

MEMORANDUM

TO: Governing Board

FROM: Megan Wetherington, P.E., Water Resources Engineer *MW*

THRU: David Still, Executive Director *DS*
Kirk B. Webster, Deputy Executive Director *KBW*

DATE: April 12, 2009

RE: March 2009 Hydrologic Conditions Report for the District

The hydrologic conditions report is compiled in compliance with Chapter 40B-21.211, Florida Administrative Code, using water resource data collected from the following: rainfall (radar-derived estimate), groundwater levels (95 wells), surfacewater levels (16 lakes and 11 rivers), river flows (6 stations on 4 rivers), spring flows (5 stations, courtesy of the Florida Department of Environmental Protection and the U.S. Geological Survey), and general hydrological and meteorological information (drought indices and weather forecasts). Data are provisional, and subject to revision. Statistics are updated as revised data become available.

RAINFALL

- Average District rainfall was 3.58", which is below the long-term monthly average of 4.53" (Table 1, Figure 1). March was the seventh consecutive month of below-normal rainfall. Figure 2 shows the estimated rainfall accumulation across the District, and Figure 3 shows the rainfall totals as a percentage of normal March precipitation.
- The average 12-month deficit was 5.82". Figure 4 depicts the 12-month surplus/deficit across the District.

SURFACEWATER

- Streamflow at all major river gages was below the 10th percentile by March 27 (Figure 5). (The percentile is the percentage of levels that are equal to or below the observed value.)

GROUNDWATER

- Groundwater levels decreased in 69% of the District's monitored wells, forty-eight percent were below the 10th percentile for March, considered extremely low. Twelve record monthly lows were observed. Figure 6

shows a generalized representation of groundwater levels. Statistics for a representative sample of wells are shown in Figure 7.

WATER CONSERVATION

A Phase I Water Shortage Advisory requesting voluntary reductions in water use remains in effect. The District urges all water users to eliminate wasteful and inefficient water use. Water is conserved by using the minimum amount needed and by irrigating only when necessary and in the morning before 10 a.m. and in evening hours after 4 p.m., when lower temperature and wind velocity reduce the amount of water lost to evaporation. The District offers a variety of free water conservation information to the public via its website and by request.

