

## SELECTED GROUND-WATER PUBLICATIONS, CONFERENCES, AND OUTREACH, 2001

### INTRODUCTION

During 2001, numerous reports, conference proceedings papers, and abstracts authored by U.S. Geological Survey (USGS) scientists were published on the ground water of Georgia; selected publications are listed below. Oral and poster presentations were given at various technical conferences and outreach events throughout the State. Most of these publications and talks presented results of investigations conducted in cooperation with agencies including the Georgia Department of Natural Resources; city of Brunswick and Glynn County; Albany Water, Gas, and Light Commission; city of Lawrenceville; U.S. Department of Defense; and U.S. Fish and Wildlife Service. Abstracts of many of the publications and ordering information are available on the Web at URL: <http://ga.water.usgs.gov/ga004.html>.

### Georgia Water Resources Conference for 2001

An important conference that was co-sponsored by the USGS and where results of several USGS investigations were highlighted was the 7th Biennial Georgia Water Resources Conference, held at the University of Georgia in Athens, in March 2001. Thirty-two USGS-authored papers (16 of which were ground-water related) were published and presented either as oral or poster presentations. The USGS Director, Charles G. Groat, was a keynote speaker at this conference.

### Other Conferences and Outreach Events for 2001

Other conferences and outreach events in which USGS ground-water scientists participated include:

- Geological Society of America, Southeastern Section Meeting, held in Raleigh, North Carolina (April);
- U.S. Geological Survey, Appalachian Region Integrated Workshop, held in Gatlinburg, Tennessee (October);
- National Ground Water Association, Southeast FOCUS Ground Water Conference, held in Atlanta, Georgia (September);
- CoastFest 2001, held in Brunswick, Georgia (October);
- SunBelt Exposition, held in Moultrie, Georgia (October); and
- First International Conference on Saltwater Intrusion and Coastal Aquifers, held in the Country of Morocco (April).

## Selected USGS Reports and Conference Proceedings Articles Published in 2001

- Abu-Ruman, Malek, and Clarke, J.S., 2001, Preliminary simulation of pond-aquifer flow and water availability at a seepage pond near Brunswick, Georgia; *in* Hatcher, K.J., ed., Proceedings of the 2001 Georgia Water Resources Conference, Athens, Georgia, March 26–27, 2001: The University of Georgia, Institute of Ecology, p. 669–672.
- Addison, A.D., 2001, Characterization of fractures using borehole geophysics in a crystalline-bedrock aquifer, Lawrenceville, Georgia; *in* Geological Society of America, Abstracts with Programs, 50th Annual Southeastern Section Meeting, April 5–6, 2001, Raleigh, North Carolina, v. 33, no. 2, p. A-81.
- Albertson, P.N., 2001a, Comparison of pre- and post-impoundment ground-water levels near the Jim Woodruff Lock and Dam site, Jackson County, Florida; *in* Hatcher, K.J., ed., Proceedings of the 2001 Georgia Water Resources Conference, Athens, Georgia, March 26–27, 2001: The University of Georgia, Institute of Ecology, p. 127–128.
- Albertson, P.N., 2001b, Simulated effects of pumpage and climatic conditions on stream/aquifer flow in streams harboring federally protected mussel species, northwestern Florida and southwestern Georgia; *in* Hatcher, K.J., ed., Proceedings of the 2001 Georgia Water Resources Conference, Athens, Georgia, March 26–27, 2001: The University of Georgia, Institute of Ecology, p. 129–130.
- Chapman, M.J., 2001, Fracture zones and lithologic characteristics associated with high-yield wells in Lawrenceville, Georgia; *in* Geological Society of America, Abstracts with Programs, 50th Annual Southeastern Section Meeting, April 5–6, 2001, Raleigh, North Carolina, v. 33, no. 2, p. A-81.
- Clarke, J.S., and Krause, R.E., 2001, Use of ground-water flow models for simulation of water-management scenarios for coastal Georgia and adjacent parts of South Carolina; *in* Hatcher, K.J., ed., Proceedings of the 2001 Georgia Water Resources Conference, Athens, Georgia, March 26–27, 2001: The University of Georgia, Institute of Ecology, p. 627–630.
- Craig, S.D., and Warner, Debbie, 2001, Summary of selected U.S. Geological Survey water-resources investigations in Georgia; *in* Hatcher, K.J., ed., Proceedings of the 2001 Georgia Water Resources Conference, Athens, Georgia, March 26–27, 2001: The University of Georgia, Institute of Ecology, p. 677–680.

