Chesapeake Bay
Fiscal 2016 Budget Overview
Agency Response

Senate Budget and Taxation Committee
Subcommittee on Public Safety, Transportation, and Environment
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Panel
Department of Natural Resources – *Frank W. Dawson, III, Acting Secretary*
Department of the Environment – *Ben Grumbles, Acting Secretary*
Department of Planning – *David Craig, Acting Secretary*
Department of Agriculture – *Mary Ellen Setting, Deputy Secretary*

Chesapeake Bay Restoration Overview

The Chesapeake Bay Total Maximum Daily Load (TMDL) was issued by the U.S. EPA in 2010 in response to insufficient restoration progress and continued poor water quality in the Bay and its rivers. The TMDL is designed to ensure that all pollution control measures needed to fully restore the Bay and its tidal rivers are in place by 2025, with at least 60 percent of pollution reductions completed by 2017 and those pollution loads maintained even as we grow beyond 2025.

The policies and programs implemented to date, particularly the Bay Restoration Fund and Chesapeake and Atlantic Coastal Bays Trust Fund, have placed Maryland on a path toward achieving its share of the Chesapeake Bay nutrient and sediment pollution reduction target by the year 2025.

This progress is documented by both our monitoring and modeling data. Maryland currently maintains a scientifically robust network of 126 tidal and non-tidal long-term monitoring stations – most of which have been sampled monthly since the mid 1980's. For the period 1999 – 2013, 60% of those stations have demonstrated improvements (i.e. declining concentrations) in nitrogen, 30% have demonstrated improvements in phosphorus, and 12% have demonstrated improvements in sediment. The amount of these improvements varies from station to station, but among those stations showing improvements, on average we are measuring about one third less of all three pollutants in the water today than in 1999. The large majority of those stations not showing improvements are showing no significant change over the last 14 years – this despite

increasing population and development. Only a small percentage are showing worsening conditions.

The monitoring data tells us the net result of our actions on the land plus a variety of other factors beyond our control – like weather, groundwater lag times, tides, etc. The modeling data allows us to remove those factors that we have no influence over, and estimate the impact that all our actions will have on the bay at some point in the future. As per the model, from 2009 (the baseline year for the TMDL) to 2013, Maryland is at 41% of the way to our nitrogen target and 62% of the way to our phosphorus target. Our progress toward our sediment target is significant, but an exact estimate is still under review by EPA.

Both modeling and monitoring data demonstrates that progress is being realized in our efforts to reduce nitrogen, phosphorus, and sediment loads to Chesapeake Bay. The objective in reducing the levels of these pollutants is to improve conditions for the Bay's living resources. The pollutant load reductions mandated by the Bay TMDL are based on the reductions projected to be necessary in order to restore water quality to a point necessary to support healthy living resources. Further pollutant load reductions will be necessary before those responses in living resources are fully realized.

Key Achievements on Chesapeake Bay Restoration Priorities beyond Water Quality

- Living Resources

- Blue Crabs: Maryland has coordinated measures with Virginia and Potomac River Fisheries Commission that focus on conservation of female spawning stock. In coordination with the industry, Maryland has developed an adaptive management system that allows for the annual adjustment of harvest relative to population levels. Because the blue crab population is highly variable, this system ensures that harvest stays in balance with the population. For the first time in the history of our blue crab surveys, fishing pressure has remained below the fishing target for 6 consecutive years.

- Menhaden: In December 2012, The Atlantic States Marine Fisheries Commission adopted a new management plan that reduces the coast-wide harvest of menhaden by 20% from recent levels. DNR, and all states along the Atlantic seaboard were successful in implementing new management

measures for the 2013 fishing season and achieving conservation goals. A recent stock assessment indicates that the menhaden population may be healthier than the 2012 assessment indicated. This week, Maryland's representatives on the Atlantic States Marine Fisheries Commission advocated for an adjustment of the harvest for Maryland's commercial fishermen as supported by this new information for 2015 and beyond.

- Oysters: Oyster populations have increased in some of their remaining habitats in Maryland as a result of the strong 2010 and 2012 year classes and relatively low mortality due to disease. The 2013 Maryland Oyster Biomass Index, a combined measure of oyster abundance and sizes, has reached its highest point on record. As a result, oyster harvests have increased from a low of 26,000 bushels in 2003-4 season to 422,000 bushels in the 2013-14 season. Temporary harvest increases have happened several times since the mid-1980's, and harvests are expected to decline as the 2010 and 2012 oysters are harvested.

- The largest oyster restoration efforts in Maryland's history are underway now. Harris Creek sanctuary is nearing completion, with 298 acres of habitat having been constructed and/or planted with hatchery seed. Construction of reefs in 114 acres of deepwater habitat of the Little Choptank River is nearing completion also. Early indications are that the reefs constructed in the earliest stages now exceed the oyster density and biomass goals established by the interagency Oyster Metrics Workgroup.

- Striped Bass: After the five year moratorium from 1985-1989, the population of striped bass increased and was declared restored in 1995. The population reached record high levels in the mid 2000's. Since then, the population has been in decline due to over harvesting and low reproduction. As a result, state and federal managers have collectively decided to decrease harvest in 2015 in an effort to reverse this decline.

- Land Conservation

    - Program Achievements: To date, DNR's land preservation programs have protected approximately 460,000 acres (POS Stateside = 323,900 acres, POS Local = 46,200 acres, CREP = 8,200 acres, Rural Legacy = 81,600 acres). Implemented a scientific based framework to

target ecological acquisitions through POS Stateside. From FY 2010 – FY 2014, approximately 93% of POS Stateside acquisitions have been within the Targeted Ecological Area. The remaining 7% of acquisitions, while not in a TEA, represented important opportunities for public recreation and/or or community connections. DNR has met the BayStat land conservation goal for Program Open Space, CREP, and Rural Legacy in every year that these goals have been set and is on target to meet or exceed them in FY 2015.

