Saluda River Basin Council Meeting Minutes

March 20th, 2024

RBC Members Present: Tate Davis, KC Price, Brandon Grooms, Jason Davis, Devin Orr, Larry Nates, Eddie Owen, Kaleigh Sims, Rebecca Wade, Josie Newton, Jay Nicholson, Thompson Smith, Paul Lewis, Melanie Ruhlman, Robert Hanley, Rick Huffman, Kevin Miller, Rett Templeton, Charlie Timmons, & Phil Fragapane

RBC Members Absent: David Lawrence, Jeff Boss (Jeff Phillips, alternate, present), David Coggins, Patrick Jackson, Justin McGrady, & Michael Waddell

Planning Team Present: John Boyer, Scott Harder, Joe Koon, Joe Gellici, Tom Walker, Leigh Anne Monroe, Andy Wachob, & Kirk Westphal

Total Present: 43

K.C. Price called the Saluda RBC's March 20th, 2024 meeting to order. The Saluda RBC March 20th meeting review includes reviewing results of flow-ecology relationship study, reviewing Greenville Water's demand assumptions and updated scenario results, discussion and selection reaches of interest and surface water conditions and continuing discussion of water management strategies.

K.C. Price called for approval of the meeting agenda. Tate Davis – 1st made a motion to approve the meeting agenda with Paul Lewis – 2nd which was approved unanimously. There was a motion to approve the last meeting minutes and summary from February 21st. Robert Hanley – 1st – made a motion which was seconded by Eddie Owen – 2nd. Members unanimously approved the last meeting minutes and summary.

Housekeeping Items-Parking Lot:

- Engagement of the public with this process-what, when, how, who -(ongoing)

- Engagement of public officials (pertinent municipalities) to promote the plan when we get to the public comment period and beyond- (Not started)
- Identify and engage stakeholders that are not involved in the basin council, but have an overlapping or adjacent connection to our efforts. For example, NRCS, SC Forestry, SCEMD, etc. (SCDNR emails state and federal agencies ahead of each council meeting)- (Ongoing)
- Development and maintenance of a public-facing data clearinghouse for all things water with the Saluda Basin- (Not started)
- Funding for implementation- (Not started).
- We have discussed some data, gaps-making sure we acknowledge those in our final report and determine how to mitigate those in the future- (Started, e.g., fish data in Blue Ridge)
- If we want to request additional surface water demand scenarios we need to decide when? –(Last call)
- Determine how and when we will coordinate with other basin councils (Ongoing)
- What recommendations do we need to consider for non-FERC regulated dams, and how they impact recreation (Not started)
- Visit and learn more about NRCS buffer and restorations- (April-May possibly)
- Keep apprised of the Surface Water Withdrawal Act – (Ongoing)

Discussion:

Q: DES question regarding status of this project with the DNR and DHEC merger.

A: Getting things figured out behind the scenes. DES begins July 1. All water planning money is being transferred over.

C: None of the responsibilities will change. Working together might help things run smoother.

C: Get it out of 2 agencies and make it more efficient.

C: Offices?

C: No update yet.

There was no public and agency comment.

Review of February Meeting Highlights:

John Boyer highlighted the February meeting- Making Decision by Consensus:

- Goal: a timely outcome all parties can live with
- Understand, Negotiate, Measure, Adjust, Cut
- 2-step, consensus-based process allows collaborative problem-solving:

  1) Allow trust-building and info-sharing, especially under conditions of conflict

  2) Consensus does not mean everyone will be equally happy

  3) All do accept that the decision is the best that could be made at the time
- Talking about interests (not positions) first exposes common ground
- In the end, you either can or can't live with the River Basin Plan-if you can live with it, then support it.

We talked about the Safe Yield of Reservoirs –(Safe yield in Million Gallons per day (MGD). Identified examples of Drought Response using the article " Drought in Urban Water Systems: Learning Lessons for Climate Adaptive Capacity." This paper shed more light on some of the examples we discussed.

