CHESAPEAKE BAY COMMISSION NOVEMBER 2016 MEETING MINUTES

The Chesapeake Bay Commission held its fourth quarterly meeting of 2016 on Thursday and Friday, November 10-11, 2016 in Virginia at Westmoreland State Park.

Commission members in attendance:

Secretary Mark Belton

Delegate David Bulova

Representative Garth Everett

Delegate Barbara Frush

Delegate Tawanna Gaines

Senator Guy Guzzone

Senator Emmett Hanger

Delegate Scott Lingamfelter

Secretary Patrick McDonnell

Senator Thomas "Mac" Middleton

Delegate Margaret Ransone

VA Citizen Member, Dennis Treacy

Senator Frank Wagner (Only on 10th)

Secretary Molly Ward

Senator Gene Yaw

Rear Admiral Jack Scorby

Members not in attendance:

Senator Richard Alloway

PA Citizen Member, Warren Elliott

Representative Keith Gillespie

Maryland Citizen Member Bernie Fowler

Delegate Maggie McIntosh

Representative Michael Sturla

Staff: Ann Swanson

Jen Donnelly

Ann Jennings

Bevin Buchheister

Marel King

THURSDAY, NOVEMBER 10, 2016

CALL TO ORDER

The meeting at Westmoreland State Park in Montross, VA was called to order by Chairman Middleton at 12:30 PM.

Chairman Middleton welcomed the members to the Northern Neck of Virginia, home to Delegate Margaret Ransone. Del. Ransone also welcomed the members to the Northern Neck

and provided them with several informational brochures on the Northern Neck and highlighted the good work Ken Benson (Park Manager) was doing here at the State Park.

CBC Executive Director Ann Swanson took roll call, and then the members unanimously approved the minutes of the September 8-9, 2016 CBC meeting and the agenda for this meeting.

Chairman Middleton introduced Ken Benson, Park Manager for Westmoreland State Park (WSP), and asked him to say a few words. Ken noted that WSP is over 80 years old and hosts 300,000 people annually. The park is one of the six original state parks opened in June 1936. The original park facilities were built in the 1930s by the Civilian Conservation Corps (CCC). Most of the roads and trails found in the park were originally dug by hand. Located on the Northern Neck Peninsula, the park is just minutes away from the birthplaces of George Washington, Robert E. Lee and James Monroe.

Chairman Middleton also introduced Virginia Secretary of Natural Resources Molly Ward and Virginia Director of the Department of Conservation and Recreation Clyde Cristman and thanked them for hosting the CBC at Westmoreland State Park.

Ann Swanson reviewed the materials in the members' packets including a memo from Dr. Havens of the Virginia Institute of Marine Science on the economic impact of the "ghost" crab pot recovery project; a memo on options for rebuilding capacity in the Conowingo dams; and an October 2016 letter from the U.S. Department of Agriculture (USDA) responding to a December 2015 letter from the CBC. Chairman Middleton corrected a statement from the CBC September 2016 meeting which incorrectly associated Exelon with a movement in Congress to rollback permitting requirements for hydroelectric facilities.

CHESAPEAKE BAY 201: OYSTERS

Chairman Middleton introduced the first presenter for the day -- Dr. Mark Luckenbach, Associate Dean of Research and Advisory Services at the Virginia Institute of Marine Science (VIMS) -- to provide a comprehensive "Bay 201" overview of the status of the oyster population in the Chesapeake Bay, current fishery management measures, and oyster sanctuary restoration. Dr. Luckenbach reviewed the current impact of two oyster diseases in Virginia and Maryland, MSX and Dermo. MSX is no longer impacting oysters in Virginia. In Virginia, approximately one-half of the oyster harvest is from leased bottom without aquaculture and one-half from leased bottom with intensive aquaculture. Virginia currently leads the East Coast of the United States in oyster harvest with 90 percent of aquacultured oysters that are sterile (i.e. triploid). VIMS breeds disease resistant oysters but does not produce or sell oyster seed.

