Streamstats—A Web-Based Tool for Estimating Streamflow Characteristics in Georgia

Anthony J. Gotvald

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

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Abstract. StreamStats is a Web-based Geographic Information System (GIS) application that was created by the U.S. Geological Survey (USGS), in cooperation with the Environmental Systems Research Institute, Inc. (ESRI) that allows users to easily obtain streamflow statistics, basin characteristics, and descriptive information for USGS streamgages and user-selected ungaged locations on streams (Ries and others, 2008). StreamStats is being implemented on a state-by-state basis to allow for customization of the data development and underlying data sets to address state specific needs, issues, and objectives. The USGS, in cooperation with the Georgia Environmental Protection Division and Georgia Department of Transportation, have implemented StreamStats for Georgia. The Georgia StreamStats website is available through the national StreamStats web-page portal at http://streamstats.usgs.gov. Links are provided on this web page for individual state applications, instructions for using StreamStats, definitions of basin characteristics and streamflow statistics, and other supporting information. StreamStats can be used to obtain previously published basin characteristics and (or) streamflow statistics for over 700 USGS streamgages in Georgia. Currently (2014), 18 basin characteristics are available for a user-selected point on a stream. Streamflow statistics, such as flood magnitude and frequency, for a user-selected point on a stream are determined through the use of published USGS regional regression equations. Applications as diverse as planning for bridge and road construction, managing water-resources quality and quantity, characterizing drainage basins, or examining the effects of urbanization on streamflow can be implemented.