/dd

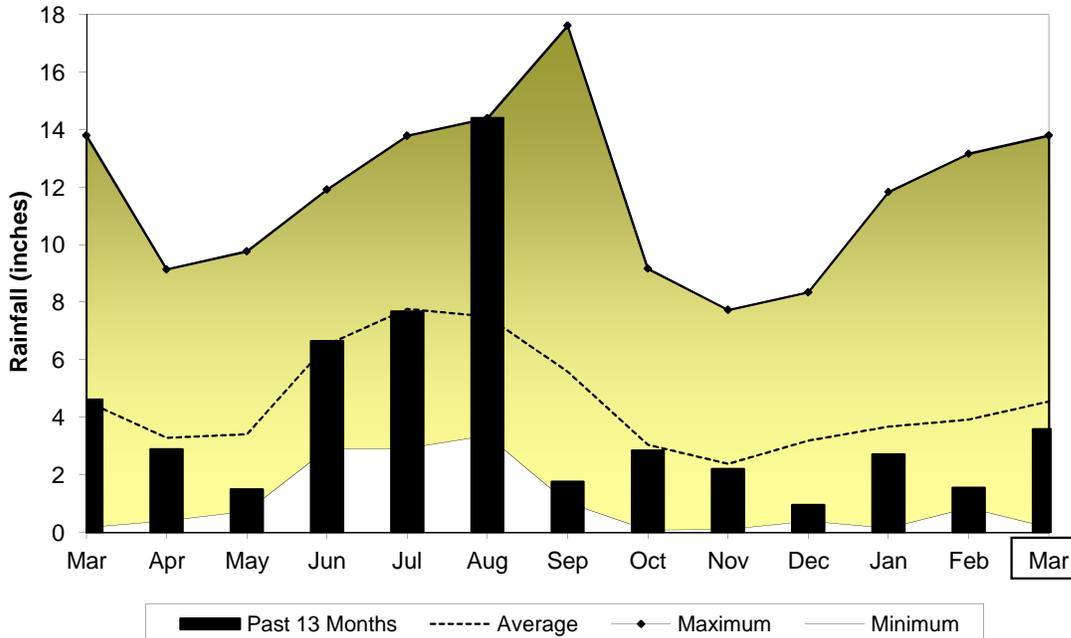
Table 1. Estimated Rainfall Totals

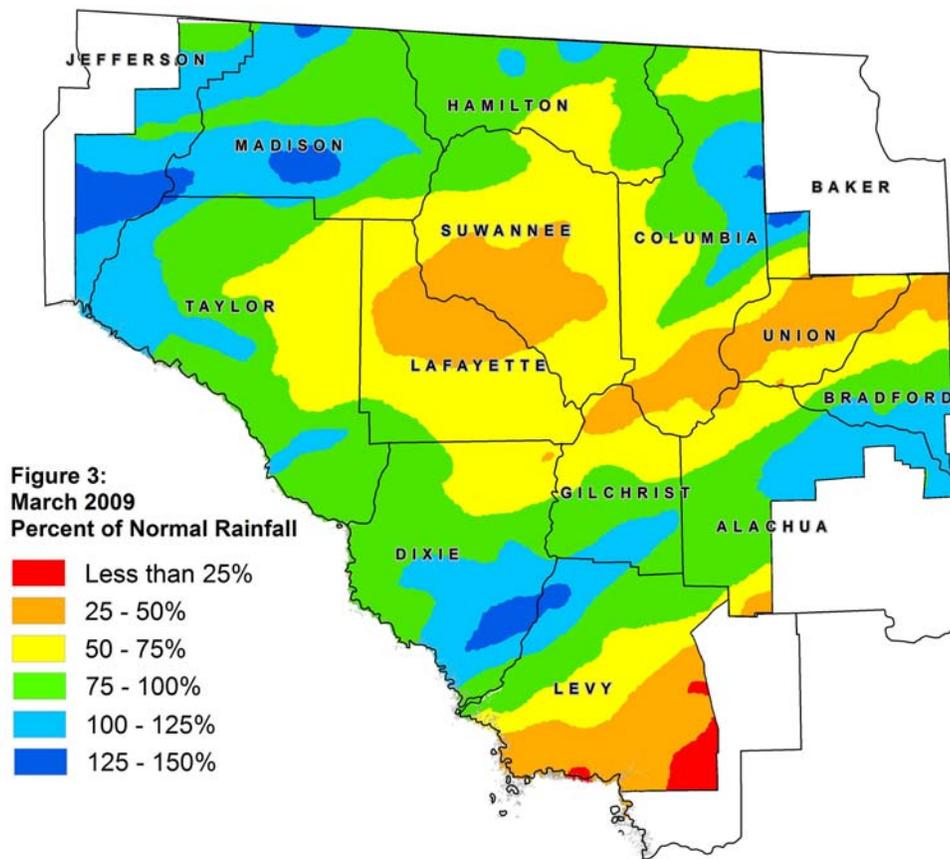
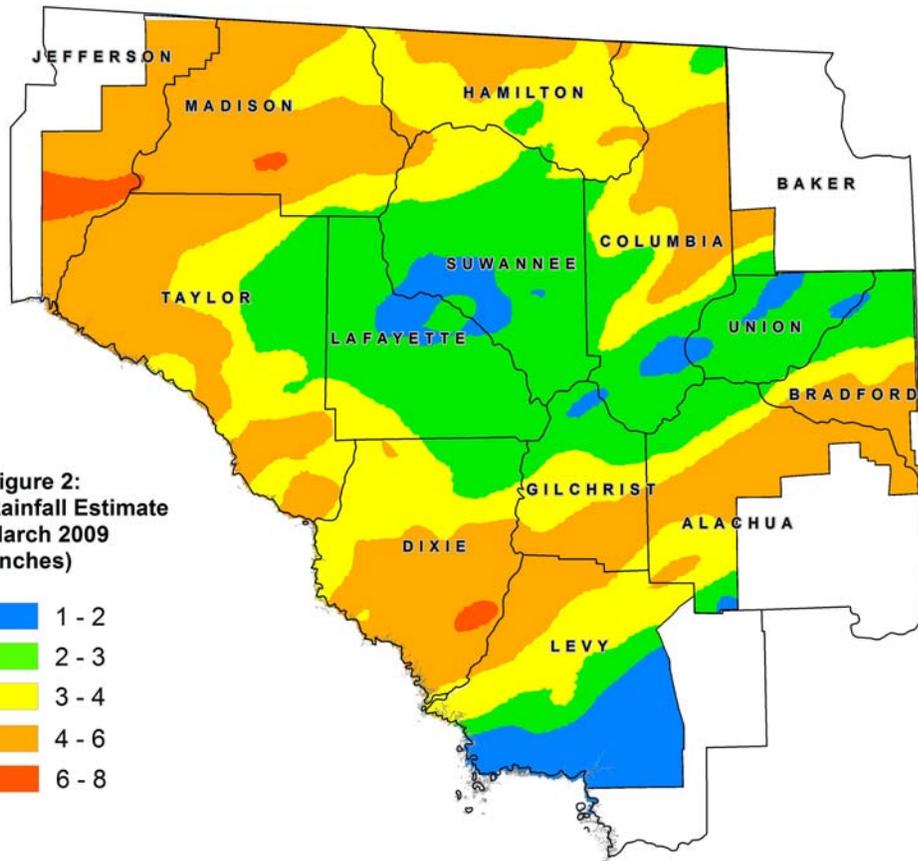
County	March-2009	March-2008	Last 12 Months	March Average
Alachua	3.93	4.09	46.67	4.30
Baker	4.10	4.88	50.84	4.52
Bradford	3.61	4.12	47.73	4.29
Columbia	3.46	4.79	46.55	4.90
Dixie	4.15	5.63	53.83	4.42
Gilchrist	3.55	4.54	48.93	4.84
Hamilton	3.76	4.63	45.73	5.16
Jefferson	5.19	2.32	52.44	6.00
Lafayette	2.50	6.74	48.46	4.85
Levy	2.76	6.34	49.51	4.73
Madison	4.62	3.26	54.07	5.59
Suwannee	2.57	5.94	48.91	5.33
Taylor	3.90	4.85	49.84	5.23
Union	2.19	4.64	43.12	4.85