Dr. Luckenbach noted that building three-dimensional reef structures is essential for oyster restoration and that the traditional notion of "working the bottom" is only effective in highly degraded oyster beds. Dr. Luckenbach indicated that the current tributary approach to oyster restoration is working. Dr. Luckenbach noted that oyster restoration is critical to sustaining the oyster fishery. Restoration should not be viewed as serving the Chesapeake Bay ecology versus maintaining the fishery.

Dr. Luckenbach reviewed the water quality benefits of oysters including assimilation of nitrogen and phosphorus in oyster tissue, shell and feces. While the research is highly variable, denitrification by oysters may be the "gold standard" for removing nitrogen from Bay waters.

Dr. Luckenbach reviewed the ongoing work of the Chesapeake Bay Program Oyster BMP Expert Panel as well as STAC and NOAA to quantify the nitrogen and phosphorus reduction efficiencies for oysters, noting that 1 million oysters would reduce 290 pounds of nitrogen. Therefore, 49 million harvested oysters (from a crop of 100 million oysters) would be needed in the Lynnhaven River to reduce one percent of the nitrogen loadings to the river. Dr. Luckenbach noted that oysters are the only food source that would not add nitrogen to the water and would remove nitrogen during production.

Delegate Ransone asked about the status of VMRC's rotational harvest in the Rappahannock River. Dr. Luckenbach responded that this management approach is working well. Virginia Citizen Representative Dennis Treacy referenced research on gene editing by Harvard University and questioned if such work would benefit the Bay's native oyster. Dr. Luckenbach responded that there is work on gene editing with the Pacific oyster but not currently ongoing in this region. Delegate Lingamfelter sought clarification on oyster diseases Dermo and MSX. Both diseases can impact oysters in high salinities. Delegate Lingamfelter also sought guidance on how the Commonwealth and the federal government should target funding for oyster restoration. Dr. Luckenbach recommended that starting in the "last best places" where there is natural recruitment would be more cost effective than trying to restore in a poor location. He also recommended a defined approach for tracking success that takes into account sanctuary and aquacultured oysters.

AGRICULTURE IN THE PHASE III WIPS

Chairman Middleton introduced the next session focusing on opportunities to reduce nitrogen, phosphorus and sediment runoff from agricultural lands in the next phase of Watershed Implementation Plans – what would be expected from the agriculture sector, what is the role of innovation and the private sector, and what is the role of technical assistance. Chairman Middleton first requested the members consider a CBC letter of support for ongoing research at the University of Maryland Eastern Shore (UMES) to investigate new approaches for phosphorus management, with a request that UMES share the results of that research with the CBC. Virginia Senator Hanger moved to submit a letter of support from the CBC and Maryland Delegate Barbara Frush seconded the motion. All members supported the motion. Ann Swanson reported that CBC staff were preparing an information report on technical assistance that would be released in early 2017 and that the CBC May 2017 meeting in Washington DC could include a discussion of technical assistance needs with federal representatives.

Part I: What Will Be Expected of Agriculture

Kelly Shenk, Agricultural Advisor for the Environmental Protection Agency (EPA) Region III, provided the members with an overview of nutrient and sediment reductions needed from Virginia, Maryland and Pennsylvania to achieve the Chesapeake Bay Total Maximum Daily Load (TMDL). Ms. Shenk prefaced her remarks with the importance of striving to achieve both a sustainable agriculture industry and clean water. Ms. Shenk noted that all three states are relying heavily on the agriculture sector to achieve their nutrient and sediment reduction goals; Virginia by 45 percent, Maryland by 41 percent and Pennsylvania by 75 percent. To achieve the Bay TMDL, Virginia will need to increase agriculture nitrogen reductions by 1.5 times the current rate and Pennsylvania will need to increase nitrogen reductions by 8 times. Maryland is currently on pace to achieve their agriculture nitrogen reduction goals. For phosphorus, Virginia again should increase efforts by 1.5 times and Pennsylvania by 4 times the current rate of reduction. Ms. Shenk noted that at the Chesapeake Bay Executive Council meeting this year

Pennsylvania announced a new partnership with EPA and USDA providing \$28.8 million in funding for agriculture BMP implementation.

