Agenda

• Welcome Back
  • Myra Reece, Director, DHEC Environmental Affairs

• Stakeholder Introductions

• Water Demands and Future Demand Projections
  • Alex Pellett, Hydrologist, SC DNR

• Definition of the Problem – Maximizing Availability
  • Rob Devlin, Director, Water Monitoring, Assessment & Protection Division

• Facilitated Discussion

• Summary and Adjourn
Surface Water Regulation Stakeholder Workgroup

**Purpose:** DHEC will convene and work with stakeholders to identify issues and work towards solutions to improve regulations and management of surface water in SC

<table>
<thead>
<tr>
<th>Stakeholder workgroup timeline</th>
<th>Notice of Drafting Published</th>
<th>Monthly Stakeholder Meetings</th>
<th>Evaluate stakeholder recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug</td>
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<tr>
<td>Sept</td>
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<td>Oct</td>
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<td>Dec</td>
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<tr>
<td>2022</td>
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Provide updates and opportunities for public comment
# Work Group Members

<table>
<thead>
<tr>
<th>Sector</th>
<th>Count</th>
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<tbody>
<tr>
<td>Water Supply</td>
<td>8</td>
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<tr>
<td>Farming</td>
<td>4</td>
</tr>
<tr>
<td>Econ Development/Industry</td>
<td>5</td>
</tr>
<tr>
<td>Advocacy</td>
<td>7</td>
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<tr>
<td>Education</td>
<td>8</td>
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<tr>
<td>Power</td>
<td>2</td>
</tr>
<tr>
<td>Government</td>
<td>5</td>
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</table>
South Carolina Department of Health and Environmental Control

Defining the Problem
Purpose

How do we improve regulations and management of surface water in SC?

- To maximize resource availability
- Promote sustainable use
- Serve as a regulatory framework to support basin planning
Unintended Consequences

Goal

To maximize resource availability

Promote sustainable use

Serve as a regulatory framework to support basin planning

Consequence

Overall allocation limits availability

Flow standards do not apply to majority of permits and registrations

Basin planning activities and regulatory framework are not working together for effective implementation
Unintended Consequences

Overallocation limits availability

- Overallocation on paper
- Withdrawal Durations
- Different Needs and Requirements for Different Users
Overallocation on Paper

• Existing withdrawer (as of January 1, 2011) permits based on capacity, not need
• Department has no authority to review or reduce existing (or new) permits
• Essentially no expiration
Current Withdrawal Durations

Existing Withdrawers
• 30 years with possible extension to 50 years

New Withdrawers
• 20 years with possible extension to 50 years

Agricultural Withdrawers
• Does not expire, but is nontransferable
Regulatory Framework for Renewals

• R61-119.I.1.a. for Existing Withdrawals:
  “...must be issued for the quantity of water specified in the current permit unless the Department demonstrates that the quantity above the maximum withdrawals during the permit term are not necessary to meet the permittee’s future needs”

• 192 Existing Withdrawers
• 362,444.5 mgm permitted
• 99% of permitted volume
• 95% of total permitted and registered volume

• Next renewal, February 2043
• Furthest renewal, March 2054
Regulatory Framework for Renewals

• R61-119.l.2.a. for New Withdrawers:
  
  “...must be **renewed for a quantity equal to the expired permit** unless the Department demonstrates that the quantity above maximum withdrawals during the permit term is not necessary to meet the permittee’s future needs”

New Withdrawers

• 8 New Withdrawers

• 2896.19 mgm permitted
• 1% of permitted volume
• 1% of total permitted and registered volume

• Next renewal, May 2034
• Furthest renewal, November 2057
Regulatory Framework for Renewals

Agricultural Withdrawers

- No language in the Regulation about renewal of Registrations
- 110 Registered Facilities
- 16628.25 mgm registered
- 4% of total permitted and registered volume
- Registered for the life of the person requesting the registration
- Cannot transfer to new owner
## Other Program Permit Durations