However, some lessons learned and limitations to Drought Response include:

- Voluntary measures or community education initiatives were vastly preferred compared to mandatory restrictions.
- Public perception-neither supply side responses nor demand-side responses were immune from public criticism.
- Drought surcharges were rarely utilized as they were seen to be quite unpopular.
- Being part of regional plan provided a sense of solidarity.
- Permanent reductions in demand allowed for s cushion between water supply and demand that could allow for banking water but made it difficult to achieve additional reductions in highly urban, low outdoor use contexts.
- Most utilities are not yet weighing the tradeoffs that may be present in dealing with drought risk in the near term and climate change in the long term.

- Restrictions are more effective than pricing policies and tend to be more equitable across different income groups than pricing measures are, which fall more heavily on poorer households.
- A drought event itself may galvanize political will to implement policies that, in normal years, may not be publicly acceptable.
- Nearly every manager interviewed considered demand management an integral part of their practices: " Our customers expect us to be in the business of encouraging efficient and environmentally sound use of resources."
- Finally, " the issue of certainty in supply that we all grew up with no longer exists, and we don't know how different it's going to be in the future, but we do know it's going to be different."

Review Results of Flow-Ecology Relationships:

Dr. Luke Bower anchored this session, stating the importance of flow-ecology relationship between Water quality, Organisms, Energy cycling and Physical habitat, including;

- In-stream flow is critical for aquatic communities
- Master variable

However, for more insights into this discussion, we can look at the paper titled "Quantifying flow-ecology relationship across flow regime class and ecoregions in South Carolina."

The goal is to provide insight on the potential response of organisms to the alternate water withdrawal scenarios produced by SWAM. We aim to put the SWAM results into biological context in aquatic communities. We are trying to use these relationships between flow and diversity. Afterward, use the outcome of these relationships to predict changes in flow and how that will impact whatever diversity metric we are looking at.

There are three steps in determining these relationships (How will this work?):

Step1: we take data from fish and Benthic data, including Hydrological data across the state. We ran this waterfall model, arrived at many flow metrics, and noticed that all the flow regimes and components impacted aquatic organisms. The relationship differs across stream classes.

Step 2: we have a lot and a lot of them, and these differed again by the stream process. Some of them were really strong and relevant, while others were not. In trying to work through all these relationships and find the best solution for the RBC, we applied selective metrics and calculated those relationships by applying the SWAM model.

Step 3: After utilizing selective metrics and calculating those relationships, the SWAM outcome produced various scenarios where we have medium and high demand scenarios with a 20% to 40% change. So, we put this relationship SWAM results in a biological context.

How can we use these relationships?

- Defining biological response limits-
    a) zones low, medium, and high change in the biological condition of stream along flow gradients.
    b) Searching for areas along flow gradients that induce changes in the biological metric.
- Predicting responses
    a) If we alter flow by X amount, what will be the biological response?

Mean daily flow (MA1): biological response limits:

Here, we see the relationship between Fish Species Richness and Mean Daily Flow. It shows us performance measures between those relationships, showing us the change in flow across the high, medium and low risks. Another way we can use this is using linear models, which are more effective models, especially for predicting things, including showing us errors associated with the predictions and uncertainty of these estimations.

Key to Understanding the Results of the Surface Water Modeling Scenarios: we looked at the Current Use Scenarios Mean Daily Flow, Scenario Mean Daily Flows and % Changes for each scenario are relative to the Current Use Scenario having 95% Confidence Interval.

Specifically for the Saluda, we can only work on one Ecoregion, which is Piedmont-Rolling Hills. For others, like Blue Ridge, we do not have enough data and sites to create some sound models.

We have 2 Stream Classes focusing on streams within the Piedmont region, which include:

1. Perennial runoff: moderately stable flow and distinct seasonal extremes

2. Perennial flashy: moderately stable flow with high flow variability

Strategic Nodes: Reedy River above Fork Shoals, Rabon Creek, Bush River near Prosperity and Twelvemile Creek.

