

AGENDA NOTE – HRPDC EXECUTIVE COMMITTEE MEETING

ITEM #14: CHESAPEAKE BAY TOTAL MAXIMUM DAILY LOAD (TMDL)

SUBJECT:

Hampton Roads Planning District Commission has accepted Virginia's request to support the State's effort to develop the Phase II Watershed Implementation Plan (WIP) for the Chesapeake Bay TMDL.

BACKGROUND:

HRPDC has developed a two-tiered approach to coordinate stakeholder involvement for the Phase II WIP throughout Hampton Roads. The local tier consists of local government teams composed of staff from all departments affected by or affecting nutrient load reductions. The local tier will develop the locality's nutrient reduction strategy by selecting a combination of BMPs (nutrient reduction methods) that meet the locality's nutrient reduction target.

The regional tier is a Steering Committee composed of locality representatives, federal and state agencies, agriculture representatives, and selected environmental groups. The Steering Committee will serve as a forum for local government representatives and other stakeholders to communicate their questions and concerns as they identify the management actions they will implement in order to meet the nutrient and sediment reduction goals necessary for a clean Bay. HRPDC staff will work with the Steering Committee and Virginia and EPA staff to address the local government concerns and provide technical assistance to develop management action scenarios. The following issues have already been identified for the Steering Committee to address:

1. Divide nutrient loads based on land use and ownership (Agricultural, VDOT, DoD, etc.) to clearly identify the portion of the nutrient reductions that the locality must implement.
2. Coordinate with the EPA and DCR to expand the types of BMPs that can be incorporated into the Bay model.
3. Provide regional feedback to the State on what localities need from the State such as more authority, regulations or funding.

The Regional Steering Committee began meeting monthly on July 14, 2011 and has held two subsequent meetings. The Steering Committee has identified and prioritized key issues that should be addressed during the Phase II WIP process. In August HRPDC staff sent a letter to DCR outlining some of these issues and requested answers to outstanding questions concerning modeling data and information. The letter incorporating DCR's responses is attached.

Whitney Katchmark, Principal Water Resources Engineer, will provide a presentation summarizing the progress towards developing the Regional input for Virginia's Phase II WIP.

RECOMMENDED ACTION:

This briefing provided for background informational purposes and provides the HRPDC Board members the opportunity to provide staff with comments and/or questions.

Attachments: HRPDC letter to DCR, incorporating DCR Responses
Priority Spreadsheet

MEMBER JURISDICTIONS

August 15, 2011

CHESAPEAKE

Ms. Joan Salvati, Division Director
Department of Conservation and Recreation
Division of Stormwater Management
Pocahontas Building
900 E. Main Street, 8th Floor
Richmond, VA 23219

FRANKLIN

GLOUCESTER

Dear Ms. Salvati:

HAMPTON

ISLE OF WIGHT

JAMES CITY

NEWPORT NEWS

NORFOLK

POQUOSON

PORTSMOUTH

The HRPDC is aware that the State has concerns with the data from the 5.3.2 model, and that this has caused a delay in the development of the official ‘tool’ that local governments will be able to use to submit Phase II scenarios to Virginia. However, the Hampton Roads local governments and members of the Regional Phase II WIP Steering Committee have a multitude of issues and questions that need to be addressed in order for local governments to continue developing their Phase II WIP strategies. The answers to most of the questions are not dependent on the model output. Localities are having trouble assessing and correcting the baseline data and estimating the nutrient reductions of proposed actions because the State has not provided information that is critical to make those calculations. Localities are also concerned about how the locality target loads were developed and whether or not they are equitable.

We request a response to the questions and issues, outlined below, prior to our next Steering Committee meeting on September 1, 2011. We also request that you attend the meeting in order to provide the Steering Committee with an update on Virginia’s progress towards Phase II WIP development and to address any concerns of the Committee members.

Critical Information for Developing Phase II Strategies

SOUTHAMPTON

1) What are the loading rates for the different land cover classes? Do these rates vary by physiographic region (coastal plain versus piedmont)? These loading rates are important for localities to have, so they can calculate a reduction from the baseline load for the area treated by a particular BMP.

SUFFOLK

SURRY

2) Localities need urban loads broken down into pervious versus impervious, so that they can better estimate load reductions from BMPs applied to specific land cover classes.

