

Hydrology Section — Land, Water and Conservation Division

South Carolina Department of Natural Resources

www.dnr.sc.gov

803-734-9100



DNR

PROJECT: Water Well Database

OBJECTIVE: Develop and maintain an electronic database of the DNR water well inventory

One of the key functions of the DNR Hydrology Section is to gain a better understanding of the occurrence and availability of groundwater in South Carolina, and perhaps the best source of information about groundwater hydrology is water wells. To that end, the Hydrology Section of the South Carolina Department of Natural Resources and its predecessor, the South Carolina Water Resources Commission, has been collecting information on water wells since 1969, when the Commission was established.

Over the years, the Department has compiled information on about 20,000 open-hole rock wells in the Piedmont and more than 13,000 sand and limestone wells in the Coastal Plain. Although those numbers may seem large, they represent only a small percentage of the total number of water wells that have been drilled in South Carolina.

The DNR well inventory includes a wide range of well uses (domestic, municipal and public-supply, industry, energy, irrigation, and monitoring), depths (from less than 5 feet to more than 4,200 feet), and yields (from dry wells to 3,000 gallons per minute). The amount and type of information contained in each record varies depending on the use of the well and on the availability of data. At a minimum, the owner, depth, and location of the well are recorded. Additional information often includes well yield, depth of screened intervals or open-hole interval, driller's log, and pump data. Some wells have water-level data, chemical analyses, geophysical and geologist's logs, and aquifer tests.

A summary of DNR's Coastal Plain water well data is currently available online (http://www.dnr.sc.gov/water/hydro/WellRecords/Wells_main.htm).

In an effort to make this hydrologic information more accessible and more functional, the DNR well records are currently being organized into a new user-friendly electronic database so that well information can be easily retrieved, searched, and mapped through web applications and analyzed with statistical techniques. Eventually, the Hydrology Section's well information will be integrated with the South Carolina Geological Survey's borehole database so that groundwater and geologic data will be available from a single publicly-accessible database. This water well database will also be linked to other online information, such as geophysical log and water-level data, that have been collected by the Hydrology Section. In addition, hard-copy well records are being scanned and archived using a document management system so that all information contained in every well record will be preserved and accessible for viewing electronically.



Industrial well in Orangeburg County.



Domestic well in Colleton County.

For additional information, contact Andrew Wachob (wachoba@dnr.sc.gov) or Frank Tian (tianf@dnr.sc.gov).