

MEMORANDUM

TO: John Mitnik, Assistant Executive Director

THROUGH: Peter Kwiatkowski, Section Administrator, Resource Evaluation

FROM: SFWMD Staff Water Supply Advisory Team

DATE: January 28th, 2020

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 and higher for this time of year. These wells are completed in the Floridan and surficial aquifers. The majority of the surface and groundwater stations across the KB recorded decreases in water levels over the last week. Stages in the Upper East Coast (UEC) canals C-23, C-24, and C-25 are 22.78, 20.98, and 22.45 feet, all above the fourteen feet agricultural cut-off. The majority of surficial aquifer stations are in the median ranges in the UEC. Groundwater levels are on the low side in St Lucie County. Surface and groundwater levels increased in over half of the Lower East Coast (LEC) over the past week. Approximately three quarters of the Biscayne aquifer monitor wells are at median levels and higher, with the remainder in the lower percentile ranges.

Groundwater levels decreased across most of the Lower West Coast (LWC) stations over the last seven days. About eighty percent of the Surficial aquifer wells are at median levels and higher, with the remainder in the lower percentile ranges. Approximately eighty percent of the Lower Tamiami aquifer wells are at median levels and higher for this time of year, with the remainder in the lower percentile ranges. About sixty percent of the Sandstone aquifer monitor wells are at median levels, with the remainder in the lower percentile ranges. Approximately sixty percent of the Mid-Hawthorn aquifer monitor wells are in the lower percentile ranges, with the remainder at median levels and higher. **Figure 1** summarizes current water level conditions.

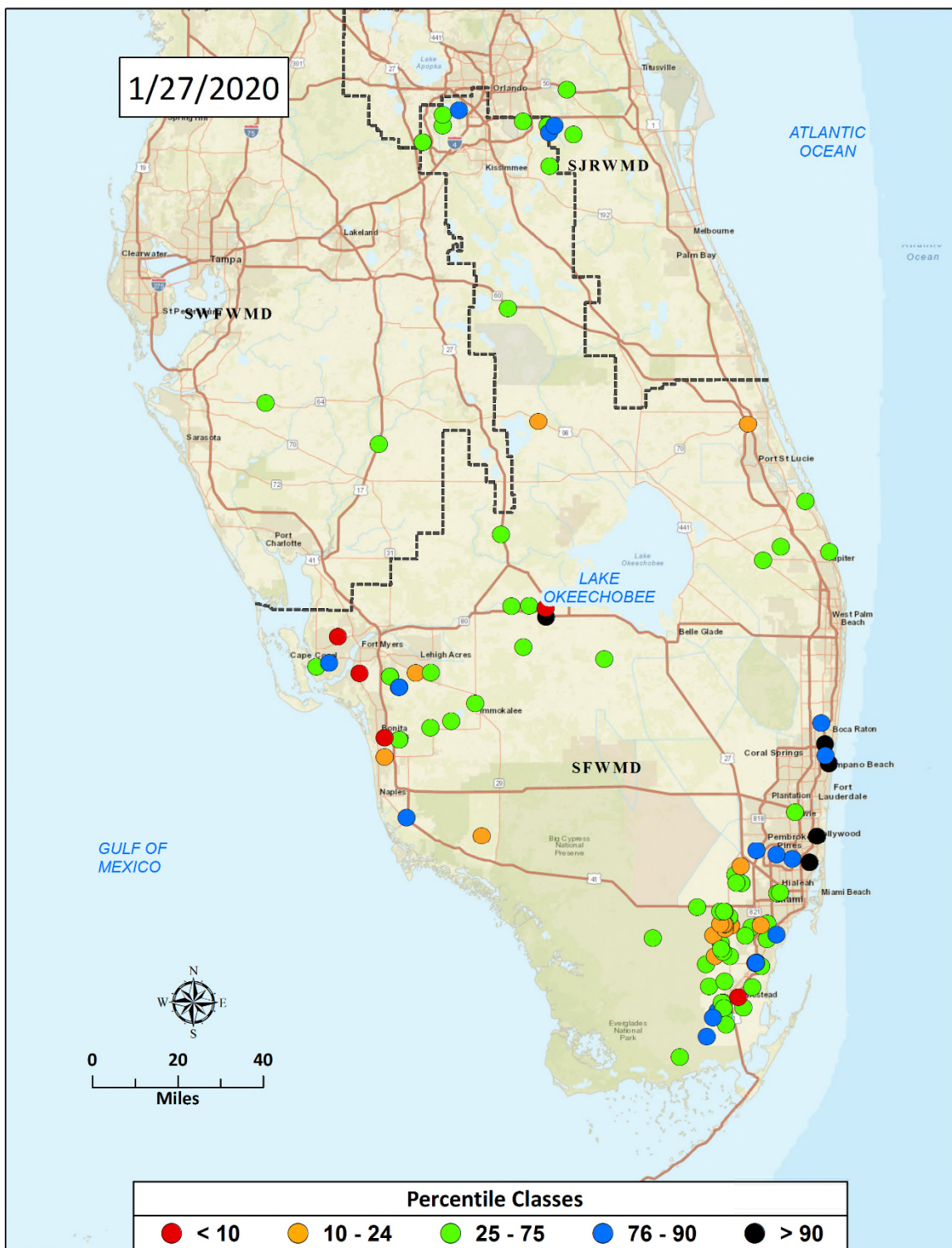


Figure 1. Real-Time Groundwater Level Map

Water Supply Technical Input to LORS2008

The Palmer Index for Lake Okeechobee (LOK) Tributary Conditions is -1.41 classified as “dry,” and is in the “moderate” risk category for water supply. The LOK stage for the next two months is projected to be in the Base-Flow Sub-Band, and the risk to water supply is categorized as “moderate.” The Climate Prediction Center’s (CPC) Precipitation Outlook is projected as “above normal” for one month and “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 Forecast is in the “dry” range, with “moderate” risk to water supply. The Multi-Seasonal Net Inflow Forecast is projected as “normal” with “moderate” risk to water supply. The stages in WCA 1, WCA 2A, and WCA 3A are all above line 1 and in the “low” risk category. Year-Round Irrigation Rule is in effect for the LEC Service Areas. **Figure 2** summarizes the water supply risk indicators.

LORS2008 Implementation on 01/27/2020 (ENSO Neutral Condition):

Status for week ending 01/27/2020:

Water Supply Risk Evaluation

Area	Indicator	Value	Color Coded Scoring Scheme
LOK	Projected LOK Stage for the next two months	Base-Flow Sub-Band	M
	Palmer Index for LOK Tributary Conditions	-1.41 (Dry)	M
	CPC Precipitation Outlook	1 month: Above Normal	L
		3 months: Normal	L
	LOK Seasonal Net Inflow Outlook	0.59 ft (Dry)	M
	ENSO Forecast (positive)		
	LOK Multi-Seasonal Net Inflow Outlook		
WCAs	ENSO Forecast (positive)	2.94 ft (Normal)	M
	WCA 1: 3 Station Average (Site 1-7, Site 1-8T & Site 1-9)	Above Line 1 (16.61 ft)	L
	WCA 2A: Site 2-17 HW	Above Line 1 (11.87 ft)	L
	WCA-3A: 3 Station Average (Site 63, 64, and 65)	Above Line 1 (9.43 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