# Permit holders in Level IV counties increased water use in April 2009 by 0.3% when compared to April 2008 and reduced water use by 18.0% when compared to April 2007

### **Background**

On October 23, 2007, Governor Perdue directed the Georgia Environmental Protection Division (EPD) to modify surface and ground water withdrawal/production permits to achieve a 10 percent reduction in usage for water use permit holders subject to Level 4 drought response. Beginning November 1, 2007, these permit holders were required to reduce water production and non-municipal/non-agricultural water withdrawal by 10 percent compared to usage of the last winter season (beginning of December 2006 through end of March 2007). This requirement expired March 31, 2008 and was not extended because EPD determined that during the spring and summer months the Level 4 outdoor water use restrictions would result in water use reductions exceeding 10%.

### **Continued Monitoring of Water Use**

Although the 10% reduction requirement is no longer in effect, EPD is continuing to monitor water usage to assess the effectiveness of the Level IV outdoor water use restrictions and other conservation efforts. Therefore, EPD is requiring 168 permittees in the current 55-county Level IV drought area that use more than 100,000 gallons per day to continue reporting their water use on a monthly basis. Overall, these permittees account for 98% of all water use in the 55-county Level IV drought area, almost exclusively from surface water.

#### **Critical Infrastructure Considerations**

Opportunities to reduce water consumption by power producing utilities are related to the demand for electricity. Consequently, water conservation by electric producing utility plants is constrained by the need to support energy demands. These can be reduced to the extent that Georgians work to reduce energy demand. Additionally, the power grid is designed to have certain plants operating almost continuously to provide the base load for electrical needs. The 7 power producing utility plants are considered separately from the data described below.

## April 2009 versus April 2008 and April 2007 Water Use

April 2009 water use by 168 permittees using more than 100,000 gallons per day increased by 0.3% or 2 million gallons per day when compared to April 2008. Each of these permittees was under Level IV outdoor watering restrictions in April 2008. Compared to April 2007, before Level IV watering restrictions were in effect, water use in April 2009 was reduced by 18% or almost 135 million gallons per day. In April 2009, 92 permittees either decreased or did not increase their water use compared to April 2008, while 75 increased water use when compared to April 2008 and 1 failed to report (Mount Zion). However, compared to April 2007, 141 permittees either decreased or did not increase their water use in April 2009 and only 27 actually increased water use. This significant reduction in water use is attributable to the outstanding conservation efforts by Georgia's citizens and the continuation of Level IV outdoor watering restrictions. Table 1 provides a summary of water use by river basin.

Table 1
Summary of April 2009 versus April 2007 and 2008 Level IV Water Use Reductions by Basin (MGD)

					0/		0/
					%		%
				WATER USE	REDUCTION	WATER USE	REDUCTION
	APRIL 2007	APRIL 2008	APRIL 2009	REDUCTIONS	IN USE	REDUCTIONS	IN USE
	WATER	WATER	WATER	FROM APRIL	FROM APRIL	FROM APRIL	FROM APRIL
BASIN	USE (MGD)	USE (MGD)	USE (MGD)	2007 (MGD)	2007	2008 (MGD)	2008
Chattahoochee and Flint	448.13	362.41	366.52	81.61	18.2%	-4.11	-1.1%
Coosa, Tallapoosa and							
Tennessee	192.32	160.43	156.10	36.22	18.8%	4.33	2.7%
Oconee and Ocmulgee	95.12	76.87	79.71	15.41	16.2%	-2.84	-3.7%
Savannah	12.87	11.68	11.20	1.67	12.9%	0.48	4.1%
All Basins	748.44	611.39	613.53	134.91	18.0%	-2.14	-0.3%