Selected Metrics: we looked at the relationships between the mean daily flow and fish species richness. For example, when the lowest happens, the fishes tend to lay their eggs in a concealed location and respond differently. For the Bush River- we didn't see much change in predictive change for the first 3 scenarios and only a 10% change in the Saluda allocation model. Plotting this into the response limits, none of these go into either the medium or high-risk zones. Again, we don't see much of a change in the richness due to the timing of low flow.

For Rabon Creek: MA1-Richness: we have very little change predicted for the first 3 scenarios, but we see a large change for this full allocation model. We see a 64% decrease in the predicted change in flow; thus, this would be a high risk of the number of species in this particular location. For the timing, very little change is predicted, and they are all in the low-risk zone.

Reedy River: we see a decrease of 90%, with very little change for those withdrawal scenarios. We see a very low impact on the aquatic organisms and virtually no change in the number for the timing.

Twelvemile Creek: for the first 3 scenarios, we see a little change in the flow and then a 15% change predicted for the allocation model, which may be a 12% change in the number of species. We see a 15% decrease in flow for the timing, which puts us at this medium risk for 12 months. So, there is not much of an impact predicted for these changes in the timing of low flow.

Limitations of this model:

What this info is:

- Guidance based on best available data and analysis tools
- Based on models with compounding statistical uncertainty
- Representative of overall (30-year) flow regime characteristics
- Applicable to streams and small rivers (86% of all SC waters)
- Relationships between organisms and flow

What this info is not:

- Arbitrary recommendations from expert advice
- Perfect
- More data= less uncertainty
- Changing climate & land cover = more uncertainty
- One-time withdrawal thresholds
- Applicable to large rivers and reservoirs
- Parsing out other factors that affect organisms
- Land use effects flow, etc.

Results Summary:

- P&R scenario showed greatest impacts for MA1 and Richness.
- Other SWAM scenarios show little to no impact on flow.
- Little to no change in TL1 for all scenarios
- Report to follow

Discussion:

Q: Think about recommendations and data gathering piece since there are gaps. What is the biggest gap to think about for decisions/recommendations?

A: 2 – Blue Ridge is lacking and there is some data but it was collected differently. We'd have to start a new project to gather data for Blue Ridge mountains and then also larger river data. Including land use and climate change info.

Q: Can you articulate in the report # samples over # years and cost? To do the Blue Ridge and river data?

A: Yes, I think we can do that.

Q: Why would UIF have a greater impact compared to a withdrawal?

A: UIF scenario there was less flow in the Reedy (no discharges to the river).

Q: How many fish species are found in Blue Ridge mountains? What distribution of species – fireyblack shiners are lower down and minnows and darters are down here. Also, a freshwater

mussel (Carolina Heelsplitter) is here (Federally listed). Where are the endangered fish in the basin for reaches of interest?

A: Yes, but it would be very general – some are so rare we don't see them often. Get a species table and rank for the state (imperiled).

Q: UIF – Reedy River lower?

A: Without discharges the flow is lower.

Q: Can we get updated slide deck?

A: Yes.

Q: Species that are recreationally important to the basin?

A: Species responses it would be important to see changes in bass but common species are important as well as indicators.

Q: Stocking of species?

A: DNR question but trout is stocked (study from earlier meeting).

Additional Surface Water Analyses- Allocating Future Greenville Water Demands between the Saluda and Savannah River Basins, and Updated Scenario Results:

John Boyer facilitated this session and introduced Notes on Greenville Water Demands (Changed because of changes to Greenville projected demands), showing the statistical summary of Average Annual Surface Water Demands by Scenario (in MGD) across surface water use sectors in relation to their Current Use, 2070 Moderate Demand, 2070 High Demand, and Permitted & Registered water demand, including the Average Annual Water Demand Projections (2070 Scenario, Total Greenville, Saluda Basin Reservoirs and lake Keowee).