March 2009 Average: 3.58
 Historical March Average: 4.53
 Historical 12-month Average: 54.68
 Past 12-Month Total: 48.86
 12-month Rainfall Deficit: -5.82

(Rainfall reported in inches)

Figure 1: Comparison of District Monthly Rainfall





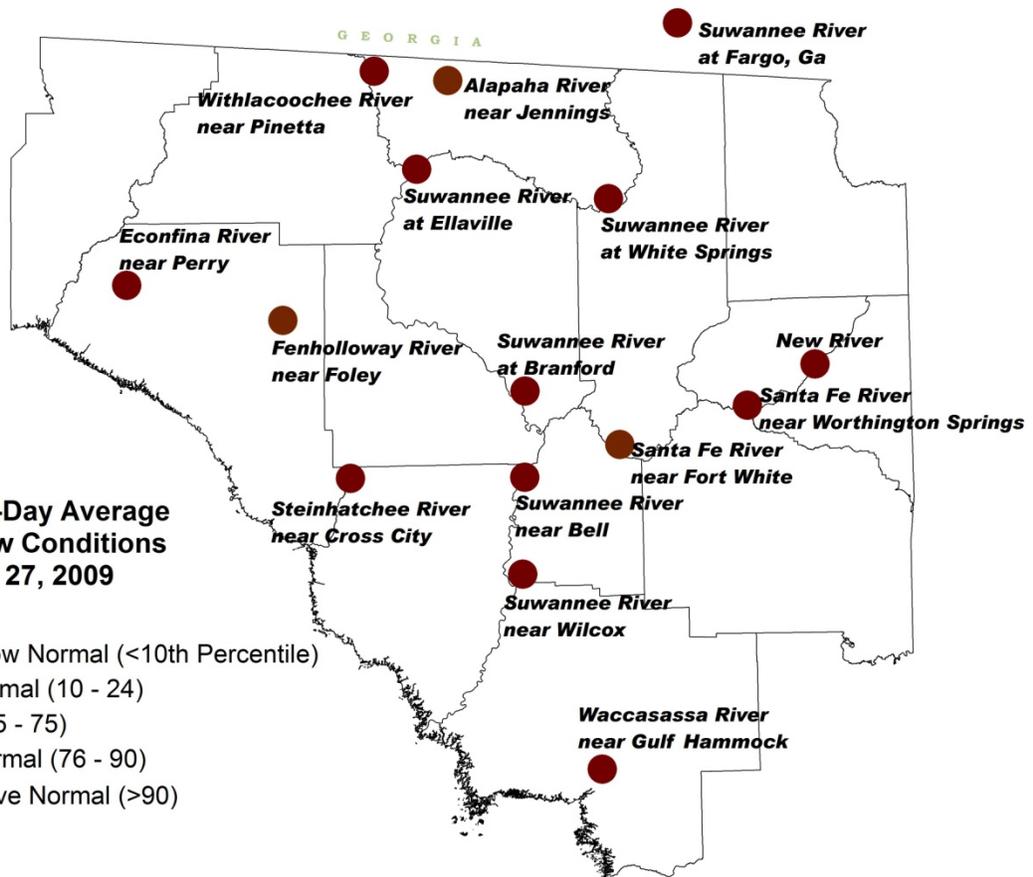
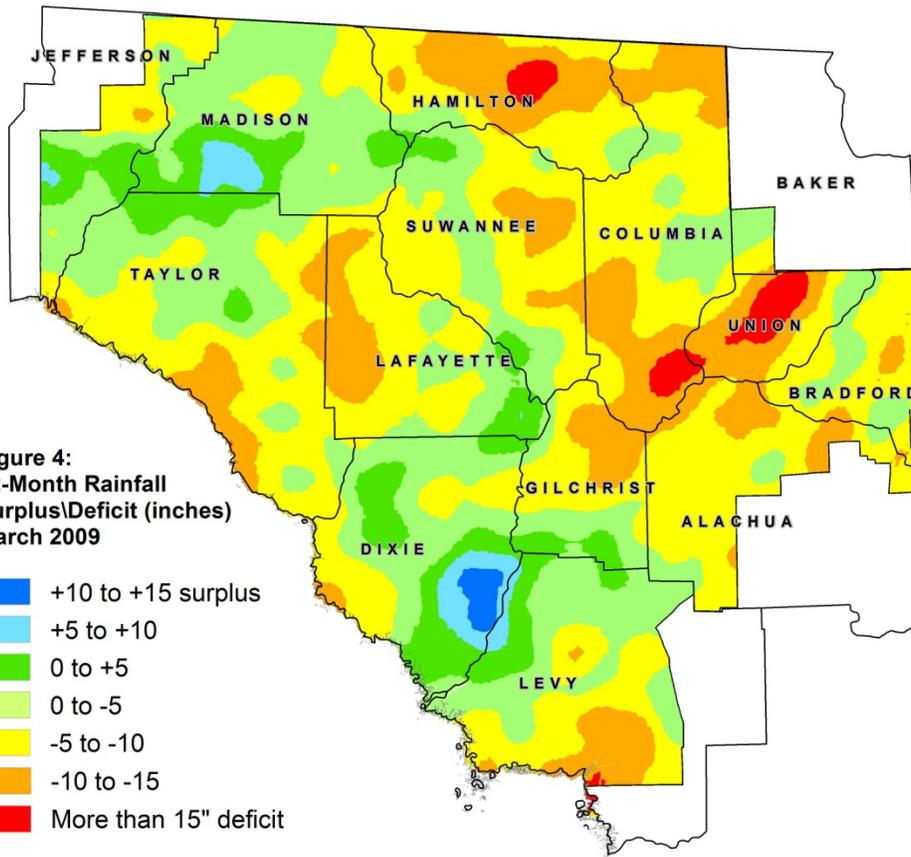
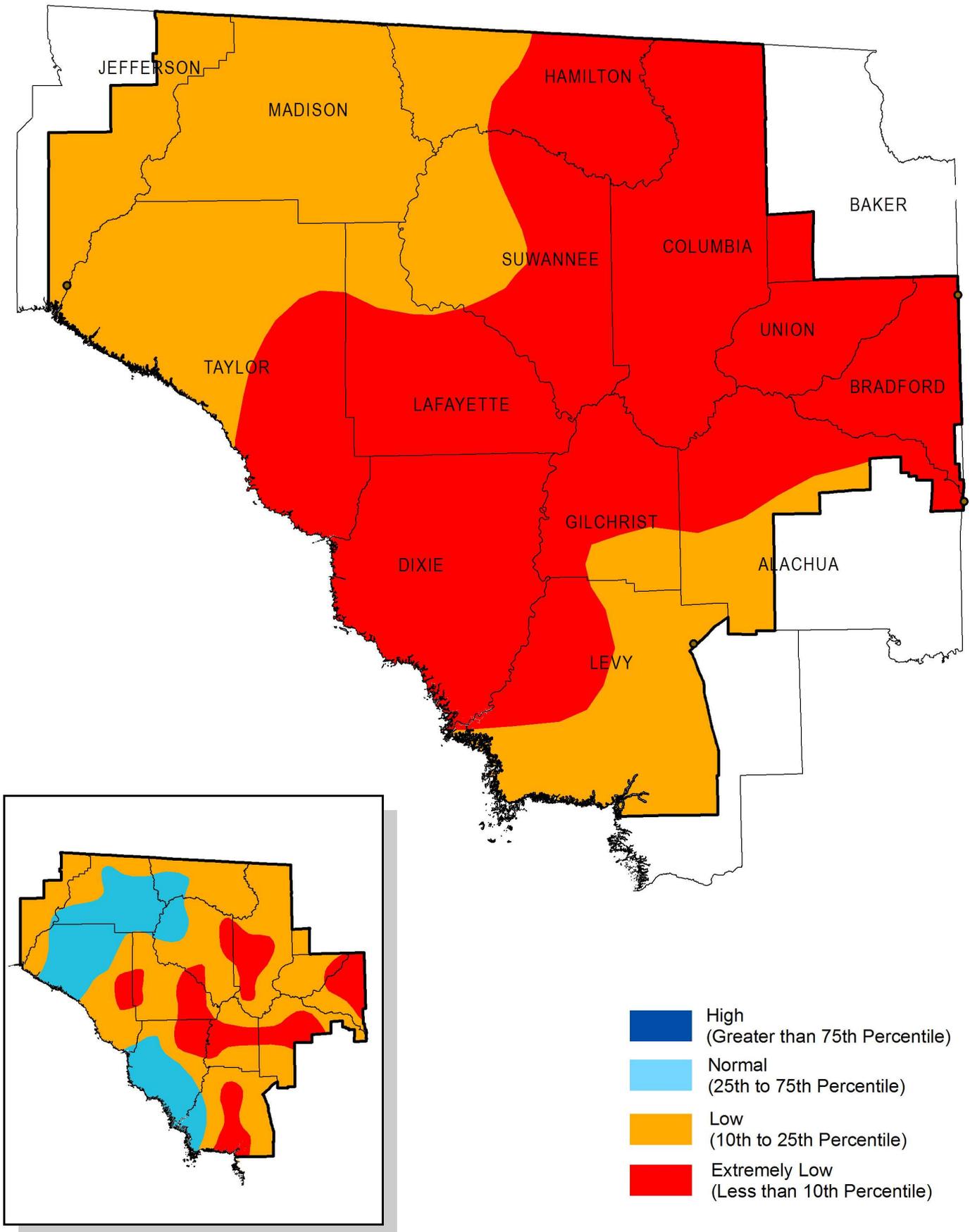


