

## **Funding Stakeholders Recommendations**

### **May 27, 2010**

#### **Background**

During the 2009 Legislative Session the West Virginia Legislature passed Senate Bill 715 which amended Chapter 22 of the West Virginia Code by adding a new section designated §22-11-30, the Chesapeake Bay Restoration Initiative. This section charges the West Virginia Department of Environmental Protection (DEP) with establishing a nutrient trading and offset program, proposing nutrient performance standards for wastewater treatment facilities, and recommending a program to fund capital improvements needed to meet nutrient removal requirements. This paper addresses section (g) requiring that “The secretary and stakeholders shall, no later than June 1, 2010, consider and recommend to the Legislature a program establishing a new and independent source of funding for capital improvements for public facilities made necessary by the imposition of nutrient removal requirements”.

WV DEP has been working with a group of stakeholders over the past 5 years in the development and implementation of the state’s Potomac Tributary Strategy, a commitment as part of West Virginia’s participation in the Chesapeake Bay Program’s Water Quality Initiative. As a result of this ongoing coordination, stakeholders were readily identified and brought together to address this Legislative Directive. On November 5, 2009, December 18, 2009 and February 2, 2010 stakeholders were convened in Martinsburg and Charleston to brainstorm funding options. A total of 35 stakeholders participated in these meetings and committed valuable time in estimating the costs of nutrient reduction technology, identifying and prioritizing funding recommendations, and developing white papers that detailed suggested recommendations. DEP would like to acknowledge and express its appreciation for the effort made by this committed group of individuals (See **Attachment 1**).

#### **Chesapeake Bay Program and Total Maximum Daily Load**

In June 2002 Governor Bob Wise signed the Chesapeake Bay Program Water Quality Initiative Memorandum of Understanding. By signing this MOU, West Virginia agreed to develop goals and objectives to reduce nutrient and sediment loads by 2010. These reductions were anticipated to come from a variety of sectors including point sources such as municipal wastewater treatment plants and industry, and nonpoint sources such as agriculture, forestry, and urban storm water runoff.

In 2008, it became apparent that the six states that make up the Chesapeake Bay drainage, including West Virginia, would not sufficiently reduce nutrients to restore the Chesapeake Bay by 2010. As a result, the Chesapeake Bay Program began the process of developing Total Maximum Daily Loads (TMDLs) for the Bay and 92 impaired tributary segments. A TMDL is a plan of action used to clean up streams that are not meeting water quality standards. The tidal segment of the Potomac River is one of those impaired segments needing a TMDL. The final TMDL will require West Virginia permitted facilities, including wastewater treatment plants, to reduce their contribution of nutrients to the Potomac. The state will be expected to accomplish nutrient

reductions in 2 year increments beginning January 1, 2011 meeting 60% of the reduction by 2017 and all reductions by 2025.

## **Estimated Funding Need**

It is estimated that West Virginia will need approximately \$140M - \$240M over the next 10 B 15 years to fund the needed upgrades. For purposes of comparison, in its most recent annual report, the IJDC, which serves as the state's central clearinghouse for water and wastewater project funding, reported closing on \$111 million in funding statewide for water and wastewater projects. Many variables exist in attempting to estimate the costs of nutrient upgrades for publicly owned wastewater treatment plants in the Potomac drainage of West Virginia. It is estimated that 18 public service districts and municipalities operating 31 wastewater plants could be affected by the Chesapeake Bay TMDL (see **Attachment 2**). One of these projects is currently under construction and several others have been through the Infrastructure and Jobs Development Council (IJDC) and have already obtained funding.

For the purposes of this effort, the capital improvements to public facilities that are necessary to provide nutrient reduction technology to existing systems were considered. As such, costs associated with proposed expansions and operation and maintenance were not included in the assessment of needed funding. Furthermore, equity demands application of supplemental funding only where projects cost more than that which can be reasonably supported by local rates (1.5% median household income).

## **Recommendations**

The stakeholders narrowed down a total of 7 possible options for funding that were further developed into white papers. These include additional funding under the Clean Water Act State Revolving Loan Fund, a fertilizer tax, a flush fee, table games revenue, a toilet tissue tax, a vanity license plate fee, and a vehicle license fee. Of these, a number were eliminated based upon the fact that they were not a new and independent source of funding, or that they were not directly related to nutrients and wastewater treatment. See **Attachment 3** for a summary of these funding ideas.

As a result, DEP further narrowed the proposals to the following, most promising three options:

- Flush Fee
- Toilet Tissue Tax
- Table Games Revenue

A single option or a combination of the above could be used to generate new revenue. DEP is recommending a “pay as you go” approach if feasible to avoid new debt service obligations. However, several of the stakeholders recommended issuing bonds to increase availability of funding, particularly in the next few years, when the construction of nutrient removing wastewater treatment plants is expected to spike to meet regulatory requirements. The details of how these funds would be collected and distributed will need further development.

**Flush Fee** - It is anticipated that a West Virginia flush fee administered statewide would generate approximately **\$12M** per year. This estimate assumes that \$30 per year would be collected from households currently served by publicly owned wastewater treatment facilities. The Public Service Commission commented that they have concerns about the use of utility bills to collect fees that are not retained or used directly by the utility and that will be used to cover costs for actions of some who may not pay a flush fee. A flush fee has been successfully operating in Maryland since 2004 and has a direct connection to wastewater.

**Toilet Tissue Tax** - Imposing a statewide tax of \$0.20 per roll of toilet tissue would equate to approximately \$20 per household per year and generate approximately **\$8M** per year. This concept was first considered by the Florida Legislature in 2005. The toilet tissue market is one of the strongest growing segments in forest products, and a fee tied to toilet tissue has a clear connection to wastewater.

**Table Games Revenue** - **\$5.5M** could be generated annually by redirecting a portion of the current table games revenue targeted toward state debt reduction and a portion currently set aside for municipalities. While table games revenue does not directly relate to wastewater treatment, current revenue is being used to support infrastructure development in municipalities that have table games and it would be reasonable to apply the locally-generated table revenue from Charles Town Races and Slots to the necessary wastewater treatment plant upgrades in the Potomac drainage.

**Attachment 4** includes the white papers developed by the stakeholder group on each of the recommendations and **Attachment 5** is the Public Service Commission's Comments to the Workgroup.

## **Statewide vs. Potomac Drainage Revenue and Implementation**

Consideration was given to collecting revenue statewide or only within the Potomac drainage. Given the amount of funding needed, it is highly unlikely that regionally-generated funds will sufficiently aid in the construction of wastewater treatment plant upgrades in the time frame necessary.

In addition, nutrient upgrades of wastewater treatment plants outside of the Potomac River watershed will likely be needed in the future to meet West Virginia water quality standards, and/or an expected nutrient limit for the Mississippi River watershed. Excessive nutrients and associated algae have been identified as increasing problems in West Virginia waters, affecting aquatic life, drinking water and recreation. DEP is already examining the effect of nutrient discharges on the Greenbrier River, which is outside the Chesapeake Bay watershed. Under this program, the funds generated from sources statewide could first be applied to the immediate needs in the Potomac watershed and then be redirected as additional needs are determined in the future.

**WVDEP Funding Stakeholders Meeting Attendees*****Dates: 11/5/09; 12/18/09; and 2/2/10***

<b><u>Name</u></b>	<b><u>Affiliation</u></b>
Alana Hartman	WV DEP Potomac Basin Coordinator
Amy Swann	WV PSC
Andy Blake	City of Ranson
Armando Benincsa	Steptoe & Johnson
Carol Crabtree	Region 9 PDC
Chris Howard	WV PSC
Clifton Browning	Berkeley County PSD
Curtis Keller	Berkeley County PSD
Dave Montali	WV DEP TMDL Program
Debbie Britt	WV Rural Water
Ellen M. Johnson	Romney
Frank Welch	Shepherdstown
Gary Rawlings	Charles Town
Gary Stalnaker	Town of Moorefield
Jennifer Pauer	WV DEP Watershed
Jerry Wolfe	Chester Engineering
Jim Kelsh	Jefferson County PSD
Joe Hankins	Jefferson County PSD
John Tuggle	Pentree, Inc.
Kathy Emery	WV DEP SRF
Kenny Michael	City of Martinsburg
Kim Sayre	Bowles Rice - Mart.
Larry Johnson	Chester Engineering
Lewis Baker	West Virginia Rural Water
Lisa Davis	Region 9 PDC
Lucas Gagnon	Moorefield
Lyn Widmyer	Jefferson County PSD
Mark Baldwin	Martinsburg
Mark Dyck	Charles Town WHGA
Mike Ball	Region 9 PDC
Mike Warwick	WV DEP SRF
Randy Sovic	WV DEP DWWM
Richard A. Harper	Petersburg
Rodney Hovermale	Warm Springs PSD
Scott Mandirola	WV DEP DWWM
Seth Rivard	Jefferson County Planning
Stacey Heavner	Region 8 PDC
Steve Knipe	Martinsburg
Steven Wilson	Moorefield
Sue Lawton	Jefferson County PSD
Teresa Koon	WV DEP NonPoint Source
Tim Stranko	Steptoe & Johnson
Tom Bayvzik	Jefferson County Development Authority
Yogesh Patel	WV DEP Permits



Ches Bay Program - POTW Cost Estimates								4/16/2010
WWTP's in WV (50,000 gpd and >)								
Owner	Facility Name	2005 Size	Current Size	Project Cost	Treatment Type	Upgrade, Expansion, or New	Proposed Size (MGD)	Comment
Berk Co PSSD	Opeq/Hedgesville	1.600	1.600	\$17,670,818	SBR, filter, chem	U	1.600	Pentree report submitted 3/15/2010
	Inwood	0.750	1.500	\$11,309,822	SBR, filter, chem	U,E	1.750	Pentree report submitted 3/15/2010
	Baker Heights	0.900	1.800	\$7,139,311	SBR, filter, chem	U	1.800	Pentree report submitted 3/15/2010
	North End	0.153	1.000	\$8,159,580	SBR, filter, chem	U,E	1.520	0.153 from Spring Mill
Berk Co PSSD	Rocky Glenn	0.095	0.000	N/A	N/A		0.000	Connected to North End WWTP 5/08
Berk Co PSSD	Woods II	0.075	0.075				0.075	
Berk Co PSSD	Marlowe Towne Ctr	0.000	0.050				0.050	Start-up 4/08
Berk Co PSSD	Forest Hgts I	0.025	0.025				0.050	First DMR - 7/06
	Forest Hgts II	0.052	0.052				0.050	First DMR - 4/06
Berk Co PSSD	Nestle Woods	0.000	0.050				0.050	Not constructed
Berk Co PSSD	Honeywood	0.050	0.050				0.050	GP extended to 5/13/10
Capon Bridge		0.050	0.050	\$400,000	AS, filters, chem	U	0.050	GP extended to 5/13/10
Central Hampshire PSD		0.200	0.200	\$2,500,000	Biolac, clarifier, chem	U,E	0.300	IJDC aplic 07; Thrasher e-mail 3/24/2010
Charles Town		1.200	1.750	\$22,800,000	SBR, disk filters, chem	U,E	2.330	Plan of Action submitted 6/30/2008
Charles Town	Tuscawilla	0.196	0.196	\$17,286,200	MBR, chem	U,E	1.000	IJDC applic submitted 10/20/2008
Fort Ashby PSD		0.500	0.500	\$18,211,000	SBR, recirc sand filters, chem	N,E	0.600	Frankfort PSD project under construction
Franklin		0.200	0.200	\$2,616,370	SBR, disk filters, chem	N,E	0.250	IJDC applic 12/20/2008
Harpers Ferry-Bolivar PSD		0.300	0.300	\$3,820,000	MBR	U	0.300	Plan of Action (letter) submitted 4/4/07
Jefferson County PSD	Flowing Springs	0.000	0.000	\$26,435,934	MBR	N	1.000	Pentree facilities plan (rev 6/09)
Keyser		2.400	2.400	\$21,250,000	MBR, chem	N	2.400	Dunn Engrs letter of 2/29/10
Martinsburg		3.000	3.000	\$45,000,000	SBR, cloth filters, chem	N	3.000	O'Brien & Gere letter 3/15/2010
Moorefield		0.600	0.600	\$41,150,200	oxid ditch, cloth disk filters, chem	N,E	4.100	Also eliminates 2 Pilgrim's Pride WWTPs
Mountain Top PSD	Bayard (001)	0.050	0.050	\$400,000	AS, filters, chem	U	0.050	Thrasher letter 3/22/2010
	Elk Garden (003)	0.050	0.050	\$400,000	AS, filters, chem	U	0.050	Thrasher letter 3/22/2010
Paw Paw		0.200	0.200	\$10,000,000	SBR, filters, chem	N	0.200	Thrasher letter 3/22/2010
Petersburg		0.600	1.350	\$2,892,291	oxid ditch, cloth disk filters, chem	U	1.350	POA submitted 5/4/07; rev \$ 3/10/10
Romney		0.500	0.500	\$15,500,000	SBR, disk filters, chem	U,E	1.000	IJDC applic 2/10/2010
Shepherdstown		0.400	0.400	\$9,102,000	MBR, chem	U,E	0.800	IJDC applic submitted 4/20/07
Wardensville		0.120	0.120	\$5,500,000	MBR, chem	N,E	0.200	Dunn Engrs letter of 2/29/10
Warm Springs PSD	Berkeley Springs (003)	0.400	1.740	\$1,600,000	chem	U	1.740	WS letter submitted 2/24/10
	Great Cacapon (002)	0.060	0.060				0.060	
		<b>14.726</b>	<b>19.868</b>	<b>\$291,143,526</b>			<b>27.775</b>	

**Funding Stakeholder Ideas**  
**Prioritized by DEP**  
**April 30, 2010**

Funding Source	People Affected	Money Generated	Comments	DEP Action
<b>Flush Fee</b>	Entire state	<b>Rough estimate in WV by DEP \$12,375,000 annually collecting only from POTWs \$30 a year per household</b> Rough estimates from white paper- WV wastewater fund: \$16.74 million annually (rough estimate based on fees collected in MD)	Consider additional categories: Residential w/onsite and w/o public water and Residential with straight pipes - Sovic	<b>DEP suggests this be statewide and only collected from those being served by POTWs</b> Calculate money generated from 8 Bay counties and statewide - Mike Warwick volunteered to help
		WV septic fund: \$2.84 million annually (rough estimate based on fees collected in MD)	Make this a broader fee that will cover all significant nutrient fees and be collected by the counties as opposed to the utilities - PSC	
<b>Toilet Tissue Tax</b>	Entire state	\$0.10 tax per roll = \$4,000,000 <b>\$0.20 tax per roll = \$8,000,000</b> <b>\$20 a year per household based on 2 rolls a week</b>	Does not generate enough money would have to be combined with Table Games Revenue or another source of funding	DEP suggests that as an alternative to the per roll tax we could use a percentage. We need to research why Florida's legislation failed.
<b>Table Games Revenue</b>	In and out of state residents that participate	A revenue stream of \$5-5.7 million per year= 40 & 30 year \$100 million bond issue at 4%. The \$100 million would support would support 5-10 projects	Not a new source of funding . Money is allocated to the counties, municipalities, and school boards, but can be used for infrastructure improvements.	DEP suggest combining Table Games with Toilet Tissue Tax to generate enough money
<b>Vehicle License and Registration Fee</b>	Everyone with a vehicle	\$1 increase =\$1.3 million annually \$2 increase =2.6 million annually	Could only be deemed a fee if we could directly relate it to stormwater capture fee - Sovic	Not directly related to nutrients and wastewater treatment. Does not generate enough money.
<b>Vanity Plate "Protect and Preserve Your Local Watershed"</b>	Interested supporters	\$15 per plate could generate \$75,000 annually		Not directly related to nutrients and wastewater treatment. Does not generate enough money.

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<b>Fertilizer Tax</b>	Fertilizer Users- Farmers, homeowners, lawn care businesses, golf courses	Tax \$0.1 per pound N or P (\$20 a ton) = \$1,387,300 annually Tax of \$50 per ton in agriculture fertilizer = \$3.5 million annually Tax of \$.20 per lb for homeowners = undetermined due to lack of data on homeowner usage.	Stakeholder discussed a tax exemption or tax credit to farmers with a Nutrient Management Plan- Koon	Difficult to capture residential use number. Also difficult to differentiate between homeowner usage and farm usage. Money generated from a fertilizer tax should be targeted at nonpoint pollution problems.
<b>Use of CWSRF</b>	CWSRF Program participants and the citizens these projects benefit	Half the federal funds received for CWSRF over and above \$20 million = \$10 million annually	Relies upon increased federal funding.	legislation is not needed to dictate funding priorities. Not a new source of funding. Funding fluctuates though the life of the program.
<b>Bag Tax - Steve Wilson Moorefield</b>			Late is an idea I have stolen from the internet that I think California is using. A bag tax. If you use a bag to carry anything from a retail market store then there is a 5 cent charge. Encourages using ones own cloth bags to carry groceries. etc. One also might play on the environment of our beautiful state that is being cluttered with white plastic bags from groceries, drug stores, retail stores, etc.	Not directly related to nutrients and wastewater treatment



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## MEMORANDUM

**To:** Chesapeake Bay Funding Work Group  
**From:** Clean Water Coalition, Inc.  
**Date:** March 22, 2010  
**Re:** Chesapeake Bay Restoration Initiative – Maryland Flush Fee

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### **I. Overview**

When considering funding alternatives, it is very important to keep in mind the distinction of a tax versus a fee. A tax can take many forms, but it is typically an assessment upon all property owners to raise revenue for the general operation of, and service provided by, government. Taxes require substantial constitutional hurdles to be overcome: They may only be imposed by the Legislature, and must be fair and equal, non-discriminatory, and not result in double taxation. On the other hand, a fee is imposed for purposes that are not solely based on deriving revenue. Fees are related to services provided by government and are based around peculiar benefits conferred on a particular group of persons or entities that are assessed the fee. Fees may be assessed to pay for improvements and services, but they are based on enhanced property values or the incremental value of the services that would not otherwise be provided.

When determining whether an assessment is a tax or a fee, courts generally analyze the primary purpose of the assessment. The character of an assessment is determined by analyzing its operation and effect. A tax is imposed by the Legislature upon many, or all, citizens. It raises money, contributes to a general fund, and is spent for the benefit of the entire community. On the other hand, a fee is imposed by an agency upon those subject to its regulation, and is dedicated to defraying the costs of a specific program.

PREMISE: A property owner or resident discharges nutrients into the waters of the state, whether by sanitary sewer discharge or septic system use and discharge. This activity is (or will be) regulated by the State because the State and its local governments are required by law to act to reduce or eliminate the impact of these discharges upon the surface waters within the State and downstream in other states. Therefore, a flush fee is a regulatory fee, and not a tax, if it is used for the sole purpose of defraying costs of compliance with these nutrient standards.

PREMISE: A flush fee would not violate the equal protection and due process guarantees of the West Virginia Constitution if the imposition and amount of the fee are reasonably and rationally related to the legitimate governmental purpose of defraying the costs of nutrient removal.

## **II. Maryland's Bay Restoration Fund**

Maryland Senate Bill 320 (enacted 2004) provides a dedicated source of revenue for nutrient reduction in Maryland's surface waters. This revenue, which is managed by Maryland's Water Quality Financing Administration, is assigned to two sub-funds:

- A) Wastewater Fund: Funding for enhanced nutrient technology upgrades to Maryland's publicly owned WWTPs to meet standards of 3 mg/l total N and 0.3 mg/l total Ph.
- B) Septic Fund: Funding to upgrade onsite systems and implement cover crops to reduce nutrient loading to MEP standard.
- C) Other sub-accounts may be established by the Water Quality Financing Administration with the approval of the Legislature.

These are the fees assessed pursuant to this law:

Residential w/individual sewer bills: \$2.50/mo on sewer bill

Residential with onsite disposal and public water: \$2.50/mo on water bill

Residential w/o public water or sewer: \$30/yr to county

Non-residential or multi family residential (1 EDU= 250 gal average daily flow):

\$2.50/mo per EDU up to 3,000 EDUs

\$1.25/mo per EDU between 3,001 and 4,999

No fee for 5,000 or more EDUs

Total fee may not exceed \$120,000 annually for a single site

The revenue collected under this program by either billing utilities or county governments is remitted to the Comptroller of the State. Counties billing the fee may do so with the property tax invoice or with a separate billing system/protocol. Utilities billing the fee typically do so quarterly.

Federal and state facilities are not exempt from the fee. This is a significant and telling detail that demonstrates that the Maryland “flush tax” is actually a fee for service. If it was otherwise, the federal government would not be liable to pay the fees. The U.S. Constitution prohibits state tax upon federal facilities, but the federal government may be required to pay fees for services provided by state or local government.

Statutory fee exemptions include municipal and county governments and their corporations and wastewater facilities not discharging nutrients or otherwise already compliant with discharge limits. The local billing authority may also establish and administer a financial hardship exemption program. Such a program must be approved by the Water Quality Financing Administration.

The Maryland statute also creates a Bay Restoration Fund Advisory Committee, an 18 member group representing state agencies, the Legislature, local government and private interest groups. Key duties of this Committee include:

Annual report preparation and presentation to Legislature

Analysis of cost of nutrient removal

Identify additional funding sources

Make recommendations to improve effectiveness of Fund

Annual recommendation on fee to be charged

Consult with counties to identify users of on-site systems and tanks

Report to Governor and Legislature on findings and recommendations

**A. Wastewater Sub-Fund**

The goal of the Wastewater Sub-Fund is to reduce nitrogen and phosphorus loading from WWTPs by annually more than 7.5M lbs of N and 260,000 lbs of Ph. These reductions represent over 1/3 of Maryland's commitment under the 2000 Bay Agreement. The purpose of this fund is to pay for projects – including planning, design, and construction – designed to achieve nutrient removal at WWTPs, called enhanced nutrient removal (ENR) projects. By the year 2012, it is estimated that cumulative grant awards from this fund will be around \$791M, and bond issuance of around \$550M, funding 66 total projects.

The Fund is a perpetual fund, and is dedicated to nutrient removal in that amounts collected do not revert to the general or other special funds of the State. Fees from WWTP users generate around \$65M annually and are dedicated to the Wastewater Fund. All wastewater facilities with customers contributing to the Fund are eligible for grants from the Fund.

The ENR strategy has set annual average nutrient goals of 3 mg/l Total Nitrogen and 0.3 mg/l Total Phosphorous for all significant WWTPs (0.5 MGD or greater). Maryland has targeted 66 facilities for ENR upgrades.

Under the current ENR project schedule (as of January 2009), Maryland estimates an ENR capital cost of \$1.113B. By using both revenue bonds and cash balances, the fund is able to make 100% grants for ENR expenditures through FY 2011. The state anticipates a funding deficit of \$245M by FY 2012. Options considered to address this deficit include: (1) Increasing the flush fee; (2) Reducing the ENR grant percentage (from 100%); (3) Reprioritizing or delaying the ENR projects; and (4) Using the Bay fees to make debt service payments on local government bond issues.

Here are the uses authorized for the Wastewater Fund:

Grant to WWTP owners up to 100% of costs for nutrient removal upgrade project

Grant up to \$5M annually for existing system rehabilitation

Grant up to 10% of funds collected in that jurisdiction for O&M costs

These are the costs eligible for payment by the Fund:

Planning, design and construction of nutrient removal upgrades

CSO abatement, rehab of existing sewers, upgrades to collection/conveyance

Debt service and issuance costs on bonds, if sale proceeds are deposited in Fund

Administrative costs incurred by local government for billing/collecting

Up to 5% of fee deposited to State Comptroller (1.08% current)

Cost of Fund administration

State Comptroller- up to 0.5% of total deposits

MDE (MD DEP) – up to 1.5% of wastewater fund

## **B. Septic Systems Sub-Fund**

The Septic Systems Sub-Fund is funded by payments made by citizens who do not use public wastewater or water service. These citizens pay a \$30 annual fee to the Fund. The sub-fund, which is estimated to annually generate \$12.6M, is dedicated to upgrading on site disposal systems (OSDS) and to implementing cover crop activities. Between 2006 and 2009, Maryland awarded approximately \$19M to homeowners and counties for upgrading septic systems.

### **1. On-Site Disposal Systems**

77.6% of the fund must be used for OSDS upgrades to the best available technology for nutrient reduction. Of that amount, 8% must be used for an education and outreach program that provides advice to owners on the proper operation and maintenance of these facilities and the availability of grants to fund necessary improvements. When fully implemented, it is estimated that \$6.5M will be available to upgrade over 600 systems annually.

Funding priority is first given to failing systems and holding tanks in identified critical areas, then to failing systems that threaten public health and safety. Grants or loans of up to 100% of cost are made from the fund for these purposes:

- Cost to upgrade OSDS with best available nutrient removal technology
- Cost difference between conventional OSDS and nutrient removing OSDS
- Cost of repair or replacement of failing OSDS
- Cost to replace multiple OSDS with collective local government system

Applicant sites are evaluated and prioritized with the following metrics:

- Failing systems
- Population density
- Proximity to surface water and source water protection areas
- Sites with restrictive soil conditions
- Sites located in/near native trout streams



Maryland experienced a slow start-up of this program, resulting in an excess of accumulated funds. Through increased outreach efforts, program expenditures now approximate program revenue. Over 350 septic systems were upgraded in 2008. In 2007, the state received less than 25 applications for septic system upgrades. During the last quarter of 2008, Maryland received an average of 150 applications monthly.

Maryland has also appointed a Best Available Technology (BAT) workgroup, including local health and public works agencies and industry representatives. This workgroup is responsible for identifying what technologies adequately deliver nitrogen reductions and are thus eligible for funding under the program. Currently, 13 proprietary technologies are eligible for funding under this program.

## **2. Cover Crop Activities**

The remaining 22.4% of this fund is transferred to the Maryland Department of Agriculture (MDA) to fund cover crop activities. (*Note:* The original split of the septic system fund was 60% for OSDS and 40% for agriculture. This was changed by the 2009 Legislature to current 77.6%/22.4% split.

Cover crops are one of the most cost effective methods for tying up excess nitrogen from the soil following the fall harvest of crops. These crops minimize nitrogen loss caused by leaching into nearby streams and aquifers, prevent soil erosion and improve soil quality.

MDA has found the best utilization of funds to achieve nutrient reduction include: (1) Planting cover crops as early as possible in the fall; (2) Planting after crops that need higher fertilizer rates such as corn and vegetables; (3) Using cover crops on field that were fertilized using manure; and (4) use of rye. MDA applied these criteria by structuring incentive payments to farmers who adhered to one or more of these priorities. Additional incentives were provided for farmers in priority watersheds.

In FY 2009, Maryland received application requests for approximately 400,000 acres, and funded 100,000 acres in cover crops. A separate commodity cover crop program is available

allowing farmers to harvest a crop for a reduced payment provided no fertilizer is used during the fall.

### **III. West Virginia Revenue Estimates**

This is a very rough estimate of revenue that may be generated by a flush fee in West Virginia equal to that charged and collected in Maryland. The estimate assumes similar land use distribution in the two states.

MD population: 5.7M

WV population: 1.8M

FY ending 2009:

MD revenues into wastewater fund: \$53,335,991, say \$53M(paid by WWTP customers)

MD revenues into septic fund: \$9,370,656, say \$9M (paid by septic users, etc)

Assuming same fee structure and use density, estimated WV annual revenues would be;

WV wastewater fund: \$16.74M

WV septic fund: \$2.84M

#### IV. Other Factors & Relevant Case Law

##### A. *Wetzel County Solid Waste Authority v. West Virginia Division of Natural Resources*, 195 W. Va. 1 (1995).

1. **Summary.** In this case, the Circuit Court of Kanawha County certified the following question to the WV Supreme Court: whether *W. Va. Code* § 7-5-22 (1990) violated *W. Va. Const. art. V, § 1*, by impermissibly delegating taxing authority, violated *W. Va. Const. art. X, § 1*, requiring taxation to be equal and uniform throughout the state, and violated *W. Va. Const. art. III, § 10*, requiring substantive due process and the equal protection of the laws.

Pursuant to *W. Va. Code* § 7-5-22, the solid waste authority enacted an assessment fee on each ton of solid waste in the county. The authority filed an action to compel enforcement of tonnage caps at a solid waste facility owned and operated by a transport company and to enforce the collection of all required fees and taxes. The circuit court judge ruled that § 7-5-22 did not violate *W. Va. Const. art. V, § 1*; *art. X, § 1*; or *art. III, § 10*.

The WV Supreme Court accepted the certified question of whether *W. Va. Code* § 7-5-22<sup>1</sup> was unconstitutional. The WV Supreme Court found § 7-5-22 constitutional and held that the solid waste assessment fee authorized by § 7-5-22 was a regulatory fee rather than a tax, and, therefore, § 7-5-22 did not violate *W. Va. Const. art. V, § 1* or *W. Va. Const. art. X, § 1*. The WV Supreme Court reasoned that the solid waste assessment fee imposed by *W. Va. Code* § 7-5-22 was rationally related to the legitimate governmental purpose of defraying the administrative costs of the regional and county solid waste authorities and their solid waste programs. Thus, the imposition of the fee was not arbitrary and unreasonable. Therefore, the court answered the

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<sup>1</sup> *W. Va. Code* § 7-5-22 (1990) states: “Each county or regional solid waste authority is hereby authorized to impose a similar solid waste assessment fee to that imposed by *W. Va. Code* § 20-5F-5 at a rate not to exceed 50 cents per ton or part thereof upon the disposal of solid waste in that county or region. All assessments due must be applied to the reasonable costs of administration of the county's regional or county solid waste authority including the necessary and reasonable expenses of its members, and any other expenses incurred from refuse cleanup, litter control programs, or any solid waste programs deemed necessary to fulfill its duties.”\*

\* *W. Va. Code*, 20-5F-5 does not refer to a tax or fee; however, it appears that the legislature is referring to *W. Va. Code*, 20-5F-5a [1988] which imposes a solid waste assessment fee of \$ 1.25 per ton of solid waste disposed of at a solid waste disposal facility and imposes an additional \$ 1.00 per ton of solid waste generated outside the solid waste disposal shed.

certified question and held that the disputed statute, which authorized solid waste authorities to impose a solid waste assessment fee, did not violate the state constitution.

## **2. Standards of Review.**

When reviewing the constitutionality of legislation, the court must find the negation of legislative power beyond a reasonable doubt before it may declare a statute unconstitutional. In considering the constitutionality of a legislative enactment, courts must exercise due restraint, in recognition of the principle of the separation of powers in government among the judicial, legislative and executive branches. Every reasonable construction must be resorted to by the courts in order to sustain constitutionality, and any reasonable doubt must be resolved in favor of the constitutionality of the legislative enactment in question. Courts are not concerned with questions relating to legislative policy. The general powers of the legislature, within constitutional limits, are almost plenary. In considering the constitutionality of an act of the legislature, the negation of legislative power must appear beyond reasonable doubt.

A state by its legislature may make reasonable classifications in enacting statutes provided the classifications are based on some real and substantial relation to the objects sought to be accomplished by the legislation, and a person who assails any such classification has the burden of showing that it is essentially arbitrary and unreasonable.

In matters of economic legislation, the legislature must be accorded considerable deference under a due process standard. The character of a tax is determined not by its label but by analyzing its operation and effect. In matters of economic legislation, the legislature must be accorded considerable deference under a due process standard. Where economic rights are concerned, courts look to see whether the classification is a rational one based on social, economic, historic or geographic factors, whether it bears a reasonable relationship to a proper governmental purpose, and whether all persons within the class are treated equally. Where such classification is rational and bears the requisite reasonable relationship, the statute does not violate *Section 10 of Article III of the West Virginia Constitution*, which is West Virginia's equal protection clause<sup>2</sup>.

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<sup>2</sup> *W. Va. Const. art. III, § 10* states that no person may be deprived of life, liberty, or property, without due process of law, and the judgment of his peers.

The United States Court of Appeals for the First Circuit explains that when the questioned assessment falls in the middle of the spectrum courts tend to emphasize the revenue's ultimate use, asking whether it provides a general benefit to the public, of a sort often financed by a general tax, or whether it provides more narrow benefits to regulated companies or defrays the agency's costs of regulation.<sup>3</sup>

### 3. Rationale.

The solid waste assessment fee authorized by *W. Va. Code*, 7-5-22 [1990] is a regulatory fee rather than a tax since the revenue from the fee is used for the sole purpose of defraying the costs of the administration of duties imposed upon the county or regional solid waste authorities. Therefore, *W. Va. Code*, 7-5-22 [1990] does not violate *W. Va. Const. art. V, § 1*, by impermissibly delegating taxing authority to the county or regional solid waste authorities nor does it violate *W. Va. Const. art. X, § 1*, which requires taxation to be equal and uniform throughout the State. The solid waste assessment fee imposed by *W. Va. Code* § 7-5-22 (1990) is rationally related to the legitimate governmental purpose of defraying the administrative costs of the regional and county solid waste authorities and their solid waste programs.

The equal protection and due process rights found in *W. Va. Const. art. III, § 10* are not violated by the imposition of the solid waste assessment fee as set forth in *W. Va. Code*,

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<sup>3</sup> Likewise, the Supreme Court of the United States as early as 1884 recognized the regulatory fee when it found that a statutory levy of \$ .50 per passenger on shipowners was not a tax since the fee was used to defray the costs of regulating immigration. *Edge v. Robertson*, 112 U.S. 580, 5 S. Ct. 247, 28 L. Ed. 798 (1884) (this case is better known by the title *Head Money Cases*). See also *State ex rel. Tindal v. Block*, 717 F.2d 874 (4th Cir. 1983), cert. denied, *South Carolina v. Block*, 465 U.S. 1080, 79 L. Ed. 2d 764, 104 S. Ct. 1444 (1984) (The deduction on proceeds of all milk sold is a regulatory fee rather than a tax because its purpose is to encourage dairy farmers to reduce milk production and to offset the costs of the milk price support program); *Mississippi Power & Light Co. v. United States Nuclear Regulatory Comm'n*, 601 F.2d 223, 225 (5th Cir. 1979), cert. denied, 444 U.S. 1102, 62 L. Ed. 2d 787, 100 S. Ct. 1066 (1980) (The licensing fee collected by the Nuclear Regulatory Commission is a fee rather than a tax because the revenue from the licensing fee is used "to recover the costs for processing applications, permits and licenses as well as the costs arising from health and safety inspections and statutorily mandated environmental and antitrust reviews."); *Government Suppliers Consolidating Services, Inc. v. Bayh*, 975 F.2d 1267, 1271 n. 2, 3 (7th Cir. 1992), cert. denied, \_\_\_ U.S. \_\_\_, 113 S. Ct. 977 (1993) (The revenue collected from the registration fees of municipal waste collection and transportation vehicles are used to implement the waste disposal regulatory system and are, therefore, fees and not taxes); *Union Pacific Railroad Co. v. Pub. Util. Comm'n*, 899 F.2d 854 (9th Cir. 1990) (The levy imposed on railroads doing business in Oregon is a regulatory fee rather than a tax because the revenue from the levy is used to defray the costs of regulating railroad operations within the state); *Radio Common Carriers v. State*, 158 Misc. 2d 695, 601 N.Y.S.2d 513, 515 (N.Y. Sup. Ct. 1993) ("A tax is defined as a levy made for the purpose of raising revenue for a general governmental purpose; a fee is enacted principally as an integral part of the regulation of an activity and to cover the cost of regulation." (citation omitted)); and *River Falls v. St. Bridget's Catholic Church of River Falls*, 182 Wis. 2d 436, 513 N.W.2d 673, 675 (Wis. Ct. App. 1994), review denied by 520 N.W.2d 91 (Wis. 1994) ("The primary purpose of a tax is to obtain revenue for the government, while the primary purpose of a fee is to cover the expense of providing a service or of regulation and supervision of certain activities." (citation omitted)). Compare *Schneider Transport, Inc. v. Cattanach*, 657 F.2d 128 (7th Cir. 1981), cert. denied, 455 U.S. 909, 71 L. Ed. 2d 448, 102 S. Ct. 1257 (1982) (The registration fees imposed by the Wisconsin Department of Transportation upon trucks is a tax because the revenue derived from the fees is used to pay for highway construction).

7-5-22 because the imposition of the solid waste assessment fee is rationally related to the legitimate governmental purpose of defraying the administrative costs of the regional or county solid waste authorities and their solid waste programs. Furthermore, the imposition of the solid waste assessment fee is neither arbitrary nor discriminatory.

The revenue from the solid waste assessment fee is to be applied to the reasonable costs of administration of the county's regional or county solid waste authority including the necessary and reasonable expenses of its members, and any other expenses incurred from refuse cleanup, litter control programs, or any solid waste programs deemed necessary to fulfill its duties. *W. Va. Code § 7-5-22* (1990). The county and regional solid waste authorities are public agencies, *W. Va. Code § 22C-4-3* (1994), whose statutorily imposed duties include the development of a comprehensive litter and solid waste control plan for its geographic area. *W. Va. Code § 22C-4-8(a)* (1994). The county and regional solid waste authorities are authorized to promulgate such rules as may be proper and necessary to implement the purposes and duties of this article (the article concerns the county and regional solid waste authorities and their duties). *W. Va. Code § 22C-4-23(5)* (1994).

*W. Va. Code § 7-5-22* (1990) authorizes the county or regional solid waste authorities to impose a solid waste assessment fee not to exceed \$ .50 per ton of solid waste disposed of in that county or region in order to defray their regulatory costs. Clearly, imposing such fee on each ton of solid waste disposed of in each county or region is not arbitrary or unreasonable. Moreover, the fact that each county or regional solid waste authority may impose a different solid waste assessment fee is not unreasonable or arbitrary in that the statute obviously considers the different needs of each county or region in dealing with solid waste. Once a fee has been imposed by a solid waste authority, that fee is assessed uniformly within that county or region.

The plaintiff's contentions that *W. Va. Code, 7-5-22* [1990] violates *West Virginia Constitution art. V, § 1*, by impermissibly delegating taxing authority to the Authority, and art. X, § 1, which requires taxation to be equal and uniform throughout the State, are premised upon the solid waste assessment fee being classified as a tax rather than a fee. In that we find the solid waste assessment fee to be a regulatory fee and not a tax, there is no need to address the

plaintiff's arguments regarding the above constitutional provisions because these provisions concern taxes, not fees.

**4. Distinguished from City of Fairmont v. Pitrolo Pontiac Cadillac.**

The plaintiff also argued the similarity of this case to *City of Fairmont v. Pitrolo Pontiac-Cadillac, supra*, in which the WV Supreme Court found that a fire service charge imposed by a municipality was an ad valorem tax rather than a service fee. The WV Supreme Court came to its conclusion by analyzing the operation and effect of the fire service charge:

It is apparent that [the fire service charge] closely resembles the general State ad valorem property tax for real and personal property. The City utilizes the assessments made by the county assessor and the State Board of Public Works for the general property tax to determine the value of the property subject to the City's tax. The tax payments are required to be made semiannually and the due dates are the same as the State property tax. The sheriff is empowered to collect the City tax, the same as the State tax. The rate of tax is fifty-five cents for each hundred dollars of value which is based on the traditional ad valorem property tax concept, the value of the property. *City of Fairmont v. Pitrolo*, 308 S.E.2d at 531.

The plaintiff's contentions that *W. Va. Code, 7-5-22 [1990]* violates *West Virginia Constitution art. V, § 1*, by impermissibly delegating taxing authority to the Authority, and art. X, § 1, which requires taxation to be equal and uniform throughout the State, are premised upon the solid waste assessment fee being classified as a tax rather than a fee. Since the WV Supreme Court found the solid waste assessment fee to be a regulatory fee and not a tax, there is no need to address the plaintiff's arguments regarding the above constitutional provisions because these provisions concern taxes, not fees. *Id. at 509, 308 S.E.2d at 531*. The WV Supreme Court ultimately held that the assessment by the municipality was a tax which violated *W. Va. Const. art X, § 1* which sets maximum limits allowed for ad valorem taxes. Therefore, in *City of Fairmont*, the WV Supreme Court was concerned with the method the municipality used to collect the fire service charge. In *Wetzel County Solid Waste Authority*, the solid waste assessment fee is not collected by valuing personal property. Instead, a fee is charged for each ton of solid waste which is disposed of at the solid waste facility. Therefore, *City of Fairmont* is distinguishable from this case.