Ms. Shenk highlighted several successful programs including the Pennsylvania No-Till Alliance which offers peer-to-peer training and the Virginia Resource Management Plan Program which offers "agriculture certainty" for farmers installing BMPs to achieve the Commonwealth's Bay goals. Ms. Shenk offered suggestions for accelerating implementation such as offering reduced crop insurance rates for farmers engaging in "agriculture certainty" programs, requiring agriculture compliance in Pennsylvania to receive a new building permit, and promoting market-based agriculture water quality initiatives.

Part II: The Role of Innovation

Katie Frazier, President of the Virginia Agribusiness Council, then spoke to the role of the private sector and innovation in achieving restoration of the Chesapeake Bay. Ms. Frazier noted that agriculture is a \$52 billion industry in Virginia and supports 311,000 jobs. She also emphasized that there is bipartisan support for both agriculture and water quality. Ms. Frazier noted that innovation is now allowing farmers to practically "spoon feed" fertilizer to meet crop needs while avoiding nutrient loss. Tools such as GIS and GreenSeeker are no longer "innovative" but common practices that help to lower fertilizer application while providing higher yields.

Ms. Frazier offered that the industry must remain adaptable and that many farm leaders have embraced BMPs, such as conservation tillage, that save both costs and time for the farmer thus increasing profitability. Ms. Frazier noted that demonstrating BMP effectiveness is important for adoption but also that reducing BMP efficiencies can serve as a disincentive to the farm community. Agriculture seeks opportunities to prove they can achieve water quality goals but also seeks to protect individual data. Ms. Frazier suggested that underserved agriculture communities include small, limited resource and beginning farmers. Virginia State University is advancing programs to assist the small and limited resource farmers.

In addition to the need for cost share funding, Ms. Frazier emphasized the critical role of technical assistance and noted that Virginia Cooperative Extension as well as retired technical staff from local Soil and Water Conservation Districts and from USDA could provide additional capacity.

Part III: The Role of Technical Assistance

Dr. Kendall Tyree, Executive Director of the Virginia Association of Soil and Water Conservation Districts, then spoke on the role of technical assistance providers in restoring the Chesapeake Bay. Dr. Tyree sought to dispel the inaccurate notion that technical assistance is simply signing a farmer up for cost share. Dr. Tyree emphasized that technical and on-the-job training for those providing technical assistance to farmers can often take two years or more. Districts are often not competitive with salaries and benefits to retain those employees after the two-year training period. She also noted that technical assistance often requires repeated interactions with farmers and it may take 5 years to convince a farmer to implement a BMP and/or participate in a state or federal cost share program. Engaging farmers is often a grassroots effort and can be more successful if farmers engage other farmers. Local Soil and Water Conservation Districts must work to build trust with farmers in their community. Local Districts are also seeking to collaborate, not compete, with other technical assistance providers from USDA, the private sector, and non-governmental agencies.

CBC Virginia Director Ann Jennings then facilitated a panel discussion with Ms. Shenk, Ms. Frazier, and Dr. Tyree. As the meeting was held just a few days after the Presidential election, CBC members sought reactions from the panel to a new Administration. The panelists and members emphasized the need to collaborate and the importance of support, rather than mandates, from the federal government regardless of the party in the White House. Ms. Frazier noted that both parties in Virginia support agriculture cost share and technical assistance to assist with Chesapeake Bay restoration. She also noted that the Commonwealth seeks realistic, workable solutions without significant regulatory overreach. Dr. Tyree noted that the shift away from co-locating USDA and District offices has placed a strain on partnership relationships, which perhaps could be addressed by the new Administration. Secretary Ward inquired about the vulnerability of the Bay TMDL under a new Administration and the implications for each state's restoration efforts. She emphasized the need for clarity on how the next Administration will administer Clean Water Act programs.

