



# Smith River Water Flow Survey

## Executive Summary & Responses

### Introduction

Instream flows are critical for healthy riverine ecosystems and management of these resources should involve a variety of stakeholders to ensure the needs of the users are met while maintaining and improving the health of the waterway. The Smith River, a major tributary of the Dan River, supports a wide range of economic and social needs including flood control, hydro power generation, and recreational use. The Smith River is a critical component in the sustainable economic development in the communities of Patrick and Henry County, Virginia, the city of



Martinsville, Virginia, and Rockingham County in North Carolina. For many years, there has been a community wide discussion regarding the amount and duration of the river flow, generation, and the recreational uses associated with the Smith River below Philpott Lake. A combination of good science, laws, regulations, institutions, and public involvement are needed for the best management of the river for a wide array of user groups.

While free stone rivers have natural seasonal fluctuations in the flows and temperature, the Smith River from Philpott to its confluence with the Dan River in North Carolina is a tailrace stream which helps sustain a cold-water trout fishery while daily fluctuations in flow and temperature are contributing stressors on the riverine ecosystem. Research conducted on the Smith River by the Virginia Department of Game and Freshwater Fish (VDGFF), Virginia Tech, and the Virginia Department of Environmental Quality (DEQ) provided data to classify the Smith River as “impaired” for macro invertebrates. The conclusions of the studies provide insight into the factors that contribute to the impairment. The scouring of the river bed from full hydro power generation has dramatic impact on the organisms within the system, while periods of no generation result in extremely low flows, exposing the substrate and further impairing the macro invertebrate habitat. Additionally, the dramatic fluctuation of temperatures daily was also found to be an additional contributing factor in the impairments. Through research and with input from the community, DRBA sought an adjustment to the generation schedule to allow for increased flows on the weekends to help reduce the dramatic temperature and river level fluctuations. Further studies are needed to analyze whether this adjustment positively impacts macro invertebrates. In addition to the temperature stabilization the increased flows on the weekend provide recreational opportunities to paddlers, allowing more user groups to enjoy the resource.

Since 2008, the Dan River Basin Association (DRBA) has been researching issues involving the Smith River and working with the community to build infrastructure that promotes and enhances recreational use of this resource. In 2009, DRBA requested a special water release from Dominion and the US Army Corps of Engineers (USACOE) to facilitate the inaugural Smith River Festival. This event, envisioned by former Henry County Supervisor Benny Summerlin and created by the Dan River Basin Association, has grown exponentially in the following years. The success of the Smith River Festival was a catalyst for enhancing the growing interest in paddle sports on the Smith River.

In 2010, with the assistance of the office of Senator Mark Warner, DRBA staff assembled a group of stakeholders which included Dominion, The US Army Corps of Engineers, the Henry County Economic Development Corporation (EDC) Tourism Division, and the Henry County Board of Supervisors, to discuss options related to weekend water releases from Philpott Dam. DRBA consulted user groups, including anglers, paddlers, and outfitters for suggestions related to weekend water flows. Both anglers and paddle groups voiced concerns for the health of the river and expressed interest in increased water flow through the weekend. Letters of support were received from The Float Fishermen of Virginia, The Smith River Trout Unlimited Chapter, The Henry County Economic Development Corporation, Local Outfitters and Paddle Groups. The Virginia Department of Game and Inland Fisheries (VDGIF) was also consulted on possible impacts to the fishery and input from the biologist suggested they did not expect any impacts from increased weekend flows. DRBA suggested a minimum flow rate of 125-150 cfs flow rate throughout the weekend would provide increased protection of habitat for macro invertebrates, reduce temperature variations, and promote a healthy fishery while enhancing opportunities for paddle sport enthusiasts. While a minimum flow rate could not be realized, Dominion was willing to allow a change in the hydro generation schedule to allow for 4 hours of generation at 650 cfs on Saturdays through the month of July, a period of 4 weekends. Lower minimum flows (150-300 cfs) could only be achieved through sluice gate releases without hydro power generation and would result in lost revenue for Dominion. The success of the July 2010 Saturday flows allowed for additional opportunities for weekend use, assessed through surveys of river access use and boater counts.