**B. *City of Huntington v. Heffley*, 127 W. Va. 254 (1944).**

**1. Summary.**

The City filed an application for a writ, seeking to compel Heffley (the City's Clerk) to countersign and attest Flood Wall Revenue Bonds in a specific amount pursuant to a City ordinance providing for the issuance of the refunding bonds and that flood walls theretofore constructed in the City, as three separate projects, be consolidated as a single undertaking. John Lewis and other taxpayers intervened as respondents to have the City's request for a writ denied, and the WV Supreme Court denied the City's request for a writ. Lewis and the other taxpayers were allowed to intervene because it was a case involving the validity of municipal ordinances providing for the refinancing of a bond issue for the purpose of paying the cost of flood wall protection, payable by special assessments on property specially benefited, and they were property holders whose properties were not included in the original taxing units, yet they were assessed by the refinancing ordinance, and holders of bonds embraced in the original issue are proper, if not necessary, parties, and should be permitted to intervene and answer. Lewis and the other taxpayers considered themselves as owners or holders of the outstanding bonds at issue.

Under Chapter 68, Acts of the West Virginia Legislature, 1935, municipalities were authorized to provide for flood control systems within their corporate limits and for 10 miles outside, except where such zone would overlap with another municipality, in which event the meridian line of the overlapping zone is to be the dividing line of their respective jurisdictions. Pursuant to the ordinances, special assessments were issued by the City to certain property owners.

In each of the ordinances authorizing the issuance and payment of the revenue bonds, there is asserted, as a preface to the ordinance, that the property within the area to be protected will be specially benefited.<sup>4</sup> The refinancing ordinance provided for notices of hearing by

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<sup>4</sup> The plan of the municipality, as expressed in its two ordinances, is (1) to consolidate the three flood wall projects into a single undertaking so as to support the single consolidated schedule of charges and the single issue of Flood Wall Revenue Refunding Bonds, (2) to secure the payment of such bonds by charges to be annually assessed against all property within the limits of the city, and without said limits but within the flood walls, both real and personal, except intangible personal property. In the rate ordinance the real property (formerly included in the eight zones under the original ordinances authorizing construction of the three zones) is divided into Zones A, B, and C; and in addition Zone D is declared to embrace "all real property, including property owned by public service companies, located within the City of Huntington but not included within either of said Zones A, B, or C, together with all personal property, located within said City of Huntington, and also all property, both real and personal, as



publication, which were duly given except that they were not subscribed with the name and title of any official of the City.<sup>5</sup> The ordinances under which the Eastern and Western Sections of the flood wall were constructed provided that the bonds issued under said ordinances may be called on certain dates set forth therein. The ordinance relating to the Central Wall contains no such provision, but the refunding ordinance protects the Central bondholders from any requirement that payment be accepted on their bonds.

The Clerk and the taxpayers claimed that the ordinances were invalid and that the writ of mandamus should not have been issued by the lower court. The taxpayers claimed that the special assessments were invalid and that the City lacked the power to refinance the bonds. The intervening taxpayers deny the City's authority to consolidate the projects for the purpose of issuing a single issue of refunding bonds and to assess all real and personal property as proposed, and challenge the assertion that special benefits, as distinguished from benefits to the community at large, will be afforded and rendered by the flood wall in its entirety to all such property.<sup>6</sup> Intervening bondholder Rice challenges the legality of the ordinance and alleges that such ordinances are "detrimental to and impair the security, source of payment, and obligation in favor of said Central Flood Wall Revenue Refunding Bonds to the loss and damage of" the intervening bondholder and the owners and holders of other bonds of said issue which are now outstanding.

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may be located outside the City of Huntington, but which is in the areas served and benefited by the flood wall". Zones 1, 4 and 7 are placed into Zone A, with a rate of 24 cents; Zones 2, 5 and 8 comprise Zone B, with a rate of 21 cents; and Zones 3 and 6, are placed into Zone C, with a rate of 15 cents. The rate for Zone D is 10 cents.

<sup>5</sup> Chapter 68, Acts of the Legislature, 1935, the legislative authority under which the three flood walls were constructed, provided that before the ordinance shall become effective, it shall be preceded by two weeks' notice of a public hearing in a newspaper or newspapers published in the municipality, or where there is no such newspaper by posting in three public places. But Section 4, Chapter 120, Acts West Virginia Legislature, 1937, under which the refunding of the bonds is sought to be had, provides that, other than the adoption of a resolution authorizing the refunding bonds, "No other proceedings or procedure of any character whatever shall be required for the issuance of refunding bonds by the public body."

<sup>6</sup> It is averred in the answer filed by the intervening taxpayers that one or more of them owns real estate in Zones 1, 2, and 3, and that they likewise own personal property, other than intangible personalty, in various locations in the Central Section which is situate in residence real estate more than 100 feet above the top of that flood wall. One of these intervenors likewise alleged that such realty and personalty received no benefit of any kind from the flood wall and cannot be benefited thereby. They also assert that the Guyandotte Flood Wall is completely separated from the rest of the City of Huntington by the Guyan River, and that said wall was not designed to protect and cannot possibly protect or benefit, either directly or indirectly, any realty or personalty located in the principal portions of the municipality.

The court determined that in the absence of evidence to the contrary, assessments were presumed to be valid, and the one attacking such assessments had the burden of establishing their invalidity. The court found that inasmuch as the special assessments were imposed by the City's ordinances arbitrarily, they were void, invalid, and unenforceable. In addition, the court held that personal property could not have been taxed inasmuch as it could not have benefited specially from an improvement. Although a public hearing was held regarding the ordinances, the court found that the taxpayers were not estopped from challenging the validity of the ordinances.

## **2. Standards of Review**

As in the case of an original assessment, the test of the validity of the reassessment is whether the public improvement creates a special benefit to the property assessed. In the absence of a contrary showing, the assessments are presumed to be valid, and one who attacks their validity has the burden of establishing their invalidity. The same rule applies on the narrow question of whether a public improvement creates a special benefit. But the rule seems to be otherwise where an improper basis or rule has been used in making the assessment.

It must be presumed that assessments for property tax purposes within the original areas are equal and uniform as required by *West Virginia Constitution, Article X, § 1*.

Personal property cannot be taxed, for the reason that it can not be specially benefited by a local improvement. The owner may be benefited in the enjoyment of the use of his personal property in that locality, but the property itself derives no benefit. The construction of the improvement may result in increased conveniences for handling the personal property, but the benefit, after all, is to the owner and not to the property. The situs of personal property follows the domicile of the owner. It may be located one day inside of an improvement district and the next day it is found elsewhere, and it has no fixed situs like real estate within the meaning necessary to constitute it the subject-matter of special assessments based on benefits.

If property is enhanced in value by reason of a public improvement, as distinguished from the general benefits to the whole community at large, it is specially benefited, and is to be assessed for the special benefits, notwithstanding every other piece of property upon or near the improvement may, to greater or less extent, be likewise specially benefitted. Assessments cannot be levied for general benefits. Within the meaning of this rule, general

benefits are those which the owner receives in common with the community at large. It is not requisite to the validity of an assessment that the benefits be immediate or direct, or that the protection from floods be absolute.

### **3. Rationale**

Municipal ordinances providing for the consolidation of three separate flood control units constructed under Chapter 68, Acts of the Legislature, 1935, which involve the assessment of property not specially benefited, are invalid; and while it "is not requisite to the validity of an assessment \* \* \* that the benefits be immediate or direct, or that protection from floods be absolute \* \* \*" ( *Duling Brothers Company v. The City of Huntington*, 120 W. Va. 85, pt. 4 syl.), the benefits to ground an assessment must be special to the property assessed as distinguished from the general benefits to the community at large.

Tangible personal property is not specially benefited by a flood control system to the extent that it may be assessed for the payment of the cost of construction and maintenance thereof under Chapter 68, Acts, West Virginia Legislature, 1935. Special assessments levied by municipal ordinance under Chapter 68, Acts West Virginia Legislature, 1935, to provide for the cost and maintenance of a municipal flood control system not grounded upon special benefits to the property, sought to be assessed, constitute taxation within the meaning of Sections 1 and 8 of Article X, West Virginia Constitution.

Where municipal ordinances provide for the consolidation of three flood control units constructed under Chapter 68, Acts of the Legislature, 1935, into a single system and notice by publication is given of a public hearing, as provided by a void ordinance, interested persons who may deem their interests adversely affected by the enactment of the ordinances, are not precluded from asserting their claimed rights in a mandamus proceeding brought for the purpose of testing the validity of the ordinances by reason of their failure to appear at said public hearing.

The intervenors are the real parties in interest. The respondent clerk has no interest in the outcome of this proceeding, except that of a citizen and public official.

Where, as in the case, the Legislature has endowed the municipality with power to refinance, the conduct of the city council must be measured by the language of the statute, which speaks only of refinancing of "enterprise" in the singular. While it is true W. Va. Code, 2-2-10

permits the construction of a word importing the singular number as applying to several things, such a result is unwarranted in this case. The consolidation provided for by the ordinances of 1944 contemplates an original assessment of property not embraced in the original projects, and what is virtually a reassessment of property included in the original taxing units.

Here we have variant costs of maintenance and construction; a difference in rates among the three original projects and, in the absence of a contrary showing, presumably a difference in the values of the properties embraced in the original units, an enlargement of the entire assessment area and a variously altered assessment of the properties embraced therein, notwithstanding one of the original areas is completely disconnected from the other two by the Guyan River. It would indeed be a rare coincidence if the groups of properties comprising each of the three units would be equal in value, considering the irregular size and extent of the units, as shown by maps of the City of Huntington lodged by agreement of counsel with the Court. The establishment of different rates for each one hundred dollars of assessed property within the three units under the original ordinances is indicative that council regarded the values of the property as being different for the reason that the rates in the respective districts are not in the same ratio to the cost of construction, and [HN4] it must be presumed that assessments for property tax purposes within the original areas are equal and uniform as required by *West Virginia Constitution, Article X, Section 1*. It would seem to follow necessarily that the ultimate cost to each group of property owners will, under the consolidation and the incident reassessment involved, be increased or decreased for the benefit and at the expense of property owners in the other units. The action of the city council in the enactment of the ordinances of 1944, though not tainted with fraud or wrongdoing, was arbitrary in character, and, in our opinion, renders the ordinances void.

What may be said of the relator's plan to enlarge the area of real property which it alleges to be benefited and served by the flood walls, and which the City proposes to assess? In the brief for the intervening taxpayers it is estimated that approximately thirty to forty per cent of the real estate which the City seeks now to assess is not within the areas protected by the walls from anticipated flooding and has not heretofore been subjected to assessment for the cost of the three projects. These respondents contend that such properties are not served or benefited by the

walls and therefore no assessment made against them is valid.<sup>7</sup> Assessments cannot be levied for general benefits. Within the meaning of this rule, general benefits are those which the owner receives in common with the community at large."

The Court concluded that the 1944 ordinances under appraisal were invalid and unenforceable, and that respondent taxpayers and bondholder were not estopped to challenge the validity of such ordinances, require the denial of the writ of mandamus to compel respondent Heffley, as city clerk, to countersign and attest the revenue refunding bonds since to do so would compel the performance of an illegal act.

**C. *The Duling Brothers Company v. City of Huntington*, 120 W. Va. 85 (1938).**

**1. Summary.**

Pursuant to Acts 1935, Chapter 68, the City adopted a flood wall plan to protect certain portions of the City subject to floods<sup>8</sup>. The City proposed to issue bonds for its share of the cost to be paid from special assessments over a number of years against the real estate within the wall. The property owners owned land within the wall. Plaintiffs sued, as property owners, against the City and others to enjoin the City from consummating the plan to issue bonds for its share of the costs of flood control systems to be paid from bonds for its share of the costs of flood control systems to be paid from special assessments over a number of years against realty within the flood wall.

The WV Supreme Court held that: (1) the wall was a municipal, not federal, project under the Act; (2) proper notice was given to the public before the plan was adopted; (3) the plan was not impracticable; (4) the plan was of such a flood control system as was contemplated by the legislature; (5) the charges were not discriminatory; (6) the proposed obligation did not violate the *Constitution of West Virginia, Article 10, § 8*; (7) Acts 1935, Chapter 68, did not violate the *Constitution of West Virginia, Article 6, § 30*; (8) a provision,

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<sup>7</sup> The city admits that realty above the top of the flood wall would not suffer physically from actual inundation in case of a flood, but asserts that it would be protected "from a cessation of the use of public utilities and from interruption of business, traffic and other normal activities." It argues further that the flood walls were "designed to protect all of the City and its inhabitants from the hazards, damage, inconvenience, interruption of business, and danger to health which directly and indirectly result from floods."

<sup>8</sup> Municipalities are authorized by Acts 1935, Chapter 68 (West Virginia), to construct and maintain flood control systems. Section three of Acts 1935, Chapter 68 (West Virginia) empowers a municipality to place the construction of a public work under the supervision of a board, commission or committee.

subjecting to a bank the reasonableness of the price agreed upon between the City and a land owner of land to be acquired for the wall, was not invalid; and (9) the City would not violate Code, 24-2-11, by operating a public utility without having first obtained a certificate of public necessity.

## **2. Rationale.**

While an assessment can be made only against such property as will be specially benefited by the work or improvement in question it is not necessary that the benefits shall be immediate or direct, or that the property shall receive absolute protection from overflow. The legislature may itself determine the lands to be benefited; and its discretion and determination will not be controlled or interfered with by the courts, unless there is a manifest and arbitrary abuse of power. The word "charge" may comprehend a special assessment on real estate.

A local assessment is to pay the expenses of an improvement designed to benefit the property of the payor. Taxation, in its usual application, is to pay the expenses of a government designed to benefit the payor as a member of organized society. From the one payment, the benefit to the payor is special; from the other, general. Consequently, while an assessment for a local improvement is an exercise of the taxing power, the assessment is generally not considered taxation, within constitutional and statutory restrictions of that power. Assessments are usually levied directly and exclusively on the real estate benefited. Zoning rates are generally fixed with direct reference to such benefit as the property may receive therefrom.

A special assessment to pay the cost of an improvement benefiting real estate is not subject to ordinary tax regulations.

The principal object of Acts 1935, Chapter 68 (West Virginia) is to authorize municipal public works. This object is clearly expressed, and being so, words descriptive of details ancillary thereto should not be narrowly defined. The word "use" is said to be one of the most comprehensive words in the English language and at law may mean service or benefit. Consequently, the title of the act may be held to contemplate special assessments (charges) for the service or benefit (use) from a flood wall.

The requirement of Acts 1935, Chapter 68 (West Virginia) that public works constructed thereunder shall be self-supporting, must be held to be inoperative where the work,

like a flood wall, is incapable of producing an operating revenue. Acts 1935, Chapter 68, conferring authority upon a municipality to construct, *inter alia*, a flood control system, to be paid for "by means of tolls, fees, rents or charges other than taxation" is construed to mean that the system may be paid for by charges in the form of special assessments on real estate within the area protected by the system. The requirement of the Act that public works constructed thereunder shall be self-sustaining, is held to be inoperative where the work, like a flood wall, is incapable of producing an operating revenue.

The area protected by a flood control system may be zoned in relation to the security afforded, and the assessment rates proportioned accordingly. Property not benefited should not be assessed. It is not requisite to the validity of an assessment, however, that the benefits be immediate or direct or that protection from floods be absolute. Municipal determination of the lands benefited, unless arbitrarily exercised, will not be disturbed by the courts.

**EXHIBIT A- the Maryland Statute**

**Maryland Water Quality Financing Administration – § 9-1605.2. Bay Restoration Fund**

**TITLE 9. WATER, ICE, AND SANITARY FACILITIES**

**Subtitle 16. Maryland Water Quality Financing Administration.**

**PART I. Definitions; General Provisions.**

**9-1601. Definitions.**

**9-1602. Created.**

**9-1603. Secretary; legal advisor.**

**PART II. Powers and Duties.**

**9-1604. Express powers.**

**9-1605. Maryland Water Quality Revolving Loan Fund.**

**9-1605.1. Maryland Drinking Water Revolving Loan Fund.**

**9-1605.2. Bay Restoration Fund.**

**9-1605.3. Chesapeake and Atlantic Coastal Bays Nonpoint Source Fund.**

**9-1606. Loans.**

**9-1606.1. Linked deposit loans.**

**9-1607. Bonds.**

**9-1608. Validity of signature; negotiable instruments; public or private sale.**

**9-1609. Refunding outstanding bonds.**

**9-1610. Definitive bonds, interim receipts, temporary bonds.**

**9-1611. Trust agreements.**

**9-1612. Rights of owner of bonds or trustee; enforcing and compelling performance of duties.**



**9-1613. Bonds as securities.**

**9-1614. Payment of bonds; construction of section; loan agreement for wastewater facility.**

**9-1615. Taxation by State.**

**PART III. Miscellaneous Provisions.**

**9-1616. Security for court costs; liens.**

**9-1617. Financial accounting.**

**9-1617.1. Financial accounting system.**

**9-1618. Termination of Administration.**

**9-1619. Severability.**

**9-1620. Additional powers; no derogation of existing powers.**

**9-1621. Construction of subtitle.**

**9-1622. Short title.**

## **9-1601. Definitions.**

- (a) *In general.*- Unless the context clearly requires otherwise, in this subtitle the following words have the meanings indicated.
- (b) *Administration.*- "Administration" means the Maryland Water Quality Financing Administration.
- (c) *Bay Restoration Fund.*- "Bay Restoration Fund" means the Bay Restoration Fund established under § 9-1605.2 of this subtitle.
- (d) *Biological nutrient removal.*- "Biological nutrient removal" means a biological nutrient removal technology capable of reducing the nitrogen in wastewater effluent to not more than 8 milligrams per liter, as calculated on an annually averaged basis.
- (e) *Board.*- "Board" means the Board of Public Works.
- (f) *Bond.*- "Bond" means a bond, note, or other evidence of obligation of the Administration issued under this subtitle, including a bond or revenue anticipation note, notes in the nature of commercial paper, and refunding bonds.
- (g) *Bond resolution.*- "Bond resolution" means the resolution or resolutions of the Director, including the trust agreement, if any, authorizing the issuance of and providing for the terms and conditions applicable to bonds.
- (h) *Borrower.*- "Borrower" means a local government or a person as defined in § 1-101(h) of this article who has received a loan.
- (i) *Chesapeake and Atlantic Coastal Bays Nonpoint Source Fund.*- "Chesapeake and Atlantic Coastal Bays Nonpoint Source Fund" means the Chesapeake and Atlantic Coastal Bays Nonpoint Source Fund established under § 9-1605.3 of this subtitle.
- (j) *Community sewerage system.*- "Community sewerage system" means a publicly or privately owned sewerage system that serves at least two lots.
- (k) *Director.*- "Director" means the Director of the Administration.
- (l) *Drinking Water Loan Fund.*- "Drinking Water Loan Fund" means the Maryland Drinking Water Revolving Loan Fund.
- (m) *Eligible costs.*- "Eligible costs" means the costs identified under § 9-1605.2(i) of this subtitle.

(n) *Enhanced nutrient removal.*- "Enhanced nutrient removal" means:

(1) An enhanced nutrient removal technology that is capable of reducing the nitrogen and phosphorus concentrations in wastewater effluent to concentrations of not more than 3 milligrams per liter total nitrogen and not more than 0.3 milligrams per liter total phosphorus, as calculated on an annually averaged basis; or

(2) If the Department has determined that the concentrations under item (1) of this subsection are not practicable for a wastewater facility, the lowest average annual wastewater effluent nitrogen and phosphorus concentrations that the Department determines are practicable for that facility.

(o) *Equivalent dwelling unit.*- "Equivalent dwelling unit" means a measure of wastewater effluent where one unit is equivalent to:

(1) If a local government or billing authority for a wastewater facility has established a definition for "equivalent dwelling unit" on or before January 1, 2004, the average daily flow of wastewater effluent that the local government or billing authority has established to be equivalent to the average daily flow of wastewater effluent discharged by a residential dwelling, which may not exceed 250 gallons; or

(2) If a local government or billing authority has not established a definition for "equivalent dwelling unit" on or before January 1, 2004, or if a local government or billing authority has established a definition that exceeds 250 gallons of wastewater effluent per day, an average daily flow of 250 gallons of wastewater effluent.

(p) *Facility.*- "Facility" means a wastewater facility or all or a portion of a water supply system as defined in § 9-201(u) of this title.

(q) *Federal Safe Drinking Water Act.*- "Federal Safe Drinking Water Act" means Title XIV of the Public Health Service Act, P.L. 93-523, as amended, 42 U.S.C. § 300f, et seq., and the rules and regulations promulgated thereunder.

(r) *Federal Water Pollution Control Act.*- "Federal Water Pollution Control Act" means the Water Pollution Control Act of 1972, P.L. 92-500, as amended, 33 U.S.C. § 1251, et seq., and rules and regulations promulgated thereunder.

(s) *Fund.*- "Fund" means a fund established by this subtitle, including the Water Quality Fund, the Drinking Water Loan Fund, and the Bay Restoration Fund and Atlantic Coastal Bays Nonpoint Source Fund.

(t) *Grant.*- "Grant" means a grant from the Administration to a grantee.

- (u) *Grant agreement*.- "Grant agreement" means a written agreement between the Administration and a grantee with respect to a grant.
- (v) *Grantee*.- "Grantee" means the grant recipient.
- (w) *Lender*.- "Lender" has the meaning stated in § 9-1606.1 of this subtitle.
- (x) *Linked deposit*.- "Linked deposit" has the meaning stated in § 9-1606.1 of this subtitle.
- (y) *Linked deposit loan*.- "Linked deposit loan" has the meaning stated in § 9-1606.1 of this subtitle.
- (z) *Linked deposit program*.- "Linked deposit program" has the meaning stated in § 9-1606.1 of this subtitle.
- (aa) *Loan*.- "Loan" means a loan from the Administration to a borrower for the purpose of financing all or a portion of the cost of a wastewater facility, if the loan is from the Water Quality Fund, or water supply system, if the loan is from the Drinking Water Loan Fund.
- (bb) *Loan agreement*.- "Loan agreement" means a written agreement between the Administration and a borrower with respect to a loan.
- (cc) *Loan obligation*.- "Loan obligation" means a bond, note, or other evidence of obligation, including a mortgage, deed of trust, lien, or other security instrument, issued or executed by a borrower to evidence its indebtedness under a loan agreement with respect to a loan.
- (dd) *Local government*.-
- (1) "Local government" means a county, municipal corporation, sanitary district, or other State or local public entity which has authority to own or operate a facility.
- (2) "Local government" includes any combination of two or more of the public entities under paragraph (1) of this subsection when acting jointly to construct or operate a facility.
- (ee) *Person*.-
- (1) "Person" means an individual, corporation, partnership, association, the State, any unit of the State, commission, special taxing district, or the federal government.
- (2) "Person" does not include a county, municipal corporation, bi-county or multicounty agency under Article 28 or 29 of the Code, housing authority under Division II of the Housing and Community Development Article, school board, community college, or any other unit of a county or municipal corporation.

(ff) *Residential dwelling*.-

(1) "Residential dwelling" means a room or group of rooms occupied as living quarters by an individual, a single family, or other discrete group of persons with facilities that are used or intended to be used for living, sleeping, cooking, sanitation, and eating, including an apartment unit, condominium unit, cooperative unit, town house unit, mobile home, or house.

(2) "Residential dwelling" does not include a hospital, hotel, motel, inn, boarding house, club, dormitory, school, college, or similar seasonal, institutional, or transient facility.

(gg) *Single site*.- "Single site" means a discrete grouping of buildings or structures that are located on contiguous or adjacent property and owned by the same user.

(hh) *User*.-

(1) "User" means any person discharging wastewater to:

(i) A wastewater facility that has a State discharge permit or national pollutant discharge elimination system discharge permit;

(ii) An onsite sewage disposal system; or

(iii) A sewage holding tank.

(2) "User" does not include a person whose sole discharge is stormwater under a stormwater permit.

(ii) *Wastewater facility*.- "Wastewater facility" means any equipment, plant, treatment works, structure, machinery, apparatus, interest in land, or any combination of these, which is acquired, used, constructed, or operated for the storage, collection, treatment, neutralization, stabilization, reduction, recycling, reclamation, separation, or disposal of wastewater, or for the final disposal of residues resulting from the treatment of wastewater, including: treatment or disposal plants; outfall sewers, interceptor sewers, and collector sewers; pumping and ventilating stations, facilities, and works; programs and projects for controlling nonpoint sources of water pollution and for estuarine conservation and management; and other real or personal property and appurtenances incident to their development, use, or operation.

(jj) *Water Quality Fund*.- "Water Quality Fund" means the Maryland Water Quality Revolving Loan Fund.

(kk) *Water supply system*.- "Water supply system" has the meaning stated in § 9-201(u) of this title.

[1988, ch. 535; 1993, ch. 396; 1997, ch. 673; 1998, ch. 328; 2004, ch. 428; 2005, ch. 25, § 1; 2006, ch. 44, § 6; ch. 64; 2008, ch. 120, § 2; ch. 121, § 2; ch. 225, §§ 1, 2; ch. 226, §§ 1, 2.]

**§ 9-1605.2. Bay Restoration Fund.**

(a) *Established; legislative intent.-*

(1) There is a Bay Restoration Fund.

(2) It is the intent of the General Assembly that the Bay Restoration Fund be:

(i) Used, in part, to provide the funding necessary to upgrade any of the wastewater treatment facilities that are located in the State or used by citizens of the State in order to achieve enhanced nutrient removal where it is cost-effective to do so; and

(ii) Available for treatment facilities discharging into the Atlantic Coastal Bays or other waters of the State, but that priority be given to treatment facilities discharging into the Chesapeake Bay.

(3) The Bay Restoration Fund shall be maintained and administered by the Administration in accordance with the provisions of this section and any rules or program directives as the Secretary or the Board may prescribe.

(4) There is established a Bay Restoration Fee to be paid by any user of a wastewater facility, an onsite sewage disposal system, or a holding tank that:

(i) Is located in the State; or

(ii) Serves a Maryland user and is eligible for funding under this subtitle.

(b) *Bay Restoration Fee.-*

(1) The Bay Restoration Fee is:

(i) Beginning January 1, 2005, for each residential dwelling that receives an individual sewer bill and each user of an onsite sewage disposal system or a holding tank that receives a water bill, \$2.50 per month;

(ii) Beginning October 1, 2005, for each user of an onsite sewage disposal system that does not receive a water bill, \$30 per year;

(iii) Beginning October 1, 2005, for each user of a sewage holding tank that does not receive a water bill, \$30 per year; and

(iv) Beginning January 1, 2005, for a building or group of buildings under single ownership or management that receives a sewer bill and that contains multiple residential dwellings that do not receive an individual sewer bill or for a nonresidential user:

1. For each equivalent dwelling unit not exceeding 3,000 equivalent dwelling units, \$2.50 per month;
2. For each equivalent dwelling unit exceeding 3,000 equivalent dwelling units and not exceeding 5,000 equivalent dwelling units, \$1.25 per month; and
3. For each equivalent dwelling unit exceeding 5,000 equivalent dwelling units, zero.

(2)

(i) For a residential dwelling that receives an individual sewer bill, a user of an onsite sewage disposal system or a holding tank that receives a water bill, a building or group of buildings under single ownership or management that receives a water and sewer bill and that contains multiple residential dwellings that do not receive an individual sewer bill, and a nonresidential user, the restoration fee shall be:

1. Stated in a separate line on the sewer or water bill, as appropriate, that is labeled "Bay Restoration Fee"; and

2. Collected for each calendar quarter, unless a local government or billing authority for a water or wastewater facility established some other billing period on or before January 1, 2004.

(ii) 1. A. If the user does not receive a water bill, for users of an onsite sewage disposal system and for users of a sewage holding tank, the county in which the onsite sewage disposal system or holding tank is located shall be responsible for collecting the restoration fee.

B. A county may negotiate with a municipal corporation located within the county for the municipal corporation to collect the restoration fee from onsite sewage disposal systems and holding tanks located in the municipal corporation.

2. The governing body of each county, in consultation with the Bay Restoration Fund Advisory Committee, shall determine the method and frequency of collecting the restoration fee under subparagraph 1 of this subparagraph.

(3) The total fee imposed under paragraph (1) of this subsection may not exceed \$120,000 annually for a single site.



(4) (i) For purposes of measuring average daily wastewater flow, the local government or billing authority for a wastewater facility shall use existing methods of measurement, which may include water usage or other estimation methods.

(ii) The averaging period is:

1. The billing period established by the local government or billing authority; or

2. If a billing period is not established by the local government or billing authority, a quarter of a calendar year.

(5) The Bay Restoration Fee under this subsection may not be reduced as long as bonds are outstanding.

(c) *Exemptions.*- A user of a wastewater facility is exempt from paying the restoration fee if:

(1) (i) 1. The user's wastewater facility's average annual effluent nitrogen and phosphorus concentrations, as reported in the facility's State discharge monitoring reports for the previous calendar year, demonstrate that the facility is achieving enhanced nutrient removal, as defined under § 9-1601(m) of this subtitle; or

2. The Department has determined that the wastewater facility does not discharge nitrogen or phosphorus and is not required to monitor for nitrogen or phosphorus in its discharge permit; and

(ii) The user's wastewater facility has not received a State or federal grant for that facility;

(2) (i) The user's wastewater facility discharges to groundwater and the annual average nutrient concentrations in the wastewater prior to discharge to groundwater have not exceeded 3 milligrams per liter total nitrogen and 0.3 milligrams per liter total phosphorus, as demonstrated by analysis of the groundwater from monitoring wells located on the property and as reported in discharge monitoring reports for the previous calendar year; and

(ii) The user's wastewater facility has not received a federal or State grant for that facility; or

(3) The Department determines that:

(i) The user's wastewater facility discharges noncontact cooling water, water from dewatering operations, or reclaimed wastewater from a facility whose users pay in to the Fund; and

(ii) The discharge does not result in a net increase in loading of nutrients compared to the intake water.

(d) *Collection; hardship exemption.-*

(1) Subject to the approval of the Administration, a local government or a billing authority for a water or wastewater facility may establish a program to exempt from the requirements of this section a residential dwelling able to demonstrate substantial financial hardship as a result of the restoration fee.

(2) (i) Except as provided in subparagraph (ii) of this paragraph, the Bay Restoration Fee shall be collected by the local government or the billing authority for the water or wastewater facility, as appropriate, on behalf of the State.

(ii) For a wastewater facility without a billing authority, the Comptroller may collect the restoration fee from the facility owner.

(3) A local government, billing authority for a water or wastewater facility, or any other authorized collecting agency:

(i) May use all of its existing procedures and authority for collecting a water or sewer bill, an onsite sewage disposal system bill, or a holding tank bill in order to enforce the collection of the Bay Restoration Fee; and

(ii) Shall establish a segregated account for the deposit of funds collected under this section.

(e) *Return and remittance; applicable law; powers of Comptroller.-*

(1) A local government, the billing authority for a water or wastewater facility, or any other authorized collecting agency shall complete and submit, under oath, a return and remit the restoration fees collected to the Comptroller:

(i) On or before the 20th day of the month that follows the calendar quarter in which the restoration fee was collected; and

(ii) For other periods and on other dates that the Comptroller may specify by regulation, including periods in which no restoration fee has been collected.

(2) Except to the extent of any inconsistency with this subsection, the provisions of Title 13 of the Tax - General Article that are applicable to the sales and use tax shall govern the administration, collection, and enforcement of the restoration fee under this section.

(3) The Comptroller may adopt regulations necessary to administer, collect, and enforce the restoration fee.

(4) (i) From the restoration fee revenue, the Comptroller shall distribute to an administrative cost account the amount that is necessary to administer the fee, which may not exceed 0.5% of the fees collected by the Comptroller.

(ii) After making the distribution required under subparagraph (i) of this paragraph, the Comptroller shall deposit the restoration fee in the Bay Restoration Fund.

(5) The State Central Collection Unit may collect delinquent accounts under this section in accordance with § 3-302 of the State Finance and Procurement Article.

(f) *Nature of Fund; accounting, investment, and audits.-*

(1) (i) The Bay Restoration Fund is a special, continuing, nonlapsing fund that is not subject to § 7-302 of the State Finance and Procurement Article and shall be available in perpetuity for the purpose of providing financial assistance in accordance with the provisions of this section.

(ii) Money in the Fund may not revert or be transferred to the General Fund or a special fund of the State.

(2) The Bay Restoration Fund shall be available for the purpose of providing financial assistance in accordance with the provisions of this section for:

(i) Eligible costs of projects relating to planning, design, construction, and upgrades of wastewater facilities to achieve enhanced nutrient removal as required by the conditions of a grant agreement and a discharge permit; and

(ii) All projects identified in subsections (h) and (i) of this section.

(3) Subject to the provisions of any applicable bond resolution regarding the holding or application of amounts in the Bay Restoration Fund, the Treasurer shall separately hold, and the Comptroller shall account for, the Bay Restoration Fund.

(4) Subject to the provisions of any applicable bond resolution governing the investment of amounts in the Bay Restoration Fund, the Bay Restoration Fund shall be invested and reinvested in the same manner as other State funds.

(5) Any investment earnings shall be retained to the credit of the Bay Restoration Fund.

(6) The Bay Restoration Fund shall be subject to audit by the Office of Legislative Audits as provided under § 2-1220 of the State Government Article.

(7) The Administration shall operate the Bay Restoration Fund in accordance with §§ 9-1616 through 9-1621 of this subtitle.

(g) *Deposits.- There shall be deposited in the Bay Restoration Fund:*

(1) Funds received from the restoration fee;

(2) Net proceeds of bonds issued by the Administration;

(3) Interest or other income earned on the investment of money in the Bay Restoration Fund; and

(4) Any additional money made available from any sources, public or private, for the purposes for which the Bay Restoration Fund has been established.

(h) *Separate accounting for and use of certain funds.-*

(1) With regard to the funds collected under subsection (b)(1)(i), from users of an onsite sewage disposal system or holding tank that receive a water bill, (ii), and (iii) of this section, beginning in fiscal year 2006, the Comptroller shall:

(i) Establish a separate account within the Bay Restoration Fund; and

(ii) Disburse the funds as provided under paragraph (2) of this subsection.

(2) The Comptroller shall:

(i) Deposit 60% of the funds in the separate account to be used for:

1. Subject to paragraph (3) of this subsection, with priority first given to failing systems and holding tanks located in the Chesapeake and Atlantic Coastal Bays Critical Area and then to failing systems that the Department determines are a threat to public health or water quality, grants or loans for up to 100% of:

A. The costs attributable to upgrading an onsite sewage disposal system to the best available technology for the removal of nitrogen;

B. The cost difference between a conventional onsite sewage disposal system and a system that utilizes the best available technology for the removal of nitrogen;

C. The cost of repairing or replacing a failing onsite sewage disposal system with a system that uses the best available technology for nitrogen removal; or

D. The cost, up to the sum of the costs authorized under item 1B of this item for each individual system, of replacing multiple onsite sewage disposal systems located in the same community with a new community sewerage system that is owned by a local government and that meets enhanced nutrient removal standards.

2. The reasonable costs of the Department, not to exceed 8% of the funds deposited into the separate account, to:

A. Implement an education, outreach, and upgrade program to advise owners of onsite sewage disposal systems and holding tanks on the proper maintenance of the systems and tanks and the availability of grants and loans under item 1 of this item;

B. Review and approve the design and construction of onsite sewage disposal system or holding tank upgrades;

C. Issue grants or loans as provided under item 1 of this item; and

D. Provide technical support for owners of upgraded onsite sewage disposal systems or holding tanks to operate and maintain the upgraded systems; and

(ii) Transfer 40% of the funds to the Maryland Agriculture Water Quality Cost Share Program in the Department of Agriculture in order to fund cover crop activities.

(3) (i) Funding for the costs identified in paragraph (2)(i)1 of this subsection shall be provided in the following order of priority:

1. For owners of all levels of income, the costs identified in paragraph (2)(i)1A and B of this subsection; and

2. For low-income owners, as defined by the Department, the costs identified in paragraph (2)(i)1C of this subsection:

A. First, for best available technologies for nitrogen removal; and

B. Second, for other wastewater treatment systems.

(ii) Funding for the costs identified in paragraph (2)(i)1D of this subsection may be provided if:

1. The environmental impact of the onsite sewage disposal system is documented by the local government and confirmed by the Department;

2. It can be demonstrated that:

A. The replacement of the onsite sewage disposal system with a new community sewerage system is more cost effective for nitrogen removal than upgrading each individual onsite sewage disposal system; or

B. The individual replacement of the onsite sewage disposal system is not feasible; and

3. The new community sewerage system will only serve lots that have received a certificate of occupancy, or equivalent certificate, on or before October 1, 2008.

(4) The Comptroller, in consultation with the Administration, may establish any other accounts and subaccounts within the Bay Restoration Fund as necessary to:

(i) Effectuate the purposes of this subtitle;

(ii) Comply with the provisions of any bond resolution;

(iii) Meet the requirements of any federal or State law or of any grant or award to the Bay Restoration Fund; and

(iv) Meet any rules or program directives established by the Secretary or the Board.

(i) Use of Fund.-

(1) In this subsection, "eligible costs" means the additional costs that would be attributable to upgrading a wastewater facility from biological nutrient removal to enhanced nutrient removal, as determined by the Department.

(2) Funds in the Bay Restoration Fund shall be used only:

(i) To award grants for up to 100% of eligible costs of projects relating to planning, design, construction, and upgrade of a wastewater facility for flows up to the design capacity of the wastewater facility, as approved by the Department, to achieve enhanced nutrient removal in accordance with paragraph (3) of this subsection;

(ii) 1. In fiscal years 2005 through 2009, inclusive, for a portion of the costs of projects relating to combined sewer overflows abatement, rehabilitation of existing sewers, and upgrading conveyance systems, including pumping stations, not to exceed an annual total of \$5,000,000; and

2. In fiscal years 2010 and thereafter, for a portion of the operation and maintenance costs related to the enhanced nutrient removal technology, which may not exceed 10% of the total restoration fee collected from users of wastewater facilities under this section by the Comptroller annually;

(iii) As a source of revenue or security for the payment of principal and interest on bonds issued by the Administration if the proceeds of the sale of the bonds will be deposited in the Bay Restoration Fund;

(iv) To earn interest on Bay Restoration Fund accounts;

(v) For the reasonable costs of administering the Bay Restoration Fund, which may not exceed 1.5% of the total restoration fees imposed on users of wastewater facilities that are collected by the Comptroller annually;

(vi) For the reasonable administrative costs incurred by a local government or a billing authority for a water or wastewater facility collecting the restoration fees, in an amount not to exceed 5% of the total restoration fees collected by that local government or billing authority;

(vii) For future upgrades of wastewater facilities to achieve additional nutrient removal or water quality improvement, in accordance with paragraphs (6) and (7) of this subsection;

(viii) For costs associated with the issuance of bonds; and

(ix) Subject to the allocation of funds and the conditions under subsection (h) of this section, for projects related to the removal of nitrogen from onsite sewage disposal systems and cover crop activities.

(3) The grant agreement and State discharge permit, if applicable, shall require an owner of a wastewater facility to operate the enhanced nutrient removal facility in a manner that optimizes the nutrient removal capability of the facility in order to achieve enhanced nutrient removal performance levels.

(4) The grant agreement shall require a grantee to demonstrate, to the satisfaction of the Department, that steps were taken to include small business enterprises, minority business enterprises, and women's business enterprises by:

(i) Placing qualified small business enterprises, minority business enterprises, and women's business enterprises on solicitation lists;

(ii) Assuring that small business enterprises, minority business enterprises, and women's business enterprises are solicited whenever they are potential sources;

(iii) Dividing total requirements, when economically feasible, into small tasks or quantities to permit maximum participation of small business enterprises, minority business enterprises, and women's business enterprises;

(iv) Establishing delivery schedules, where the requirement permits, that encourage participation by small business enterprises, minority business enterprises, and women's business enterprises; and

(v) Using the services and assistance of the Maryland Department of Transportation and the Governor's Office of Minority Affairs in identifying and soliciting small business enterprises, minority business enterprises, and women's business enterprises.

