

BAY RESTORATION FUND ADVISORY COMMITTEE

Maryland Department of the Environment

Aqua and Terra Conference Rooms

1800 Washington Blvd.

Baltimore, Maryland 21230

September 26, 2013

1:00 p.m. to 4:00 p.m.

Meeting Minutes

Welcome/Introduction

- The meeting was chaired by Mr. Greg Murray, Chairman for the Bay Restoration Fund Advisory Committee and Administrator for Washington County.
- Mr. Murray welcomed the committee members and other attendees.

Review of Minutes

- Previous meeting minutes from the July 25, 2013 meeting were handed out to the committee members for their review and comment. An electronic copy of the meeting minutes was also e-mailed to the committee members prior to the meeting.
- There were no comments on the meeting minutes. Unless any other comments from the members are received, the approved minutes and handouts from the meeting will be posted on MDE's website.

Discussion

I. Update on ENR Implementation and Upcoming Events

- Mr. Saffouri referenced the Wastewater Treatment Plants ENR Upgrade Status handout and noted the facility status comparison between the previous meeting and the meeting today. To date there are 31 facilities in operation, 18 under construction, 12 in design, 4 in planning, and 2 in pre-planning, for a total of 67 facilities. The additional facility in operation is Joppatown. Marlay Taylor is scheduled to start construction next month.
- Mr. Saffouri called attention to the percentage complete for each plant that is under construction and noted that every project increased their percentage slightly. There are two projects at 99 percent that are expected to be completed by December, Snow Hill and Aberdeen.

- The following facilities are ready to schedule an event, if needed. Committee members will be informed via e-mail, if an event is scheduled.

Chesapeake Beach – Ready for Groundbreaking

Marlay Taylor had a groundbreaking ceremony on September 19, 2013

Joppatown – Ready for Dedication

Snow Hill has scheduled an Open House for the ENR upgrade on Saturday, October 19, 2013. In addition, a dedication ceremony is being scheduled by the Town.

- Mr. Bouxsein inquired about the Northeast River construction start. Mr. Saffouri stated that the design is completed and they are close to starting construction. Mr. Murray asked how the Joppatown plant is doing since it started up. The response was that the plant is in the optimization stage, and that it takes about six months to a year to achieve the ENR level of treatment.

II. Update on Cover Crop Activities.

- Ms. Chamberlain provided the update on the cover crop activities. MDA extended the aerial seeding from October 1 to October 5, 2012 and during that time an additional 5,000 acres were planted. The fall planting resulted in 415,437 acres and the Watershed Implementation Plan goal was 355,000 acres. Only a few counties fell short. During that time, it is estimated that 2.6 million pounds of nitrogen and 86,000 pounds of phosphorus were prevented from discharging to the Chesapeake Bay. The fiscal year 2014 program has started. Over 590,000 acres have been approved, and the first planting should end by October 1st and by October 15th, the first and second plantings should all be completed.

III. ENR Performance for Upgraded WWTPs.

- Mr. Saffouri referenced the handout titled, CY 2012 ENR performance. At the July 25, 2013 meeting, MDE was asked, for the WWTPs that have been upgraded, how they were doing in meeting the average annual ENR levels. As part of the Operation & Maintenance BRF grant funding program, the plants are required to submit to MDE their performance data for the previous calendar year. The data for CY 2012 is given in the aforementioned handout. The area highlighted in yellow are the CY 2012 annual average total phosphorus (TP) and total nitrogen (TN) results for the upgraded WWTPs. For TP, all the plants except three (Perryville, Crisfield, and Mount Airy) are meeting the average of 0.3 milligrams per liter (mg/L) or less. For TN, only two plants (Perryville and Mount Airy) are not meeting ENR performance levels. Most of the plants are achieving close to 2.0 mg/l TN, which is beyond what was expected when the facilities were designed.
- Mr. Bouxsein asked what is the performance standard. Mr. Saffouri responded that the BRF laws state 0.3 mg/l for TP and 3.0 mg/l for TN. But, for the NPDES permits, MDE allowed one (1) mg/L for operational flexibility, even though the limit of technology is three (3) mg/L. The plants are allowed to have a level as high as four (4) mg/L without being in violation of their permit. This was done so the plants are not considered in violation every time it exceeds 3.0 by 0.1 mg/L.

