

## MINUTES FROM SEPTEMBER 29<sup>TH</sup> MEETING OF THE HB1774 WORKGROUP

In attendance were workgroup members Marcie Parker (VDOT), Ann Jennings (CBC), David Nunnally (Caroline County), Shannon Varner (Troutman Sanders), Sandy Williams (ATCS), Philip Abraham (VACRE), Andrew Clark (HBAV), Peggy Sanner (CBF), Lewie Lawrence (MPPDC), Tom Swartzwelder (King and Queen County), Greg Evans (DOF), Jeff Corbin (Restech Systems), Russ Baxter (DSNR), Melanie Davenport (DEQ), Adrienne Kotula (James River Association), Steve Owens (VDOT), Chris Pomeroy (AquaLaw), Jonathan Harding (VA Agribusiness Council), and Eldon James (RRBC).

Also present were Mike Rolband (WSSI), Xixi Wang (ODU), KC Filippino (HRPDC), Ryan Brown (Kane Jeffries), Mark Luckenback (VIMS), Carl Hershner (VIMS), Mike Polychrones (VML), Joe Wood (CBF), Fred Cunningham (DEQ), Chris Antoine (VCPC), Kristin McCarthy (CBF/VCPC), Amber Leasure-Earnhardt (CBF/VCPC), and Brandon Bull (DEQ). The meeting was facilitated by Elizabeth Andrews of VCPC.

The meeting was called to order at 9:00a.m. The minutes for the full Workgroup meeting on August 30<sup>th</sup> were approved, as amended.

### SUBCOMMITTEE 1 PRESENTATION

Elizabeth provided an overview of the Subcommittee's work up until that point. The primary goal of Subcommittee 1 was to find solutions to issues involving stormwater and ditches in rural Tidewater localities. Marcie Parker had first presented data on the VDOT ditch maintenance program and the relatively few complaints about ditches in rural localities over the past year. The group then had examined the concept of volume credits proposed in the legislation, and decided they were unwilling to expand credit trading outside of the confines of a watershed; and there is no real demand for volume credits within the watershed in rural Tidewater localities because there are no MS4s or other permittees nearby and there is no technical rationale for wanting to trade credits in the current situation. In addition, implementation would be difficult for the rural localities (for example, the volume credit trading program in Washington, DC that the group had been briefed on); and a volume credits program would not protect stream/channel quality at the site where the volume occurs.

For these reasons, the Subcommittee had decided not to pursue development of a volume credits program but instead had discussed ditch restoration and clean-up as a method to achieve a large net reduction in non-point loads, to help the Commonwealth meet its Bay TMDL reduction requirements. However, they had decided that was impractical because implementation would be very complex for these rural localities, and unachievable because VIMS' research showed not much development occurring in those areas to generate pollutants. Most pollutants were coming off of agricultural lands and yards.

So the Subcommittee had looked at ditch clean up to achieve a net load reduction for rural localities via targeted, effective BMPs to address loads coming out of agricultural fields, for use within a locality as a local offset for development-generated pollutants (so development projects could achieve stormwater compliance offsite). Ann Jennings had presented information

to the Subcommittee on the Talbot County, Maryland approach to ditch restoration. The group also had heard about Clean Water Services in Oregon, a stormwater utility supported by its 13 member jurisdictions. The group had discussed three considerations about this approach:

1) The Chesapeake Bay program is hoping to have a decision on the use of ditch practices as agricultural BMPs by next year (the Chesapeake Bay Roadside Ditch Management Team report states that “The RDM team recommends that the urban and agricultural work groups develop a crediting approach for each practice by the summer 2018.”).

2) The Talbot County study’s approach requires acquisition of interests in private land (encroachment on adjacent properties is sometimes necessary in order to have room to install BMPs).

3) The Stormwater Management Act would need to be modified to ensure responsibility for permanent BMP maintenance lies with a specific entity (which could be a property owner, a private group, or a local government or regional authority such as a PDC).