We made some modifications, including shortage maps, reservoir level plots, and low flows and Minimum Instream Flows comparisons. These have been updated from what was presented in February, reflecting the change in Greenville demands for the 2070 Moderate and High Demand Scenarios.

Discussion:

C: Transfers more water into the Saluda Basin and also the Broad.

C: Accounted through ReWa.

C: More Savannah water going into our basin from Keowee – double positive.

C: Original model used Blue Ridge reservoirs but an import from the Savannah River Basin will increase in Saluda.

C: A lot of water in the Savannah Basin – no shortages, similar findings in the Saluda.

C: One comment – Permitted and Registered is high in GVL reservoirs but it allows us to pull from those reservoirs – we like to balance it but can use one or the other. We pulled from N. Saluda during the Pinnacle Mtn fire due to unknown water quality.

C: Hydrologic period of record for each gage.

Q: No discharges by ReWa on the Saluda?

A: We do but not sure where exactly or on the SWAM image.

C: Georges Creek? Upstream of Saluda?

Q: Are wastewater discharges on SWAM? NPDES permits?

C: 10% of withdrawal at Adkins WTP goes back into Keowee – process water. 2-3% at Stovall.

C: Don't think you have anything less than one.

C: I can check but there were lots of small less meaningful discharges to model that weren't included.

Discussion on Proposed Reaches of Interest and Surface Water Conditions:

Kevin Miller anchored this session, talking about a proposal for Surface Water Conditions, that is, protect recreation or account for the least minimum recreational needs, such as minimum instream flow and water availability for recreation. He added in the proposal term unimpaired mean as opposed to just mean annual daily flow. This is to prevent that which makes it a little more complicated definition. Some alternatives are;

Alternative 1. "unimpaired mean annual daily flow" could be replaced with "unimpaired median daily flow." This alternative addresses two issues with the proposal:

1) It directionally offsets the increase in flow caused by using "unimpaired mean annual daily flow" vs current "mean annual daily flow"

2) It reduces the impact of highly-variable, short-term, high volumes flows that may not be representative of the stream conditions required to achieve the stated objective.

Alternative 2: If having a surface water condition varying by month is deemed to complex, simply using 20% of the unimpaired mean annual daily flow (or median annual flow) could be considered.

Alternative 3: "unimpaired" could be removed to better align the goal with the legal definition, but this would risk cyclical reductions in the quantitative value over time.

Alternative 4: the goal of maintaining the biological, chemical, and physical integrity of the stream, taking into account the needs of downstream users, recreation, and navigation, is accepted with completely different criteria to be defined by the group.

He further noted that South Carolina law defines navigable streams as a standard equivalent to the ability to use canoes or kayaks on said stream in Section 49, Chapter 1. Finally, talked about the new hydroelectric project construction-South Carolina law forbids new hydroelectric projects impounding or diverting waters of navigable streams from preventing navigation by watercraft of the type ordinally frequenting the reach of the watercourse and requires them to provide a means of portage or bypass.

Discussion:

Q: What are the conditions that describe the term impairment- who or what is given the task of addressing this impairment?

A: There is no authority given to anybody, and no one really has the authority to change it.

Q: Would there be a need for more folks to have a proper way to define it or the need for more RBC members to address the issue?

A: Two options to do this would be to work with the hydroelectric operator and recommend a regulation to require this.

Q: Is the section of the Saluda River that has been identified as impaired that impairment is considered flow-based?

A: Correct.

