

The Southwest Florida Water Management District urges year-round water conservation. Water levels may rise and fall, but our water resources remain limited, and the natural systems continue to be dependent upon those water resources. The District encourages efficient, non-wasteful uses of water to sustain our high quality of life. For more information about ways to conserve water, call the Water Management District at 1-800-423-1476 or visit the District's Web site at www.watermatters.org.

Water Resource Monthly Update

May 30, 2008

The Southwest Florida Water Management District's *Water Resource Monthly Update* provides information to the public about the health of the water resources.

The *Monthly Update* contains three sections: **Aquifers**, **Rainfall** and **Surface Water**. The surface water section includes lake levels and streamflow. Information on the aquifer, rainfall, and streams is organized into three regions: north (Citrus, Hernando, Lake, Levy, Marion and Sumter counties), central (Hillsborough, Pasco, Pinellas, and Polk counties), and south (Charlotte, DeSoto, Hardee, Highlands, Manatee, and Sarasota counties). The lake level regions are described later in this report.

Aquifers

Aquifers are underground layers of rock and sand that hold water. In southwest Florida, more than 80 percent of the water supply comes from aquifers.

Aquifer levels normally fluctuate from month to month, reaching annual high levels at the end of the rainy season, and annual low levels at the end of the dry season. Therefore, each month has a different range of normal readings. The **Aquifer Levels** table compares current average levels to the lowest historical normal averages for the given month. For example, January 2008 readings are compared with records from all previous Januarys. The numeral "0" represents the bottom of the normal range of readings. A positive (+) number means the current average levels are normal or above normal. For instance, a "+1" reading means the current levels average a foot above the bottom of the normal range. A negative (-) number indicates the current levels are below normal.

The monthly **Aquifer Levels** table shows how the current average levels compare to the bottom of the normal range, the comparison to the average level of the last week of the previous month, and the level measured on the same date last year, and the range of normal values for each region. For example, in the northern region any value between "0" and "+4" would be considered to fall within the normal range. A value greater than "+4" in the northern region would be above the normal range.

Aquifer Levels

	May 28	April	May 2007	Normal range*
North	-0.06 foot	0.44 foot	-1.31 feet	0 to +4 feet
Central	2.51 feet	4.33 feet	1.10 feet	0 to +6 feet
South	1.97 feet	5.29 feet	-1.62 feet	0 to +8 feet

*Approximate levels

Rainfall

The **Rainfall** table shows rainfall measured since Jan. 1, 2008, the historic average for this period, the annual totals for recent years and the historic annual average for the entire period of record for the three regions. The rainfall values for the current month and year are considered provisional and subject to revision. The other annual figures are final.

2008 Rainfall (in inches)

	May 1-28	May	Jan. – April	Jan. – April
	Actual	Historic	Actual	Historic
North	0.55	3.60	14.28	12.43
Central	0.55	3.26	15.08	11.37
South	1.10	3.61	11.55	10.44

Historic Rainfall (Jan.- Dec. in inches)

	2007	2006	2005	2004	2003	2002	2001	2000	Jan. - Dec.
	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Historic
North	45.43	38.73	58.85	62.50	53.95	59.50	43.17	32.88	53.55
Central	41.44	43.13	51.62	68.52	53.86	64.75	43.21	32.60	52.56
South	38.53	42.28	61.65	62.65	55.61	60.47	49.26	32.84	52.50

Surface Water

Surface water is water found on the surface of the Earth including rivers, lakes, streams, ponds, wetlands, oceans and seas. This surface water section includes the measurement of lake levels and streamflow.

Each month the District measures the water levels in 76 lakes. The lake levels are compared to the lakes' adopted minimum low management (MLM) levels. The MLM level is the annual normal low level for the lake, which is usually recorded at the end of the dry season.

The **Lake Levels** table shows the average levels for the four regions: Northern, Tampa Bay, Polk Uplands and Lake Wales Ridge. The northern region includes Citrus, Hernando and Sumter counties and the Tampa Bay region includes Hillsborough and Pasco counties. The Polk Uplands region includes northern Polk County. The Lake Wales Ridge region includes portions of Polk and Highlands counties. The levels compare current readings to the MLM. For example, a "-2" reading means the current level is 2 feet below the MLM. The table also shows the reading from the previous month and the reading for the same date last year.

Lake Levels (in feet, relative to MLM)

	May levels	Previous month	Same date last year
Northern	-4.33	-3.79	-4.17
Tampa Bay	-1.84	-1.46	-1.59
Polk Uplands	-2.08	-1.80	-1.19
Lake Wales Ridge	-5.49	-4.96	-3.15

Streamflow, also known as discharge, is the volume of water passing a location in a certain amount of time. The slope of the watershed surrounding the stream or river, the permeability and water storage capacity of the surrounding soils, and the rainfall pattern all affect streamflow.

The **Streamflow** table shows the discharge levels measured in percentile values for the key rivers in the three regions: north, central and south. A percentile is a ranking from 0 to 100 that indicates what percent of comparable readings were at or below the current reading. For example, if the current month's streamflow is in the 50th percentile, that means that half of the historic month's readings were higher and half were lower. A normal percentile range is between the 25th and 75th percentiles.

Streamflow

	May percentile	Previous month percentile	Same date last year percentile	Normal range percentile
North				
Withlacoochee River near Holder	12	19	3	25-75
Withlacoochee River near Trilby	2	58	3	25-75
Central				
Hillsborough River near Zephyrhills	27	82	4	25-75
South				
Peace River at Arcadia	17	49	7	25-75
Peace River at Bartow	2	49	5	25-75