The Subcommittee had proposed 7 potential funding options for such a program:

- 1) An entrepreneur or state agency working with localities pays them for credits; this idea could include the legislature providing funding to a state agency with a locality match via a stormwater utility fee
- 2) CWA Section 319 grants
- 3) Chesapeake Bay Program develops an assigned efficiency for ditch clean up as an Agricultural BMP under the Bay TMDL and Virginia then provides Ag BMP funding
- 4) Environmental organizations or localities with grants undertake projects such as the Talbot County, MD example, where ditches are cleaned out and widened, or converted to wetlands with an easement to ensure perpetuity (driven by a desire for better water quality)
- 5) The Stormwater Local Assistance Fund (SLAF) program follows what the Bay TMDL program allows; it is restricted to capital projects currently, has no funds for administration and does not recognize in-kind contributions of localities. The ranking system for deciding which projects to fund also is a challenge, and the cost/lb. often drives that. It could be amended or a new, separate SLAF program could be created for use by non-permitted localities for these types of nonpoint load reduction projects
- 6) Natural resources bonds
- 7) Use of WQIF dollars, where the Director of DEQ could be required to sign grant agreements as is currently done for point source grants

Elizabeth noted that these funding options would be discussed in detail later in the meeting. She finished by noting that the Subcommittee also had discussed the recommendations of the Healthy Watersheds report, but that report is not finalized yet; and had considered the potential use of comprehensive stormwater management plans by rural Tidewater localities. DEQ requirements for approval of comprehensive SWM plans were discussed, and it was determined that the creation and implementation of these would likely be too complex and expensive to be a good alternative for rural localities.

## **SUBCOMMITTEE 2 PRESENTATION**

Elizabeth reported that Subcommittee 2's goals included ascertaining methods that would be easier for rural localities to use in managing stormwater. Mike Rolband had first presented his tiered approach, which would establish 3 tiers with varying standards of management based on the percentage of Impervious Cover in the watershed as determined by VGIN data (which would be augmented by local knowledge). The group had made a few revisions to the approach at its last meeting and would discuss it at their next meeting. David Nunnally also had presented on the "Nunnally/Carter" proposed approach, in which there would be a menu of BMPs to choose from with calculations done already. It would be like an expansion of the Agreement in Lieu of a Plan program for certain small development sites, perhaps with LID incorporated up front. More research was being done on this approach, and the group was considering whether it should encompass both water quality and quantity, since the Workgroup had agreed early on to focus on just the water quantity requirements that were problematic for rural localities with limited staff.

## **CARL HERSHNER'S PRESENTATION ON RESEARCH IN SUPPORT OF THE SUBCOMMITTEES' WORK**

Carl Hershner presented four different proposals. The first involved managing the volume and quality of water within the ditches. Mathews County was presented as a more extreme case due to its topography. This is important because the topography allowed Carl to determine what would actually be the load that could be traded. Carl used LIDAR data to then locate the ditches and estimate their volume in Mathews County as well as other localities. The bottom line for this proposal is that there is significant ditch volume and potentially a significant volume of water - the problem is that the topography makes capturing and treating this water difficult. Further, there are trading market issues, as there is really no market in the watershed.

The next proposal that VIMS studied was termed the comprehensive ditch approach. Under this approach, water would be captured and treated enough to alleviate the demands on MS4 communities. Carl stated that there may be a decent load that might produce enough to impact the Bay water quality, but that this depends on whether all of the water can be captured and treated - which is very expensive. In order to capture the load, both road ditches and private ditches would likely have to be used. This approach is probably not practical because the locality would have to acquire all of the collection points, apply BMPs, and then maintain everything.