In 2012, the Henry County Board of Supervisors adopted a resolution recognizing the intrinsic value of the Smith River and the economic potential for Henry County and Southern Virginia. The Board supported efforts to obtain more consistent water flow from Philpott Lake for recreational use and the improved health of the fishery.

In 2013, DRBA hosted a stakeholder meeting to request a scheduling of weekend flows that allowed for 4 hours of recreational use on both Saturday and Sunday from June through October. The meeting was attended by representatives from Dominion, USACOE, the Henry County EDC Tourism Division, the Henry County Board of Supervisors, and representatives from the paddling and fishing community. The agreed upon generation schedule allowed a compromise for anglers and boaters to utilize the river at various times of day. The 10 hours of no generation would allow anglers the ability to wade fish in the river, while the 4 hours of generation would allow paddlers the opportunity to use the river. This generation schedule continued through October 2013.

In August 2015, DRBA again hosted a stakeholders meeting with support from the office of Congressman Morgan Griffith, which included representatives from both congressional districts, the Henry County EDC Tourism Division, the Henry County Board of Supervisors, and representatives from the paddling and fishing communities to report on the increased use and economic development of the Smith River through tourism and to again request modification of the generation schedule on weekends. The USACOE and Dominion agreed to a modified schedule of generation to allow for increased weekend flows. The generation schedule was realized by the modification of the hours of generation based on the number of available water units allotted by the USACOE. The same volume of water was released, but the scheduling was adjusted to allow for 7 days of selected generation. The time agreed upon for generation on Saturday and Sunday was based on input from user groups; the 4-hour schedule allowed for anglers and paddlers to enjoy the resource at various times throughout the weekend.

The generation schedule remained in effect throughout the remainder of 2015 at the request of Henry County PSA to facilitate requirements of a new withdrawal permit and until April 2016 when a fire damaged the powerhouse and all hydro power generation was stopped. Flows were then maintained through sluice gate operation and flow rate was adjusted by the USACOE in response to inflows. In early 2016, some anglers began to express concerns about the continued weekend generation schedule, which they felt created adverse fishing conditions. The weekend water flow, however, provided increased paddling opportunities.

In March of 2016, DRBA again facilitated a stakeholder group meeting to discuss weekend flow rates. Stakeholders included Dominion, USACOE, representatives for Senator Warner, Senator Kaine, Congressman Griffith, and Congressman Hurt, along with Henry County Administrators and representatives from the office of the Henry County EDC Tourism Division, Henry County PSA, DEQ, and VDGIF. DRBA representatives suggested that the schedule could be modified to allow for a change in times water was released to better accommodate anglers but a change in duration of flows would reduce paddling opportunities. The Henry County EDC Tourism Division suggested that anglers request should be accepted over paddlers and that the flow schedule should be reduced to accommodate those requests. DEQ and VDGIF suggested reduction in the flows would be beneficial to the fishery. Henry County Public Service Authority (PSA) preference was no change in the schedule as the new withdrawal permit was based on the current weekend schedule. The consensus from both DEQ and VDGIF was in favor of increased base flows to improve the aquatic ecosystem. Increased base flows would have recreational benefits for both fishing and boating. However, it was pointed out by Dominion and the USACE that increasing base flows while generating power would not be possible with the current equipment available at Philpott. As the 216 study had previously suggested, this may be possible with upgraded units. The Henry County Administrator acknowledged the increase in river use by paddlers and the economic impact realized in the county during the past year.

The flows remained the same with the agreement to further discuss changes, however, a fire in the Philpott Dam powerhouse in April 2016 caused all generation to cease. Flows were adjusted through sluice gate operation and low flow valves as per USACOE mandates to control flooding while

maintaining lake levels at or near guide curve. The repairs to the powerhouse have yet to be completed with a tentative final repairs completion date of August 2017.

