



Surface Water Stakeholder Workgroup September 23, 2021 Meeting Summary

Overview

In the [State Register of August 27, 2021](#), DHEC published a Notice of Drafting which proposed amending R. 61-119, "Surface Water Withdrawal, Permitting, Use and Reporting."

To gather input that may guide the regulatory amendment process, DHEC's Bureau of Water convened the inaugural meeting of Surface Water Stakeholder Workgroup at 10 am on Thursday, September 23, 2021. This meeting brought together representatives including water suppliers, energy providers, business and industry, agriculture, environmental non-profit organizations, academia and other state agencies. Together these diverse stakeholders will work in a series of meetings in the coming months to address the following question:

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

- ***To maximize resource availability,***
- ***Promote sustainable use, and***
- ***Serve as a regulatory framework to support basin planning?***

Opening Remarks

Myra Reece, DHEC Director of Environmental Affairs, thanked everyone for their commitment to the process and opened the meeting by describing the purpose of the stakeholder group and goals of these meetings.

Reece noted that how this is the appropriate time for these discussions because:

1. ***By statute, SC Code of Law §1-23-120(J), DHEC conducts regulation review every 5 years.*** We are currently reviewing regulations in this fiscal year. Feedback from this process can inform any recommendations in this review cycle.
2. ***We have 10 years of data, knowledge, and information since these regulations were enacted.*** This data provides scientific basis for improvements around resource management.

3. ***With 10 years of experience with this permitting program, we have identified some unintended consequences of the current framework.*** These are preventing the Department from making the best water management decisions for South Carolina. This is an opportunity to work together to identify process improvements, regulation updates or other best practices.

Stakeholder Introductions

Kristy Ellenberg, Director of Collaborative Partnerships for DHEC Environmental Affairs, served as facilitator, providing a process overview and asking all who attended to introduce themselves and share what sustainability of surface water means to each individually. There were common themes that emerged in defining sustainability:

- Balancing the current and future needs of all users;
- Recognizing the diversity of the state;
- Making sound decisions based on the best modern science;
- Promoting reasonable water use within boundaries of availability; and
- Having the environment as a stakeholder.

Surface Water Regulation Review

Rob Devlin, Director, Water Monitoring, Assessment & Protection Division, gave a presentation providing the broad overview of the surface water program, including data and historical perspectives. He reiterated the goals of the stakeholder group and outlined unintended consequences that have been observed in the surface water program. [This presentation](#) and other workgroup references are included on the [DHEC Surface Water Stakeholder Workgroup](#) webpage which will continue to be updated throughout this process.

Devlin outlined how the current permitting program distinguishes existing surface water withdrawers at the time the regulation was enacted on January 1, 2011, new surface water withdrawers since January 1, 2011 and agricultural withdrawers. Withdrawal durations from 20-50 years to agricultural registrations with no expiration and no transferability.

Observations since 2011 have noted:

- Only 6% subject to minimum instream flow (MIF) requirements
- Existing Permits based on pump capacity and are over-permitted when compared to historic use records

- Reasonableness criteria only for New Permits
- Inconsistencies with permit duration

