

## MINUTES

### South Fork Holston River IP

#### 1st Stakeholder Meeting

January 25, 2023; 9:00-10:30am (Residential/Urban); 10:30-noon (Agriculture)

DEQ Southwest Regional Office, Abingdon, VA

#### ATTENDEES:

- Bill Moss, District Conservationist, Natural Resources Conservation Service (NRCS)
- Brittany Phillips, Wildlife Biologist, USDA Forest Service- Mt Rogers National Rec Area
- Hunter Wyatt, Conservation Specialist, Holston River SWCD (HRSWCD)
- Jeana Waddle, District Manager, Evergreen SWCD (ESWCD)
- Katy Treash, Environmental Health Supervisor, Virginia Department of Health (VDH)
- Keith Whalen, Acting NRA Ranger, USDA Forest Service- Mt Rogers National Rec Area
- Kenneth Pennington, Building Inspector, Smyth County
- Kevin Cornett, Soil Conservationist, Natural Resources Conservation Service (NRCS)
- Lance Yates, Conservation Specialist, Evergreen SWCD (ESWCD)
- Lorie Stevens, Administrative Secretary, Holston River SWCD (HRSWCD)
- Mike Horne, Conservation Specialist, Evergreen SWCD (ESWCD)
- Ryan Belk, Natural Resources Conservation Service (NRCS)
- Travis Holt, Environmental Manager, Virginia Department of Health (VDH)
- Wayne Turley Conservation Specialist, Holston River SWCD (HRSWCD)
- Department of Environmental Quality (DEQ)
  - Ashely Went- Central Office, Technical Reviewer
  - Chantel Wilson- Central Office, Nonpoint Source Program Coordinator
  - David Nichols- Southwest Region, TMDL Coordinator
  - Kelly Miller- Southwest Regio, Stormwater & Watershed Planning Manager
  - Kristy Woodall- Central Office, TMDL/NPS Data Coordinator
  - Martha Chapman – Southwest Region, Water Monitoring and Assessment Scientist
  - Madison Whitehurst- Central Office, Data Coordinator
  - Stephanie Kreps – Southwest Region, NPS Coordinator

---

**Meeting purpose:** To get initial feedback on the status of the South Fork Holston River Watershed's bacteria sources and ways to reduce bacteria in the watershed with best management practices, outreach/education and partnerships; and discuss next steps.

Each participant introduced themselves. Stephanie Kreps (DEQ) gave a brief introduction of the meeting purpose, gave an overview of Virginia's water quality process and the South Fork Holston River's TMDL (approved in 2016) (see PowerPoint presentation). The first part of the discussion focused on residential/urban issues and then the agricultural issues were discussed in the second half of the meeting. The meeting wrapped up with next steps to complete the plan. Details of the discussions are below, with reference to the slide in the PowerPoint.

#### Residential Septic/Urban:

Slide 4: Are there any benthic impairments in the watershed? Kristy Woodall (DEQ) confirmed there are no sediment TMDLs. Martha Chapman confirmed later in the meeting that the benthic data that has been collected to date is 'good', meaning the macroinvertebrates that we'd hope

to be in the watershed are present and not showing signs of decline. Hurricane Creek has a pH impairment but from natural causes).

Department of Housing and Community Development (DHCD) did a project to help with failing systems (before TMDL was done so should already be accounted for). Maybe DHCD would be another source of funding for future work? The USFS Grindstone Campground septic issue is being addressed now...would help with reducing bacteria in watershed (which monitoring station is nearby?). Stephanie will send the monitoring location/type of station to the group.

Slide 6: How is 'failing septic system' defined? HRSWCD said when a repair or replacement is needed after a pump out. VDH said it's defined as when sewage is backed up on the ground or in the home.

Slide 8: VDH is aware of only a few 'true' straight pipes in the watershed over the past 18 years. The number of failing systems is usually higher than straight pipes. **The total number of failing systems seem are correct, but the total of straight pipes seems high.**

Slide 9: (Cost of BMPs were updated in the table to reflect the DEQ FY23 cost-share rates). These practices cost more now with increase in materials and demand for supplies. Will DEQ updates these for FY24?