Figure 6: March 2009 Groundwater Levels

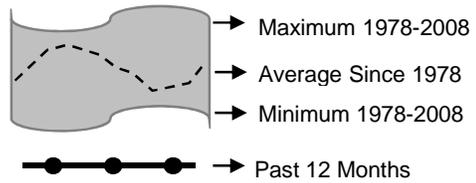


Inset: February 2009 Groundwater Levels

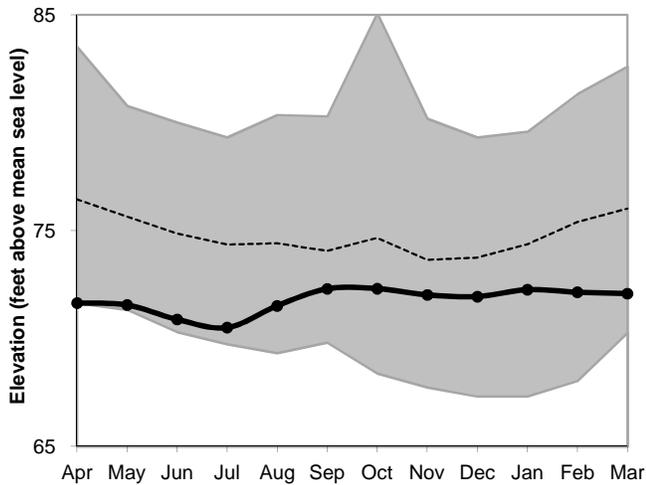
Figure 7: Monthly Groundwater Level Statistics

