

MEMORANDUM

TO: John Mitnik, Division Director, Operations, Engineering, and Construction

THROUGH: Peter Kwiatkowski, Section Administrator, Resource Evaluation

FROM: SFWMD Staff Water Supply Advisory Team

DATE: February 5th, 2019

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. The majority of surface water and groundwater stations across the KB recorded increases in water levels over the last week. Stages in the Upper East Coast (UEC) canals C-23, C-24, and C-25 are at 22.53, 20.94, and 21.67 feet, all above the fourteen feet agricultural cut-off. The recent rain has eased the lower groundwater levels in UEC surficial aquifer wells in the coastal areas. Most stations are at median levels and higher. Surface and groundwater levels increased in about one third of the Lower East Coast (LEC) stations over the past week. About sixty percent of the Biscayne aquifer monitor wells are at median levels with the remainder mostly in the upper percentile ranges for this time of year.

Groundwater levels increased in most the stations in the Lower West Coast (LWC) over the last seven days. Approximately sixty percent of the wells in the Surficial aquifer are in their median percentile ranges, with the remainder in the upper percentile ranges. About seventy percent of the Lower Tamiami aquifer wells are at median levels for this time of year, with the remainder in the lower percentile ranges. Approximately eighty percent of the Sandstone aquifer monitor wells are at median levels, with the remainder in the upper percentile ranges. About sixty percent of the Mid-Hawthorn aquifer monitor wells are in the lower percentile ranges, with the remainder split between median levels and the upper percentile ranges. The Mid Hawthorn aquifer is the deepest aquifer covered in this hydrologic update and takes the longest to recharge in response to the recent rainfall. **Figure 1** summarizes current water level conditions.

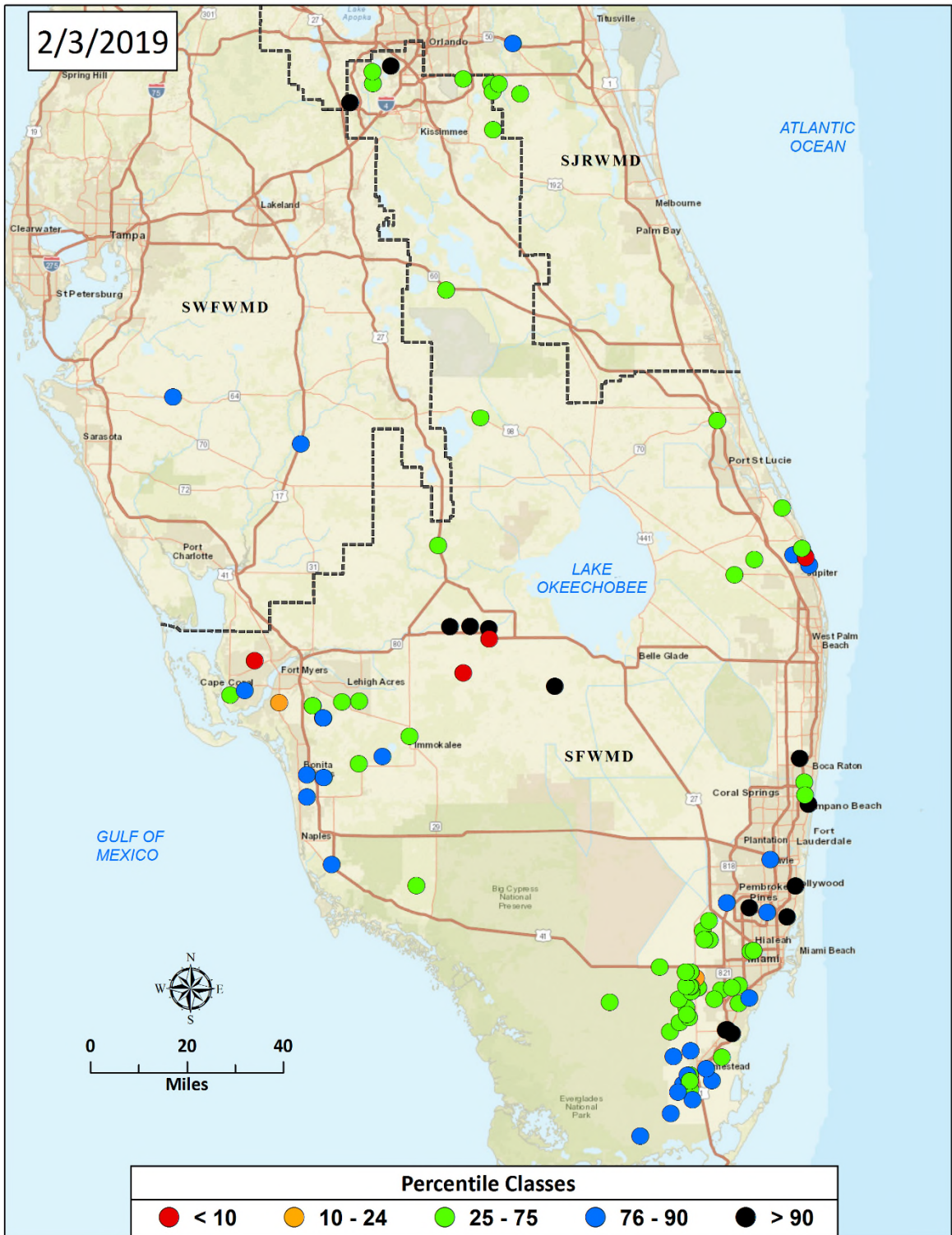


Figure 1. Real-Time Groundwater Level Map

Water Supply Technical Input to LORS2008

The Palmer Index for Lake Okeechobee (LOK) Tributary Conditions is 0.29 classified as “normal,” and is in the “low” risk category. 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 “normal” for one month and “above normal” for three months, leaving both the one-month outlook and three-month outlook in the “low” risk category. The LOK Seasonal Net Inflow Forecast is in the “wet” range, with “low” risk to water supply. The Multi-Seasonal Net Inflow Forecast is projected as “wet” with “low” risk to water supply. The stages in all Water Conservation Areas are 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 02/04/2019 (ENSO Neutral Condition):

Status for week ending 02/04/2019:

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	0.29 (Normal)	L
	CPC Precipitation Outlook	1 month: Normal	L
		3 months: Above Normal	L
	LOK Seasonal Net Inflow Outlook	1.52 ft	L
	ENSO Forecast (positive)	(Wet)	
WCAs	LOK Multi-Seasonal Net Inflow Outlook	3.48 ft (Wet)	L
	ENSO Forecast (positive)		
	WCA 1: Site 1-7, Site 1-8T, & Site 1-9 Average	Above Line 1 (16.54 ft)	L
	WCA 2A: Site 2-17 HW	Above Line 1 (12.36 ft)	L
	WCA-3A: 3 Station Average (Site 63, 64 and 65)	Above Line 1 (9.57 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