They are, however, designed to achieve 3.0 mg/l. Mr. Bouxsein asked what typically causes the plants not to meet the performance levels. There are a lot of things that can happen at the WWTP that can prevent the plant from achieving 3.0 mg/l for one or two months, but because the requirement is an annual average, the plant can still achieve 3.0 mg/l for that year.

- Mr. Ball asked how the average is calculated. It is just a simple average of the monthly average results. The NPDES discharge permit for each facility specifies the number of samples required monthly. The monthly averages for the 12 months as reported in the Discharge Monitoring Reports (DMR) are added and then divided by 12 to obtain the annual average results. Mr. Ball inquired if the data is available for others to look at and use. The Environmental Protection agency does have a website with DMR data from all the national WWTPs that can be reviewed for any parameter, not just nitrogen.
- Mr. Bouxsein stated his questions related to whether the plants were doing all they should to achieve the performance standard. Currently, to be eligible for BRF O&M grant money the plant is optimized to meet 3.0 mg/L TN and the permit requires 4.0 mg/L TN. So, if the plant achieves 3.0 mg/L or less, they get the full grant amount. At 4.0 mg/L, the plant meets the permit limit, but it gets zero O&M grant funds. Between 3.0mg/L and 4.0 mg/L, the grant amount is pro-rated.

IV. Update on BRF Fee Collection and Budget

- Mr. Khuman presented the fee distribution data from the fee program's inception through the end of July 2013 given on the last two pages of the handout from the Comptroller's office. The total fund distribution to date is as follows: approximately \$509.9 million to MDE Line 1 (Wastewater Fund), \$66.6 million to MDE Line 2 (Septic Fund), and \$53.1 million to MDA Line 2 (Cover Crop Fund).
- Review of these pages shows that the impact of doubling the flush fee, in terms of the revenue generated, is about what was expected. At the time of the legislation it was expected that about 10 percent of the revenue would be lost because allowing for financial hardships would be a requirement and not an option and the fee would not double in three areas, Western Maryland, Ocean City, and part of Cecil County. The projection for Line 1 (Wastewater) was \$100 million and the actual revenue for Fiscal Year 2013 is \$102 million. Similarly, for Line 2, the revenue for Fiscal Year 2013 of \$26.6 correlates with the projected estimate. The good news then is that the revenue is in line with the predicted funding to complete the ENR upgrade for the majors through 2017, and any additional funds required to initiate the ENR upgrade for the minor facilities.

V. Minor Plants Upgrade Priority List

- Mr. Saffouri referenced two handouts; (1) ENR Project Selection Ranking Sheet and (2) Targeted Minor Facilities and Permitted Flow. The first handout gives the scoring system and it is the same scoring that was used for the major plants, plus some additional items. Items 1- 4 are from the BRF law. Other added items are based on whether a facility has a Consent Order or Smart and Growing (practicing smart growth, and also have potential to grow).