Levels April 1, 2008 through March 31, 2009

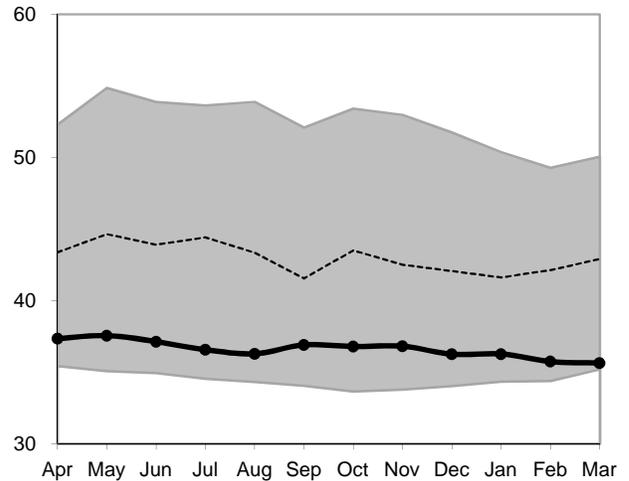
Period of Record Beginning 1978



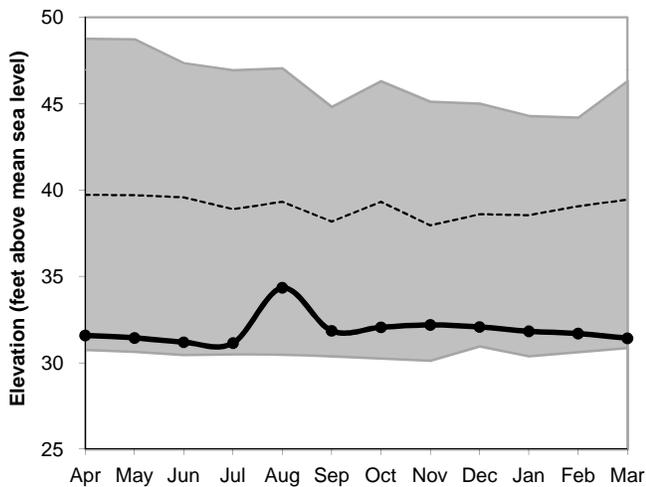
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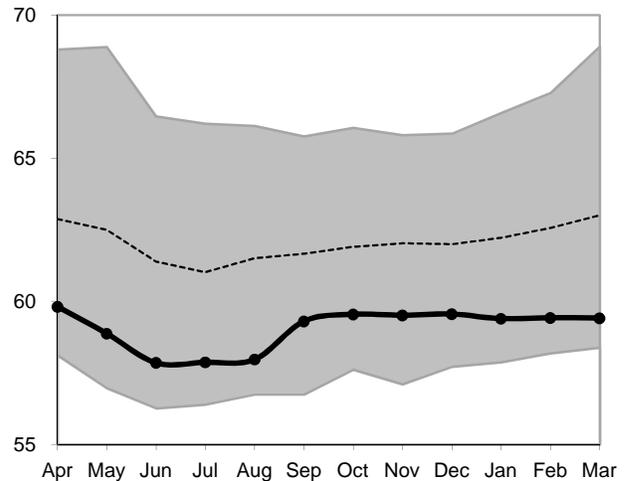
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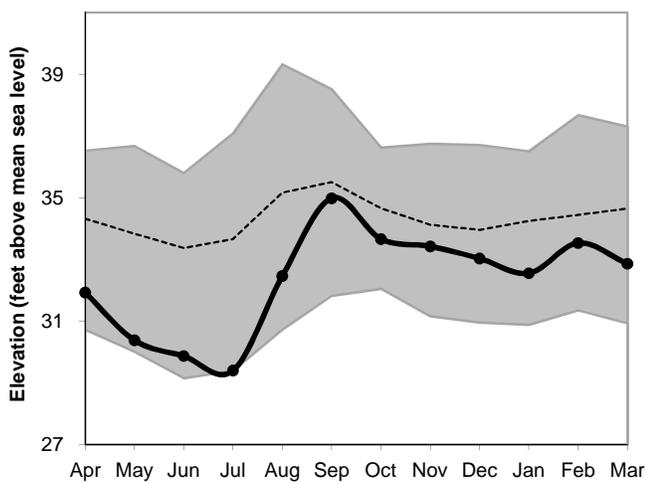
Columbia County S041625001



Bradford County S072132001



Dixie County S101210001



Taylor County S050701001

