Surface Water Permitting and Allocation in South Carolina

2008 SC Water Resources Conference

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Bureau of Water
Do We Permit and Allocate Groundwater in South Carolina?

• Yes!
  – The Capacity Use Program was established in the 1960’s
  – Any groundwater withdrawal in a capacity use area (most of the coastal plain) over 3 million gallons in any month must be issued a permit by DHEC
Do We Permit and Allocate Surface Water in South Carolina?

• No, we don’t!
What Quantity-Related Surface Water Legislation Do We Have?

• Currently two Acts regulate surface water withdrawals:
  – *Surface Water Withdrawal and Reporting Act* (registration and reporting over 3 million gallons in any month)
  – *Interbasin Transfer of Water*

*DHEC has no authority to permit withdrawals of surface water that are not interbasin transfers*
Water Use in South Carolina
Figure 6: Reported Water Use by Category in South Carolina, 2006
<table>
<thead>
<tr>
<th></th>
<th>Groundwater</th>
<th>Surface Water</th>
<th>Total</th>
<th>Percentage of Total Non-Power Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquaculture</td>
<td>148.13</td>
<td>171.87</td>
<td>320.00</td>
<td>.07%</td>
</tr>
<tr>
<td>Golf Courses</td>
<td>3371.75</td>
<td>9,275.15</td>
<td>12,646.90</td>
<td>3.09%</td>
</tr>
<tr>
<td>Industrial</td>
<td>11,137.61</td>
<td>138,188.07</td>
<td>149,325.68</td>
<td>36.46%</td>
</tr>
<tr>
<td>Irrigation</td>
<td>17,980.52</td>
<td>11,176.64</td>
<td>29,157.16</td>
<td>7.11%</td>
</tr>
<tr>
<td>Mining</td>
<td>3,225.35</td>
<td>498.44</td>
<td>3,723.79</td>
<td>0.91%</td>
</tr>
<tr>
<td>Other</td>
<td>54.01</td>
<td>NR</td>
<td>54.01</td>
<td>0.01%</td>
</tr>
<tr>
<td>Water Supply</td>
<td>39,271.52</td>
<td>186,149.20</td>
<td>225,420.72</td>
<td>55.05%</td>
</tr>
</tbody>
</table>

Total Non-Power Water Use: 409,510.95 million gallons

NR = None Reported
Population Growth in SC

• Statewide, population of SC has doubled from 1960 (2.5 million) to 2005 (over 4 million)
• SC’s projected population in the year 2030 is 5,148,569
• Between 2000 and 2030, SC’s population is expected to gain about 1.2 million people
• In the 2000 Census, SC was the 26th most populous state in the nation. By 2030, SC is projected to rise to 23rd place
• Between 1973 and 1994, population in Berkley, Charleston, and Dorchester Counties increased by 40%
Do We Need A Surface Water Permitting and and Allocation System in South Carolina?

• Yes, to address two main issues:
  – Instate: Better management of our water resources within South Carolina (more people, more industry, more water demands, no more water)
  – Interstate: To allow SC to enter into agreements with other states on shared water resources
Governor’s Water Law Review Committee

- Established by Governor’s Executive Order on June 24, 2003
- Committee of diverse interests and backgrounds
- To advise the Governor about initiatives needed to preserve, maintain, and manage the water resources of this state to ensure available and affordable quantities and qualities of water for present and future multiple uses
Governor’s Water Law Review Committee

• Committee met four times in 2003, with final report issued January 2004
• Recommendations included:
  – Establish a surface water permitting system
  – Enter into negotiations with NC and SC on shared water resources
Governor’s Water Law Review Committee

- Information and final report can be found at http://scwaterlaw.sc.gov/
Surface Water Permitting Legislation

- General consensus among stakeholders and environmental organizations that a surface water permitting program is needed
- Senate Bill 428 introduced but did not pass in 2008
- Committee hearing testimony revolved around one main issue – minimum instream flow
What Are the Key Concepts?

