

Yeocomico River Watershed Implementation Plan Kick Off Meeting

Northumberland Public Library, Heathsville, VA

Feb. 2, 2017 6:00-8:00 p.m.

Attendees

Katie Ranger (DEQ)

Anna Reh-Gingerich (DEQ)

Brandon Dillistin (NNSWCD)

Gail Sigler

Nancy Demarest

Harrison Daniel

Jennifer Palmore (DEQ)

Mac Sisson (VIMS)

Chip Jones (NNSWCD)

Dr. Lynton Land

Colston Newton

Ram Gupta (DEQ)

Kathy Clarke (NNSWCD)

John Sigler

Kate Daniel

Stuart McKenzie

Meeting Summary

Introductions and welcome from Mac and Katie.

Why we are here: waterways are currently impaired due to high bacteria levels, which close shellfish beds for fishing and waterways for recreational use (E. coli, Enterococci, Fecal Coliform). Maps were shown that cover the implementation area. Everything shown in red is currently an impaired segment. Some examples are Gardner Creek, Hampton Hall Branch, Shannon Branch, Yeocomico, etc.

Maps depicting area land-use were also shown, with descriptions of the different types of land uses in the area (pasture, hay, etc.).

To address these impairments, Total Maximum Daily Loads (TMDLs) were generated for watersheds in the area, which is essentially the maximum loading of bacteria that waterways can withstand to reach water quality standards again. Three TMDL reports were generated for this area, and we are combining them into this one Implementation Plan.

Slide was shown with applicable water quality standards. The shellfish criteria is more stringent than the recreational criteria. We are going to aim for the shellfish standard, to also address the recreation.

Map depicting DEQ and VDH monitoring stations was shown.

An Implementation Plan serves as a guideline of how to reach the goals of the TMDL. It is a community effort to improve water quality and there are multiple steps we follow to develop the most-effective plan we can. We'll start with a bacteria assessment, then prioritize our sources to find what would be

the most effective. Public participation is also a major component, so that we implement projects that will work well in your community.

A bacteria source assessment looks into all possible sources of bacteria. These include point sources under the Virginia Pollution Discharge Elimination System (VPDES) permits and nonpoint sources, including direct inputs and indirect from stormwater runoff. A few slides presented the original TMDL values, percent loadings based on land use, and previously estimated percent reductions.

Wrapped up the presentation with comments about Best Management Practice options, a tentative schedule, and ways that groups and citizens can be involved with the public participation process, including: working groups, steering committees, and public meetings. Working groups are slightly smaller and more specific to certain topics where you can offer input. There will be two meetings for each working group. Towards the end when the IP is finalized, there will be a steering committee review process.

Q&A

Q: Are they all impaired to the shellfish standard?

A: SF stands for shellfish impairment. Those labelled with SF are impaired for shellfish standard.

Q: Do you have a map that is available for us to take home

A: Not at this time, but we can email them out if you are interested.

Q: What is happening with the Hampton Hall map? Why is there a break, but there isn't a break in the areas in the other ones? Was that area not monitored?

A: This is representative of the monitoring stations, so if there are impairments, it was monitored. Some of the areas are also different between tidal or free-flowing which has different water quality standards, so breaks can happen. We also have a map that shows all of the monitoring stations.

Q: The 40% forest percentage also includes clear cut areas? That seems high?

A: Yes, it also includes those areas. Does this still seem representative of the area?

Comment: There was just recently a new land use map that was released by the state.

A: Yes, we will be using those in the IP.

Q: Does the shellfish standard also take into account the habitat, or bottom of the stream? Even if you clean up the water, shellfish won't grow on all habitats.

A: It does not take habitat into account.

Q: What are the symbols on the map?

A: They are all monitoring stations, they just monitor for different things.

Q: What are enterococci?

A: They are also a type of fecal coliform, but they are measured in salt water. E. coli are used to gauge freshwater.

Q: What type of monitoring data is this, professional, citizen..?

A: They are all DEQ monitoring stations.

Q: These data are from 10 decades ago bacteria source tracking, right?

A: Yes.

