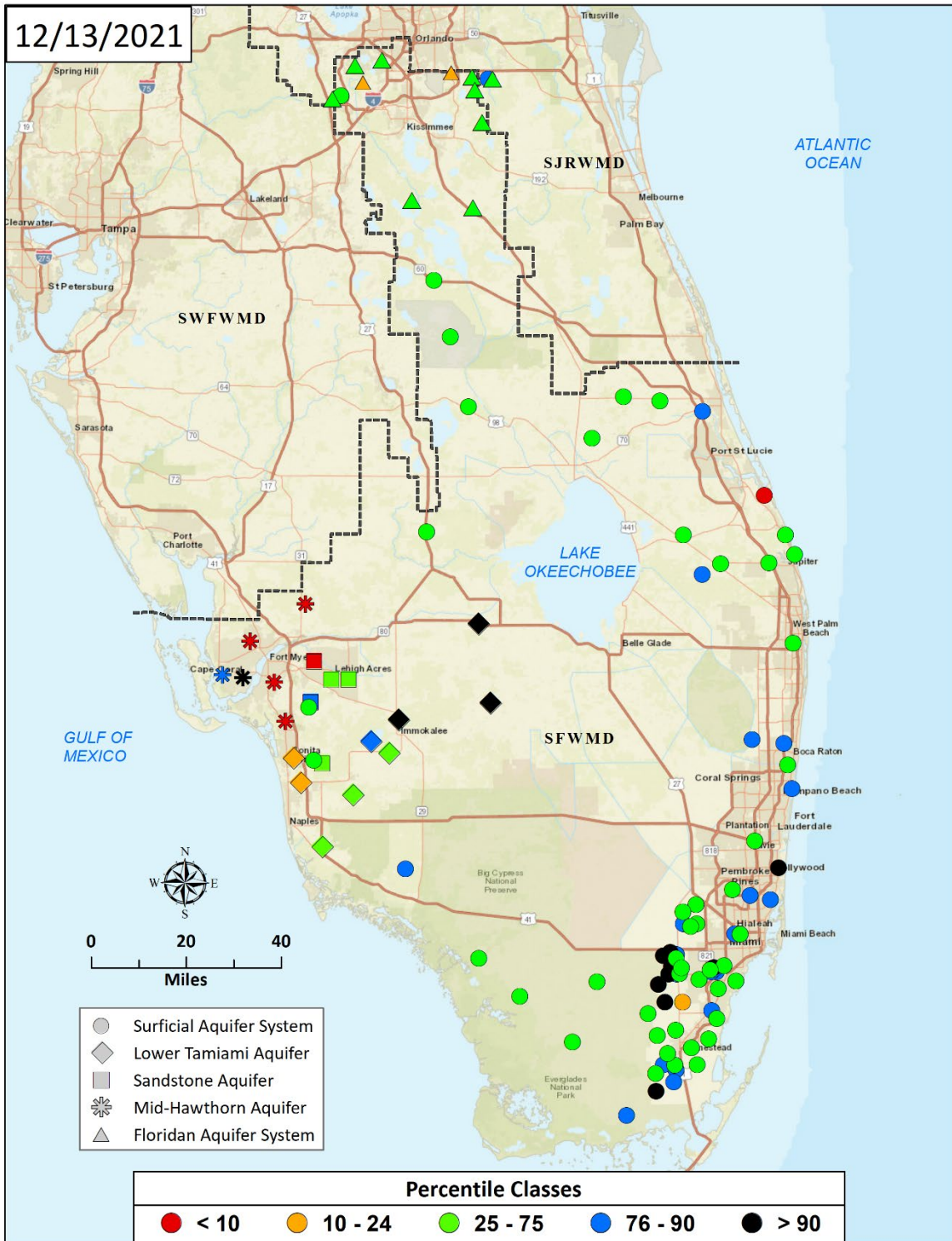


Figure 1. Real-Time Groundwater Level Map

Water Supply Technical Input to LORS2008

The Palmer Index for Lake Okeechobee (LOK) Tributary Conditions was -0.57 on December 13, 2021 and is classified as “normal to extremely wet,” and is in the “low” risk category for water supply. The LOK stage for the next two months is projected to be in the Low Sub-band, and the risk to water supply is categorized as “moderate.” The Climate Prediction Center’s (CPC) Precipitation Outlook is projected as “below normal” for one month and “below normal” for three months, leaving the one-month outlook in the “moderate” risk category and three-month outlook in the “high” risk category. The LOK Seasonal Net Inflow Forecast is in the “extremely dry” category and is in the “high” risk category. The LOK Multi-Seasonal Net Inflow Forecast is in the “normal” range with “moderate” risk to water supply. The stages in WCA 1, WCA 2A and WCA 3A are above line 1 and are in the “low” risk category. Year-Round Irrigation Rule is in effect for the LEC Service Areas. All Service Areas are in the “low” risk category for water supply. **Figure 2** summarizes the water supply risk indicators.

LORS2008 Implementation on 12/13/2021 (ENSO Condition- La Nina Watch):

Status for week ending 12/13/2021:

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	-0.57 (Normal to Extremely Wet)	L
	CPC Precipitation Outlook	1 month: Below Normal	M
		3 months: Below Normal	H
	LOK Seasonal Net Inflow Outlook	-0.44 ft	H
	ENSO Forecast	Extremely Dry	H
	LOK Multi-Seasonal Net Inflow Outlook	2.28 ft	M
ENSO Forecast	Normal	M	
WCAs	WCA 1: 3 Station Average (Sites 1-7, 1-8T and 1-9)	Above Line 1 (17.33 ft)	L
	WCA 2A: Site 2-17	Above Line 1 (13.07 ft)	L
	WCA-3A: 3 Station Average (Sites 63, 64, and 65)	Above Line 1 (10.28 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.

Figure 2. Water Supply Risk Indicators