

MEMORANDUM

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

THROUGH: Peter Kwiatkowski, Section Administrator, Resource Evaluation

FROM: SFWMD Staff Water Supply Advisory Team

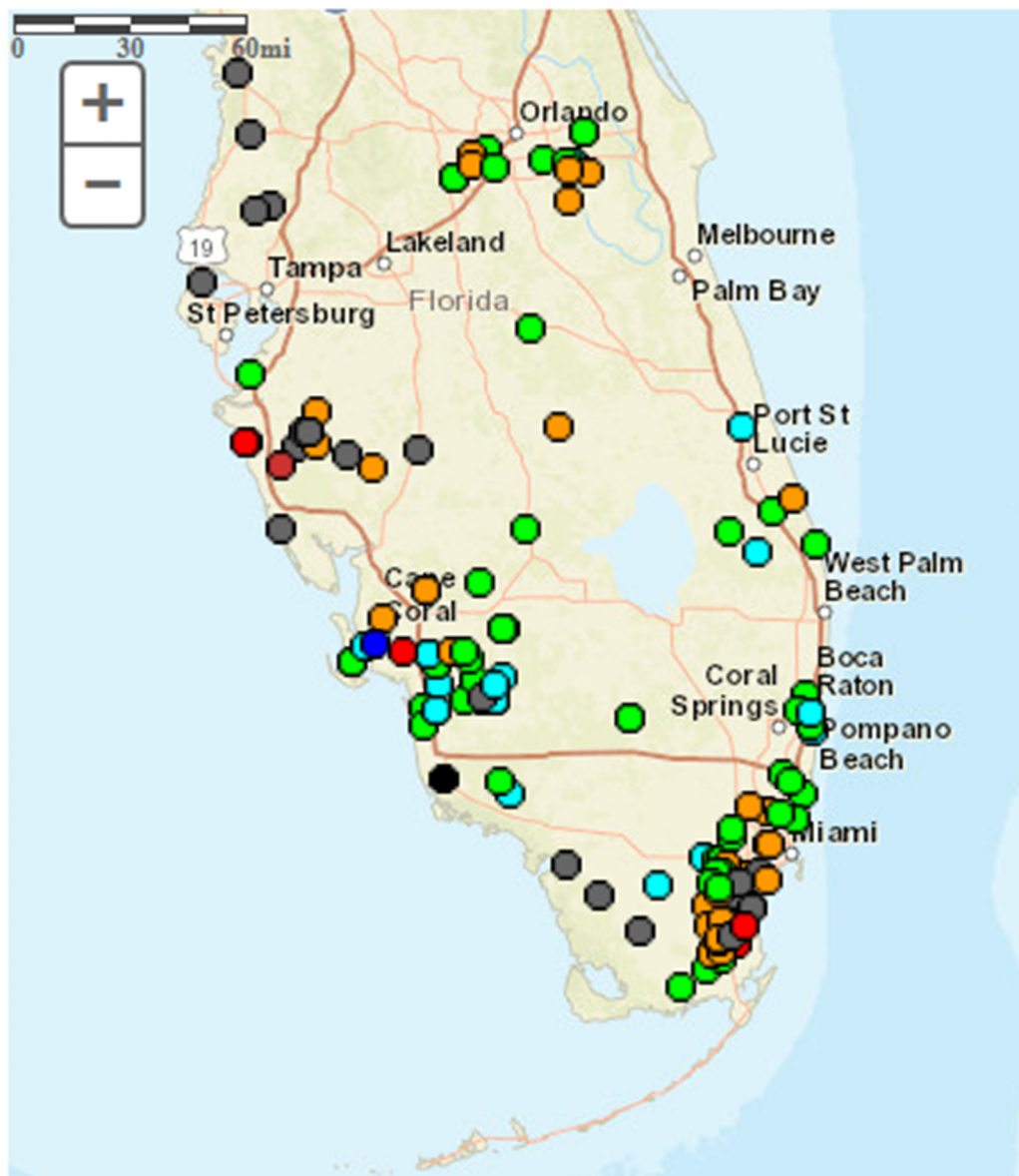
DATE: July 11, 2017

SUBJECT: Water Supply Report

District-wide Conditions

Surface and groundwater levels showed mixed trends throughout the District over the last week. About two thirds of United States Geological Survey (USGS) real-time wells in the Kissimmee Basin (KB) within the District boundaries are at median levels. Approximately half 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 21.29, 19.20, and 19.10 feet. The majority of UEC surficial aquifer wells are at median levels or higher for this time of year. Surface and groundwater levels decreased in about half of the Lower East Coast (LEC) monitoring stations over the past week. Water levels are still a little low in parts of Everglades National Park, and C-111 basin. Approximately two thirds of the USGS Biscayne aquifer monitor wells are within their median percentile range or higher at this time.

In the Lower West Coast (LWC), groundwater levels increased in most of the monitor wells over the last seven days. The majority of the wells in the Surficial aquifer are at median levels or higher for this time of year. About half of the Lower Tamiami aquifer wells are in the upper 76th to 90th percentile range, with the remainder at median levels. Approximately eighty percent of the Sandstone aquifer monitor wells are at median levels or higher for this time of year. About half of the Mid-Hawthorn aquifer monitor wells are at median levels or higher, with most of the remainder in the lower 10th to 24th percentile range and lower. **Figure 1** summarizes current water level conditions.



| Explanation - Percentile classes (symbol color based on most recent measurement) | | | | | | | Wells | Springs |
|--|---------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|--------------------------------------|-------------------------------------|---|---|
| ● | ● | ● | ● | ● | ● | ● | ○ Real-Time | ■ |
| Low | <10 Much Below Normal | 10-24 Below Normal | 25-75 Normal | 76-90 Above Normal | >90 Much Above Normal | High | □ Continuous | ▣ |
| | | | | | | Not Ranked | △ 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 -3.10 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 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 “normal” for three months, leaving both the one-month and three-month outlooks 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 stages in all Water Conservation Areas 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 7/10/2017 (ENSO Neutral Condition):


Status for week ending 7/10/2017:

District wide, Raindar rainfall was 1.12 inches for the week. Lake stage on 7/10/2017 was 12.44 ft, up 0.04 ft from last week.

The updated July 2017 SFWMM Dynamic Position Analysis [percentile graph](#) for Lake Okeechobee show that the current lake stage is in the Beneficial Use Operational Sub-Band.

The LORS2008 tributary [indices](#) are classified as **Normal**. The PDSI indicates very dry condition and the LONIN is Normal. The classification is based on the wetter of the two.

Water Supply Risk Evaluation

| 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 | -3.10 (Extremely Dry) | H |
| |  CPC Precipitation Outlook | 1 month: Normal | L |
| | | 3 months: Normal | L |
| | LOK Seasonal Net Inflow Outlook | 2.56 ft (Normal) | L |
| | ENSO La Nina Years | | L |
| | LOK Multi-Seasonal Net Inflow Outlook | | 4.04 ft (Wet) |
| ENSO La Nina Years | L | | |
| WCAs | WCA 1: Site 1-7, Site 1-8T, & Site 1-9 Average | Above Line 1 (16.40 ft) | L |
| | WCA 2A: Site 2-17 HW | Above Line 1 (13.16 ft) | L |
| | WCA-3A: 3 Station Average (Site 63, 64 and 65) | Above Line 1 (11.16 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