VIRGINIA BEACH

WILLIAMSBURG

3) Is the State working with EPA to reconcile the differences between Virginia’s BMP efficiencies and the Bay Model efficiencies? When will this issue be resolved?

YORK

Attachment 14A

Concerns about Target Loads

- 1) Localities are concerned that the use of '2009 Progress' model run as the baseline for determining urban stormwater load reductions for all localities creates inequity for localities within the Chesapeake Bay Program Act areas that have been implementing stormwater requirements since 2000. Additionally, the information contained in the '2009 progress' scenario is incomplete. HRPDC suggests that DCR use the '2010 no action' model run to determine the necessary percent load reductions for urban stormwater.
- 2) How are the nutrient reduction goals of each locality influenced by the model effectiveness factors for each segmentshed?
- 3) If the State developed the Phase I WIP load goals using a standard treatment percentage for each BMP for each locality, why are the nutrient and sediment load reductions for localities so disparate?
- 4) How can localities account for the nutrient reductions achieved by the Fertilizer restrictions recently passed by the General Assembly?
 - a. Will there be an input for this in the tool that DCR is developing?
 - b. How will this relate to the Nutrient management plan requirement for localities?
 - i. How can localities account for property owners that do not apply any fertilizer to lawns?
- 5) Virginia's Phase I WIP included a statement that federal properties would be held to a higher implementation level of BMP implementation than non-federal properties. Was this included in the model runs for the Phase I WIP? Will it be included in the model runs for the Phase II WIP?
- 6) What additional programs or implementation levels were required for agriculture? What additional funding has been dedicated to achieving nutrient and sediment reductions from agriculture?

Issues on cataloging and documenting nutrient reductions

- 1) Localities need guidance on how to document pre 2006 BMPs that have not been included in the model, so that they can be included during the recalibration in 2017. Localities also request that the Tool DCR is creating have the ability to estimate the

reductions achieved by these ‘missing’ BMPs, so that localities can account for that nutrient removal during their planning process.

- 2) Localities have not been receiving credit for some management actions that have Model efficiencies because they have not been reported.
 - a. Please list the BMPs that the State is aware of that have not been reported.
 - b. What is the State’s plan to address this during the Phase II process?
- 3) Additional BMPs and efficiencies need to be added to the Model.
 - a. What priorities has the State submitted to EPA?
 - b. What actions is the State taking to establish interim efficiencies for localities to use during the planning process?
- 4) Erosion and Sediment Control
 - a. How were the acres under e and s control determined?
 - b. The BMP loading sheet has a 2025 target for acres under E and S. Does this number refer to the acres that will be under e and s control in the year 2025, or the number of acres that have been controlled during a longer period preceding 2025? If the latter, what is the starting year?
 - c. How is a locality supposed to increase areas under erosion and sediment control when that is a factor of the pace of development?
- 5) How can localities estimate the benefit of tree plantings not associated with reforestation or buffer restoration (ie. Street trees or increased canopy on developed lots)?
- 6) How are septic pumpouts and biosolids applications being tracked?
- 7) The BMP crosswalk spreadsheet indicates that street sweeping can be reported in acres swept or pounds of material collected. Which unit was used for the street sweeping in the load reduction spreadsheets delivered to localities?
- 8) Is the State or EPA concerned about localities assuming urban nutrient management plans and agricultural practices will be implemented indefinitely even though the agreements are only effective for 1-3 year periods?

Ms. Joan Salvati
August 15, 2011
Page 4

- 9) How does the TMDL account for air deposition, and is there an opportunity for local/state air emissions reductions programs to have an impact on nutrient reductions locally?
- 10) Are the impacts of extreme storms causing major water quality impacts and should we be considering different BMPs to mitigate these extreme storms?

The HRPDC staff, the region's localities, and members of the Chesapeake Bay TMDL Regional Steering Committee have been working diligently to address the state's expectations of the Phase II WIP effort. At the August 4, 2011 meeting of the Regional Steering Committee, the HRPDC staff sensed a growing frustration on the part of the localities and other stakeholders over the lack of important information and guidance from the state that is critical to moving the process forward. We believe that it is essential that we address these gaps at the September meeting.