DRBA acknowledged the need to address residents’ concerns regarding weekend flow rates and the continued management of the river. To assess the community knowledge of the Smith River and Philpott Dam and to help educate user groups, DRBA requested and received funding from the Harvest Foundation to develop and administer a survey and hold public meetings to gain input from residents in Martinsville, Henry County and the surrounding areas. DRBA held three public meetings at various locations in Henry County, to explain the survey and to answer questions related to Smith River water flow and recreational use. The survey was provided in printed hard copy at the meetings, through an online link on DRBA's website, promoted through the Martinsville Bulletin and online social media. Responses were received from 172 total participants. The survey was open from April 2016 through August 2016.

**Key Findings**

- Fishing (71%), boating (66%), and hiking along the river shore (47%) were the top three main recreational uses of the Smith River claimed by survey participants.
- More than half of respondents believe that the Smith River is somewhat healthy, but also needs more protection in areas. Litter and erosion were the top two named negative impacts.
- More than 80% of respondents understand that flood control is the primary function of Philpott Dam.
- Close to 80% of respondents would like to have 4 hours or more of water generation on both Saturdays and Sundays.
- 60% of respondents have participated in a river-related event such as a cleanup, festival, and/or group outing.
- Several respondents commented on having a schedule of releases seasonally.
- Over 60% of respondents identified themselves as both anglers and boaters.

**Actual Survey Responses**

**1) What activity do you enjoy on the Smith River and how often?**

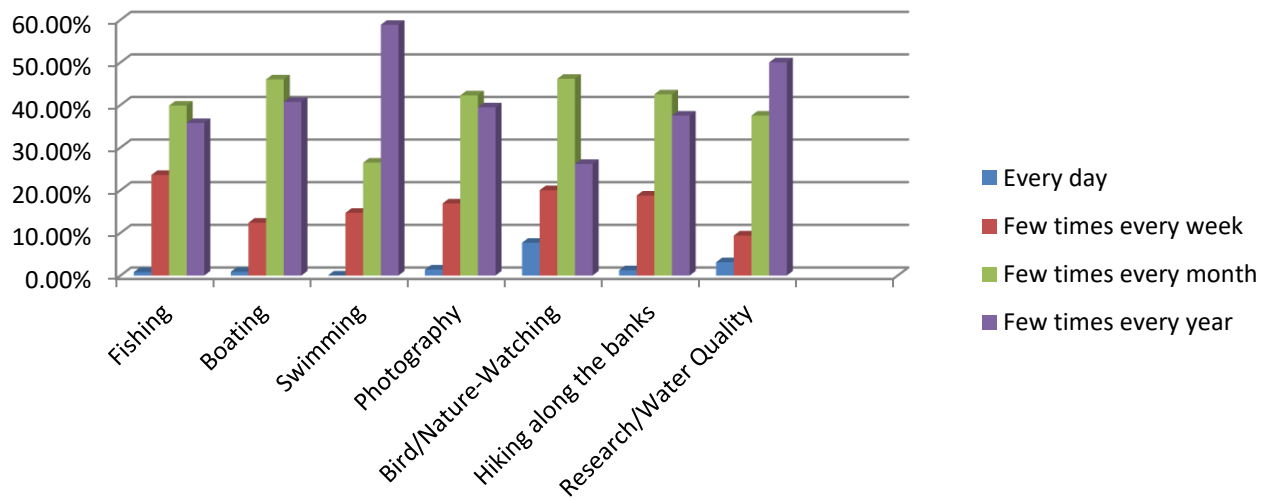
**Choose as many as apply.** (Answered: 172/Skipped: 0)

**Total # of Responses**

Fishing	123
Boating	113
Hiking along the banks	80
Photography	71

Bird/Nature-Watching	65
Swimming	34
Research/Water Quality	32
Total Responses	518

Note: Participants could choose more than one activity.