- The second handout is a list of all the minor facilities with 40,000 gallons per day (gpd) and above. 40,000 gpd was selected because below that rate facilities are mostly at trailer parks and high schools, etc. The list is sorted by priority rank, Number 1 is Rising Sun and Number 54 is Point Lookout State Park. Mr. Khuman stated that both handouts are being presented for discussion.
- Mr. Leocha stated that a couple of months previously he had given the Committee a handout regarding cost per pound and how it might be used to prioritize individual plants. Mr. Saffouri stated that the last column of the handout listing the Minor facilities presents the cost per pound of each facility based on estimates. The estimates are based on a cost curve due to a lack of actual cost numbers except for the actual estimates for facilities currently in planning or design. For the 67 major plants, the annualized cost per pound, computed for a 20 year life cycle, (total capital cost divided by 20) was under \$5.00. For smaller plants, less than 0.5 million gallons per day (MGD) the cost numbers started to increase to \$10 to \$12 a pound, and some facilities can range as high as \$50 to \$100 a pound. These amounts are getting into the range of stormwater activities. In terms of cost-effectiveness, at about \$50 per pound or less it might still be best to upgrade a minor facility, but as the cost per pound increases to above \$100 it might not really be cost-efficient, and some stormwater activity may be more efficient.
- Mr. Murray asked where the pounds per year that are reduced are credited. Depending upon who paid for the upgrade, it would be credited to the overall goal of the state if the state pays for it, or the tributary strategy goal if the plant expands its capacity and the jurisdiction pays for it. However, if the plant is upgraded and does not expand its capacity, and if the state does not pay for the upgrade, the plant can continue to discharge pollutants at its current level with no reduction. The dilemma that the small plants are going to face will be; should I do nothing or should I expand. If you are expanding, the plant's maximum pollution will be reduced to X pounds and the milligrams per liter will be at 4.0 or less.
- Ms. Donoho asked, as the plant capacity gets smaller, does it get more expensive and more difficult to get to 4.0 mg/L. Mr. Khuman responded, it is expensive, but the technology exists and the cost per pound is likely to be high. Ms. Donoho then inquired, in setting policy for the major minors, is it necessary to stick to the major criteria or can the minors be allowed to discharge a little more. Mr. Khuman stated that if we do pursue ENR upgrade of the major-minors, then where will the pound reduction come from. The state is looking for those pounds. By 2025 the goal is to reduce nitrogen by 20 million pounds, seven and a half million of that from a point source sector. How this goal is achieved, whether with the upgrade of the minor facilities, stormwater, or farming activities, it should be done in a cost efficient manner.

VI. Load Caps Policy for Funded Minor Plants and Growth

- Mr. Leocha gave a Power Point presentation on the Smart Growth considerations for the BRF funding prioritization for the Minor Wastewater Treatment Plants. The presentation described the challenges that the towns face in meeting Smart Growth goals, local considerations for accepting Bay Restoration Funds for ENR upgrade, and solutions to meeting towns growth needs given

Total Nitrogen (TN) caps. The presentation also included a proposed prioritization point scale to include Smart Growth in the Minor facilities ENR ranking selection process. An example, looking at how the prioritization points translate into real on the ground information, using the Union Bridge WWTP, was also presented. The Power Point presentation will be put on the Committee Website.

- MDP is still working on the prioritization point scale and is open for suggestions and guidance. In the prioritization of the list of minor facilities, MDP would like to include the numbers from the proposed scale to that list. It will take a little more work and a little more time to do that.
- Mr. Murray asked whether the minor facilities that are ready to upgrade to ENR, do they know what the ramifications are if they spend their own money versus spending BRF money and what they are if they are able to keep the load versus not keeping a load. Mr. Saffouri answered yes, and stated that when a jurisdiction accepts the grant, MDE will include the new cap load in the ENR agreement.
- Mr. Ball stated he would like to see two examples to better understand the implications of using BRF funds versus using other funds, and new loads versus existing loads. He asked to see the scores and what it was that moved facilities down the list. Also, could they be scored under the old and new schemes. It was decided to do examples for Rock Hall, Manchester, and Myersville, and it would be in the form of an expanded spreadsheet.
- Ms. Donoho inquired if the local government is being included in the ultimate capacity decisions, specifically relating to the new anticipated loading cap and connecting the septic systems to the WWTP. Mr. Khuman stated that discussions with the local governments are on-going. Mr. Prager stated the credit received for bringing in the existing septic does not count against the cap. Also, the existing permit may or may not have to be amended depending upon whether or not the jurisdiction (plant) is going to get additional capacity.

VII. BRF January 2014 Annual Report

- Mr. Saffouri provided the update on the 2014 Bay Restoration Fund Advisory Committee Annual Status Report to the Maryland Legislature. MDE will be sending last year's Annual Report to the Maryland Department of Planning (MDP) and the Maryland Department of Agriculture (MDA) to update. MDE, MDP, and MDA will then update their respective portions of the Annual Report. MDE will send the revised Annual Report to the Committee members for final review. It is hoped by the next meeting, we will have the initial draft.