(5) If the steps required under paragraph (4) of this subsection are not demonstrated to the satisfaction of the Department, the Department may withhold financial assistance for the project.

(6) (i) All wastewater facilities serving Maryland users that have contributed to the Bay Restoration Fund are eligible for grants under this section, including the Blue Plains Wastewater Treatment Plant in the District of Columbia.

(ii) Grants issued under paragraph (2)(i) of this subsection for upgrades to the Blue Plains Wastewater Treatment Plant may be awarded only if each party to the Blue Plains Intermunicipal Agreement of 1985 contributes a proportional share of the upgrade costs in accordance with the Blue Plains Intermunicipal Agreement of 1985, as revised and updated.

(7) Priority for funding an upgrade of a wastewater facility shall be given to enhanced nutrient removal upgrades at wastewater facilities with a design capacity of 500,000 gallons or more per day.

(8) (i) The eligibility and priority ranking of a project shall be determined by the Department based on criteria established in regulations adopted by the Department, in accordance with subsection (k) of this section.

(ii) The criteria adopted by the Department shall include, as appropriate, consideration of:

1. The cost-effectiveness in providing water quality benefit;
2. The water quality benefit to a body of water identified by the Department as impaired under Section 303(d) of the Clean Water Act;
3. The readiness of a wastewater facility to proceed to construction; and
4. The nitrogen and phosphorus loads discharged by a wastewater facility.



(9) A wastewater facility that has not been offered or has not received funds from the Department under this section or from any other fund in the Department may not be required to upgrade to enhanced nutrient removal levels, except as otherwise required under federal or State law.

(j) Bay Restoration Fund Advisory Committee.-

(1) There is a Bay Restoration Fund Advisory Committee.

(2) The Committee consists of the following members:

(i) The Secretaries of the Environment, Agriculture, Planning, Natural Resources, and Budget and Management, or their designees;

(ii) One member of the Senate, appointed by the President of the Senate;

(iii) One member of the House of Delegates, appointed by the Speaker of the House of Delegates;

(iv) Two individuals representing publicly owned wastewater facilities, appointed by the Governor;

(v) Two individuals representing environmental organizations, appointed by the Governor;

(vi) One individual each from the Maryland Association of Counties and the Maryland Municipal League, appointed by the Governor;

(vii) Two individuals representing the business community, appointed by the Governor;

(viii) Two individuals representing local health departments who have expertise in onsite sewage disposal systems, appointed by the Governor; and

(ix) One individual representing a university or research institute who has expertise in nutrient pollution, appointed by the Governor.

(3) The Governor shall appoint the chairman of the Committee from the designated members of the Committee.

(4) The Committee may consult with any stakeholder group as it deems necessary.

(5) (i) The term of a member is 4 years.

(ii) A member continues to serve until a successor is appointed.

(iii) The terms of the members appointed by the Governor are staggered as required by the terms provided for members of the Committee on October 1, 2004.

(iv) At the end of a term, a member continues to serve until a successor is appointed and qualifies.

(v) A member who is appointed after a term has begun serves only for the rest of the term and until a successor is appointed and qualifies.

(6) The Committee shall:

(i) Perform an analysis of the cost of nutrient removal from wastewater facilities;

(ii) Identify additional sources for funding the Bay Restoration Fund;

(iii) Make recommendations to improve the effectiveness of the Bay Restoration Fund in reducing nutrient loadings to the waters of the State;

(iv) Make recommendations regarding the appropriate increase in the restoration fee to be assessed in fiscal year 2008 and subsequent years as necessary to meet the financing needs of the Bay Restoration Fund;

(v) In consultation with the governing body of each county:

1. Identify users of onsite sewage disposal systems and holding tanks; and

2. Make recommendations to the governing body of each county on the best method of collecting the Bay Restoration Fee from the users of onsite sewage disposal systems and holding tanks that do not receive water bills;

(vi) Advise the Department on the components of an education, outreach, and upgrade program established within the Department under subsection (h)(2)(i)2 of this section;

(vii) Study the availability of money from the Fund for the supplemental assistance program within the Department to provide grants to smaller, economically disadvantaged communities in the State to upgrade their wastewater collection and treatment facilities;

(viii) Advise the Secretary concerning the adoption of regulations as described in subsection (k) of this section; and

(ix) Beginning January 1, 2006, and every year thereafter, report to the Governor and, subject to § 2-1246 of the State Government Article, the General Assembly on its findings and recommendations.

(7) Members of the Committee:

(i) May not receive compensation; but

(ii) Are entitled to reimbursement for expenses under the Standard State Travel Regulations, as provided in the State budget.

(8) The Department of the Environment, Department of Agriculture, Department of Planning, Department of Natural Resources, and Department of Budget and Management shall provide staff support for the Committee.

(k) Joint report.-

(1) Beginning January 1, 2009, and every year thereafter, the Department and the Department of Planning shall jointly report on the impact that a wastewater treatment facility that was upgraded to enhanced nutrient removal during the calendar year before the previous calendar year with funds from the Bay Restoration Fund had on growth within the municipality or county in which the wastewater treatment facility is located.

(2) (i) In preparing the report required under paragraph (1) of this subsection, the Department of the Environment and the Department of Planning shall:

1. Include the number of permits issued for residential and commercial development to be served by the upgraded wastewater treatment facility; and

2. Determine what other appropriate information is to be included in the report.

(ii) In determining the information that should be included in the report under subparagraph (i) of this paragraph, the Department of the Environment and the Department of Planning shall act:

1. In consultation with the Bay Restoration Fund Advisory Committee;  
and

2. With the assistance of the municipality and county in which an upgraded wastewater treatment facility is located.

(3) The Department and the Department of Planning shall submit the report required under paragraph (1) of this subsection to the President of the Senate, the Speaker of the House, the Senate Budget and Taxation Committee, the Senate Education, Health, and Environmental Affairs Committee, the House Appropriations Committee, the House Environmental Matters Committee, and the Governor, in accordance with § 2-1246 of the State Government Article.

(l) Regulations.- The Department shall adopt regulations that are necessary or appropriate to carry out the provisions of this section.

[2004, ch. 428; 2006, ch. 462; 2007, ch. 257; 2008, ch. 36, § 6; ch. 225, § 2; ch. 226, § 2; ch. 666; 2009, ch. 127.]

# MARYLAND WATER QUALITY FINANCING ADMINISTRATION

## Notes to the Financial Statements June 30, 2009 and 2008

### 11. BAY RESTORATION FUND ACTIVITY

During Fiscal Year ending June 30, 2009, the Wastewater Fund received cash deposits from the Maryland Comptroller's Office totaling \$53,355,991, which earned investment interest of \$5,719,761 for capital projects and \$120,694 for the 2008 indenture. Similarly, the Septics Fund (60% of septic fees) received cash deposits of \$9,370,656 which earned investment interest of \$664,364. The 40% of septic fee revenue transferred by the State Comptroller's office to the Department of Agriculture is not recorded or accounted for in the financial statements of the Administration. The Board of Public Works approves grant awards, which are implemented through signed agreements. Also, Capital disbursements of funds were made totaling \$19,119,115 for the wastewater treatment plant upgrades and \$9,976,803 for septic system projects. Wastewater Fund and Septics Fund fee revenue receivable at June 30, 2009 and 2008 was \$11,286,908 and \$607,673 and \$11,303,434 and \$494,212, respectively.

Below is a summary of grant activity through June 30, 2009:

#### WASTEWATER FUND:

	GRANT AWARD	CUMULATIVE GRANT DISBURSEMENTS	REMAINING GRANT BALANCE
<b>ENHANCED NUTRIENT REMOVAL PROJECTS</b>			
Aberdeen, Town of	\$ 200,000	\$ -	\$ 200,000
Allegany County	12,921,382	7,309,455	5,611,927
Anne Arundel County	400,000	-	400,000
Baltimore City	15,000,000	6,318,673	8,681,327
Bowie, City of	600,000	303,838	296,162
Brunswick, City of	8,263,000	8,263,000	-
Cambridge, City of	100,000	43,748	56,252
Chestertown, Town of	1,490,854	1,490,854	-
Crisfield, City of	4,231,000	4,125,896	105,104
Cumberland, City of	1,000,000	780,235	219,765
Delmar, Town of	200,000	60,362	139,638
Denton, Town of	200,000	26,050	173,950
Easton, Town of	8,660,000	7,477,872	1,182,128
Elkton, Town of	7,960,000	6,771,875	1,188,125
Emmitsburg, Town of	50,000	25,000	25,000
Federsburg, Town of	3,360,000	2,900,000	460,000
Hagerstown, City of	10,857,000	1,541,121	9,315,879
Harford County	50,000	31,580	18,420
Havre de Grace, City of	11,289,000	8,261,086	3,027,914
Howard County	530,000	-	530,000
Hurlock, Town of	941,148	941,148	-
Indian Head, Town of	6,484,000	5,486,089	997,911
La Plata, Town of	110,000	74,210	35,790
Leonardtown, Town of	510,000	-	510,000

MARYLAND WATER QUALITY FINANCING ADMINISTRATION

Notes to the Financial Statements  
June 30, 2009 and 2008

11. BAY RESTORATION FUND ACTIVITY (continued)

WASTEWATER FUND (continued)

	GRANT AWARD	CUMULATIVE GRANT DISBURSEMENTS	REMAINING GRANT BALANCE
<b>ENHANCED NUTRIENT REMOVAL PROJECTS</b>			
MD Environmental Services	\$ 100,000	\$ 71,687	\$ 28,313
Mount Airy, Town of	200,000	196,350	3,650
Perryville, Town of	4,000,000	1,051,064	2,948,936
Pocomoke, City of	200,000	-	200,000
Poolesville, Town of	100,000	-	100,000
Queen Anne's County	6,380,645	6,380,645	-
Salisbury, City of	3,000,000	2,476,141	523,859
St. Mary's County	200,000	-	200,000
Talbot County	2,000,000	1,777,934	222,066
Thurmont, Town of	300,000	-	300,000
Washington County	100,000	-	100,000
Westminster, City of	20,000	-	20,000
WSSC	3,325,000	-	3,325,000
<b>ENR SUBTOTAL</b>	<b>\$ 115,333,029</b>	<b>\$ 74,185,913</b>	<b>\$ 41,147,116</b>

	GRANT AWARD	CUMULATIVE GRANT DISBURSEMENTS	REMAINING GRANT BALANCE
<b>SEWER PROJECTS</b>			
Baltimore City	\$ 4,875,000	\$ 4,644,900	\$ 230,100
Denton, Town of	100,000	100,000	-
Emmitsburg, Town of	600,000	600,000	-
Frostburg, City of	1,800,000	1,800,000	-
Fruitland, City of	300,000	267,172	32,828
Mountain Lake Park, Town of	750,000	-	750,000
Port Deposit, Town of	178,199	178,199	-
Secretary, Town of	322,068	322,068	-
St. Mary's County	203,714	203,714	-
Talbot County	1,450,000	1,000,000	450,000
Taneytown, City of	200,000	200,000	-
Washington County	200,000	200,000	-
<b>SEWER SUBTOTAL</b>	<b>10,978,981</b>	<b>9,516,053</b>	<b>1,462,928</b>
<b>TOTAL A0111 (ENR &amp; SEWER)</b>	<b>\$ 126,312,010</b>	<b>\$ 83,701,966</b>	<b>\$ 42,610,044</b>

MARYLAND WATER QUALITY FINANCING ADMINISTRATION

Notes to the Financial Statements  
June 30, 2009 and 2008

11. BAY RESTORATION FUND ACTIVITY (continued)

SEPTICS FUND:

SEPTIC PROJECTS	GRANT AWARD	CUMULATIVE GRANT DISBURSEMENTS	REMAINING GRANT BALANCE
Anne Arundel Co Health Dept.	\$ 2,644,000	\$ 1,889,559	\$ 754,441
Calvert Co Dept of Planning/Zoning	2,515,000	871,566	1,643,434
Canaan Valley Institute/Frederick Co	1,462,000	721,531	740,469
Caroline Co Health Dept.	421,000	219,445	201,555
Cecil Co Health Dept.	650,000	-	650,000
Charles Co Health Dept.	1,504,000	601,817	902,183
Dorchester Co Health Dept.	409,000	46,690	362,310
Harford Co Health Dept.	1,038,000	-	1,038,000
Kent Co Dept. of Water/WW	597,000	596,404	596
Maryland Dept. of Natural Resources	287,000	-	287,000
Talbot Co Dept. of Natural Resources	1,168,000	751,427	416,573
Wicomico Co Health Dept.	2,719,000	825,833	1,893,167
Worcester Co Dept. of Environ. Programs	1,142,000	291,216	850,784
Individual Septic Grants (537)	6,140,201	5,983,148	157,053
<b>TOTAL SEPTIC (A0112)</b>	<b>\$ 22,696,201</b>	<b>\$ 12,798,636</b>	<b>\$ 9,897,565</b>

Below is a summary of grant activity through June 30, 2008:

WASTEWATER FUND:

ENHANCED NUTRIENT REMOVAL PROJECTS	GRANT AWARD	CUMULATIVE GRANT DISBURSEMENTS	REMAINING GRANT BALANCE
Aberdeen, Town of	\$ 200,000	\$ -	\$ 200,000
Allegany County	12,763,382	2,333,382	10,430,000
Anne Arundel County	400,000	-	400,000
Baltimore City	15,000,000	6,318,673	8,681,327
Bowie, City of	600,000	175,277	424,723
Brunswick, City of	8,263,000	8,151,038	111,962
Cambridge, City of	100,000	-	100,000
Chestertown, Town of	2,000,000	1,340,601	659,399
Crisfield, City of	4,231,000	3,870,957	360,043
Cumberland, City of	1,000,000	311,479	688,521
Delmar, Town of	200,000	60,362	139,638
Easton, Town of	8,660,000	7,387,114	1,272,886
Elkton, Town of	7,960,000	6,022,861	1,937,139

MARYLAND WATER QUALITY FINANCING ADMINISTRATION

Notes to the Financial Statements  
June 30, 2009 and 2008

11. BAY RESTORATION FUND ACTIVITY (continued)

WASTEWATER FUND (continued)

	GRANT AWARD	CUMULATIVE GRANT DISBURSEMENTS	REMAINING GRANT BALANCE
<b>ENHANCED NUTRIENT REMOVAL PROJECTS</b>			
Emmitsburg, Town of	\$ 50,000	\$ 25,000	\$ 25,000
Federalsburg, Town of	3,360,000	699,668	2,660,332
Hagerstown, City of	650,000	629,501	20,499
Havre de Grace, City of	11,289,000	4,074,671	7,214,329
Harford County	50,000	-	50,000
Howard County	530,000	-	530,000
Hurlock, Town of	941,148	941,148	-
Indian Head, Town of	6,484,000	4,902,554	1,581,446
La Plata, Town of	110,000	-	110,000
Leonardtown, Town of	510,000	-	510,000
MD Environmental Services	100,000	65,120	34,880
Mount Airy, Town of	200,000	192,953	7,047
Perryville, Town of	200,000	-	200,000
Queen Anne's County	6,380,645	6,380,645	-
Salisbury, City of	3,000,000	2,389,378	610,622
St. Mary's County	200,000	-	200,000
Talbot County	2,000,000	1,777,934	222,066
Thurmont, Town of	300,000	-	300,000
Washington County	100,000	-	100,000
Westminster, City of	20,000	-	20,000
WSSC	3,325,000	-	3,325,000
ENR SUBTOTAL	<u>\$ 101,177,175</u>	<u>\$ 58,050,316</u>	<u>\$ 43,126,859</u>
	GRANT AWARD	CUMULATIVE GRANT DISBURSEMENTS	REMAINING GRANT BALANCE
<b>SEWER PROJECTS</b>			
Baltimore City	\$ 3,875,000	\$ 3,644,900	\$ 230,100
Emmitsburg, Town of	600,000	600,000	-
Frostburg, City of	1,800,000	959,995	840,005
Port Deposit, Town of	200,000	-	200,000
Secretary, Town of	350,000	38,420	311,580
St. Mary's County	230,000	-	230,000
Talbot County	1,000,000	1,000,000	-
Taneytown, City of	200,000	89,220	110,780
Washington County	200,000	200,000	-
SEWER SUBTOTAL	<u>8,455,000</u>	<u>6,532,535</u>	<u>1,922,465</u>
TOTAL A0111 (ENR & SEWER)	<u>\$ 109,632,175</u>	<u>\$ 64,582,851</u>	<u>\$ 45,049,324</u>





## **Bay Restoration Fund Advisory Committee**

**Robert M. Summers, Ph.D., Acting Chairman**

## **Annual Status Report January 2008**

**Report to Governor Martin O'Malley  
The Senate Education, Health, and Environmental Affairs Committee  
And the House Environmental Matters Committee**



## EXECUTIVE SUMMARY

The Bay Restoration Advisory Committee is pleased to present to Governor Martin O'Malley and the Maryland Legislature, its third annual Legislative Update Report. Great strides have been made in implementing this historic Bay Restoration Fund, but many challenges remain as we begin 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

- The Comptroller's Office and the Maryland Department of the Environment, in cooperation with local government wastewater billing authorities implemented the Bay Restoration Fund fee collection process. Since January 1, 2005 the local billing authorities have been collecting the fee from wastewater users and since October 1, 2005 from Onsite Sewage Disposal System (OSDS) users.
- As of November 30, 2007, the Comptroller of Maryland has deposited \$152.03 million to the Maryland Department of the Environment for the Wastewater Treatment Plant fund, \$18.35 million to the Maryland Department of Environment for the Septic Systems Upgrade fund, and \$12.23 million to the Maryland Department of Agriculture for Cover Crop Program.
- Enhanced Nutrient Removal (ENR) upgrades of the State's major sewage treatment plants are currently underway. Seven facilities, Celanese in Allegany County, Hurlock in Dorchester County, Aberdeen Proving Ground in Harford County, Easton in Talbot County, Swan Point in Charles County, Kent Island in Queen Anne's County, and North East River in Cecil County, have been completed and are in operation. Eight facilities are under construction, 13 are under design, and 30 are in planning. MDE is continuing to work to bring the remaining 8 major systems into the program by urging the facilities to proceed with the ENR upgrade and/or by adding nutrient loading limits and compliance schedule in the discharge permits.
- All 23 counties and Baltimore City have identified and begun billing of OSDS users.
- BRF Advisory Committee has established a workgroup including local health and public works agencies and industry representatives, to develop specifications for approved OSDS technologies. Referred to as Best Available Technology (BAT) Workgroup, this group of professionals is responsible for establishing the procedures for determining what specific types of systems will be eligible for grants under the OSDS portion of the BRF. The BAT workgroup has adopted a protocol used by the Environmental Protection Agency/ Environmental Technology Verification (EPA/ETV) to establish a procedure to verify the performance of nitrogen reducing OSDS. A review team comprised of two engineers from MDE and one County Environmental Health Director are reviewing applications to ensure that each technology has been third party evaluated to a standard at least as stringent as the EPA/ETV's. Currently twelve proprietary technologies have been evaluated by the program and are eligible for BRF funding in Maryland.
- MDE updated the video, "Onsite Sewage Disposal Systems – Protecting Your System – Preserving the Bay". This video, which won a prestigious Aegis Award for video production, teaches homeowners about the care of septic systems and about the connection between septic systems and the

Bay while also informing property owners about the availability of BRF funds to upgrade septic systems.

- The Maryland Department of Agriculture dedicates its portion of BRF funds for the implementation of the statewide Cover Crop Program. In FY2008 farmers applied for 330,000 acres, 44% of Maryland's Chesapeake Bay Program 2010 goal. MDA approved 300,000 acres in keeping with the budget allocation. Funds projected from BRF annually will support approximately 230,000 acres of cover crops in the program. Cover crops are planted in the fall to tie up nitrogen remaining from the previous crop. They are recognized as the single most cost effective best management practice (BMP) available to control nitrogen movement to groundwater and subsequently the Bay. Cover crops also prevent soil erosion and improve soil quality.
- MDE executed Memorandums of Understanding with Salisbury University and Towson University to develop a statewide Geographic Information System (GIS) data layer that will provide the geographic location and significant information for all septic systems in the State. This data will allow for improved modeling on septic system impacts and help direct available funding to areas where upgrading septic system will make the biggest impact. The GIS information will also be used to track the BAT units installed through the program. The MOU with Salisbury University deals with the identification of the OSDS completed by January 1<sup>st</sup> of 2008. Currently, the spatial identification of Maryland's OSDS is nearly in completion and the deliverables are currently being QA/QC before its transfer to Towson University. At Towson University the information will be entered into the OSDS database with a Geospatial Data Manager (GDM). The GDM will be used to facilitate the management of the data through a secure, user-friendly, browser-based application. The database is expected to be ready by July of 2008.
- MDE and Maryland Department of Planning (MDP) have initiated efforts to implement the requirements of House Bill 893, which was passed in the 2006 session and requires MDE and MDP, in consultation with local governments, to report on the impact that an ENR upgraded wastewater treatment plant has on growth in the jurisdiction it serves. The first report is due as part of the January 2009 Bay Restoration Fund Advisory Committee Annual Report.

### **Challenges**

- Wastewater treatment plant construction costs on recently opened bids are significantly higher than the original pre-planning level estimates. As a result the total capital cost for the ENR Upgrades is likely to be higher than the \$750 million to \$1 billion range estimated at the time of legislation. The escalating costs can be attributed to increasing energy, steel and concrete costs. Also, these estimates were made as an order of magnitude estimate prior to the passage of the Bay Restoration Fund legislation before any detailed engineering analyses had been done at any of the facilities. Based on the estimated revenue projections and bond issuance, it is estimated the current fee schedule (\$30/year) can help finance approximately \$800 million in ENR upgrades. Since the funding gap is not expected to occur until 2012, the Committee believes we should allow for two years to get better cost estimates on some of the larger ENR projects, before making any recommendation on how to address the anticipated funding shortfall.

- MDE is seeing increasing requests for allocation of BRF funding to assist minor facilities with upgrade costs and some have suggested that a portion of the funding be redirected to minor facilities, which are not as cost-effective in terms of nutrient removal.
- There is a concern that individuals having their septic systems upgraded with the BRF will be subject to taxation based on the value of the upgrade or grant. This serves as a deterrent to property owners who may otherwise want to participate in a voluntary program. The Federal tax code allows the Secretary of the U.S. Department of Agriculture (USDA) to declare grant programs, which are for the purpose of improving the environment, as actions that do not result in income for the property owner. Hence, these grants are considered tax-exempt. In a letter to the U.S. Secretaries of Agriculture and Treasury, Secretary Wilson requested a ruling in favor of Maryland's position that these grants meet the requirements of federal law for a tax exemption. Under Secretary USDA, Mark Rey responded that we should send additional information to John Dondero, Branch Chief, Environmental Improvement Programs, Natural Resources Conservation Services (NRCS) for review. The NRCS have been provided with the requested information.
- Advanced septic systems that remove nitrogen require electricity and have moving parts that require regular maintenance. The EPA strongly recommends that management systems be in place to ensure the long-term performance of advanced septic systems. The BRF has no provisions for ongoing management of nitrogen reducing septic systems.

### **Conclusions**

The implementation of the Bay Restoration Fund program has been initiated successfully and is proceeding in the right direction at a good pace.

With the development and implementation of the BayStat process MDE has improved its benchmarks and tracking of implementation efforts to ensure that projects remain on schedule.

Due to the lack of detailed engineering cost estimates for the three largest sewage treatment plants (Blue Plains, Back River and Patapsco), the Committee believes it is still too early to determine what, if any, modifications should be made to the Bay Restoration Fund fee structure.

## **Purpose of this Report**

Section 1605.2 of Chapter 9 of 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.

## **Programs and Administrative Functions**

### **Comptroller's Office:**

The role of the Comptroller of Maryland (CoM) is to act as the collection agent for the Bay Restoration Fund (BRF) and make distributions to the Maryland Department of the Environment (MDE) and the Maryland Department of Agriculture (MDA) as required.

In the second year of administering the BRF, the CoM is beginning the compliance phase of the fee administration. The law specifies that the BRF shall be administered under the same provisions allocable to administering the sales and use tax. Granted that authority, the CoM is beginning the audit process for both filers and non-filers of BRF quarterly reports.

For non-filers, CoM has begun contacting the billing authorities and users who have failed to file or pay the BRF and are obtaining sufficient documentation to make an assessment and begin collection activity. Federal government billing authorities and users have to date refused to participate in the BRF process. An agreement was obtained by MDE with several defense organizations having wastewater treatment plants to upgrade their systems over a defined period of time and they were then exempted from the BRF by MDE. A copy of the agreement was provided by MDE to CoM, and those BRF accounts were subsequently placed in an inactive status. The CoM is now preparing to audit billing authorities who are not collecting the BRF from federal agencies and will make assessments as appropriate against those billing authorities for those uncollected fees.

Additionally, the CoM is working with MDE to obtain historical flow data from billing authorities and users, which will be compared to returns filed by billing authorities and users to ensure accurate BRF returns have been filed and paid.

The CoM will begin reporting the results of such compliance activities during FY2008.

### **Maryland Department of the Environment:**

Three units within the Maryland Department of the Environment (MDE) are involved in the implementation of the Bay Restoration Fund.

#### **I. Maryland Water Quality Financing Administration:**

The Maryland Water Quality Financing Administration (MWQFA) was established under Annotated Code of Maryland, Title 9, Subtitle 16 with the primary responsibility for the financial management and fund accounting of the Water Quality Revolving Loan Fund, the Drinking Water Revolving Loan Fund

and the newly created Bay Restoration Fund. Specifically for the Bay Restoration Fund, the MWQFA is responsible for the issuance of revenue bonds, payment disbursements, and the overall financial accounting including audited financial statements.

II. Water Quality Infrastructure Program:

The Water Quality Infrastructure Program (WQIP) manages the engineering, planning and project management of federal capital funds consisting of federal EPA construction grants, special federal appropriations grants, and state revolving loan funds for water quality and drinking water projects. The Program also manages State grant programs including Special Water Quality/Health, Small Creeks and Estuaries Restoration, Stormwater, Biological Nutrient Removal, Water Supply Financial Assistance and the State match to the federal grants. There may be as many as 250 active capital projects ranging in levels of complexity at any given time. Individual projects range in value from \$10,000 to \$50 million. A single project may involve as many as eight different funding sources and multiple construction and engineering contracts over a period of three to ten years. WQIP is responsible for assuring compliance with the requirements for each funding source while achieving the maximum benefit of funds to the recipient and timely completion of the individual projects. WQIP consists of three divisions, Bay Restoration Fund Program Division, a Project Management Division, and a Planning division.

III. Wastewater Permits Program:

The Wastewater Permits Program (WWPP) issues permits for surface and groundwater discharges from municipal and industrial sources and oversees onsite sewage disposal and well construction programs delegated to local approving authorities. Large municipal and all industrial discharges to the groundwater are regulated through individual groundwater discharge permits. All surface water discharges are regulated through combined state and federal permits under the National Pollutant Discharge Elimination System (NPDES). These permits are issued for sewage treatment plants, some water treatment plants and industrial facilities that discharge to State surface waters. These permits are designed to protect the quality of the body of water receiving the discharge.

Anyone who discharges wastewater to surface waters needs a surface water discharge permit. Applicants include industrial facilities, municipalities, counties, federal facilities, schools, and commercial water and wastewater treatment plants, as well as, treatment systems for private residences that discharge to surface waters.

WWPP will ensure that the enhanced nutrient removal goals and/or limits are included in the discharge permit of facilities upgraded under the BRF. To accommodate the implementation of the Onsite Sewage Disposal System (OSDS) portion of the Bay Restoration Fund, the WWPP Deputy Program Manager has been designated as the lead for the onsite sewage disposal system upgrade program.

**Maryland Department of Agriculture:**

The Maryland Department of Agriculture (MDA) delivers soil conservation and water quality programs to agricultural landowners and operators using a number of mechanisms to promote and support the implementation of best management practices (BMPs). Programs include information, outreach, technical

assistance, financial assistance and regulatory requirements under the Water Quality Improvement Act. Soil Conservation Districts are the local delivery system for many of these programs.

The Chesapeake Bay Restoration Fund provides a dedicated fund source to support the Cover Crop Program. In prior years, funding fluctuated and program guidelines were modified accordingly to try to get the best return on public investment. Results from a 2005 survey of 3000 farm operators, who had previously participated in MDA Water Quality Incentive programs, indicated that changing Cover Crop Program guidelines and funding uncertainty discouraged participation. The survey and a follow up 2006 survey were used to make program adjustments, with a goal to maximizing program participation and water quality benefits. Program adjustments included increasing the acreage enrollment cap, on-line access to application forms, increased incentives for early planting and split payments. Future program eligibility adjustments may occur in response to an evaluation of targeting mechanisms initiated at the request of Governor O'Malley.

FY2008 saw application requests for 330,000 acres, exceeding available funds. BRF funds approximately 120,000 acres in traditional cover crops. A separate commodity cover crop program was also available allowing farmers to harvest the crop for a reduced payment provided they do not use fertilizer in the fall. This portion of the program is authorized through MDA's General Fund budget. The commodity cover crop program accounted for 58,000 acres of the total approved acres. Because of limited funding in the commodity cover crop program, approximately 250 applicants requesting to enroll 25,000 acres were not approved to participate.

In FY2007, an agreement with the Maryland Grain Producers Utilization Board (MGPUB) resulted in MDA and the MACS Office administering a Hulless Barley Program within the commodity cover crop program, which does not utilize BRF. The purpose is to provide experience for producers who plant hulless barley as a cover crop for its use in the future as a feedstock to produce ethanol. The MGPUB has initiated actions to construct an ethanol plant using hulless barley as a feedstock in Maryland. The pilot provides an added incentive for operators who choose to grow hulless barley as part of the commodity cover crop option. In FY2007, the first year of the Hulless Barley Program, 692 acres were planted.

MDA administers the Cover Crop Program through the Maryland Agricultural Water Quality Cost Share Program or MACS. MACS provides financial assistance to farm operators to help them implement approximately 30 BMPs. Cover crops are one of the most cost effective methods for tying up excess nitrogen from the soil following the fall harvest of crops. They minimize nitrogen loss caused by leaching into nearby streams and aquifers, prevent soil erosion and improve soil quality.

### **Maryland Department of Planning:**

The Maryland Department of Planning (MDP) is a statutory member of Bay Restoration Fund Advisory Committee (BRF AC). The Department's general mandate is to advise State agencies, local governments, the General Assembly, and others on planning matters. More specifically, the Department is focused on implementation of State Planning and Smart Growth policies and programs at all levels of government. Generally, the BRF program will support State Planning and Smart Growth policies to the degree that WWTP capacity serves existing and new development in State recognized PFAs.



There are several specific functions that MDP carries out that related directly or indirectly to the BRF programs. An additional specific reporting responsibility was added by HB 893 in the 2007 legislative session.

1. State Clearinghouse Review

All State and federal financial assistance applications, including those for BRF funds are required to be submitted to the State Clearinghouse within MDP. In turn, MDP sends notice to all relevant State agencies and local jurisdictions for review and comment. The Clearinghouse subsequently notifies the applicant and funding agency of any comments received. This review ensures that the interests of all reviewing parties are considered before the project can be sent to the Board of Public Works for approval.

2. County Water and Sewerage Plan and amendment review and comment.

MDP is directed by law to advise MDE concerning the consistency of County Water and Sewerage Plans and amendments with “local master plan and other appropriate matters” such as State Smart Growth policy (Environment Article 9-507 (b)(2)). MDP carries out this review and advises MDE accordingly for consideration before MDE makes an approval decision on Water and Sewerage Plans or amendments.

The law also requires that County Water and Sewerage Plans and amendments must be consistent with the local master or comprehensive plans. Therefore, if a plan or amendment is not consistent with a comprehensive plan, it is subject to disapproval by MDE. Since facility construction, discharge, and other permits must also be consistent with the County Water and Sewerage Plans, the legal chain, from comprehensive plans to Water and Sewerage Plans to permits, provides some assurance that all BRF projects are consistent with local plans and State Smart Growth policy before funding is approved and construction can begin. As noted above, BRF funds will support State Planning and Smart growth policies to the extent that local comprehensive plans and County Water and Sewerage Plans reflect and implement these policies.

3. Local (county and municipal) comprehensive plan review and comment

Local Comprehensive Plans and amendments are also subjected to a State interagency review process before they can be adopted by a local governing body. However, since these plans are not subject to State approval, comments provided are advisory only. Depending on the wishes of the jurisdiction, MDP works closely with, and provides technical assistance to, local governments in the processes leading to adoption of local comprehensive plans and advises them on planning issues and methods supporting State Planning and Smart Growth policies and practices.

### Bay Restoration Fund Status

The Bay Restoration Fund (BRF) fees collected from wastewater treatment plant users are identified as “Wastewater” fees and those collected from users on individual onsite septic systems as “Septic” fees. These fees are collected by the State Comptroller’s Office and deposited as follows:

- Wastewater fees (net of local administrative expenses) are deposited into MDE’s “Wastewater Fund.”
- Sixty percent (60%) of the Septic fees (net of local administrative expenses) are deposited into MDE’s “Septic Fund.”
- Forty percent (40%) of the Septic fees (net of local administrative expenses) are deposited into Maryland Department of Agriculture’s (MDA) “Septic Fund.”

The status of the cash deposits from the State Comptroller’s Office to MDE and MDA for each of the sub-funds identified above, as of November 30, 2007, is as follows:

#### Wastewater Fund (MDE 100% for ENR & Sewer Infrastructure)

<u>Sources:</u>		<u>Uses:</u>	
Cash Deposits	\$152,030,393	Capital Grant Awards	\$90,484,530
Cash Interest Earnings	\$ 7,678,484	Admin. Expense Allowance	\$ 2,280,456
<b>Total</b>	<b>\$159,708,877</b>	<b>Total</b>	<b>\$92,764,986</b>

ENR Grants:	BPW Date	Grant Award
Kent Island/Queen Anne’s- ENR	20-Jul-05	\$ 6,493,000
Crisfield-ENR	20-Jul-05	\$ 4,231,000
Salisbury-ENR	31-Aug-05	\$ 3,000,000
Hurlock-ENR	31-Aug-05	\$ 941,148
Easton-ENR	31-Aug-05	\$ 8,660,000
Alleghany/Celenese-ENR	31-Aug-05	\$ 2,333,382
Talbot/St Michaels- ENR	21-Sep-05	\$ 2,000,000
Cambridge ENR (planning phase)	2-Nov-05	\$ 100,000
Chestertown	18-Jan-06	\$ 2,000,000
Federalburg ENR	1-Feb-06	\$ 360,000
Indian Head ENR	15-Feb-06	\$ 6,484,000
Perryville ENR	3-May-06	\$ 200,000
Mount Airy ENR	17-May-06	\$ 200,000
Elkton ENR	17-May-06	\$ 7,500,000
Bowie ENR	17-May-06	\$ 100,000
Aberdeen ENR	7-Jun-06	\$ 200,000
Balto City/Patapsco ENR	30-Aug-06	\$ 10,000,000

Balto City Back River WWTP ENR	30-Aug-06	\$	5,000,000
City of Brunswick/WWTP ENR	30-Aug-06	\$	8,263,000
Havre de Grace WWTP/ENR	6-Dec-06	\$	400,000
Bowie ENR	6-Dec-06	\$	500,000
Cumberland WWTP ENR	3-Jan-07	\$	1,000,000
MD Env Serv/Freedom District WWTP ENR	3-Jan-07	\$	100,000
WSSC/Damascus WWTP ENR	3-Jan-07	\$	325,000
Emmitsburg WWTP ENR	3-Jan-07	\$	50,000
WSSC/Western Branch WWTP ENR	3-Jan-07	\$	1,000,000
Leonardtown WWTP ENR	3-Jan-07	\$	510,000
Delmar WWTP ENR	14-Feb-07	\$	200,000
Elkton ENR (increase)	6-Jun-07	\$	460,000
La Plata ENR	11-Jul-07	\$	110,000
Havre de Grace WWTP/ENR (increase)	11-Jul-07	\$	10,889,000
Sub-Total ENR Grants		\$	83,609,530

Sewerage Projects	BPW Date		Grant Award
Balt City Gwynns Run Sewer	2-Nov-05	\$	1,575,000
Talbot/St Michaels Sewer Coll	3-May-06	\$	500,000
Emmitsburg/ South Seton Ave Sewer Line	7-Jun-06	\$	600,000
Talbot/St Michaels Sewer Coll. #2	20-Sep-06	\$	500,000
Balto City/Greenmount Sewer Rehab	20-Sep-06	\$	1,300,000
Wash. Co. Halfway Inflow/Infilt. Reduction	18-Oct-06	\$	200,000
Secretary Infiltration/Inflow Reduction	3-Jan-07	\$	200,000
Frostburg Combined Sewer Overflow	3-Jan-07	\$	1,000,000
Balto City/Greenmount Sewer Rehab #2	12-Sep-07	\$	1,000,000
Sub-Total SEWERAGE Grants		\$	6,875,000
TOTAL WWTP FUND GRANT AWARDS		\$	90,484,530

**Septic Fund (MDE 60% for On-Site Disposal System upgrades)**

<u>Sources:</u>		<u>Uses:</u>	
Cash Deposits	\$18,351,241	Capital Grant Awards	\$ 9,223,734
Cash Interest Earnings	\$ 803,315	Admin. Expense Allowance	\$ 1,468,099
Total	\$19,154,556	Total	\$10,691,833

SEPTIC Program	BPW Date	Grant Award
Anne Arundel Co Health Dept	06-Dec-06	\$ 2,644,000
Calvert Co Dept of Planning/Zoning	06-Dec-06	\$ 933,000
Charles Co Health Dept	06-Dec-06	\$ 604,000
Canaan Valley Institute (7/11/07)/Frederick Co	06-Dec-06	\$ 712,000
Kent Co Dept of Water/WW	06-Dec-06	\$ 597,000
Maryland Dept of Natural Res./Queen Anne's Co	06-Dec-06	\$ 287,000
Caroline Co Health Dept	06-Dec-06	\$ 144,000
Talbot Co Dept of Public Works	06-Dec-06	\$ 1,168,000
Wicomico Co Health Dept.	06-Dec-06	\$ 771,000
Worcester Co Dept of Envir Programs	07-Dec-06	\$ 1,142,000
Individual Septic Systems (6 Homes)	N/A	\$ 80,532
<b>TOTAL SEPTIC FUND GRANT AWARDS</b>		<b>\$ 9,082,532</b>

**Septic Fund (MDA 40% for Cover Crops)**

<u>Sources*:</u>		<u>Uses:</u>	
Cash Deposits	\$12,234,161	Grant Awards	\$ 7,381,602
		Admin. Expense	\$ 246,043
		Total	\$ 7,627,645

Maryland farmers have submitted applications to plant over 330,000 acres of cover crops in FY2008, which equates to a maximum funding demand of over \$13.2M. Contracts with a total value of \$12M were approved. Given the normal slippage (later plantings, fewer acres, etc., than planned), the anticipated actual expenditure this program year is \$8M, which includes watershed specific federal funds and general funds dedicated to traditional cover crop acres and commodity cover crop acres.

**Potential Funding Gap and Recommended Action:**

Based on current total estimated ENR capital cost of \$1.038 billion and BRF wastewater (WW) fund projected cash flow, the WW fund can provide \$807 million in grants and is expected to have a funding deficit of \$231 million by 2018. Under the current ENR project schedule and anticipated cash flow needs, the WW fund will be able to provide up to 100% grants for ENR expenditures through FY 2011. This will be accomplished by issuing approximately \$545 million in revenue bonds in addition to using

the Bay fee cash balances (See Attachment 1 for details). The primary reasons for the anticipated funding gap are the higher ENR project cost and the 15-year term limitation on the bay bonds, as required under the Maryland constitution for State supported debt. MDE investigated the issuance of 20-year bonds, which would have allowed the State to issue \$100 million more in revenue bonds than the 15-year term. However, it was later determined by the State Treasurer that since the BRF fee is assessed practically from all State residents, any bonds leveraged against the fee must have the same terms as the General Obligation debt, which is set by the State constitution not to exceed 15 years.