Permitted Volume vs Reported Use by Basin

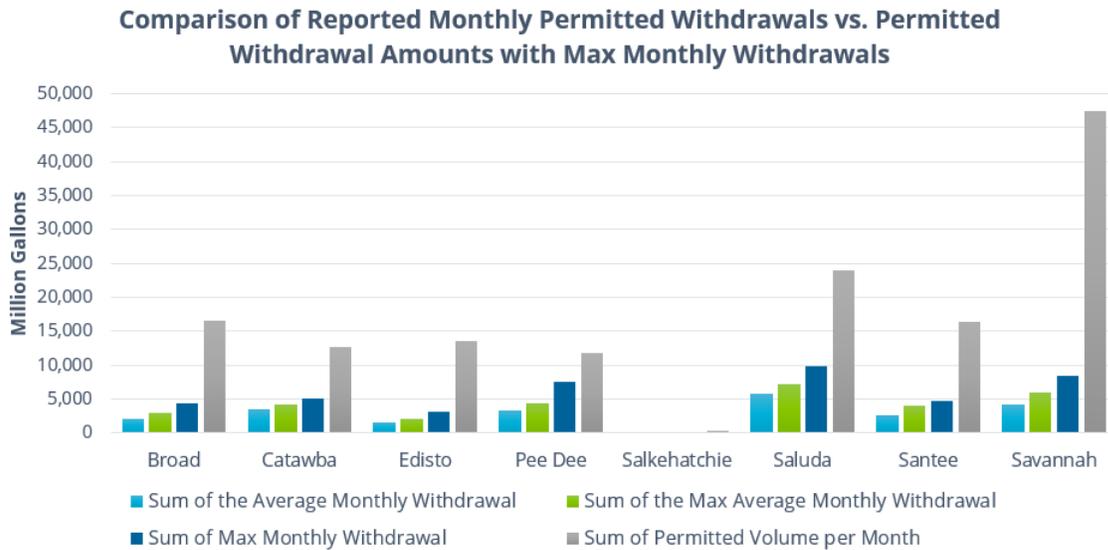


Figure 1: A comparison of the amount of surface water that is legally allotted to Permitted users versus the sum of the average, maximum, and average maximum monthly reported amount used from 2011 to 2020.

Registered Volume vs Reported Use by Basin

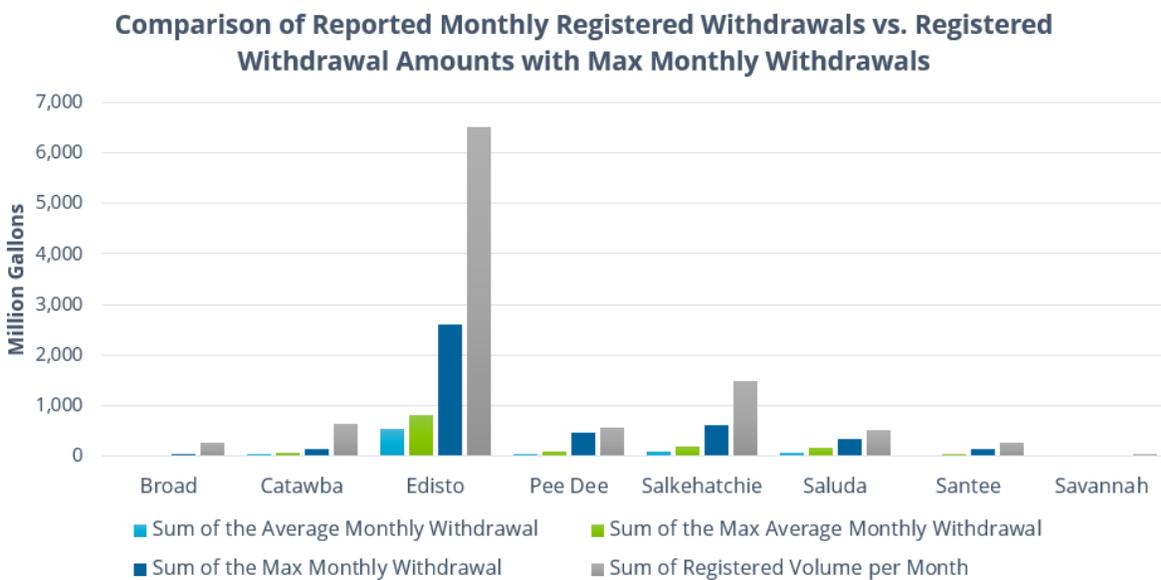


Figure 2: A comparison of the amount of surface water that is legally allotted to Registered users versus the sum of the average, maximum, and average maximum monthly reported amount used from 2011 to 2020.