Carl then presented the ditch BMP approach, in which site-specific BMPs would be placed to offset requirements at other sites. As an example, Carl discussed the Dollar General in King and Queen County, in which the size of the parcel had to include a detention pond. The store sits right next to a VDOT ditch that could be modified to be a BMP for the site. This approach presents the question of whether localities can capture agricultural runoff as well to generate credits. In Maryland, they reengineer ditches with vegetation and flow barriers to create wet/dry detention ponds within the road framework by an adjacent farm. This requires that a specific area with a significant load (where agricultural lands drain into ditches) is targeted. Further, runoff topography is important for this approach as the water must get to the ditch and not simply sit on the field. Therefore, this is a possible method for localities to treat loads and

develop offsetting credits. Russ Baxter asked if Carl estimated load reductions from practices on the croplands, to which Carl responded that they did not estimate them at this time. However, they are aware that the ditch BMP performance will vary based on the load generated (which is dependent on the crop growing practices). Carl also pointed out that once the water enters the ditch, the farm no longer owns the water. One problem with this approach is that it does increase the potential for road flooding. The amount of water flowing into the ditches that is available for transport is around 2/3. Further, retrofitting of ditches, which includes increasing storage capacity and vegetation and barriers to slow the flow offsite, can be used to counteract this. Therefore, in most cases, the water stays on site. However we don't have all of the numbers yet. Ann Jennings asked if there is a way to calculate the potential credits now without the baseline. Carl stated that the short answer is yes, but that this cannot be done comprehensively. Case studies, however, are possible. David Nunnally stated that in addition to the water quality benefits, this approach entails a water quantity benefit that would help with the problem of downstream channel erosion. Carl agreed that this is true, but that the volume benefits are not easily tradable. Ultimately, using ditches as a BMP to create credits to offset the load for development could be a viable option, however the two main issues with this approach is who owns the ditch and who maintains it. Further, Talbot County, Maryland, did not develop credits in their approach.

Carl then discussed the tiered SWM approach (Mike Rolband's proposal) that was considered by Subcommittee 2. Under this approach, management method would be determined by the amount of impervious cover. Under this approach, they would use VGIN and look at the smallest currently mapped watershed units and other data in order to estimate impervious cover, which can be done for pretty much all localities. With this approach, impervious cover is estimated based on preexisting delineations of impervious areas and signature from remotely sensed images. Although not all surfaces are recognized, the data is supposed to be 95% accurate (although this has not been tested by VIMS). Instead, they could perhaps consider the estimate as a baseline rebuttable presumption of impervious cover in a county. Under this approach, we would establish an impervious cover starting point and then have localities track and input the changes. Elizabeth asked if we would need a definition of impervious cover (as was discussed in Subcommittee 2), and Carl stated that he did not think it was necessary, although he is not a lawyer. In terms of tracking impervious cover at the level 6 watersheds, the changes in impervious cover would be routinely and continuously remapped by localities after changes.

## **ODU PRESENTATION**

Mujde next presented case study data about Cobbs Creek Ditch Runoff. The ODU team examined data from VIMS on about 286 drainage ditches. They examined changes in runoff pre- and post-development in the area of Cobbs Creek after various storms. The precondition was no development, and post condition represents the existing conditions today. They found the least amount of change in an area that already had the highest potential for runoff. Further, certain areas showed higher levels of change because of their large IC%. For certain areas, the changes in flow are insignificant, and the model makes some assumptions that cause large potential errors. In summary, they concluded that areas with high runoff potential will not have significant changes in runoff after development. Mike pointed out that this is not the case every time, that it is site specific because there is an inherent flaw in the model that cannot account for certain

nuances and its accuracy is only 30-50%; and Mujde agreed. David Nunnally requested that the current condition in each category be analyzed to show the development in each area, that way it will be possible to see what kinds of development create the largest runoff changes. Mujde stated that she thought this would be possible.

Elizabeth then discussed logistics. Subcommittee 2 is set to meet prior to the next Workgroup meeting on October 13<sup>th</sup>. Elizabeth had previously asked the Subcommittee 1 members to send in their homework assignments so that funding options could be discussed at today's meeting. Elizabeth stated that we need to discuss those and see if Subcommittee 1 needs to have another meeting, or if they can come to the consensus that they want the budget options written up into a recommendation for the full Workgroup.