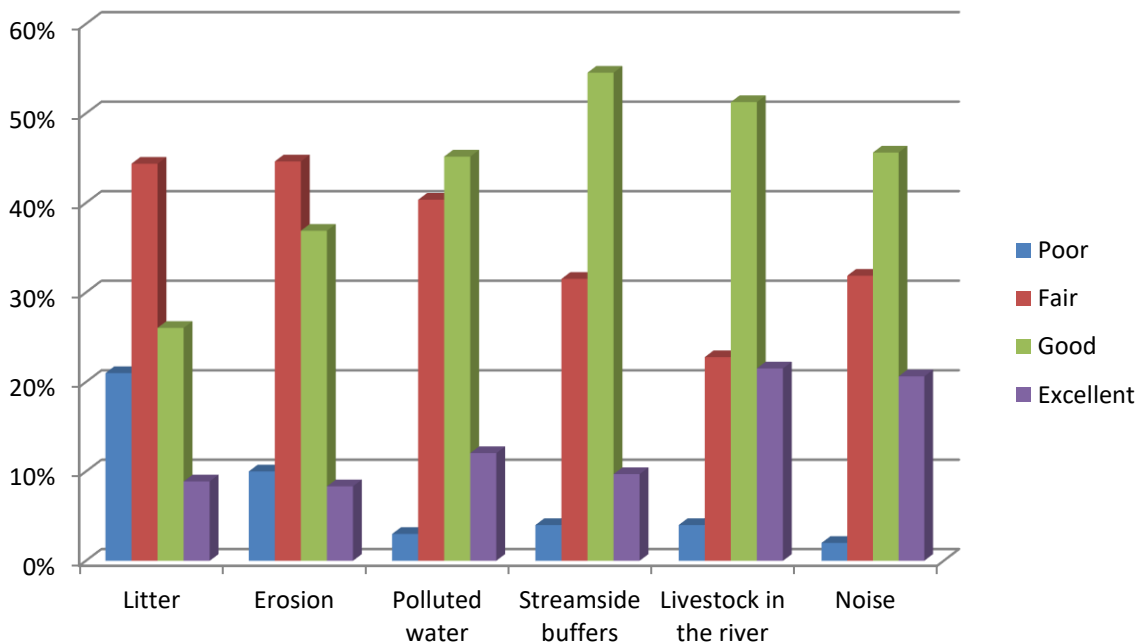
**2) In your opinion, what is the overall environmental health of the Smith River?**

(Answered: 169 /Skipped: 3)

	Healthy	Somewhat healthy, need more protection in areas	Not healthy, impaired in some areas	Not healthy, mostly impaired
Wildlife	37%	56%	5%	1%
Fish	25%	60%	12%	3%
Vegetation	37%	50%	13%	2%
Water Quality	26%	59%	13%	2%

**3) How would you rate the Smith River related to negative impacts?**

(Answered: 170 /Skipped: 2)



**4) Please rate the purpose of Philpott Dam in your opinion.**

**1= Most Important, 4= Least Important** (Answered: 172 /Skipped: 0)

	1 –	2 –	3 –	4 –	Total –
Power generation	43	63	42	24	172
Flood control	83	43	29	17	172
Provide for recreation	46	63	23	40	172
Provide drinking water	31	56	41	44	172

**5) What is your preference for weekend generation of water? Amount and day** (Answered: 170/Skipped: 2)

Generation on Saturday - # of respondents (Total: 108)

No generation = 31

Generation = 77

Generation on Sunday - # of respondents (Total: 105)

