The South Carolina Department of Health and Environmental Control

Groundwater Use and Capacity Use Program – A Quick Overview

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Bureau of Water

Water Monitoring, Assessment, and Protection Division

Groundwater Management Section

Promoting and protecting the health of the public and the environment • www.scdhec.gov
Groundwater Use and Reporting Act
Title 49 Chapter 5 South Carolina Code of Laws

Legislative Policy:

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.

This mandate effectively enables the Department to apply “Reasonable Use” doctrine for groundwater withdrawals in the designated Capacity Use Areas.
What is a “Reasonable Use”? 

In no certain order……

Agriculture
Public Water Supply
Private Water Supply
Recreation (i.e. Golf Courses)
Industry

Basically, any use that is not considered wasteful or malicious.
Groundwater Use and Reporting Act

Anyone withdrawing groundwater for any purpose in excess of 3 million gallons per month must register and report that use annually to the Department.

Where excessive groundwater withdrawal presents potential adverse impacts, a Capacity Use Area may be designated. There are currently four Capacity Use Areas in South Carolina.

Within Capacity Use Areas, withdrawals over 3 million gallons must be permitted by the Department. Locally developed “Groundwater Management Plans” are to be developed in each area.

In the Coastal Plain, but outside of a Capacity Use Area, no permit is required, but new wells are placed on public notice 30 days prior to construction.
Capacity Use Area Requirements

Withdrawals of groundwater over 3 million gallons in any month must be permitted by the Department.

Applicants must demonstrate the effect of any proposed withdrawal.

Applicants must justify the reasonableness of the proposed withdrawal.

Applicants must justify well construction and aquifers selected for withdrawal.

Permit holders must record groundwater withdrawals monthly and report annually to the Department.
Capacity Use Areas

Fall Line
Groundwater Withdrawal and Reporting Requirements

Withdrawals of groundwater over 3 million gallons in any month must be registered with the Department.

Registered groundwater withdrawers may justify well construction and aquifers selected for withdrawal.

Registered groundwater withdrawers must record groundwater withdrawals monthly and report annually to the Department.
Notice of Intent Counties

Groundwater withdrawals in the identified counties, including those portions of Edgefield, Saluda, Lexington, Richland, Kershaw, and Chesterfield counties east or southeast of the Fall Line, who intend to construct a new well or increase the rated capacity of an existing well must notify the Department at least 30 days prior to initiating the activity.
Registration Counties

Groundwater withdrawers in the identified counties, including these portions of Edgefield, Saluda, Lexington, Richland, Kershaw, and Chesterfield counties west or northwest of the Fall Line must register with and report their usage annually to the Department.
### 2010 Reporting Water Withdrawers

<table>
<thead>
<tr>
<th>Water Use Category</th>
<th>Facilities</th>
<th>Groundwater Sources</th>
<th>Surface Water Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquaculture</td>
<td>6</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Golf Course</td>
<td>251</td>
<td>253</td>
<td>272</td>
</tr>
<tr>
<td>Hydroelectric</td>
<td>29</td>
<td>1</td>
<td>30</td>
</tr>
<tr>
<td>Industrial</td>
<td>89</td>
<td>244</td>
<td>50</td>
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<tr>
<td>Irrigation</td>
<td>222</td>
<td>575</td>
<td>268</td>
</tr>
<tr>
<td>Mining</td>
<td>14</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>24</td>
<td>1</td>
</tr>
<tr>
<td>Thermoelectric</td>
<td>19</td>
<td>15</td>
<td>29</td>
</tr>
<tr>
<td>Water Supply</td>
<td>224</td>
<td>777</td>
<td>79</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>860</strong></td>
<td><strong>1907</strong></td>
<td><strong>744</strong></td>
</tr>
</tbody>
</table>
## 2010 Total Reported Water Use

<table>
<thead>
<tr>
<th>Water Use Category</th>
<th>Surface Water</th>
<th>Groundwater</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquaculture</td>
<td>403.44</td>
<td>215.76</td>
<td>619.21</td>
<td>0.00%</td>
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<tr>
<td>Golf Course</td>
<td>10,524.30</td>
<td>3,910.03</td>
<td>14,434.32</td>
<td>0.09%</td>
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<tr>
<td>Hydroelectric</td>
<td>12,323,377.25</td>
<td>0.43</td>
<td>12,323,377.69</td>
<td>77.18%</td>
</tr>
<tr>
<td>Industrial</td>
<td>124,883.42</td>
<td>8,243.44</td>
<td>133,126.85</td>
<td>0.83%</td>
</tr>
<tr>
<td>Irrigation</td>
<td>10,418.65</td>
<td>20,755.92</td>
<td>31,174.57</td>
<td>0.20%</td>
</tr>
<tr>
<td>Mining</td>
<td>934.347</td>
<td>2,637.593</td>
<td>3,571.94</td>
<td>0.02%</td>
</tr>
<tr>
<td>Other</td>
<td>4.53</td>
<td>54.953</td>
<td>59.48</td>
<td>0.00%</td>
</tr>
<tr>
<td>Thermoelectric</td>
<td>3,233,081.07</td>
<td>2016.64</td>
<td>3,235,097.71</td>
<td>20.26%</td>
</tr>
<tr>
<td>Water Supply</td>
<td>18,4138.66</td>
<td>40591.01</td>
<td>224,729.67</td>
<td>1.41%</td>
</tr>
<tr>
<td>Total</td>
<td>15,887,765.67</td>
<td>7,8425.78</td>
<td>15,966,191.45</td>
<td>100.00%</td>
</tr>
</tbody>
</table>
Water Use Unrelated to Power Production
Trends 2001-2010

Millions of Gallons

Year

Aquaculture
Golf Course
Industrial
Irrigation
Mining
Other
Water Supply
2010 Groundwater Use

Millions of Gallons

- 3 - 59
- 60 - 162
- 163 - 238
- 239 - 998
- 899 - 1657
- 1658 - 3118
- 3119 - 4343
- 4344 - 8286
- No Reported Use
2010 Reported Groundwater Withdrawals
2010 Local Area Groundwater Demand

Volume of Groundwater Used

- High
- Low
Change in Local Area Groundwater Demand
2003-2006 to 2007-2010

Increase
No Change
Decrease
Contact:
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Alex P. Butler 803-898-3575
Or, if you feel lucky, try
Rob Devlin 803-898-3798