



Aquifers, Groundwater, and Their Importance Laws and Plans Affecting Groundwater Use

In 1967, the Water Resources Planning and Coordination Act was passed. This act established the South Carolina Water Resources Commission and directed the agency to study and plan for water resources of the State and to assist the governor and General Assembly in establishing water resource policies. In 1993, as part of the South Carolina government reorganization by Governor Campbell, the Act was amended to separate the duties between the South Carolina Department of Natural Resources (SCDNR) Water Resources Division and the South Carolina Department of Health and Environmental Control (SCDHEC), with all regulatory authority being transferred to SCDHEC.

In 1998, the Water Resources Division of SCDNR pulled together a group of water experts and drafted the first edition of the State Water Plan. This plan documented the hydrology of South Carolina and provided valuable information about the water resources. It also established strategies and recommendations for managing the state waters. In 1991, Mount Pleasant Waterworks (MPW) became the first public water supply to use Reverse Osmosis (RO) treatment of the Middendorf Aquifer groundwater as its principal source of water. In 1995, Nucor Steel applied for construction permits through SCDHEC to pump up to 8 million gallons of water a day from the Middendorf Aquifer for quenching steel. This volume was more than the entire Town of Mount Pleasant was using at the time. MPW filed suit to deny Nucor use of the Middendorf Aquifer, because there was no law providing groundwater protection in effect at the time, the suit was dismissed.

After many years of MPW seeking groundwater protection, Representative Chip Campsen spearheaded the passage of the Groundwater Use and Reporting Act in 2000. This act established the process for designating capacity use areas to protect groundwater. Groundwater withdrawers in the Capacity Use Areas must get permits from SCDHEC if they withdraw more than 3 million gallons per month. In July of 2001, SCDHEC published the Preliminary Assessment of the Groundwater Conditions in Charleston, Berkeley and Dorchester Counties and in August 2002, the Trident Capacity Use Area was established. As part of this designation, a groundwater management plan was to be developed by the local stakeholders. Initially, some work was done on the plan locally, however around 2005 work on the plan stopped.

In 2004, the second edition of the State Water Plan was published by SCDNR. Recommendations in the plan include designating the entire Coastal Plain a capacity use area and that "water availability can be enhanced by withdrawing water in the following order of source preference: (1) streams; (2) lakes; and (3) aquifers". This 2004 edition is the latest edition of the State Water Plan. There is an ongoing surface water assessment being conducted by SCDNR through a consultant with Clemson University assisting with the stakeholder involvement. The United States Geological Survey (USGS) has been contracted by SCDNR to update the Coastal Plain Groundwater Model. This updated model is expected to be complete early 2019. SCDNR is planning groundwater stakeholder meetings in the near future. Once all the surface and groundwater information is assembled and the stakeholder input is assimilated, the new version of the State Water Plan should be ready in 2023.

Recently, it was brought to SCDHEC's attention that the Groundwater Management Plan required by the Capacity Use Designation had to be established before withdrawal permits could be issued. In February of 2017, SCDHEC published a schedule to develop and approve the plan. After two meetings and a public hearing, the SCDHEC board approved the Trident Capacity Use Area Groundwater Management Plan on May 11, 2017.

As part of the Groundwater Management Plan, the local Technical Advisory Committee of the Berkeley, Charleston, Dorchester Council of Governments will review four pending groundwater permits.

Proper development and execution of laws and plans that impact use of the Middendorf Aquifer is key to the protection and sustainability of the groundwater supply that provides water to many areas in South Carolina. A strong partnership between regulators and stakeholders will ensure that the best plans and laws are developed, managed, and executed.