Permitted and Registered Volume vs Reported Use by Sector

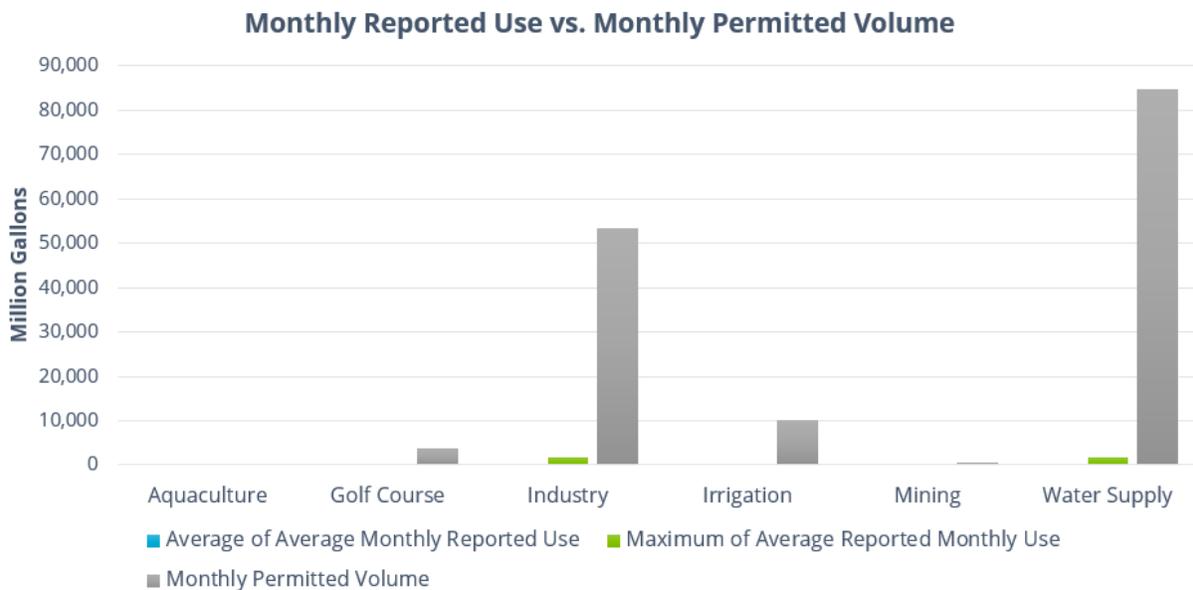
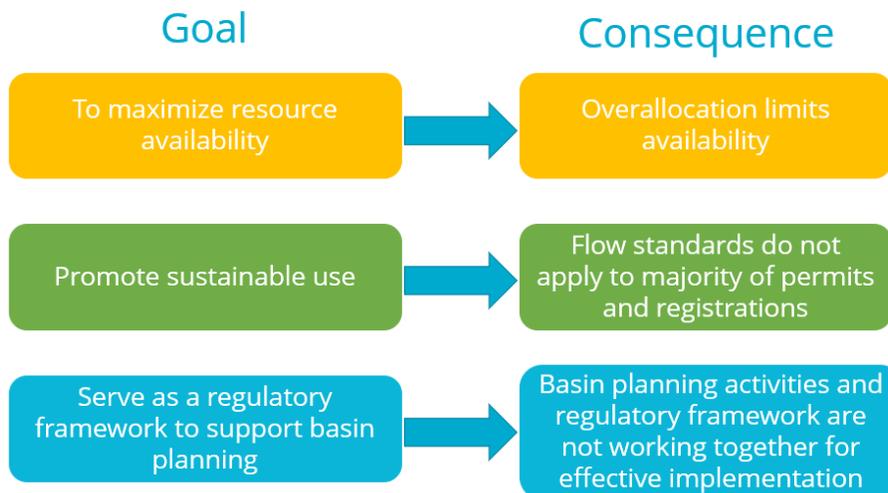


Figure 3: A comparison of the amount of surface water that is legally allotted by Sector versus the sum of the average, maximum, monthly reported amount used from 2011 to 2020.



South Carolina Department of Health and Environmental Control

Unintended Consequences



Highlights of Devlin's presentation and group conversations are summarized as follows.

