1st Community Engagement Meeting for the development of a Clean Up Plan (Implementation Plan) for the Pigg River, Poplar Branch, Fryingpan Creek, and Beaverdam Creek Watersheds Summary

Franklin County Public Library, Rocky Mount, VA

4:30 PM on 18 April 2024

Kimberly Romero kicked off the first community engagement meeting (CEM) for the developing implementation plan (IP) for the Pigg River, Poplar Branch, Fryingpan Creek, and Beaverdam Creek watersheds. She introduced herself as the Non-Point Source (NPS) Coordinator for the Department of Environmental Quality's Blue Ridge Regional Office in Salem, Virginia. Kim provided physical copies of the slideshow presentation, maps of the watersheds, and a map of all the IPs in the vicinity of the watersheds. All attendees signed the attendance sheet at the door. This sheet detailed the attendee's names and email addresses. There were 15 meeting attendees present.

Following Kim's introduction and expression of gratitude for those in attendance, she introduced the goals for the meeting, which included reviewing Virginias water quality process and the total maximum daily load (TMDL) that this IP will be based on. Other goals she hoped to accomplish were to facilitate a discussion about how to reduce sediment and bacteria in the respective impaired watersheds and which best management practices (BMPs) should be prioritized when writing the IP.

Kim displayed the slides to review the water quality process and the previous TMDLs as she provided a brief summary of what was discussed at the first implementation plan meeting. She discussed the Clean Water Act and its basis for this process, what an impairment is, and details of the TMDLs that were written to address the impairments within the watersheds the meeting focused on. The TMDLs are a 2006 Bacteria TMDL on Beaverdam Creek and a 2023 Benthic TMDL for the Pigg River, Poplar Branch, Fryingpan Creek, and Beaverdam Creek. The earlier TMDL addresses bacteria while the second addresses excessive sediment.

After introducing the TMDLs, land use maps for each watershed, as well as pie charts displaying sediment contributions from each type of land use, were shown to provide background for the BMPs that would be discussed. Most of the sediment is coming from pasture/hay and cropland in all four watersheds. With this information, Kim described the necessary reductions in each watershed. Reductions are necessary from croplands, pasture/hay areas, developed pervious and impervious areas, barren lands, turf grass, and eroding streambanks to meet water quality standards and reduce sediment in every watershed. Reductions in bacteria loading need to come from human sources, livestock, agricultural nonpoint sources, urban nonpoint sources, and wildlife. These reductions are necessary in only the Beaverdam Creek watershed. These reductions were all calculated in the original TMDLs written, they have not been recalculated for the IP yet.

Question: (Attendee) These numbers are from 2006, that was more than a decade ago, is that data anywhere close to what is present in that creek now?

Answer: (Kim) We are going to discuss the current conditions now, that slide was covering the previously calculated numbers from the original TMDL. Thank you for the transition into the next slide.

Kim transitioned from the information and background section of the CEM into the discussion portion of the CEM. Kim displayed popular BMPs used to reduce sediment and bacteria loadings in the watersheds since the TMDLs were written. There are 6 sediment reducing BMPs that have been implemented since March of 2021 in all four watersheds. There are 22 bacteria reducing BMPs that have been implemented since 2006 in the Beaverdam Creek watershed.

Moving onto the BMPs that could help further reduce bacteria loadings into Beaverdam Creek, Kim sought to understand from the community what the trends have been in the agricultural community surrounding Beaverdam Creek. Data from the USDA National Agricultural Statistics Service (NASS) was displayed showing the estimated numbers of farm acres, cattle, beef cattle, dairy cattle, sheep, and horses in Bedford County, which is where the Beaverdam Creek watershed is located, from 2002 and 2022. Kim pointed out the percent change in each of those categories over 20 years which help indicate the trends in land use and then asked the meeting attendees if those numbers looked consistent with what they have noticed in their community.

Question: (Attendee) Can you explain the 87% reduction in dairy cattle?

Answer: (Kim) We are using the statistics from the USDA who estimated there were about 230 dairy cows in Bedford County in 2022.

Answer: (Attendee) That looks correct. There has only been one dairy farm in Bedford County survive the last two decades.

