

MEMORANDUM

TO: John Mitnik, Assistant Executive Director

THROUGH: Peter Kwiatkowski, Section Administrator, Resource Evaluation

FROM: SFWMD Staff Water Supply Advisory Team

DATE: February 21, 2023

SUBJECT: Water Supply Report

District-wide Conditions

About 85 percent of the United States Geological Survey (USGS) real-time wells in the Kissimmee Basin (KB) are in the median and upper percentile ranges for this time of year. The wells in the Upper KB are mostly completed in the Floridan aquifer and the wells in the Lower KB are Surficial aquifer system wells. Surface water and groundwater levels decreased in about 90 percent of the KB stations over the last week.

Upper East Coast (UEC) surface water stations showed mixed trends and groundwater levels decreased during the last week. Stages in UEC canals C-23, C-24, and C-25 are 22.78, 20.67, and 21.74 feet, all above the fourteen feet agricultural cut-off. About 80 percent of the UEC wells are at median and higher levels for this time of year.

In the Lower East Coast, about 80 percent of the surface and groundwater stations recorded decreasing trends over the past seven days. All but three of the LEC surficial aquifer system stations are in the median and upper percentile ranges for this time of year.

Groundwater levels decreased in all the Lower West Coast (LWC) stations over the last week. All the monitored wells in the Surficial aquifer system are in the median and upper percentile ranges for this time of year. About 30 percent of the Lower Tamiami aquifer wells, about 70 percent of the Sandstone aquifer wells, and about 60 percent of the Mid-Hawthorn aquifer wells are in the lower percentile ranges for this time of the year.

Figure 1 shows a statistical comparison between current groundwater levels and long-term historical monthly average groundwater levels at representative wells throughout the District.

