

MEMORANDUM

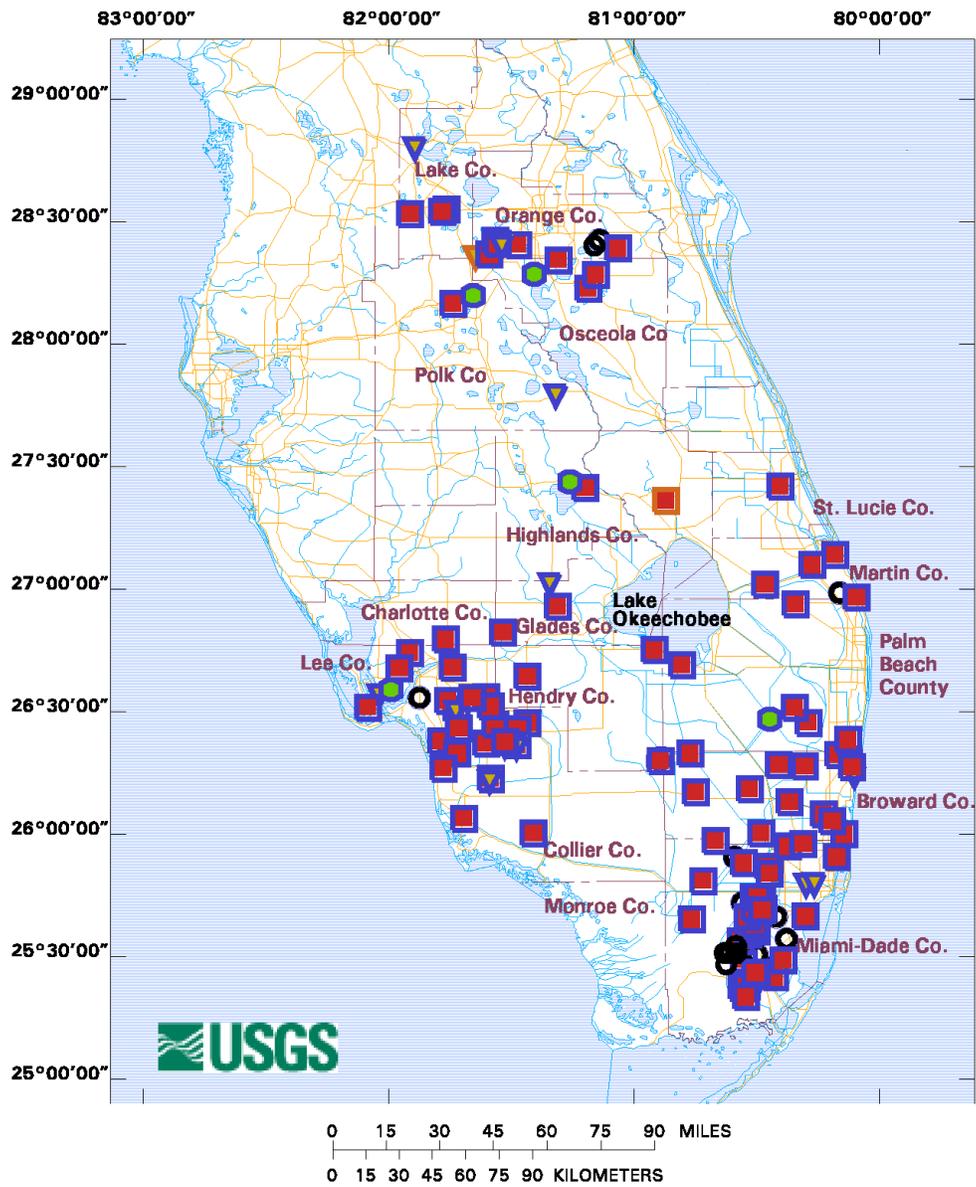
TO: Susan Sylvester, Bureau Chief, Operations
THROUGH: Dean Powell, Bureau Chief, Water Supply
FROM: SFWMD Staff Water Supply Advisory Team
DATE: June 28, 2011
SUBJECT: Water Supply Report

District-wide Conditions

Groundwater levels increased across the District over the last week. Water levels in United States Geological Survey (USGS) real-time wells in the Kissimmee Basin rose this week; however, more than half of the wells are in the lowest 10th percentile level for this time of year. Stages in the Upper East Coast (UEC) canals C-23, C-24 and C-25 are at 16.47, 18.72, and 19.80 ft NGVD, respectively, increasing substantially above the previous week's levels. Groundwater levels in the UEC have increased but remain in the lowest 10th percentile for their periods of record. Biscayne aquifer water levels in the Lower East Coast (LEC) rose this week, many between .2 and 0.3 feet. LEC groundwater elevations continue to be well below average expected for this time of year (about 90% in the lowest 10th percentile). Groundwater levels increased in the Lower West Coast (LWC) in all aquifers. About 60% of the LWC Surficial aquifer well water levels remain in the lowest 10th percentile. About 80% of Lower Tamiami and Sandstone aquifer wells are in the lowest 10th percentile for this time of year. The Mid-Hawthorn aquifer wells had some of the largest increases this week; however, about half the wells remain in the lowest 10th to the lowest 30th percentile levels and half in the lowest 10th.

