Five Step Process

Steps involved in developing regional water plans and updating the State Water Plan.

1. Surface Water Availability Assessment
2. Ground Water Availability Assessment
3. Water Demand Forecasts
4. Regional Water Plans
5. New State Water Plan

Cooperators:

[Logos of cooperating organizations]
STEP 2

Groundwater Availability Assessment

Purpose: Update the 2010 groundwater flow model of the Coastal Plain.

2010 model report

Model update is scheduled to be completed by June 2019.

USGS webpage for the project:
GW Flow Model

- Pot Maps
- Water use
- Hydrogeologic Framework
- Monitoring Network
- Recharge Model
- Pumping Tests

http://www.dnr.sc.gov/water/waterplan/groundwater.html
Aquifer and confining-unit structure contour maps...
Aquifer and confining unit isopach maps...
Aquifer transmissive thickness maps...

Are all being done in ArcMap (Josh Williams, DNR)

The hydrogeologic cross sections, which were originally done in RAGWARE, are being redrawn in Illustrator.
Hydrogeology of the Myrtle Beach Area
Myrtle Beach
ASR core hole
HOR-973
HOR-1326 (McQueen Branch) & 1327 (Crouch Branch) Daily Average and Manual Water Levels

HOR-1326
Aquifer: McQueen Branch
Depth: 600 ft
Screen: 590-600 ft

HOR-1327
Aquifer: Crouch Branch
Depth: 440 ft
Screen: 430-440 ft
HOR-0973 Manual Water Levels

Aquifer: Gramling
Elevation: 19 ft.
Depth: 1331 ft.
Screen: 1012-1328 ft.
Figure B41. Hydrostratigraphic correlation cross section from HOR-973-1165, Myrtle Beach, Horry County, SC, to HOR-388/HH 39J, Calabash, Brunswick County, NC.
Black Creek Aquifer System
300’ – 900’ below surface

New Nomenclature

Lower Crouch Branch (300’ – 440’)
McQueen Branch (460’ – 630’)
Charleston Aquifer (720’ – 890’)

Slide courtesy of Grand Strand Water & Sewer Authority
Deerfield ASR Well

Not approved as submitted due to length of well with screened sections possibly in multiple aquifers.

Class V / Recharge Wells / R.61-87.11(E)(1)(b): “Recharge wells used to replenish the water in an aquifer.”

“an aquifer” is indicative of a single aquifer.