



May 2002

Fact Sheet

Trident Area Capacity Use Designation

- Why is the Department of Health and Environmental Control (DHEC) considering designating the Trident Area as a Capacity Use Area?

DHEC has been requested, by Mount Pleasant Water Works, to designate the Trident area (Berkeley, Dorchester, and Charleston counties) as a Capacity Use Area. In accordance with the *Groundwater Use and Reporting Act*, Title 49, Section 5 of the S.C. Code of Laws, DHEC has investigated the available groundwater information in the Trident Area to determine if designation is warranted.

- What are the results of DHEC's investigation?

The major aquifers in these counties used as drinking water supplies are the shallow aquifer system, the Santee/Black Mingo aquifers (part of the Floridan aquifer system), and the Middendorf aquifer.

Comprehensive groundwater investigations in the Trident area have documented progressive groundwater level declines, salt-water intrusion, and an increasing demand on the groundwater resource as a result of rapid industrial and commercial growth. For example, groundwater levels in the Middendorf aquifer have declined from the pre-development level of 126 feet above mean sea level to approximately 56 feet below sea level, a total decline of more than 180 feet.

Demands for groundwater are certain to increase in the future. The population in the Trident area increased 40 percent from 1973 to 1994, and is expected to reach 795,879 by 2030.

- What does this technical information mean?

DHEC concludes from the technical information gathered in the investigation that the groundwater supplies of the Trident area have been used to the degree that coordination and regulation of groundwater supplies have become desirable and necessary.

- Are there other Capacity Use areas in our state?

Yes, there are currently two Capacity Use areas. One is the Lowcountry Capacity Use area, where there is a significant ongoing investigation into the salt-water intrusion problems on Hilton Head Island. The other is the Waccamaw Capacity Use area where the extensive use of groundwater for irrigation is being monitored. By designating the Trident area as a Capacity Use area, all of South Carolina's coastal counties will receive increased monitoring and protection of their groundwater resources.

- What are the requirements in a Capacity Use area?

The regulatory requirements only affect large groundwater users. Anyone who withdraws 3 million gallons or more in any one month must receive a permit from DHEC. Also, the amounts of groundwater withdrawn are reported to DHEC each year so that usage can be tracked. DHEC routinely publishes water use data for the state.

- What is the purpose of the Capacity Use Program?

The goal of the program is not to prevent the use of groundwater, but to help ensure that this finite and valuable resource is available for everyone to use by using best management practices. The legislative policy stated in the *Groundwater Use and Reporting Act* is very clear: "The General Assembly declares that the general welfare and public interest require that the groundwater resources of the State be put to beneficial use to the fullest extent to which they are capable, subject to reasonable regulation, in order to conserve and protect these resources, prevent waste, and to provide and maintain conditions which are conducive to the development and use of water resources."

- Are there any benefits to being designated as a Capacity Use area?

Yes, there are several benefits. A local groundwater management plan will be developed, in coordination with local governments and groundwater users, that will help guide DHEC's permitting decisions. The permitting process allows DHEC to work with new users of the groundwater resource to help ensure best management practices are utilized, and that only the amount of groundwater necessary for that particular activity is used.

If you have any questions, please contact Mr. David Baize at (803) 898-4272 or by e-mail: baizedg@dhec.state.sc.us.