



# **Bay Restoration Fund Advisory Committee**

**Gregory B. Murray, Chairman**

## **Annual Status Report January 2016 (11<sup>th</sup> Report)**

**Report to:**

**Governor Larry Hogan**

**The President of the Senate**

**The Speaker of the House**

**The Senate Education, Health, and Environmental Affairs Committee**

**The Senate Budget and Taxation Committee**

**The House Environmental Matters Committee**

**The House Appropriations Committee**

## Bay Restoration Fund Advisory Committee Members

| Committee Members         | Affiliation                                    |
|---------------------------|--|
| Gregory B. Murray         | Washington County                              |
| Ben Grumbles              | Maryland Department of the Environment         |
| Delegate Barbara A. Frush | Maryland House of Delegates                    |
| James L. Hearn            | Washington Suburban Sanitary Commission        |
| Beth Lynn McGee, Ph.D.    | Chesapeake Bay Foundation                      |
| Christopher P. Murphy     | Anne Arundel County Department of Public Works |
| Kevin Barnaba             | Harford County Health Department               |
| William P. Ball, Ph.D.    | Johns Hopkins University                       |
| Cheryl A. Lewis           | Town of Oxford                                 |
| Mark J. Belton            | Maryland Department of Natural Resources       |
| David R. Craig            | Maryland Department of Planning                |
| David R. Brinkley         | Maryland Department of Budget & Management     |
| Joseph Bartenfelder       | Maryland Department of Agriculture             |

## **PURPOSE OF THIS REPORT**

Section 1605.2 of Chapter 9 of the Environment Article requires that beginning January 2006, and every year thereafter, the Bay Restoration Fund (BRF) Advisory Committee must provide an update to the Governor and the General Assembly on the implementation of the BRF program, and report on its findings and recommendations.

## **EXECUTIVE SUMMARY**

The Bay Restoration Fund Advisory Committee (BRFAC) is pleased to present to Governor Larry Hogan and the Maryland Legislature, its eleventh annual Legislative Update Report. Great strides have been made in implementing this historic Bay Restoration Fund (BRF), but many challenges remain as we continue with the multi-year task of upgrading the State's wastewater treatment plants and onsite sewage disposal systems and the planting of cover crops to reduce nitrogen and phosphorus pollution in Chesapeake Bay.

### **Accomplishments**

- As of July 30, 2015, the Comptroller of Maryland has deposited approximately \$730 million in the Maryland Department of the Environment (MDE) Wastewater Treatment Plant fund, \$101 million in the Maryland Department of Environment Septic Systems Upgrade fund, and \$76 million in the Maryland Department of Agriculture (MDA) Cover Crop Program fund, for a total of \$907 million in BRF fees (Wastewater and Septic Users).
- Enhanced Nutrient Removal (ENR) upgrades of the State's major sewage treatment plants are currently underway. Upgrades to 41 major facilities have been completed and are in operation. Upgrades to 20 other facilities are under construction, four are in design, and two are in planning.
- Most major sewage treatment plants including the largest plants (> 10 MGD) are expected to be completed by 2017. Less than six plants may not meet this deadline. However, if that occurs, it will not prevent Maryland from meeting the load reduction goals because most upgraded plants are far exceeding their nutrient reduction goals.
- The 2012 BRF fee increase has allowed MDE to start targeting minor sewage treatment plants (less than 0.5 million gallons per day). The goal is to complete the upgrade of at least five minor plants before 2017 consistent with the Maryland Watershed Implementation Plan (WIP) for the Chesapeake Bay Total Maximum Daily Loading (TMDL). Previously, three minor facilities completed the ENR upgrade using other State and federal fund sources. Four more are under construction and expected to be completed by 2017, which would allow Maryland to exceed its goal for minor facilities.