No generation = 32

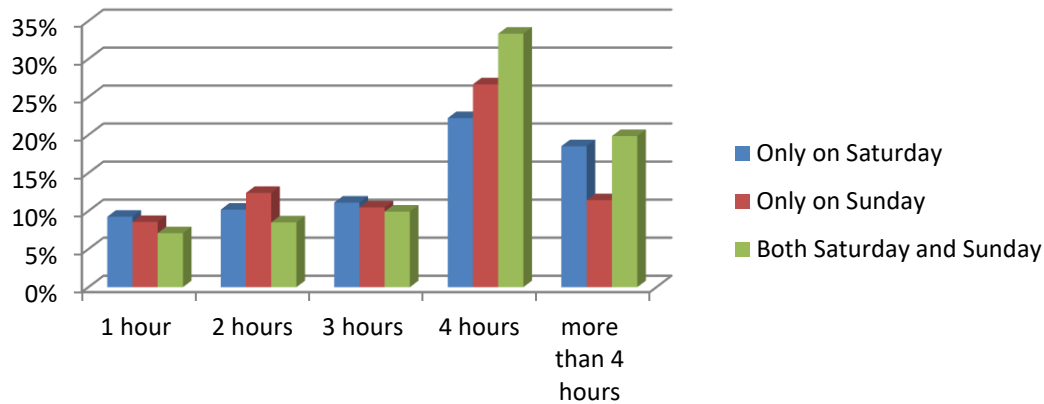
Generation = 73

Generation on Saturday & Sunday - # of respondents (Total: 141)

No generation = 30

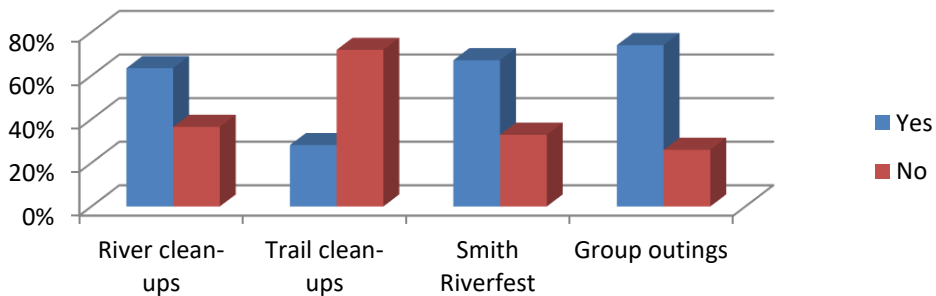
Generation = 111

**Breakdown of responses for hours of generation**



**6) Do you participate in any river related events throughout the year?**

(Answered: 168 /Skipped: 4)



**7) Do you have anything else to add that is important to you related to water generation at Philpott Dam?**

(Answered: 81 /Skipped: 91)

**Unedited Responses**

Thanks to the Dan River Association for working to help keep the river clean and for providing an opportunity for paddlers to use the river on the weekends. Please keep up the good work, thanks

We need to keep the river clean and make it accessible for all and attract more uses to help with economic development. its not just for fishermen or boaters, its a community resource that should be shared

The economic value of tourism on the Smith has increased dramatically due to the efforts of the Dan River Basin Association. Its obvious there are more and more boats on the river than ever before and that equates to money for our community. Paddlers have never had the opportunities they have now and this is only because of the efforts of DRBA. Please continue to help our river and our area. Thanks you

I fly fish and kayak. I would like to see one day of the weekend for kayakers (power generation) and one for fly fishing (no generation).

I buy a Virginia fishing license solely for the Smith River. I spend money in the area every time I fish or stay there. I would be able to visit much more regularly if generation schedules took the fisherman into account and gave them a scheduled day. I don't own a boat, I wade the river, which is not doable in most places during generation

A fair compromise for paddlers and fishermen would be to have one weekend day with a 4hr gen. and a day with no gen. This should be for summer months when more paddlers are using the river.

I wish generation was scheduled solely on the recreational needs of the community. My understanding is that we see no direct benefit from the power generation. We buy from AEP but Dominion sells the power. I don't see how that helps Martinsville and Henry Co.

The Smith River is an absolute necessity for paddle sports in the Martinsville area and water generation is pivotal to maintaining and growing this amazing recreational opportunity.

Would really love to be able to fish a full day on the way and continue protecting this unique, amazing fishery.

Do this seasonally. The fish, the river and the paddlers all need water during the summer months. Extra or weekend generation during the winter months helps no one.

