

MEMORANDUM

TO: Governing Board

FROM: Megan Wetherington, Hydrologist

THRU: Jerry A. Scarborough, Executive Director
Kirk B. Webster, Deputy Executive Director

DATE: October 4, 2006

RE: September 2006 Hydrologic Conditions Report for the District

The Hydrologic Conditions Report is compiled from data collected from four water resource-monitoring networks. The four networks are rainfall (gage-adjusted radar rainfall dataset), groundwater levels (101 wells), lake levels (17 lakes), and river levels (31 stations on 8 rivers).

RAINFALL

Due to the timing of October's Governing Board meeting, the September radar-derived rainfall data is provisional in nature and will be gage-adjusted in the near future. The average District-wide rainfall according to this data was 5.93 inches. The District average rainfall for September for all years on record is 5.58 inches. Cumulative rainfall for the past 12 months is 43.73 inches, compared to the long-term average annual District rainfall of 55.6 inches. Figure 1 shows the rainfall distribution; the coastal areas received rain in excess of six inches, while portions of counties in the northern part of the District remained drier, with less than four inches of rain. A summary of rainfall by county for the District for September and a comparison of month-by-month rainfall versus the long-term average are provided in Table 1 and Figure 2, respectively.

GROUNDWATER

Groundwater levels in the Floridan aquifer dropped 5.5 inches on average during September. Levels are still mostly within normal range, but dropped to the 40th percentile. Exceptions occurred in Lafayette County and southern Jefferson County (Figure 3).

SURFACEWATER

With the exception of Lake Francis in Madison County, which increased by six inches, the lakes within the District's monitoring network either decreased slightly in elevation or remained the same. Lake levels decreased by an average of 2.4 inches. Current lake levels are shown compared to historic lake data in Table 2.

River levels throughout the District continued to decline during September from the low values seen throughout the summer. New record monthly lows were observed at the Withlacoochee River near Pinetta and the Santa Fe River near Fort White. The end of month reading at the Steinhatchee River near Cross City tied the historic monthly low at that station. September 2006 river levels and statistical summaries for the District's rivers at selected monitoring stations are provided in Table 3.

WATER CONSERVATION

The District recommends that water conservation be an ongoing activity for all water users. The District has a variety of free water conservation information available to the public, including a Home Water Use Survey and conservation tips, wastewater reuse, and xeriscape publications. Water is conserved by using the minimum amount needed for specific applications and by irrigating lawns, plants, and crops 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.

/dd

Table 1. Rainfall Totals by County Within SRWMD

County	RAINFALL (INCHES)		
	Sep-2006	Sep-2005	Average
ALACHUA	5.13	2.39	5.36
BAKER	5.98	1.56	5.44
BRADFORD	5.29	2.67	6.13
COLUMBIA	6.24	1.58	4.85
DIXIE	7.59	2.88	6.58
GILCHRIST	6.23	2.57	5.75
HAMILTON	4.28	2.05	4.63
JEFFERSON	5.42	3.24	5.31
LAFAYETTE	5.20	2.09	5.46
LEVY	8.76	2.23	6.70
MADISON	4.77	2.42	4.62
SUWANNEE	5.76	2.25	5.08
TAYLOR	6.89	2.13	5.61
UNION	5.53	2.53	4.94
District Average	5.93	2.33	5.58

