

Permit holders in Level IV counties decreased water use in December 2008 by 1% when compared to December 2007 and reduced water use by 12.6% when compared to December 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Although the 10% reduction requirement is no longer in effect, EPD is continuing to monitor water usage to assess the effectiveness of the Level IV outdoor water use restrictions and other conservation efforts.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.

December 2008 versus December 2007 and December 2006 Water Use

December 2008 water use by 168 permittees using more than 100,000 gallons per day decreased by 1% or 6 million gallons per day when compared to December 2007. This is significant since each of these permittees was under Governor Perdue's order to reduce water use by 10 percent and under Level IV outdoor watering restrictions in December 2007. **Compared to December 2006, before Level IV watering restrictions were in effect, water use in December 2008 was reduced by 12.6% or more than 84 million gallons per day.** In December 2008, 88 permittees either decreased or did not increase their water use compared to December 2007, while 78 actually increased water use when compared to November 2007 and 2 failed to report (Martin and Nicholson). However, compared to December 2006, 127 permittees either decreased or did not increase their water use in December 2008 and only 39 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 December 2008 versus December 2006 and 2007 Level IV Water Use Reductions by Basin (MGD)

BASIN	DECEMBER 2006 WATER USE (MGD)	DECEMBER 2007 WATER USE (MGD)	DECEMBER 2008 WATER USE (MGD)	WATER USE REDUCTIONS FROM DECEMBER 2006 (MGD)	% REDUCTION IN USE FROM DECEMBER 2006	WATER USE REDUCTIONS FROM DECEMBER 2007 (MGD)	% REDUCTION IN USE FROM DECEMBER 2007
Chattahoochee and Flint	392.35	351.74	344.21	48.14	12.3%	7.53	2.1%
Coosa, Tallapoosa and Tennessee	182.28	154.43	154.73	27.55	15.1%	-0.30	-0.2%
Oconee and Ocmulgee	84.42	75.55	76.86	7.56	9.0%	-1.31	-1.7%
Savannah	12.07	10.92	10.88	1.19	9.8%	0.03	0.3%
All Basins	671.12	592.64	586.68	84.44	12.6%	5.95	1.0%