Chesapeake Bay Program Water Quality Steering Committee
Advance Briefing Materials for the
June 20 - 21, 2007 Meeting

Attachment C:

OVERVIEW OF VIRGINIA'S APPROACH TO IMPLEMENTING NONPOINT SOURCE REDUCTIONS AT THE COUNTY LEVEL AND ANTICIPATED SUPPORT NEEDS

STEP #1 - Locality Data Review

BACKGROUND

The Virginia Department of Conservation and Recreation, Division of Soil and Water Conservation (DCR) was largely responsible for facilitating and drafting the last set of tributary strategies, completed in late 2004 and early 2005. Regional Managers based in the Division's five, Bay Watershed Offices, organized numerous meetings in 8 distinct, bay sub-basins or tributaries. In meeting with stakeholders, the data in the Bay watershed model phase 4.3 was described and discussed as the foundation of the nutrient and sediment reduction plans. The knowledge of local people familiar with an area's landscape and trends sometimes differed from the data built into the phase 4.3 watershed model.

With the development of a new watershed model and data updates, there is an opportunity to involve local experts in the review of certain elements of data. The Phase 5.0 model contains many more hydrologic units and data points then the current model. Review of key components of Phase 5.0 model data is essential to building jurisdictions' acceptance of the model results and their willingness to employ it or have it employed for a variety of uses. Virginia intends to have local officials review and compare the data to their own before the model is finalized. A process has been devised to introduce the Phase 5.0 model and data to the stakeholders who may eventually be affected by its findings.

Trends based on data from past years and data projected forward to 2030 will be shown to local governments and to soil and water conservation districts. They will be asked whether the trends appear accurate and to suggest changes as needed. Current local land cover patterns will be displayed for review. Virginia planning district commissions have been approached to help facilitate the review process. A very important aspect of the project is acquainting VA localities with the model and exposing them to its strengths and limitations. Then, as water quality planning and implementation progresses in the Bay, local governments will already have some experience and familiarity with this particular tool.

CURRENT STATUS

DCR compiles BMP installation data provided to the Chesapeake Bay Program. The model land cover data is being grouped into land use categories corresponding more closely to typical land use categories used by local governments. The trend data for 2030 and for the intervals, 2010, 2015, 2020 and 2025 must be provided to complete the picture. When the 2030 draft projections are near finalization, DCR can begin the process of interacting with the localities and seeking local buy-in of projection data. Supporting graphic representations, at the county scale, would be most useful for this effort.

SUMMARY

Appreciation and support from the CBP has been strong for the process Virginia is proposing to conduct. Timing is difficult to predict owning to Phase 5.0 model issues still being resolved. Once initial data in the model is ready, Virginia will need time to complete its review process. The WQSC initially agreed that states should be allowed 12 months for this data review process. Virginia may need assistance in preparing the graphics and charts needed to convey information about the model to local people. If DCR prepares certain graphics, review by the CBP would be helpful. Also, precise and clear explanations are needed about the source of each data type in the model, and how each type of information was distributed across the landscape and over time. This is essential because localities will ask these questions, and DCR.

SUPPORT DECISIONS REQUESTED

Virginia needs 12 months to review the data with local governments and develop their support. Will that time be made available? Also, CBPO assistance with graphics, either production or review, is anticipated. Will this be available?

STEP #2 – Pilot Project for Local NSP Control Implementation

BACKGROUND

The Phase 5.0 model provides information about runoff rates at a scale that can be connected to the land management occurring within a particular county. In Virginia, a county or municipal government is the most logical scale for developing nonpoint source water quality plans. Every citizen, business and land-user identifies with their county. Working at the county level provides an area small enough that land use and data can be understood yet large enough to permit a great deal of flexibility and variety. Most important, counties in Virginia have the land use decision making authority. Leadership at the county level is the most direct means to affect local planning, local ordinances and ultimately land use and land management decisions.

DCR has begun looking at ways to increase county involvement in nonpoint source pollution reduction efforts while providing a means to recognize the environmental services provided by well-managed forest, farmland, open space and development. Individual tributary loading targets would be broken down to county level loading goals for each county within a tributary. Each county would then estimate the amount of NPS

loadings arising from that jurisdiction, based on land use and land management, currently and at points in the future. This presents a concept where the county can monitor their land uses and determine what activities will add to or subtract from their nutrient and sediment loads and also characterize their ability to reach and maintain an assigned loading value, i.e., their share of a tributary cap load.

To evaluate this concept, DCR is interested in conducting a pilot project. The project would try to establish the data at the county level for county-based water quality efforts that are linked to the state's tracking systems and also the Chesapeake Bay Program goals. The project would entail segmenting the watershed model into a portion operable for just one county and then working with the county to use the model and data. This might mean they merge model information with their own land use plans, overlay districts and even their GIS system. A pilot project would attempt to work out the mechanics of locally based nutrient and sediment tracking. It also would assess the viability of county-level reductions and educate local officials and citizens about how various land management practices can be used to achieve desired nutrient and sediment goals. The result would be a process that demonstrates local implementation of the tributary strategy and clarifies local options for land use and land management while attempting to control nonpoint source pollution loadings to meet tributary goals.

CURRENT STATUS

Conducting the pilot project is the subject of a small watershed grant proposal to the National Fish and Wildlife Foundation. Funding decisions are expected in August 2007. In drafting the proposal, support was obtained from Richmond County, as well as from the Northern Neck Planning District Commission (PDC) and the Northern Neck Soil and Water Conservation District. If the project is awarded funds, the PDC will administer the project. DCR will have a major role in the pilot project.

SUPPORT DECISIONS REQUESTED

The CBP has expressed great interest in this pilot. Timing of requested CBP support will be very important. Assuming the project moves forward, DCR would need to know the following:

1. By when can the CBP disaggregate the model for Richmond County?
2. What type computer knowledge or expertise will be necessary locally for someone to use that the model and data to run scenarios?
3. Will CBP staff help train someone in the project locality and help in melding the Phase 5.0 model data with existing county data systems (if feasible)?
4. Will the CBP re-engage with DCR and the locality when new NPS loads for each tributary and county are calculated by the Phase 5.0 model?

In short, DCR would like a degree of certainty as to the level of support the CBPO is willing to provide for the project.