

Crab Creek Final Steering Committee meeting (Christiansburg Town Hall)

August 27, 2014

See sign in sheet for attendees –Diana Hackenburg, Chris Burcher, Karen Kline, Ashley Hall, John Burke, Ronald Hall, Clark Payne, Wayne Nelson, Cynthia Hancock, Christopher Barbour, Stacy Horton, Hunter Mussey, Ryan Hendrix, Laura Walters, Lawrence Hoffman, Doug Burton, Randy Wingfield, Barry Helms, Christopher Webster

Diana introduction

Participant introductions

Diana presentation (*.ppt)

- background

- Crab Creek meeting history

- IP modifications (land use and sediment loads updated)

 - Question from EEE (Environmental, Engineering, and Educational)

 - Consulting/VDOT – where did street sweeping data come from? Karen answered but unsure of data source. **Follow up – we will check on data source for street sweeping source**

 - Question EEE – how did we identify model error? Diana/Karen – Gene Yagow found it and BSE changed the target load; WLA stayed the same. Town C’burg – was it a math error and did DEQ fix it globally? Karen – yes. Question EEE – this was a LA from the GWLF? Karen –yes. Town of C’burg clarified modeling for audience re: comparing to Tom’s Creek to get a ‘standard’ for high aquatic life scores. More discussion about error between EEE and Karen. **Bigger picture question from EEE – does TMDL need to be changed associated with this error? DEQ will not modify TMDL at this time. The IP will document that the TMDL channel erosion load allocation was modified and BMPs was quantified to attain the adjusted allocation. Town – does this affect the MS4? Karen/Diana – no because that is the WLA for permits, this doesn’t affect those, just LA. Question EEE – who did we notify at central office? Diana – Charlie Lunsford; and Liz McKercher was informed as well.

- Meeting summary slide [meeting notes are online]

- Ag group summary (Cynthia) – biggest thing was updating land use and ‘microfarm’ (small subsistence level farms) discussion. NOTE: May want to beef up this section of IP

- Residential group summary – stormwater and wastewater issues. Existing monitoring.

- Gov’t group summary – technical and financial resources needed for stormwater and stream restoration. Septic/straight pipes and barriers to public. MS4 status. Pet waste. Dog park. Difficulties reaching microfarms.

- BMPs

 - Diana gives summary, audience provides feedback

 - SSOs (sanitary sewer overflows)

 - Town contracted to study this and summarized for participants – Infiltration and inflow. Systematic approach to addressing this in town. First step is analysis: flow meters in various sections of receiving areas

going to WWT. Then evaluate rain flows vs. base flows to evaluate which sections are receiving I/I. Then develop systematic approach to implement corrective actions. Goal is to reduce I/I by picking main problem areas. Funded by town. Had initial meeting and town is budgeting for the bigger project now. It was mentioned that TMDL load reduction is 100% but town will never be able to reach that. Town is aiming at 2 year storm as reduction goal, which is more realistic. Study will be used to develop capital improvement plan and identify 'where they are going to spend their money'. Diana – an explanation of the town's work is in the draft IP.

-Residential septic practices – not changed since March. Question from town – is there a separation between county and town for residential septic issues? Karen – BSE could do it with structures data. Diana – we asked for those data but didn't get them. Town – we tried but data were sketchy. **Diana – Chris and Karen can work on it.** Q – what kind of data? Karen – 911 data showing addresses. Town thinks they can provide data and will provide during the comment period if they intend to move forward with these changes. Note this for future TMDL IPs. Comment – most of town is likely to be on sewer anyway rendering this type of analysis sort of moot.

-2 state, 4 years total implementation planned for residential BMPs. Q EEE – is that condensed from last time? Wasn't it 10 years? Diana – we were but DEQ went with a shorter time frame that is aggressive. Town – these numbers in this timeframe are scary.

-Pet waste. Town Q – it is challenging to show we reduced our load through actual monitoring and lower numbers in the streams. There has been talk about getting MS4 credit for outreach only and not the actual efforts (when the measured goals are not actually met). Diana – I'm not sure if the MS4 guidance will have any of that in it.

