

MEMORANDUM

TO: John Mitnik, Assistant Executive Director

THROUGH: Peter Kwiatkowski, Section Administrator, Resource Evaluation

FROM: SFWMD Staff Water Supply Advisory Team

DATE: September 20, 2022

SUBJECT: Water Supply Report

District-wide Conditions

Figure 1 shows a statistical comparison between current groundwater levels and groundwater levels for this time last year at representative wells throughout the District that collect real-time groundwater levels.

The water levels in about 90 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 (Figure 1). 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 and groundwater levels increased in all the Kissimmee Basin stations over the last seven days.

Upper East Coast (UEC) surface water levels decreased, and groundwater levels increased in the Upper East Coast since last week. Stages in the UEC canals C-23, C-24, and C-25 are 21.06, 18.91, and 18.82 feet, all above the fourteen feet agricultural cut-off. Half of the UEC surficial aquifer stations are in the lower percentile ranges for this time of year (Figure 1).

About 30 percent of the surface and groundwater stations in the Lower East Coast (LEC) recorded decreasing trends over the past seven days. S-176 and S-177 (C-111 basin) are both in the “yellow” caution zone. About 5 percent of the LEC surficial aquifer system stations are in the lower percentile ranges for this time of year (Figure 1).

In the Lower West Coast (LWC), all the groundwater stations increased over the last week. About 15 percent of the surficial aquifer system wells are in the lower percentile ranges for this time of year. All the Lower Tamiami aquifer wells are in the median and upper percentile ranges for this time of year (Figure 1). All the Sandstone aquifer wells are in the median and upper percentile ranges and about 70 percent of the Mid-Hawthorn aquifer wells are in the lower percentile ranges (Figure 1). Mid-Hawthorn aquifer L-4820 in North Cape Coral is in the “yellow” caution zone.

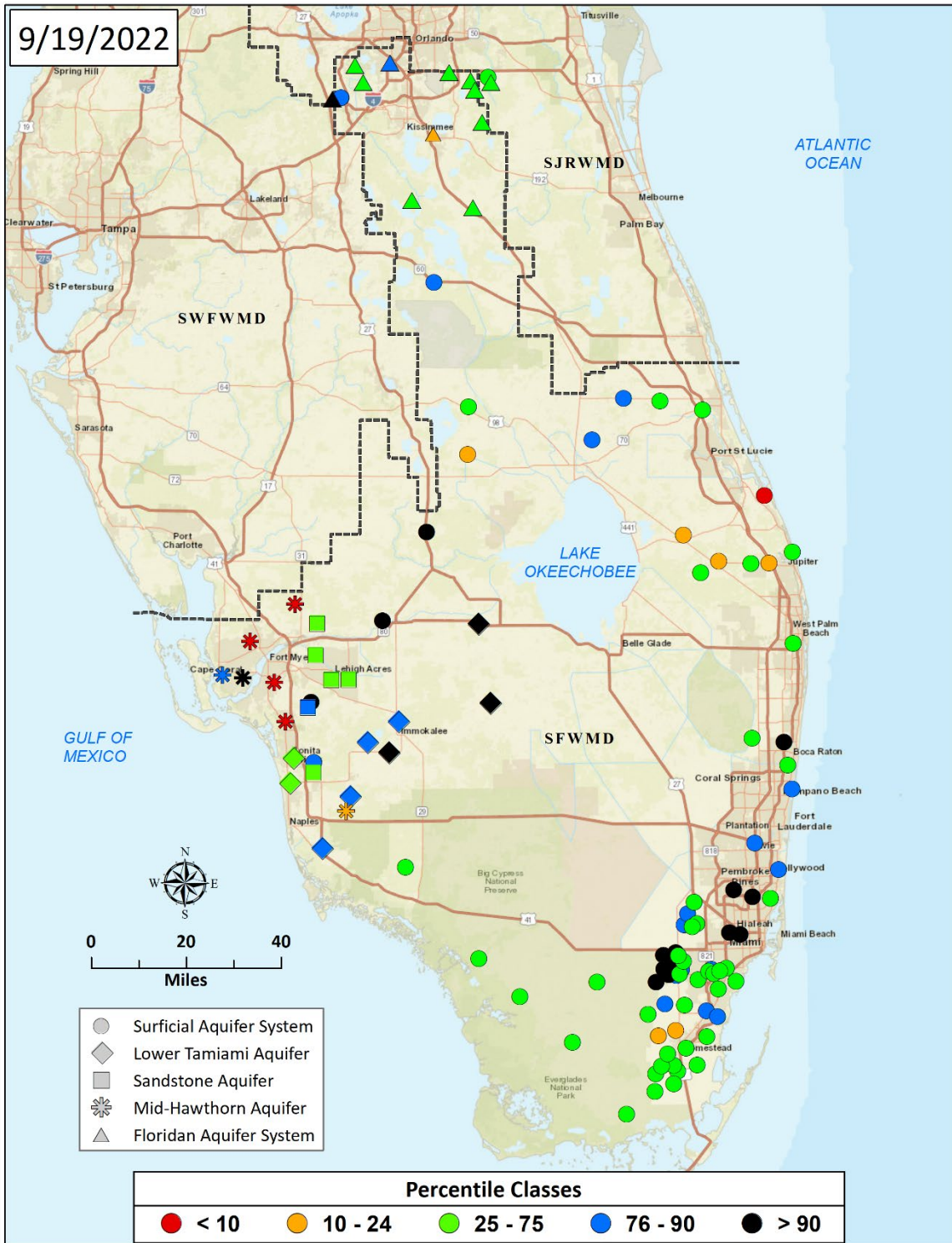


Figure 1. Map showing a statistical comparison between current groundwater levels and groundwater levels for this time last year

Water Supply Technical Input to LORS2008

The Palmer Index for Lake Okeechobee (LOK) Tributary Conditions was -3.20 on September 19, 2022, and is classified as “extremely dry,” and is in the “high” risk category for water supply. The projected LOK stage for the next two months is 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 the one-month outlook in the “low” risk category and three-month outlook in the “low” risk category. The LOK Seasonal Net Inflow Outlook is in the “dry” category and is in the “moderate” risk category. The LOK Multi-Seasonal Net Inflow Outlook is in the “dry” range with “high” 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. Water Supply Risk Indicators

LORS2008 Implementation on 09/19/2022 (ENSO Condition- La Niña Watch)*:

Status for week ending 09/19/2022:

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 | -3.20 (Extremely Dry) | H |
| | CPC Precipitation Outlook | 1 month: Normal | L |
| | | 3 months: Normal | L |
| | LOK Seasonal Net Inflow Outlook | 1.02 ft | M |
| | ENSO Forecast | Dry | |
| | LOK Multi-Seasonal Net Inflow Outlook | 0.92 ft | H |
| ENSO Forecast | Dry | | |
| WCAs | WCA 1: 3 Station Average (Sites 1-7, 1-8T, 1-9) | Above Line 1 (16.59 ft) | L |
| | WCA 2A: Site 2-17 | Above Line 1 (12.33 ft) | L |
| | WCA-3A: 3 Station Average (Sites 63, 64, and 65) | Above Line 1 (9.68 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.