Revenue should be considered in this decision. I am not a resident of VA. I am a resident of PA who lives in NC. I began buying an annual nonresident fishing license with a trout stamp in 2009. The current cost is 94.00. Because of the dam situation and recreational generation I decided NOT to buy a license in 2016. I am awaiting a reasonable compromise that is beneficial to both fishermen and kayak enthusiasts. My commute from NC to Bassett is 2:45. The trip is no longer worth the drive for 4-7 hours of fishing. Other revenues lost: I typically fill my gas tank in Martinsville. I usually eat 2-3 meals in local restaurants and I sometimes stay over night in local lodging. I have also been known to purchase fishing equipment in local stores when I forget an item at home. My bottom line: Do kayak enthusiasts generate this revenue for the state and local community? How much do they pay for a license? Do they drive all the way from NC to go float the river? When the dam is functioning correctly, does Dominion Power have to generate every day of the week? I would



surely enjoy a mid week trip to fish the river in safe wading conditions. Can kayak enthusiasts enjoy the river during power generation? I don't know if that is safe or not, but it is definitely not safe for fishing.

I believe we should have a generation schedule which benefits all users of the river, anglers and kayakers alike.

sharing the river is good for everyone but 4hour generations on the weekends eliminate the fishermen both local and out of town guests. I fish the river a lot but have never seen anywhere near the boaters as there is fishermen so why do we remove so many for a few

dont change what ain't broke - water traffic will always be minimal - fishermen have more impact per river mile and hour

Water releases should happen for kayakers on Saturday or Sunday but not both. In addition, weekend releases should only take place for the months of June-August

Generation during the week is great during the summer when done either early in am (5am - 11am), later (5 pm - 11pm) or limited during the day. i fish alot during the week and really appreciate the low cool flows all summer, and have for 23 years Kevin Lyons Raleigh NC FWIW, I am a Mech Eng Prof in Power and energy at NCSU, so if I can be of help in any technical capacity to help Philpott Efforts, please advise. PS Rocky has done a great job communicating issues to all in a very difficult situation.....

All day generation on weekends makes it impossible to fly fish on the river during the weekends.

the Smith is a perfect wild brown trout habitat. It draws anglers from all over. I've always thought of it as a river made for angling, from a recreational point.

Flow and temperature swings need to be reduced to more closely resemble a natural system in order to improve the aquatic community and this resource for all parties.

I fish on the river and I feel the most important criteria are the fish and insects. Too much cold water hurts the insect reproduction, too little hurts the fish survival. Generation in the middle of the day hurts license sales which effect the priority to have generous stockings.

I kayak and trout fish. Scheduled weekend generation during warm weather is a good thing but I don't see why it should be done during the cooler seasons. There are very few boaters before May and after Sept, but great fishing that can not be done with high water levels. If Dominion is going to work with us on the schedule it should be done to maximize all users.

Habitat and lifecycle needs of the river's fishes must come first, then a compromise that considers both paddlers and anglers must be reached.

Need to compromise to improve river and water quality while allowing and promoting both floating as well as fishing in the river. We have a jewel in this river that would benefit us greatly if promoted along with maintaining a suitable flow and temperature. It is very similar to the South Holston in Tennessee and it is managed as one of the premier trout streams in the nation.

IF both Sat & Sun generation: Stagger generation to accommodate both paddlers and fishers: Saturday, 8am – 12pm (for afternoon fishing) Sunday, 12pm – 4pm (for morning fishing) Reverse the schedule each weekend, (I have heard a proposal of 10am - 2 pm for both Sat & Sun) This is unfair and totally unacceptable)

Do whatever it takes to keep the fishery and resource growing and thriving. There are many people from the area who go to the new, south holston, and watauga rivers. They don't have to go to Tennessee or NC to enjoy a healthy river.

I agree with what the DGIF have to say on the amount of generation that will affect the fishery.

I like to trout fish on the Smith river several times a year with friends. I would like to see a little more consideration put into the trout fishery and fishing.