## **PRESENTATION ON 7 POTENTIAL FUNDING OPTIONS**

Melanie summarized CWA § 319 grants as funding for non-point source regulation. Melanie pointed out that this can be cumbersome as a source of funding, and that the money cannot be used for regulated activities. It instead must be used for activities in approved watershed management plans. One challenge to this option is agricultural practices, as giving money for farm-specific projects causes some issues with landowners signing agreements. Peggy asked if it is possible that § 319 funding may be cut at the federal level, to which Melanie responded that it probably is. Ann pointed out that DEQ has stated that § 319 is not for TMDL projects, but Melanie stated that it could potentially be used for that if it was included in the WIP.

Russ Baxter then presented on ditch management as a BMP. There is a panel looking at this issue for the Bay Program, and lots of practices have not gone through the full process to be allowed for use in WIPs. There is a Technical Advisory Committee that proposed BMPs are brought to for review. They then establish specifications for the BMP manual. The Va. Soil and Water Conservation Board then considers these proposals, and if they are approved they will be available on July 1<sup>st</sup> of the next fiscal year. The earliest that ditch management would be available as a cost-sharing practice would be fiscal year 2019.

Russ then discussed WQIF funding. Per statutory requirements, grant agreements are signed whether or not there is money in the fund for projects proposed by MS4 permit holders. The same thing could possibly be done for stormwater. In some cases, stormwater is considered a point source even though the projects are non-point source (for example, MS4s). There was concern expressed about the precedent that this would set for everyone getting an agreement. Elizabeth pointed out that it is a policy choice for the Commonwealth as to whether to have a program like WQIF for non-point sources. Someone said there is not a list of approved uses for WQIF activities, but under the language of the statute it can be used for activities with a nutrient reduction potential. Therefore, the General Assembly would have to allocate a portion of that money for non-point sources if the management proposal has a potential for nutrient reduction. Shannon Varner pointed out that Russ's draft statutory language does not apply for rural localities and is only for MS4s. Further, the ability to grant credits under this approach is only for point sources.

Elizabeth pointed out that the Workgroup's report could be a recognition of the importance of the nonpoint load issue and a recommendation that the General Assembly consider the various funding options. Ann asked if there is a recommendation for VDOT to apply some of its resources, to which Marcy responded that that is an additional financial burden that they are not supposed to have according to the rules for this process. Russ, Elizabeth, and Ann pointed out in response that it would be just another tool by which to control stormwater. Mike Rolband pointed out that this may even lower VDOT's costs. Marcy pointed out that they are not sure that they have to meet the stormwater requirements unless something is being built in an MS4. Lewie pointed out that it would save money to shift the cost of maintenance of VDOT ditches used as BMPs onto developers.

Melanie then presented on the current state of Stormwater Local Assistance Fund (SLAF) eligibility. There is language in the statute, however, that may impede the use of the SLAF as the applicant must be a local government, and the project must be a capital project. Further, the BMPs must be included on the CBP or Stormwater BMP clearinghouse, and only 50% of the project would be funded. The SLAF also cannot be used to generate credits for sale through the nutrient trading program, and the law would not allow for credits to be given away to developers. Elizabeth stated that Subcommittee 1 can look at the statute in detail at the next meeting. Potential challenges to using SLAF funding include that the BMP has not been approved yet, that not all practices would be considered capital projects, and that the range of cost effectiveness is quite broad. Elizabeth stated that the program would have to be changed quite a bit in order to be workable- and that this is a question for Subcommittee 1. Ann asked if localities could improve cost effectiveness by adding more match funds, but Melanie did not think so. Eldon noted that one impediment for rural localities under this approach is that it is very expensive to apply and manage the grant if the locality does a SLAF-funded project. To incentivize non-MS4 localities to take this on, the Rappahannock River Basin Commission is interested in seeing administrative costs become eligible as a SLAF-covered cost. Eldon then presented some proposed changes to the SLAF being considered by the RRBC, and distributed a copy of a proposed bill to change the program.