Q: Are you aware of any guidance that the EPA offers on how to develop what is called a total maximum daily flow, which would basically be a resolution of this impairment flow?
A: Note from Melanie's presentation and some information found online on how impairment was determined.
Q: Is your proposal written to use unimpaired daily flow as opposed to mean annual daily flow?
A: Yes, unimpaired MADF.
Q: Is your suggestion basin-based and wide, or are there recommendations for specific reaches?
A: Thinking basin-wide but more looking at hydroelectric facilities that are non-FERC, 3 I know of and no proof of impairment anywhere else.
Q: Looking at the recommendation for the entire basin for recreational purposes, the flow should always be 20% of the mean annual daily flow. Is that in a nutshell?
Ans: yes, it is.
Q: If it is at 20% it would be useable?
A: I wouldn't go that far – some rivers have seasonal flows. 20% not every river will be navigable.
Q: Navigable streams as defined by state.
A: Corps uses blue line map.
C: Navigable waters of the state map.
C: Dealing with navigability issues in particular, in certain segments, that map is indeed antiquated, and it does not include all of the navigable waters according to our state law. If you can float it with a boat or a couple of logs tied together- it's navigable. Also, a 1998 study of Navigable showed that more than 20% might be needed to suggest 35 to 38% with flows of 300 to 340cfs. Our group came together and responded to EPA's guidance on hydrologic impairment with the methodology to try to assess that impairment. That is the only reason we have impaired on the list. There are also impairments that have not been assessed.
C: No evidence of hydrologic impairment because no one is out there looking. The Reedy was put forward as well and DHEC agreed – peak flows up and base flows down. Likely other impaired reaches but haven't been assessed.
C: I suspect 35-38% might have come from Saluda River Outfitters.

C: Feedback or alternatives?

C: We'll have to use model UIF and there is uncertainty in doing that. Adding uncertainty.

Q: Why is this happening and what is the impact of 20% on users?

A: Again it goes back to basin-wide or specific segment.

C: Basin-wide – more than just paddling but also aquatic life in general protection.

C: Strategies that help improve flow conditions. Reduce 4% in current, mod, HD to that 2%. Lower 2070 demands try to close the gap to more naturalized conditions.

C: Discharges can impact this – where the discharge is located.

C: Possible to set standards to go with it. See value in seeing these standards from a narrative standard.

Q: Does anybody know how many shoals there are below Saluda Lake to Piedmont?

A: A few, a rapid above Saluda River Outdoors – Dolly Cooper there are shoals and many downstream. 5-10 shoals.

Q: Are shoals an issue with flow?

A: At 20% I can get downstream through all shoals.

C: Piedmont is run as a run of river operation.

Q: Force Saluda Lake to generate electricity to maintain flows?

A: Yes.

Q: What about people that use the lake?

A: If incoming flow to Lake minus Easley Combined Utility uses – maintain levels in the Lake.

C: Proposing the state develop regs, policies, to regulate non-FERC hydroelectric facilities.

C: Management policy should incorporate flow into Lake and what Easley uses that's different from allowable instream flow. We could make the reg a recommendation instead.

C: I think I could improve my recommendation based on the conversation.

C: Greenville Water voluntarily keeps instream flows going.

C: Does anyone know of this happening anywhere else?

C: Hearing that I think we should do more research and come back for more discussion.

Q: Does anyone think this is a non-starter?

A: No.

Q: Did we get a presentation on how Saluda Lake is managed?

A: No.

C: Important for this discussion.

C: Hydro is what you see on the hydrograph and defer to ECU on withdrawal intake is deep in the Lake.

C: Recommendations were to keep it as run of river. Kevin will refine it and make it a handout. John will look at UIF model results.

Q: Are we comfortable with 20-30-40 to protect aquatic life? #'s outdated? Making assumptions on 20-30-40 baseline. Something to think about and science related to that question.

A: Can I get that study?

C: Because 20-30-40 is regulatory driven by law not making a change recommendation. We can make recommendations for agencies to review that reg. Need to have really good data to talk about changing it.

C: I would focus more on Luke's data based on actual data. 20-30-40 not grounded in science as much.