Citizen response: Then you need to look at them with a great deal of skepticism. The results were from a technique that was not the way an analytical procedure should be done. The results have not been replicated in other methods.

DEQ Response: We will actually be redoing the reductions with a new bacteria source assessment. By contacting the sources themselves through the workgroups, ask for data from citizens if they have any better data, etc...

C: But you still don't have the direct source? BST is the only analytical method. How are you going to estimate wildlife?

DEQ: We will be using data from the VGDIF to estimate wildlife data with best estimations.

Q: Why are some of them at 0% for reductions needed?

A: At the time of the TMDL, those creeks came back as meeting water quality standards, but they were still included.

Q: Go through every one besides Mill Creek, the human is 100% reduction. Why did it happen that way, standard of 0, but not everywhere else?

A: The current load was low enough that it was meeting the standards, so they did not need to do reductions.

Q: Before we move on, you're telling us that we're going to get up-to-date data to get a better picture of how to implement, correct?

A: Yes, we will be collecting more up-to-date information.

Q: Why don't you just do the Yeocomico? Why such a large area?

A: Having a larger area makes it a little bit easier to do implementation, so that we don't have to double up on the efforts.

Q: Are you going to have a meeting in Westmoreland?

A: Possibly.

Citizen Response: You definitely should because these creeks are all in that area, and there's quite a bit talk from shellfish sanitation and organizations about the shellfish beds being closed. Would be good for you to go there.

Q: Why is there a difference in the humans for the Mill Creek TMDL?

A: Because this is freshwater, no longer estuarine.

Q: How are you going to get to 0 loading for livestock?

A: Remove the direct input from livestock, by doing exclusion fencing. These are guidelines set by the EPA, so they are the goals that we're trying to reach. May not be able to reach that, but we're going to try to get there. Try to do pump outs.

Citizen Response: In regards to the septic systems, VDH does a shoreline survey, so there may be a problem, but they'll be fixed very quickly...

Q: Chesapeake Bay Act... septic field, do you move to a recovery field if it fails? Bay Act requires reserved drain field for new construction. Do you switch back and forth to clean out the bacteria?

A: It's just meant to be another place to do sewage.

Q: I'm from the SWCD, and you're most likely to see that the livestock numbers have already been met because of a very good cost-share program, that was 100% . Is there a way to get that incorporated into this IP so that the efforts can be focused into other areas so that we don't put money and effort into the livestock work?

A: We will get data from the DCR database from those who have access and incorporate them. Have those been added to DCR?

Citizen: Yes they should have been.

Q: Those percentages are just a part of the whole TMDL right?

A: Yes.

Q: Are there a lot of livestock farms?

A: Yes, they've all had BMPs/Exclusion fencing.

Biosolid testing would come back as human sources. This testing came back as cattle signature. BST analysis tried to determine using different DNA signatures.

Q: But you're no longer using the BST?

A: Right, the numbers could still totally change. The red impairments on the map are current, we're working to try to get the red to be fixed.

Q: Is the Yeocomico currently a no-discharge zone?

A: There is a permit, but it has not been finalized yet.

Comment: I was surprised by the backlash against not having a permit in the area and pumping waste.

Q: How do we get our neighbors involved?

A: Your input will be recorded here, and your input will be given to that section.

Q: Two of us are against the discharge zone, how are we going to get our voices out there?

A: We're trying to include your feelings in with the IPs, because we want to incorporate BMPs that are going to resonate with the community and actually be implemented successfully.

Q: Will the no-discharge zones actually contribute to improving the water quality?

A: I do not have a good answer to that at this time.

Comment: I ask because I have no idea how you would enforce something like that? It's easy to enforce on merchant or bigger ships, but how do you enforce recreational?

Response: Marine police can enforce it by boarding and checking.

Q: What do people give as opposition to no-discharge zone?

A: It would require money from users to install holding tanks in their recreational vessels.

Q: Have we got any figures on Lodge Creek since Callao switched over to sewer system recently?

A: We can check the water quality data after... do you know which year it went into place?

Comment: It went into effect two or three years ago.

Response: We can check the water quality data for the last few years to see if there's a difference.

