Return to Normal Streamflows and Water Levels: Summary of Hydrologic Conditions in Georgia, 2013

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Abstract. The U.S. Geological Survey (USGS) South Atlantic Water Science Center (SAWSC) maintains a long-term hydrologic monitoring network in Georgia that includes more than 350 real-time streamgages, 10 lake-level monitoring stations, 67 real-time water-quality monitors, and several water-quality sampling programs. Additionally, in Georgia the SAWSC monitors more than 180 groundwater wells, 39 of which are real-time. Changing hydrologic conditions emphasize the need for accurate, timely data to help make informed decisions regarding the management and conservation of Georgias water resources. Hydrologic conditions during water year (WY) 2013 (October 2012–September 2013) were assessed by comparison with long-term historical data. The 2013 WY started out in persistent drought conditions, as portions of Georgia had been in extreme (D3) drought conditions since August 2010 as defined by the U.S. Drought Monitor. Several streamgages with 20 or more years of record were experiencing near record low flows and several lake and reservoir levels were below full pool. Groundwater levels in unconfined aquifers monitored by the Georgia Climate Response Network were experiencing near record low levels. In December 2012, Georgia began experiencing persistent heavy rainfall for extended periods. As a result Georgia was free of D3 drought conditions as of February 2013 and hydrologic conditions for streamgages, groundwater levels, and lake and reservoir levels improved. By February 2013 till the end of the water year, several streamgages returned to normal flow conditions, groundwater levels in unconfined aquifers increased above historic median levels, and lake and reservoir levels reached full pool.