- Stormwater. This is new stuff for this meeting. Residential and urban stormwater practices including homeowner BMPs as options to reduce loads. These specifically go to MS4 allocations. Town comment – this is for residences that are 'in an MS4' but actually discharge directly to crab creek and not to a storm sewer. [NOTE: discharge to either is possible] Diana – do these numbers look ok? Town – probably will be a lot more manufactured BMPs I assume. Diana – because of space? Popularity? Town – there are already more than these numbers (popular). One of the confusing things is if undeveloped land uses a BMP, then giving credit to them is a problem because it's a new land use. These seem to apply only to redevelopment. Town – extended detention; is that new? Diana – yes. Town – that's aggressive. Development at today's rate, even over 6 years, you wouldn't have that many (65) projects. Karen – but this is acres treated, not # of projects. Town – ok. That's probably obtainable. Diana – if you think retrofits need to be another BMP we can do that. Town – we can't count a new development as a credit because it's really mitigating a change in land use. ISSUE – how does DEQ account for new

construction vs. redevelopment or retrofitting. Karen – we can include this type of data in the IP document. Diana – we will look into retrofit opportunity for detention ponds. NOTE – look into more manufactured retrofit BMPs for places that may not have the space to implement larger BMPs that require more extra space.

-Streambank restoration. In response to channel erosion, there are BMPs available to reduce this. This is a range of BMPs from minimal to full stream restoration. DEQ/BSE updated this based on prior meeting input. Town – I would like to bring up Norfolk Southern component. Any thoughts on their activity directly adjacent to Crab Creek and their potential for a significant impact; especially with respect to monitoring that area? Original TMDL does not address rail transportation land use as a sediment source. Therefore, under the TMDL/IP development planning process load is not addressed. The IP will acknowledge it as a concern raised by stakeholders.

-full stream restoration cost estimate is \$1.7M. Q – is that a ‘turn key’ cost? Karen – I don’t think that would include the technical cost. Town – that is a very low cost estimate for that big a project. Even if it was not full restoration and simply stabilization. General comments that \$150 per linear foot is way low. The James River association published a document that summarizes these costs. Diana – we looked at that and used it to get at \$150 figure. We thought this was a decent estimate of costs generalizing for all variables in Crab Creek. What would y’all price this at? Answer – too many uncertainties, we prefer a range. Question – what has been use in other plans? Diana – I’ve seen both higher and lower. ****Price will be considered**** Q – did the Roanoke River plan separate by stabilization and full restoration? Karen – if you prefer it split out we need two numbers from you. Town – that total number is our justification for seeking grant money and it needs to be accurate. (question aimed at town officials) When it comes to an action plan, can these numbers be held against us? DEQ MS4 guidance – Ips may be used by localities for pollutant reduction strategies; however they are not considered a requirement for permit compliance. Further, IPs do not prescribe specific BMPs to implement to meet their MS4 permit requirements.

-Agricultural practices. BMPs. Used already-in-place systems in Crab Creek to generate these estimates. Chris/SSWCD – take out SL9, not an incentive to manage properly and very few put in for 7-8 years. Too strict management for state. SL-9 is actually a BMP instead of an incentive. It goes beyond an SL-6. Take out SL-9 altogether but include the grazing land management system with the SL-6. DEQ has included the pasture management BMP, SL-10T in place of SL-9. Karen – is that the same for LE-2T? Chris – it could be the same thing. Diana – are you using SL-6 and grazing land management together now? Chris – we’re using grazing land management and stream exclusion together. Just don’t use SL-9. But leave the 528 in. On that practice we only pay \$25/acre if managed right. DEQ is using \$75 acre cost since farmers are being enrolled in 3-year

contracts in both the federal and state programs (i.e., 528 and SL-10T). And again, that's a BMP that is implemented AFTER the rotational grazing is put in. I would raise the FR-1 for both pines and hardwoods because it includes fence. Go up as high as \$1500 (pines about \$600). SL-11 needs to be raised also. Need to include grading and heavy equipment and fencing so it is established. Chris – rest look ok. SL-8B might go up also.

-Technical assistance costs. Town – stage two should include some money for residential. Whether full-time or not can be discussed.** Chris – 6 years is even too long to accomplish ag and residential goals. If that's all we had to do; the MS4 and other stuff adds to it.

-Slide showing total cost. \$8.4M

Town – the TMDL considered all permits as point loads which is an allowance for those loads. So the 2k load allowance is a small part of the total load, of which, the construction load is a big contributor. When there is a major storm the construction sites contribute way more load during a storm and may cause more of an overall problem. So we can't use TMDLs as leverage to reduce construction loads further. Which stinks. NOTE: can we better account for construction loads to help reduce the requirements of the TMDLs?

-Tracking. **Add that MS\$ tracking plans (i.e., TMDL Action Plans) will quantify additional efforts.**