Figure 1 is a USGS map showing current conditions developed from a 7-day running average of daily recorded water levels compared to the statistical distribution of daily water levels for the period of record for selected sites in southern Florida.

PROVISIONAL DRAFT -- Subject to Revision



- | | |
|--|--|
| <ul style="list-style-type: none"> Rivers and canals Roads and highways County boundaries Telemetry site | <p>Water level compared to historical data, without trend analysis:</p> <ul style="list-style-type: none"> Insufficient information available to compute water-level statistics In lowest 10 percent of past water elevations Within lowest 10 to 30 percent of past water elevations Within 20 percent of the median of past water elevations Within highest 10 to 30 percent of past water elevations In highest 10 percent of past water elevations |
|--|--|

**Water levels at selected sites in South Florida,
Based on PROVISIONAL DATA, as of June 27, 2011.**

**Figure 1. Current Water-level Conditions in South Florida (source: USGS,
http://www.sflorida.er.usgs.gov/ddn_data/index.html)**

Water Supply Technical Input to LORS2008

The Palmer Index for Lake Okeechobee (LOK) Tributary Conditions this week is -3.15, classified as “extremely dry” and remains in the “high” risk category. The LOK Stage for the next two months is projected to be in the Water Shortage Management Band; therefore the risk category to water supply remains “high.” The LOK Seasonal Net Inflow Forecast is projected as “wet” with “low” risk to water supply. The LOK Multi-Seasonal Net Inflow Forecast is projected as “normal” and is in the “medium” risk category (yellow) due to lake stage predictions. The Climate Prediction Center’s Precipitation Outlook is projected as “normal” for 1 month and “above normal” for 3 months, and is in the “low” risk category. Stages in Water Conservation Areas 1, 2A, and 3A remain below line 2, in the “high” risk category. LEC Service Areas 1, 2, and 3 remain in the “high” risk category because of regionally low groundwater levels. **Figure 2** summarizes the water supply risk indicators.

LORS2008 Implementation on 06/27/2011 (ENSO La Niña Condition):

Water Supply Department Technical Input

Water Supply Outlook:

District wide, Raindar rainfall 2.42” for the week ending 06/27/2011. Lake stage on 06/27/2011 is 9.65 ft, up 0.02 ft from last week.

The updated June 2011 SFVMM Position Analysis [percentile graph](#) and [tracking chart](#) for Lake Okeechobee show that the lake stage is in the Water Shortage Management Band. The LORS2008 tributary [indices](#) are classified as **Near Normal**. The PDSI indicates very dry condition and the LONIN is near normal. The classification is based on the wetter of the two.

Water Supply Risk Evaluation

| Area | Indicator | Value | Color Coded Scoring Scheme |
|--|---|--|----------------------------|
| LOK | Projected LOK Stage for the next two months | Water Shortage Management Band | H |
| | Palmer Index for LOK Tributary Conditions | -3.15 | H |
| | | (Extremely Dry) | |
| | CPC Precipitation Outlook | 1 month: Normal | L |
| | | 3 months: Above Normal | |
| | LOK Seasonal Net Inflow Forecast | 1.84 ft (Wet) | L |
| AMO warm/ENSO La Niña | | | |
| LOK Multi-Seasonal Net Inflow Forecast | 1.31 ft (Normal) | M | |
| AMO warm/ENSO La Niña | | | |
| WCAs | WCA 1: Site 1-8C | Below Line 2 (13.51 ft*) | H |
| | WCA 2A: Site S11B HW | Below Line 2 (9.89 ft*) | H |
| | WCA-3A: S333 HW | Below Line 2 (7.37 ft) | H |
| LEC | Service Area 1 | Modified Phase II restrictions in effect | H |
| | Service Area 2 | Modified Phase II restrictions in effect | H |
| | Service Area 3 | Modified Phase II restrictions in effect | H |

Note: the LORS2008 tributary indices are different from the indices from the latest Adaptive Protocol for Lake Okeechobee presented in the table.

* missing USACE data using USGS data.

Figure 2. Water Supply Risk Indicators