- DHEC wants to make decisions based on evolving population, extreme climate, and other factors.
- From a historical perspective, state regulation was initially discussed with the 2002 drought and during a period when there were increased lawsuits between adjacent states relating to water rights.
- There is a noted discrepancy between permitted and registered volumes and the actual reported uses by users between basins and use sectors.
- There were discussions on FERC licenses and how permits are written based on the safe yields calculated for these.
- The Department has not experienced industries or others reaching out to decrease or alter their permit limit when new users want to come into a region and withdraw water (Devlin noted there may be one exception to this and would follow-up with the group with that information.)
- Some industrial users request large withdrawals to cover needs to run on maximum capacity for a short period of time, not necessarily reflecting constant demand.
- Questions were raised about the ability to reset safe yield after discharge from a reservoir, especially a FERC licensed lake with known release requirements.

Facilitated Discussion

Small group breakout discussions asked stakeholders to consider the following three questions which had also been shared as part of the meeting registration form.

1. What changes have you seen **in the last ten years** impacting surface water in South Carolina?
2. What **immediate changes are needed** to have more sustainable and available surface water resources for our state?
3. What are the most important changes or considerations to discuss regarding our state's surface water for the **next ten years**?

Breakout Group Notes

1. What changes have you seen in the last 10 years impacting surface water in SC?

Growth & Changes in Demand

- Growth in regions & population growth
- Increased suburban development
- Increased users moving into the state
- Increase in water demand has been lower than the increase in population in some growing areas and efficiencies should be considered

Climate Variability/Drought/Flooding

- Climate Change
- Climate variability influencing different sectors, especially agriculture with regards to crop types being grown and irrigation techniques
- Drought
- Ever changing and more extreme temperatures

Specific User Needs

- Irrigation has increased to be more profitable in recent years, yet irrigation is relatively low volume user compared to other use types.
- Most agricultural irrigation has been groundwater, but some users have migrated to surface water due to the establishment of the capacity use areas in the coastal plain.
- Increase in other users
- Switch to more gas generation at power plants which requires more water

Other

- more data needed for decisions

2. What immediate changes are needed to have more sustainable and available surface water resources for our state?

- Technology has changed and increased
- Will existing users be protected from new users coming in?
- more diverse viewpoints
- Need to manage the message and education across sectors and with the public

- A stewardship or accountability component that would share and promote best management practices across all sectors/users
- Education of what other users need.

3. *What are the most important changes or considerations to discuss regarding our state's surface water for the next 10 years?*

- Stakeholder workgroup should be assembled to assess and discuss legislation changes
- Allocation and how long is it effective for
- Municipal users could have regulations that facilitate aquifer storage and recovery (ASR), wastewater reclamation, etc.
- Technology firms are coming to the state and have replaced textile users. Tech uses more water for cooling purposes.
- Need a mechanism to go to existing permit holders to request a decreased volume/allocation if not using anything close to permit. May consider changes to regulation or law that would give Department that ability. Determine how water returned from the users would be accounted for.
- Reasonable use criteria for agricultural and other users
 - Applicability of minimum instream flow (MIF) requirements does not apply to agricultural registrations. Would MIF for registrations stop “unreasonable” registrations and promote protection of the resource.

Additional Questions and Discussion

New User Questions and Discussion

- Would it be possible to identify companies that have not been able to move to SC because of the lack of available legal water?
- In the instances of applicants not being able to get a permit due to insufficient legal water, DHEC does not have the authority to ask upstream withdrawers to reduce their permitted volume.

FERC dam questions

- When asked about how materially influenced is defined related to FERC dams, Devlin noted there is no direct definition of what materially influenced means, but DHEC considers a withdrawer to be influenced when the discharge from the dam is 51% of the flow.

- Does the calculation at the point of withdraw below a dam reset the upstream calculation? Do upstream users above the dam come into consideration for users below dam?
- do permits downstream of a reservoir impact the safe yield in a reservoir? (it seems like the answer is no). And, do permits within a reservoir, or upstream of a reservoir, impact the safe yield downstream of the reservoir? (it seems like the answer is yes, but perhaps we would prefer the answer to be no). I don't have as much experience with FERC as some other folks, but it would seem to me that the managed releases from the reservoir would tend to de-couple the upstream and downstream portions of the basin.