We appreciate your participation and assistance in this effort. If you have questions or desire to discuss these concerns further, please call Whitney Katchmark or Jennifer Tribo.

Sincerely,

A handwritten signature in black ink that reads "John M. Carlock". The signature is written in a cursive, flowing style.

John M. Carlock
Deputy Executive Director

WSK/fh

Issue	Importance	Agency Contact	Resources	Action	Timeframe
Establish interim BMP efficiencies and tool for planning purposes.	High	DCR/CBP	CSN Technical Bulletin, MDE guidance	Review CSN technical bulletin work with DCR and EPA to incorporate into planning tool and WIP II scenario runs.	ASAP
Coordinate with DCR on Tool development to ensure that all practices are included and can eventually be incorporated into Bay Model simulations.	High	DCR	MAST, CSN Technical Bulletin, MDE NPDES Guidance, Watershed Treatment Model.	Workgroup of locality reps, hrpdc and DCR to provide guidance and feedback to DCR	ASAP
Identify BMPs with efficiencies that have not been reported by the State in the past and recommend form for reporting and tracking these BMPs in the future.	High	DCR	DCR	Workgroup of locality reps, hrpdc and DCR to determine and disseminate to group.	ASAP
Exclusion of properties owned and operated by other entities within the locality boundaries.					
a. Federal Facilities	high	Navy/EPA	EPA federal facilities GIS layer	Identify discrepancies with EPA layer, and work with localities to adjust loadings accordingly.	end of August
b. VDOT	high	VDOT/DCR/MDE	MDE/SHA methodology	Develop methodology to extract VDOT roads and right of ways from locality loads	September/October
c. Industrial facilities with permits	high	DEQ/tetra tech	permit addresses, locality parcel layers, MDE methodology	Develop methodology to extract permitted industrial facilities and loads from locality goals. Explore contracting options.	October/November
d. State facilities (parks, universities)	high	DCR	Protected lands GIS layer, parcels	Develop methodology to extract properties and loads from locality goals	October/November
e. Mines	medium	DMME/DCR	Phase I WIP, other documentation of methodology.	Extract surface mines from locality load targets	Before December
f. Reservoirs located within a locality, but owned by another locality	medium				
Need clarification on agricultural BMPs related to stacking.	Medium High	DCR		DCR work with SWCD	October/November
Develop/Compile cost estimates for types of BMPs	Medium		CWP study, CSN working on.	Coordinate with other entities on status of research, select standard costs for use in HRPDC estimates.	December/January
Authority and feasibility of placing BMPs on private property	Medium		CWP retrofit manual, incentive and trading programs in Richmond, NH, DC	Research, presentations, and white paper on possible incentive or trading programs to encourage BMP on private property. Also research necessary maintenance provisions.	February/March 2012
Identify BMPs that should be added to the model:	Medium High			Work with DCR and appropriate Chesapeake Bay Program workgroups to study BMP efficiencies.	Ongoing
a. Retrofits		CBP/USWG			
b. Runoff reduction BMPs		CBP/USWG			
c. Maintenance upgrades		CBP/USWG			
d. Reduction of SSOs		CBP/USWG			
e. Updated stream restoration		CBP/USWG			
f. Oyster restoration		DCR/VIMS/CBP			
g. Calculating water quality credits for flood control BMPs		CBP/USWG			
Connection between MS4 permits and Phase II WIP management actions	Medium	DCR		Stay in touch with permit process progress.	Draft Permits 6-12 months
Identify regulatory obstacles to buffer restoration and potential solutions to overcome these obstacles.	high	DCR/COE		HRPDC work with localities, DCR and other appropriate agencies to identify obstacles and develop whitepaper on possible solutions.	Spring 2012
Identify/develop tools to estimate redevelopment rates, so localities can factor these reductions into their planning.	Medium		SW Regs, economic development depts.	HRPDC and locality workgroup to research	Spring 2012
Identify obstacles to rainwater harvesting and reuse and identify potential legislative actions.	Medium Low	VDH/DHCD	VDH and DHCD guidance	look for examples in other states, participating in building code standards development process, explore need for more regulatory authority. Reach out to other Regions to determine any planned actions or level of interest in coordinating.	Building codes review late 2011, 2012/2013 legislative packages