Slides 11 & 12:

1. Aware of current problems/issues with failing septic and/or straight pipes? Any particular area to focus on?
  - There is a **need for design help** on septic systems because there is no money to pay for this if the practice cannot be completed. HRSWCD has an example on the NF Holston where a new design for a septic system couldn't be developed because of the terrain/siting of a residence. A lot of time and money went into getting a design, but nothing was completed because they claim any/all designs wouldn't work at this location. No one was paid for their work since HRSWCD couldn't charge 319 funds since a BMP wasn't completed. Could DEQ or VDH help with this?
  - Damascus is the only area with sewer. **Recommended to focus first around Damascus/Sugar Grove areas and work our way out.**
  - **Material costs have increased and supply has decreased.** HRSWCD said the cost to do a pump out now is \$475 (and that doesn't include uncovering the lid). DEQ needs to consider increasing average cost in BMP manual. RB-5s cost more than \$24k.
2. What % of failing septic systems need to be repaired vs. replaced?
  - HRSWCD said there would be **more septic system replacements than repairs. VDH agreed.**
3. Of the failing systems and straight pipes, what % would require a conventional system vs. an alternative system?
  - VDH is seeing more need for alternative systems but there is **less interest in pursuing an alternative system because of the long-term maintenance/monitoring** that's required. People don't want to be bothered with it. So, there could be an issue that alternative systems are needed but no one wants to proceed with installing. VDH said of the failing systems/straight pipes, **60% would need conventional and 40% alternative.**
4. What's the possibility to hook up to sewer? Any new projects in future?

- There has been talk in Smyth County to extend sewer to Grosclose (outside of watershed area), but it cost a lot of money for only 20 homes so not going to pursue it. **Nothing else has been discussed in the two counties.** Damascus is the only area with sewer and no one was aware of any new lines being put in (even though Hwy 58 is being expanded coming into Damascus, where the WWTP is located). Would be good to **check the Regional Wastewater Study** that's currently being updated to see if there are any updates in this watershed.

5. Aware of areas on public sewer that may smell of sewage or leak/overflow?

- **No**

6. What's the best way to recruit interest? Best outreach/education methods?

- Most people are not willing to self-report a failing septic system unless it's really bad because they don't have the funds to fix it.
- Social media could be a good tool to promote a residential septic program so that people can learn about the program on their own time, without bringing attention to themselves. **Social media should direct people to information on how to get help (SWCD, VDH websites with 1-pagers on how to get assistance with fixing a failing system or straight pipe).** HRSWCD has a 1-pager that they developed to promote their septic program and can share with VDH. The challenge with social media is that most people in this watershed are older and not on social media, so would still need to rely on word of mouth, yard signs, newspaper and mailers/door hangers.
- The most common outreach that's been effective in other IP areas is **word of mouth.** People are more willing to sign up if their families/friends have done it and can tell them how it works.
- **Yard signs** have been helpful in other IP areas to make people aware of the septic program and who to contact (include website/phone number to get more information).
- **Mailers and door hangers** have helped in Smyth County in other IP areas.
- It helps when **VDH is aware when a septic program is in place** to know when someone comes in for help may be eligible for cost-share. HRSWCD said VDH is great to work with!
- **Virginia Cooperative Extension and 4-H** could also be helpful in promoting a septic program in their outreach.
- There's also a need for **training opportunities for contractors to do alternative systems.** Septic Inc. (based in Haysi) are the only ones in the area that have the license to do them so can make it difficult during implementation. Ashely Wendt (DEQ) suggested DEQ may want to see if it's possible to allocate part of the 319 funds to certification programs to help with getting more licensed contractors for alternative systems.

7. Is there interest in pet waste stations? Where?

- Kenneth Pennington with Smyth County said there are **a couple canine facilities in the works within the watershed** (one commercial and one private). Stephanie Kreps (DEQ) said she'd send the Wastewater Treatment System for Confined Canine Facilities (CCF) (PW-3) specifications to Kenneth, so they have some guidance to share on design/cost.
- Kelly Miller (DEQ) mentioned there is a **new dog park in Damascus.** Maybe they would have interest in pet waste stations? No one from Damascus came to the meeting to confirm but would be nice to include in the IP.