Since the ENR funding deficit is not anticipated until FY 2012 and ENR project costs for the big three projects (Back River, Patapsco, and Blue Plains WWTPs) are very preliminary, the Advisory Committee, at this time, is not recommending any change to the Bay Restoration fee, which is currently \$2.50 per month per Equivalent Dwelling Unit.

### **Update on Fees from Federal Facilities**

On July 19, 2006, the State of Maryland and the Department of Defense (DoD) signed a Memorandum of Understanding (MOU) to resolve a dispute regarding the applicability of the Bay Restoration Fee to DoD. The State's legal position is that the federal government is not exempt from paying the Bay Restoration Fund (BRF) fee; however, the DoD asserts that the BRF fee is a tax and that the State may not tax the federal government. On July 19, 2006, with the advice of counsel, the State chose to settle the matter with DoD rather than to litigate. In the MOU, neither party concedes any legal position with respect to the BRF fee. The MDE has agreed to accept DoD's proposal to undertake nutrient removal upgrades at certain DoD-owned wastewater treatment plants at its own expense (estimated cost \$22.5 million) in lieu of paying the BRF fee. No other Federal agency is exempt from paying the BRF fee.

One DoD facility, Aberdeen Proving Ground – Aberdeen, has been upgraded to achieve ENR level of treatment. MDE will continue to work with DoD to upgrade the other facilities as specified in the MOU.

### **Wastewater Treatment Plant Upgrades With Enhanced Nutrient Removal (ENR)**

#### **Status of Upgrades:**

The Maryland Department of the Environment (MDE) is implementing a strategy known as Enhanced Nutrient Removal (ENR) and is providing financial assistance to upgrade wastewater treatment facilities in order to achieve ENR. The ENR Strategy and the Bay Restoration Fund set forth annual average nutrient goals of WWTP effluent quality of Total Nitrogen (TN) at 3 mg/l as "N" and Total Phosphorus (TP) at 0.3 mg/l as "P", where feasible, for all significant wastewater treatment plants with a design capacity of 0.5 million gallons per day (MGD) or greater. Other wastewater treatment plants may be selected by the Department for upgrade on a case-by-case basis, based on the cost effectiveness of the upgrade, environmental benefits and other factors. Specifically, Maryland's 66 major sewage treatment facilities are targeted for the initial upgrades.

MDE has taken advantage of the momentum generated by the existing biological nutrient removal (BNR) program and has proceeded with the ENR strategy as a continuation to the BNR. Facilities that were in the planning or design phase to upgrade to BNR (achieving 8 mg/l total nitrogen) were asked to revise their plans to include ENR capability to achieve 3 mg/l total nitrogen and 0.3 mg/l total phosphorus. Consequently, ENR upgrades are underway at many plants, and to date, seven facilities, Celanese in Allegany County, Hurlock in Dorchester County, Aberdeen Proving Ground in Harford County, Easton in Talbot County, Swan Point in Charles County, Kent Island in Queen Anne's County, and North East River in Cecil County, have been completed and are in operation. Please see Attachments 2 through 8 for more information on facilities currently in the ENR operation. In addition, eight facilities are under construction, 13 are under design, and 30 are in planning. MDE continues to work to bring the remaining 8 major systems into the program.

#### **Minor Facilities:**

Under the ENR strategy, minor facilities (with design flow of less than 0.5 MGD) will not be targeted for funding under the BRF before the upgrade of the 66-targeted major facilities is completed. Likewise, minor facilities were not targeted for upgrade under the original BNR program. Most minor facilities are currently achieving the secondary treatment level of approximately 18 mg/l total nitrogen. Some of the minor facilities, which have an average of 0.11 MGD flow, will be discharging more pounds of nitrogen per year than ENR upgraded major facilities that have an average flow of 0.5 MGD. Accordingly, MDE in consultation with the Advisory Committee, the Department of Budget and Management, and subject to the approval of the Governor's Office, is considering a policy to continue the BNR program in future years for BNR/ENR upgrades at these minor facilities.

Major facilities should continue to have the priority for the BNR funding. It should be noted that due to design limitation and/or space requirement many major facilities are required to refine their BNR process before they could be upgraded to ENR. For example some facilities have been designed to achieve BNR level of treatment only during the summer months. In the mean time, BRF funding can only be provided for ENR from year round BNR. Therefore, funding gap would exist without the BNR funding.

#### **House Bill 893 Implementation:**

House Bill 893, enacted on April 24, 2007, requires that: "Beginning January 1, 2009, and every year thereafter, the Department (MDE) and the Department of Planning shall jointly report on the impact that a wastewater treatment facility that was upgraded to Enhanced Nutrient Removal during the calendar year before the previous calendar year with funds from the Bay Restoration Fund had on Growth within the municipality or county in which the wastewater treatment facility is located."

As required by this legislation, MDP and MDE are determining the appropriate information to be included in the annual report in consultation with the Bay Restoration Fund Advisory Committee.

## **Onsite Sewage Disposal System (OSDS) Upgrade Program**

### **OSDS Identification and Billing**

There are an estimated 420,000 OSDS's in Maryland that needed to be identified by local jurisdictions and billed. Working with the Advisory Committee, Maryland Department of Planning and the State Department of Assessment and Taxation, all jurisdictions have identified and are now billing septic system users.

### **Best Available Technology (BAT)**

The Bay Restoration Fund legislation states that funds generated by the OSDS users fee may be used for the following:

“ With priority given to failing systems and holding tanks located in the Chesapeake Bay and Atlantic Coastal Bays Critical Area, grants or loans for up to 100% of:

- A. The costs attributable to upgrading an onsite sewage disposal system to the best available technology for removal of nitrogen; or
- B. The cost difference between a conventional onsite sewage disposal system and a system that utilizes the best available technology for the removal of nitrogen;”

It was necessary to develop a procedure for determining which technologies should be considered grant eligible. The BRF Advisory Committee established a workgroup including local health and public works agencies and industry representatives, to develop specifications for approved OSDS technologies. Referred to as Best Available Technology (BAT) Workgroup, this group of professionals was responsible for establishing the procedures for determining what specific types of systems will be eligible for grants under the OSDS portion of the BRF. MDE and the BAT workgroup reviewed programs in other states, published research and third party verification programs. Current research indicates that nitrogen discharges from OSDS's can be reduced by 50 to 60 percent.

The BAT workgroup adopted a protocol used by the Environmental Protection Agency for Environmental Technology Verification (EPA/ETV) to establish a procedure to verify the performance of proprietary nitrogen reducing OSDS. Twelve proprietary technologies have been evaluated by the EPA/ETV program and are eligible for BRF funding in Maryland. A review team comprised of two engineers from MDE and one County Environmental Health Director review applications to ensure that each technology has been third party evaluated to a standard at least as stringent as the EPA/ETV's.

For non-proprietary technologies the vendor/applicant must provide a detailed description of the technology process illustrating sound scientific fundamentals and engineering practice. Acceptable technologies may be approved as a highly managed system. Highly managed systems must have either a renewable operating permit or be managed as part of a service district. No jurisdictions have availed themselves of the use of highly managed systems.

The BAT protocol requires an application for technology review to be submitted to MDE. The technical review team with experts in the field will review each application for approval of a particular technology and information collected to verify the effectiveness of that technology. If the technology has not

undergone independent third-party verification or certification indicating consistent reduction of better than 50 percent of the nitrogen, the technology will be allowed an unlimited number of types of installations. These technologies will be monitored for a one to two year field evaluation period. After this period the technical review team will determine if the technology receives an unconditional approval, needs further field testing or is rejected from the program. This evaluation period will allow the Department to further define what should be considered a BAT and to perform cost benefits analyses.

### **BAT Project Selection**

The goal of the OSDS portion of the BRF is to curtail the amount of nitrogen discharged from OSDS into the waters of the State. This benefits the State by helping to restore the estuarine environment and provides for better protection of drinking water supplies. The Bay Restoration Fund statute states that funds may be used to provide grants for the incremental cost of upgrading OSDS to BAT for nitrogen removal. The BRF cannot provide funding for an entire OSDS replacement or repair and any material (gravel & pipe) and labor costs not directly associated with the BAT unit installation. The Department recognizes that operation and maintenance, design review, installation inspection and project management are essential parts of the cost of upgrading OSDS to BAT for nitrogen removal. The BRF grant funds will cover the initial cost of purchasing and installing the BAT unit. The cost for the initial 5 years of operation and maintenance may also be included in the cost of purchasing the BAT technology. The local implementing entity may also use a portion of the BRF funds for reasonable costs associated with identifying individual applicants, reviewing plans, and inspecting BAT unit installations.

The Department has outsourced some elements of the OSDS portion of the BRF implementing OSDS upgrades using the BRF funds granted to county and municipal government agencies. These agencies may, with approval from MDE, make grants to OSDS users who agree to upgrade their systems and provide the necessary ongoing operation and maintenance. As mandated by the legislation, addressing failing systems in either the Chesapeake Bay Critical Area or the Maryland Coastal Bay's Critical Area is highest priority.

In cooperation with the Advisory Committee, MDE developed a Request for Proposals (RFP) for local governments to obtain funding through the BRF to support the planning, design and construction of BAT OSDS systems in targeted watersheds, with priority to failing systems in the Critical Area of the Chesapeake Bay and the Coastal Bays. The highest priority was given to proposals that directly address failing OSDS in either the Chesapeake Bay Critical Area or the Maryland Coastal Bay's Critical Area, although grants are not limited to these areas only. Other factors that received priority points included:

- Proximity to shellfish harvesting areas,
- Watersheds that are known to be nutrient impaired due to OSDS,
- Areas that are within 2500' of reservoirs or recreational lakes,
- Areas that are within wellhead protection zones,
- Areas where private wells and OSDS are concentrated on lots smaller than 1 acre,
- Areas that are underlain with karst (limestone) geology,
- Projects that create responsible management entities,
- Projects that utilize renewable operating permits,
- Projects that create management (sanitary) districts,
- Household income below median household income for the county of residence; and
- Readiness to proceed.



A key component of a successful proposal was the level of management the project will have. Without proper scheduled maintenance, the units will not produce a consistently high quality effluent. A responsible management entity, as defined by the U.S. Environmental Protection Agency (EPA), is “an entity responsible for managing a comprehensive set of activities delegated by the regulatory authority; a legal entity that has the managerial, financial, and technical capacity to ensure long-term, cost effective operation of onsite and/or cluster water treatment systems in accordance with applicable regulations and performance (e.g., a wastewater utility or wastewater management district).” Other management examples that were rewarded higher award points were the issuance of operating permits, similar to State Groundwater Discharge Permits that have reporting limits, or enforceable maintenance contracts to be recorded by some County authorized process.

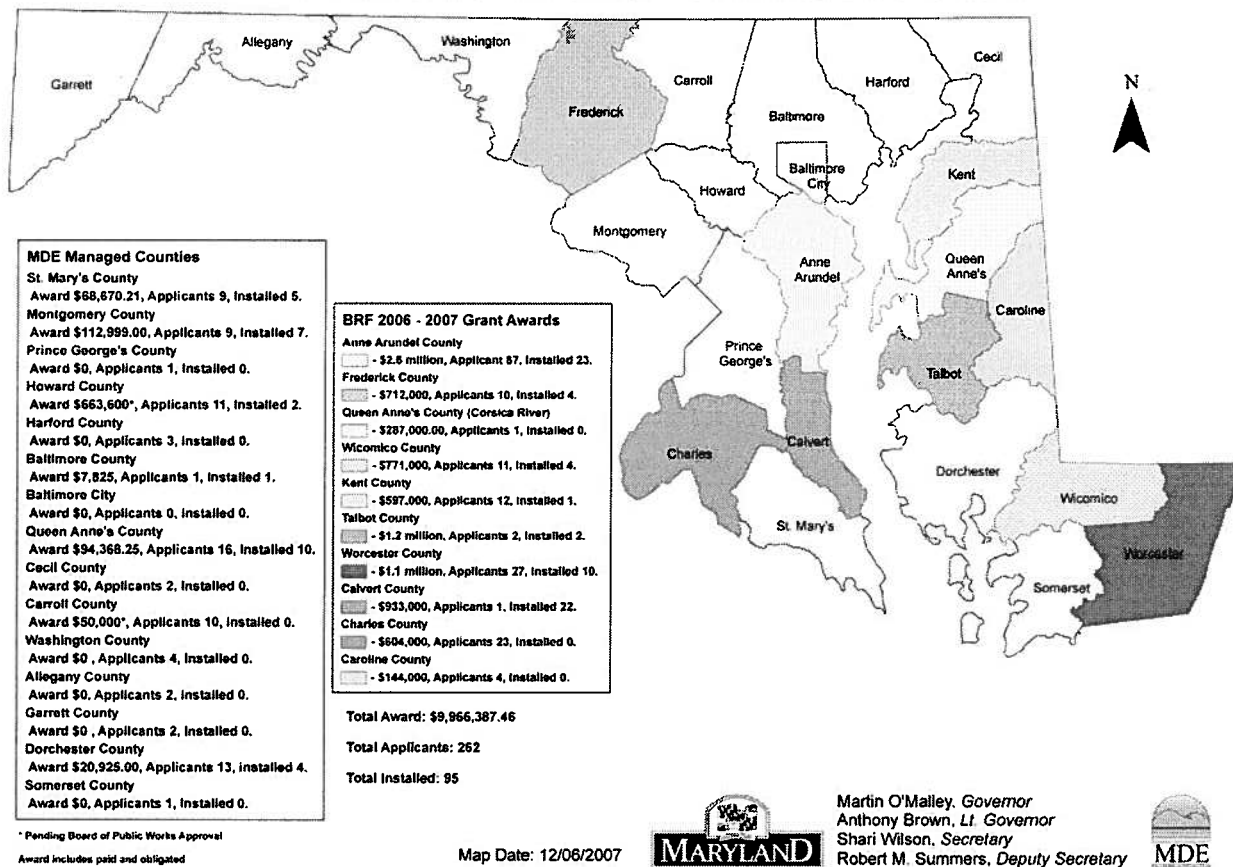
A review panel consisting of personnel from MDE and the Governor’s Advisory Committee evaluated and ranked the proposals. A project score sheet was developed to rate how well each proposal addressed elements that included: readiness to proceed, addressing failing systems in the critical area, addressing other health and environment based factors, identifying onsite sewage disposal systems to be upgraded, partnerships and available resources to implement the proposal and how long-term issues of management are to be addressed. Ten proposals were submitted to MDE prior to the stated deadline and proposed awards were based on their project scores. On December 6, 2006, the Board of Public Works approved MDE’s request to fund the proposals and awarded a total of over 9 million dollars to ten different jurisdictions to upgrade approximately 700 septic systems. The following table summarizes the awards:

<u>Recipient</u>	<u>County</u>	<u>Amount of Grant</u>
Anne Arundel County Health Department	Anne Arundel	\$2,644,000
Calvert County Department of Planning and Zoning	Calvert	\$933,000
Charles County Health Department	Charles	\$604,000
Frederick County Health Department	Frederick	\$712,000
Kent County Department of Water and Wastewater	Kent	\$597,000
Maryland Department of Natural Resources	Queen Anne’s	\$287,000
Caroline County Health Department	Caroline	\$144,000
Talbot County Department of Public Works	Talbot	\$1,168,000
Wicomico County Health Department	Wicomico	\$771,000
<u>Worcester County Department of Environmental Programs</u>	<u>Worcester</u>	<u>\$1,142,000</u>
	Total	\$9,002,000

MDE is developing an Application & proposal for grant funding to provide other jurisdictions opportunity to participate in implementing the BRF.

The following figure summarizes system installation and application by County:

### Bay Restoration Fund OSDS Grant Awards and Installations



### Outreach

MDE staff is working with the Chesapeake Bay Tributary Teams, community groups and environmental groups to promote the onsite system upgrade program and has attended meetings, environmental fairs and other events organized by these groups to make presentations and distribute grant program materials.

In the fall of 2005, MDE has developed a brochure entitled "The Bay Restoration Fund Onsite Sewage Disposal System User Information Guide". The brochure explains the Bay Restoration Fund and informs citizens how to apply for funding. The brochure is available on MDE's website, and is being distributed to local health departments. Also, the brochure is being distributed as part of MDE's inspection of onsite sewage disposal systems adjacent to shellfish harvesting waters.

In the winter of 2006, MDE produced the video, "Onsite Sewage Disposal Systems – Protecting Your System – Preserving the Bay". This video, which won a prestigious Aegis Award for video production, teaches homeowners about the care of septic systems and about the connection between septic systems and the Bay while also informing property owners about the availability of BRF funds to upgrade septic systems. To date approximately 5,000 copies of this video have been distributed to homeowners and demand for the video remains high.

## **Cover Crop Activities (Maryland Department of Agriculture)**

### **Recent Program Streamlining Activities in Preparation for the BRF Program:**

In 2005, the Maryland Department of Agriculture engaged the Schaefer Center for Public Policy to assist with a series of focus groups across the state and questionnaires sent to over 3,000 agricultural operators across the state. The purpose was to assess the Cover Crop Program and identify improvements that would result in additional acreage enrolled in the program. The recommendations have been evaluated and many of the recommendations incorporated in the current program. Specific streamlining actions include putting the application and certification forms on the MDA website so they can be downloaded by the applicants and faxed into the local Soil Conservation District offices.

In FY2008, a separate commodity cover crop program continued to be available allowing farmers to harvest the crop for sale in the spring in return for a reduced payment provided they do not fertilize the acres in the fall. Acreage enrollment was capped at 250 acres per application. General funds available for this portion of the program limited the number of applications eligible for the program. Therefore, approximately 250 applications were cancelled due to insufficient funds.

Also in FY2007, a three-year agreement was signed with the Maryland Grain Producers Utilization Board (MGPUB) resulting in MDA and the MACS Office providing additional incentives for participation in the Hulless Barley Program. Producers who plant hulless barley may sell it in the future as a feedstock to produce ethanol in a plant planned to be built by the MGPUB. This program gives operators an opportunity to see how the barley grows and learn any special considerations needed in the planting, harvesting and management of the hulless barley. In the first year of the program, 692 acres of hulless barley were planted for an additional \$10,000 paid to the farmers by the MGPUB.

### **Status of Implementation of BRF for Cover Crop Activities:**

The Maryland Department of Agriculture has received \$12,234,161 from the BRF to date. Since program demand exceeded BRF grant availability in FY2007, MDA reduced the acreage caps for each application. For FY2008, traditional cover crop applications were capped at 700 acres and commodity cover crop applications were capped at 250 acres per application.



Maryland Department of the Environment  
Maryland Water Quality Financing Administration

Bay Restoration Fund  
WWTP Upgrade Cashflow Projection (does not include Septice)

SCENARIO: FIVE YEAR BUDGET

Current Fee \$40.00 New Fee \$ 50.00  
Rate of Inflation 3%

Fiscal Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
Revenue															
Net WWTP Revenue Transfer from COMF	\$ 7,022,607	\$ 57,688,075	\$ 57,405,810	\$ 58,000,000	\$ 58,000,000	\$ 58,000,000	\$ 58,000,000	\$ 58,000,000	\$ 58,000,000	\$ 58,000,000	\$ 58,000,000	\$ 58,000,000	\$ 58,000,000	\$ 58,000,000	\$ 687,400,000
Net Bond Sale Proceeds (1)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Est. Interest/Investment Earnings (0.4%)	\$ 38,736	\$ 951,410	\$ 1,854,466	\$ 2,767,695	\$ 2,790,805	\$ 2,814,000	\$ 2,837,199	\$ 2,860,398	\$ 2,883,597	\$ 2,906,796	\$ 2,929,995	\$ 2,953,194	\$ 2,976,393	\$ 2,999,592	\$ 34,485,940
Total Revenue for Effluent Sewer Upgrades	\$ 7,061,405	\$ 58,648,085	\$ 61,420,276	\$ 110,058,102	\$ 133,321,678	\$ 230,098,054	\$ 266,363,822	\$ 317,117,899	\$ 344,329,659	\$ 383,239,293	\$ 444,027,995	\$ 492,927,194	\$ 541,826,393	\$ 590,725,592	\$ 1,373,630,481
Expenses:															
EMR Capital Grants to WWTPs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sewer Infrastructure Grants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
EMR O&M Grants to WWTPs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Debt Service Reserve (10% of bond issue)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Debt Service	\$ 105,340	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Admin. Expenses Allocation (up to 1.5%)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Expenses for Effluent Sewer Upgrades	\$ 105,340	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fund Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Beginning Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ending Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bond Issuance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Beginning Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ending Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net of Bond Issuance Costs, estimated at 1.5% of bond issued	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cum. Debt Sale Proceeds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ 7,061,405	\$ 58,648,085	\$ 61,420,276	\$ 110,058,102	\$ 133,321,678	\$ 230,098,054	\$ 266,363,822	\$ 317,117,899	\$ 344,329,659	\$ 383,239,293	\$ 444,027,995	\$ 492,927,194	\$ 541,826,393	\$ 590,725,592	\$ 1,373,630,481

Fiscal Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
Revenue															
Net WWTP Revenue Transfer from COMF	\$ 7,022,607	\$ 57,688,075	\$ 57,405,810	\$ 58,000,000	\$ 58,000,000	\$ 58,000,000	\$ 58,000,000	\$ 58,000,000	\$ 58,000,000	\$ 58,000,000	\$ 58,000,000	\$ 58,000,000	\$ 58,000,000	\$ 58,000,000	\$ 687,400,000
Net Bond Sale Proceeds (1)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Est. Interest/Investment Earnings (0.4%)	\$ 38,736	\$ 951,410	\$ 1,854,466	\$ 2,767,695	\$ 2,790,805	\$ 2,814,000	\$ 2,837,199	\$ 2,860,398	\$ 2,883,597	\$ 2,906,796	\$ 2,929,995	\$ 2,953,194	\$ 2,976,393	\$ 2,999,592	\$ 34,485,940
Total Revenue for Effluent Sewer Upgrades	\$ 7,061,405	\$ 58,648,085	\$ 61,420,276	\$ 110,058,102	\$ 133,321,678	\$ 230,098,054	\$ 266,363,822	\$ 317,117,899	\$ 344,329,659	\$ 383,239,293	\$ 444,027,995	\$ 492,927,194	\$ 541,826,393	\$ 590,725,592	\$ 1,373,630,481
Expenses:															
EMR Capital Grants to WWTPs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sewer Infrastructure Grants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
EMR O&M Grants to WWTPs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Debt Service Reserve (10% of bond issue)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Debt Service	\$ 105,340	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Admin. Expenses Allocation (up to 1.5%)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Expenses for Effluent Sewer Upgrades	\$ 105,340	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fund Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Beginning Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ending Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bond Issuance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Beginning Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ending Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net of Bond Issuance Costs, estimated at 1.5% of bond issued	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cum. Debt Sale Proceeds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ 7,061,405	\$ 58,648,085	\$ 61,420,276	\$ 110,058,102	\$ 133,321,678	\$ 230,098,054	\$ 266,363,822	\$ 317,117,899	\$ 344,329,659	\$ 383,239,293	\$ 444,027,995	\$ 492,927,194	\$ 541,826,393	\$ 590,725,592	\$ 1,373,630,481

(1) Net of Bond Issuance Costs, estimated at 1.5% of bond issued  
(2) Assumed 15-year term at Wt. Avg. 6.50% interest rate with level debt service

County: 443 Whelan, Director, MWDPA  
Email: jwhelan@mdarpa.com  
Phone: 410-537-3119

**Northeast River/Seneca Point Nutrient Removal  
Fact Sheet**

**PROJECT DESCRIPTION:**

A nutrient removal upgrade was first planned and designed to achieve total nitrogen removal to a yearly average of 8 milligrams per liter (mg/l) at the 2.0 million gallons per day (mgd) wastewater treatment plant (WWTP) as part of the State's Biological Nutrient Removal Program. Because of the original design of the WWTP, it was determined that with minor modifications the plant would be able to achieve enhanced nutrient removal (ENR) level of treatment and achieve 3 mg/l total nitrogen and 0.3 mg/l total phosphorus. MDE and the County agreed to the design revisions, and the plant was upgraded to achieve ENR before the Bay Restoration Fund was established.

**RECEIVING STREAMS/BODIES OF WATER:** Northeast River

**NUTRIENT REMOVAL (AT 2 MGD):***Nitrogen*

	<b>Total Nitrogen (Without Upgrade)</b>	<b>Total Nitrogen (With Upgrade)</b>	<b>% Reduction</b>
<b>Concentration (mg/l)</b>	18	3	83%

The plant will maintain its Tributary Strategy loading cap of 24,364 pounds of nitrogen per year even after reaching its design capacity and 20-year projected growth.

*Phosphorus*

	<b>Total Phosphorus (Without Upgrade)</b>	<b>Total Phosphorus (With Upgrade)</b>	<b>% Reduction</b>
<b>Concentration (mg/l)</b>	2	0.3	85%

The plant will maintain its Tributary Strategy loading cap of 1,827 pounds of phosphorus per year even after reaching its design capacity and 20-year projected growth.

**TOTAL COST AND FUNDING SOURCES:**

Total Project Cost	<u>\$7,601,400</u>
State BNR Grant	\$1,675,900
SRF Loan /Local Share	\$5,925,500

**MILESTONES:**

<b>CONSTRUCTION START:</b>	October 2002
<b>CONSTRUCTION COMPLETION:</b>	August 2005

**Hurlock Wastewater Treatment Plant (WWTP) BNR/ENR Upgrade**  
**FACT SHEET**

**PROJECT DESCRIPTION:**

The project consists of planning, design, and construction of facilities to upgrade the existing Hurlock WWTP for Biological Nutrient Removal (BNR) and Enhanced Nutrient Removal (ENR) to achieve effluent concentrations goal of 3 mg/l for Total Nitrogen and 0.3 mg/l for Total Phosphorous. The existing lagoons will be replaced with a 1.65 mgd activated sludge BNR system and tertiary filters ENR system.

**RECEIVING STREAM/BODIES OF WATER:** Wrights Branch

**NUTRIENT REMOVAL (AT 1.65 MGD):***Nitrogen*

	<b>Total Nitrogen (Without Upgrade)</b>	<b>Total Nitrogen (With Upgrade)</b>	<b>% Reduction</b>
<b>Concentration (mg/l)</b>	18	3	83%

The plant will maintain its Tributary Strategy loading cap of 20,101 pounds of nitrogen per year even after reaching its design capacity and 20-year projected growth.

*Phosphorus*

	<b>Total Phosphorus (Without Upgrade)</b>	<b>Total Phosphorus (With Upgrade)</b>	<b>% Reduction</b>
<b>Concentration (mg/l)</b>	2	0.3	85%

The plant will maintain its Tributary Strategy loading cap of 1,508 pounds of phosphorus per year even after reaching its design capacity and 20-year projected growth.

**TOTAL COST AND FUNDING SOURCES:**

Total Project Cost	<u>\$7,585,362</u>
State Supplemental Grant	\$ 300,000
State BNR Grant	\$2,600,000
Bay Restoration Fund	\$1,000,000
State Revolving Loan Fund	\$2,734,552
EPA Grant	\$ 950,810

**MILESTONES:**

**CONSTRUCTION START:** June 2004  
**CONSTRUCTION COMPLETION:** May 2006

**CELANESE WASTEWATER TREATMENT PLANT (WWTP)**  
**FACT SHEET**

**PROJECT DESCRIPTION:**

The project involves planning, design, and construction of new activated sludge Enhanced Nutrient Removal (ENR) facility to replace the existing lagoon system, and achieve effluent concentration goal of 3 mg/l for Total Nitrogen and 0.3 mg/l for Total Phosphorous. The project also involves the expansion of the existing 1.25 million gallons per day (MGD) Celanese Wastewater Treatment Plant to 1.66 MGD. The upgrade also includes the installation of denitrification filters for additional nitrogen and phosphorous removal. The original project included only the upgrade with a biological nutrient removal (BNR). However, after the passage of the Bay Restoration Fund Bill, a change order to the construction contract was issued to include the ENR upgrade.

**RECEIVING STREAM/BODIES OF WATER:** Potomac River

**NUTRIENT REMOVAL GOAL (AT 1.66 MGD):***Nitrogen*

	<b>Total Nitrogen (Without Upgrade)</b>	<b>Total Nitrogen (With Upgrade)</b>	<b>% Reduction</b>
<b>Concentration (mg/l)</b>	18	3	83%

The plant will maintain its Tributary Strategy loading cap of 24,364 pounds of nitrogen per year even after reaching its design capacity and 20-year projected growth.

*Phosphorus*

	<b>Total Phosphorus (Without Upgrade)</b>	<b>Total Phosphorus (With Upgrade)</b>	<b>% Reduction</b>
<b>Concentration (mg/l)</b>	2	0.3	85%

The plant will maintain its Tributary Strategy loading cap of 1,827 pounds of phosphorus per year even after reaching its design capacity and 20-year projected growth.

<b>BUDGET:</b>	Total Project Cost	<b><u>\$15,833,000</u></b>
	State BNR Grant	\$3,566,000
	Bay Restoration Fund	\$2,022,000
	State Supplemental Grant	\$1,110,000
	SRF Loan	\$8,910,000
	Other Local Funding	\$225,000

<b>MILESTONES:</b>	<b>CONSTRUCTION START:</b>	March 2003
	<b>CONSTRUCTION COMPLETION:</b>	November 2006



**Town of Easton Wastewater Treatment Facility BNR/ENR Upgrade and Expansion**  
**Fact Sheet**

**PROJECT DESCRIPTION:**

This project is to improve the existing wastewater treatment system and enable the community to meet the goals established for nutrient loads discharged to the Chesapeake Bay. Specifically, the wastewater treatment facility is designed for enhanced nutrient removal (ENR) upgrade to achieve effluent concentrations goal of 3 mg/l for Total Nitrogen and 0.3 mg/l for Total Phosphorous. Also, the project involves the expanding the plant capacity from 2.35 to 4.0 million gallons per day (mgd). The BNR upgrade will be funded at the existing plant capacity of 2.35 mgd, while the ENR upgrade will be funded at the approved design capacity of 4.0 mgd.

**RECEIVING STREAM/BODIES OF WATER:** Choptank River

**NUTRIENT REMOVAL (AT 4.0 MGD):**

*Nitrogen*

	<b>Total Nitrogen (Without Upgrade)</b>	<b>Total Nitrogen (With Upgrade)</b>	<b>% Reduction</b>
<b>Concentration (mg/l)</b>	18	3	83%

The plant will maintain its Tributary Strategy loading cap of 48,729 pounds of nitrogen per year even after reaching its design capacity and 20-year projected growth.

*Phosphorus*

	<b>Total Phosphorus (Without Upgrade)</b>	<b>Total Phosphorus (With Upgrade)</b>	<b>% Reduction</b>
<b>Concentration (mg/l)</b>	2	0.3	85%

The plant will maintain its Tributary Strategy loading cap of 3,655 pounds of phosphorus per year even after reaching its design capacity and 20-year projected growth.

**TOTAL COST AND FUNDING SOURCES:**

Total Project Cost	<b>\$37,453,191</b>
State BNR Grant	<b>\$ 8,930,000</b>
Bay Restoration Fund	<b>\$ 8,000,000</b>
Local Share/SRF Loan	<b>\$20,523,191</b>

**MILESTONES:**

**CONSTRUCTION START:** December 2004  
**CONSTRUCTION COMPLETION:** June 2007

**Kent Narrows/Stevensville/Grasonville WWTP BNR/ENR Upgrade and Expansion**  
**FACT SHEET**

**PROJECT DESCRIPTION:**

The project involves the planning, design and construction of enhanced nutrient removal (ENR) upgrade to achieve total nitrogen removal to a yearly average of 3 mg/l, and phosphorus of 0.3 mg/l. The upgrade also involves the expansion of the treatment capacity of the plant from 2.0 million gallon per day (MGD) to 3.0 MGD to accommodate growth within State designated Priority Funding Areas and serve existing homes currently using failing septic systems; thereby, averting a public health hazard and further reduce nitrogen loading to the Bay. A new activated sludge process will replace the existing rotating biological contactor (RBC) process with an increased capacity of 3.0 MGD. The treated wastewater from the KN/S/G WWTP will continue to be discharged directly into the Chesapeake Bay.

**RECEIVING STREAM/BODIES OF WATER:** Middle Chesapeake Bay

**NUTRIENT REMOVAL (AT 3.0 MGD):***Nitrogen*

	<b>Total Nitrogen (Without Upgrade)</b>	<b>Total Nitrogen (With Upgrade)</b>	<b>% Reduction</b>
<b>Concentration (mg/l)</b>	18	3	83%

The plant will maintain its Tributary Strategy loading cap of 36,547 pounds of nitrogen per year even after reaching its design capacity and 20-year projected growth.

*Phosphorus*

	<b>Total Phosphorus (Without Upgrade)</b>	<b>Total Phosphorus (With Upgrade)</b>	<b>% Reduction</b>
<b>Concentration (mg/l)</b>	2	0.3	85%

The plant will maintain its Tributary Strategy loading cap of 2,741 pounds of phosphorus per year even after reaching its design capacity and 20-year projected growth.

**TOTAL COST AND FUNDING SOURCES:**

Total Project Cost	\$35,018,817
State BNR Grant	\$ 8,525,817
Bay Restoration Fund	\$ 6,493,000
Local Share/SRF Loan	\$20,000,000

**MILESTONES:**

<b>CONSTRUCTION START:</b>	January 2005
<b>CONSTRUCTION COMPLETION:</b>	August 2007

**Aberdeen Proving Ground - Aberdeen Area WWTP BNR/ENR Upgrade**  
**Fact Sheet**

**PROJECT DESCRIPTION:**

The project involves the planning, design and construction of biological nutrient removal (BNR) and enhanced nutrient removal (ENR) upgrade to achieve total nitrogen of 3 mg/l, and phosphorus of 0.3 mg/l at the existing plant capacity of 2.8 million gallons per day.

**RECEIVING STREAMS/BODIES OF WATER:** Upper Chesapeake Bay

**NUTRIENT REMOVAL (AT 2.8 MGD):***Nitrogen*

	<b>Total Nitrogen (Without Upgrade)</b>	<b>Total Nitrogen (With Upgrade)</b>	<b>% Reduction</b>
<b>Concentration (mg/l)</b>	18	3	83%

The plant will maintain its Tributary Strategy loading cap of 34,110 pounds of nitrogen per year even after reaching its design capacity and 20-year projected growth.

*Phosphorus*

	<b>Total Phosphorus (Without Upgrade)</b>	<b>Total Phosphorus (With Upgrade)</b>	<b>% Reduction</b>
<b>Concentration (mg/l)</b>	2	0.3	85%

The plant will maintain its Tributary Strategy loading cap of 2,558 pounds of phosphorus per year even after reaching its design capacity and 20-year projected growth.

**PERMITTEE:** City of Aberdeen

**TOTAL COST AND FUNDING SOURCES:**

Total Project Cost	<u>\$6,300,000</u>
US Army	\$6,300,000

**MILESTONES:**

<b>CONSTRUCTION START:</b>	August 2004
<b>CONSTRUCTION COMPLETION:</b>	March 2006

**Swan Point Wastewater Treatment Plant (WWTP) BNR/ENR Upgrade and Expansion**  
**Fact Sheet**

**PROJECT DESCRIPTION:**

The project entails design and construction of a new wastewater treatment plant to be built in two phases for an ultimate treatment capacity of 600,000 gallons per day (gpd) and will serve the Swan Point Development. The new plant will replace the existing 70,000 gpd wastewater treatment plant located in the Swan Point Development that will be abandoned upon completion of the new WWTP.

Only Phase I of the new plant was completed providing sewage treatment capacity of 300,000 gpd. The new plant is also required to meet stringent nutrient removal requirements with a Total Nitrogen effluent concentration limit of 10 mg/l at 300,000 gpd, 5 mg/l at 600,000 gpd, and with performance goal regardless of the flow of 3.0 mg/l and a Total Phosphorus concentration of 0.3 mg/l. The plant will continue to discharge into the existing outfall line to Cuckhold Creek, a tributary to the Potomac River and the Chesapeake Bay. The new Swan Point WWTP is located on a 220-acre land parcel owned by Charles County, adjacent to the Cobb Island WWTP and will provide future service to the communities of Cobb Island and Mathews Manor.

**RECEIVING STREAMS/BODIES OF WATER:** Potomac River

**NUTRIENT REMOVAL (AT 600,000 GPD):***Nitrogen*

	<b>Total Nitrogen (Without Upgrade)</b>	<b>Total Nitrogen (With Upgrade)</b>	<b>% Reduction</b>
<b>Concentration (mg/l)</b>	18	3	83%

The plant will maintain its Tributary Strategy loading cap of 7,309 pounds of nitrogen per year even after reaching its design capacity and 20-year projected growth.

*Phosphorus*

	<b>Total Phosphorus (Without Upgrade)</b>	<b>Total Phosphorus (With Upgrade)</b>	<b>% Reduction</b>
<b>Concentration (mg/l)</b>	2	0.3	85%

The plant will maintain its Tributary Strategy loading cap of 548 pounds of phosphorus per year even after reaching its design capacity and 20-year projected growth.

**PERMITTEE:** US Steel/Charles County

**TOTAL COST AND FUNDING SOURCES:**

Total Estimated Project Costs	<u>\$8,080,000</u>
U.S. Steel	\$8,080,000

**MILESTONES:**

**CONSTRUCTION START:** May 2005  
**CONSTRUCTION COMPLETION:** May 2007



## **Bay Restoration Fund Advisory Committee**

**Robert M. Summers, Ph.D., Acting Chairman**

## **Annual Status Report January 2009**

**Report to:**

**Governor Martin O'Malley**

**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**

## PURPOSE OF THIS REPORT

Section 1605.2 of Chapter 9 of 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 Advisory Committee is pleased to present to Governor Martin O'Malley and the Maryland Legislature, its fourth annual Legislative Update Report. Great strides have been made in implementing this historic Bay Restoration Fund, but many challenges remain as we begin 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 September 30, 2008, the Comptroller of Maryland has deposited \$188.80 million to the Maryland Department of the Environment for the Wastewater Treatment Plant fund, \$21.60 million to the Maryland Department of Environment for the Septic Systems Upgrade fund, and \$14.40 million to the Maryland Department of Agriculture for Cover Crop Program.
- Enhanced Nutrient Removal (ENR) upgrades of the State's major sewage treatment plants are currently underway. Nine facilities have been completed and are in operation. Two other facilities are currently meeting the ENR treatment level, Dorsey Run and North East River, but require further evaluation to ensure that they will continue to achieve ENR without additional improvements as they approach their design capacity. Nine facilities are under construction, 19 are in design, and 22 are in planning. MDE is continuing to work to bring the remaining five major systems into the program by urging the facilities to proceed with the ENR upgrade and/or by adding nutrient loading limits and compliance schedule in the discharge permits. The committee is proposing to add Hampstead to the funding list as it is required to upgrade by Maryland's Tributary Strategy – Statewide Implementation Plan.
- BRF Advisory Committee has established a workgroup including local health and public works agencies and industry representatives, to develop specifications for approved OSDS technologies. Referred to as Best Available Technology (BAT) Workgroup, this group of professionals is responsible for establishing the procedures for determining what specific types of systems will be eligible for grants under the OSDS portion of the BRF. The BAT workgroup has adopted a protocol used by the Environmental Protection Agency/ Environmental Technology Verification (EPA/ETV) to establish a procedure to verify the performance of nitrogen reducing OSDS. A review team, comprised of two engineers from MDE and one County Environmental Health Director, is reviewing applications to ensure that each technology has been third party evaluated to a standard at least as stringent as the EPA/ETV's. Currently thirteen proprietary technologies have been evaluated by the program and are eligible for BRF funding in Maryland.