September 2006 Rainfall

Figure 1

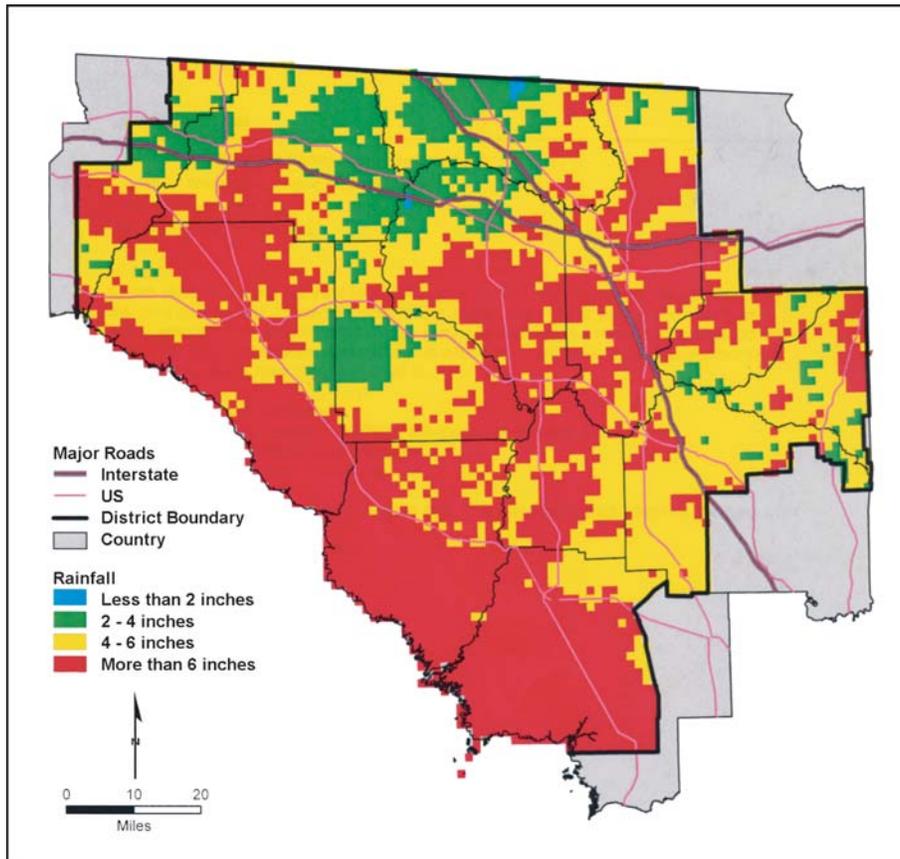


Figure 2 . Comparison of Monthly Rainfall in SRWMD.