- It's possible there would be interest in pet waste stations **along the Creeper Trail in Damascus.**
  - Because of reasons mentioned above, **need to include pet waste BMPs in IP** to help with installation costs.
8. What funding sources/organizations could help with paying for repairs, replacement of septic systems or sewer connections? Pet waste stations?
- Nothing new. See other bacteria IPs in the region and the updated Regional Wastewater Study (released in early 2023?) for partners and funding sources.
  - Be sure to include Creeper Trail Conservancy as partner (for pet waste stations), DHCD and Mount Rogers PDC.
9. Any barriers to implementation in this watershed?
- **No new barriers than normal** (i.e., skepticism of government programs and sharing their information, having enough money to do everything, homeowners having enough money to contribute to cost-share, and limited contractors who can do alternative systems).

### **Agriculture:**

Slide 13: Clarification that **NRCS numbers are not included in these totals** (since we're unable to get these numbers).

Slide 14:

- Need to see if **2022 Ag statistics data** is available to update table.
- Based on the numbers in this table, HRSWCD **doesn't see sheep and horses declining** in Washington County. **Cattle numbers seem low** too (hasn't changed much).
- USFS has seen **increased interest in horses** on their trails.
- ESWCD says the **sheep increase seems high and has plateaued out.**
- ESWCD is **seeing more goats** in Smyth County.
- There's only **1 dairy in the watershed** (Sugar Grove in Smyth County). **Dairy numbers seem high.** The **majority of cattle are beef cattle so more focus on these.**

Slide 15:

- ESWCD and HRSWCD will send their updated Ag BMP cost lists to Stephanie. **HRSWCD said most of their practices are costing at least 50% more than 2016. ESWCD estimates practices are costing 20-30% more than 2016** (for instance water woven wire fence was \$3.25 per foot and now it's \$5.25 per foot. That is a \$2.00 per foot increase. Water system components and drilling a well has seen significant increases).
- Practices to consider adding to list:
  - **Continuing Conservation Initiative (CCI) practices-** These are practices that are out of lifespan, but producers want to continue them. This is an incentive to do maintenance and DCR gets 5 more years of credit for these practices. The DEQ 319 program doesn't currently fund these practices and need to see if this could be an option for future project funding. The 319 program won't pay for annual practices so maybe this is why it won't fund these.
  - **SL-7 (Extension of Water Systems)-** These go hand-in-hand with SL-6N/W practices.

- **NRCS Brush Management (Ac.) (314) Conservation Practice**- This practice keeps cattle from overeating and congregating in areas which can cause erosion and concentrated manure. This is not a standalone practice and usually done as part of a system. (Not sure if this is considered a BMP for bacteria impairment).
- **NRCS 512 Forage and Biomass Planting**- Mike Horne (ESWCD) suggested adding this based on his experience with Tazewell SWCD (Not sure if this is considered a BMP for bacteria impairment).
- **Woodland Buffer Filter Area (FR-3)**- (Not sure if this is considered a BMP for bacteria impairment).

Slides 16-17:

1. What is the level of interest in installing best management practices (BMPs)? What % are interested in 10-, 25-, 35-, 50-foot buffers? What types of practices do they prefer?
  - Historically, there's been **a lot of interest to do BMPs** in the watershed, but a lot of previous work is **out of lifespan and not holding up**. Producers are, in general, older and could explain why a lot of was done 10-15 years ago and as the producers have aged, they aren't starting new or maintaining those practices after lifespan.
  - Producers are interested in 100% cost-share (follow the money) to cover costs and not necessarily because of water quality improvements. **Most choose wider buffers** because of more cost-share.
  - In Smyth County, there has been **a lot of change in ownership** of land. There are currently 3 practices 'in the works' in the watershed.
  - SWCDs recommended to **keep all buffer options**.
2. What is the current growth trend for agriculture in the area? Do you expect to see significant changes in farming practices over the next 5-10 years?
  - USFS commented that they're seeing **more Christmas tree and pumpkin farms** in the Sugar Grove area (Smyth County).
  - As mentioned above, **land ownership has changed a lot** and **producers are getting older** in Smyth County. Also see new, less experienced farmers moving into area so there's a mix of interest in doing BMPs.
  - **No significant changes** anticipated.
3. Is there interest in rotational grazing systems? Other pasture management practices?
  - **Almost every contract has a rotational grazing component but over time, about 25% are maintained**. Producers have good intentions but over time, interest and time fades.
  - Word of mouth helps increase interest.
  - Using **SL-7 helps set up for rotational grazing** (hence another reason to include it).
4. Is there interest in practices to address manure spreading on crop or pasture fields?
  - There is **interest in manure spreading but DCR doesn't have a specification or enough money to make it worth it**. DCR has incentives to address manure spreading but it isn't cost effective to haul liter to southwest Virginia from northern Virginia or North Carolina (this is an issue that DCR needs to address).
  - Because of the economy of fertilizers, producers are **recycling manure more**.
  - **NRCS Nutrient Management (Ac.) (590) Conservation Practice** is the only practice.
5. Is there interest in converting poor pasture or erodible cropland to forest?
  - Kelly Miller (DEQ) mentioned that there is **interest in nutrient banking**.

- **Carbon credits** could be an upcoming trend in the watershed.
  - USFS mentioned they are keeping their pastureland (about 7,000 acres across the National Forest but only about 200 acres within the watershed). Some has changed to hay land.
6. What % of cropland is already implementing conservation (e.g., continuous no-till) practices?
    - You see '**minimum**' till and not true '**no-till**'. There is **no continuous no-till**.
    - There is a lot of compacted soil because of trucks.
    - In Smyth County, **75-80% of producers use the no-till seeder** (more interest in the small tillers that can be pulled by ATV).
  7. What would be the best outreach/education methods to recruit interest? Are there any groups in the watershed that would be good resources for education and outreach?
    - **High school FFA** engaged in outreach/education
    - Good to **target new, less experienced farmers**.
    - **Farm tours** are effective in showing actual practices/benefits. Once you get a producer 'in the door' you can expose them to other practices. Agencies need incentives to help bring people 'in the door'.
    - **Small-scale demos** to show practice application.
    - **Virginia Cooperative Extension** good resource with a lot of technical documents.
    - **Social media** can help spread information/ideas.
    - **Newspaper/Trade Times** still relevant for reaching older producers.
  8. Are there other funding sources (in addition to DCR, NRCS and DEQ) that could help pay for installation of BMPs?
    - **National Fish and Wildlife Foundation (NFWF)**
    - **Upper Tennessee River Roundtable (UTRR)** good to partner with funding
    - **USFWS Partners Program** good to partner with funding
    - **Canaan Valley Institute** good to partner with funding
    - **Department of Forestry (DOF)**
    - **Trout Unlimited**
    - [NRCS/USFS Joint Chief's Landscape Restoration Partnership](#)- project could focus on brook trout (would need to see if there are ideas related to bacteria sources)
    - **USFS Collaborative Landscape Restoration Program**- for farms adjacent to USFS land
  9. Any barriers to implementing stream fencing and improving pasture management in this watershed?
    - **Not enough contractors** in the area to install the BMPs. All the 'good ones' are booked all the time and there's less of them available.

### **Next steps:**

There will be another Stakeholder meeting in February or March 2023 to answer any other questions and possibly review a draft plan. Stephanie Kreps (DEQ) will be in touch with more details as this is determined. The hope is to have a draft plan ready for the final public meeting in April 2023. After a 30-day public comment period, it will be submitted to EPA for approval. It is anticipated that the plan will be approved by June/July 2023. Once the plan is approved, the SF Holston River IP will be eligible for DEQ Nonpoint Source 319(h) funds. The next opportunity to apply for these funds will be summer 2023 (with activities starting in fall 2024) so it's possible

that applications could be submitted this year. If the timing doesn't work out, the next opportunity will be the summer of 2024 (with activities starting in fall 2025).