Permit time frames

- How amenable are water users to permits with time periods less than life expectancy of intake structure?

When asked for a priority or suggested change based on his experience, Rob Devlin noted the benefit to a reasonableness criteria for all permits and registrations and a permit duration that would allow for review of use like in the groundwater capacity use program. These could help the groundwater and surface water programs work together more successfully.

Next Steps

The stakeholder group will reconvene to share additional information and have further discussions over the next three months. [DHEC Surface Water Stakeholder Workgroup](#) webpage will continue to be updated throughout this process and will continue to provide an opportunity for public comment. We look forward to conversations in the coming months.

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



Appendix A: Stakeholder Attendees

Jeff Allen – Clemson Water Resources
John Baker – Sylvamo (previously International Paper)
David Bereskin – Greenville Water
Tim Brown – SC Golf Course Superintendents Association
Ed Bruce – Duke Energy
Rick Caldwell – SC Farm Bureau
Jesse Cannon – Santee Cooper
Emily Cedzo – Coastal Conservation League
Cassidy Evans – SC Farm Bureau
Scott Harder – SC Department of Natural Resources
Rebecca Haynes – Conservation Voters of SC
Earl Hunter – The Southern Group
Dr. Karthi – Clemson University
Kendall Kirk – Clemson Edisto Research Education Center
Jill Miller – SC Rural Water Association
Heather Nix – Clemson Water Resources
Harry Ott – SC Farm Bureau
Alex Pellet – SC Department of Natural Resources
Derrick Phinney – Clemson Orangeburg Office
Nathan Smith – Clemson Agribusiness
Bill Stangler – Congaree Riverkeeper
Gary Spires – SC Farm Bureau
Michael Traynham – Nexsen Pruet
Charles Wingard – Walter P. Rawl Farms
Daniel Young – SC Department of Commerce

Appendix B: Regulatory References

[R. 61-119 Surface Water Withdrawal, Permitting, Use, and Reporting. \(Link to full text\)](#)

SC Code of Law §1-23-120(J)

Each state agency, which promulgates regulations or to which the responsibility for administering regulations has been transferred, shall by July 1, 1997, and every five

years thereafter, conduct a formal review of all regulations which it has promulgated or for which it has been transferred the responsibility of administering, except that those regulations described in subsection (H) are not subject to this review. Upon completion of the review, the agency shall submit to the Code Commissioner a report which identifies those regulations:

(1) for which the agency intends to begin the process of repeal in accordance with this article;

(2) for which the agency intends to begin the process of amendment in accordance with this article; and

(3) which do not require repeal or amendment.

Appendix C: Categorized Summary of Pre-Meeting Registration/Survey Stakeholder Input

Pre-meeting survey: What changes have you seen in the last ten years impacting surface water in South Carolina?

Growth & Changes in Demand

- Growth in population, industry & agriculture.
- additional users and uses, population growth, economic growth,
- Increasing irrigation withdrawal registrations, although the impacts on surface water are unclear.
- Greater demand for usage
- Dramatic increase in suburban development, much of with irrigated lawns.,
- increase in surface water treatment plants
- We have increased demand.
- Increased demand

Flows

- More fluctuation from high to low flows.

Discharge

- increase in the amount of discharge into the rivers. In particular the Catawba and rivers around Charleston

Algal Blooms

- Increased algal blooms
- algae

Climate/Drought/Flooding

- more floods
- Climate change impacts such as drought & flooding
- Floods,

- Localized flooding from hurricanes.
- Efficacy of laws addressing needs
- That our current laws do not reflect the reality of the threats to our surface water resources and do not adequately protect these resources from being seriously strained. The Edisto has been and continues to be the model example of these issues and how seriously and quickly they must be addressed.
- Other
- difference of opinions and thoughts on how water should be managed
- None on my river
- I am new to the State. Unable to comment.