• Move from a riparian system to a regulated riparian system where it is acknowledged that the waters of the state are a natural resource in trust for the public and subject to the state’s sovereign power to plan, regulate, and control the withdrawal and use of these waters
Basics of Riparian Common Law

- A person who owns land contiguous to a natural watercourse is the owner of riparian land.
- A natural watercourse has a defined channel and bed.
- A riparian owner possesses a property right to use water accessible from his/her riparian land for the benefit of that riparian land. No preference given to any particular use.
- The riparian right to use water is inherent in title to real property adjacent to a natural watercourse. Whether water is actually used or not does not alter or extinguish this right of use.
- All riparian owners on a watercourse are entitled to protection from interference of right of use.
Problems with Riparian Common Law

• Uncertainty and insecurity of right
  – No guarantee to certain amount of water – all existing and future riparian owners have equal right to use water.
  – What is considered reasonable use is relative – what is currently deemed reasonable may no longer be reasonable in future.
  – Civil action is only means of enforcing and maintaining a riparian right.
Problems with Riparian Common Law

- Limitations on Water Use
  - Water cannot be used on non-riparian lands.

- Focused on Individual Rights, No Comprehensive Management of Water Resources. Tragedy of the Commons.
How Does Bill Modify Riparian Common Law?

• For riparian owners withdrawing 3 million gallons or more per month, must obtain permit.
• Riparian owners withdrawing less than 3 mg/m operate under riparian common law.
  – Does not apply to discharges, detention.
• Withdrawer may not have protection of use, i.e., permit application could be denied.
• Reasonableness of withdrawal determined by the permitting process.
Key Concepts

• Existing users grandfathered into program
• Establishes “minimum instream flow” which is flow necessary to maintain the biological, chemical, and physical integrity of the stream
• Minimum instream flow has been the main point of controversy/discussion
Typical Streamflow Pattern
Interstate Issues
Complicated Water Issues

- 3 States Sharing the Resource
- U.S. Army Corps of Engineers (Savannah)
- FERC Dam Relicensing
  - Alcoa and Progress Energy (Yadkin-Pee Dee)
  - Duke Energy (Catawba- Wateree)
  - SCE&G (Saluda)
FERC Relicensing: NC connection

• Progress Energy and Alcoa projects regulate flow from NC into SC in the Pee Dee Basin
• Duke Energy impoundments regulate flow in the Catawba/Wateree Basin
• SCDHEC, SCDNR have been significantly involved in both relicensing processes
River Basin Advisory Commissions

- Legislation in NC and SC established Bi-State Advisory Commissions for the Yadkin/Pee-Dee and Catawba/Wateree Basins
- The Catawba/Wateree Bi-State Commission has been active for two years, but the Yadkin/Pee-Dee has yet to be appointed
- Allocation of water resources has been discussed in the Catawba/Wateree Commission meetings
Interbasin Transfers

• January 10, 2007, NC approved a 10 MGD (reduced from the original request of 36 MGD) transfer from the Catawba/Wateree Basin and 10 MGD from the Yadkin/Pee-Dee Basin to the Cities of Concord and Kannapolis (Rocky River Basin)

• SC Attorney General has filed legal action against NC in US Supreme Court
Georgia/South Carolina Issues

• The Savannah River shared along state border so different dynamics than with NC

• Three main issues:
  – Upper Floridan Aquifer/Saltwater Contamination
  – Assimilative capacity of the Savannah River
  – Allocation of water for use in the Savannah River
Georgia/South Carolina Issues

• The Governors of both states have appointed members to a Savannah River Basin Advisory Committee to discuss these issues
Summary

• A surface water permitting program is needed in SC

• Provide a tool to better manage the surface water resources within our state and to address interstate issues
Questions?

- “When the well is dry, we learn the worth of water” – Benjamin Franklin