Delegate Bulova inquired about prioritizing new or revised approaches to accelerate implementation of BMPs. Ms. Shenk and Dr. Tyree both agreed that cost share needs to reach farmers that are not already participating in state and/or federal programs. The panel questioned if the process to quantify reduction efficiencies for new, innovative practices could be shortened. The panel also discussed the critical need to verify BMPs that farmers have implemented without any cost share. Ms. Frazier indicated that the agriculture community supports verification and that all practices should count toward out Bay goals and that self-reporting should not lead to any regulatory action. The panel also stressed the importance of, at a minimum, continuing current levels of cost share funding.

FRIDAY, NOVEMBER 11, 2016

CALL TO ORDER

Chairman Middleton called the meeting to order at 9:00 AM and took a moment to honor all Veterans. The U.S. Armed Forces Anthem "Armed Forces Medley" was played and each member or guest who served was asked to stand during their military anthem.

The Chairman expressed sincere thanks to all Veterans, including many of the Westmoreland State Park staff, who were working on the Veterans Day holiday due to our meeting. Chairman then asked Executive Director Ann Swanson to take roll.

CHAIRMAN'S UPDATE

Executive Council Meeting

Chairman Middleton updated the members on the annual meeting of the Chesapeake Bay Executive Council (EC) at Boyce, Virginia. Chairman Middleton reported that the EC voted to support local government engagement, to raise awareness of the economic benefits of the Chesapeake Bay and to seek increased federal funding for stormwater infrastructure needs. Ann Swanson noted that the CBC would seek to meet with the Bay Congressional delegation during the May 2017 meeting in Washington, DC.

Ann Swanson reported that the Principals Staff Committee decided to remain engaged in implementation of the Environmental Finance Summit recommendations given the significance of financing needs.

Pennsylvania Initiatives

Acting Secretary for the Pennsylvania Department of Environmental Protection Patrick McDonnell reported on additional funding announced at the EC meeting for agriculture BMPs noting that it is a "down payment" on the overall funding need. He also briefed the members on Pennsylvania's Chesapeake Bay restoration strategy which includes engaging local Conservation Districts, placing additional staff in the field, focusing Growing Greener on Bay restoration needs, identifying new funding for developing nutrient management plans, and beginning discussions of Phase III of the Watershed Implementation Plan.

In closing out the Chairman's Update, Chairman Middleton noted that the CBC Executive Committee meeting was short and that the audit was very well done. Ann Swanson acknowledged CBC Administrative Officer Jen Donnelly's hard work on the CBC budget. Ms. Swanson also noted that increased funding for the CBC from each state will ensure that staff do not need to use reserve funding which must be maintained for use if a state is late in providing their support. Ms. Swanson suggested that the members should consider a budget increase in 2018; the 2016 budget increase was the first increase in 8 years.

Virginia Delegate Lingamfelter moved to accept the auditor's report. Maryland Delegate Barbara Frush seconded the motion. All members supported the motion.

THE MID-POINT ASSESSMENT AND PHASE III WIPS

Part I: Setting the Stage

Chairman Middleton reminded the members of the ongoing mid-point assessment of each jurisdiction's progress toward the Chesapeake Bay TMDL. He noted that each CBC meeting would devote time to ensure members are well informed and up-to-date on the mid-point assessment as well as the Phase III Watershed Implementation Plans (WIPs).

Ms. Swanson provided the members with a review of key issues under deliberation through the mid-point assessment and highlighted the real improvements in natural resources and water quality being documented throughout the watershed. Ms. Swanson noted that Dr. Walter Boynton would be speaking on the Bay's "tipping point" at the CBC meeting in January 2017.

