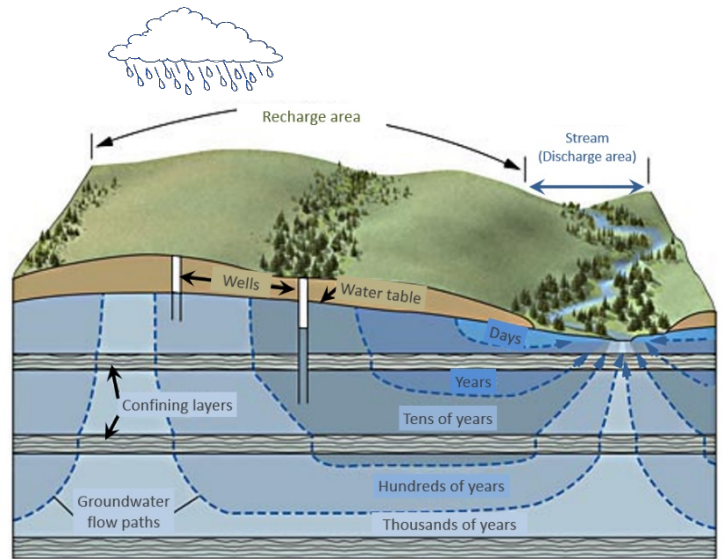


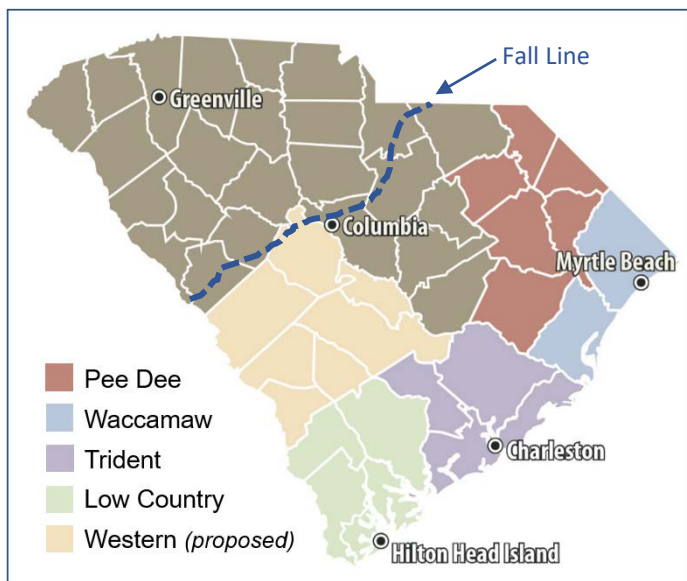
Key Facts about Groundwater in South Carolina

Groundwater and surface water systems are connected parts of the hydrologic cycle. Both resources are affected by natural variations in rainfall and by anthropogenic (human) uses. Depleting one resource depletes the other, and recovery can be fast or very slow.

In the South Carolina coastal plain (southeast of the fall line), groundwater occurs in sedimentary aquifers below the ground surface. These porous, water-saturated layers are complex geological systems through which water moves at varying timescales, ranging from days to thousands of years. Aquifers are generally thinner and more connected to each other in updip coastal plain regions (nearer the fall line) and thicker and less connected to each other near the coast. Man-made political boundaries (counties, cities) do not control the movement or availability of groundwater.



Groundwater and Surface Water



Groundwater Capacity Use Areas

Groundwater is a shared resource; it is not owned by anyone individually but belongs collectively to all of us. Common uses of groundwater include drinking water (residential wells and municipal water supplies), irrigation (golf courses, landscapes, small farms and large agriculture), and industrial uses. Historically, groundwater in South Carolina has been plentiful, with quantity and quality sufficient to meet demand.

However, as groundwater demand grows throughout the state, a clear long-term trend of decreasing groundwater availability is apparent. Multiple comprehensive studies show that demand may soon exceed supply – in some areas, this is already happening. In response, several Groundwater Capacity Use Areas have been established and an additional (Western) area is proposed. Capacity Use Areas are one part of an effective resource management strategy.

Capacity Use designation is necessary now to ensure that groundwater will remain available for all users.

Learn more:

Badr, A.W., Wachob, A., & Gellici, J.A. (2004). *South Carolina Water Plan, Second Edition*. State of South Carolina, South Carolina Department of Natural Resources. Columbia, SC: Land, Water, and Conservation Division.

Campbell, B.G., Fine, J.M., Petkewich, M.D., Coes, A.L., Terziotti, S., Gellici, J.A., & Lautier, J.C. (2010). *Groundwater Availability in the Atlantic Coastal Plain of North and South Carolina*. U. S. Geological Survey.

Harder, S.V., Gellici, J.A., & Wachob, A. (2012). *Water-Level Trends in Aquifers of South Carolina*. South Carolina Water Resources Conference. 1, pp. 10-18. Journal of South Carolina Water Resources.