C: 20-30-40 met criteria for navigation and for fish habitat. I've asked to re-evaluate 20-30-40 but it isn't a priority right now. Saluda Lake management issue rather than a basin issue.

C: Where to go with it – is there a way to influence hydroelectric operations? Supposed to be run of river. Try to make hydro operations to consider downstream users.

C: Should the RBC develop a committee and have a conversation with significant folks that make decisions? We have a concern – is there anything we can do? As a first step a conversation could get us to a happy place without lawyers, regs, etc.

C: Seems like a good starting place.

C: Take a month – to understand our role in addressing this issue and decide if we want a group to talk to them.

C: Sounds great – volunteer is a good first step. Give them testimonials from rec users and dealing with water turning off. Rec users and aquatic life issues.

C: Stretch below Saluda Lake focus.

C: Boyd Mill's Pond and other ones without gages. Maybe we can address those as well.

C: A basin-wide strategy from the Flow-ecology study could help with this issue.

Additional Discussion of Water Management Strategies:

John Boyer anchored this session and introduced the planning framework definitions, which include;

- Surface Water Management Strategy- a water management strategy proposed to eliminate a Surface Water Shortage, reduce a Surface Water Shortage, or generally increase Surface Water.
- A River Plan is a collection of water management strategies supported by a summary of data and analyses designed to ensure the surface water and groundwater resources of a river basin will be available for all users for years to come, even under drought conditions.

However, we went through an exercise a couple of meetings ago to identify existing strategies in the Basin, and we got some feedback from members, including

Group Report-Q1: Existing Strategies in the Basin:

- Water loss and control measures, including leak management via smart meters (including both AMI and Amr)
- Small impoundments (for golf and age supply, generally) and larger reservoirs (for energy, public supply, and industry, generally)
- Tired rate structures
- Public education 9e.g. water bill inserts)
- Drought management plan

Group Reports-Q2: Effectiveness of Existing Strategies:

- Drought plans have limited effectiveness because only the governor has authority, in many cases, to enact mandatory water use restrictions.
- Public education (e.g., bill inserts) could be more effective
- Small impoundments are recognized as being effective to maintain access to needed supply during low flow conditions, as evidenced by the fact that numerous agricultural water users build them to retain water.

- The major reservoirs in the Saluda basin are effective water supply strategies and meet our needs-such as recreation.

Group Reports-Q3: can Existing Strategies Expanded:

- Existing water infrastructure (conveyance, reservoirs, storage facilities) needs to be maintained. Aging infrastructure may result in increased water loss.
- It has become more difficult to permit and build even small impoundments. Impoundments serve as critical storage opportunities for water users located far away from major sources. Relying on small streams, especially near headwaters, is difficult unless impoundments are used to store water during dry periods when lower-order stream flows are reduced or zero.
- Watershed protections such as riparian buffers can be expanded to both improve water quality and reduce sediment loading to streams.

Group Reports-Q4: What Strategies are relevant in the Saluda basin and Should be Further Evaluated?

- The advantages and disadvantages of reclaimed water (water reuse) were briefly discussed.
- In the Saluda basin, much of the water that is withdrawn is returned to the system and used further down the basin. This is a form of indirect potable reuse.

Demand Side Strategies; Important Considerations:

- Water users have different financial and technical resources.
- Not every strategy is applicable to every water user.
- Due to uncertainty of future water availability, it is becoming increasingly important to use water as efficiently as possible.
- Some strategies may be identified as part of an adaptive management plan. They are only recommended if certain risk triggers occur or conditions change beyond what is expected.

Adaptive management is a framework that can be used to implement options as the future unfolds in a structured way to avoid the pitfalls of either under-performance or over-

investment. John further emphasized that when selecting and thinking about these demand-side strategies, especially how we incorporate them into a plan that can be adapted to implement the strategy at the right time and avoid the pitfalls of underperformance or over-investment. It is important to consider common uncertainties in water resources planning, which include climate, population, land use, type of industry/industrial growth, modeling and data gaps, politics/legislation, and regulations.

