

FLOOD INUNDATION MAPPING IN GEORGIA

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The USGS (USGS) has been modeling and mapping flood inundation in Georgia since 1994. Links to the flood-inundation maps and publications for six 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), Sweetwater Creek near Austell (Musser, 2012c), Big Creek in Alpharetta and Roswell (Musser, 2015a), and South Fork Peachtree Creek in DeKalb County (Musser, 2015b). 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 the Withlacoochee River in Valdosta and Lowndes County. Musser, J.W., and Dyar, T.R., 2007, Two-dimensional flood-inundation model of the Flint River at Albany, Georgia: USGS Scientific Investigations Report 2007-5107, 49 p., <http://pubs.usgs.gov/sir/2007/5107>. Musser, J.W., 2012a, Flood-inundation maps for Peachtree Creek from the Norfolk Southern Railway bridge to the Moores Mill Road NW bridge, Atlanta, Georgia: USGS Scientific Investigations Map 3189, 9 p., 50 sheets; available online at <http://pubs.usgs.gov/sim/3189/>. Musser, J.W., 2012b, Flood-inundation maps for Suwanee Creek from the confluence of Ivy Creek to the Noblin Ridge Drive bridge, Gwinnett County, Georgia: USGS Scientific Investigations Map 3226, 8 p. pamphlet, 19 sheets; available online at <http://pubs.usgs.gov/sim/3226/>. Musser, J.W., 2012c, Flood-inundation maps for Sweetwater Creek from above the confluence of Powder Springs Creek to the Interstate 20 bridge, Cobb and Douglas Counties, Georgia: USGS Scientific Investigations Map 3220, 10 p. pamphlet, 21 sheets, available online at <http://pubs.usgs.gov/sim/3220/>. Musser, J.W., 2015a, Flood-inundation maps for Big Creek from the McGinnis Ferry Road bridge to the confluence of Hog Wallow, Alpharetta and Roswell, Georgia: USGS Scientific Investigations Map 3338, 19 sheets, 10-p. pamphlet, <http://dx.doi.org/10.3133/sim3338>. Musser, J.W., 2015b, Flood-inundation maps for South Fork Peachtree Creek from the Brockett Road bridge to the Willivee Drive bridge, DeKalb County, Georgia: USGS Scientific Investigations Map 3347, 13 sheets, 10-p. pamphlet, <http://dx.doi.org/10.3133/sim3347>.

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