

Permit holders in Level IV counties increased water use in November 2008 by less than 1% when compared to November 2007 and reduced water use by 12.5% when compared to November 2006

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Although the 10% reduction requirement is no longer in effect, EPD is continuing to monitor water usage to assess the effectiveness of the Level IV outdoor water use restrictions and other conservation efforts.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.

November 2008 versus November 2007 and November 2006 Water Use

November 2008 water use by 168 permittees using more than 100,000 gallons per day increased by less than 1% or 2 million gallons per day when compared to November 2007. Of those 168 permittees, 84 either decreased or did not increase their water use in November 2008 when compared to November 2007, while 83 increased water use when compared to November 2007. 1 failed to report (Martin). In addition, 125 permittees either decreased or did not increase their water use in November 2008 when compared to November 2006, while 42 increased water use when compared to November 2006. This is particularly significant considering that, during November 2007, each of these water systems was under Governor Perdue's order to reduce water use by 10 percent compared to the usage of the last winter season (December 2006 through end of March 2007). When November 2008 water use is compared to November 2006, before Level IV watering restrictions were in effect, water use was reduced by 12.5% or nearly 89 million gallons per day. 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 November 2008 versus November 2006 and 2007 Level IV Water Use Reductions by Basin (MGD)

BASIN	NOVEMBER 2006 WATER USE (MGD)	NOVEMBER 2007 WATER USE (MGD)	NOVEMBER 2008 WATER USE (MGD)	WATER USE REDUCTIONS FROM NOVEMBER 2006 (MGD)	% REDUCTION IN USE FROM NOVEMBER 2006	WATER USE INCREASES FROM NOVEMBER 2007 (MGD)	% INCREASE IN USE FROM NOVEMBER 2007
Chattahoochee and Flint	413.68	364.91	368.51	45.17	10.9%	3.60	1.0%
Coosa, Tallapoosa and Tennessee	193.48	163.03	160.58	32.90	17.0%	-2.45	-1.5%
Oconee and Ocmulgee	89.30	78.82	79.64	9.66	10.8%	.82	1.0%
Savannah	12.44	11.27	11.41	1.03	8.3%	0.14	1.2%
All Basins	708.90	618.03	620.14	88.76	12.5%	2.11	0.3%