

MEMORANDUM

TO: John Mitnik, Assistant Executive Director

THROUGH: Peter Kwiatkowski, Section Administrator, Resource Evaluation

FROM: SFWMD Staff Water Supply Advisory Team

DATE: April 28th, 2020

SUBJECT: Water Supply Report

District-wide Conditions

Surface and groundwater levels showed mixed trends throughout the District over the last week. Approximately three quarters of the United States Geological Survey (USGS) real-time wells in the Kissimmee Basin (KB) within the District boundaries are at median levels for this time of year, with the remainder in the lower percentile ranges. These wells are completed in the Floridan and surficial aquifers. About one third of the surface and groundwater stations across the KB recorded decreases in water levels over the last week.

Lake Istokpoga is at regulation schedule and G207 and G208 pump stations have been secured. Lake Okeechobee stage is 11.46 feet and is in the Beneficial Use Sub Band. The rain this past week eased the situation a little in the Kissimmee Basin and Upper East Coast areas.

Stages in the Upper East Coast (UEC) canals C-23, C-24, and C-25 are 23.09, 20.06, and 19.79 feet, all above the fourteen feet agricultural cut-off. Most of surficial aquifer stations have recovered to median levels in the UEC with the recent rains. Surface and groundwater levels decreased in about three quarters of the Lower East Coast (LEC) stations over the past week. Over fifty percent of the Biscayne aquifer monitor wells are in the lower percentile ranges, with most of the remainder at median levels. The seasonal agricultural drawdown has now ended in southern Miami-Dade.

Groundwater levels decreased in about half of the Lower West Coast (LWC) stations over the last seven days. Water Shortage restrictions are in effect for Lee County at this time. About sixty percent of the Surficial aquifer wells are in the lower percentile ranges, with the remainder at median levels. Approximately seventy percent of the Lower Tamiami aquifer wells are at median levels for this time of year, with the remaining half in the lower percentile ranges. About twenty 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 the upper percentile ranges. **Figure 1** summarizes current conditions.