Pre-meeting survey: What immediate changes are needed to have more sustainable and available surface water resources for our state?

Existing permitted allocations

- Permit applications need to be considered with the already existing permitted water rights in place, not historical usage.

Regulatory Revisions

- Immediately revising current regulations to address issues with flow standards, safe yield, exemptions, etc.
- If i could wave a magic wand it would be for communities to have the ability to increase discharge amounts into the rivers but i recognize there are impediments to that
- There seem to be several issues with the regs that make allocation difficult and reduce the authority of DHEC.
- There needs to be a regulatory framework for immediate actions where needed. Broad regulatory changes to the law/regulation may not be needed.
- I think it would be wise to consider differing approaches to surface water permitting for smaller streams vs. large water bodies.
- Expectations for stewardship and accountability should be similar across all users.,

More Information Needed

- An understanding of availability and better modeling
- High quality data on current and future demands as well as best possible projections of current and future supplies under varying climatic scenarios.
- Real time monitoring of impacts from natural disasters and climate impacts
- Detailed assessment and better accountability of the resource including actions to resolve any gaps or limitations.
- Programs to better encourage good stewardship and accountability of water resources across all industrial, municipal, and residential users.

Planning & Stakeholder Process

- I also think additional regional water and sewer systems would be a great help to smaller communities and a significant net win for the environment.
- Deliberative stakeholder meetings to consider and discuss any potential changes.
- Proper planning for current and future scenarios.

Other

- Agreement with neighboring state.
- I am not sure.
- prefer not to answer at this time

Pre-Meeting Survey: What are the most important changes or considerations to discuss regarding our state's surface water for the next ten years?

Current Issues (generally/comprehensively)

- Focus on where there are known issues (current issues).
- We should consider reevaluating flow standards, safe yield, permit lengths (in terms of years), grandfathered users, exemptions for certain users, etc. Looking comprehensively at all of these items is essential if we want to be sure we're making smart decisions regarding water withdrawal and quantity.

Tools and information needed

- How water is currently used, how much water is actually available, and future predictions are needed.
- education on water availability, quality vs quantity
- Better oversight tools for monitoring and allocation of resources
- Continued scientific-based research to better understand projections/needs and current status of stewardship among users.,

Differences in users

- Best use, defining all of our users,
- Allowing increased discharge and withdrawal for industries
- grandfathered users, exemptions for certain users,
- Definition of reasonable use criteria and minimum in-stream flow for agricultural withdrawals.

Overallocation/Limited Availability

- Acknowledging the possible over allocation of the resource in the previous legislation and opportunities to address downstream users needs and potential growth.
- "permitted rights"
- grandfathered permits—allocations, ag registrations
- Supply determination; allocation priority
- permit lengths (in terms of years),

Flow Standards

- Safe yield
- consider reevaluating flow standards, safe yield

Basin Planning

- I would say refining the river basin council process and adjusting the surface water regulations as necessary to prepare for major changes ahead associated with growth.
- Probably Climate Change
- I also like the western approach, that groundwater is the "savings account" and surface water is the "checking account."
- Agreements with neighboring states.

Other: prefer not to answer at this time

Pre-meeting Survey: How would you define your organization's role in this process?

- Stakeholder
- A conservation stakeholder
- A definite stakeholder relating to surface water quantity and quality.
- stakeholder, user, public provider for safe, affordability drinking water that is the backbone of the community and economic health of such.
- Active participant in many water resource related conversations and initiatives relative to the preservation of water as an essential resource
- active in applicable river basin councils, etc.
- We are an environmental lobbying organization
- Helped negotiate the original legislation.
- Representation and advocate for small rural communities.
- We need to have adequate water for our power plants and to serve our water customers.
- We deal with the companies that are trying to find industrial sites where their wastewater requirements can be met in a cost effective manner
- Higher education
- Continue to support and provide technical input.
- Technical expertise.
- Education and outreach
- Interest in supporting sound recommendations based on scientific research.
- to provide reliable information to decision-makers
- Advisory
- Government relations