

MEMORANDUM

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

THROUGH: Peter Kwiatkowski, Section Administrator, Resource Evaluation

FROM: SFWMD Staff Water Supply Advisory Team

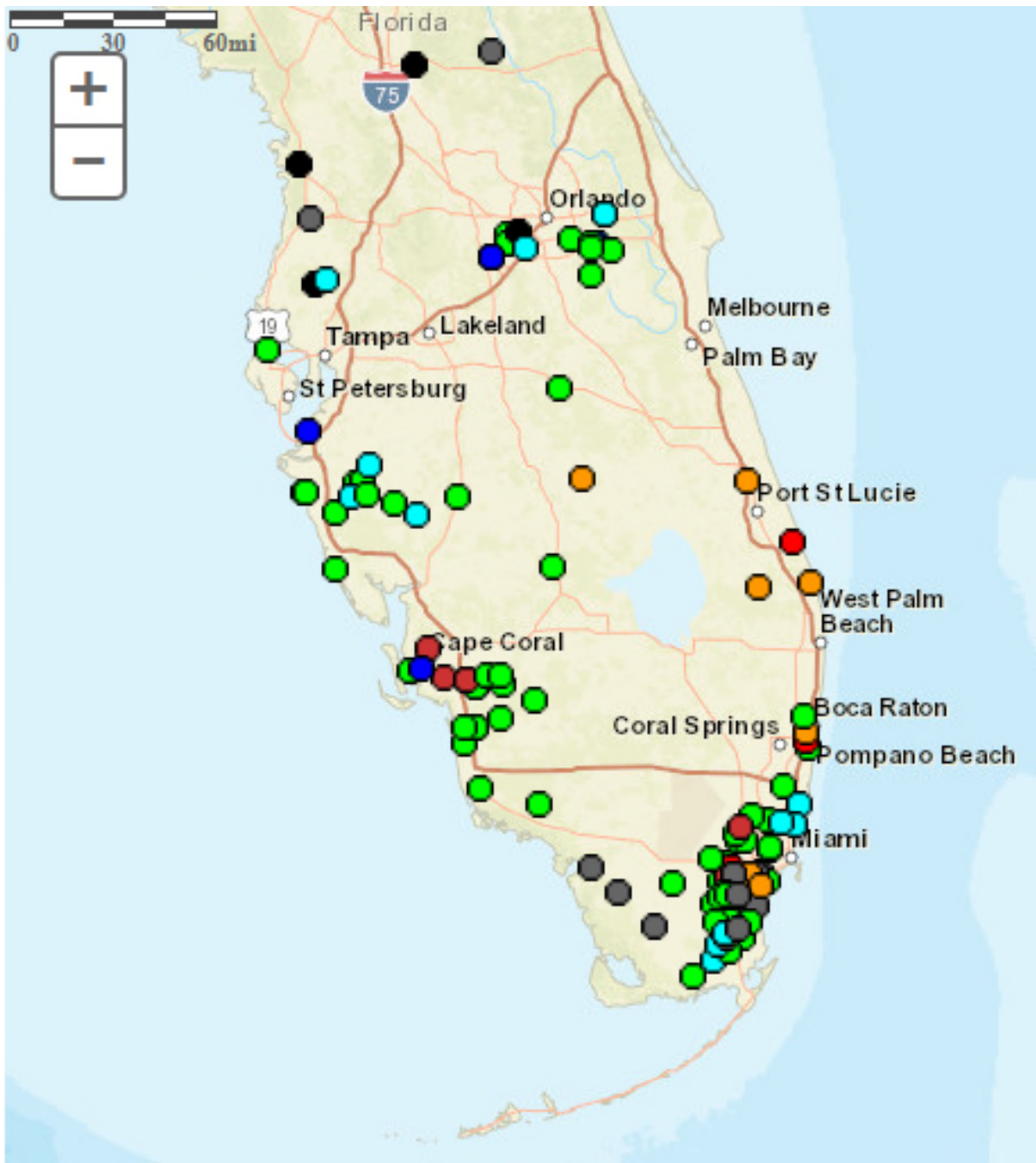
DATE: December 26th, 2018

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 medians 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 21.63, 19.44, and 20.72 feet, all above the fourteen feet agricultural cut-off. UEC surficial aquifer wells are mostly in their lower percentile ranges. Surface and groundwater levels increased in about fifty percent of the Lower East Coast (LEC) stations over the past week. About two thirds of the Biscayne aquifer monitor wells are at median levels and higher, with the remainder in the lower percentile ranges for this time of year.

Groundwater levels increased in the majority of the stations in the Lower West Coast (LWC) over the last seven days. The majority of the wells in the Surficial aquifer are in their median percentile ranges. About eighty 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 two thirds of the Sandstone aquifer monitor wells are at median levels, with the remainder also in the lower percentile ranges. About two thirds 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.



Explanation - Percentile classes (symbol color based on most recent measurement)

Low	<10	10-24	25-75	76-90	>90	High	Not Ranked
	Much Below Normal	Below Normal	Normal	Above Normal	Much Above Normal		

Figure 1. [Florida Real-Time Groundwater Level Network Map](#)

Water Supply Technical Input to LORS2008

The Palmer Index for Lake Okeechobee (LOK) Tributary Conditions is -2.07 classified as “extremely dry,” and is in the “high” risk category. The LOK stage for the next two months is projected to be in the Beneficial Use Sub-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” range, with “low” risk to water supply. The Multi-Seasonal Net Inflow Forecast is projected as “wet” with “low” risk to water supply. The stage in Water Conservation Area 1 is in the “moderate” risk category. Stages in Water Conservation Areas 2A and 3A are above line 1 and are 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 12/24/2018 (ENSO Neutral Condition):

Status for week ending 12/24/2018:

District wide, Raindar rainfall was 1.03 inches for the week. Lake stage on 12/24/2018 was 12.74 ft, NGVD, down 0.05 ft from last week. The updated December Mid-Month 2018 SFWMM Dynamic Position Analysis [percentile graph](#) for Lake Okeechobee show that the current lake stage is in the Base Flow Sub-band. The LORS2008 Tributary Hydrologic Condition (THC) is classified as **Dry**. The PDSI indicates dry conditions and the LONIN is dry. The THC classification is based on the wetter of the two [indices](#).

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	-2.07 (Extremely Dry)	H
	CPC Precipitation Outlook	1 month: Above Normal	L
		3 months: Above Normal	L
	LOK Seasonal Net Inflow Outlook	1.12 ft (Normal)	L
	LOK Multi-Seasonal Net Inflow Outlook	3.88 ft (Wet)	L
		ENSO Forecast (positive)	
WCAs	WCA 1: Site 1-7, Site 1-8T, & Site 1-9 Average	Line 1- Line 2 (16.24 ft)	M
	WCA 2A: Site 2-17 HW	Above Line 1 (12.12 ft)	L
	WCA-3A: 3 Station Average (Site 63, 64 and 65)	Above Line 1 (9.51 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