Question: (Attendee) Does anyone know what farm that is?

Question: (Attendee) Is that number real?

Answer: (Karen) These numbers are based off voluntary self-reporting to the USDA.

Question: (Kim) Do these numbers seem consistent with what you're seeing in this community?

Answer: (Attendee) You have better data than me.

Answer: (Attendee) You have better numbers than we do.

Answer: (Attendee) That does seem consistent with what we have seen.

Question: (Kim) Does this change with sheep seem consistent?

Answer: (Attendee) Based on Franklin County, I'd say so.

Question: (Attendee) So, are farmers making a change from cattle to sheep?

Answer: (Attendee) Well, it's more so new farmers are coming in and sheep are more profitable right now than cattle. Meat sheep that is.

Question: (Kim) Does this number for horses seem consistent as well?

Answer: (Attendee) We don't have a good way of tracking horses. This is still for Bedford County, right?

Answer: (Kim) Yes, the data on this slide is specific to Bedford County because we are looking at the potential agricultural contributions to bacteria in Beaverdam Creek right now. We are interested in the current trends in land use and whether they have been increasing, decreasing, or steady in the area.

Question: (Attendee) Doesn't the USDA have this data?

Answer: (Kim) Yes, but we want to talk to the community members and make sure these numbers are consistent with what they have noticed.

Statement: (Attendee) I'm going to abstain.

Statement: (Attendee) You should check with the Farm Bureau.

Statement: (Attendee) You could reach out to the local FFAs (Future Farmers of America).

Following a lively discussion about the potential agricultural contributions of bacteria into Beaverdam Creek, Kim directed the discussion towards potential urban sources of bacteria. A chart with estimated numbers for population, septic systems, failing septic systems, straight pipes, and pets within Beaverdam Creek watershed from the 2020 United States Census was displayed. Kim told the meeting attendees that this is the data she has currently but will be touching base with Virginia Department of Health (VDH) to confirm those numbers and potentially receive better details to inform the modeling for the bacteria IP. She then asked the meeting attendees if these numbers looked reasonable to base the IP on.

Question: (Attendee) So, there are no trends on this slide?

Answer: (Kim) No, these numbers have not changed much since the Bacteria TMDL in 2004.

Question: (Attendee) So which pets are the greater polluter (referring to cats and dogs)?

Answer: (Attendee) Well people may let their cats and dogs out…

Answer: (Karen) Well dogs (feces) contain more bacteria than cats.

Answer: (Kim) Loading would be important to consider as well. That is why there is usually such an emphasis on cattle in clean-up plans.

Answer: (Attendee) Also, cats will bury their feces so that's not much of a source.

Question: (Attendee) Don't most cats have a litter box inside of a house?

Question: (Attendee) So, where do those litter boxes go?

Statement: (Attendee) That's much better than where dogs go.

Kim called the meeting back on track and rephrased her question to facilitate a discussion about what the community members were seeing in the Bedford County area.

Question: (Attendee) Is this for Bedford County still?

Answer: (Kim) Yes, this is for Bedford County which is the location of the Beaverdam Creek watershed.

Statement: (Attendee) Well, it doesn't say that at the top of this slide.

Question: (Attendee) Have we considered surveying realtors in the area?

Answer: (Kim) We could, right now we are just gathering information, we will have compiled information from many different sources for the second CEM. Right now, we are focused on what you have seen.

Question: (Attendee) Doesn't the county have that information?

Answer: (Kim) We have asked people from the county to attend these meetings but they have not been able to come yet.

Question: (Attendee) I get asking the public is important, but government offices have that information, wouldn't they be better to ask?

Answer: (Kim) We will reach out and talk to these different government offices, but we want to keep the community involved. I'm trying to be as transparent as possible.

Question: (Attendee) So you don't have the data now?

Answer: (Kim) We are gathering it now. We will have it at the second CEM.

Statement: (Attendee) Well you should have it at this meeting tonight.

Statement: (Attendee) Well, that's backwards.

Statement: (Aerin) Kim is giving you, the community, your opportunity now to contribute to that data collection and have your time to speak on what is occurring within your communities.