- MDE continues to distribute the video, “Onsite Sewage Disposal Systems – Protecting Your System – Preserving the Bay”. This video, which won a prestigious Aegis Award for video production, teaches homeowners about the care of septic systems and about the connection between septic systems and the Bay while also informing property owners about the availability of BRF funds to upgrade septic systems.
- The Maryland Department of Agriculture dedicates its portion of BRF funds for the implementation of the statewide Cover Crop Program. In FY2009 farmers applied for 400,000 acres, over 50% of Maryland’s Chesapeake Bay Program 2010 goal. Funds projected from BRF annually will support approximately 100,000 acres of cover crops in the program. Additional funding was made available from the 2010 Chesapeake Bay Trust Fund in 2009 to support increased level of participation. Cover crops are planted in the fall to tie up nitrogen remaining from the previous crop. They are recognized as the single most cost effective best management practice (BMP) available to control nitrogen movement to groundwater and subsequently the Bay. Cover crops also prevent soil erosion and improve soil quality.
- Through contracts with Salisbury University and Towson University, as well as continued support from the Maryland Department of Planning, MDE now has a geographic information system (GIS) data layer capable of identifying locations of individual onsite sewage disposal systems in Maryland.
- Through increased outreach efforts in the BRF septic system upgrade program; program expenditures now approximate program revenue. Over 350 septic systems were upgraded through the BRF in 2008 bringing the total to 450. The 450 upgraded septic systems result in a decrease of approximately 6,840 pounds of nitrogen per year that would be discharged to the waters of the State. In 2007 MDE received less than 25 applications per month for upgrading septic systems. During the last quarter of 2008 MDE received an average of 150 applications per month.
- MDE and Maryland Department of Planning (MDP) have initiated efforts to implement the requirements of House Bill 893, which was passed in the 2006 session and requires MDE and MDP, in consultation with local governments, to report on the impact that an ENR upgraded wastewater treatment plant has on growth in the jurisdiction it serves. As part of this report, MDE and MDP evaluated the impact during 2007 as required by the legislation.

### Challenges

- Wastewater treatment plant construction costs on recently opened bids are significantly higher than the original pre-planning level estimates. As a result the total capital cost for the ENR Upgrades is likely to be higher than the \$750 million to \$1 billion range estimated at the time of legislation. The escalating costs can be attributed to increasing energy, steel and concrete costs. Also, these estimates were made as an order of magnitude estimate prior to the passage of the Bay Restoration Fund legislation and before the performance of any detailed engineering analyses at any of the facilities. Based on the estimated revenue projections and bond issuance, it is estimated the current fee schedule (\$30/year) can help finance approximately \$868 million in ENR upgrades by 2018. The current ENR capital cost is estimated at \$1.113 billion leaving a potential deficit of \$245 million. Since the funding gap is not expected to occur until 2012, the Committee believes that we should allow two years to get better cost estimates on some of the larger ENR projects, before making any recommendation on how to address the anticipated funding shortfall.

- There is a concern that individuals having their septic systems upgraded with the BRF will be subject to taxation based on the value of the upgrade or grant. This serves as a deterrent to property owners who may otherwise want to participate in a voluntary program. The Federal tax code allows the Secretary of the U.S. Department of Agriculture (USDA) to declare grant programs, which are for the purpose of improving the environment, as actions that do not result in income for the property owner. Hence, these grants are considered tax-exempt. In a letter to the U.S. Secretaries of Agriculture and Treasury, Secretary Wilson requested a ruling in favor of Maryland's position that these grants meet the requirements of federal law for a tax exemption. USDA Under Secretary Mark Rey responded that we should send additional information to John Dondero, Branch Chief, Environmental Improvement Programs, Natural Resources Conservation Services (NRCS) for review. The NRCS has been provided with the requested information.
- Advanced septic systems that remove nitrogen require electricity and have moving parts that require regular maintenance. MDE has evaluated the electrical use of the different advanced systems and can now provide property owners with more complete information. The EPA strongly recommends that management systems be in place to ensure the long-term performance of advanced septic systems. The BRF has no provisions for ongoing management of nitrogen reducing septic systems.

### **Conclusions**

The implementation of the Bay Restoration Fund program is proceeding in the right direction at a good pace, which is expected to further improve in the upcoming years.

With the development and implementation of the BayStat process MDE has improved its benchmarks and tracking of implementation efforts to ensure that projects remain on schedule.

As Patapsco's design is being finalized, better cost estimates have been provided for the project showing even higher costs and more program deficit. Due to the lack of detailed engineering cost estimates for the other two largest sewage treatment plants (Blue Plains and Back River), the Committee believes that it is still too early to determine what, if any, modifications should be made to the Bay Restoration Fund fee structure.



## **Programs and Administrative Functions**

### **Comptroller's Office:**

The role of the Comptroller of Maryland (CoM) is to act as the collection agent for the Bay Restoration Fund (BRF) and make distributions to the Maryland Department of the Environment (MDE) and the Maryland Department of Agriculture (MDA) as required.

In the third year of administering the BRF, the CoM began the compliance phase of the fee administration. The law specifies that the BRF shall be administered under the same provisions allocable to administering the sales and use tax. Granted that authority, the CoM began the audit process for both filers and non-filers of BRF quarterly reports.

For non-filers, CoM has begun contacting the billing authorities and users who have failed to file or pay the BRF and is obtaining sufficient documentation to make an assessment and begin collection activity. Federal government billing authorities and users have to date refused to participate in the BRF process. MDE secured an agreement with several defense organizations having wastewater treatment plants to upgrade their systems over a defined period of time and they were then exempted from the BRF by MDE. A copy of the agreement was provided by MDE to CoM, and those BRF accounts were subsequently placed on inactive status. The CoM has begun to audit billing authorities who are not collecting the BRF from federal agencies and will make assessments as appropriate against those billing authorities for those uncollected fees.

Additionally, the CoM is working with MDE to obtain historical flow data from billing authorities and users, which will be compared to returns filed by billing authorities and users to ensure accurate BRF returns have been filed and paid.

The CoM completed two compliance audits in FY2008. These audits resulted in additional assessments and subsequent collections of over \$14 thousand dollars. Additional compliance audits are scheduled for FY2009.

## **Maryland Department of the Environment:**

Three units within the Maryland Department of the Environment (MDE) are involved in the implementation of the Bay Restoration Fund.

### **I. Maryland Water Quality Financing Administration:**

The Maryland Water Quality Financing Administration (MWQFA) was established under Title 9, Subtitle 16 of the Maryland Code. MWQFA has primary responsibility for the financial management and fund accounting of the Water Quality Revolving Loan Fund, the Drinking Water Revolving Loan Fund and the newly created Bay Restoration Fund. Specifically for the Bay Restoration Fund, the MWQFA is responsible for the issuance of revenue bonds, payment disbursements, and the overall financial accounting, including audited financial statements.

### **II. Water Quality Infrastructure Program:**

The Water Quality Infrastructure Program (WQIP) manages the engineering, planning and project management of federal capital funds consisting of special federal appropriation grants and state revolving loan funds for water quality and drinking water projects. The Program also manages State grant programs, including Special Water Quality/Health, Small Creeks and Estuaries Restoration, Stormwater, Biological Nutrient Removal, and Water Supply Financial Assistance. There may be as many as 250 active capital projects ranging in levels of complexity at any given time. Individual projects range in value from \$10,000 to \$50 million. A single project may involve as many as eight different funding sources and multiple construction and engineering contracts over a period of three to ten years. WQIP is responsible for assuring compliance with the requirements for each funding source while achieving the maximum benefit of funds to the recipient and timely completion of the individual projects. WQIP consists of three divisions: (1) the Bay Restoration Fund Program Division; (2) the Project Management Division; and (3) the Planning Division.

### **III. Wastewater Permits Program:**

The Wastewater Permits Program (WWPP) issues permits for surface and groundwater discharges from municipal and industrial sources and oversees onsite sewage disposal and well construction programs delegated to local approving authorities. Large municipal and all industrial discharges to the groundwater are regulated through individual groundwater discharge permits. All surface water discharges are regulated through combined state and federal permits under the National Pollutant Discharge Elimination System (NPDES). These permits are issued for sewage treatment plants, some water treatment plants and industrial facilities that discharge to State surface waters. These permits are designed to protect the quality of the body of water receiving the discharge.

Anyone who discharges wastewater to surface waters needs a surface water discharge permit. Applicants include industrial facilities, municipalities, counties, federal facilities, schools, and commercial water and wastewater treatment plants, as well as treatment systems for private residences that discharge to surface waters.

WWPP will ensure that the enhanced nutrient removal goals and/or limits are included in the discharge permit of facilities upgraded under the BRF. To accommodate the implementation of the Onsite Sewage Disposal System (OSDS) portion of the Bay Restoration Fund, the WWPP Deputy Program Manager has been designated as the lead for the onsite sewage disposal system upgrade program.

## **Maryland Department of Agriculture:**

The Maryland Department of Agriculture (MDA) delivers soil conservation and water quality programs to agricultural landowners and operators using a number of mechanisms to promote and support the implementation of best management practices (BMPs). Programs include information, outreach, technical assistance, financial assistance and regulatory requirements under the Water Quality Improvement Act. Soil Conservation Districts are the local delivery system for many of these programs.

The Chesapeake Bay Restoration Fund provides a dedicated fund source to support the Cover Crop Program. In prior years, funding fluctuated and program guidelines were modified accordingly to try to get the best return on public investment. Results from a 2005 survey of 3000 farm operators, who had previously participated in MDA Water Quality Incentive programs, indicated that changing Cover Crop Program guidelines and funding uncertainty discouraged participation. The survey and a follow up 2006 survey were used to make program adjustments, with a goal to maximizing program participation and water quality benefits. Program adjustments included increasing the acreage enrollment cap, on-line access to application forms, increased incentives for early planting and split payments. In SFY 2009 new eligibility requirements were introduced consistent with findings from a scientific panel under the auspices of BayStat. The incentive structure was adjusted to maximize nutrient reductions. In addition to incentives for early planting, farmers could receive increased payments for planting cover crops after corn or vegetables, planting cover crops on fields where manure was used as a nutrient source, planting rye, using certain tillage methods or planting in priority watersheds. With added incentives payments ranged from \$30 per acre to \$90 per acre.

FY2009 saw application requests for approximately 400,000 acres. MDA approved all eligible applications for 387,000 acres. BRF funds approximately 100,000 acres in cover crops. A separate commodity cover crop program was also available allowing farmers to harvest the crop for a reduced payment provided they do not use fertilizer in the fall. The 2010 Chesapeake Bay Trust Fund was used to supplement existing funds, and in conjunction with general funds and limited watershed specific funding helped expand program availability. Tributary strategies call for 600,000 acres of traditional cover crops and 150,000 acres of commodity cover crops annually.

In FY2007, an agreement with the Maryland Grain Producers Utilization Board (MGPU) resulted in MDA and the MACS Office administering a Hulless Barley Program within the commodity cover crop program, which does not utilize BRF. The purpose is to provide experience for producers who plant hulless barley as a cover crop for its use in the future as a feedstock to produce ethanol. The MGPU has interest to construct an ethanol plant using hulless barley as a feedstock in Maryland has been impacted by economic conditions unfavorable to the venture. Recently other entities are expressing interest in pursuing an ethanol facility using barley. The added incentive for operators who choose to grow hulless barley was available in 2009. There has been limited response to the program.

MDA administers the Cover Crop Program through the Maryland Agricultural Water Quality Cost Share Program or MACS. MACS provides financial assistance to farm operators to help them implement approximately 30 BMPs. Cover crops are one of the most cost effective methods for tying up excess nitrogen from the soil following the fall harvest of crops. They minimize nitrogen loss caused by leaching into nearby streams and aquifers, prevent soil erosion and improve soil quality.

## **Maryland Department of Planning:**

The Maryland Department of Planning (MDP) is a statutory member of Bay Restoration Fund Advisory Committee (BRFAC). The Department's general mandate is to advise State agencies, local governments, the General Assembly, and others on planning matters. More specifically, the Department is focused on implementation of Smart Growth policies and programs at all levels of government. Generally, the BRF program supports State Planning and Smart Growth policies to the degree that WWTP capacity is allocated to serve existing and new development in locally certified and State recognized Priority Funding Areas (PFAs).

Specific functions that MDP carries out that relate directly or indirectly to the BRF programs are summarized below. HB 893 enacted by the 2007 legislative session, added an additional BRF reporting responsibility which is discussed in another section.

### **1. State Clearinghouse Review**

All State and federal financial assistance applications, including those for BRF funds are required to be submitted for review through the State Clearinghouse which is part of MDP. The Clearinghouse solicits comments on these applications from all relevant State agencies and local jurisdictions. The applicant and funding agency are subsequently notified of any comments received. This review ensures that the interests of all reviewing parties are considered before a project is sent forward for final federal or State approval.

### **2. Review and Comment on County Water and Sewerage Plans and Amendments**

MDP is directed by law to advise MDE regarding the consistency of County Water and Sewerage Plans and amendments with "local master plan and other appropriate matters" (Environment Article § 9-507 (b)(2)). This includes review for consistency with State Smart Growth policy. MDP carries out this review and provides advisory comments to MDE for consideration before MDE makes an approval decision on Water and Sewerage Plans or amendments.

The law also requires that County Water and Sewerage Plans and amendments be consistent with the local master or comprehensive plans. Therefore, if a plan or amendment is not consistent with a comprehensive plan, it is subject to disapproval by MDE. Since facility construction, discharge, and other permits must also be consistent with the County Water and Sewerage Plans, the legal chain, from comprehensive plans to Water and Sewerage Plans to permits, helps to assure that all BRF projects are consistent with local comprehensive plans before funding is approved and construction can begin.

### **3. Priority Funding Areas (PFA)**

One specific feature of State Smart Growth policy is the designation of Priority Funding Areas (PFAs). These areas are delineated by local governments in accordance with statutory criteria that focus on concentrating high density growth in and near existing communities. If the local PFA boundaries do not meet the legal requirements in the law, MDP overlays a "comment area" delineation to so indicate. The PFA statute lists the specific State financial assistance programs that are required to focus their funding on projects inside the PFA, with certain specified exceptions. BRF funds and projects are not listed as a PFA

covered program. The rationale for this was that BRF funds will only pay to upgrade existing treatment capacity and will not pay for any capacity expansions.

HB 893, which is discussed further in another section, raises certain issues related to the BRF exclusion from the PFA requirement.

#### 4. Local Comprehensive Plan Review and Comment

Local Comprehensive Plans must be prepared by every county and municipality in Maryland, pursuant to Article 66B of the Annotated Code. MDP provides comments on all draft local Comprehensive Plans and amendments. Through the Clearinghouse review process, other State agencies are also provided the opportunity to comment before they can be adopted by local governing bodies. However, since these plans are not subject to State approval, comments provided are advisory only. Depending on the wishes of the jurisdiction, MDP works closely with, and provides technical assistance to, local governments in the processes leading to adoption of local comprehensive plans. MDP advises them on planning issues and methods supporting State Planning and Smart Growth policies and practices.

HB 1141, enacted by the 2006 General Assembly, added new required elements to local comprehensive plans. One of these is a Water Resources Element which must be completed by every jurisdiction by October 1, 2009. This element is required to address water supply and wastewater infrastructure, and water quality issues to assure that these considerations are more fully integrated into comprehensive planning. In addition to the comprehensive plan interagency review process described above, MDE is specifically mandated to establish criteria for this element and to review the element for consistency with these criteria and MDE's overall water resources programs. However, as with all local comprehensive plans, there is no provision for State approval. It is expected that preparation and local adoption of these elements will further improve guidance for effective use of BRF funds for all of its authorized purposes.

### Bay Restoration Fund Status

The Bay Restoration Fund (BRF) fees collected from wastewater treatment plant users are identified as "Wastewater" fees and those collected from users on individual onsite septic systems as "Septic" fees. These fees are collected by the State Comptroller's Office and deposited as follows:

- Wastewater fees (net of local administrative expenses) are deposited into MDE's "Wastewater Fund."
- Sixty percent (60%) of the Septic fees (net of local administrative expenses) are deposited into MDE's "Septic Fund."
- Forty percent (40%) of the Septic fees (net of local administrative expenses) are deposited into Maryland Department of Agriculture's (MDA) "Septic Fund."

The status of the cash deposits from the State Comptroller's Office to MDE and MDA for each of the sub-funds identified above, as of September 30, 2008, is as follows:

#### Wastewater Fund (MDE 100% for ENR & Sewer Infrastructure)

<u>Sources:</u>		<u>Uses:</u>	
Cash Deposits	\$188,795,088	Capital Grant Awards	\$115,490,175
Cash Interest Earnings	\$ 12,619,540	Admin. Expense Allowance	\$ 2,831,926
Net Bond Proceeds	<u>\$ 51,623,877</u>	FY '09 Bond DS Allowance	<u>\$ 4,654,963</u>
Total	\$253,038,505	Total	\$122,977,064

Applicant/WWTP Fund	Grant Award
<b>ENR PROJECTS</b>	
Aberdeen ENR	200,000.00
Alleghany Co/ Georges Creek ENR	10,588,000.00
Alleghany Co/ Celanese ENR	2,333,382.00
Anne Arundel Co/ Annapolis WRF	200,000.00
Anne Arundel Co/ Broadneck WRF	200,000.00
Baltimore City/Patapsco ENR	10,000,000.00
Baltimore City/Back River WWTP ENR	5,000,000.00
Bowie ENR	600,000.00
City of Brunswick/WWTP ENR	8,263,000.00
Cambridge ENR	100,000.00

Applicant/WWTP Fund	Grant Award
Chestertown ENR	2,000,000.00
Crisfield WWTP ENR	4,231,000.00
Cumberland WWTP ENR	1,000,000.00
Delmar WWTP ENR	200,000.00
Denton WWTP ENR	200,000.00
Easton WWTP ENR	8,660,000.00
Elkton ENR	7,960,000.00
Emmitsburg WWTP ENR	50,000.00
Federalsburg ENR	3,360,000.00
City of Hagerstown/WWTP ENR	650,000.00
Havre de Grace WWTP ENR	11,289,000.00
Harford Co./ Sod Run ENR	50,000.00
Howard County/Little Patuxent ENR	530,000.00
Hurlock WWTP ENR	941,147.75
Indian Head ENR	6,484,000.00
La Plata ENR	110,000.00
Leonardtown WWTP ENR	510,000.00
MD Env Serv/Freedom District WWTP ENR	100,000.00
Mt Airy ENR	200,000.00
Perryville ENR	4,000,000.00
Queen Anne's/ Kent Island ENR	6,380,645.09
Salisbury WWTP ENR	3,000,000.00

<b>Applicant/WWTP Fund</b>	<b>Grant Award</b>
St. Mary's Co./Marley Taylor Water Reclam.	200,000.00
Talbot Co/St Michaels ENR	2,000,000.00
Thurmont WWTP ENR	300,000.00
Washington Co./Winebrenner	100,000.00
Westminster ENR	20,000.00
WSSC/Damascus WWTP ENR	325,000.00
WSSC/Western Branch WWTP ENR	1,000,000.00
WSSC/Blue Plains WWTP ENR	2,000,000.00
<b>ENR SUBTOTAL</b>	<b>105,335,174.84</b>
<b>SEWER PROJECTS</b>	
Balto City Gwynns Run Sewer	1,575,000.00
Balto. City Greenmount Branch Sewer Interc.	2,300,000.00
Balto. City Greenmount Branch Sewer Interc. II	1,000,000.00
Emmitsburg/South Seton Ave Sewer Line	600,000.00
Frostburg Combined Sewer Overflow Phase IV	1,000,000.00
Frostburg CSO - Phase V	800,000.00
City of Fruitland Infiltration & Inflow Sewer	300,000.00
Port Deposit Inflow & Infiltration Reduction	200,000.00
Secretary/Gordon Street Lift Station	150,000.00
Secretary Infil/Inflow Reduction	200,000.00
St. Mary's METCOM/Evergreen Park Sewer	230,000.00
Talbot/St Michaels Sewer & Upgrade	1,000,000.00
Talbot/St Michaels Sewer & Upgrade	400,000.00



Applicant/WWTP Fund	Grant Award
City of Taney Town/Balt St Water Main	200,000.00
Washington Co. Halfway Inflow/Infiltration Reduction	200,000.00
<b>SEWER SUBTOTAL</b>	10,155,000.00
<b>TOTAL (ENR &amp; SEWER)</b>	<b>115,490,174.84</b>

**Septic Fund (MDE 60% for On-Site Disposal System upgrades)**

<u>Sources:</u>		<u>Uses:</u>	
Cash Deposits	\$21,600,504	Capital Grant Awards	\$17,029,391
Cash Interest Earnings	\$ 1,550,934	Admin. Expense Allowance	\$ 1,728,040
<b>Total</b>	<b>\$23,151,438</b>	<b>Total</b>	<b>\$18,757,431</b>

Applicant/Septic Fund	Grant Award
Anne Arundel Co Health Dept.	2,644,000.00
Calvert Co Dept of Planning/Zoning Phase I	933,000.00
Calvert Co Dept of Planning/Zoning Phase II	1,948,000.00
Canaan Valley Institute/Frederick Co	712,000.00
Canaan Valley Institute/Washington Co	750,000.00
Caroline Co Health Dept. Phase I	144,000.00
Caroline Co Health Dept. Phase II	277,000.00
Cecil County Health Dept.	650,000.00
Charles Co Health Dept.	604,000.00
Dorchester County Health Dept.	409,000.00
Harford County Health Dept.	1,038,000.00
Kent Co Dept. of Water/WW	597,000.00
Maryland Dept. of Natural Resources	287,000.00
Talbot Co Dept. of Natural Resources	1,168,000.00
Wicomico Co Health Dept. Phase I	771,000.00
Wicomico Co Health Dept. Phase II	1,948,000.00
Worcester Co Dept. of Environ. Programs	1,142,000.00
<b>SUBTOTAL SEPTIC</b>	<b>16,022,000.00</b>
Individual Septic Upgrades (78) thru 9/08	1,007,390.76
<b>TOTAL SEPTIC</b>	<b>17,029,390.76</b>

**Septic Fund (MDA 40% for Cover Crops)**

Sources:

Cash Deposits\* \$ 14,400,335

Uses:

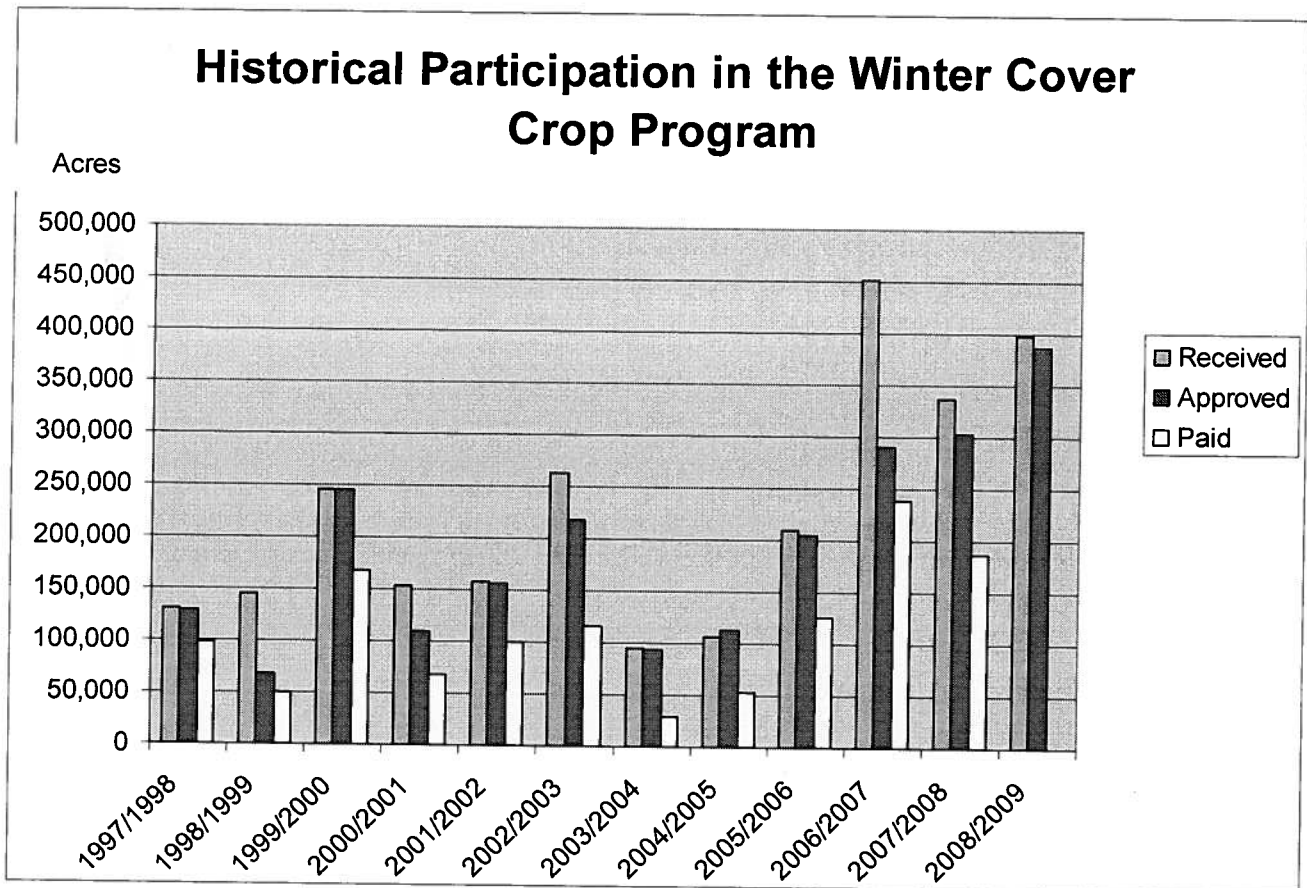
Grant Awards \$ 11,488,974

Admin. Expense \$ 388,000

Total \$ 11,876,974

\*Cumulative revenue as of 9/30/08

Historically there is attrition between acres approved for funding and actual payments for cover crops planted under the Maryland Agricultural Water Quality Cost Share Program. The main cause of reduced acreage is one of time and labor availability in the fall planting of cover crops after harvest. Related causes are delays caused by weather and other uncontrolled factors. In FY2009, farmers were able to enroll in a commodity cover crop option which allows harvest at a reduced incentive. This option effectively has eliminated the attrition that occurred in past years due to opting out of the program for harvest in the spring. The chart below illustrates the “typical” program attrition profile. Since the FY2009 program underwent a number of changes, a margin of error should be factored into use of historic rates to predict attrition this year.



### **Potential Funding Gap and Recommended Action:**

Based on current total estimated ENR capital cost of \$1.113 billion and BRF wastewater (WW) fund projected cash flow, the WW fund can provide \$868 million in grants and is expected to have a funding deficit of \$245 million by 2018. Under the current ENR project schedule and anticipated cash flow needs, the WW fund will be able to provide up to 100% grants for ENR expenditures through FY 2011. This will be accomplished by issuing approximately \$530 million in revenue bonds in addition to using the Bay fee cash balances (See Attachment 1 for details). The primary reasons for the anticipated funding gap are the higher ENR project costs and the 15-year term limitation on the bay bonds, as required under the Maryland Constitution for State supported debt. MDE investigated the issuance of 20-year bonds, which would have allowed the State to issue \$100 million more in revenue bonds than the 15-year term. However, it was later determined by the State Treasurer that since the BRF fee is assessed practically from all State residents, any bonds leveraged against the fee must have the same terms as the General Obligation debt, which is set by the State Constitution not to exceed 15 years.

Since the ENR funding deficit of \$245 million is not anticipated until FY 2012 and the ENR project costs for the big three projects (Back River, Patapsco, and Blue Plains WWTPs) are very preliminary, the Advisory Committee will evaluate the following options in more detail prior to making any recommendations:

- a. Increasing the Bay fee, which is currently \$2.50 per month per Equivalent Dwelling Unit;
- b. Reducing the ENR grant, which currently is at 100% of eligible costs;
- c. Reprioritizing the upgrade of the 67 ENR projects while delaying or not undertaking the upgrade of certain WWTPs;
- d. Seeking Bay Restoration Fund statutory changes that allow the Bay fees to make debt service payment on bonds issued by local governments (for ENR eligible cost) that have a term of up to 30 years.

### Update on Fees from Federal Facilities

On July 19, 2006, the State of Maryland and the Department of Defense (DoD) signed a Memorandum of Understanding (MOU) to resolve a dispute regarding the applicability of the Bay Restoration Fee to DoD. The State's legal position is that the federal government is not exempt from paying the Bay Restoration Fund (BRF) fee; however, the DoD asserts that the BRF fee is a tax and that the State may not tax the federal government. On July 19, 2006, with the advice of counsel, the State chose to settle the matter with DoD rather than to litigate. In the MOU, neither party concedes any legal position with respect to the BRF fee. The MDE has agreed to accept DoD's proposal to undertake nutrient removal upgrades at certain DoD-owned wastewater treatment plants at its own expense (estimated cost \$22.5 million) in lieu of paying the BRF fee. No other Federal agency is exempt from paying the BRF fee.

One DoD facility, Aberdeen Proving Ground – Aberdeen, has been upgraded to achieve ENR level of treatment. MDE will continue to work with DoD to upgrade the other facilities as specified in the MOU. The goal is complete the targeted DoD facilities by 2012. Specifically, the following are the targeted DoD facilities with their projected construction completion dates:

DoD Facility	Projected Construction Completion Date
Fort Detrick	June 2011
Fort Mead	December 2012
Aberdeen Proving Ground – Edgewood	December 2012
Naval Station – Indian Head	December 2011

### Wastewater Treatment Plant Upgrades With Enhanced Nutrient Removal (ENR)

#### Status of Upgrades:

The Maryland Department of the Environment (MDE) is implementing a strategy known as Enhanced Nutrient Removal (ENR) and is providing financial assistance to upgrade wastewater treatment facilities in order to achieve ENR. The ENR Strategy and the Bay Restoration Fund set forth annual average nutrient goals of WWTP effluent quality of Total Nitrogen (TN) at 3 mg/l as "N" and Total Phosphorus (TP) at 0.3 mg/l as "P", where feasible, for all significant wastewater treatment plants with a design capacity of 0.5 million gallons per day (MGD) or greater. Other wastewater treatment plants may be selected by the Department for upgrade on a case-by-case basis, based on the cost effectiveness of the upgrade, environmental benefits and other factors. Specifically, Maryland's 66 major sewage treatment facilities are targeted for the initial upgrades.

MDE has taken advantage of the momentum generated by the existing biological nutrient removal (BNR) program and has proceeded with the ENR strategy as a continuation of the BNR program. Facilities that were in the planning or design phase to upgrade to BNR (achieving 8 mg/l total nitrogen) were asked to revise their plans to include ENR capability to achieve 3 mg/l total nitrogen and 0.3 mg/l total phosphorus. Consequently, ENR upgrades are underway at many plants, and to date, nine facilities have been completed and are in operation. Two other facilities are currently meeting the ENR treatment level,

Dorsey Run and North East River, but require further evaluation to ensure that they will continue to achieve ENR without additional improvements as they approach their design capacity. Nine facilities are under construction, 19 are in the design stage, and 22 are in the planning stage. MDE is continuing to work to bring the remaining five major systems into the program by urging the facilities to proceed with the ENR upgrade and/or by including nutrient loading limits and a compliance schedule in the discharge permits. The committee is proposing to add Hampstead to the funding list as it is required to upgrade by Maryland's Tributary Strategy – Statewide Implementation Plan.

The following are the facilities that have completed the upgrade and are in operation:

Facility	Design Flow in Million Gallons Per Day	Date Completed	Total Cost	BRF Cost	Nitrogen Load Reduction At Design Flow (Lbs/year)	Phosphorus Load Reduction At Design Flow (Lbs/year)
Hurlock	1.65	May 2006	\$7,585,000	\$1,000,000	75,000	3,500
Celanese	1.66	Nov. 2006	\$15,833,000	\$2,022,000	91,000	4,200
Easton	4.00	June 2007	\$37,453,000	\$8,000,000	60,000	8,500
Kent Narrows	3.00	Aug. 2007	\$35,019,000	\$6,493,000	137,000	6,300
APG-Aberdeen	2.80	Mar. 2006	\$6,300,000	\$0	127,000	5,900
Swan Point	0.60	May 2007	\$8,080,000	\$0	27,000	1,200
Chestertown	0.90	June 2008	\$9,802,000	\$2,000,000	68,000	3,100
Brunswick	1.40	Sept. 2008	\$14,945,000	\$8,263,000	63,000	2,900
Salisbury	8.5	Dec. 2008	\$78,021,000	\$3,000,000	388,000	18,100
<i>Total</i>	24.51		\$213,038,000	\$30,778,000	1,036,000	53,700

As an estimate of the total benefit of these capital projects, the above load reductions were determined based on the difference between what would be the facility's load without the upgrade versus the load with the upgrade at the ultimate design capacity. These load reductions would allow the upgraded facilities to maintain their Tributary Strategy loading caps of nitrogen and phosphorus even after reaching their design capacity and the 20-year projected growth.

## House Bill 893 Implementation

House Bill 893, enacted on April 24, 2007, requires that: “[b]eginning January 1, 2009, and every year thereafter, the Department (MDE) and the Department of Planning shall jointly report on the impact that a wastewater treatment facility that was upgraded to Enhanced Nutrient Removal during the calendar year before the previous calendar year with funds from the Bay Restoration Fund had on Growth within the municipality or county in which the wastewater treatment facility is located.”

As required by this legislation, MDP and MDE have advised the Bay Restoration Fund Advisory Committee regarding the best available information to address this mandate. The results of this analysis are presented below. This first Report addresses the following Bay Restoration Fund financed facilities which were completed prior to January 1, 2008:

Facility	Design Capacity (MGD)		Actual 2007 Flow	% of Original
	Original	At Upgrade		
Celanese, Allegany County	2.00	1.66	1.319	66.0%
Town of Easton, Talbot County	2.35	4.00	2.161	92.0%
Town of Hurlock, Dorchester County	2.00	1.65	1.025	51.3%
Kent Island (KNSG), Queen Anne's County	2.00	3.00	1.368	68.4%

As of 2007, actual flows for the subject facilities have been below the original design capacity before the ENR upgrade. Therefore, growth at these facilities during 2007, if any, cannot be attributable to the Bay Restoration Fund.

### MDP Methodology

Even though the Bay Restoration Fund does not fund additional treatment capacity, and growth would have been supported by these facilities with or without the ENR upgrades, for reasons discussed below, the analysis completed by MDP shows that connections to systems served by BRF upgraded facilities do occur outside of the PFA. This will be explained further below.

To estimate growth at these facilities the MDP BRF Analysis uses the following Data:

1. Sewer Service Area Data derived from the latest County Comprehensive Water and Sewerage Plans. These boundaries are updated regularly based on approved amendments or updates of the county plans.
2. Locally certified PFAs, excluding the PFA “comment areas” that have been identified by MDP. A “comment area” refers to an area certified by a county that does not meet the PFA statutory criteria. They are delineated by MDP on the PFA maps. Their purpose is to advise other State agencies that cover State

financial assistance programs that they should avoid targeting these areas. PFA boundaries are also updated regularly.

3. Parcel Point Data from Maryland Property View (specifically, MDPV 2006 and 2007). This data identifies new construction on parcels during the reporting year. MDPV is a tax map and parcel information collection of county-wide data sets which are maintained and updated on an annual rotation cycle. The update cycle varies for any particular county due to the fact that updates occur as a complete set of county data records are received. The update cycles may not match perfectly the calendar year for the reporting cycle. However, MDPV is still a valuable resource for tracking parcel changes over a 12 month period. MDP employs its best efforts to provide a consistent analysis when comparing reporting cycles with the specified calendar year. However, over a multi-year reporting period, new connection trends will become apparent.

For each wastewater treatment plant (WWTP) service area, this analysis results in identifying the number of 2007 connections inside and outside of the PFA. This is the baseline against which the annual future changes in the number of connections will be measured. The analysis assumes (based on the County Water and Sewerage Plans) that any improved properties inside of existing service areas are connected to the WWTP. No distinction is made among types of uses – residential, commercial, etc.

An “improved parcel” is defined as any parcel with an improvement value greater or equal to \$10,000.

**Alternative Empirical Methodology**

A parallel methodology using empirical data is also being initiated. BRF grant agreements require each grant recipient to report all new connections to completed BRF funded ENR plants. As this data becomes available in future years to compare to the results generated by the MDP analysis, a determination will be made whether to continue to use only one or both methodologies.

Maps showing each service area and PFAs were prepared with newly improved parcels highlighted with a yellow dot. These maps appear in Attachment 2 of this Report. These newly improved parcels are then simply counted with respect to their location inside and outside of the PFA to produce the data shown in the table below.

<b>Base Year Connections To 2007 Completed ENR Upgraded WWTPs Inside and Outside of PFAs</b>			
<b>WWTP</b>	<b>Start of Operation Date</b>	<b>Number of Connections Inside PFA – 2007</b>	<b>Number and Percent of All Connections Outside PFA - 2007</b>
<b>Celanese, Allegany County</b>	11/2/2006	1854	64 / 3.3%
<b>Town of Easton, Talbot County</b>	6/30/2007	5899	102 / 1.7%
<b>Town of Hurlock, Dorchester County</b>	5/15/2006	796	6 / 0.7%
<b>Kent Island, Queen Anne’s County</b>	8/20/2007	6134	504 / 7.6%

This table shows that the number and percentages of connections outside of the PFA varies significantly, at least for these first service areas. Connections occur outside of the PFA for a number of reasons, one of which is that Comprehensive Plans and Water and Sewerage Plans are not required to be consistent with PFAs. The sole purpose of PFAs is to focus State investment programs listed in the PFA statute into PFAs. As discussed elsewhere, the BRF is not a listed program.

County Water and Sewerage Plans, however, are required by law to be consistent with local comprehensive plans. This means that the use of BRF funds is consistent with those linked plans. Notwithstanding the lack of consistency requirement between these two plans and PFAs, MDP and MDE make their best efforts in using the County Water and Sewerage and local comprehensive planning processes to ensure that growth, which may be directly or indirectly attributable to the Bay Restoration Fund program, be within State designated Priority Funding Areas. During the next year, staff will evaluate the following issues and report any findings or recommendations for improvements for consideration by the Advisory Committee in time for the 2010 Annual Report.

- There is no mandated link between the County Water and Sewer Plans and State Smart Growth policies including PFAs.
- There is no mandated link between the Bay Restoration Fund program and State Smart Growth policies including PFAs.
- The Bay Restoration Fund does not pay for any treatment capacity above the Approved Design Capacity in the Maryland's Tributary Strategy Statewide Implementation Plan. However the use of BRF funds may be indirectly linked to where and how growth occurs.
- Most facilities have design capacity above current flow, which can be used for growth either inside or outside of the PFA, with or without the ENR upgrade. Hence, measuring a direct link between BRF funds and the support of development not consistent with PFAs and State Smart Growth policies will be difficult.



## **Onsite Sewage Disposal System (OSDS) Upgrade Program**

### **OSDS Identification and Billing**

There are an estimated 420,000 OSDS's in Maryland that needed to be identified by local jurisdictions and billed. Working with the Advisory Committee, Maryland Department of Planning and the State Department of Assessment and Taxation, all jurisdictions have identified and are now billing septic system users.

### **Use of the OSDS BRF**

The Bay Restoration Fund legislation states that funds generated by the OSDS user fee may be used for the following:

With priority first given to failing systems and holding tanks located in the Chesapeake and Atlantic Coastal Bays Critical Area and then to failing systems that the Department determines are a threat to public health or water quality, grants or loans for up to 100% of:

- A. The costs attributable to upgrading an onsite sewage disposal system to the best available technology for removal of nitrogen;
- B. The cost difference between a conventional onsite sewage disposal system and a system that utilizes the best available technology for the removal of nitrogen;
- C. For a low income user the cost of repairing or replacing a failing onsite sewage disposal system with a system that uses the best available technology for nitrogen removal
- D. The cost, up to the sum of the costs authorized under item A of this item for each individual system, of replacing multiple onsite sewage disposal systems located in the same community with a new community sewerage system that is owned by a local government and that meets enhanced nutrient removal standards.