VIII. BRF Septic O&M

- Mr. Prager provided an update on the operation and maintenance (O&M) and tracking of the best available technology (BAT) of on-site sewage disposal systems (OSDS) that remove nitrogen. These systems are household size miniature wastewater treatment plants, and not like a septic tank that should be pumped out every few years. However, even if it is not pumped out, a septic tank is going to work for a long time as designed. These little wastewater plants do require regular O&M.
- The regulation that was passed requires use of these systems for all new construction in the Chesapeake Bay and Coastal Bay Watersheds. Currently, about 4,300 of these systems are in the ground, and ultimately, it is expected that will expand by 2,000 to 2,500 installations per year. Therefore, the new regulation included a requirement that the systems be serviced by a licensed service provider at least once per year. The regulations also require that the system installation be reported to MDE and the maintenance visits also be reported.
- MDE is currently tracking the installation and maintenance using a spreadsheet, but the long-term plan is to use a web-based reporting system. It took MDE a little while, but good progress has been made in developing the reporting system. The plan is that the manufacturer will input the installation data into the web-site, and the licensed service provider will do the maintenance, at least once a year, and input that information into the web-site. If a year goes by, and the O&M service was not performed, the web site will automatically print out a friendly reminder that the O&M is required. If the O&M still does not occur, enforcement would progress up to including potential penalties. The first step in developing the OSDS reporting system is building the database. MDE has decided to develop this database in-house. The MDE Information Technology (IT) staff described it as a quick implementation.
- In Maryland, five years of O&M is included in the upfront cost of the OSDS system when a system is installed. At this time, several hundred systems have been installed over the past five years. Homeowners receive the first five years of O&M free, after that they will have to pay the cost, estimated at \$150 to \$200. The regulation gives MDE the responsibility for monitoring and compliance, but MDE has the authority to delegate that responsibility. The County Health Departments, the County approving authority, however, must agree to accept that delegation.

IX. Septics PFA Issue

Mr. Khuman provided an update regarding the Priority Funding Area (PFA) issue on septic systems, discussed at the July 25, 2013 meeting. The Committee as a whole agreed that there should be amendments to the law that will allow for existing homes within the PFA to connect. Also, that the amendments will allow for some exceptions for homes outside the PFA. MDE is hoping that the next legislative session will rectify that.

Next Meeting

The next meeting will take place on December 5th, a Thursday.

Materials Distributed at the Meeting

- Meeting Agenda
- Previous Meeting Minutes (July 25, 2013)
- Wastewater Treatment Plants ENR Upgrade Status (September 26, 2013)
- ENR Project Selection Ranking Sheet for Minor Facilities
- Targeted Minor Facilities and Permitted Flow (September 26, 2013)
- Program-to-Date BRF Fee Collection Report (through July 31, 2013)
- BRF Fee Collection Reports (through July 31, 2013)
- BRF Fee Distribution Report through July 31, 2013
- CY 2012 ENR Performance (O&M Annual Grant Allocation) FY-2014 BPW
- Minor WWTP Funding Prioritization Using Bay Restoration Funds (Smart Growth Considerations

Attendance

Advisory Committee Members or Designees Attending:

Greg Murray, Chairman, Washington County Government
James L. Hearn, Washington Suburban Sanitary Commission
Rebecca Chamberlain, Maryland Department of Agriculture
John Leocha, Maryland Department of Planning
Fiona Burns, Department of Budget and Management
Gabe Cohee, Department of Natural Resources
Peter Bouxsein, Chesapeake Bay Foundation
William Ball, Johns Hopkins University
Walid Saffouri, Maryland Department of the Environment
Candace Donoho, Maryland Municipal League

Others in Attendance:

Julie Pippel, Washington County
Sarah Sprecher, Washington County
Andrew Gray, Department of Legislative Services
Leslie Cook, Department of Legislative Services
Carissa Matthews, Department of Budget and Management
Kelly Duffy, RK&K
Mary Vitale, Hazen & Sawyer
Tom Curtin, Maryland Municipal League

Maryland Dept. of the Environment (MDE) Attendees:

Jag Khuman	Michael Kanowitz	Jim George
Marya Levelev	Elaine Dietz	Jeff Fretwell
Jay Prager	Kimberly Knussman	
Sunita Boyle	Cheryl Reilly	