Question: (Attendee) Well shouldn't the county and VDH be here tonight?

Answer: (Kim) Yes, the county and VDH were both invited to be here tonight.

Statement: (Attendee) I think it's tough because we started in Bedford, there's a lot more information in the room tonight from Franklin County. I will say, from all the builders I know, there's a back up of houses being built in the are for the next few years. There are a lot of new houses being built.

Question: (Attendee) Isn't that opposite from Franklin County?

Answer: (Attendee) A little bit, maybe we could look at build permits to look for those trends.

Statement: (Attendee) I don't believe I've heard of any sewer coverage going in.

Statement: (Attendee) I want data from the county first before we all take wild guesses.

Statement: (Attendee) I want to know for question 3 (refers to question from the slide, "Is there any information regarding straight pipes in the watershed?") if VDH has data on straight pipes.

Statement: (Kim) VDH was invited to this meeting, that data will be what we focus on for the second CEM.

Question: (Attendee) So, is there a survey monkey already built for this?

Answer: (Kim) This has been sent to them via PDF and I'm waiting on their response currently.

Statement: (Attendee) We are also waiting on that information.

Statement: (Ashley) I want to say, I go to other meetings across the state, and I've never heard VDH give a definitive number of straight pipes.

Question: (Attendee) Is that purposeful?

Answer: (Ashley) They are in a tough position because they have to tabulate complaints for the communities they serve. They would have to walk a creek to know for certain.

Statement: (Attendee) You can get a list of known violations. They charge the public for those. They might know that number.

Statement: (Attendee) Bedford's VDH has had a lot of turnover the past few years. I know they don't come out to site visits anymore. They also have not kept up with records so that may be difficult to find.

Question: (Attendee) So, we have acknowledged that some agencies may be less forthcoming, what if they don't get back to you?

Answer: (Karen) There are general presumptions from national studies that we can base the numbers on if we need to.

Question: (Attendee) What if you file a FIOA request?

Answer: (Ashley) We can't provide personal identifying information (PII) and neither can VDH so I'm not sure if they could give us much information.

Statement: (Attendee) When I asked for violations once through FIOA, they gave it to me.

Statement: (Ashley) Well, they can do that as long as it does not include PII.

Statement: (Attendee) I don't know about the capabilities of your office but, typically with straight pipes, the houses with them predate the 1970s and are within 300 feet of a creek. Maybe you could go through with GIS and determine potential straight pipes that way.

Answer: (Kim) Yes, maybe that could work, we might also be able to take a look at a realtor website.

Statement: (Attendee) I know in Roanoke, there is an NGO that can fix septics and failed systems, what is their name? They would have data because they do that.

Statement: (Kim) We know we won't get the exact number. What we are looking for is a good estimate so when we write the clean up plan, when we say it will cost X amount of dollars to do these BMPs, we can get adequate grant funding that will allow us to address the watershed. These are all good resources and this is good feedback.

Kim moved the meeting forward by shifting to the prioritization of different BMPs that can reduce sediment in all four watersheds for this IP. Kim explained each of the practices that could be used for sediment reduction and displayed them along with the cost/unit for each BMP. She informed the meeting attendees that this is the time to provide input on BMP practice types and what makes sense for these watersheds. She also explained that once the IP is submitted to the EPA, it will not be able to be changed. Only the BMPs that are on the EPA approved implementation plans will be eligible for funding. Kim asked meeting attendees about each BMP practice and whether the cost per unit looks appropriate for the region.

Question: (Attendee) Is this for all the watersheds now?

Answer: (Kim) Yes, these are BMPs for all four watersheds.

Statement: (Attendee) Your slides could use a heading, so we know what we are looking at.

Answer: (Kim) Yes, each question and table, in the handouts I have provided, have the headings indicating if it is sediment or bacteria. The sediment is for all four watersheds while bacteria is only for Beaverdam Creek. However, I can explicitly state out each watershed for the next meeting.

Question: (Kim) Does this price for livestock exclusion look too high or too low ($75,000/system)?

Answer: (Attendee) That number might be low because incentives have increased on those practices. I would put it at $100,000 because buffer payments have increased.