Above items C and D were not included in the initial legislation; rather they were added in subsequent legislative sessions. MDE developed procedures, guidelines and an application for low income users to apply for the full cost of repairing or replacing a failing OSDS with a system that includes BAT. The MDE website has been updated to include this information. An applicant qualifies for a full cost BAT complete disposal system replacement when the applicant meets one of the following conditions:

- Receives energy assistance subsidy;
- Receives public assistance - supplemental security income (SSI) or food stamps;
- Receives veterans or social security disability benefits;
- Meets the following guidelines:

Household Size	Maximum Monthly Income Standards	Maximum Yearly Income Standards
1	\$1,516.65	\$18,200.00
2	\$2,041.65	\$24,500.00
3	\$2,566.65	\$30,800.00
4	\$3,091.65	\$37,100.00
5	\$3,616.65	\$43,400.00
6	\$4,141.65	\$49,700.00
For each additional person, add	\$525.00	\$6,300.00

**Best Available Technology (BAT)**

The Department developed a procedure for determining which technologies should be considered grant eligible, and the BRF Advisory Committee established a workgroup including local health and public works agencies and industry representatives, to develop specifications for approved OSDS technologies. Referred to as Best Available Technology (BAT) Workgroup, this group of professionals was responsible for establishing the procedures for determining what specific types of systems will be eligible for grants under the OSDS portion of the BRF. MDE and the BAT workgroup reviewed programs in other states, published research and third party verification programs. Current research indicates that nitrogen discharges from OSDS's can be reduced by 50 to 60 percent.

The BAT Workgroup adopted a protocol used by the Environmental Protection Agency for Environmental Technology Verification (EPA/ETV) to establish a procedure to verify the performance of proprietary nitrogen reducing OSDS. During the past year one new technology was added to the approved list bringing the total number of proprietary technologies that have been evaluated by the EPA/ETV program and are eligible for BRF funding in Maryland to thirteen. A review team comprised of two engineers from MDE and one County Environmental Health Director review applications to ensure that each technology has been third party evaluated to a standard at least as stringent as the EPA/ETV's.

For non-proprietary technologies the vendor/applicant must provide a detailed description of the technology process illustrating sound scientific fundamentals and engineering practice. Acceptable technologies may be approved as a highly managed system. Highly managed systems must have either a renewable operating permit or be managed as part of a service district. No jurisdictions have availed themselves of the use of highly managed systems.

The BAT protocol requires an application for technology review to be submitted to MDE. The technical review team with experts in the field will review each application for approval of a particular technology and information collected to verify the effectiveness of that technology. If the technology has not undergone independent third-party verification or certification indicating consistent reduction of more than 50 percent of the nitrogen, the technology will be allowed a limited number of types of installations. These technologies will be monitored for a one to two year field evaluation period. After this period the technical review team will determine if the technology receives an unconditional approval, needs further field testing or is rejected from the program. This evaluation period will allow the Department to further define what should be considered a BAT and to perform cost benefits analyses.

## BAT Project Selection

The goal of the OSDS portion of the BRF is to curtail the amount of nitrogen discharged from OSDS into the waters of the State. This benefits the State by helping to restore the estuarine environment and provides for better protection of drinking water supplies. The Bay Restoration Fund statute states that funds may be used to provide grants for the incremental cost of upgrading OSDS to BAT for nitrogen removal. Only as a lesser priority for low income users can the BRF provide funding for an entire OSDS replacement or repair that includes BAT and other material (gravel & pipe) and labor costs related to the directly the repair or replacement. The Department recognizes that operation and maintenance, design review, installation inspection and project management are essential parts of the cost of upgrading OSDS to BAT for nitrogen removal. The BRF grant funds will cover the initial cost of purchasing and installing the BAT unit. The cost for the initial 5 years of operation and maintenance may also be included in the cost of purchasing the BAT technology. The local implementing entity may also use a portion of the BRF funds for reasonable costs associated with identifying individual applicants, reviewing plans, and inspecting BAT unit installations.

The Department has outsourced some elements of the OSDS portion of the BRF implementing OSDS upgrades using the BRF funds granted to county and municipal government agencies. These agencies may, with approval from MDE, make grants to OSDS users who agree to upgrade their systems and provide the necessary ongoing operation and maintenance. As mandated by the legislation, addressing failing systems in either the Chesapeake Bay Critical Area or the Maryland Coastal Bay's Critical Area is highest priority.

The following table summarizes outsourcing approved by the Board of Public Works in 2008:

<b>Recipient</b>	<b>County</b>	<b>Grant</b>
Calvert County Planning & Zoning	Calvert	\$1,582,000
Canaan Valley Institute	Washington	\$750,000
Caroline County Health Department	Caroline	\$277,000
Cecil County Health Department	Cecil	\$650,000
Dorchester County Health Department	Dorchester	\$409,000
Harford County Health Department	Harford	\$1,038,000
Wicomico County Health Department	Wicomico	\$1,948,000
	<b>TOTAL</b>	<b>\$6,654,000</b>

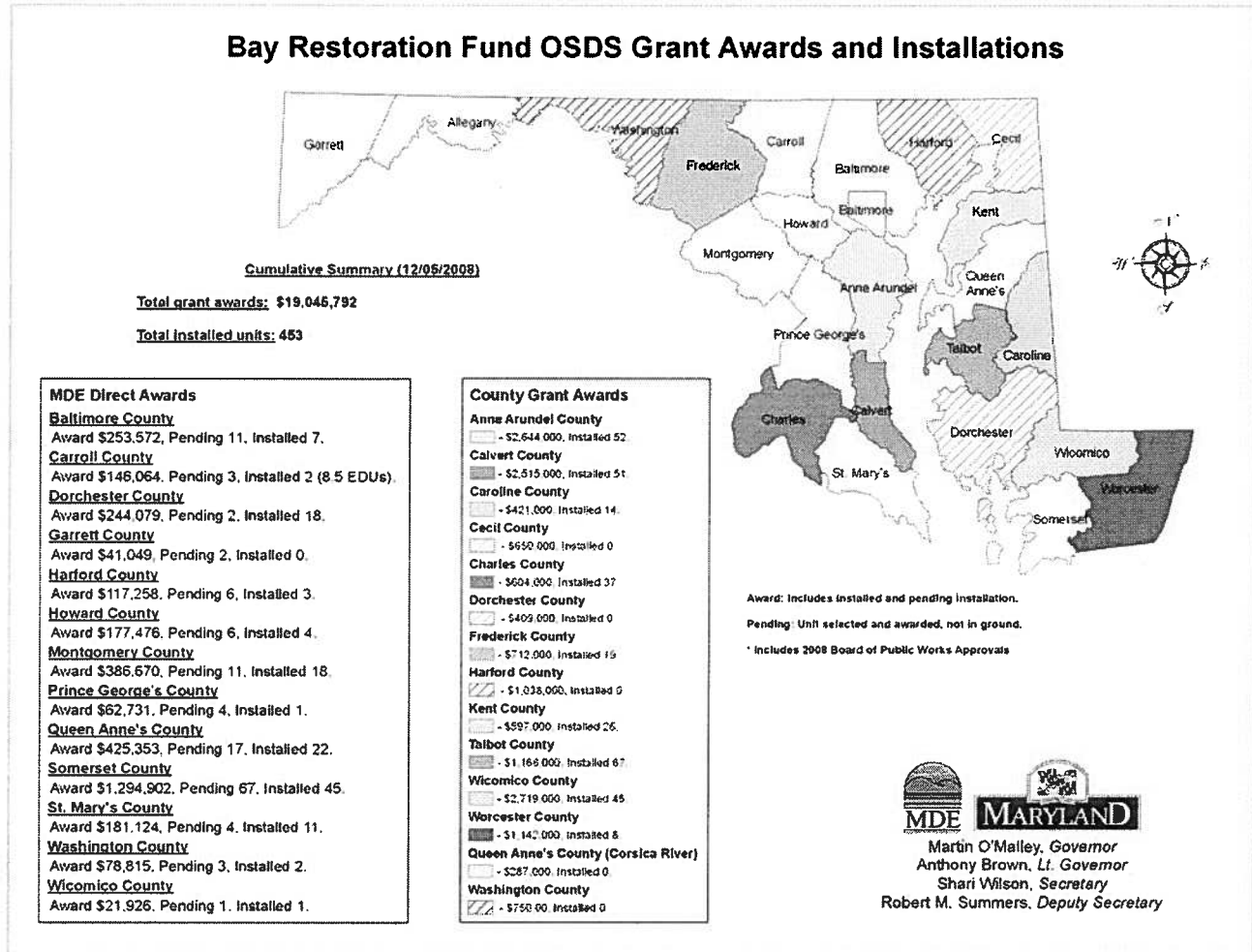
**Prioritization**

MDE has developed the following prioritization scheme:

<b>FACTOR</b>	<b>POINTS</b>	<b>SCORE</b>
Critical area upgrade only	20	
Failing system upgrade only	20	
holding tank upgrade only	20	
<b>Income</b>		
low income upgrade only	10	
any income upgrade only	9	
complete system replacement and upgrade for low income*	1	
<b>Environmental and Public Health</b>		
1,000 feet from shellfish harvesting waters	1	
1,000 feet from non-tidal surface water	1	
well head protection area	1	
carbonate rock geology	1	
<b>Water Supply</b>		
unconfined aquifer well	2	
confined aquifer well	1	
<b>TOTAL</b>		

\* The applicant qualifies for a full cost BAT complete disposal system replacement only when the low income requirements are met.

The following figure summarizes system installation and application by County:



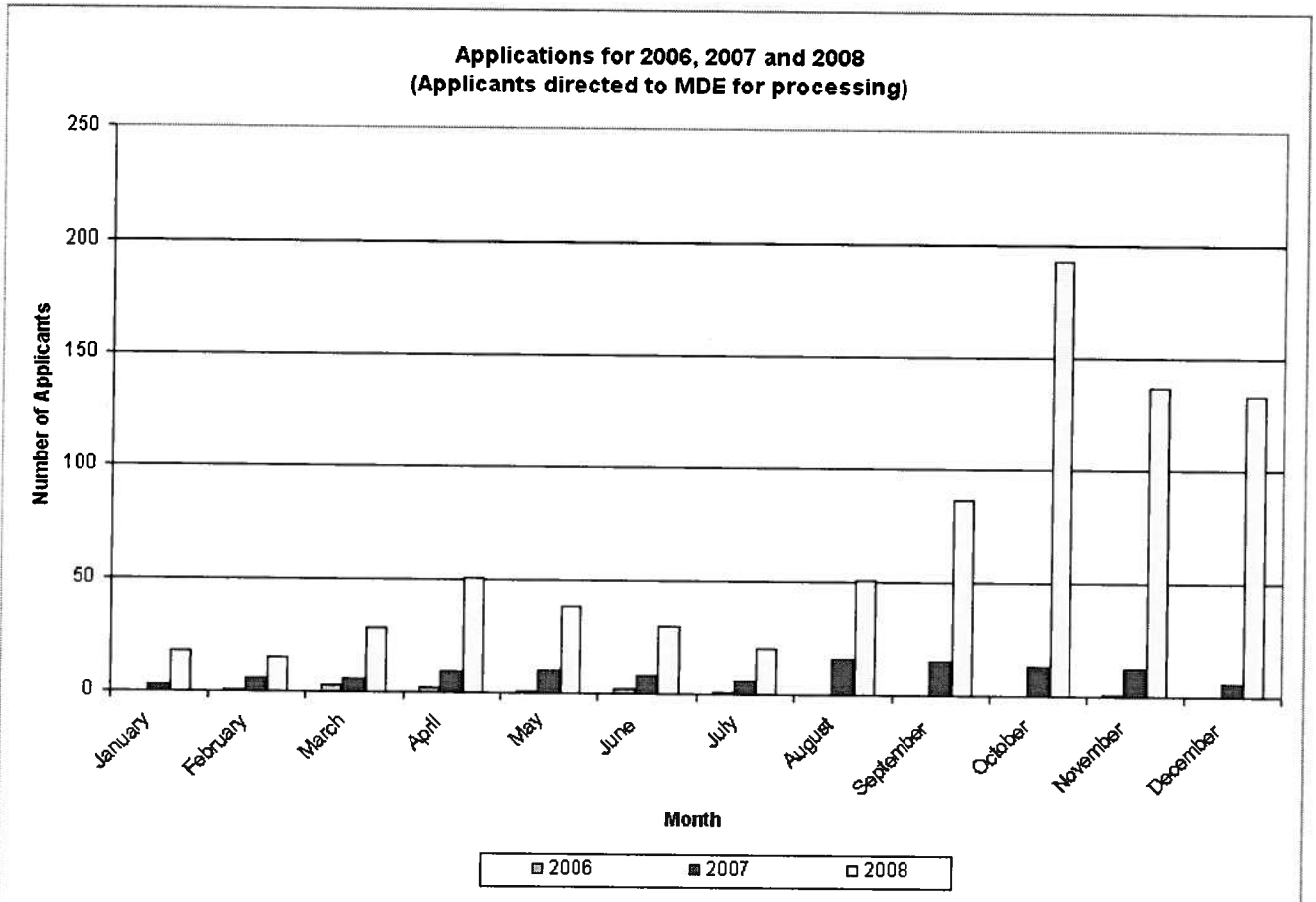
## Outreach

Please note that the demand for upgrading septic systems is now equal to the available revenue, however there remains an excess of accumulated funds due to the slow start-up of the program. MDE is addressing the excess accumulation of funds through the following initiatives:

- MDE staff is working with the Chesapeake Bay Tributary Teams, community groups and environmental groups to promote the onsite system upgrade program and has attended meetings, environmental fairs and other events organized by these groups to make presentations and distribute grant program materials.
- In the fall of 2005, MDE has developed a brochure entitled "The Bay Restoration Fund Onsite Sewage Disposal System User Information Guide." The brochure explains the Bay Restoration Fund and informs citizens how to apply for funding. The brochure is available on MDE's website, and is being distributed to local health departments. Also, the brochure is being distributed as part of MDE's inspection of onsite sewage disposal systems adjacent to shellfish harvesting waters.

- In the winter of 2006, MDE produced the video, “Onsite Sewage Disposal Systems – Protecting Your System – Preserving the Bay.” This video, which won a prestigious Aegis Award for video production, teaches homeowners about the care of septic systems and about the connection between septic systems and the Bay while also informing property owners about the availability of BRF funds to upgrade septic systems. To date, approximately 5,000 copies of this video have been distributed to homeowners and the video can be viewed on MDE’s website.
- In the fall of 2008, with assistance from the Governor’s Office and featuring the Governor, MDE produced a radio advertisement promoting the Bay Restoration Fund. The advertisement, which aired throughout the State, encourages Marylander’s to take advantage of the free septic system upgrades to protect their property and to help cleanup the Bay. MDE also airs this advertisement when citizens are put on hold on the MDDE phone system.
- Training of MDE field staff to enable them to inform property owners of the availability and advantages of the BRF Septic System Upgrade Program. As of December 13, 2008, four training sessions have been completed.
- Identify high-profile State-owned facilities in the critical area for Bay Restoration Fund (BRF) septic system upgrades to serve as demonstration projects. Projects have been identified at the University of Maryland Wye Center, Jefferson Patterson Park, Martinak State Park, at the Wye Oak. These and an additional ten DNR facilities should be completed by December 30, 2008.
- 134 State-owned septic systems have been identified in the Critical Area. MDE is to work with the appropriate agencies to upgrade these systems using the BRF. Over 100 of the identified systems are DNR-owned. MDE is working with the State agencies to target and upgrade State-owned facilities in the critical Area.
- MDE has identified all properties in the critical area on septic. We plan, on a rolling basis, to send a post card to these properties promoting the BRF. Mail-outs are scheduled to commence December 24, 2008.
- MDE began targeting large septic systems with individual State discharge permits to notify them of the availability of the BRF for upgrading their system.
- MDE prepared an RFP for a social marketing study to help guide future marketing efforts. The proposed RFP was revised as per DBM comments and resubmitted to DBM the second week of December 2008.
- MDE worked more closely with the press resulting in several stories in local papers.
- MDE let an RFP to obtain a list of pre-approved vendors and installers at a pre-determined cost. This will free property owners from having to go through the bid process. Vendor responses are due January 21, 2009.

The following chart summarizes applications received by MDE (partial data for 12/08):



## **Cover Crop Activities (Maryland Department of Agriculture)**

### **Recent Program Streamlining and Targeting to Achieve Maximum Nutrient Reduction:**

In 2005, the Maryland Department of Agriculture engaged the Schaefer Center for Public Policy to assist with a series of focus groups across the State and sent questionnaires to over 3,000 agricultural operators across the State. The purpose was to assess the Cover Crop Program and identify improvements that would result in additional acreage enrolled in the program. The recommendations were incorporated into the Cover Crop Program the following year. A follow up survey of participants that year was then used to evaluate how streamlining affected enrollment and contract completion.

In FY2008, a separate commodity cover crop program continued to be available allowing farmers to harvest the crop for sale in the spring in return for a reduced payment provided they do not fertilize the acres in the fall.

Under the auspices of the BayStat management strategy, MDA working in conjunction with the University of Maryland Center for Estuarine Studies, organized a group of scientists to provide information on how best to utilize available funds for cover crops to achieve the greatest nutrient reductions. The findings included:

1. planting cover crops as early as possible in the fall
2. planting after crops that need higher fertilizer rates such as corn and vegetables
3. using cover crops on fields that were fertilized using manure
4. planting method
5. use of rye

MDA applied these criteria by structuring the incentive payments to reward farmers who adhered to one or more of these priorities. Additional incentives were also provided for farmers who planted cover crops in priority watersheds selected in the BayStat process for a targeted effort by State agency actions. Funds available from the 2010 Chesapeake Bay Trust Fund will more than double the resources available to the Cover Crop Program in FY2009.

MDA has subcontracted with University of Baltimore, Schaefer Policy Center again in FY2009 to evaluate changes made to the program and to better understand barriers to participation.

### **Status of Implementation of BRF for Cover Crop Activities:**

The Maryland Department of Agriculture portion of BRF funds is \$ 14,400,335 as of September 30, 2009. MDA budget appropriations have not kept pace with revenue earnings due to challenges in projecting annual revenue during BRF start up. MDA will request DBM action in FY2009 to resolve this issue and bring in all available revenue. This one-time opportunity will help offset FY09 general fund cuts to the Cover Crop Program.



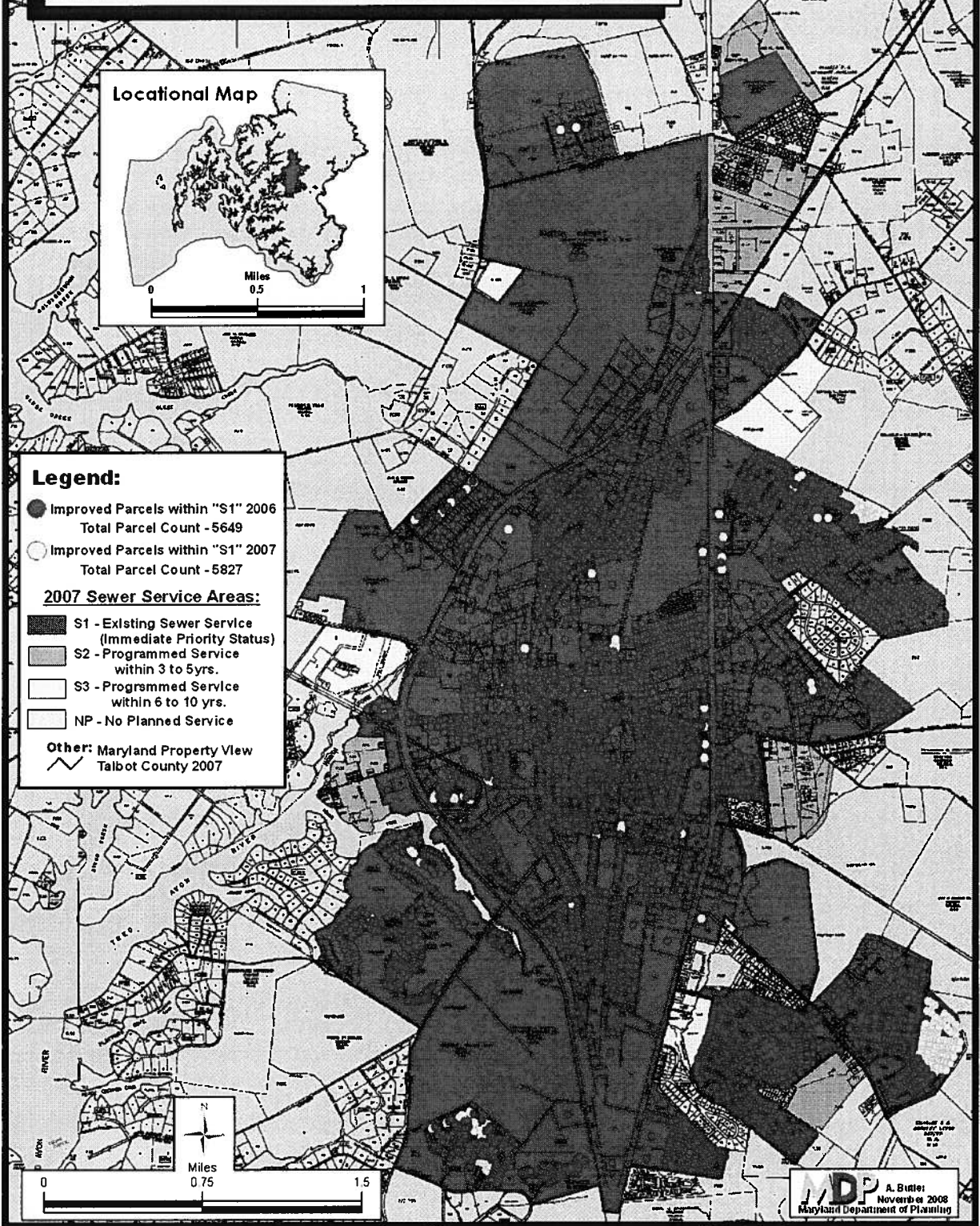
## **Potential Funding Gap**



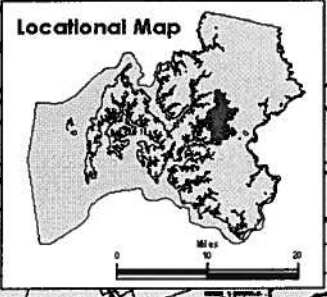
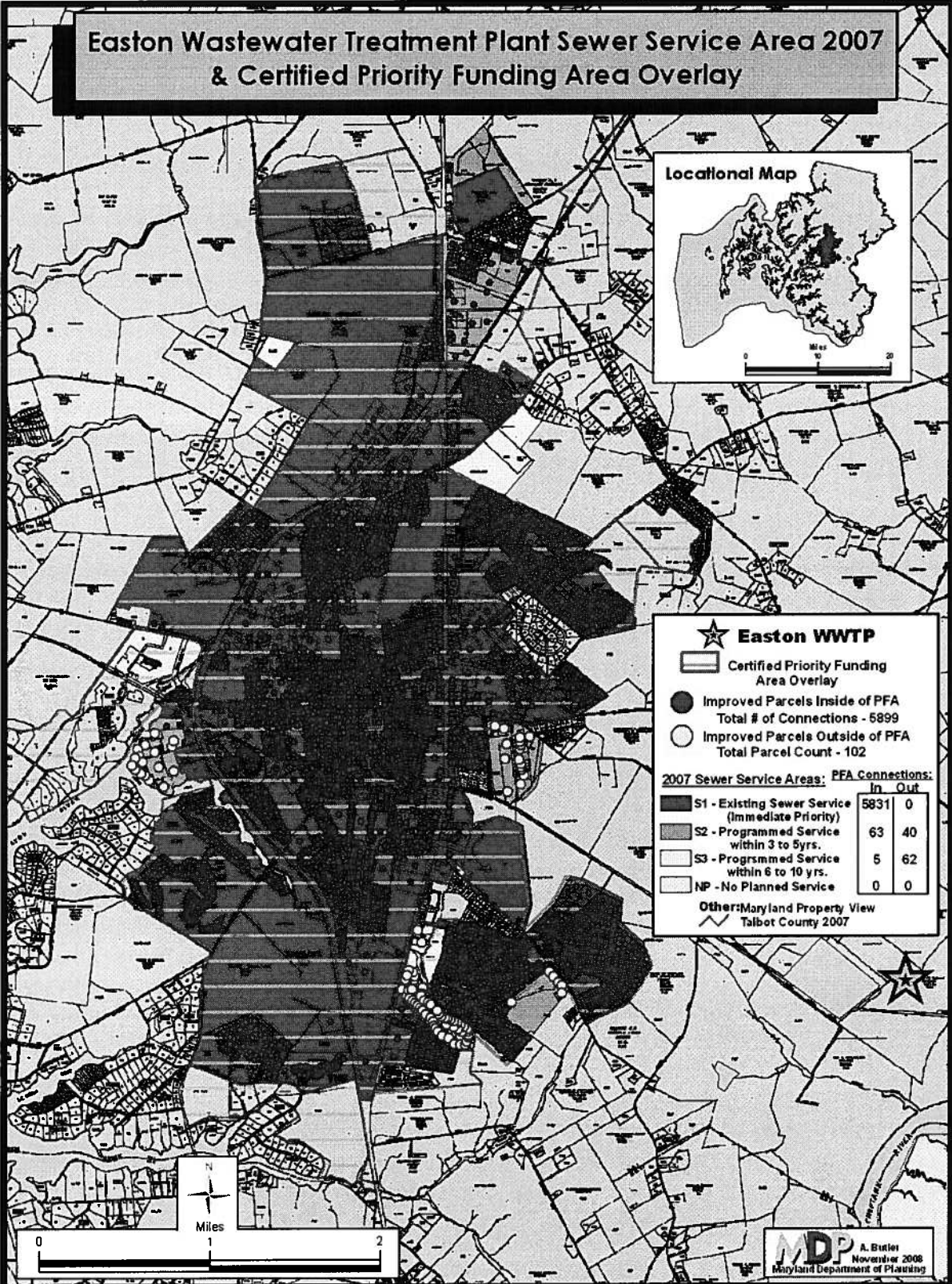


## **Sewer Service Areas**

# Easton Wastewater Treatment Plant Sewer Service Area 2007 & Improved Parcels



# Easton Wastewater Treatment Plant Sewer Service Area 2007 & Certified Priority Funding Area Overlay

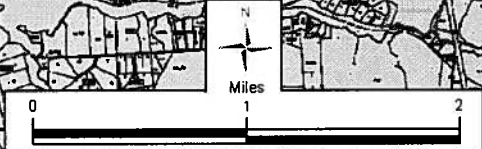


**★ Easton WWTP**

- Certified Priority Funding Area Overlay
- Improved Parcels Inside of PFA  
Total # of Connections - 6899
- Improved Parcels Outside of PFA  
Total Parcel Count - 102

2007 Sewer Service Areas:	PFA Connections:	
	In	Out
S1 - Existing Sewer Service (Immediate Priority)	5831	0
S2 - Programmed Service within 3 to 5yrs.	63	40
S3 - Programmed Service within 6 to 10 yrs.	5	62
NP - No Planned Service	0	0

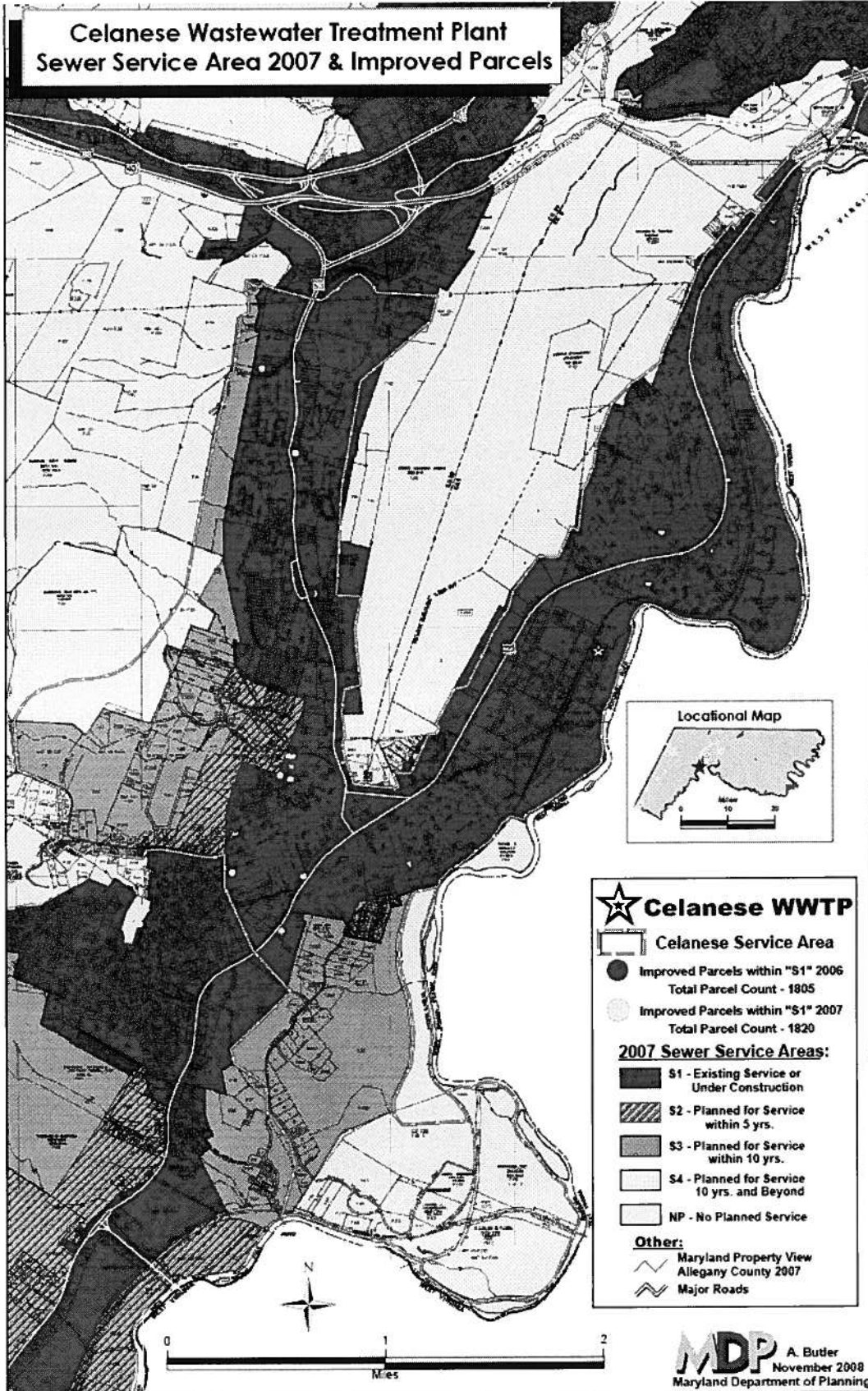
Other: Maryland Property View  
Talbot County 2007



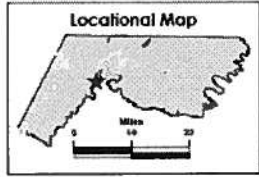
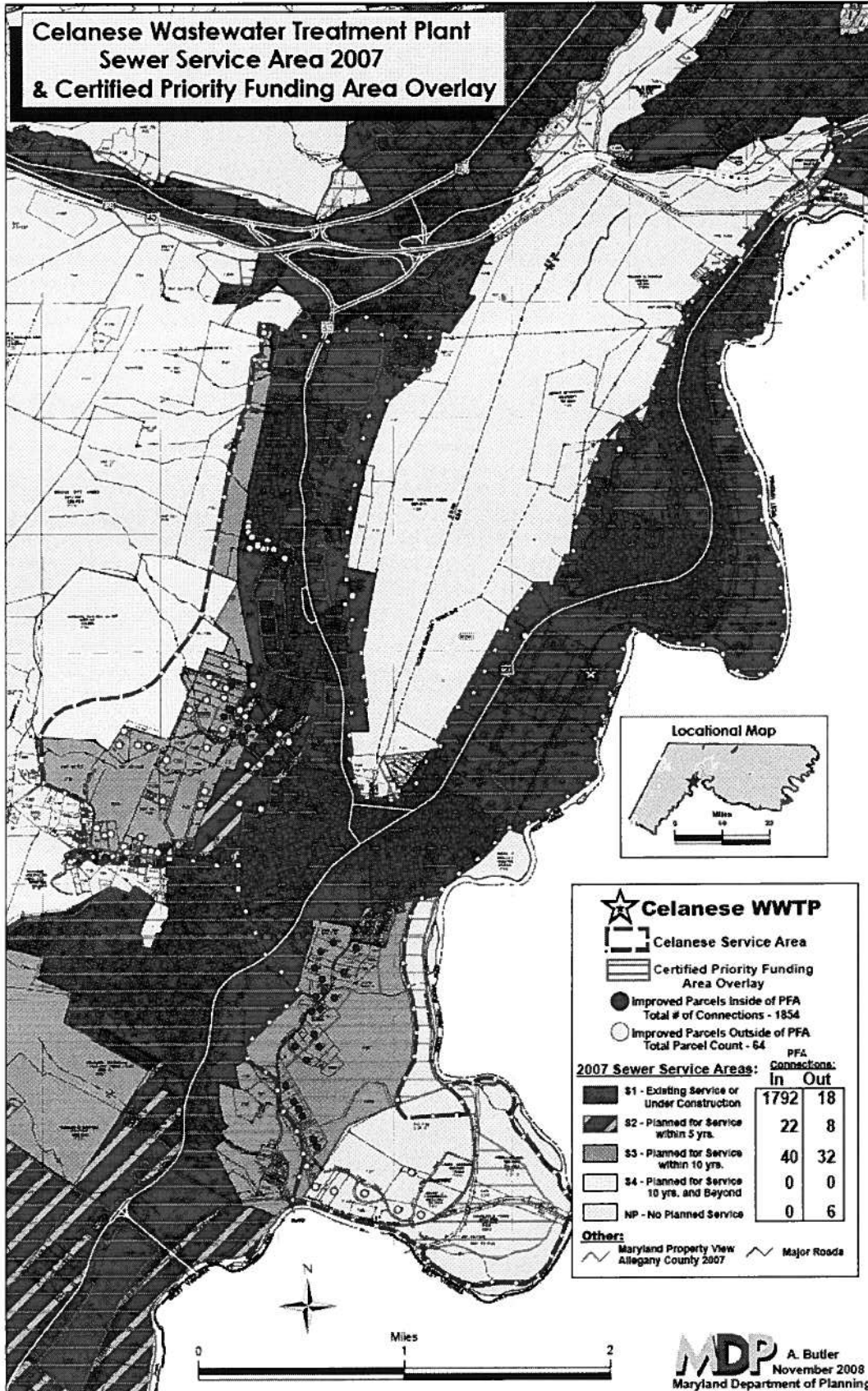
**MDP** A. Bistler  
November 2008  
Maryland Department of Planning



**Celanese Wastewater Treatment Plant  
Sewer Service Area 2007 & Improved Parcels**



**Celanese Wastewater Treatment Plant  
Sewer Service Area 2007  
& Certified Priority Funding Area Overlay**



**★ Celanese WWTP**

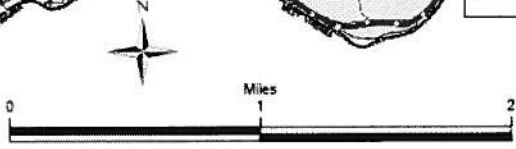
- Celanese Service Area
- Certified Priority Funding Area Overlay
- Improved Parcels Inside of PFA  
Total # of Connections - 1854
- Improved Parcels Outside of PFA  
Total Parcel Count - 64

**2007 Sewer Service Areas:**

	PFA Connections:	
	In	Out
S1 - Existing Service or Under Construction	1792	18
S2 - Planned for Service within 5 yrs.	22	8
S3 - Planned for Service within 10 yrs.	40	32
S4 - Planned for Service 10 yrs. and Beyond	0	0
NP - No Planned Service	0	6

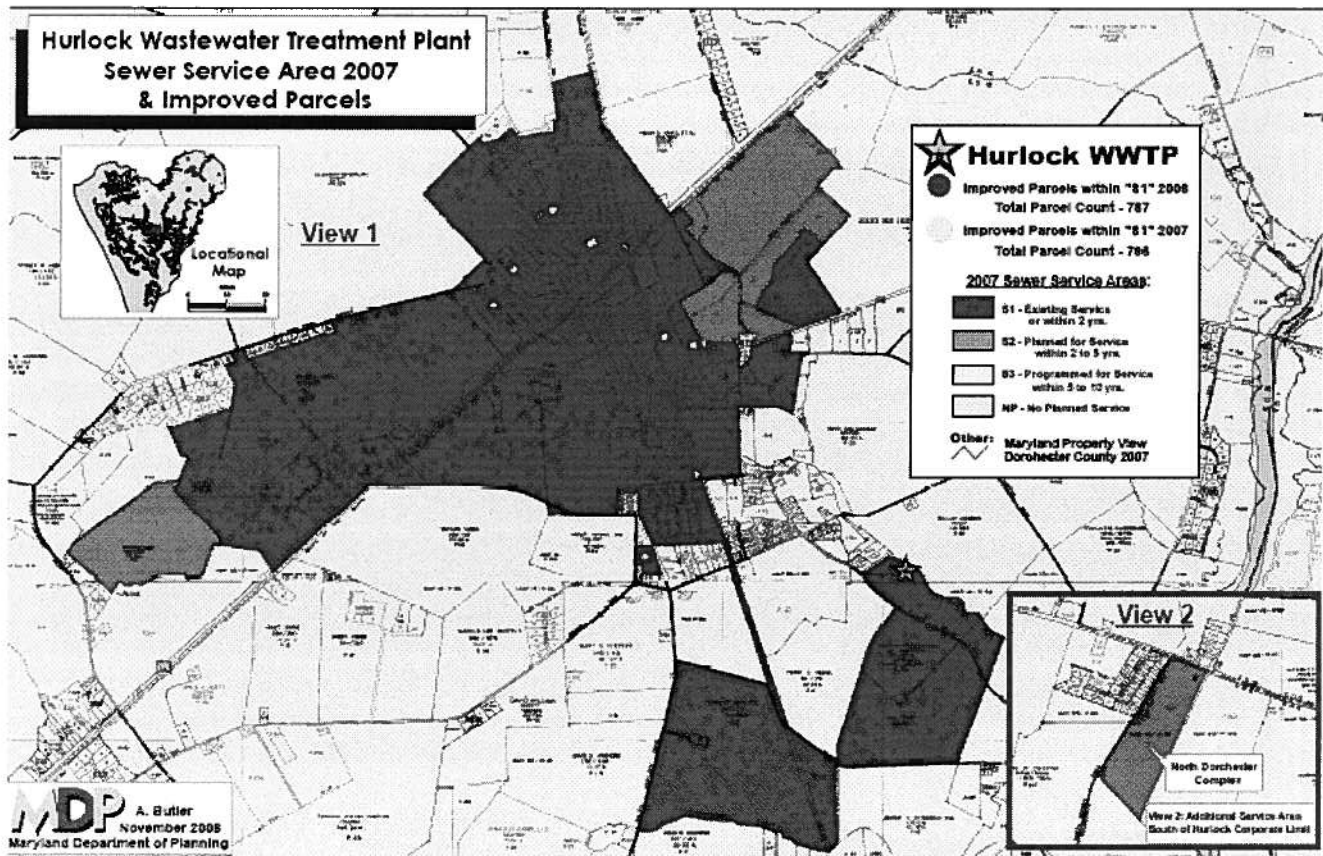
**Other:**

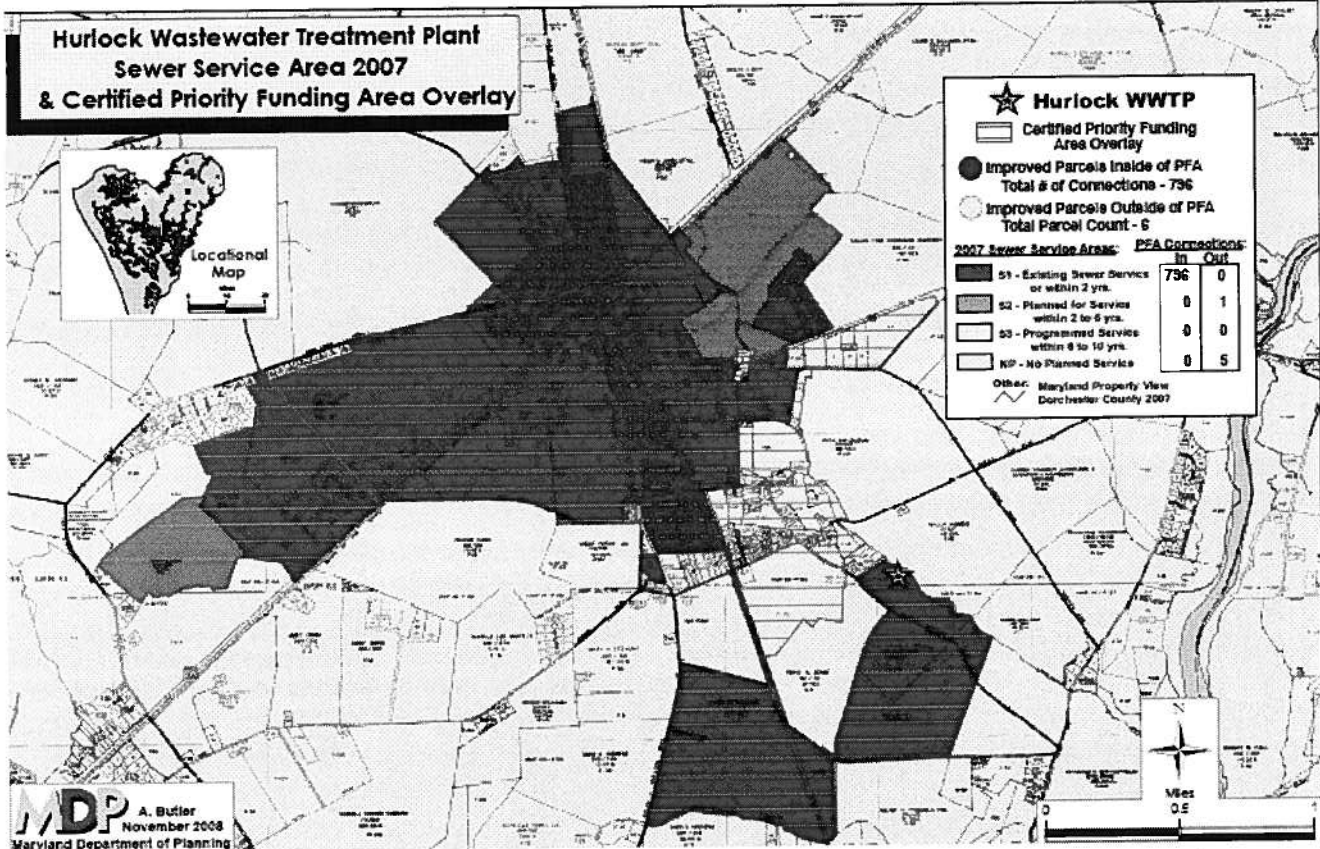
- Maryland Property View Allegany County 2007
- Major Roads



