

Flood Inundation Mapping in Georgia

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Reference: McDowell RJ, CA Pruitt, RA Bahn (eds.), *Proceedings of the 2015 Georgia Water Resources Conference*, April 28-29, 2015, University of Georgia, Athens.

Abstract. The U.S. Geological Survey (USGS) has been modeling and mapping flood inundation in Georgia since 1994. Links to the flood-inundation maps and publications for four stream reaches can be found on the Georgia Flood Inundation Web site (<http://ga.water.usgs.gov/fim/>). These include the Flint River at Albany (Musser and Dyar, 2007), Peachtree Creek at Atlanta (Musser, 2012a), Suwanee Creek at Suwanee (Musser, 2012b), and Sweetwater Creek near Austell (Musser, 2012c). The inundation maps, which are available through the USGS Flood Inundation Mapping Science Web site at http://water.usgs.gov/osw/flood_inundation/, depict estimates of the areal extent and depth of flooding corresponding to selected water levels (stages) at each USGS streamgage. Current stage at each USGS streamgage may be obtained at <http://waterdata.usgs.gov/> and can be used in conjunction with these maps to estimate near real-time flooding extent. The National Weather Service (NWS) forecasts flood hydrographs at many places that commonly are collocated at USGS streamgages. The forecasted peak-stage information for a USGS streamgage, which is available through the National Weather Service River Forecast Center, Southeast RFC Web site (<http://www.srh.noaa.gov/serfc/>), may be used in conjunction with these maps to show predicted areas of flood inundation. The availability of these maps, when combined with real-time stage from USGS streamgages and forecasted stream stages from the NWS, provides emergency management personnel and residents with critical information for flood-response activities, such as evacuations and road closures, as well as for post-flood recovery efforts. In addition, USGS is currently developing flood-inundation maps for Big Creek in Alpharetta and Roswell.