Generation issues have caused me to drive 100 miles further where you can enjoy a whole day of fishing without jumping all around on the river.

I just started kayaking recently and I enjoy it very much. I have encouraged family and friends to join me and others that are already kayaking. I believe finding a balance for fishermen and kayakers is in the best interest for tourism in the area. I put in behind the dam today and saw others, fishermen and kayakers, in the river. the water was low and that made for a rocky trip. I think they were letting out 400gps today. I don't think i'll do this again at that rate of flow.

What is the point in having a Lifetime Trout License if water generation makes wade fishing dangerous?

Please direct management for water quality and fishery health.

Weekend generation is great. I just can't get to the river often after work on weekdays. It also provides a great economic benefit to the area.

Safety for people from out of town who do not fully understand the risk of the water rising quickly.

Would it be possible to alternate weekend generation? 1st and 3rd weekends generates of paddlers can use the river and 2nd and 4th weekends no generation. Generating every weekend, however, makes it possible for everyone.

Generate at night when most people would not be fishing or canoeing anyway.

My biggest concern is the Smith River's potential to improve the quality of life and resulting economic benefit of tourism and recruiting business to the area. Weekend wade fishing in the mornings and evenings and paddling in the heart of the day is, in my opinion, the optimal recreation use of the river. The best fishing is morning and evening; the best paddling is in the heart of mid-day. The 10-2 each weekend day best meets those realities. By making both opportunities both days, we have the best chance of getting people to come to the area for the weekend, staying over Saturday night to take advantage of the opportunity both days. This also makes sure that Henry County PSA has the water they need to meet the community's needs.

There is some negative impact at these boat ramps you have installed to surrounding neighborhoods.

I have to drive over 90 minutes to get to the Smith River. I usually eat dinner intown. If the river was managed correctly it could be a world class fishery. People from all over the country would visit, like they do on the SoHo in Tn.

This is a unique fishery that needs to be preserved and available for weekend fishing

Get scientists involved! This is an experiment with no scientists actively involved.

The weekend generation make it difficult for people out of town to fish the river. I stay over night when I come and eat local. I have been fishing this river for years'

I think there needs to be a nightly release to keep water temps cook during summer.

Some members of the population that are wanting year around weekend generation have monetary interest in there being weekend generations. Guarantee you that fisherman bring more income to the town of Martinsville than kayakers and paddlers.

opinion of the VDGIF must be considered to maintain a quality fishery

We need to find a balance and allow the fishermen to be recognized as stakeholders. This is one of the most amazing natural resources that we have and is a unique amazing fishery. We need to protect it and enjoy it.

Weekend water releases would be beneficial to our local economy

Water generation on the weekends has been a wonderful addition to being able to enjoy the River!

The current weekend generation prevents me from traveling to fish on the weekend.

Generating for 4 hours on Saturday and Sunday is a big problem for people who wade and fish especially for those who come from out of town, Some compromise is needed when the generator is repaired.

Keep the 4 hours on Saturday and Sunday!

It also has an economic/tourism effect. We spend money in the area at restaurants, gas stations etc.

would love to have more on weekends. That's the only time most of us working class can enjoy it.

weekend generation is good for local economy

Me and my family enjoyed the 4 hour water releases last summer. I believe 4 hours of water generation on Saturday and Sunday will continue to bring out of town visitors to our area.

I think 4 hours of generation on Saturday and Sunday will have a great economic impact on our area.

I feel this is a very clean nice river to kayak in. And fishing

I would paddle Smith River much more often if it had releases on weekends. Now I only get to paddle on Memorial day, Labor day and the riverfest.

I would be paddling the Smith much more often if it generated on the weekend. Can't use vacation day to paddle when you have other options on the weekend. When we paddle the Smith we bring other people with us that get to experience the area and spend money as well.