Secretary Ward noted that Governor McAuliffe will continue as the EC Chair in 2017 and that work with the Chesapeake Bay Program can, at times, be challenging. Secretary Ward offered that the Commonwealth should be thankful and proud of the expertise and good work of James Davis Martin. She noted that James Davis Martin is working hard to bring the jurisdictions to consensus on many difficult matters.

Part II: New Tools for the Mid-Point Assessment & WIP Development

James Davis Martin, Chesapeake Bay Coordinator with the Virginia Department of Environmental Quality and Chair of the Water Quality Goal Implementation Team, briefed the members on their progress in reducing nutrients and sediment noting that progress has not been made in a static environment. While population has continued to increase, the decline in Chesapeake Bay water quality has been halted and turned around.

James Davis Martin reviewed the new land use/land cover data produced for the jurisdictions to better inform their Phase III WIP deliberations. He emphasized that the new 1 meter squared data would provide 900 times better resolution than the prior 30 meter squared data and that the

new land cover data is provided through aerial photography versus satellite imagery. He also noted that the jurisdictions and local governments have had more opportunity to correct errors in the data. The new data set also brings in local government information including specific parcel descriptions and zoning designations.

James Davis Martin reviewed the status of the Susquehanna River dams in trapping nutrients and sediments. As the Conowingo Dam is now at dynamic equilibrium, additional, previously unaccounted for pollution loads will require additional effort to achieve water quality standards. The same may be true as the impacts of a changing climate – increased rainfall, increased air and water temperatures, increased carbon dioxide, and sea level rise -- are factored into the restoration effort.

James Davis Martin informed the members that the reduction efficiencies for 17 BMPs are under development and/or review although this effort is not unique to the mid-point assessment. Review of BMPs continues throughout the restoration timeline. He noted that 5 BMPs are key to completing the updated, Phase 6 Chesapeake Bay Watershed Model – nutrient management planning, animal waste management systems, advanced onsite septic systems, wetlands and urban tree canopy.

James Davis Martin reviewed the increased need to engage local partners, particularly local governments, in development of the Phase III WIPs. He reviewed the deliberations on creating local area planning goals which can assist jurisdictions in targeting resources and provide reasonable assurance to EPA that the TMDL will be achieved. "Local" refers to any scale finer than a jurisdiction's basin scale. "Goals" can refer to numeric reductions or percentage of BMP implementation as well as programmatic measures. James Davis Martin noted that local goals will not be effective if they do not help to accelerate local implementation. He also indicated that reduction targets for federal facilities were driven by President Obama's Executive Order 13508. The Executive Order encouraged facilities that are not regulated to "come to the table." The local planning process for federal facilities was very effective, is driving increased engagement by those facilities, and is driving new actions. The local targets for federal facilities provided the facilities with a better understanding of their contribution to the Bay restoration effort. James Davis Martin questioned whether we have a driver like the Executive Order to effectively engage local governments noting that currently those engaged make up the "coalition of the willing."

Delegate Lingamfelter spoke on a concern raised in Virginia by licensed land surveyors regarding use of aerial imagery and LIDAR data in making land use decisions. This issue has been raised through the Virginia Geographic Information Network and is being assessed by the Attorney General's Office.

James Davis Martin indicated that the intention of the Chesapeake Bay Program is to update the land use/land cover data approximately every three years at a cost of \$3.5 million each time.

Delegate Lingamfelter noted that litter to energy technologies can serve as effective BMPs at the proper scale. A farm scale approach may be more appropriate and feasible than a regional scale approach. James Davis Martin emphasized that manure to energy technologies, and other feasible, alternative uses of manure and litter, are very important for the Bay restoration effort as there is likely insufficient cropland for appropriate and balanced use of nitrogen and phosphorus.

Delegate Bulova noted that local area targets are very important and urged James Davis Martin to investigate current unintended disincentives to reduction efforts outside of regulated MS4 communities. Baseline needs are greater in those unregulated communities.

NEW BUSINESS

Hearing no new business, Chairman Middleton adjourned the meeting at 10:00 a.m.