**MDP** A. Butler  
November 2008  
Maryland Department of Planning

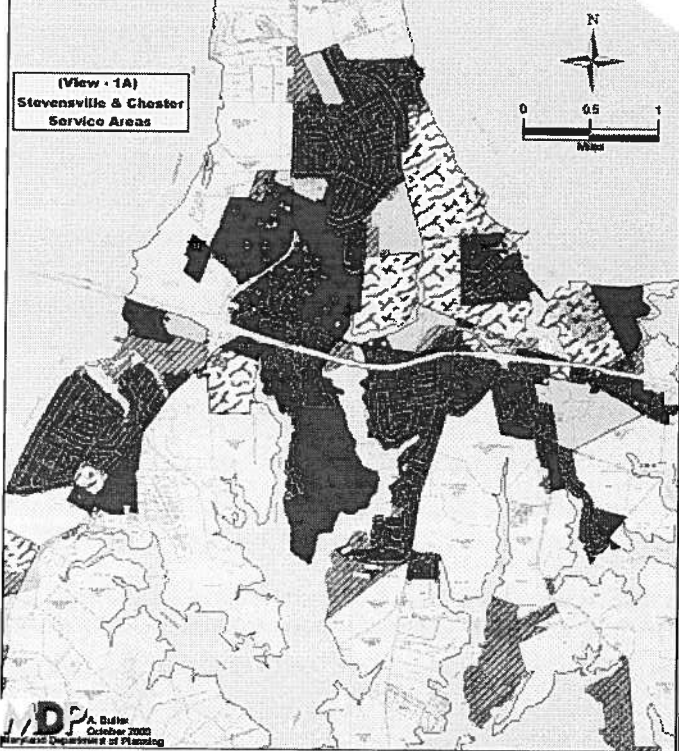
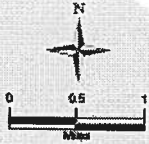






**The Kent Narrows/Stevensville/Grasonville Wastewater Treatment Sewershed 2007**

(View - 1A)  
Stevensville & Chester Service Areas



**MD** A. Balducci  
October 2008  
Maryland Department of Planning

(View - 2A)  
Kent Narrows, Grasonville & Prospect Bay Service Areas

**★ Kent Narrows/Stevensville/Grasonville WWTP**

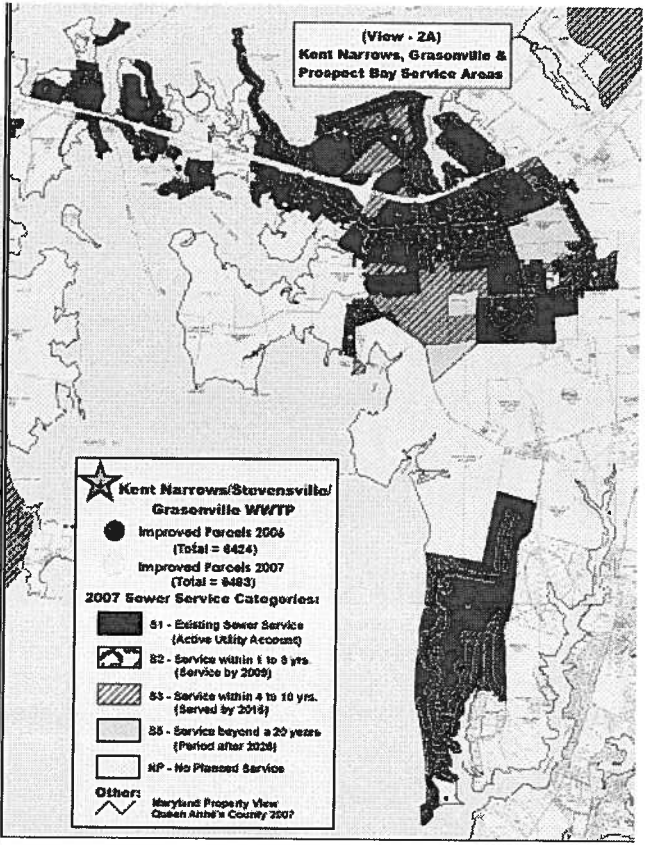
- Improved Parcels 2006 (Total = 6424)
- Improved Parcels 2007 (Total = 6483)

**2007 Sewer Service Categories:**

- S1 - Existing Sewer Service (Active Utility Account)
- ▨ S2 - Service within 1 to 3 yrs (Service by 2009)
- ▩ S3 - Service within 4 to 10 yrs. (Served by 2016)
- S5 - Service beyond a 20 years (Period after 2026)
- NP - No Planned Service

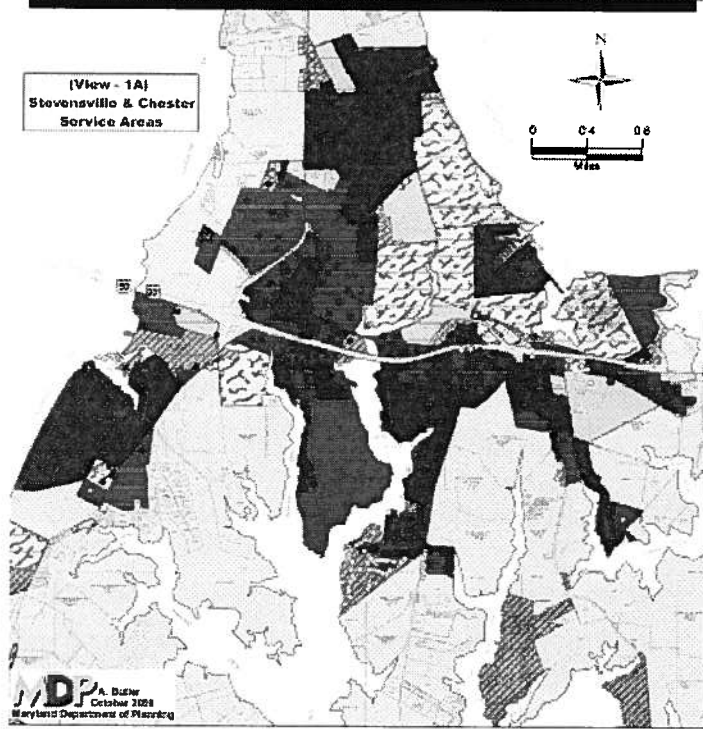
**Other:**

- ⚡ Maryland Property View Queen Anne's County 2007



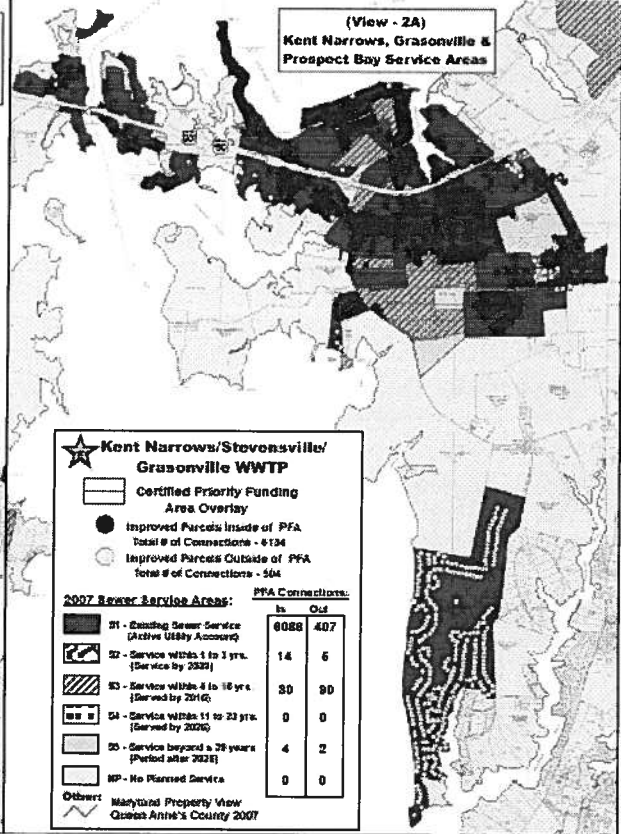
**The Kent Narrows/Stevensville/Grasonville Wastewater Treatment Plant Sewer Service Area 2007 & Certified Priority Funding Area Overlay**

(View - 1A)  
Stevensville & Chester Service Areas



**D** A. Butler  
October 2008  
Maryland Department of Planning

(View - 2A)  
Kent Narrows, Grasonville & Prospect Bay Service Areas



**★ Kent Narrows/Stevensville/Grasonville WWTP**

- ☐ Certified Priority Funding Area Overlay
- Improved Parcels Inside of PFA  
Total # of Connections - 4134
- Improved Parcels Outside of PFA  
Total # of Connections - 504

2007 Sewer Service Areas:	PFA Connections:	
	In	Out
S1 - Rainlog Sewer Service (Active Utility Account)	6088	407
S2 - Service within 1 to 3 yrs. (Service by 2009)	14	6
S3 - Service within 4 to 10 yrs. (Service by 2016)	30	90
S4 - Service within 11 to 23 yrs. (Service by 2020)	0	0
S5 - Service beyond a 25 years (Period after 2025)	4	2
NP - No Planned Service	0	0

Others: Maryland Property View  
Queen Anne's County 2007

## Memorandum

**TO:** Jennifer Pauer, WVDEP

**FROM:** Gary Rawlings, Charles Town City Manager  
Andrew P. Blake, Esquire

**DATE:** March 15, 2010

**SUBJECT:** Vehicle License and Registration Fee Increase

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At the February 2, 2010 meeting of the West Virginia Funding Stakeholder Group, Andy Blake, Attorney for the City of Ranson and Gary Rawlings, City Manager of the City of Charles Town agreed to prepare a white paper for DEP and the group briefly examining the increase of vehicle license and registration fees and development of water-shed vanity plates as a revenue source for increasing the amount of funding available for use in addressing nutrient removal costs and physical facility upgrades required by the point-source sector.

### **Increase West Virginia License and Registration Fee**

#### **Proposal #1: Increase License and Registration Fee**

Current Situation: All West Virginians must renew their vehicle registrations on an annual basis. According to the West Virginia Division of Motor Vehicles, there are approximately 1.3 million vehicles currently registered in West Virginia. The current fee for standard license and registration renewals is \$30.00. Vanity plates are an additional \$15.00 per year.

Fee Increase: One source of new and independent funding would be an increase of the annual vehicle registration fee. A \$1.00 increase on every renewal dedicated solely to the funding of improvements required under the Chesapeake Bay Initiative would generate approximately \$1.3 million annually. A \$2.00 increase would generate approximately \$2.6 million annually.

### **Design and Offer Environmental Vanity License Plate to Fund the Bay**

#### **Proposal #2: Design and Sell Environmental Vanity Plate**

Current Situation: West Virginia offers over 60 different vanity plates. According to a Charleston Gazette article by Phil Kabler on October 8, 2004, more than 10 percent of the 1.3 million vehicles registered in the state have specialized plates. At that time, DMV statistics showed 130,344 vanity plates in use. There is no reason to believe these numbers have changed significantly. WV DMV currently offers several plates that benefit wildlife and the environment. For example, the "white tail deer plate" costs \$55.00. The renewal is \$45.00 annually. Fifteen

dollars of each purchase goes to the Wildlife Diversity Program of the WVDNR to help conserve and protect the state's nongame animal species and rare plants, improve distribution of educational materials to schools and libraries, develop wildlife viewing areas for state residents and visitors, and support many other programs designed to educate the public about the state's wildlife resources.

Proposal: The same vanity plate concept could be replicated to fund capital improvements to assist in the cleanup of the Chesapeake Bay and local watersheds. The plate could be targeted as "Protect and Preserve Your Local Watershed." Considering that the Chesapeake Bay is a far distance from many West Virginia citizens, a more successful approach may be to target the vanity plate to save the local watershed. Protecting and preserving the local watershed will eventually lead toward the cleanup of the Bay. Annually, \$15.00 of each renewal could be deposited into a special fund to assist in the cost of capital improvements to fund projects required by the Chesapeake Bay Initiative. 5,000 plates per year would yield approximately \$75,000 annually.

## Memorandum

**TO:** Jennifer Pauer, WVDEP

**FROM:** Andrew P. Blake, Esquire  
Joseph A. Hankins

**DATE:** March 15, 2010

**SUBJECT:** Toilet Tissue Tax

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At the February 2, 2010 meeting of the West Virginia Funding Stakeholder Group, Andy Blake, Attorney for the city of Ranson and Joe Hankins, board member of the Jefferson County Public Service District agreed to prepare a white paper for DEP and the group briefly examining the use of a toilet tissue tax as a revenue source for increasing the amount of funding available for use in addressing nutrient removal costs and physical facility upgrades required by the point-source sector.

### Imposition of Toilet Tissue Tax

**Proposal: Impose a \$0.10 Toilet Tissue Tax to Fund Chesapeake Bay Initiative Capital Improvements to raise approximately \$4,000,000 annually or \$0.20 to raise \$8,000,000 annually.**

The idea of taxing toilet tissue is not a new concept. In 2005, Senate Bill 2544 was introduced in the Florida Legislature to impose a 2 cent tax on each roll of toilet tissue. At the time, it was estimated that the tax would have raised approximately \$30 million. The bill did not pass the Legislature. The Florida bill is scant on details regarding how the tax would be administered or collected and what the administrative cost of the tax collection would be, leaving the details to the Department of Revenue. The new revenue generated was proposed to pass to the FL DEP to be deposited in the Wastewater Treatment and Storm water Management Revolving Fund. The first use of the new funds was to be the state's matching contribution against any federal capitalization funding. This suggests that the new state tax might only offset other state funds that would have been applied as match and may not have been intended to actually generate new funds for grant or loan to wastewater or storm water projects.

In July 2009, Rep. Earl Blumenauer (D -Oregon-3<sup>rd</sup>) introduced the Water Protection and Reinvestment Act of 2009.<sup>1</sup> to the U.S. House of Representatives. The bill currently has 31 co-sponsors. On introduction the bill was referred to three House Committees on Energy and Commerce, Ways and Means, and Science and Technology. The bill remains in committee with no movement. This bill would impose a 3% tax on any item disposed of in water, including toilet paper. The bill identifies revenue sources through the creation and imposition of an excise tax on a) water-based beverage products (4 cents) b) water disposal product (3 %) and c) pharmaceutical product (0.5 % of price). Water disposal product is defined (see page 6 of the bill, line 10) to include soaps and detergents, toiletries, toilet tissue

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<sup>1</sup> [http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111\\_cong\\_bills&docid=f:h3202ih.txt.pdf](http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:h3202ih.txt.pdf)

and cooking oils. The bill also creates a new tax on corporate profits in a similar fashion to the now expired corporate tax that funded the Superfund program.

Fundamentally, the Bluemenauer bill is aimed at addressing the historical under-investment in clean water infrastructure through an additional \$10 billion annually, to be added to a modernized federal granting program and trust fund. The bill identifies half-dozen small taxes that would affect a broad national base of those who use water or create pollution.

The United States is the largest market worldwide for toilet tissue. According to the websites [bathroomsprayers.com](http://bathroomsprayers.com)<sup>2</sup> and [treehugger.com](http://treehugger.com)<sup>3</sup>, the United States uses 36.5 billion rolls of toilet paper each year, which represents at least 15 million trees pulped. This also involves 473,587,500,000 gallons of water to produce the paper and 253,000 tons of chlorine for bleaching purposes. The manufacturing process is reported to require about 17.3 terawatts of electricity annually, not including the energy and materials involved in packaging and transporting toilet tissue to end consumers.

Toilet tissue is also facing sustainability criticisms with premium brands use of virgin paper pulp and fibers from old growth forests sources. Toilet tissues with recycled content are available but face consumer acceptance issues<sup>4</sup>.

Toilet paper and other water disposal products also constitute a significant load on the city sewer systems and water treatment plants. It is also often responsible for clogged pipes. Although toilet tissue has become an essential item in the American household, there is little doubt that there is a direct correlation between its usage and demand on public sewer systems. A fee tied to toilet tissue purchase that was clearly targeted to generate revenue for clean water issues has a simplicity and fairness element that is difficult to argue.

Developing annual per capita purchase estimates for toilet tissue proved to be challenging. The following analysis presents what we believe to be a conservative and reasonable estimate.

Preliminary research reveals that the average person uses approximately 23.6 rolls per year.<sup>5</sup> On average, consumers use 8.6 sheets per trip – a total of 57 sheets per day. That’s an annual total of 20,805 sheets. According to studies, an average roll of toilet paper lasts about five days in the bathroom. There are 1.8 million people in WV. Thus, 1.8 million x 23.6 rolls x \$0.10 per roll = \$4,248,000 annually or \$2.36 per person annually. A \$0.20 tax per roll would generate approximately \$8,496,000 annually. This calculation does not include hotels, hospitals, or industrial users etc. It is difficult to believe that consumers would quit purchasing toilet paper due to an imposition of a \$0.10 tax per roll.

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<sup>2</sup> <http://www.bathroomsprayers.com/info/mypage.php?page=40>

<sup>3</sup> [http://www.treehugger.com/files/2008/04/bidets\\_eliminat.php](http://www.treehugger.com/files/2008/04/bidets_eliminat.php)

<sup>4</sup> Burnett, L. (2009, March 11) Environmentalists taking on toilet paper. *Edmonton Sun*. Retrieved from: <http://www.edmontonsun.com/News/Canada/2009/03/10/8699396.html> This article cites Greenpeace and NRDC experts on the issue.

<sup>5</sup> Kaufman, L. (2009, February 25) Mr. Whipple Left It Out: Soft Is Rough on Forests. *New York Times*. Retrieved from <http://www.nytimes.com/2009/02/26/science/earth/26charmin.html>. This article cites RISI, which is an information provider for the global forest products industry.





1           (c) "Department" means the Department of Environmental  
2 Protection.

3           (2) Beginning October 1, 2005, a fee of 2 cents per  
4 roll shall be imposed on toilet tissue sold in this state.  
5 The fee shall be collected by dealers and remitted monthly to  
6 the Department of Revenue.

7           (3) All fees collected shall be state funds at the  
8 moment of collection. A person who, with intent to unlawfully  
9 deprive or defraud the state of its moneys or the use or  
10 benefit thereof, fails to remit fees collected pursuant to  
11 this section commits theft of state funds, punishable to the  
12 same extent provided in s. 212.15(2).

13           (4) The proceeds of the fee shall be distributed in  
14 accordance with this section. For the purpose of this section,  
15 the proceeds of the fee include all funds received by the  
16 Department of Revenue under this section, including interest  
17 and penalties on delinquent fees. The Department of Revenue  
18 shall determine the amount that must be reserved for its  
19 administrative costs.

20           (5) The Department of Revenue shall administer,  
21 collect, enforce, and audit the fee authorized under this  
22 section and, for such purpose, has the same authority that is  
23 provided for the administration, collection, enforcement, and  
24 auditing of the general state sales tax imposed under chapter  
25 212 except as otherwise provided in this section. The  
26 provisions of chapter 212 regarding the authority to audit and  
27 make assessments, the keeping of books and records, and  
28 interest and penalties on delinquent fees are applicable. The  
29 fee may not be included in computing estimated taxes under s.  
30 212.11. The limitations on determining and assessing taxes  
31

1 provided in s. 95.091 apply to the determination and  
2 assessment of the fee imposed by this section.

3 (6) In addition to expenditures authorized for  
4 administrative costs under subsection (4), the Department of  
5 Revenue and the department may employ persons and incur other  
6 expenses for which funds are appropriated by the Legislature.  
7 The Department of Revenue and the department may adopt rules  
8 and prescribe forms as necessary to administer this section.  
9 The Department of Revenue may establish audit procedures,  
10 recover administrative costs, and assess delinquent fees,  
11 penalties, and interest.

12 (7) The proceeds of the fee shall be deposited in the  
13 Wastewater Treatment and Stormwater Management Revolving Loan  
14 Trust Fund created by s. 403.1835. In any year in which a  
15 federal capitalization grant is received by the department for  
16 the Wastewater Treatment and Stormwater Management Revolving  
17 Loan Trust Fund, the proceeds of the fee shall first be used  
18 to provide the state's matching share of the federal grant for  
19 use as provided by s. 403.1835. All remaining proceeds of the  
20 fee shall be used as provided by s. 403.1838.

21 Section 2. This act shall take effect upon becoming a  
22 law.

23  
24 \*\*\*\*\*

25 SENATE SUMMARY

26 Imposes a fee of 2 cents on toilet paper sold in the  
27 state. Provides a criminal penalty for failure to remit  
28 the fee. Provides for administration and enforcement by  
29 the Department of Revenue. Authorizes rulemaking by the  
30 Department of Revenue and the Department of Environmental  
31 Protection. Provides for use of the proceeds for  
administrative costs of the Department of Revenue.  
Provides for deposit of the proceeds in the Wastewater  
Treatment and Stormwater Management Revolving Loan Trust  
Fund administered by the Department of Environmental  
Protection.

# H.R. 3202 - THE WATER PROTECTION AND REINVESTMENT ACT

REP. EARL BLUMENAUER

*Original Co-sponsors: LaTourette (R-OH), Dicks (D-WA), Simpson (R-ID), Petri (R-WI)*

## **THE NEED FOR LEGISLATION:**

The American Society of Civil Engineers (ASCE) has given our nation's drinking water and wastewater infrastructure a grade of "D-" in their 2009 report card. The Environmental Protection Agency (EPA)'s most recent *Clean Water and Drinking Water Infrastructure Gap Analysis* estimates a \$534 billion gap between current investment and projected needs over the next 20 years. Last year alone, American communities suffered more than 240,000 water main breaks and saw billions of gallons of overflowing combined sewer systems, causing contamination, property damage, disruptions in the water supply, and massive traffic jams. According to ASCE, an average of six billion gallons of potable water is lost per day in the US because of leaky pipes. This is enough to fill nearly 9,091 Olympic-sized swimming pools!

## **THE TRUST FUND:**

Our nation's water infrastructure needs have grown while federal funding for clean water has declined. While the needs are estimated to be over \$25 billion a year, appropriations for water infrastructure have averaged just over \$2.3 billion a year since 2000. This pushes more and more costs on local governments and ratepayers, whose rates have grown at twice the rate of inflation in recent years. We need new sources of revenue to meet our communities' water infrastructure and environmental restoration needs. Similar dedicated funding is available for our nation's transportation systems – it's time to establish a trust fund to finance water infrastructure.

A Water Protection and Reinvestment Trust Fund, funded by those who contribute to water quality problems and those who use our water systems, will provide a deficit-neutral, consistent and protected source of revenue to help states replace, repair, and rehabilitate critical drinking water and wastewater treatment facilities.

## **THE REVENUE SOURCES:**

The Water Protection and Reinvestment Act would assess a number of small taxes on a broad base of those who use water and contribute to water pollution. The taxes are designed to be collected at the manufacturer level, so any increased costs to consumers will be minimal. These revenue sources were analyzed in a recent Government Accountability Office report and are expected to raise at least \$10 billion a year.

- 4 cent per container excise tax on water-based beverages. These products rely on drinking water as their major input and result in both increased flows and increased waste in our waters.
- 3% excise tax on items disposed of in wastewater, such as toothpaste, cosmetics, toilet paper and cooking oil: These products wind up in the water stream and require clean up by sewage treatment plants.
- 0.5% excise tax on pharmaceutical products. Pharmaceutical residues found in our nation's water bodies are an increasing concern for clean and drinking water utilities. A small fee on the industry will support efforts to prevent pharmaceuticals from entering water systems and research into remediation.
- 0.15% tax corporate profits over \$4 million. All corporations use drinking and wastewater infrastructure and depend on it functioning to conduct their business. A similar tax was used to fund the Superfund program until it expired in 1995.

## **HOW IT WOULD WORK:**

Clean Water Act Funding: Almost half of the funding would be distributed as grants and loans through the existing Clean Water State Revolving Loan Fund (CWSRF). These funds are grants used to capitalize state funds, which then provide loans to publicly owned treatment works for wastewater treatment construction to meet CWA requirements and provide sewage services. The CWSRF would be modernized, consistent with recent legislation passed by the House. The bill would provide additional incentives for green infrastructure and water efficiency as well as provide funding for state efforts to prevent and control pollution. It would require states to provide some of the funding in the form of grants. Additional assistance would be made available for technical assistance to small wastewater treatment facilities.

Safe Drinking Water Act Funding: Over one-third of the funding would be distributed as loans through the Safe Drinking Water Act State Revolving Loan Fund (DWSRF). Similar to CWSRF funds, these are used by states to provide

loans to public water systems for expenditures to facilitate compliance with drinking water regulations and to protect public health. Changes would be made to modernize the DWSRF and provide technical assistance to small communities consistent with the recent authorization passed by the Senate Environment and Public Works Committee. In addition, funds would be targeted towards larger systems with the worst infrastructure problems. Additional incentives for environmental and fiscal sustainability would be added.

Additional Programs: The remaining funding would support a number of new programs, including:

- **Security Upgrades:** Grants to states, municipalities, publicly owned treatment works, and community drinking water systems for capital projects to increase security to update a vulnerability assessment, emergency response plan, or site security plan required under the SDWA or any other applicable law. This will help offset the costs of new security requirements currently under consideration in House committees.
- **Climate Change and Adaptation:** Grants to support efforts by water systems to take actions to increase energy and water efficiency, reduce greenhouse gas emissions, and increase resilience to the impacts of climate change.
- **Sewer Overflow Control:** Funding for an existing program to help states and local communities address sewer overflows. This is a growing problem in which untreated sewage is released into the environment, contaminating our nation's waters, degrading water quality and exposing humans to viruses and other pathogens that can cause serious illness. The EPA estimates that more than 850 billion gallons of untreated wastewater and stormwater are released each year into U.S. waters.
- **Research, Development, and Technology Demonstration:** A new research program within the EPA to develop, demonstrate, and transfer innovative or improved technologies and methods for the treatment, control, transport, and reuse of drinking water and wastewater. It would also create a new system of regional university research centers, based on the successful transportation research centers, to conduct strategic research, education, and outreach for sustainable management of water resources.
- **Workforce Development:** Funding for existing programs under the CWA and SDWA to provide support for operator training, undergraduate and graduate environmental engineering and natural sciences to ensure that a stable labor force exists to operate and manage water and wastewater treatment utilities.
- **Drug Take-Back:** A new competitive grant program to support state, local, tribal, and non-profit drug take-back programs to help reduce the presence of pharmaceuticals in water.
- **Cost of Service Study:** The National Academy of Sciences would study the means by which public water systems and treatment works meet the costs associated with operations, maintenance, capital replacement, and regulatory requirements. This will help the EPA, Congress, and water facilities determine what new approaches might assist in meeting water needs.

#### **THE WATER PROTECTION AND REINVESTMENT ACT WILL:**

- Protect public health by providing the funding communities need to provide safe drinking water and sewer service.
- Restore the environment by providing incentives for green infrastructure that reduces energy use and withstands the impacts of global warming.
- Create jobs by investing in projects to repair and replace aging systems. A \$10 billion investment would create between 200,000 and 267,000 new jobs in engineering, construction and other industries.
- Reduce pollution by decreasing the number and severity of combined sewer overflows, increasing funds for state environmental restoration efforts and reducing the amount of pharmaceuticals in our water supply.

#### **THE WATER PROTECTION AND REINVESTMENT ACT IS SUPPORTED BY:**

- National Association of Clean Water Agencies
- American Rivers
- Clean Water Action
- Associated General Contractors
- American Society of Civil Engineers
- Water & Sewer Distributors of America
- Rural Community Assistance Partnership
- Coalition for Alternative Wastewater Treatment
- American Public Works Association
- National Utility Contractors Association



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February 26, 2009

## Mr. Whipple Left It Out: Soft Is Rough on Forests

By [LESLIE KAUFMAN](#)

Americans like their toilet tissue soft: exotic confections that are silken, thick and hot-air-fluffed.

The national obsession with soft paper has driven the growth of brands like Cottonelle Ultra, Quilted Northern Ultra and Charmin Ultra — which in 2008 alone increased its sales by 40 percent in some markets, according to Information Resources, Inc., a marketing research firm.

But fluffiness comes at a price: millions of trees harvested in North America and in Latin American countries, including some percentage of trees from rare old-growth forests in Canada. Although toilet tissue can be made at similar cost from recycled material, it is the fiber taken from standing trees that help give it that plush feel, and most large manufacturers rely on them.

Customers “demand soft and comfortable,” said James Malone, a spokesman for Georgia Pacific, the maker of Quilted Northern. “Recycled fiber cannot do it.”

The country’s soft-tissue habit — call it the Charmin effect — has not escaped the notice of environmentalists, who are increasingly making toilet tissue manufacturers the targets of campaigns. [Greenpeace](#) on Monday for the first time issued a national guide for American consumers that rates toilet tissue brands on their environmental soundness. With the recession pushing the price for recycled paper down and Americans showing more willingness to repurpose everything from clothing to tires, environmental groups want more people to switch to recycled toilet tissue.

“No forest of any kind should be used to make toilet paper,” said Dr. Allen Hershkowitz, a senior scientist and waste expert with the Natural Resource Defense Council.

In the United States, which is the largest market worldwide for toilet paper, tissue from 100 percent recycled fibers makes up less than 2 percent of sales for at-home use among conventional and premium brands. Most manufacturers use a combination of trees to make their products. According to RISI, an independent market analysis firm in Bedford, Mass., the pulp from one eucalyptus tree, a commonly used tree, produces as many as 1,000 rolls of toilet tissue. Americans use an average of 23.6 rolls per capita a year.

Other countries are far less picky about toilet tissue. In many European nations, a rough sheet of paper is deemed sufficient. Other countries are also more willing to use toilet tissue made in part or exclusively from recycled paper.

In Europe and Latin America, products with recycled content make up about on average 20 percent of the at-home market, according to experts at the Kimberly Clark Corporation.

Environmental groups say that the percentage is even higher and that they want to nurture similar acceptance here. Through public events and guides to the recycled content of tissue brands, they are hoping that Americans will become as conscious of the environmental effects of their toilet tissue use as they are about light bulbs or other products.

Dr. Hershkowitz is pushing the high-profile groups he consults with, including Major League Baseball, to use only recycled toilet tissue. At the Academy Awards ceremony last Sunday, the gowns were designer originals but the toilet tissue at the Kodak Theater's restrooms was 100 percent recycled.

Environmentalists are focusing on tissue products for reasons besides the loss of trees. Turning a tree to paper requires more water than turning paper back into fiber, and many brands that use tree pulp use polluting chlorine-based bleach for greater whiteness. In addition, tissue made from recycled paper produces less waste tonnage — almost equaling its weight — that would otherwise go to a landfill.

Still, trees and tree quality remain a contentious issue. Although brands differ, 25 percent to 50 percent of the pulp used to make toilet paper in this country comes from tree farms in South America and the United States. The rest, environmental groups say, comes mostly from old, second-growth forests that serve as important absorbers of carbon dioxide, the main heat-trapping gas linked to [global warming](#). In addition, some of the pulp comes from the last virgin North American forests, which are an irreplaceable habitat for a variety of endangered species, environmental groups say.

Greenpeace, the international conservation organization, contends that Kimberly Clark, the maker of two popular brands, Cottonelle and Scott, has gotten as much as 22 percent of its pulp from producers who cut trees in Canadian boreal forests where some trees are 200 years old.

But Dave Dickson, a spokesman for Kimberly Clark, said that only 14 percent of the wood pulp used by the company came from the boreal forest and that the company contracted only with suppliers who used “certified sustainable forestry practices.”

Lisa Jester, a spokeswoman for Procter & Gamble, the maker of Charmin, points out that the Forest Products Association of Canada says that no more than 0.5 percent of its forest is harvested annually. Still, even the manufacturers concede that the main reason they have not switched to recycled material is that those fibers tend to be shorter than fibers from standing trees. Long fibers can be laid out and fluffed to make softer tissue.

Jerry Baker, vice president of product and technology research for Kimberly Clark, said the company was not philosophically opposed to recycled products and used them for the “away from home” market, which includes restaurants, offices and schools.

But people who buy toilet tissue for their homes — even those who identify themselves as concerned about the environment — are resistant to toilet tissue made from recycled paper.

With a global recession, however, that may be changing. In the past few months, sales of premium toilet paper have plunged 7 percent nationally, said Ali Dibadj, a senior stock analyst with Sanford C. Bernstein & Company, a financial management firm, providing an opening for makers of recycled products.

Marcal, the oldest recycled-paper maker in the country, emerged from bankruptcy under new management

last year with a plan to spend \$30 million on what is says will be the first national campaign to advertise a toilet tissue's environmental friendliness. Marcal's new chief executive, Tim Spring, said the company had seen intense interest in the new product from chains like Walgreens. The company will introduce the new toilet tissue in April, around [Earth Day](#)

Mr. Spring said Marcal would be able to price the new tissue below most conventional brands, in part because of the lower cost of recycled material.

“Our idea is that you don't have to spend extra money to save the Earth,” he said. “And people want to know what happens to the paper they recycle. This will give them closure.”

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# Tissue market continues to grow

By Brad Kalil, Director of Tissue, RISI

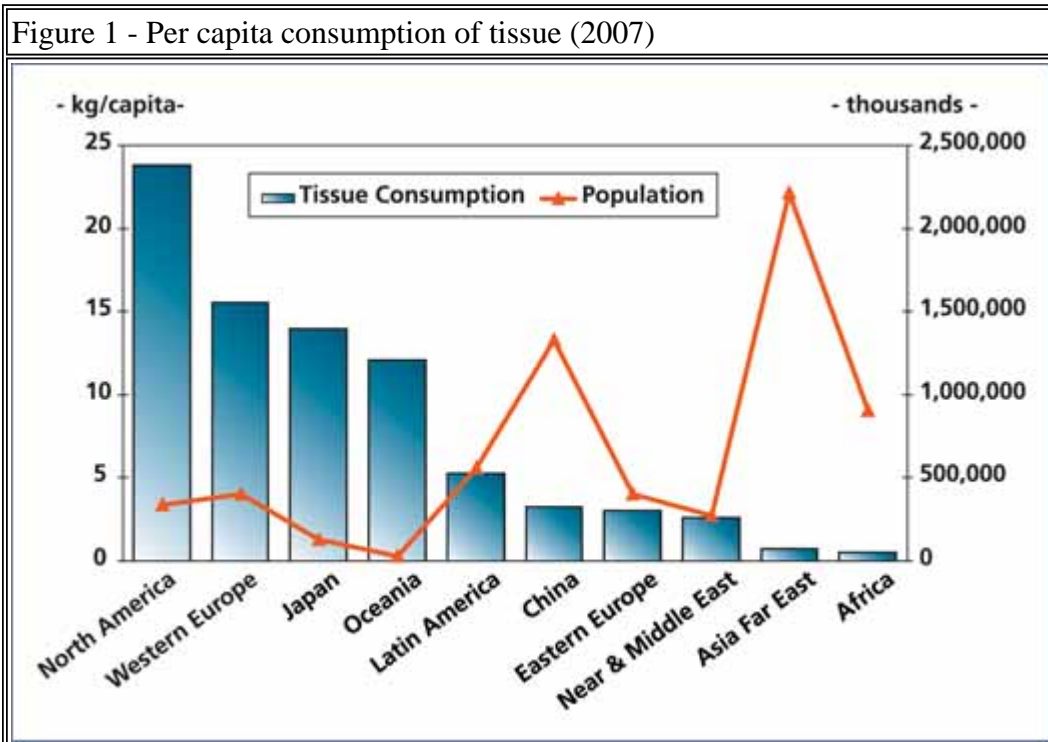
ATLANTA, Oct. 31, 2008 (Viewpoint) - The tissue market is one of the strongest growing segments in forest products, especially in the mature markets of North America. Over the last 10 years the North American tissue market has expanded 2.1% annually while the rest of the world has grown by 4.6% annually. Even with worldwide tissue growth nearly double that of North America, the United States is still the largest tissue market in the world.

The North American tissue market is comprised of toilet tissue (45% share of North American consumption), toweling (36%), napkins (12%), facial tissue (6%) and other uses, including sanitary (1%).

The US remains the largest single market because of its continued growth in the per capita consumption. It takes the worldwide lead at close to 24 kg, followed by Canada at 22 kg, Figure 1. In the last 20 years US per capita consumption has increased by 5 kg, and by 2 kg in the last 10 years. This development illustrates that the tissue business continues to have good growth opportunities even when the market is mature and product penetration is high.