Water Conservation and Efficiency Strategies:

We discussed some strategies to include in the plan, the level of support and priority, including them as an adaptive strategy, and finally, making recommendations.

Agricultural Portfolio of Water Efficiency Strategies, which are;

- Water Audits and Nozzle Retrofits
- Irrigation Equipment Changes
- Soil Management and Cover Cropping
- Irrigation Scheduling
- Crop Variety, Crop Type, and Crop Conversions
- Future technologies
- Others

Discussion:

C: Use is a drop in the bucket particularly on the main stem of the Saluda. We are educated on these issues all of the time. Irrigation is costly. The old days of flooding fields are long gone. I don't have a problem with any of those unless you make it mandatory.

C: NRCS practices – fencing to keep livestock out of streams. Look at NRCS for livestock.

C: Going to push back on riparian buffers and water quality recommendations.

C: Funds are available from NRCS.

C: Cost-share (short term and long term assistance).

C: Conservation has a dual purpose – cost and environmentally sound. Counties should be paying us to improve water quality as farmers/land owners.

C: That might be a recommendation.

C: Greenville county has a fund for easements.

C: Farm Bureau also has started up a program (permanent conservation easements).

C: AI could grow and help make water use more efficient.

C: Anything to improve efficiency in water use.

C: There is some center pivots in Newberry county – people should look at nozzle retrofits.

C: Also in Lexington county.

C: Ag is already doing all of those things already and golf – don't change order.

Q: Irrigation scheduling question – crop will need the irrigation; we won't use water we don't need.

C: Definition of irrigation scheduling?

C: Timing of water irrigation day, night, etc.

C: Irrigation scheduling might be more important for houses (residential) and industry as they are bigger abusers (raining when irrigating as an example).

C: For crops water is all about timing.

C: Irrigate corn until it matures – soybeans irrigate during pod development production.

Q: Why you wouldn't want it to be mandatory?

A: We don't like to be told we have to do anything.

C: So many variables go into the decisions for ag planting.

C: Good practice is to rotate your crops. Profit and costs play a huge role in that.

Municipal Portfolio of Water Conservation and Efficiency Strategies:

- Conservation Pricing Structures/Drought Surcharge
- Landscape Irrigation Program and Codes
- Leak Detection and Water Loss Control Programs (and Replace Aging Infrastructure)
- Public Education of Water Conservation
- Residential Water Audits
- Reclaimed Water Programs
- Time of Day Watering Limits

- Others

Discussion:

C: Lawn irrigation costs us a lot for those peak days for residential to recoup funds.

C: We do a summertime average for sewer rates.

C: That's why there are 2 meters - for water and sewer.

C: Thinking about rate structure.

C: I don't think it will impact people – people that use it can afford it.

C: Conservation pricing structures are based on water use - increasing block rate structure.

C: The people it impacts will pay it.

C: It is discussed every time we talk about rates. Not a practice used in the Southeast but becoming more popular. Once it takes hold most water suppliers will get on board as well.

C: Really have to jack up the 2nd tier.

C: ReWa is on tiered system as is Greenville.

C: Not unique to Greenville – water supply utility is different from sewer utility. Customers pay differently in our system in different places. Constant juggling act.

C: Conservation impacts rates potentially.

Q: Commercial/industrial users? Don't see commercial or industrial audits?

A: Get to it next.

C: Smaller systems don't put as much time into water audits.

C: Satellites to detect water losses.

C: One of the things we did in Spartanburg – when do you need this to take effect? We revised drought ordinances and then when drought hits we use a block structure. Pretty easy change to make without going into the rate structure. We have law enforcement officers who work for us. Pricing structures work during drought (residential).

Q: Communications or public campaign?

A: We did. In Landrum system did declare moderate drought and if we got into severe or extreme it was ready to kick in.

