

Hickory Log Creek Dam

The City of Canton, Georgia, and the Cobb County-Marietta Water Authority engaged Schnabel Engineering and Brown & Caldwell to design a dam on the Hickory Log Creek to create a lake and reservoir.



Installation of pre-cast panels and roller-compacted concrete

The dam will be about 950 feet wide and 180 feet high, making it one of the largest roller-compacted concrete dams authorized by the Georgia Safe Dams Program. The lake will be about 370 acres in size; the res-

ervoir will hold over 5 billion gallons of drinking water; and as much as 44 million gallons of water per day may be withdrawn.

Geocomp Corporation was engaged by Thalle Construction to install a large and sophisticated array of instruments in and around the dam. The list of instruments includes:

- 18 vibrating wire piezometers
- 6 Casagrande-type piezometers
- 3 inclinometers
- 56 thermistors in eight different lifts
- 19 survey monuments
- 2 wiers
- 4 observation wells
- staff gage.

The instruments are routed to three locations within the drainage gallery and within adit tunnels inside the dam.

Instruments may be read manually or may be read by an optional sensor-to-screen technology using iSite data loggers to iSiteCentral.com.

Monitoring will take place during the reservoir-filling stage and will continue for two years after. Geocomp is proposing to provide continuous monitoring of the dam with a call-alert system that will automatically notify authorities of potential issues.

The construction of the dam is projected to be finished by the later part of 2007, and the filling of the lake and reservoir is anticipated to be completed by 2009.



Aerial view of the dam under construction