

NEW WATERSHED BOUNDARY MAP FOR GEORGIA

Mark N. Landers^{1/}, Keith W. McFadden^{2/}, and Jimmy R. Bramblett^{3/}

AUTHOR: ^{1/}Hydrologist and ^{2/}Computer Specialist, U.S. Geological Survey, 3039 Amwiler Road, Suite 130, Peachtree Business Center, Atlanta, GA 30360-2824; and ^{3/}Water Resources Specialist, The University of Georgia, College of Agricultural and Environmental Sciences, Department of Agricultural and Applied Economics, 315-B Conner Hall, Athens, GA 30602.

REFERENCE: *Proceedings of the 2001 Georgia Water Resources Conference*, held March 26-27, 2001, at The University of Georgia, Kathryn J. Hatcher, *editor*, Institute of Ecology, The University of Georgia, Athens, Georgia.

Abstract. Watersheds are units for surface-water runoff and are broadly used to define the spatial extent of surface-water investigations and management programs. A standardized, digital data base of accurately and consistently defined watershed boundaries, or hydrologic units, has been developed to support water resources programs in Georgia. This new watershed boundary map is a cooperative effort of the Georgia Department of Natural Resources, the U.S. Geological Survey (USGS), the Georgia Geographic Information System Clearinghouse, and the Natural Resources Conservation Service (NRCS). Watershed boundary development also was coordinated with adjacent States, and with Federal Geospatial Data Committee efforts to create a National guideline for watershed boundary—or hydrologic unit—mapping. The map is complete and a digital copy may be obtained from the USGS, the Georgia GIS Clearinghouse, or the NRCS. A hard copy of the map and supporting report also is being produced by the NRCS and the USGS.

The principal characteristic of the new Georgia watershed boundary map is that its pour points and boundaries are based solely on hydrologic considerations. The map defines watershed boundaries at the fourth through sixth levels (8-, 10- and 12-digit hydrologic units). Watershed boundaries selected for definition on this map were delineated on 1:24,000 scale USGS topographic maps, using the most recent edition available. The maps were scanned and digitized at a scale of 1:12,000 or larger. The new map defines parts of 54 8-digit watersheds; 395 10-digit watersheds with an average area of 174 square miles, and 1,964 12-digit watersheds with an average area of 35 square miles. The new Georgia watershed boundary map will support scientific investigations and management efforts on topics such as non-point and point source contaminant loading, ecosystem function, and coordinated partnerships among stakeholders whose interests are joined by a shared watershed.