Question: (Kim) Okay, thank you. Are any of these exclusion systems more popular in this area?

Answer: (Attendee) The SL-6W is the most popular of those.

Question: (Kim) Do all these exclusion practices cost about the same?

Answer: (Attendee) No, off-stream water is less, and narrow buffers are less because the water systems tend to be smaller and come with less of a buffer payment.

Questions: (Kim) Great, thank you! On to the pasture practices, how do these costs look?

Answer: (Attendee) I don't think those practices are going to be popular because those have to come after a lot of management. Some of those practices overlap with CSP from NRCS. NRCS is more popular with those practices than us.

Answer: (Attendee) The SL-9 is no longer. You should add SL-7 to that list though because that is a popular pasture practice that implements rotational grazing. That practice can come off any of the other practices.

Answer: (Attendee) Theres one practice that is also popular you could add, SL-6F. That is a stream exclusion practice as well. The concept behind that one is you can put the fence farther from the stream and create a hay field between the fence and the creek. This is a good one for areas that flood. That practice has been very popular.

Question: (Attendee) (directed at another attendee) Do y'all do many FR-3's?

Answer: (Attendee) Most of that is through CREP. We have had a few. We should add that to the list. That is a stream side buffer of trees in an SL-6 buffer.

Question: (Kim) Do you have any information on the average cost of that practice?

Answer: (Attendee) That varies big time on the species, contractor, and how far they have to go with it.

Question: (Karen) Is there anything else more specific that we could use for development?

Answer: (Attendee) Could be $1,000 to $5,000 an acre. It really depends on the goals of the landowner?

Question: (Attendee) What does permanent vegetation mean?

Answer: (Attendee) That practice takes a field out of production to maintain permanent vegetation on the field.

Question: (Attendee) Is that payment for just one year out of production?

Answer: (Attendee) No, that is for many years. The payment is determined by how many years the field remains out of production.

Question: (Attendee) So, are they paid every year they don't use their field?

Answer: (Attendee) No, this is a one-time payment.

Statement: (Attendee) This practice is usually used on smaller areas, usually areas being affected by erosion that are difficult to farm anyway.

Statement: (Attendee) Thank you for explaining that. I'm starting with a very big learning curve for a lot of this stuff.

Question: (Kim) Is this practice popular? Should we include it?

Answer: (Attendee) Yes, include it. It is used for such small areas; it doesn't usually rank well. If there was more money for it, we might be able to get more on the ground.

Question: (Kim) Okay. Does that number (cost) look accurate?

Answer: (Attendee) We will have to circle back on that one.

Question: (Karen) Would you able to share your cost list with us for this year?

Answer: (Attendee) Yes. We can also share the NRCS ones as well.

Statement: (Attendee) Careful with the NRCS ones because they are very outdated. Especially their fencing, that number is very outdated.

Question: (Kim) Is afforestation of eroded pasture popular? Should we include that one or not?

Answer: (Attendee) Yes, that one is popular.

Question: (Kim) What about that cost?

Answer: (Attendee) Yes that number is okay if you're planting pines ($570/acre), but hardwoods are much more expensive. Those cost over $3,000 an acre, up to $10,000 an acre.

Statement: (Attendee) You should add the RT practice from DOF (Department of Forestry). That is a newer practice that can cover planting trees in retired fields.

Statement: (Attendee) Don't forget to add the incentive rate to the costs as well because that adds considerable cost per acre.

Question: (Kim) Should we keep the SL-1 practice?

Answer: (Attendee) Yes, keep it. We don't do a lot of those, but we do some. I would raise that number (cost) for that practice though.

Question: (Kim) Should we keep the no till practice?

Answer: (Attendee) We don't have the ability to pay much for that practice, so we haven't done one in over a decade.

Statement: (Attendee) You should add the SL-15B for Bedford County. That is popular up there. You should also add SL-8M for cover crops because we use that one more.

Question: (Kim) What would the cost be for those?

Answer: (Attendee) For the Sl-15B, $60/acre, and for the SL-8 $90/acre.

Statement: (Attendee) Cover crops don't always compete well, but, if there was more money set aside, it might.