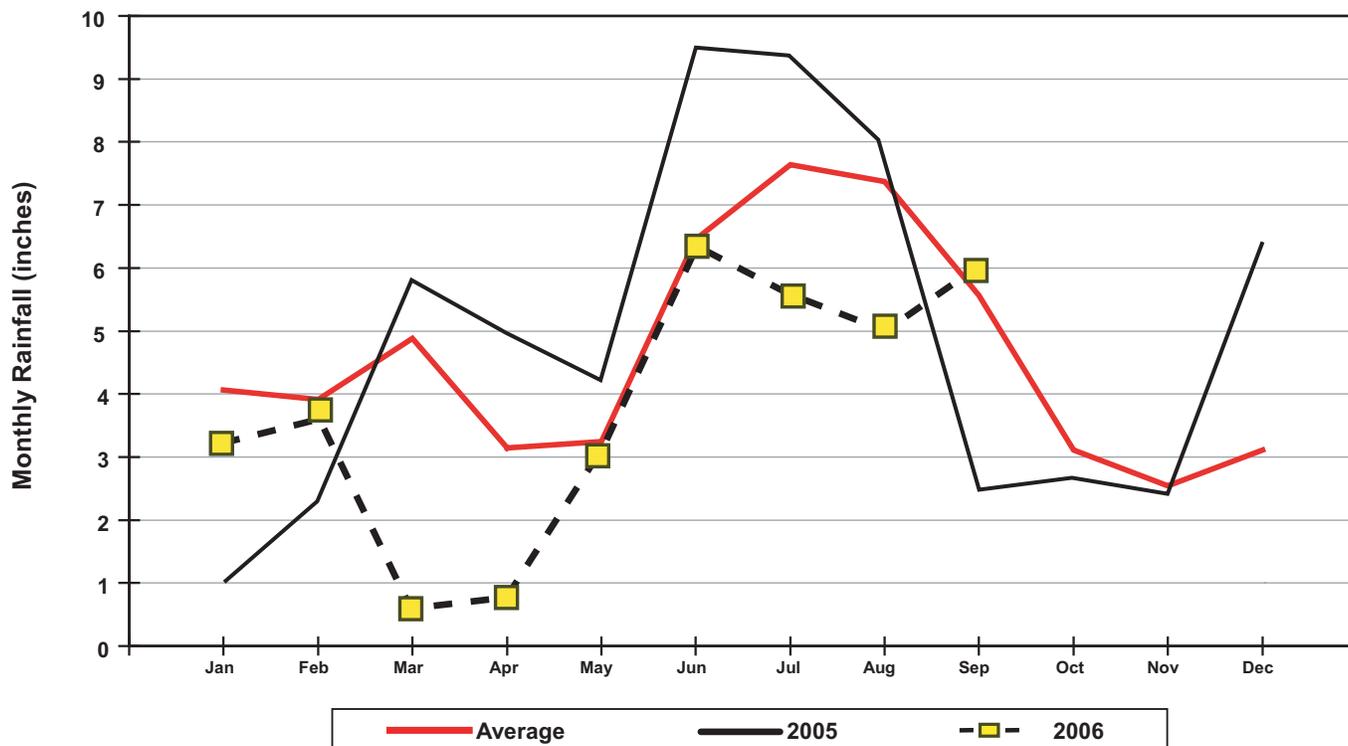


Table 2. Lake Levels within SRWMD.

Lake	Beginning Record	2005 September	2006 July	2006 August	2006 September	Monthly Change	Record Low	Record High
Lake Octahatchee	Nov-74	102.3	102.1	101.8	N/A	-	95.6 (3/89)	107.9 (3/05)
Cherry Lake	Nov-74	151.7	151.7	151.6	151.5	-0.1	150.8 (11/90)	154.0 (9/75)
Andrews Lake	Nov-74	77.3	76.6	76.4	76.3	-0.1	73.3 (12/01)	78.4 (12/94)
Palestine Lake	Aug-75	143.7	142.4	142.1	142.1	-0.1	139.3 (10/02)	145.2 (10/92)
Ocean Pond	Dec-74	154.7	153.4	153.0	153.0	0.0	150.9 (8/02)	156.6 (2/98)
Governor Hill Lake	Nov-74	53.0	50.3	49.7	48.8	-0.8	46.8 (1/02)	54.3 (2/98)
Alligator Lake	Sep-65	97.0	94.0	93.9	93.9	0.0	90.2 (4/68)	100.8 (9/04)
Lake Francis	Jun-99	139.9	139.6	139.0	139.5	0.5	139.0 (12/01)	141.7 (9/04)
Lake Butler	Jul-57	130.8	129.5	129.1	128.9	-0.2	126.8 (7/02)	134.0 (9/64)
Hampton Lake	Feb-89	129.9	129.1	128.9	128.7	-0.2	124.5 (5/02)	133.4 (3/98)
Lake Sampson	Jul-57	130.6	130.7	130.5	130.4	-0.1	129.5 (12/77)	136.2 (3/59)
Lake Crosby	Feb-89	130.9	130.4	130.1	129.6	-0.4	128.3 (5/01)	135.4 (10/04)
Waters Lake	Jul-72	72.5	69.3	68.1	67.9	-0.2	55.1 (2/82)	79.7 (9/04)
Low Lake	Nov-74	147.4	147.3	147.4	147.5	0.0	146.8 (7/00)	150.3 (6/94)
Santa Fe Lake	Jul-58	141.5	139.9	139.6	139.2	-0.3	135.7 (10/02)	142.8 (1/98)
Lake Altho	Mar-76	140.0	139.3	138.9	138.6	-0.4	136.8 (7/01)	141.5 (2/98)
Snead's Smokehouse Lake	Dec-76	80.3	79.7	79.3	78.9	-0.4	78.4 (5/96)	85.4 (4/84)

Bold indicates record measurement.