Having public meetings 6 months after the weekend generation began is ludicrous. You should have had these well before the water generations began. This would have been a much smoother operation if you had buy-in from all user groups before anything changed. This process has done nothing but cause contention and increase the divide between user groups which primarily want the same thing.

Weekend generation is vital to rejuvenation of Bassett as well as surrounding towns.

I think 4 hours of generation on both Saturday and Sunday is perfect for fishing and kayaking.

Water generation is especially important in the summer months as the water warms up farther downstream. Additionally, the pulsed releases from the dam 'shock' the fish, whereas a smaller continual release would greatly benefit the river as it would not have such a drastic impact on the temperature and flow rate of the river. A mid-day pulse would suffice on weekends to allow afternoon floats/evening fishing. 2-3 hours is perfect.

I believe that the river should and can be enjoyed by all, but catering to paddlers/boaters by increasing flows negatively impacts the ability for fishermen to utilize the river during peak spring and fall fishing times. Boaters and paddlers have more days per year to enjoy the river than fishermen do and that should be taken into consideration.

Please give us some water on the weekends, we love to be able to play in the river

Martinsville and Henry county does not have any water rescue teams. There was at least two rescue operations last year involving paddlers, one resulting in a death. If there is going to be an increase in river activities there needs to be an increase in training and having water rescue teams locally in place.

This river is a hidden gem to the surrounding area.

That is the coldest water around.

I was very pleased with week-end generation in 2015 for paddling purposes.

Prior to the current weekend 4 hour generation both Saturday and Sunday, I fly fished the Smith nearly every weekend. I always bought gas and ate at one of the local restaurants when visiting and have not been back since the current schedule was adopted. Furthermore, there are areas of the Smith that cannot be safely fished as a consequence of this schedule. I am eager to fish the Smith again and bring my dollars back to the local economy as are others I have spoken to.

Although we are Florida residents, we spend from April through October in the Martinsville area enjoying kayaking on the Smith River as well as the Dan and Mayo Rivers.

Great boating!! Love to Kayak the Smith all year all temperatures!

The base flow of the river should be increased. I the base flow was increased to just below the threshold for trout fisherman to wade the boaters could float and every body would be happy

Maybe alternate days on the week with generation so people can fish some and kayak some on those days as well.

I understand the frustration of both the fishermen and paddlers. I think maybe if we keep posting the generation times so most people are aware of the water conditions is a good idea. Maybe alternate every weekend to suit the fisherman and paddlers, generate one weekend and not the next. During the week keep having a set schedule of generation times that way on some evenings paddlers could enjoy going down the river on certain evenings when they get off work. Then certain days during the week don't generate to suit the fishermen. The ones that don't check the schedule before they come out, tough luck, they should check the schedule. Thanks!

During trout stocking season I feel like water generation should be kept to night time as much as possible and if needed during the day either morning or evening not all day everyday.

I believe that 4 hours of water generation on Saturday and Sunday is best for everyone using the river. It will allow for more planned outings for paddlers and fishermen. I personally have witnessed a major increase in paddlers on the river during the weekend generation schedule last summer. One day I personally counted 20 cars at one access point, several from out of state. I live 1/2 mile

from the river in Bassett. I cross the river at least 6 times a day during the week. I personally observe the number of people that use the river.

I am in some paddle clubs and also lead a group of paddlers from my church up there. Would love to do more paddles there if there are dam releases. I can only paddle on weekends and mostly on Sat. and would love to see more releases up there so I could make more of them. April-Oct for me would be great.

Nope I think I covered it. Generating is a part of the smith learn how to cope with it or find some where else to fish. The core of engineers is and "have" done a perfect job very well since the dam was built 60 years ago

I like to fish the Smith river. It is the closest quality trout water I fish. I come from NC. I usually fish fairly late then eat dinner in town. I try to spend my money in Bassett. I do wish I could catch some bigger fish but that is my problem not yours

### Geographic Representation

Martinsville/Henry County	38% (65)
Dan River Basin, not including MHC	39% (67)
Out of Region	<u>23% (40)</u>
	100% (172)