<table>
<thead>
<tr>
<th>Permitting Program</th>
<th>Permit Duration</th>
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<tbody>
<tr>
<td>SC Surface Water Permit (Existing)</td>
<td>30-50 years</td>
</tr>
<tr>
<td>SC Capacity Use Area GW Permits</td>
<td>5 years</td>
</tr>
<tr>
<td>SC NPDES Permits</td>
<td>5 years</td>
</tr>
<tr>
<td>Georgia SW Permit</td>
<td>10 years</td>
</tr>
<tr>
<td>Alabama SW Permit</td>
<td>10 years (was originally 5 years)</td>
</tr>
<tr>
<td>Maryland SW Permit</td>
<td>12 years</td>
</tr>
<tr>
<td>Mississippi SW Permit</td>
<td>10 years</td>
</tr>
<tr>
<td>Tennessee SW Registration (no ag)</td>
<td>1 year (annual renewal)</td>
</tr>
<tr>
<td>Virginia SW Permits</td>
<td>15 years</td>
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</table>
Different Needs and Requirements for Different Users

• Irrigation – most use in summer months
• Industry/Municipalities - consistent throughout the year
• BMPs and Industry standards different between/within sectors
• Only know when use is highest and that demands will increase
• The “Do Nothing” Solution – leads to more compounding problems in the future
## Water Use Category

<table>
<thead>
<tr>
<th>Water Use Category</th>
<th>Surface Water (mgm)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquaculture</td>
<td>450.1</td>
<td>0.0%</td>
</tr>
<tr>
<td>Golf Course</td>
<td>4,614.8</td>
<td>0.0%</td>
</tr>
<tr>
<td>Hydroelectric</td>
<td>408,777,419.0</td>
<td>99.5%</td>
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<tr>
<td>Industrial</td>
<td>91,764.5</td>
<td>0.0%</td>
</tr>
<tr>
<td>Irrigation</td>
<td>8,717.0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Mining</td>
<td>1,068.1</td>
<td>0.0%</td>
</tr>
<tr>
<td>Other</td>
<td>0.0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Nuclear Power</td>
<td>1,506,166.9</td>
<td>0.4%</td>
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<tr>
<td>Thermoelectric</td>
<td>228,938.9</td>
<td>0.1%</td>
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<tr>
<td>Public Water Supply</td>
<td>198,340.8</td>
<td>0.0%</td>
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<tr>
<td>Total</td>
<td>410,817,480.0</td>
<td>100.0%</td>
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</tbody>
</table>

**Total Reported Surface Water Use 2020 by Type Use**

- Aquaculture
- Golf Course
- Hydroelectric
- Industrial
- Irrigation
- Other
- Nuclear Power
- Thermoelectric
- Public Water Supply
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<tr>
<td>Total</td>
<td>304,955.2</td>
<td>100.0%</td>
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Nonseasonal Usage
- Aquaculture
- Hydroelectric Power
- Industrial
- Mining
- Other
- Thermoelectric Power
- Water Supply

Seasonal Usage
- Golf Courses
- Irrigation
- Nuclear Power
Average 2020 Surface Water Use by Use type

- Aquaculture
- Golf Course
- Industry
- Irrigation
- Mining
- Thermoelectric
- Nuclear
- Hydroelectric
- Water Supply

Added at the request of the Workgroup
Average 2020 Surface Water Use by Use type (No Power)

Added at the request of the Workgroup
Total 2020 Surface Water Use by Use type

- Aquaculture
- Golf Course
- Industry
- Irrigation
- Mining
- Hydroelectric
- Nuclear
- Thermoelectric
- Water Supply

Added at the request of the Workgroup
Total 2020 Surface Water Use by Use type

Added at the request of the Workgroup
Guidelines for Group Discussion

- Participatory process: your voice is important to this process
  - Chat is available
  - Raising hands
  - *6 to unmute by phone
Group Discussion

What is reasonable to protect and ensure availability of the resource to meet future demand?

- Relative to overallocation
- Relative to length of time of permit
- Relative to meet different needs for different users
Next Steps

• Your commitment and participation are important
• Public participation process
  • Encourage others to stay informed & provide comments on website
  • DHEC staff available to reach out to groups you represent