Comment: You can get those data from the shellfish sanitation for sure.

Comment: I feel like if you switched all cities from septic pump to sewer, it would substantially improve the Chesapeake Bay. There should be no bacteria coming out of a sewage treatment plant.

Response: Sewer is the best option, but it's not always practical/implementable in more rural areas.

Q: Do you have a general timeline?

A: Working group meetings expected to start in March, continue throughout the spring. This is very tentative. Hoping to have a final document close to October, in which case the steering committee will be looking it over in the fall. There are public comment periods.

Q: Who are the personnel for these working groups?

A: You are if you feel compelled to join one!

Q: What kind of data collection will you be doing for the working groups and committees to help them plan?

A: Bring it from DCR, updated land use... we bring it to the working group to ask if they agree that it is representative... is 40% forest area representative for example?

Q: My concern will be for the non-tidal flush, is the tide going in and just pushing it all into the headwaters and not flushing it all back out? How do we figure that kind of stuff out?

A: In the working groups, we can try to identify some of those things to identify which BMPs will be the most effective.

Q: What are the timelines for implementing the things?

A: Staged implementation, 5 years, 10 years....

Comment: My concern will be factors of sea level rise with climate change, I feel like that will have to be incorporated into the implementation factor.

Q: Is there a place on DEQ's website where we can look at IPs in areas that are comparable to ours so we can get an idea of what to look for in these working groups? And will there be a cost-share program that will help us with these projects?

A: Yes and yes. Those are all listed on our website, Mattaponi will come into play. Once IP is done, we'll start putting BMPs into the ground, that's when the cost-share funding will come into play. BMPs are voluntary from the farmer or homeowner perspective. Addressing those concerns is voluntary.

Q: 319 funding is from EPA?

A: Yes. There are also at least 10 sources of funding that will be listed in the IP, and any if the working group identifies any other.

Q: Will the plan be split into the two counties? Or will it be just one plan?

A: It will be one plan that will cover both counties.

Q: I have a big concern at the Mill Pond Creek... there's a lot of tires, deer carcasses, muck... how are you going to clean up?

A: We can try to address that in the work group.

Extra Comments:

Comment: I still don't trust these old data... they can tell you how much deer there is, but they won't be able to tell you how much deer waste enters the actual water.

Response: We're going to try to focus on the controllable load, rather than just the wildlife. We cannot control the wildlife, so we're going to focus on septic, pets, and livestock.

Comment: The headwaters have been going on for as long as the population has been growing. It's not going to change.

Response: We're trying to move forward with what we can do. The stakeholder inputs are what we're looking for to find what's realistic, so that we can update this old information.

Comment: DEQ insisted on going through all of these creek by creek a decade ago... all of these creeks were exactly the same. The bacteria increases toward the headwaters, the salinity decreases toward the headwaters. In the headwaters, there are few houses... the water is shallow, it's far from the mouth... There's runoff. There's no flushing in the headwaters. I have a rainfall record of more than a decade and compared them to the shellfish concentrations. Most of the time, heavy rainfall even kicks the bacteria. That tells me that it's wildlife. It's always been this way. Unless you are going to get samples to do microbial source tracking to prove what the source of the bacteria is... The Chesapeake Bay is all about nutrients, this is where the focus should be placed. These creeks are mostly just mud anyway. There's nothing out there but woods and wildlife. I can only think about one creek that has half a dozen cows in it. Almost every single creek that I'm familiar with has a mill pond at the top of them. They were checking the bacteria levels at the dam, which means they would get trapped in that mill pond. There was also a big flock of geese. Did you know that you can take muddy sediment from these creeks and culture fecal bacteria? That means that bacteria are resident in the sediment.

Comment: We will also need to eliminate bio sludge and poultry litter... birds follow the plow. Seagulls are on fields that have bio sludge and poultry litter. The seagulls are brought. It's clean when it's applied... if you're serious about eliminating all human sources of bacteria... you need to ban biosolids. A ¼ of Chesapeake Bay is from the application of biosolids. What happens if we put it into our IP that we want to ban biosolids? Would the state go for it?