Update of the State Water Plan

Groundwater Availability Assessment
Stakeholder Meeting
North Charleston, S.C.
November 28, 2017

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Land, Water and Conservation Division
S.C. Department of Natural Resources
2004


One recommendation was for the development of regional water plans for each major river basin in the State.

10 years later – SCDNR and SCDHEC initiated the first step towards these regional water plans.

Overview of the Water Planning Process

A Brief History...
The goal of water planning is to develop a water-resources management plan that ensures that an adequate and reliable supply of clean water will be available to sustain all future uses. Water plans will be developed for each of these basins, the same basins used by DHEC for water-quality assessments and for managing interbasin transfers of water.
Five Step Process

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

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

Cooperators:

- DHEC
- US Army Corps of Engineers
- CDM Smith
- USGS
- Clemson University
In August 2014, CDM Smith, Inc. was awarded a contract to develop surface-water quantity models for each basin using its Simplified Water Allocation Model (SWAM) modeling tool.

Models inform us of how much surface water is available for future use and to test water-management strategies.

Stakeholder meetings were facilitated by Clemson University with support from CDM Smith, DNR, and DHEC.
Surface-Water Availability Assessment

Stakeholder Meetings

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<tr>
<th>Basin</th>
<th>#1 Location</th>
<th>#2 Location</th>
<th>Date</th>
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<tbody>
<tr>
<td>Saluda</td>
<td>Greenville</td>
<td>Apr. 2015</td>
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<td>Greenville</td>
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<td>Edisto</td>
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<td>Broad</td>
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<td>Pee Dee</td>
<td>Florence</td>
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<td>Florence</td>
<td>May 2016</td>
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<td>Catawba</td>
<td>Rock Hill</td>
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<td>Moncks Corner</td>
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<td>Walterboro</td>
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<td>North Augusta</td>
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www.scwatermodels.com
Surface-Water Availability Assessment
DNR Webpage

Monthly Progress Reports
Legislative Quarterly Reports
Technical Reports
Technical Memorandums
Meeting Notes
Presentations
Videos

River Basins
Broad       Catawba
Edisto      Pee Dee
Salkehatchie Saluda
Santee      Savannah

http://www.dnr.sc.gov/water/waterplan/surfacewater.html
Purpose: Update the 2010 groundwater flow model of the Coastal Plain.

Model update is scheduled to be completed by February 2019.

2010 model report

https://pubs.usgs.gov/pp/1773/

USGS webpage for the project:
STEP 3

Water-Demand Forecasts

Purpose: Develop water-demand forecasts for each of the 8 basins.

SCDNR is working with the USACE (Charleston) and Clemson to develop water-demand forecasts for each basin.

Forecasts from 2015-2065 in 5- and 10-year intervals for:

1. Public supply
2. Domestic supply
3. Agriculture
4. Industry
5. Power
6. Golf Course

Have recently met with these groups:

- Water Works Association, Utility Council
- Chamber of Commerce, Environmental Committee
- Farm Bureau, Water Committee
- Water Quality Association
STEP 4
Regional Water Plans
Using the models and forecasts, and with oversight from State agencies, stakeholders will begin the process of developing regional water plans for each basin.

This step includes:

• The formation of basin advisory councils
• An analysis to determine if any water deficits will occur
• An assessment of management strategies to meet the future demands
• Water conservation and drought management recommendations
STEP 5
State Water Plan

Upon completion of the regional water plans, the State water plan will be updated by DNR.

This step includes:

• Assessment of the overall condition of water resources in the State
• Evaluation of statewide trends in water use and availability
• Offering water-resource policy and program recommendations
• Introducing innovative practices