C: Demand side for drought. If utilities in the basin could come together to say what it should look like. Shared pain concept. If Greenville adopts something that is stricter then we are tied into that. All go in together. Utilities in basin could strategize how we could all enact similar structured things. Much easier sell in our area if it was a concerted effort.

C: The bill comes 1 and a half to 2 months later which is an issue.

C: Communication is very important in these situations.

C: From drought we are driven more by Keowee. We didn't see reductions this past summer/fall during drought stage 2-3. Serious drought is when penalties need to be used to conserve water.

C: Not effective because it doesn't lower demands?

C: Once people stop using it it doesn't bounce back for years. Low water use fixtures – that low hanging fruit is more or less done.

C: Creating problems for us on the sewer side.

Q: Drought scenario – who declares it for water supply utilities?

A: State drought response committee theoretically. They get together to decide on drought in their region. Not necessarily effective. Don't hang your hat on it. Local decisions to be made. Until people see reservoirs are low or dry brown grass people will pay attention to it eventually. Utilities saying stop using – people stop.

C: Utilities can determine on their own using drought plan.

C: Customize to your situation.

C: We don't wait for DRC.

C: Don't rely on one thing.

C: Water utilities have to have a drought plan – some are very old. Most systems haven't touched their original plan.

C: Wholesale customers look at supply as you have to sell us this water.

1. Eliminate toilet rebates
2. Car wash recycling (already do it).

Q: What is water waste ordinance?

A: Penalty for wasted water.

3. Remove water waste ordinance.

4. Water efficiency standards for new construction.

C: Many irrigation systems don't have moisture sensors.

Q: Keep reclaimed water programs?

C: Keep Broad language and expand on it.

C: ASR in some areas?

C: ASR not recommended for the basin. Maybe in Lexington /Lex Co.

C: Pump treated water into the ground – ASR.

C: Elaborate on public education on BMPs. Rain barrels or native plants. City or utility encouraged.

Industrial and Energy Portfolio of Water Conservation and Efficiency Strategies:

- Water Audits
- Rebates on Energy Efficient Appliances
- Water Recycling and Reuse
- Water Saving Equipment and Efficient Water systems
- Installing Water Saving Fixtures and Toilets
- Education Employees
- others

Discussion:

Q: What is rebates on energy efficient appliances?

A: Places like Duke have programs to encourage reduction in water use.

C: I'd like to see something targeted to industrial – older commercial to new commercial.

C: Folks in the basin who represent large industry (ies). Those companies have goals and look for projects to fund to do that. Carbon credits and water credits. Coca Cola does some of those projects and spend $ to offset.

C: Personally don't think it will be that meaningful.

C: Let's keep it as an option and wait.

Upcoming Meeting Schedule and Topics: Saluda RBC Meeting #13, Wed, April 17, 2024.

Informational Topics:

- Further discussion of water management strategies
- Drought planning and drought management recommendations (tentative)
- Stream restoration (Alex Pellett, SCDNR and Melanie Ruhlman , RBC Member)

Field Trip- Stream restoration sites in the upper part of the Saluda River basin. Meet at Stovall WTP for brief meeting first.

KC asked for a motion to close the meeting. Jeff Phillips – 1st and Robert Hanley – 2nd.
Meeting adjourned at 2:03 PM.

Minutes: Iffy Ogbekene and Tom Walker
Approved: 4/17/24

RBC Chat:

10:49:52 From Thomas Walker to Everyone:
break until 11

12:20:02 From Thomas Walker to Everyone:
lunch until 12:45 - break

13:52:55 From Melanie to Everyone:
I can't unmute

13:53:40 From Melanie to Everyone:
We had an industry reach out to us looking for water conservation projects to meet their water offset goals.

13:54:37 From Thomas Walker to Everyone:
thank you!

13:54:45 From Melanie to Everyone:

I don’t know why it won’t let me unmute

14:02:58 From Thomas Walker to Everyone:

meeting adjourned