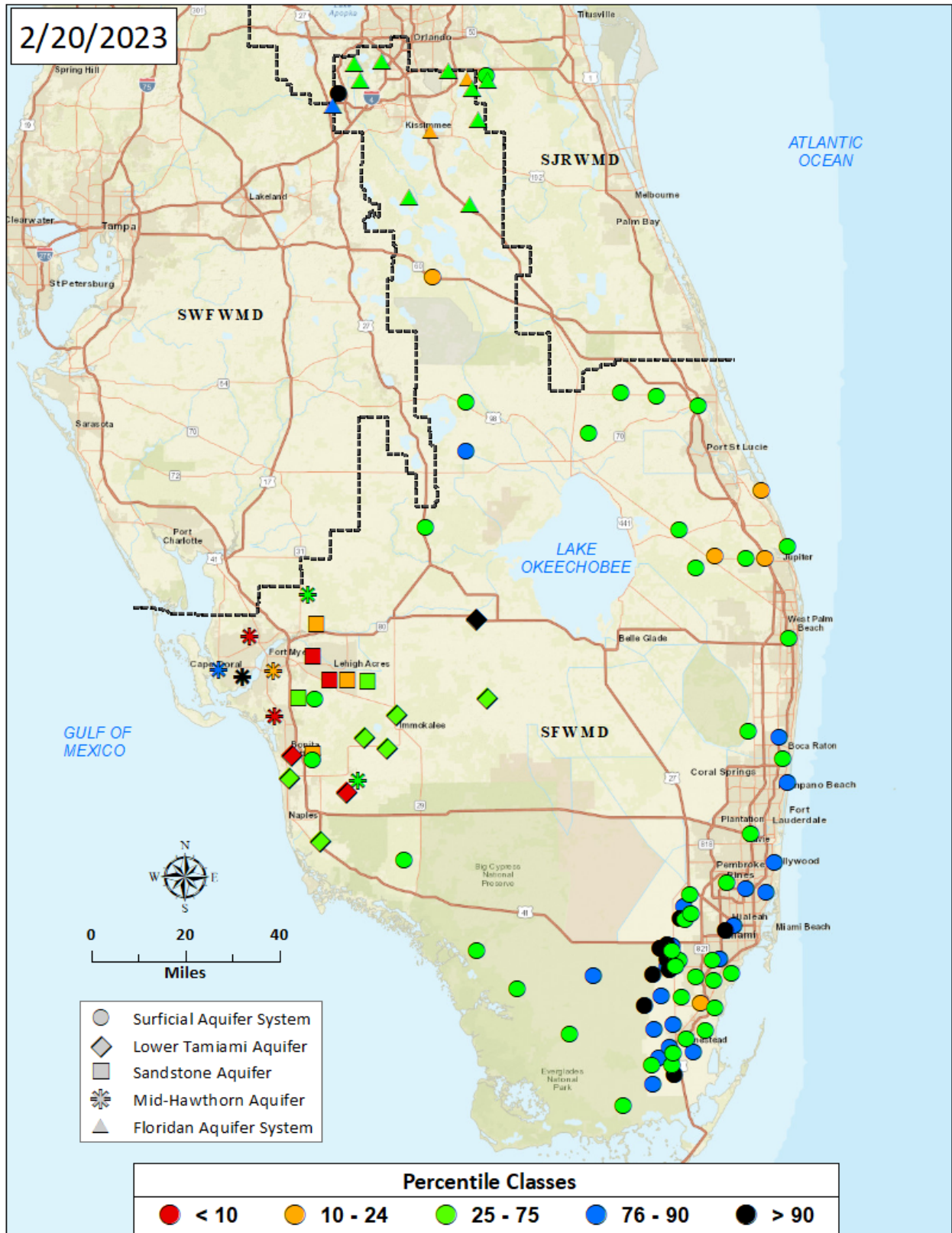


Figure 1. Current Groundwater Level Conditions

Water Supply Technical Input to LORS2008

The projected LOK stage for the next two months is Low Sub-Band, and the risk to water supply is categorized as “moderate”. The Palmer Drought Index for Lake Okeechobee (LOK) Tributary Conditions was -0.63 which is classified as “normal to extremely wet” and is in the “low” risk category for water supply. The Climate Prediction Center’s (CPC) Precipitation Outlook is projected as “below normal” for one month and “below normal” for three months, leaving the 1-month projection in the “moderate” risk category and the 3-month projection in the “moderate” risk category. The LOK Seasonal Net Inflow Outlook is “dry” and is in the “moderate” risk for water supply. The LOK Multi-Seasonal Net Inflow Outlook is in the “normal” range with “moderate” risk to water supply. The stages in WCA 1, WCA-2, and WCA-3 are all above line 1 and are in the “low” risk category. The Year-Round Irrigation Rule is in effect for the three LEC Service Areas. All three LEC Service Areas are in the “low” risk category for water supply. **Figure 2** summarizes the water supply risk indicators.

Figure 2. LORS 2008 Water Supply Risk Indicators

LORS2008 Implementation on 02/20/2023 (ENSO Condition- La Niña Watch):
Status for week ending 02/20/2023*:

Water Supply Risk Evaluation

| Area | Indicator | Value | Color Coded Scoring Scheme |
|---------------|---|--------------------------------------|----------------------------|
| LOK | Projected LOK Stage for the next two months | Low Sub-band | M |
| | Palmer Drought Index for LOK Tributary Conditions | -0.63 (Normal to Extremely Wet) | L |
| | CPC Precipitation Outlook | 1 month: Below Normal | M |
| | | 3 months: Below Normal | M |
| | LOK Seasonal Net Inflow Outlook | 0.63 ft | M |
| | ENSO Forecast | Dry | M |
| | LOK Multi-Seasonal Net Inflow Outlook | 2.58 ft | M |
| ENSO Forecast | Normal | M | |
| WCAs | WCA 1: 3 Station Average (Sites 1-8C) | Above Line 1 (16.79 ft) | L |
| | WCA 2A: Site S11B | Above Line 1 (12.01 ft) | L |
| | WCA-3A: 3 Station Average (Sites 63, 64, and 65) | Above Line 1 (9.46 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.

*- S77 flow data for Feb 17,18,19 is not available from the USACE Daily Reports and was substituted with alternative data sources on DBHYDRO