SUMMARY OF THE MEETING OF THE
REGIONAL TECHNICAL ENVIRONMENTAL WORKGROUP
September 4, 2014

1. Purpose of Workgroup

The HRPDC Regional Technical Environmental Workgroup met for the first time. Ms. Jenny Tribo, HRPDC, welcomed the group and explained its purpose, which is to provide an opportunity for in-depth discussion of technical issues related to the Chesapeake Bay Program and wetlands restoration projects in the region. There is no set membership. Meetings will be held approximately once per quarter and will be held after Regional Environmental Committee meetings. The next three meetings will be in December, March, and June. Ideas for agenda topics should be sent to Ms. Tribo.

2. Regional Wetlands Restoration Prioritization

Ms. Marcia Berman, VIMS Center for Coastal Resources Management, gave a presentation on a methodology previously developed by VIMS CCRM to identify sites appropriate for wetlands mitigation projects and on a proposal to develop a new methodology that accounts for new data and climate change impacts. The previous model was a GIS-approach that utilized data on hydrology, wetlands, hydric soils, land cover, and conservation lands as part of a hierarchical model that ranks sites based on their suitability. Additional data would have been preferred but was not available. This tool is currently available online (http://ccrm.vims.edu/gis_data_maps/interactive_maps/wet_target/index.html) and can be queried by users to provide recommendations based on size, locality, hydrologic unit, and suitability rank.

CCRM is currently proposing to incorporate sea level rise and community resiliency into an update of the model that would rank projects based on their ability to add to community resiliency. The new model would also incorporate social vulnerability. Proposed elements include:

1) An evaluation of the potential for existing wetlands to mitigate flooding
2) An assessment of conservation requirements in upland areas to preserve wetland service capacity
3) An assessment of where created marshes add to community resiliency
4) A targeting function that allows for wetlands to be strategically placed where they contribute to the most vulnerable communities

Mr. Justin Shafer, Norfolk, asked if the model only applied to upland areas or would also include shoreline projects. The model would. He asked if it excludes areas adjacent to developed areas. It does not.

If the project receives funding (it is currently in pre-proposal review with NOAA), a steering committee would be set up to guide new conditions to include.

Ms. Ellen Roberts, Poquoson, asked what the study area would be for the new project. The study area was not specified in the pre-proposal, but the project is not scale-dependent. The major scale issue comes from the data used in the analysis and how easy it is to manipulate.

Mr. Clay Bernick, Virginia Beach, asked if the current web tool can export shapefiles. The data is available for download.

Mr. David Imburgia, Hampton, stated that the mitigation bank guidance group has its own preferences on where mitigation projects should go. It would be good to have this group represented on the steering committee.

Ms. Whitney Katchmark, HRPDC, asked the group for suggestions on other datasets to include or missing components. Ideas included:
1) Existing/permitted mitigation sites
2) Near-shore conditions (bathymetry, bank conditions, etc.)
3) Archeological resources
4) Active vs. fallow agricultural lands, and vacant/non-agricultural lands

3. Floating Wetlands Expert Panel Recommendations Update

Mr. David Sample, Virginia Tech, updated the group on the status of the Chesapeake Bay Program's Floating Wetlands Expert Advisory Panel. The presentation included an overview of what floating wetlands are, their advantages, their disadvantages, and the proposed charge to the expert panel. The report is currently under development, with Tom Scheuler and Cecilia Lane of the Chesapeake Stormwater Network facilitating the panel process. Once the report is completed the panel will review it. Mr. Sample anticipates that some kind of incremental credit will be assigned to floating wetland BMPs if they comply with general guidelines, but the amount has not been set.

In general, the research shows that floating wetlands have a small but significant effect on nutrient removal, and that the choice of mat (biohaven or bee mat)has its greatest effect during the startup period. Once established, both types of mats have similar nutrient removal rates.

Ongoing research includes:
1) Assessing the impact of floating wetlands retrofits across watersheds to help with TMDL compliance
2) Assessing the temperature benefits of floating wetlands
3) Developing design parameters and guidance

The harvest schedule for floating wetlands depends on the plants used and the nutrients being removed. Peak plant growth generally occurs by late July or early August.

Mr. Shafer asked if the panel had looked at floating wetlands in tidal systems. They have not.

Mr. Shafer asked if the protocols for credit were limited to harvesting or would there be some credit for just having floating wetlands. Credit would probably just be for harvested systems.

4. Chesapeake Bay Program Update

Ms. Tribo provided an update to the group on the Chesapeake Bay Program. The HRPDC staff has mainly been following the Water Quality Goal Implementation Team (and its workgroups) and the Local Government Advisory Committee. The major WQ workgroups that have been looked at are those for land use, urban stormwater, and watershed technical. Major developments that HRPDC staff has been following include the upcoming changes to the Bay Model in 2017, new BMPs added to the model, LGAC concerns, and Virginia's WIP progress. A status meeting for the WQGIT has been scheduled for October 7-8th to go over the team's priorities and work plan progress.

Ms. Tribo provided a status report on various BMPs. The following panels have completed their work:

1) Urban stormwater retrofits
2) State stormwater performance standards
3) Urban nutrient management
4) Septic systems
5) Vegetated urban filter strips and stream buffer upgrades
6) Enhanced erosion and sediment control

Other panels underway include:

1) Oyster restoration
2) Shoreline erosion management (has been delayed for model review and testing)
3) Nutrient discharges from grey infrastructure (under review by urban stormwater workgroup)
4) Street sweeping and other bulk waste removal (panel is still deliberating)
5) Floating wetlands (panel is still deliberating)
6) Algal flow-way technologies (being led by watershed technical workgroup)
7) Urban tree planting (draft from urban forestry workgroup expected soon)

Online Bay TMDL resources include:

1) http://chesapeakestormwater.net/bay-stormwater/baywide-stormwater-policy/urban-stormwater-workgroup/
2) http://www.chesapeakebay.net/groups/group/urban_stormwater_workgroup
3) http://www.chesapeakebay.net/groups/group/water_quality_goal_implementation_team

The panel review process will also be changing. The new process is being conducted by a consortium of universities led by Virginia Tech.

Attendance

Locality/Agency/Organization	Representative	Representative	Representative	Representative
Chesapeake	Barbara Brumbaugh			
Hampton	Gayle Hicks	David Imburgia		
Newport News	Allison Watts			
Norfolk	Justin Shafer	June Whitehurst		
Poquoson	Ellen Roberts			
Portsmouth	Brian Swets			
HRPDC	Jill Sunderland	Whitney Katchmark	Jenny Tribo	Ben McFarlane
Timmons Group	Liz Scheessele			
URS	Seshadri Iyer			
VIMS	Marcia Berman			
Virginia Beach	Clay Bernick			
Virginia Tech	Laurie Fox	David Sample		
Chesapeake Bay Foundation	Joe Wood			
Elizabeth River Project	Sara Felker			
Wetlands Watch	Shannon Hulst			
BHEM/ODU	Deva Borah			