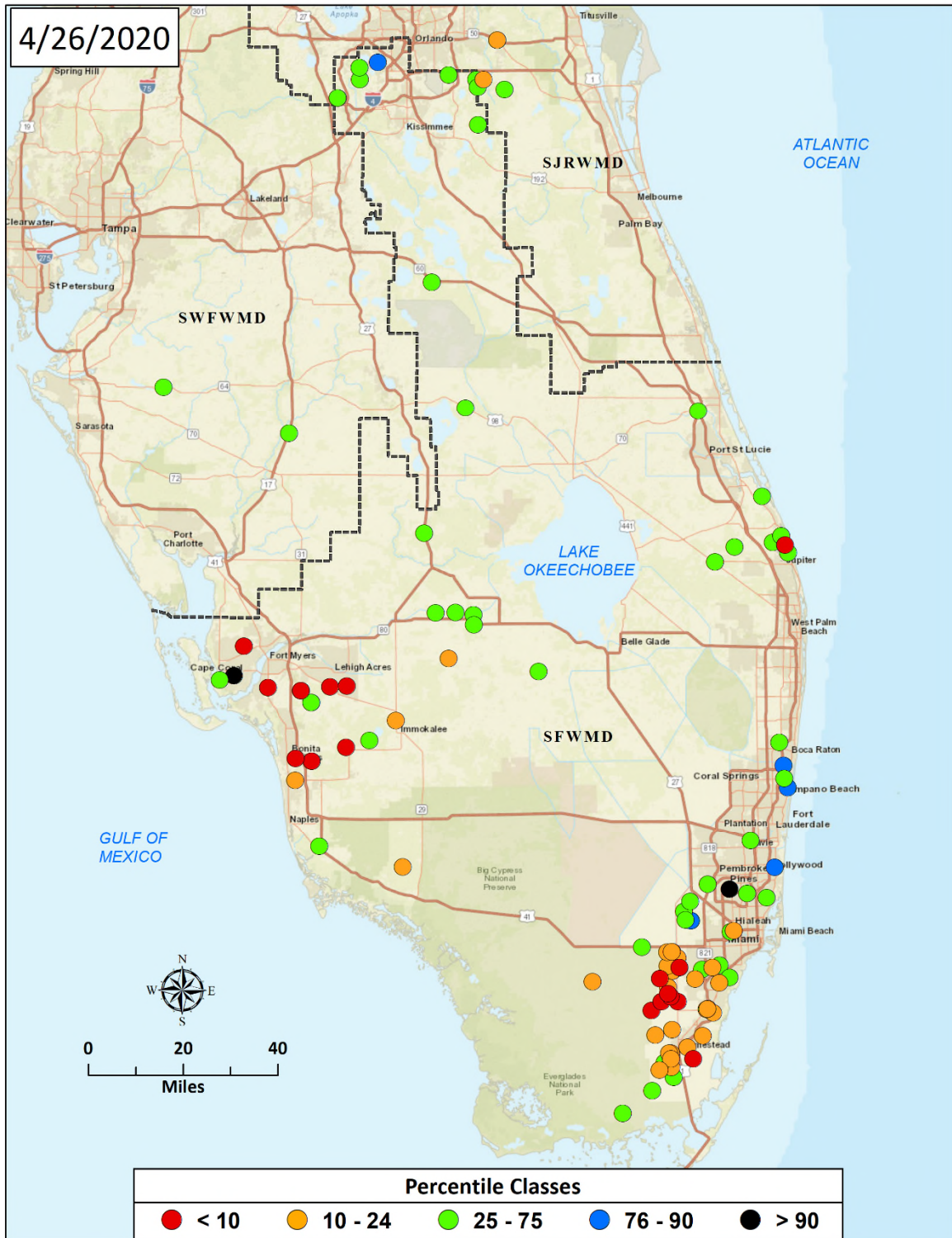


Figure 1. Real-Time Groundwater Level Map

Water Supply Technical Input to LORS2008

The Palmer Index for Lake Okeechobee (LOK) Tributary Conditions is -2.32 classified as “extremely dry,” and is in the “high” risk category for water supply. The LOK stage for the next two months is projected to be in the Beneficial Use Band, and the risk to water supply is categorized as “high.” The Climate Prediction Center’s (CPC) Precipitation Outlook is projected as “above 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 “normal to extremely wet” category and is in the “low” risk category. The Multi-Seasonal Net Inflow Forecast is in the “normal” range with “moderate” risk to water supply. The stage in WCA 1 is above line 1 and is in the “low” risk category. WCA 2A stage is below Line 2 and is in the “high” risk category. Average stage in WCA-3A is between Line 1 and Line 2 and is in the “moderate” risk category for water supply. Year-Round Irrigation Rule is in effect for the LEC Service Areas. Service Area 1 (Palm Beach) is in the “low” risk category, Service Area 2 (Broward) is in the “high” risk category and Service Area 3 (Miami-Dade) is the “high” risk category for water supply. **Figure 2** summarizes the water supply risk indicators.

LORS2008 Implementation on 04/27/2020 (ENSO Neutral Condition):

Status for week ending 4/27/2020:

Water Supply Risk Evaluation

Area	Indicator	Value	Color Coded Scoring Scheme
LOK	Projected LOK Stage for the next two months	Beneficial Use Sub band	H
	Palmer Index for LOK Tributary Conditions	-2.32 (Extremely Dry)	H
	CPC Precipitation Outlook	1 month: Above Normal	L
		3 months: Above Normal	L
	LOK Seasonal Net Inflow Outlook	2.07 ft	L
	ENSO Forecast (positive)	(Normal to Extremely Wet)	
	LOK Multi-Seasonal Net Inflow Outlook	2.63 ft (Normal)	M
WCAs	ENSO Forecast (positive)		
	WCA 1: Site 1-8C	Above Line 1 (15.94 ft)	L
	WCA 2A: Site S-11B	Below Line 2 (10.04 ft)	H
LEC	WCA-3A: 3 Station Average (Site 63, 64, and 65)	Line 1- Line 2 (8.52 ft)	M
	Service Area 1	Year-Round Irrigation Rule in effect	L
	Service Area 2	Year-Round Irrigation Rule in effect	H
	Service Area 3	Year-Round Irrigation Rule in effect	H

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