Water Use in Georgia by County for 2010 and Water-Use Trends, 1985–2010

Stephen J. Lawrence

Affiliation: Hydrologist, U.S. Geological Survey South Atlantic Water Science Center, Norcross Georgia 30093

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Abstract. Estimated total water withdrawals in Georgia were about 4,697 million gallons per day (Mgal/d) in 2010. The largest withdrawals were for thermoelectric power generation (2,046 Mgal/d), public supply (1,141 Mgal/d), irrigation (802 Mgal/d), and self-supplied industrial uses (494 Mgal/d). Seventy-five percent of 2010 withdrawals were from surface-water sources. According to the U.S. Census Bureau, nearly 9.7 million people lived in Georgia in 2010. Public suppliers provided water to 85 percent of the population, 78 percent of that water was surface water. Surface water sources provided nearly 100 percent of the water withdrawn for thermoelectricpower generation (2,043 Mgal/d). About 75 percent of all groundwater withdrawn in 2010 was used for irrigation (579 Mgal/d). Withdrawals for 2010 were 14 percent lower than 2005 (5,471 Mgal/d) and 30 percent lower than the 1980 total of 6,725 Mgal/d. These declines were evident across all water-use categories. The total water use per capita in 1985 (total withdrawals divided by total population) was about 850 gallons per day (gal/d) and steadily decreased to 482 gal/d in 2010, a 43 percent decline. About 2,337 Mgal/d of water was returned to Georgia streams and lakes in 2010 under the National Pollutant Discharge Elimination System (NPDES) program administered by the Georgia Environmental Protection Division. This amount was about 50 percent of the total water withdrawn from all sources. Water returns declined 39 percent between 1995 and 2010, mirroring the decline in water withdrawals during that period. In addition, land applications of treated wastewater increased steadily between 1995 and 2010.