

MEMORANDUM

TO: John Mitnik, Assistant Executive Director

THROUGH: Peter Kwiatkowski, Section Administrator, Resource Evaluation

FROM: SFWMD Staff Water Supply Advisory Team

DATE: June 1st, 2021

SUBJECT: Water Supply Report

District-wide Conditions

Surface and groundwater levels generally decreased 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. The surface and groundwater stations throughout the KB recorded decreases in water levels over the last week.

Stages in the Upper East Coast (UEC) canals C-23, C-24, and C-25 are 21.37, 19.11, and 18.80 feet, all above the fourteen feet agricultural cut-off. About half of the surficial aquifer stations are at median levels for this time of year, with the remainder in the lower percentile ranges. Surface and groundwater levels decreased across the Lower East Coast (LEC) stations during the past week. Approximately two thirds of the Biscayne aquifer wells are at median levels for this time of year. The remainder is split between the upper and lower percentile ranges. Groundwater levels are on the low side in C-111 Basin, South Miami-Dade County, Everglades National Park, Water Conservation Area 2A (WCA 2A) and Water Conservation Area 3A (WCA 3A).

Groundwater levels decreased in most of the stations on the Lower West Coast (LWC) over the last seven days. Approximately three quarters of the surficial aquifer wells are at median levels for this time of year. About eighty percent of the Lower Tamiami aquifer wells are at median levels and higher, with the remainder in the lower percentile ranges. Over three quarters of Sandstone aquifer are in the lower percentile ranges, with the remainder at median levels for this time of year. About eighty percent of the Mid-Hawthorn aquifer monitor wells are in in the lower percentile ranges, with the remainder split between median levels and the upper percentile ranges. **Figure 1** summarizes current conditions.

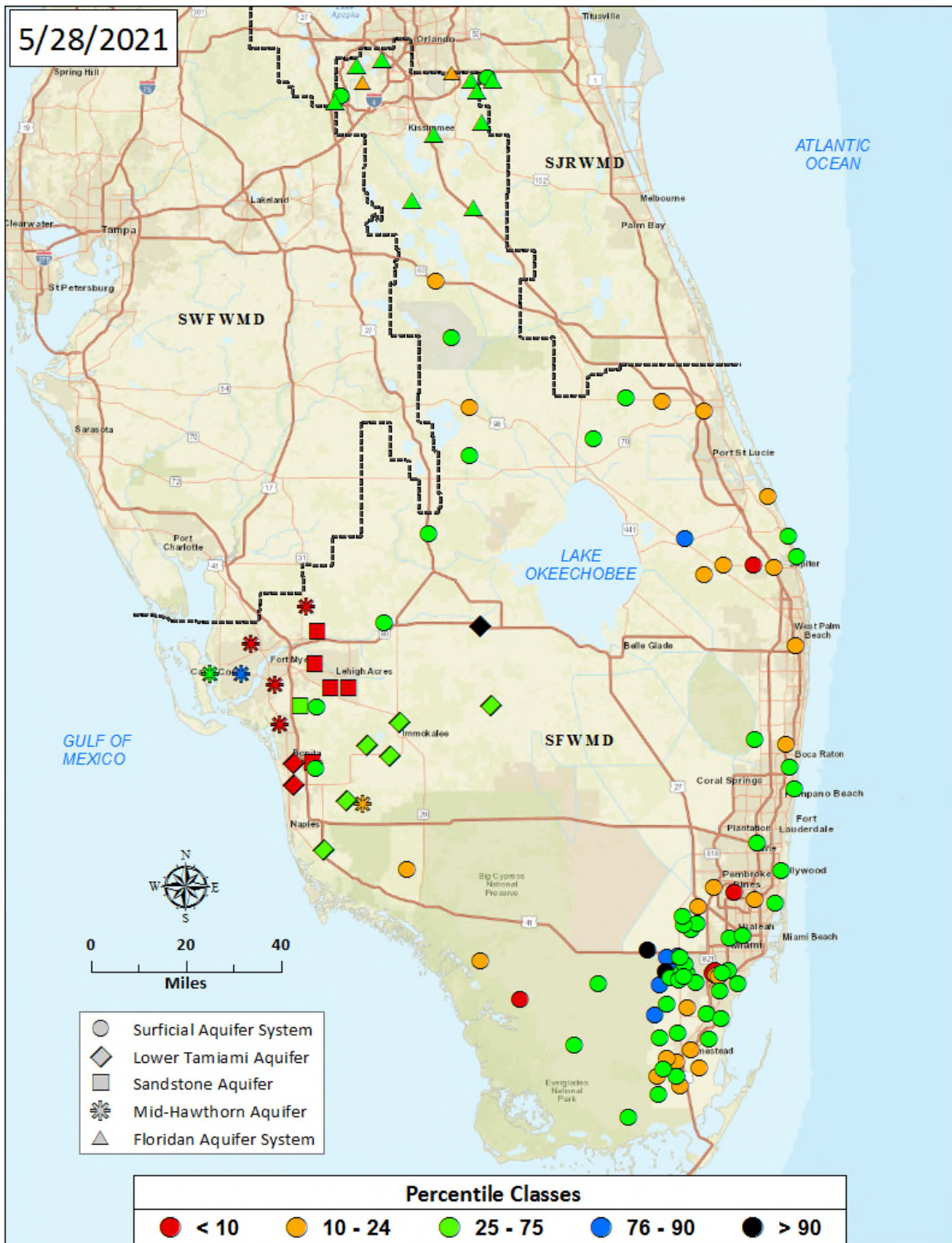


Figure 1. Real-Time Groundwater Level Map

Water Supply Technical Input to LORS2008

The Palmer Index for Lake Okeechobee (LOK) Tributary Conditions is -2.06 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 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 “above normal” for one month and “above normal” for three months, leaving both the one-month 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. The stage in WCA 3A is between line 1 and line 2 and is in the “moderate” 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 5/31/2021 (ENSO Condition- Final La Nina Advisory):

Status for week ending 5/31/2021:

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 Drought Index for LOK Tributary Conditions | -2.06 (Extremely Dry) | H |
| | CPC Precipitation Outlook | 1 month: Above Normal | L |
| | | 3 months: Above Normal | L |
| | LOK Seasonal Net Inflow Outlook | 2.26 ft | L |
| | ENSO Forecast | Normal to Extremely Wet | L |
| | LOK Multi-Seasonal Net Inflow Outlook | 2.56 ft | M |
| ENSO Forecast | | Normal | M |
| WCAs | WCA 1: Site 1-8C | Above Line 1 (15.31 ft) | L |
| | WCA 2A: Site S-11B HW | Below Line 2 (10.28 ft) | H |
| | WCA-3A: 3 Station Average (Site 63, 64 and 65) | Line 1- Line 2 (8.51 ft) | M |
| 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