* - BG indicates lake level below gage. N/A - Data missing

Figure 3

Groundwater Levels for September 2006

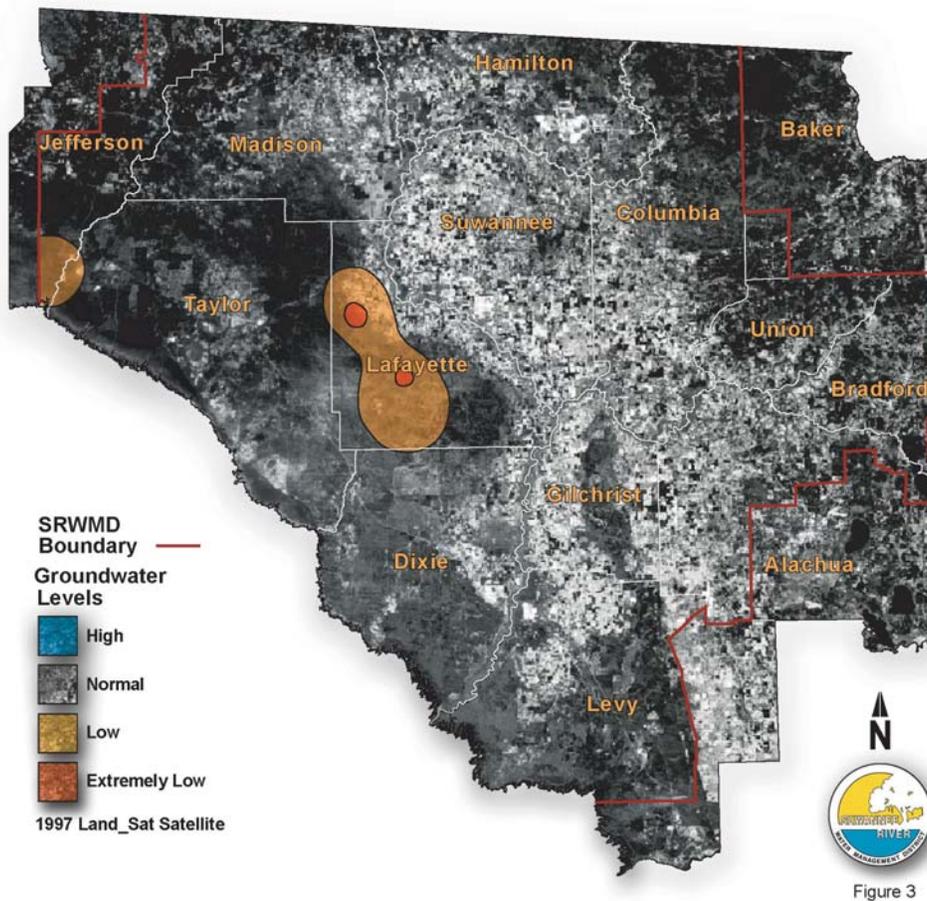


Table 3. River Levels within SRWMD.

	October 2006	Average October	October 2005	October Lowest	October Highest	Historic Low	Historic High
<u>SUWANNEE RIVER AND TRIBUTARIES</u>							
SUWANNEE RIVER @ White Springs	49.9	54.3	53.1	49.7	83.5	49.59 Jun-55	88.56 Apr-73
SUWANNEE RIVER @ Ellaville	29.1	31.3	31.1	28.9	57.0	28.55 Aug-02	68.10 Apr-48
SUWANNEE RIVER @ Branford	8.3	11.8	13.4	7.2	26.2	6.74 Jul-02	38.88 Apr-48
SUWANNEE RIVER @ Wilcox	2.0	4.0	4.4	1.7	14.0	0.37 Feb-57	21.79 Apr-48
WITHLACOOCHEE RIVER near Pinetta	53.5	54.8	54.2	53.6	69.1	53.25 Aug-02	85.85 Apr-48
SANTA FE RIVER near Fort White	21.3	23.0	21.9	21.5	36.2	21.01 Nov-02	36.20 Sep-64
<u>COASTAL RIVERS</u>							
AUCILLA RIVER at Lamont	46.1	50.3	47.9	46.4	55.1	43.50 Jun-55	59.47 Apr-73
STEINHATCHEE RIVER near Cross City	10.3	13.2	10.4	10.3	23.1	10.11 Jul-81	26.74 Sep-64
ECONFINA RIVER near Perry	16.6	19.3	16.8	16.3	27.1	15.85 Jan-76	27.13 Sep-57
FENHOLLOWAY RIVER near Foley	54.5	56.3	55.6	54.2	68.8	54.17 Aug-77	68.80 Sep-64

Bold indicates new record set during the month.