- Funding: The current Capital Improvement Plan will return the programs to dedicated full cash funding by FY 2019. In order to meet land preservation goals, protect natural resources, and provide public access opportunities, this commitment should be maintained.

- New Chesapeake Bay Watershed Agreement

On June 16, 2014, the Chesapeake Bay Watershed Agreement was signed. Signatories include representatives from the entire watershed, committing for the first time the Bay's headwater states to full partnership in the Bay Program. This plan for collaboration across the Bay's political boundaries establishes goals and outcomes for the restoration of the Bay, its tributaries and the lands that surround them.

This agreement contains 10 goals that will advance the restoration and protection of the Bay watershed - all of which Maryland will be implementing. Each goal is linked to a set of outcomes, or time-bound and measurable targets that will directly contribute to its achievement.

<u>Responses to DLS identified Issues and Recommendations</u>

Issues

1. **The Department of Legislative Services (DLS) recommends the addition of budget bill language to request that the Administration continue to publish the overall Chesapeake Bay restoration data and two-year milestones funding in the Governor's budget books.**

   Response: The agencies accept this recommendation.

2. **DLS recommends that the BayStat agencies comment on the plans for the growth strategy, Phosphorus Management Tool, financing restoration activities such as through nutrient trading, and cost-effectiveness of the pollution reduction strategy.**

   Response: These policy and financing options were and continue to be discussed by the Maryland Bay Cabinet Agencies as part of a larger framework for achieving interim and final pollution reduction targets, and maintaining those reductions over time. Future plans will need to be reviewed and approved by the current administration prior to presenting to the Department of Legislative Services. It is important to note, however, that Maryland is operating under an adaptive pollution reduction strategy consisting of three phases of Watershed Implementation Plans (WIP) and detailed 2-Year Milestones. The Phase I and II WIPs identify a list strategies and practices to be put in place by 2017 that will achieve at least 60 percent of the necessary pollutant load reductions in aggregate, identifies a broad framework to address cost-effectiveness, and places Maryland on a path to reach 2025. Additionally, the Phase I WIP reports the expected pace of implementation within each sector and a timeline to reach the sector targets. The final sector targets are provided, but detailed strategies for reaching 2025 are not fully developed.

   A Phase III plan, currently in discussion, is designed to make mid-course adjustments to strategies and identify actions/practices/policies to be implemented in 2018-2025 timeframe to meet final 2025 targets. This plan is to be submitted to EPA in 2018 and is currently under discussion within Maryland agencies.

3. **In addition, DLS recommends again that the BayStat agencies submit information on updated historical spending and projected Chesapeake Bay restoration spending and associated impacts and the overall framework to meet the calendar 2025 requirement of having all best management practices in place to meet water quality standards for restoring the Chesapeake Bay.**

   Response: The Maryland Bay Cabinet Agencies worked in consultation with the University of Maryland Environmental Finance Center to develop recommendations to address key policy and financing issues associated with achieving Bay restoration success. To that end, the State Agencies developed a financing and policy framework for achieving interim and final pollution reduction targets, and maintaining those reductions over time. As this framework identified several key policy and financing recommendations, it will need to be reviewed and approved by the current administration prior to presenting to the Department of Legislative Services.

4. **DLS recommends that the BayStat agencies comment on whether any funding is budgeted to address the scale, pattern, and trend of acidification and its impact on the Chesapeake Bay and Atlantic coastal bays and whether efforts are planned to secure federal and or other sources of funding for evaluating this risk.**

   The "Task Force to Study the Impact of Ocean Acidification on State Waters" submitted its report to the Governor and General Assembly on January 9, 2015 and provided its first briefing to the General Assembly on January 28, 2015. Although it was determined by the Task Force that there are many gaps in acidification monitoring, research, education, communication and outreach, it recommended the establishment of an interagency commission or workgroup to determine the acidification priorities and need for additional funding. The BayStat agencies agree with the Task Force's recommendation and believe it would be premature to comment on whether or how much additional funding is necessary until that work is complete.

5. **DLS recommends that the BayStat agencies comment on the likely decision points that will result from the additional study of the impact of Conowingo Dam sediment on the Chesapeake Bay.**

   The DLS report accurately portrays the issues related to the Conowingo Dam, potential impacts to Chesapeake Bay water quality from the Dam reaching full capacity, and Dam relicensing effort.

   The decision points from the additional Conowingo Dam sediment studies will be made first by MDE as part of the Water Quality Certification, which will occur annually until it is determined what contribution the Dam has towards meeting Bay water quality standards and secondly, during the Chesapeake Bay 2017 Mid Point Assessment. Enhanced lower Susquehanna River monitoring and modeling funded by Exelon over the next 2 years will inform the new Chesapeake Bay TMDL model. Any additional nutrient and sediment load allocations will be make by the Chesapeake Bay partnership that includes MD, VA, PA, WV, DE, NY, Washington DC and EPA. The Bay Program has a strict timeline for the decisions associated with the 2017 Mid Point Assessment that has been agreed upon by Maryland agencies. Relicensing is anticipated to occur in 2018

<u>Recommended Actions</u>

1. **Add budget bill language on a Chesapeake Bay restoration framework.**

Response: The agencies accept this recommendation.

2. **Add budget bill language on two Chesapeake Bay restoration reports**

Response: The agencies accept this recommendation.