- Cressler, A.M., Blackburn, D.K., and McSwain, K.B., 2001, Ground-water conditions in Georgia, 2000: U.S. Geological Survey Open-File Report 01-220, 182 p.
- Falls, W.F., Harrelson, L.G., Conlon, K.J., and Petkewich, M.D., 2001, Hydrogeology and water quality of the lower Floridan aquifer, coastal Georgia, 1999–2000; *in* Hatcher, K.J., ed., Proceedings of the 2001 Georgia Water Resources Conference, Athens, Georgia, March 26–27, 2001: The University of Georgia, Institute of Ecology, p. 652–655.
- Gonthier, G.J., 2001, A low-cost and effective method to help characterize ground-water flow in a Piedmont fractured crystalline rock, Marietta, Georgia; *in* Adams, D.B., Burke, K.B., Hemingway, B.S., Keay, J.A., and Yurewicz, M.C., compilers: U.S. Geological Survey Appalachian Region Integrated Workshop Proceedings, Gatlinburg, Tennessee, October 22–26, 2001: U.S. Geological Survey Open-File Report 01-406, p. 116.
- Gonthier, G.J., and Waddell, J.P., 2001, Trichloroethene Presence in Rottenwood Creek near Air Force Plant 6, Marietta, Georgia, Summer 2000; *in* Hatcher, K.J., ed., Proceedings of the 2001 Georgia Water Resources Conference, Athens, Georgia, March 26–27, 2001: The University of Georgia, Institute of Ecology, p. 586–589.
- Krause, R.E., and Clarke, J.S., 2001a, Saltwater contamination of ground water at Brunswick, Georgia and Hilton Head Island, South Carolina; *in* Hatcher, K.J., ed., Proceedings of the 2001 Georgia Water Resources Conference, Athens, Georgia, March 26–27, 2001: The University of Georgia, Institute of Ecology, p. 756–759.
- Krause, R.E., and Clarke, J.S., 2001b, Coastal ground water at risk—Saltwater contamination at Brunswick, Georgia and Hilton Head Island, South Carolina: U.S. Geological Survey Water-Resources Investigations Report 01-4107, poster.
- Fanning, J.L., Schwarz, G.E., and Lewis, W.C., 2001, A field and statistical modeling study to estimate irrigation water use at Benchmark Farms study sites in southwestern Georgia, 1995–96: U.S. Geological Survey Water-Resources Investigations Report 00-4292, 66 p.
- Jones, L.E., 2001, Saltwater contamination in the Upper Floridan aquifer at Brunswick, Georgia; *in* Hatcher, K.J., ed., Proceedings of the 2001 Georgia Water Resources Conference, Athens, Georgia, March 26–27, 2001: The University of Georgia, Institute of Ecology, p. 644–647.
- Laitta, M.T., 2001, Linkage of offshore and onshore hydrogeologic data for coastal Georgia and adjacent parts of South Carolina and Florida using a geographic information system; *in* Hatcher, K.J., ed., Proceedings of the 2001 Georgia Water Resources Conference, Athens, Georgia, March 26–27, 2001: The University of Georgia, Institute of Ecology, p. 764–767.
- McSwain, K.B., and Barber, N.L., 2001, Ground-water monitoring and effects of the 1998–2000 drought on ground-water levels in Georgia; *in* Hatcher, K.J., ed., Proceedings of the 2001 Georgia Water Resources Conference, Athens, Georgia, March 26–27, 2001: The University of Georgia, Institute of Ecology, p. 61.
- Mosner, M.S., 2001, Effects of drought on stream discharge and ground-water levels near Lake Seminole, southwestern Georgia and northwestern Florida, October 1999–August 2000; *in* Hatcher, K.J., ed., Proceedings of the 2001 Georgia Water Resources Conference, Athens, Georgia, March 26–27, 2001: The University of Georgia, Institute of Ecology, p. 118–121.
- Payne, D.F., Provost, A.M., and Voss, C.I., 2001, Preliminary numerical models of saltwater transport in coastal Georgia and southeastern South Carolina; *in* Hatcher, K.J., ed., Proceedings of the 2001 Georgia Water Resources Conference, Athens, Georgia, March 26–27, 2001: The University of Georgia, Institute of Ecology, p. 656–659.
- Payne, D.F., Provost, A.M., Voss, C.I., and Clarke, J.S., 2001, Mechanisms of saltwater contamination of ground water in coastal Georgia, USA—Preliminary results of variable-density transport modeling: *in* Proceedings of the First International Conference on Saltwater Intrusion and Coastal Aquifers—Monitoring, Modeling, and Management, Essaouira, Morocco, April 23–25, 2001, 3 p., published on the World Wide Web at URL: <http://www.olemiss.edu/sciencenet/saltnet/page8.html>.
- Peck, M.F., Clarke, J.S., Abu-Ruman, Malek, and Laitta, M.T., 2001, Hydrogeologic conditions at two seepage ponds in the coastal area of Georgia, August 1999 to February 2001; *in* Hatcher, K.J., ed., Proceedings of 2001 Georgia Water Resources Conference, Athens, Georgia, March 26–27, 2001: The University of Georgia, Institute of Ecology, p. 768–771.
- Torak, L.J., 2001, Physical and hydrochemical evidence of mixing of surface water and ground water in and near Lake Seminole, southwestern Georgia and northwestern Florida; *in* Hatcher, K.J., ed., Proceedings of the 2001 Georgia Water Resources Conference, Athens, Georgia, March 26–27, 2001: The University of Georgia, Institute of Ecology, p. 122–126.

Warner, Debbie, and Lawrence, S.J., 2001, Ground-water flow and nitrate-source investigation in the Upper Floridan aquifer, southwestern Albany area, Georgia; *in* Proceedings of the National Ground Water Association Southeast FOCUS Ground Water Conference, Atlanta, Georgia, September 24–25, 2001, p. 64.

Williams, L.J., and Belaval, Marcel, 2001, Use of 2-dimensional direct-current resistivity profiling in a crystalline-rock aquifer near Lawrenceville, Georgia; *in* Hatcher, K.J., ed., Proceedings of the 2001 Georgia Water Resources Conference, Athens, Georgia, March 26–27, 2001: The University of Georgia, Institute of Ecology, p. 772–773.