

MEMORANDUM

TO: John Mitnik, Assistant Executive Director

THROUGH: Peter Kwiatkowski, Section Administrator, Resource Evaluation

FROM: SFWMD Staff Water Supply Advisory Team

DATE: October 19th, 2021

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 for this time of year. The wells in the northern portion of the KB are mostly completed in the Floridan aquifer and the wells in southern KB in the surficial aquifer system. Surface and groundwater levels increased in twenty percent of the stations in the Kissimmee Basin since last week. Groundwater elevations in all the Kissimmee Basin Floridan aquifer wells decreased since last week.

Stages in the Upper East Coast (UEC) canals C-23, C-24, and C-25 are 23.15, 20.84, and 22.40 feet, all above the fourteen feet agricultural cut-off. About three quarters of surficial aquifer stations are at median or higher levels, with the remainder in the lower percentile ranges for this time of year. Water levels decreased over the last seven days at over half of the Lower East Coast stations. Most of the Biscayne aquifer wells are at median levels and higher for this time of year. Groundwater levels are on the low side in the C-111 Basin.

Groundwater levels decreased in all the Lower West Coast (LWC) stations since last week. All the surficial aquifer and about two-thirds of the Lower Tamiami wells are at median levels for this time of year. About 60% of the Sandstone aquifer wells are in the lower percentile ranges, and the remainder are in the median and upper percentile range. About two-thirds of the Mid-Hawthorn aquifer monitor wells are in the lowest percentile range, with the remainder split between median levels and the upper percentile range for this time of year. **Figure 1** summarizes current conditions.

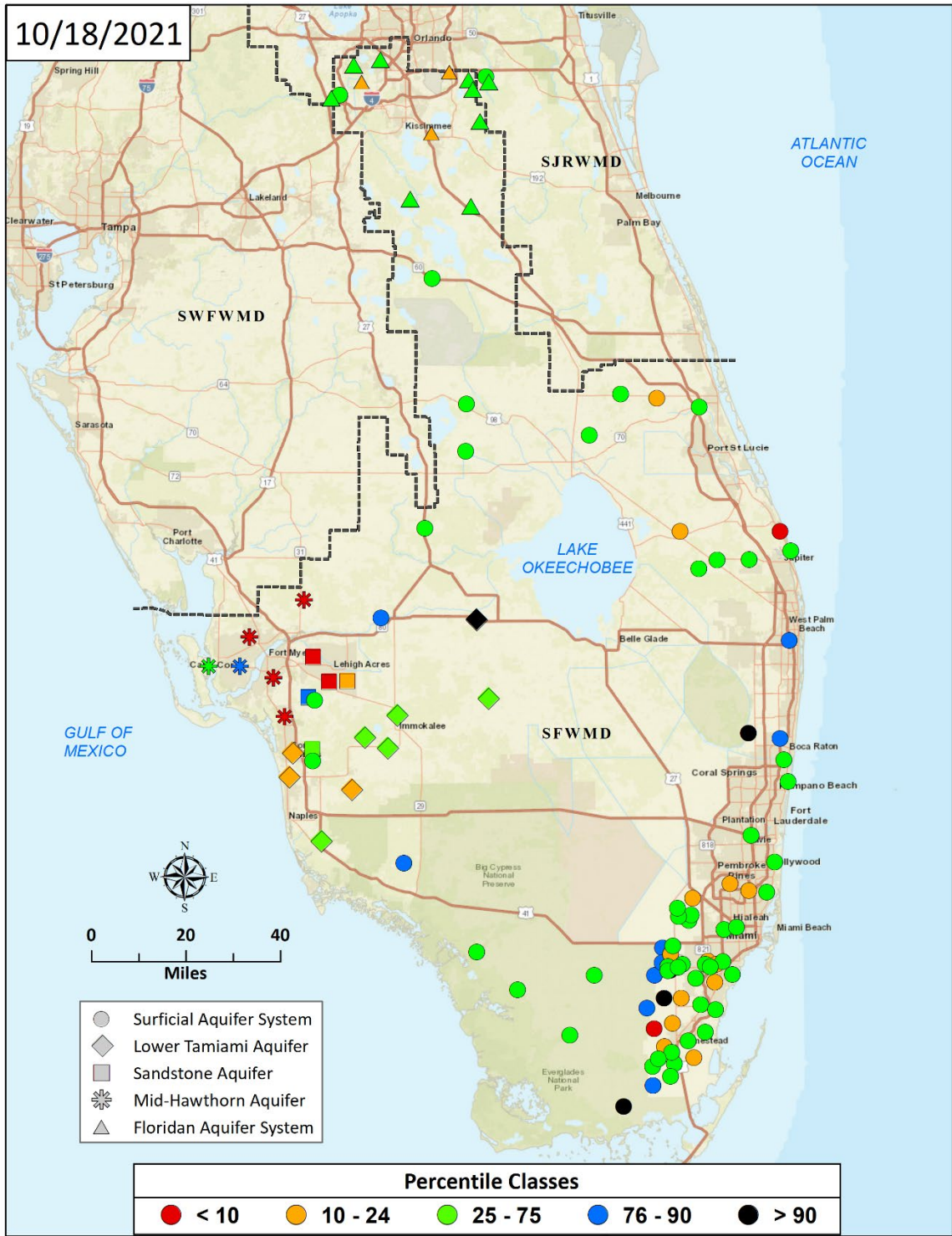


Figure 1. Real-Time Groundwater Level Map

Water Supply Technical Input to LORS2008

The Palmer Index for Lake Okeechobee (LOK) Tributary Conditions was -2.52 on October 18, 2021 and is 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 Low Sub-band, and the risk to water supply is categorized as “low.” The Climate Prediction Center’s (CPC) Precipitation Outlook is projected as “normal” for one month and “below normal” for three months, leaving the one-month outlook in the “low” risk category and three-month outlook in the “moderate” risk category. The LOK Seasonal Net Inflow Forecast is in the “dry” category and is in the “moderate” risk category. The LOK Multi-Seasonal Net Inflow Forecast is in the “dry” range with “high” risk to water supply. The stages in WCA 1, WCA 2A and WCA 3A are above line 1 and are in the “low” risk category. Year-Round Irrigation Rule is in effect for the LEC Service Areas. All Service Areas are in the “low” risk category for water supply. **Figure 2** summarizes the water supply risk indicators.

LORS2008 Implementation on 10/18/2021 (ENSO Condition- La Nina Watch):

Status for week ending 10/18/2021:

Water Supply Risk Evaluation

| Area | Indicator | Value | Color Coded Scoring Scheme |
|---------------|---|--------------------------------------|----------------------------|
| LOK | Projected LOK Stage for the next two months | Low Sub-band | L |
| | Palmer Drought Index for LOK Tributary Conditions | -2.52 (Extremely Dry) | H |
| | CPC Precipitation Outlook | 1 month: Normal | L |
| | | 3 months: Below Normal | M |
| | LOK Seasonal Net Inflow Outlook | 0.40 ft | M |
| | ENSO Forecast | Dry | M |
| | LOK Multi-Seasonal Net Inflow Outlook | 0.25 ft | H |
| ENSO Forecast | Dry | H | |
| WCAs | WCA 1: 3 Station Average (Site 1-7, 1-8T and 1-9) | Above Line 1 (17.42 ft) | L |
| | WCA 2A: Site 2-17 | Above Line 1 (13.93 ft) | L |
| | WCA-3A: 3 Station Average (Site 63, 64 and 65) | Above Line 1 (10.53 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