Abstract. The Clayton and Claiborne aquifers are heavily pumped as sources of water for irrigation, public supply, and industrial purposes in southwestern Georgia. This pumping has led to large water-level declines in the Clayton aquifer, and the Georgia Environmental Protection Division imposed a moratorium on new permits in the Clayton aquifer in the early 1990s. Although the U.S. Geological Survey in cooperation with state and local agencies operates a continuous water-level monitoring network in the two aquifers, the last time an area-wide effort to measure water levels in the aquifers and map their potentiometric surfaces was during October-November 1994. To determine current hydrologic conditions water levels were measured in wells completed in the Clayton and Claiborne aquifers during November 2011 and these data were used to construct potentiometric surface and water-level change maps for each aquifer. This presentation will provide an overview of changes in groundwater levels and the configuration of potentiometric surfaces for the Clayton and Claiborne aquifers between October-November 1994 and November 2011.