Greg Evans was then asked to discuss natural resources bond funding options. Greg pointed out that we can probably safely assume that federal funding will decrease. Further, the state will have to have some skin in the game in order to meet future obligations. As it is unclear what the competing demands will be, the group should consider external funding options, i.e., private capital. For example, DC Water Environmental Investment Bonds don't share installation costs, but they do share the risk of the BMPs' performance. Further, the Forest Service Conservation Finance Program was originally created as a program for fire prevention, but is now looking to expand to water quality. The common denominator in both examples is how to make the project something on which private investors would be willing to take a risk. Mike Rolband did caution the group that we have to be careful of how costs are spread out on bonds, as, for example, the DC Bond was for 100 years. Russ stated that one enticement for private entities could be a stream of income from taxes or some special assessment. Ultimately, there are a lot of different options to be explored. Peggy pointed out that CBF's bond model is different than DC's. Further, CBF wants to see funding for BMPs with associated co-benefits that will affect the rate of return the investors will get. Chris Pomeroy stated that DC Water's bond program established this concept and that CBF is taking it further. Peggy stated that this should be another tool for

localities, and that applicability is probably limited to those projects that would provide a revenue stream.

Shannon Varner then discussed the private sector as a source of water quality improvements in areas where localities have targeted growth. There are currently cost effective mechanisms already in place. There are multiple options under this approach: First, public lands with water quality projects could be of a nature that would generate credits. The locality may be able to provide access to public lands for the private sector to undertake water quality improvements that meet the requirements to generate DEQ certified credits. Essentially, this would give the private sector access to that and then a deal could be worked out for the generated credits. He noted that questions were raised, however, as to whether projects exist to generate credits, and if there is a market for these credits. Second, he discussed the 2016 Wagner Bill authorizing a locality to establish defined storm water service charge zones. The generated funds could be used by the locality to contract with a private entity to install water quality and quantity controls for the designated growth area. These could be located in appropriate locations within the growth area in advance of the hoped-for development on a somewhat of a mini-stormwater management plan concept. Chris stated that the intent of the bill was to call attention to the ability to work together to do good things. Localities could work with the private sector to install water quantity and quality controls for specific areas. Then, they could add in a service charge for certain areas in order to pay back the private sector. This approach could attract new development by ensuring infrastructure is already in place.

## **TOM'S PRESENTATION ON PRIVATE SECTOR REVIEW OF STORMWATER PLANS**

Tom Swartzwelder first walked the group through the Code provisions that apply. He stated that one challenge in rural counties is having experts on staff to review the stormwater management plans. The purpose of review is, ultimately, to make someone with some form of certification look at the plans. Melanie stated that she did not participate in the development of the regulation, thus she cannot speak to what DCR intended. Under Tom's proposed approach, the applicant must have some license to design the practice that they have submitted. Tom stated that one way to get around the problem of rural localities not having the requisite expertise to review plans would be to have a licensed PE sign and seal the plans. This would obviate the need for someone certified by DEQ to sign and seal the plans for "donut hole" projects. Melanie stated that the only people that need to be certified are those who oversee the plans. Peggy stated that she would not want a lack of locality review process to leach outside of rural localities without much development.

The group discussed whether the tiered approach would be necessary if Tom's proposal were adopted and local government stormwater plan approvals were not required. Tom wanted to limit this proposal to the twelve rural localities that are the focus of the Workgroup, but also wanted to keep the tiered approach on the table. Ann stated that the statute's limit to Tidewater localities is very important. Elizabeth asked if this issue should be referred to Subcommittee 2, or if the entire Workgroup should continue to discuss it. Some members stated they wanted to go ahead and vote to recommend that PE-submitted plans not require review by a certified reviewer, but to still keep the tiered approach alive as a tool for localities that want to use it. Mark stated

that the introduction to the final report should specify that all of the recommendations only apply to the Tidewater counties. Fred Cunningham suggested that Tom's proposal be amended to require that stormwater plans must be stamped with "This plan was designed in accordance with state law and regulations." After some discussion, Elizabeth called for a vote on Tom's suggestion with Fred's recommended amendment. David Nunnally moved to vote, which was seconded by Adrienne Kotula. The vote was unanimous in favor of recommending Tom's approach.

After asking for and hearing no public comment, Elizabeth adjourned the meeting at 12:47p.m.