- In addition to the seven minor sewage plants (mentioned above) that are expected to be upgraded by 2017, MDE is encouraging other minor plants to apply for funding and initiate the planning for the ENR. To date, seven additional plants have signed the funding agreement progressed into planning or design.
- MDE is also using BRF funds to upgrade septic systems with the Best Available Technology (BAT) for nitrogen removal. To date, BRF has funded 7,069 BAT upgrades throughout Maryland, of which 3,935 BAT upgrades were completed within Maryland's Critical Areas.
- The Maryland Department of Agriculture (MDA) dedicates its portion of BRF funds for the implementation of the statewide Cover Crop Program. In FY2015, farmers planted 475,560 acres attaining an estimated nutrient reduction of 2.9 million pounds of nitrogen and 95,000 pounds of phosphorus. Cover crops are one of the Best Management Practices (BMPs) comprising Maryland's Watershed Implementation Plan to meet nutrient reductions for TMDL. Goals are established in 2 year increments known as milestones. Cover crop implementation in FY2015 represents 123% of Maryland's 2015 Milestone goal.
- In FY2016 Maryland farmers applied to plant 652,594 acres of cover crops which is a record signup. Although farmers typically enroll more acreage than they complete planting, farmers are projected to exceed the 2016/2017 milestone goal of 417,014 acres.
- MDA is projected to receive \$11.2 million in BRF support in FY16. It is projected that BRF will provide financial assistance for approximately 221,000 acres of cover crops.
- Over the past four years, funding gaps for the Cover Crop Program have been addressed with funding from the 2010 Chesapeake Bay Trust Fund to support the increased level of participation required to meet TMDL goals.
- Cover crops are planted in the fall to tie up nitrogen that remains mobile in the soil after crop harvest. They are recognized as one of the State's most cost effective BMP available to prevent nitrogen movement to groundwater and subsequently the Bay. Cover crops also prevent soil erosion and improve soil quality.
- MDE and Maryland Department of Planning ("Planning") are continuing their efforts to implement the requirements of House Bill 893, which was passed in the 2007 Legislative Session and requires MDE and Planning, in concert with the BRFAAC and consultation with local governments to report on the growth influences that ENR upgraded wastewater treatment plants may be having in the jurisdiction served. As part of this report, Planning is continuing its analyses and is reporting on all qualifying wastewater treatment plants, grouped by State Regions, found in Table 1 on Page 26 of this report.

## Challenges

The United States Environmental Protection Agency (EPA), in coordination with the Bay watershed jurisdictions of Maryland, Virginia, Pennsylvania, Delaware, West Virginia, New York, and the District of Columbia (DC), developed and established the Total Maximum Daily Loading (TMDL) and a nutrient and sediment pollution diet for the Chesapeake Bay, consistent with Clean Water Act requirements. The Maryland Phase Watershed Implementation Plan (WIP) calls for specific strategies on how to achieve the interim target reduction of 60% of the Final Target by 2017, and ultimately achieving the Final 2025 Target. MDE will continue to use its Integrated Priority System to prioritize/allocate future funding to the different sectors. The Committee will monitor the project selections under this process and recommend changes to the process as needed. All the following sectors, except Agriculture, are funded through MDE:

- Point Source, which includes major and minor municipal treatment plants. Most major plants and at least five additional minor plants will need to be upgraded to Enhanced Nutrient Removal (ENR) in order to achieve the interim target reduction of 60% by 2017. Additional minor plants need to be upgraded after 2017 to assist in meeting the Final 2025 Target. In addition, further reductions in this sector may be achieved by BRF funding of combined and separate sewer overflow control.
- Septic Systems: BRF funding will continue to be provided before and after 2017 for BAT septic systems to support local teams and MDE strategies.
- Stormwater: BRF funding can be provided starting July 2017 for stormwater BMPs to support local initiatives and MDE strategies.
- Agriculture: Annual agricultural BMPs are set at about the same level in the interim as in the Final Target. Cover Crop activities being funded by BRF are essential to the success of the agricultural strategy.

### Recent Statutory Changes:

During the 2015 legislative session, the BRF statute was amended (SB 133 & SB 863) impacting the expanded uses of the Wastewater Fund. The law amends the prioritization of project funds starting FY 2018 (except as indicated below) as follows:

1. Funding an upgrade of a wastewater facility to enhance nutrient removal at wastewater facilities with a design capacity of 500,000 gallons or more per day;
2. Funding for the most cost-effective enhanced nutrient removal upgrades at wastewater facilities with a design capacity of less than 500,000 gallons per day;
3. Funding any of the following types of projects selected based on water quality and public health benefits, as determined by the Department of the Environment:
  - (i) Combined sewer overflow abatement, rehabilitation of existing sewers, and upgrading conveyance systems, including pumping stations (starting FY 2016);
  - (ii) Nitrogen reduction from onsite sewage disposal systems/septic systems;
  - (iii) Stormwater projects being undertaken by local governments who have implemented a system; of charges;

- (iv) Stormwater alternative compliance plan, undertaken by an organization exempt from taxation under IRS regulations, if required by a local government because the organization has substantial financial hardship as a result of a local government stormwater remediation fee.

## **Conclusions**

- MDE will continue to use the BayStat process to improve its benchmarks and tracking of implementation efforts to ensure that BRF funded projects remain on schedule to assist the State in meeting both the interim 2017 and final 2025 nutrient reduction targets.
- MDE and Planning, in consultation with the BRF Advisory Committee have developed a priority system for the selection of minor WWTPs for ENR upgrades. In addition to funding ENR at minor WWTPs, MDE will use its existing water quality priority rating system for the selection of BRF funded expanded use projects.