Question: (Kim) Are there additional BMPs we haven't mentioned that we should include?

Answer: (Attendee) We have a suite of animal waste practices that can reduce erosion from animal traffic. They cost a lot, but they may be helpful.

Statement: (Kim) We can add that.

Statement: (Attendee) I have a negative practice to add. Don't plant bamboo on the creek. We have lost so many acres to it. I'm seeing more and more of it. It's everywhere now.

Statement: (Attendee) I believe it's classified as invasive now.

Statement: (Attendee) Farms planted it along their creeks and it's now out of control. I can make a list of the horrendous places with bamboo in the county. There's even a house I know of that is being taken over by it.

Question: (Attendee to the foresters in the room) Is there anything that can be done about it?

Answer: (Attendee) You need a backhoe because it's roots are really strong. It is also chemical resistant most times. It does also usually grow along streams so you really can't spray it with chemicals anyway.

Kim took adequate notes of the BMP practices for agriculture that were discussed. She then transitioned to a slide displaying urban/residential BMPs with their cost/unit for discussion. She first posed the questions to the meeting attendees asking if there are opportunities in these areas already to establish these BMPs? Is VCAP (Virginia conservation assistance program) available in this area? The room shakes their heads yes and Kim moves on the ask about specific BMPs and their cost/unit.

Question: (Kim) Would we like to have bioretention on our list? Does this cost look reasonable?

Question: (Attendee) Is a bioretention filter a filter or just a term?

Answer: (Kim) That is just a term. You could just call it bioretention.

Answer: (Attendee) So, a typical rain garden is around $7,500 but bioretention can go for around $12-15K.

Question: (Kim) Is there interest for this practice in this area?

Answer: (Attendee) Not much, there's a lot of forested areas and rural areas. With our topography, most rain events would overwhelm those systems anyway.

Question: (Kim) What about stream bank stabilization? Is there interest in that BMP? It was mentioned at the first IP meeting?

Answer: (Attendee) Yes, there is definitely interest in that. And, that number (cost) seems about right.

Question: (Attendee) Does DEQ have the funding to get streambank restoration done? It usually needs designed by private engineers and it's hard to get a cost estimate on those prior to starting the project.

Question: (Kim) Ashley, is there a better process for getting cost estimates for streambank restoration?

Answer: (Ashley) New River Soil and Water Conservation District did one with a TMDL grant. Maybe we could reach out and ask them for their numbers?

Statement: (Attendee) We haven't done one, but we have to potential to do two right now if there was funding for that.

Question: (Kim) How about bioswales? Is there interest? Does this cost look realistic?

Answer: (Attendee) We don't do anything that covers that.

Answer: (Attendee) Get numbers from VCAP program for that. I think the cost would cap out the VCAP cost share.

Answer: (Attendee) The Chesapeake Bay Landscape folks could tell us more about pricing for urban and residential BMPs. I can get in contact with someone I know to find out their numbers.

Answer: (Attendee) I think that's used more in the coal fields where properties have been decimated. Am I correct on that?

Answer: (Attendee) It's more like a vegetated stormwater conveyance channel. It is usually done in more residential settings.

Question: (Attendee) What is the difference between a Bioswale/Dry swale and a retention pond?

Answer: (Attendee) One is supposed to hold water, the other is not. Water is supposed to pass through a swale quickly, not sit in it.

Statement: (Attendee) VCAP doesn't fund dry swales.

Question: (Kim) What is the most popular rainwater collection practice? (Rain barrels, rain gardens, dry wells) Would these other practices not be very popular?

Answer: (Attendee) There might be some interest in dry wells. Like I said, in our area, most rainstorms would overwhelm any of those systems. None of those would be very popular. You should leave streamside buffers though because we can cost share on conservation landscaping.

Question: (Kim) Are there any BMPs of interest that you are not seeing on our list?

Answer: (Attendee) There are a few different grant programs through DOF that will help with afforestation on public lands and lands promoting clean water.

