

MEMORANDUM

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

THROUGH: Peter Kwiatkowski, Section Administrator, Resource Evaluation

FROM: SFWMD Staff Water Supply Advisory Team

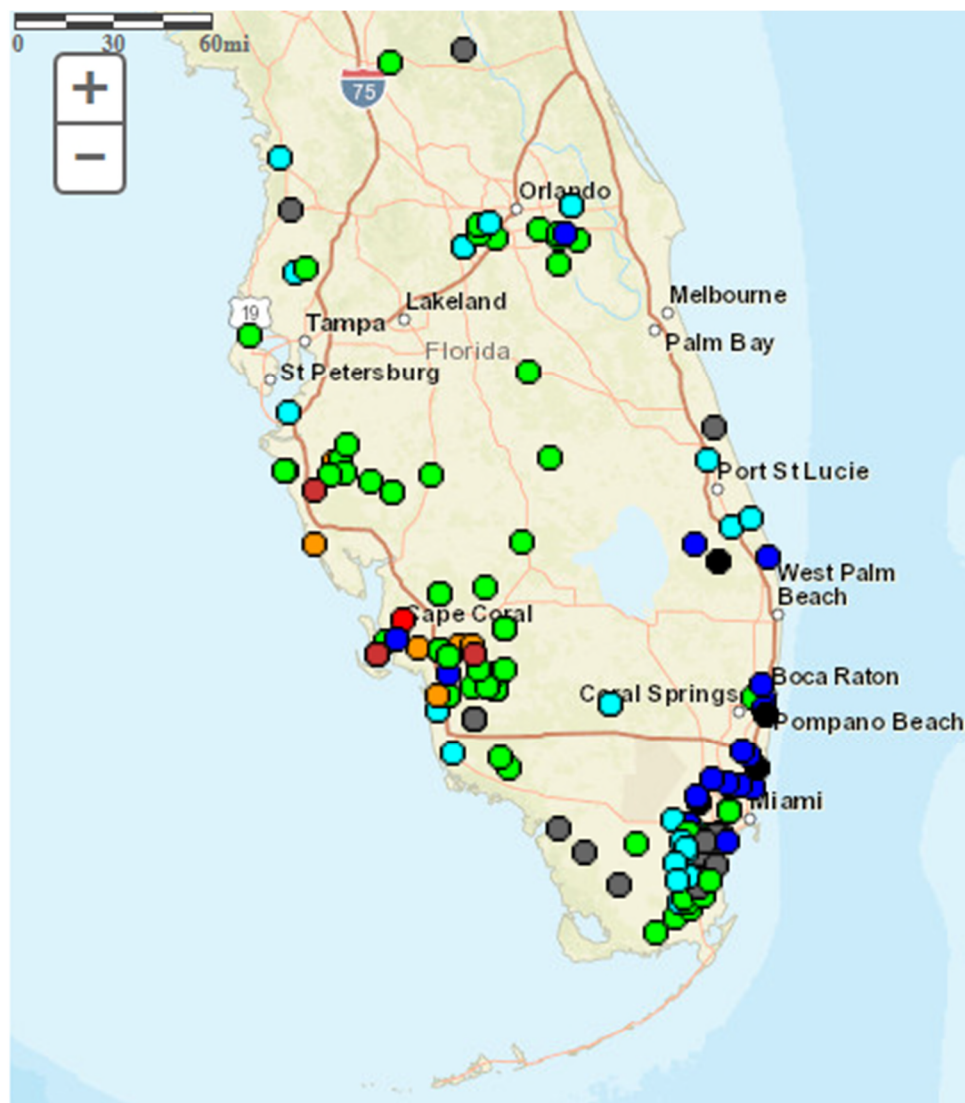
DATE: May 22, 2018

SUBJECT: Water Supply Report

District-wide Conditions

Surface and groundwater levels showed increasing 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. 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 21.54, 19.54, and 18.14 feet, all above the fourteen feet agricultural cut-off. About half of the UEC surficial aquifer wells are in the median percentile range for this time of year, with the remainder in the upper percentile ranges. Surface and groundwater levels increased throughout the Lower East Coast (LEC) over the past week. Approximately forty percent of the Biscayne aquifer monitor wells are at median levels for this time of year, with the remainder in the upper percentile ranges. Levels are still low in Everglades National Park (ENP).

Overall, conditions have improved in the Lower West Coast (LWC). Groundwater levels increased across the region over the last seven days. Approximately two thirds of the wells in the Surficial aquifer are at median levels for this time of year, with the remainder in the upper percentile ranges. About fifty percent of the Lower Tamiami aquifer wells are in the 76th to 90th percentile range, with the remainder split between median levels and the 10th to 24th percentile range. Approximately half of the Sandstone aquifer monitor wells are at median levels for this time of year, with the remainder split between the upper and lower percentile ranges. About one third of the Mid-Hawthorn aquifer monitor wells are at median levels, with the remainder also split between the upper and lower percentile ranges. **Figure 1** summarizes current water level conditions.



Explanation - Percentile classes (symbol color based on most recent measurement)								Wells		Springs	
									Real-Time		
Low	<10	10-24	25-75	76-90	>90	High	Not Ranked		Continuous		
	Much Below Normal	Below Normal	Normal	Above Normal	Much Above Normal				Periodic Measurements		

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 -0.29 classified as “normal to extremely wet,” and is in the “low” risk category. The LOK stage for the next two months is projected to be in the Low flow Sub-Band, and the risk to water supply is categorized as “low.” 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” 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 Water Conservation Areas 1, 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 5/21/2018 (ENSO Neutral Condition):

Status for week ending 5/21/2018:

District wide, Raindar rainfall was 4.44 inches for the week. Lake stage on 5/21/2018 was 13.50 ft, NGVD, up 0.67 ft from last week.

The updated May 2018 SFWMM Dynamic Position Analysis [percentile graph](#) for Lake Okeechobee show that the current lake stage is in the Low Flow Sub-Band.

The 2008 LORS Tributary Hydrologic Condition (THC) tributary is classified as **Very Wet**. The PDSI indicates near normal condition and the LONIN is very wet. The THC classification is based on the wetter of the two [indices](#).

Water Supply Risk Evaluation

Water Supply Risk Evaluation			
Area	Indicator	Value	Color Coded Scoring Scheme
LOK	Projected LOK Stage for the next two months	Low Flow Sub Band	L
	Palmer Index for LOK Tributary Conditions	0.29 (Normal to Extremely Wet)	L
	CPC Precipitation Outlook	1 month: Above Normal	L
		3 months: Above Normal	L
	LOK Seasonal Net Inflow Outlook	3.20 ft	L
	ENSO Years	(Normal to Extremely Wet)	
	LOK Multi-Seasonal Net Inflow Outlook	3.85 ft (Wet)	L
ENSO Conditions	L		
WCAs	WCA 1: Station Average (Site 1-7, Site 1-8T, Site 1-9)	Above Line 1 (16.81 ft)	L
	WCA 2A: Site 2-17	Above Line 1 (12.78 ft)	L
	WCA-3A: 3 Station Average (Site 63, 64 and 65)	Above Line 1 (9.66 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