Kim took the appropriate notes from the discussion of the urban/residential BMPs that could reduce sediment loadings. She then displayed the BMP list for reducing bacteria in the Beaverdam Creek watershed with the cost/unit. Kim acknowledged from the earlier

conversation that there were no representatives from Bedford County in the room but still asked the meeting attendees who live near the Bedford County community about the potential interest and accuracy of the cost/unit.

Question: (Kim) What do we think of these numbers?

Answer: (Attendee) Based on Franklin County, that cost for vegetative cover is low. You'll be able to see most of these numbers from our cost list.

Question: (Kim) Would it be better to just look at that cost list and try to continue reaching out to folks in Bedford County?

Answer: (Ashley) Yes, we can try to use a regional average for costs. We can also try to reach back out to Peaks of Otter for their cost list as well.

Statement: (Attendee) Don't forget to remove the SL-9 practice, which we don't have anymore, and add in the SL-7.

Statement: (Kim) Okay, as long as we are all in agreement, we can move on since we don't have any representatives from Bedford County here.

Kim carried the meeting forward to the general questions section. These are questions for the meeting attendees to think about prior to the second community meeting. The questions were displayed and available in a handout. The group was asked what methods of outreach would be best used in the community and whether there are other potential funding sources that could be available to implement BMPs. Kim also displayed, and provided in a handout, a map displaying all of the Implementation Plans currently in effect in the surrounding areas. This map was to show that there is funding available in adjacent areas as well. Kim also told the room she would follow up on animal waste practices that could reduce both sediment and bacteria loadings.

To wrap up the meeting, Kim detailed what the next steps would be following this meeting and proposed four dates for consideration for next CEM. She then opened the meeting back up for more questions and discussion.

Question: (Attendee) Can you talk about the pedigree of cost estimates?

Answer: (Karen) At the next meeting, we will come back with a list of practices for each watershed. We will work with the community to determine which practices will be used more or less. There is a cost associated with each practice and we can use the cost to help weigh which practices we want to implement the most in these watersheds.

Question: (Attendee) Are you baking inflation into that cost?

Answer: (Karen) We don't usually but we might be able to look into that.

Question: Well, how long does a BMP take to do?

Answer: (Kim) It depends on the funding sources. The VACS program receives annual funding. If we are only talking about EPA 319 funding, this IP will first need EPA approval, following approval, applying for funding is an annual process that takes place in late may to early June. If we finish the IP this year and EPA approves it quickly, next summer, the district and NGOs can apply for 319 funding and they will receive that funding the following fall.

Question: (Attendee) But how long will a BMP take to do?

Answer: (Attendee) Anywhere from a week to four years. If the participant is ready and has the money, it can be done quick. It really depends on the eagerness of the participant.

Statement: (Kim) Even residential septic BMPs can take some time, they have to go out and get bids and installers for the BMPs. What I was going to say is, at the end of the IP, we will have all the practices and how much everything will cost, based on the average cost to do it, and then we will begin seeking opportunities to implement these practices over a 10-15 year period.

Question: (Attendee) Does permitting time time need to be factored in?

Answer: (Attendee) Somewhat. Streambank work, that's the longest, so that could be a factor.

Statement: (Attendee) I used to do cost estimating for ship building. These were multiyear projects. What you're describing won't cover 50% of the cost to implement if you aren't factoring in inflation.

Statement: (Attendee) That's because with ship building, the contractors have to do the work, but with this we have to convince landowners.

Statement: (Kim) These are all voluntary practices. We will have to try and encourage people to communicate with the districts to do these BMPs.

Statement: (Attendee) Accessibility to funding is dependent on the aggressiveness of the people going after the funding.

Statement: (Attendee) From the conversation held at the first meeting, it sounds as though, if we got a few of the large landowners on board, we could solve a lot of problems very quickly. That's either a really good or a really bad thing. If we can get this going, if we can convince one of them to implement these practices, we can do this. It only takes one putting in the practices to warm the others up to the idea.

Statement: (Attendee) We will have to convince them first that there's a value in improving the environment.

Question: (Attendee) Can I get everyone's business cards?

Kim thanked the meeting attendees for coming to the meeting and ensured to them she would be following up with a survey to pick a day for the next meeting.

This concluded the meeting.