It should be noted that US per capita consumption of tissue continues to be much higher than western European consumption (slightly less than 16 kg), as it has for at least the last 20 years. Both cultural and market differences between the US and western Europe contribute to this trend, including: the more advanced away from home (AfH) tissue sector in the US; the generally positive attitude towards consuming and shopping; the wider variety of tissue goods available; strong promotion of brands; and demographic/housing differences benefiting US tissue consumption over that of western Europe.

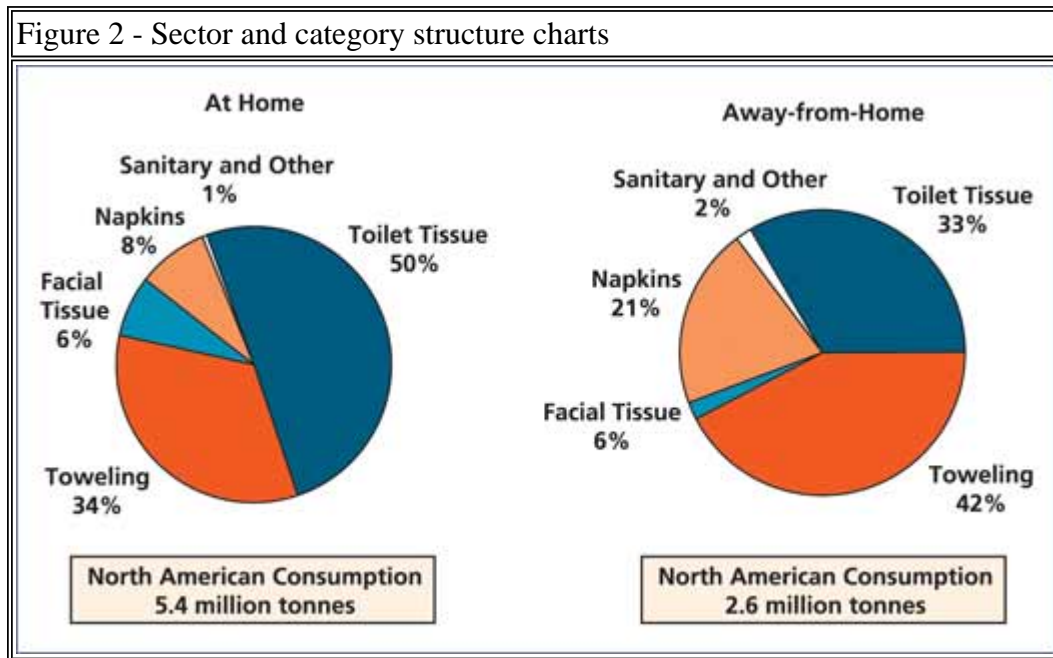
Figure 1 - Per capita consumption of tissue (2007)



## Current market structure

Approximately two-thirds of US tissue consumption is in the consumer sector, or At-Home, while the rest (32%) is in the AfH sector, including industrial converting applications. AfH tissue can be found in commercial and industrial settings such as office and government buildings, hotels, schools, airports, hospitals and highway rest stops -- anywhere restroom and kitchen facilities are not in a private home. However, the popularity and availability of club stores, hypermarkets and some office supply chains have made it increasingly difficult to classify tissue sales as At-Home or AfH. Figure two illustrates the product category sizes within each of the sectors.

Consumption growth has been faster in the At-Home (2.9%) than in the AfH sector (0.8%) in the last 10 years, further increasing the At-Home share. Usage patterns are similar in the US and in Canada. US per capita consumption is higher than Canadian consumption, particularly in toweling, while climatic factors contribute to the high facial tissue consumption in Canada.



### Consumption trends

North American tissue consumption experienced very strong growth in 1996-2000, driven by the strong US economy and consumer spending. At-Home shipments continued to be rather strong thereafter, although the growth declined to 1.7% annually in 2001-2006. Growth accelerated again in 2007 to 2.2%. For the period 1997-2007, North American consumer sector tissue growth averaged a respectable 2.9% annually.

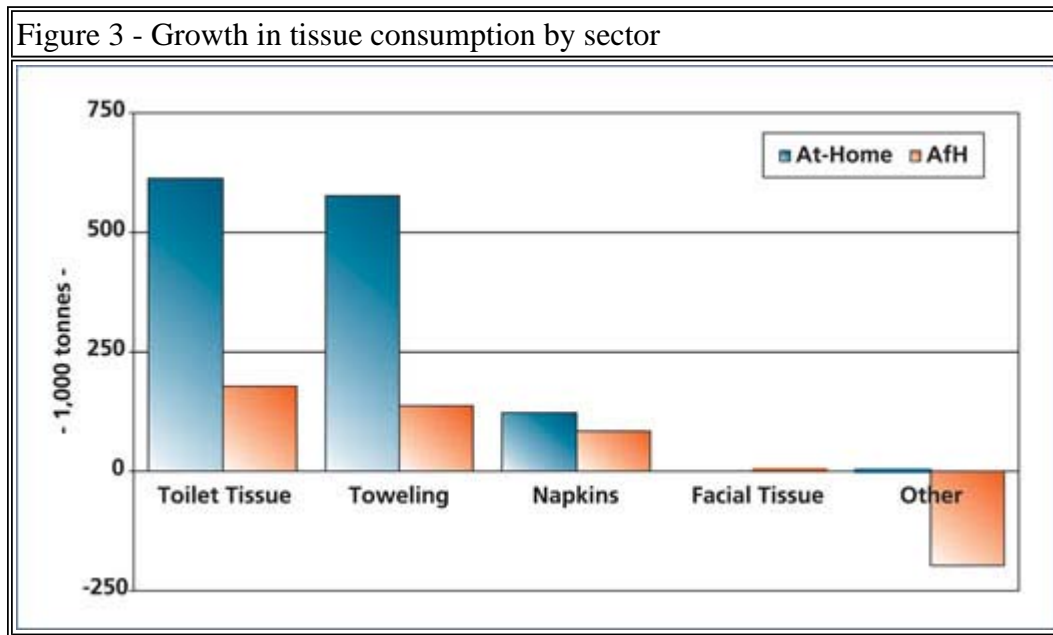
Kitchen toweling has shown the fastest relative growth rate benefiting from new products and product modifications by all the main players, including Procter & Gamble (P&G), Kimberly-Clark (K-C) and Georgia-Pacific (G-P). Decorative designs, nice print quality and color embossing have made toweling an attractive product for use not only in the kitchen, but also in many other household applications.

Consumer toilet tissue and kitchen toweling, by far, accounted for the largest volume of growth in North America in 1996-2006, Figure 3. The facial tissue segment is a stagnant market facing increasing competition from nonwoven-based wet wipes (such as "Dove" or "Oil of Olay" products). Suppliers have made efforts by increasing the supply of pocket hankies to complement boxed facial tissue when traveling and other "to go" applications, but these efforts have not been successful in growing the total facial tissue consumption.

The AfH sector, on the other hand, has suffered drastically from the consequences of September 11: North American converted product shipments declined 2.1% in 2001 after several years of 2-3% annual growth. AfH growth rates have not returned to those higher levels, partly due to product rationalization by the main producers in several product segments. The overall growth rate of the AfH sector was further negatively influenced by the sharp decline in diaper carrier sheet demand, as new diaper constructions no longer require a tissue sheet, using

instead a nonwoven sheet. This change took place within a relatively short period of time. Further severe substitution came from cleaning wipes using nonwoven and other higher-performance materials. The AfH tissue business suffered an additional (albeit one time) loss by the successful efforts of wholesalers and big end-users to use just-in-time deliveries and tighten inventory control. Inventory has been shortened to about 10 days.

AfH toweling growth has been cut by the ongoing change from folded towels to roll towel dispensers. Roll towel dispensers help purchasers save on paper quantity. Tissue companies, as well, have launched new series of touch-free, motion-activated and controlled-use towel dispensers, which promote source reduction and discourage paper waste by controlling the amount of toweling dispensed at each use. These changes may have curbed AfH toweling growth by at least 0.5-1.0% annually.



### Driving forces for future demand

The main variables that will drive future tissue demand in North America include:

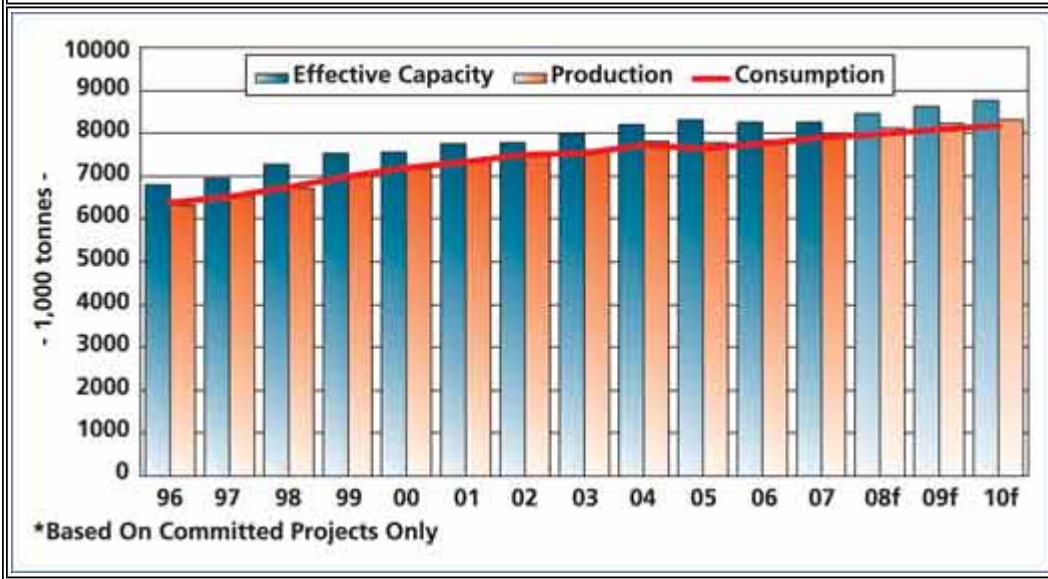
- Expected future economic growth
- Population growth and other demographic changes
- Quality upgrading and inventiveness by companies for new product specifications
- Dispenser developments in the AfH sector
- Substitution effects.

The North American tissue business has grown in recent years mainly because of quality upgrading, new product launches and modified product re-launches, in addition to innovative marketing by the industry leaders. We expect this to continue, although it may be increasingly difficult for companies to find further, desirable innovations.

A recent major development has been the trend toward reduced weight per product sheet by reducing the size of the sheet and/or basis weight reductions without a price change. This trend has accelerated since 2003, and while it may not completely stop, there are limits to how much the fiber contents can be reduced. The light-weighting trend pervades the entire tissue product range.

It is expected that new product developments will continue to be seen in At-Home toilet tissue and kitchen toweling applications. It is interesting that, despite G-P's main rivals, P&G and K-C, being committed to using Through-Air-Dried (TAD) and Uncreped Through-Air Dried Technology (UCTAD) (a proprietary process of K-C) their highest quality category products, G-P decided for a "hybrid" towel product, and improved toilet tissue quality with structural changes in the sheet through micro-embossing. An interesting innovation will be G-P's three-ply toilet tissue product, designed to compete against the TAD quality products of its two main rivals.

Figure 4 - Demand and supply developments\* in the North American tissue market (1996-2010)



Product development in the kitchen towel sector has been particularly rapid. TAD and UCTAD products with super absorbency have established new standards, with the product appearance and package printing gaining increasing interest as well. New print designs, increased use of color, new embossing patterns and luxury packaging are all aiming at the same target: increased shelf attraction and differentiation from competing products. It is likely that kitchen towels will increasingly develop into an "all-round" tissue in US households.

At-Home napkins are expected to rapidly lose position to kitchen towels in every day use for two reasons: price and competitive quality provided by the kitchen towels of today and the future. Kitchen towel roll dispensing may be more convenient to store in many kitchens, as napkin packs are often quite large (400-count). This development will be an essential negative factor for consumer napkin demand in North America over the forecasting period. Napkins will increasingly develop into intensively printed design products, and have the party goods/special occasion market as the important end-use.

At-Home facial tissue is a mature product in North America with limited expectation of any major demand boost through quality developments apart from new package designs. Competition from wet wipes will continue to hurt the facial tissue business. Improved medicines and generally milder winters have also reduced the rate of illness and thus some need for facial tissue.

In AfH toilet tissue, the three main players, G-P, K-C and SCA, will continue to stress commercial versions of their consumer brands, pushing hotels and offices to use home-quality type products. These efforts are expected to drive the average AfH toilet tissue quality upward and have a positive influence on overall consumption.

In AfH toweling applications, the no-touch dispenser concept will continue its successful penetration in the upper market segment, replacing major folded towel quantities. Roll towels typically use dedicated dispenser systems and tie clients with the supplier for paper delivery. Hot air dryers are not expected to endanger toweling in the future. The "Scott Fold" TAD towel dedicated to the upper market segment has established a preferred position in many quality office applications.

In the AfH napkin sector, one-at-a-time napkin dispensers are likely to reduce total napkin use substantially in fast food restaurants. Increasing use of part-recycled fiber-based tissue for napkin converting is also reducing napkin costs.

AfH facial tissue will continue to benefit from the steadily increasing number of new hotel rooms and restaurant washrooms, virtually all furnished with a package of facial tissue.

In sanitary tissue applications, the consumption of diaper carrier sheets has already declined to a very small tonnage in North America and the main substitution process is over. Medical tissue demand will be positively affected by the aging population and increasing number of facilities needed for seniors, but quality upgrading has brought nonwovens strongly into this end-use and, in the longer term, tissue is likely to be the loser in this competitive game.

Overall demand for tissue products in North America is forecast to grow at an average annual rate of 1.2% over the next three years (2008-2010), growing nearly 93,000 tonnes annually. Canadian demand is expected to grow slightly faster than US demand. Quality upgrading will continue in the Canadian market where there is still more upgrading potential than in the US.

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**Evaluation of the Potential for Using Table Games Revenue  
For Funding Advanced Treatment for Wastewater Treatment Plants  
March 15, 2010**

**Background**

The purpose of this research paper is to evaluate the potential for using Table Games revenue for the funding of engineering, construction, and construction administration of advanced treatment facilities for wastewater treatment (See minutes of December 18, 2009 Stakeholders Meeting). Advanced treatment facilities are defined for this study as: Treatment facilities needed for reducing nitrogen and phosphorus pollutants from the discharge effluent of Publically Owned Treatment Works (A POTW is a wastewater facility owned by a municipality or Public Service District charged with wastewater treatment.) to a level equal to that which is considered "Chesapeake Bay Standards. Currently those standards are considered to be 5mg/l nitrogen and 0.5mg/l phosphorus.

Unless superseded by a state-wide priority list, any POTW mandated by their NPDES permit would be eligible for these funds.

The West Virginia Lottery is a component unit of the State of West Virginia and is accounted for as a proprietary fund special purpose government engaged in business type activities. The West Virginia Lottery (Lottery) was established by the State Lottery Act in 1985 and amended to in subsequent years to include various gaming venues including table games in 2007 (The Charles Town Races and Slots venue was approved for Table Games in late 2009 and is expected to be the most valued site once it is fully operational). The Lottery currently derives its revenues from four basic types of lottery games: instant, on-line, video type games; and table games.

Acts by the State Legislature determine how the revenues from the Lottery are divided up and to whom they are allocated. It is a complex piece of legislation, but basically the relevant highlights as to how municipalities obtain a share of the Lottery pie via Table Games is as follows:

- 2% of Adjusted Gross Receipts (AGR) from Race Tracks with Table Games goes to County Commissions with Race Tracks with Table Games. However, ½ of that revenue goes to the County School Board if it is in a "growth county"
- 3% of AGR from Race Tracks with Table Games goes to Municipalities within counties that have Table Games. The funds are allocated pro rata based on population at last decennial census. However, if within a "growth county", 2/3 of the revenue will go to the County School Board, with the remaining going to the municipalities. Money must be used for capital improvements.
- 0.5% of AGR goes to municipalities in which race track table games are located. Revenues cannot go to any municipality that did not

have a race track within its corporate boundary as it existed on January 1, 2007.

- Of the State's share (74% AGR) the following distribution is legislated:
  - 76% to the State Debt Reduction Fund
  - 4% for pension plan of each racing association
  - 10% for non-racetrack table games locations, in equal shares, and may be used only for payment of regional jail expenses and the costs of infrastructure improvements and other capital improvements.
  - 10% for non-racetrack table games, in equal shares, and may only be used for payment of debt reduction in municipal police and fire pension funds and costs of infrastructure and other capital improvements.

The figures below are from the latest statement of revenues for the seven month period ending January 31, 010. The revenues are running behind last year's by approximately 7.4%. This is most likely due to the economy. It should be noted that Table Games gross revenues are down 4%. The figures for distribution of funds to municipalities are highlighted. As can be seen, relatively speaking taking all the table game revenue does not bring about a substantial fund compared to the anticipated costs of constructing advanced treatment wastewater treatment plants. Basically the revenues are allocated as follows:

Prizes (Winnings): 45% of Gross Revenue  
 Remainder: 54% goes to State of West Virginia to be further allocated according to state statute.  
 Administrative Fee: 1% (The Lottery is self sustaining)  
 100%

Using FY 2010 (the incomplete fiscal year July '09 to and including January '10) as an example, the revenue/expenses for the West Virginia Lottery are allocated as follows:

• Lottery Revenues:	\$785,947,000
• Lottery Commissions and prizes:	<u>(\$442,824,000)</u>
• Gross Profit	\$343,123,000
• Administrative Expenses	(\$ 15,618,000)
• Other Operating Income:	<u>(\$ 1,922,000)</u>
• <b>Total Operating Income</b>	<b>\$329,427,000</b>
• Expenses	
○ Investment Income	(\$ 219,000)
○ <b>Distribution to Municipalities:</b>	<b>(\$ 4,451,000)</b>
○ Capital Reinvestment:	(\$ 3,903,000)



○ State of West Virginia:	<b>(\$ 321,241,000)</b>
• Net Income:	<b>\$ 51,000</b>

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Source: West Virginia Unaudited Statement for the West Virginia Lottery. Financial Statement for January 31, 2010.

The two key items from the above table are: 1) \$4.451 million is available to the municipalities for the 7-month period, and 2) \$321 million is available to the state of West Virginia for the same period. If the \$4,451,000 is prorated for a 12-month period then revenues of **\$7,630,000** is estimated to be available for allocation among counties, municipalities, and school boards in growth counties. Growth counties are defined for this legislative act as those that have enacted a Local Powers Act.

### **Conclusion**

It is unrealistic to assume that 100% of the allocated local funds of the Lottery would be made available for use by the counties and municipalities for the purpose of financing upgraded wastewater treatment plants. If we do not compete for the funds that go to the school boards and to the counties without racetracks, we are left with a much smaller pool of funds but perhaps an easier political obstacle.

I would suggest that we establish a goal of \$100 million dollars of bonded indebtedness that would be used for the construction of upgrades to the POTW's. The bonds would be paid for by earmarking a portion of the municipal share of the Table Games Revenue and a portion of the monies now used by West Virginia for the Debt Reduction Fund. As much as possible should come from the current municipal share with the Debt Reduction Fund making up the difference in the total needed to meet the new debt service of the WWTP upgrade fund.

A revenue stream of \$5 million to \$5.7 million per year would support a 40 year or 30 year respectively \$100 million dollar bond issue at 4% interest. (Note: Remember that FY 10 revenue is projected at \$7.63 million in a recession year). The \$100 million would support approximately five to 10 projects to start based on cost figures discussed at previous meetings of the stakeholders group.

The funds may go even further if certain policies were enacted when using these funds. Example policies that have been used in other states have included:

- Using the Lottery Grant funds for upgrading wastewater treatment plants to Advanced Treatment or greater (5mg/l Nitrogen and 0.5mg/l Phosphorus for example)



- Paying for expansion by using Local and or Developer funds. The legislation would include allowing Municipalities and PSD's to charge impact fees to cover expansions. The Lottery Grant would be used to pay for Advanced Treatment for the percentage of the plant upgrade used by existing customers.
- Using the Lottery Grant to pay for plant upgrades that are necessary to meet TMDL criteria even if the criteria are not equal to the current Chesapeake Bay standards.

## MEMORANDUM

TO: JENNIFER PAUER, WVDEP

FROM: JAMES V. KELSH, ESQUIRE

DATE: MARCH 15, 2010

SUBJECT: FERTILIZER TAX

At the February 2, 2010 meeting of the West Virginia Funding Stakeholder Group ("Group"), I agreed to prepare a white paper for DEP and the Group regarding a fertilizer tax.

The Secretary of DEP and stakeholders have been directed by W.Va. Code ("Code") 22-11-30(g) to "recommend to the Legislature a program establishing a new and independent source of funding for capital improvements for public facilities made necessary by the imposition of nutrient removal requirements."

Taxing nitrogen and phosphorous fertilizer is a sensible place to find funds to address the nutrient problem because these products are undoubtedly contributing to the excessive nutrients in waterways problem. The imposition of a tax upon these products will internalize upon the users of such products the full cost to society of their use. Taxes will increase the price, which will decrease usage, thereby reducing the magnitude of the problem.

West Virginia has a Fertilizer Law, W.Va. Code ("Code") Chapter 19, Article 15. Under this law, any manufacturer or distributor of agricultural or residential fertilizer is required to obtain a permit annually from the W.Va. Commissioner of Agriculture before distributing fertilizer in the state. Code §19-15-2(a-b). Fertilizer product labels are required to disclose the percentage content of Total nitrogen, available phosphate, and soluble potash. Code ' ' 19-15-2(b)(2); 19-15-1(m). Distributors of fertilizer are required to report quarterly to the Commissioner of Agriculture the number of net tons distributed in the quarter. Code ' 19-15-4(b).

There is already a system in place which will readily permit the determination of how much fertilizer is being sold in West Virginia. Attached please find an excerpt from the 2009 WV Annual Agricultural Statistics bulletin with respect to fertilizer use in West Virginia. In 2007, West Virginia consumed 48,077 tons total of single nutrient grade nitrogen materials, 21,072 tons of multiple nutrient fertilizers that include nitrogen as a nutrient, and 216

MEMORANDUM

TO: Jennifer Pauer, WVDEP

March 15, 2010

Re: Fertilizer Tax

Page 2

tons of single nutrient grade phosphate materials. The total tonnage of all three is 69,365 tons. A tax of \$.01 per pound of nitrogen or phosphorous, \$20 per ton, would generate \$1,387,300 annually. Nitrogen is now selling for \$250-350 per ton. The price of nitrogen spikes with natural gas prices. It has sold for as much as \$1,000 per ton. Since natural gas prices are projected to be stable in light of the belief of adequate supplies with shale fracking, nitrogen prices may stabilize too. A tax of \$50 per ton on nitrogen and phosphorous in agricultural fertilizer is believed to be the maximum amount that would be politically viable. That would generate approximately \$3.5 million annually. A higher tax on fertilizer products that are marketed to residential users may be appropriate, as there is a widespread belief that homeowners tend to overuse fertilizers more so than farmers. Because homeowners use less fertilizer than farmers, a higher tax should be more tolerable, say \$.20 per lb. I could find no data on homeowner use of fertilizer in West Virginia, so the yield from that tax could not be determined.

Once a tax is established, the Department of Agriculture or the State Tax Department would remit collected tax proceeds to a special fund at either the DEP or the IJDC that would be restricted to nutrient reduction related projects, whether sanitary sewage, stormwater, or nutrient trades. The tax would be statewide, and the fund could be used anywhere in the state; however initially demand for the funds would be heavily weighted to the Chesapeake Bay watershed. Because there is expected to be a surge in sanitary sewage projects in the next five years that will exceed the proceeds of this tax, a component of the fund would be that funds could be used for debt forgiveness.

The benefits of this approach will be that it imposes costs on a sector that has not been contributing financially to a problem that it has largely created. The cost will be broadly spread, as the residential and golf course sector will also be contributing. This will encourage border hopping for fertilizer, however, that is an indirect increase in the cost of fertilizer that should also discourage excessive usage. Since all distributors of fertilizer are subject to the current registration statute, the end user would need to do the border hopping himself; a VA fertilizer distributor couldn't legally hop the border to serve a farmer in WV. Agricultural products are commodities, and this tax will put the WV agricultural community at a competitive disadvantage.

MEMORANDUM

TO: Jennifer Pauer, WVDEP

March 15, 2010

Re: Fertilizer Tax

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(jefferso\chesapeake bay\wv funding\  
memo to Pauer re fertilizer tax)

**FARM PRODUCTION EXPENDITURES: Major Input Items,  
Average per Farm and Total, Atlantic Region, 2006-2007 <sup>1/</sup>**

Expenditure - Farm Share	Farms Reporting <sup>2/</sup>		Average per Farm <sup>3/</sup>		Total Expenditures	
	2006	2007	2006	2007	2006	2007
	Percent		Dollars		Million Dollars	
Total Farm Production Expenditures <sup>4/</sup>	100.0	<b>100.0</b>	72,375*	<b>76,535</b>	30,850*	<b>32,340</b>
Livestock, Poultry & Related Expenses <sup>5/</sup>	28.0*	<b>23.4</b>	6,428*	<b>5,798</b>	2,740*	<b>2,450</b>
Feed	65.5*	<b>67.2</b>	12,364*	<b>15,146</b>	5,270	<b>6,400</b>
Farm Services <sup>6/</sup>	94.9*	<b>95.3</b>	9,079*	<b>9,585</b>	3,870*	<b>4,050</b>
Rent <sup>7/</sup>	24.8*	<b>20.8</b>	2,229*	<b>2,343</b>	950	<b>990</b>
Agricultural Chemicals <sup>8/</sup>	36.2*	<b>37.7</b>	1,947*	<b>2,201</b>	830*	<b>930</b>
Fertilizer, Lime & Soil Conditioners <sup>8/</sup>	54.7*	<b>53.5</b>	3,284*	<b>3,550</b>	1,400	<b>1,500</b>
Interest	31.4	<b>32.8</b>	2,956*	<b>3,384</b>	1,260	<b>1,430</b>
Taxes (Real Estate & Property)	100.0	<b>100.0</b>	3,191*	<b>3,503</b>	1,360	<b>1,480</b>
Labor	29.3*	<b>29.3</b>	8,493*	<b>8,212</b>	3,620*	<b>3,470</b>
Fuels	87.5*	<b>86.8</b>	3,425*	<b>3,739</b>	1,460*	<b>1,580</b>
Farm Supplies & Repairs <sup>9/</sup>	83.9*	<b>86.3</b>	4,716*	<b>5,064</b>	2,010*	<b>2,140</b>
Farm Improvements & Construction <sup>10/</sup>	62.2*	<b>58.3</b>	6,076*	<b>6,106</b>	2,590*	<b>2,580</b>
Tractors & Self-Propelled Farm Machinery	17.4*	<b>18.1</b>	2,393*	<b>2,367</b>	1,020	<b>1,000</b>
Other Farm Machinery	20.1*	<b>21.7</b>	1,361*	<b>1,349</b>	580*	<b>570</b>
Seeds & Plants <sup>11/</sup>	40.0*	<b>40.0</b>	2,909*	<b>2,911</b>	1,240*	<b>1,230</b>
Trucks & Autos	16.8*	<b>14.7</b>	1,478*	<b>1,160</b>	630*	<b>490</b>
Miscellaneous Capital Expenses <sup>12/</sup>	2.8*	<b>7.5</b>	47*	<b>118</b>	20*	<b>50</b>

<sup>1/</sup> Includes CT, DE, KY, ME, MD, MA, NH, NJ, NY, NC, PA, RI, TN, VA, VT, and WV. <sup>2/</sup> Number of farms reporting item divided by total number of farms. <sup>3/</sup> Total expenditures divided by total number of farms. <sup>4/</sup> Includes landlord and contractor share of farm production expenses. <sup>5/</sup> Includes purchases and leasing of livestock and poultry. <sup>6/</sup> Includes all crop custom work, veterinary services, transportation costs, marketing charges, insurance, leasing of machinery and equipment, general and miscellaneous business expenses and utilities. <sup>7/</sup> Includes public and private grazing fees. <sup>8/</sup> Includes material and application costs. <sup>9/</sup> Includes bedding and litter, marketing containers, power farm shop equipment, oils and lubricants, miscellaneous non-capital equipment and supplies, repairs and maintenance of livestock and poultry equipment and capital equipment for livestock and poultry. <sup>10/</sup> Includes all expenditures related to new construction or repairs of buildings, fences, operator dwelling (if dwelling is owned by operation) and any improvements to physical structures of land. <sup>11/</sup> Excludes bedding plants, nursery stock, and seed purchased for resale. Includes seed treatment. <sup>12/</sup> Summary inconsistencies with version five (Core) questionnaires dictated that miscellaneous expense be summarized with general business expense and rolled up into the farm services line item. \* Revised.

**CONSUMPTION OF FERTILIZER IN WEST VIRGINIA: Mixtures and Materials, 2006-2007 <sup>1/</sup>**

Single-Nutrient Grades	2006		2007		Multiple-Nutrient Grades		Total <sup>2/</sup>	
	2006	2007	2006	2007	2006	2007	2006	2007
	Short Tons		Short Tons		Short Tons		Short Tons	
Anhydrous Ammonia	79	0	10-34-0	0	12			
Aqua Ammonia	28	17	10-30-0	0	0			
Nitrogen Solutions	3,747	5,078	11-(51-55)-0	1	2			
Urea	42,624	40,985	18-46-0	3,431	3,316			
Ammonium Nitrate	84	37	All Other	78	98			
Ammonium Sulfate	752	595	<b>Total N-P</b>	<b>3,510</b>	<b>3,428</b>			
Ammonium Thiosulfate	5	0	<b>Total N-P-K</b>	<b>18,182</b>	<b>17,285</b>			
Other	778	123						
<b>Total Nitrogen Materials</b>	<b>48,775</b>	<b>48,077</b>						
Superphosphate 22% and Under	0	7	<b>Total N-K</b>	<b>137</b>	<b>213</b>			
Superphosphate > 22%	100	124						
Other	72	85	<b>Total P-K</b>	<b>126</b>	<b>146</b>			
<b>Total Phosphate Materials</b>	<b>172</b>	<b>216</b>						
Potassium Chloride	4,505	3,851						
Potassium Sulfate	4	29						
Potassium - Mag. Sub. 22% K2O	0	1						
Other	37	13						
<b>Total Potash Materials</b>	<b>4,546</b>	<b>3,895</b>						
<b>Total Single-Nutrient</b>	<b>53,493</b>	<b>52,188</b>	<b>Total Multiple-Nutrient <sup>3/</sup></b>	<b>21,955</b>	<b>21,072</b>	<b>75,448</b>	<b>73,260<sup>4/</sup></b>	
<b>Total Other <sup>5/</sup></b>						<b>1,537</b>	<b>754</b>	
<b>Total Fertilizer <sup>6/</sup></b>						<b>76,985</b>	<b>74,014</b>	

<sup>1/</sup> Years ended June 30, 2006 and 2007. Data for 2008 were not available at the time of publishing. <sup>2/</sup> Totals may not add due to rounding. <sup>3/</sup> Includes analysis of N-P-K, N-P, N-K, and P-K. <sup>4/</sup> Total of Single-Nutrient and Multiple-Nutrient. <sup>5/</sup> Includes Natural Organics and Secondary and Micronutrients. <sup>6/</sup> Total Multiple-Nutrient plus Total Single-Nutrient plus Total Other. Source: Commercial Fertilizers 2007, a cooperative project of the Association of American Plant Food Control Officials and The Fertilizer Institute, published in October 2008.

## MEMORANDUM

TO: JENNIFER PAUER, WVDEP

FROM: JAMES V. KELSH, ESQUIRE

DATE: MARCH 15, 2010

SUBJECT: CHANGE IN USE OF CWSRF MONEYS

At the February 2, 2010 meeting of the West Virginia Funding Stakeholder Group ("Group"), John Tuggle of Pentree, Inc. and I agreed to prepare a white paper for DEP and the Group regarding use of increased funding from the federal government for the Clean Water State Revolving Fund ("CWSRF") program to address nutrient reduction.

West Virginia's CWSRF program has received increased funding from the federal government over historical averages in 2009 through both the American Resource and Recovery Act and, more importantly, the federal budget for the Environmental Protection Agency ("EPA") approved in the fourth quarter of 2009. The increase in funding for the EPA is widely expected to continue in future years.

The Secretary of DEP and stakeholders have been directed by W.Va. Code ("Code") 22-11-30(g) to "recommend to the Legislature a program establishing a new and independent source of funding for capital improvements for public facilities made necessary by the imposition of nutrient removal requirements."

John Tuggle and I have prepared for the consideration of DEP and the Group the attached proposed amendment to Code ' 22C-2-3, one of the statutes governing the CWSRF program. The proposed amendment adds greater specificity to disbursement of moneys from the CWSRF program. The current legislation in effect defers the issue of the criteria for disbursement of CWSRF moneys entirely to a legislative rule, 47 WVCSR Series 31. The proposed amendment to Code ' 22C-2-3 would provide greater statutory direction. The proposed amendment would require half of the funds the CWSRF program receives annually from the federal government over and above \$20 million to be used for nutrient removal activities. The \$20 million amount is believed to be, approximately, the average annual allocation the CWSRF program received from EPA prior to 2009. To illustrate how the proposed amendment would work, if the CWSRF program receives \$40 million in an annual funding from EPA after June

MEMORANDUM

TO: Jennifer Pauer, WVDEP

March 15, 2010

Re: Change in Use of CWSRF Moneys

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1, 2010, \$10 million of that amount would be restricted for use to fund projects that provide for nutrient removal.

The proposed amendment would authorize DEP to disburse that \$10 million in the form of a loan or grant to the extent EPA permits the CWSRF program to use the annual funding for grants. The recipients of such loans or grants would be limited to "local entities," defined at Code ' 22C-2-1 as including any county, city, authority, district, public service district, commission, bank, political subdivision, regional government authority, state government agency, interstate agency, or non-profit association or corporation in West Virginia. In order to be eligible to receive the nutrient reduction funds, the local entity would need to either hold or apply for a NPDES permit containing a nutrient restriction, and sponsor a project to reduce or remove nutrients. Such projects could include stormwater projects. Components of a project could be not directly related to nutrient reduction, such as transmission lines being constructed to reach a wastewater treatment plant that is being newly constructed or upgraded to provide nutrient treatment, and the entire project would be eligible to receive the funds set aside for nutrient reduction projects.

A benefit of this proposal is it relies upon new, increased federal funding. Because the increase is new, capturing such funds for nutrient removal should not be very disruptive of current uses and established expectations. The proposed legislation still provides for a sizable amount of the newly increased funds to be used for other purposes.

The restrictions on usage of the nutrient reduction funds are not limited to the Chesapeake Bay watershed. This may widen the political appeal of the legislation.

The proposed legislation is ambiguous with respect to when it would become effective. One could argue that it does not become effective until a legislative rulemaking is completed to amend 47 WVCSR Series 31. We believe the more persuasive argument is that since the proposed legislation does not conflict with the current legislative rule, it becomes effective immediately. This ambiguity is unavoidable without extensive re-drafting of the CWSRF statute, which would probably generate much greater friction in the legislative approval process.

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TO: Jennifer Pauer, WVDEP

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(jefferso\chesapeake bay\wv funding\  
memo to Jennifer Pauer WVDEP)



## PROPOSED AMENDMENT<sup>1</sup>

### **§22C-2-3. West Virginia water pollution control revolving fund; disbursement of fund moneys; administration of the fund.**

(a) Under the direction of the division of environmental protection, the water development authority shall establish, administer and manage a permanent and perpetual fund, to be known as the "West Virginia Water Pollution Control Revolving Fund" The fund shall be comprised of moneys appropriated to the fund by the Legislature, moneys allocated to the state by the federal government expressly for the purposes of establishing and maintaining a state water pollution control revolving fund, all receipts from loans made from the fund to local entities, all income from the investment of moneys held in the fund, and all other sums designated for deposits to the fund from any source, public or private. Moneys in the fund shall be used solely to make loans to local entities to finance or refinance the costs of a project: *Provided*, That moneys in the fund shall be utilized to defray the costs incurred by the authority and the division of environmental protection in administering the provisions of this article: *Provided, however*, That moneys in the fund shall be used to make grants for projects to the extent allowed or authorized by federal law.

(b) The director of the division of environmental protection, in consultation with the authority, shall promulgate legislative rules in accordance with the provisions of article three, chapter twenty-nine-a of this code, to:

(1) Govern the disbursement of moneys from the fund: *Provided*, That half the moneys in excess of twenty million dollars annually allocated after June 1, 2010 to the state by the federal government expressly for the purpose of establishing and maintaining a state water pollution control revolving fund shall be used solely to make loans, or grants to the extent allowed or authorized by federal law, to local entities: (i) holding or applying for a National Pollution Discharge Elimination System permit that restricts the number of pounds of total nitrogen or phosphorous that may be discharged in compliance with said permit or terms of such permit application; and (ii) sponsoring projects that include facilities to reduce or remove total nitrogen or phosphorous from water, specifically including, but not limited to, stormwater facilities; and

(2) Establish a state water pollution control revolving fund program to direct the distribution of grants or loans from the fund to particular local entities and establish the interest rates and repayment terms of the loans.

(c) In order to carry out the administration and management of the fund, the authority is authorized to employ officers, employees, agents, advisers and consultants, including attorneys, financial advisers, engineers, other technical advisers and public accountants and, notwithstanding any provisions of this code to the contrary, to determine their duties and compensation without the approval of any other agency or instrumentality.

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<sup>1</sup> New language is indicated by underscoring.

(d) The authority shall promulgate legislative rules in accordance with the provisions of article three, chapter twenty-nine-a of this code to govern the pledge of loans to secure bonds of the authority.

(e) All moneys belonging to the fund shall be kept in appropriate depositories and secured in conformance with this code. Disbursements from the fund shall be authorized for payment by the director of the authority or the director's designee. Any depository or officer of the depository to which moneys of the fund are paid shall act as trustee of the moneys and shall hold and apply them solely for the purposes for which the moneys are provided under this article. Moneys in the fund shall not be commingled with other money of the authority. If not needed for immediate use or disbursement, moneys in the fund may be invested or reinvested by the authority in obligations or securities which are considered lawful investments for public funds under this code.

## Public Service Commission Comments to the Workgroup

In 2009, the West Virginia Legislature passed Senate Bill 715 which added a new section to the Code, designated §22-11-30, relating to the protection of the Chesapeake Bay Watershed and nutrient reductions projects. Among the provisions of the bill are the requirements for the Department of Environmental Protection (DEP) to perform, in consultation with affected stakeholders, the following actions:

1. Establish a program of nutrient trading and off-sets no later than June 1, 2012.
2. Report to the Joint Legislative Commission on State Water Resources the status of proposed performance standards necessary for wastewater treatment facilities in the Chesapeake Bay watershed for nutrient reduction no later than June 1, 2010.
3. Consider and recommend to the Legislature a program establishing a new and independent source of funding for capital improvements made necessary by the imposition of nutrient removal requirements no later than June 1, 2012.

In response to action item number 3, the DEP convened a group of stakeholders which included elected officials, publicly owned wastewater treatment plant staff, representatives from the State Department of Agriculture, West Virginia Rural Water Association and Public Service Commission staff and attorneys practicing in the area of wastewater treatment. The group met several times and identified a variety of possible revenue sources. At the last meeting in February, 2010, several individuals volunteered to research and submit white papers on some of the ideas which included the Maryland Flush Fee, a tax on toilet paper, vehicle license and registration fee increases and table game revenues, among others. The white papers have now been submitted and reviewed by the Commission.

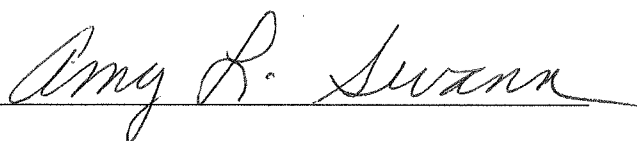
In the stakeholder meetings, the approach which seemed to generate the most interest was the imposition of a fee similar to the Maryland Flush Fee which is found in Maryland's State Code at §9-1605.2 and is titled the Bay Restoration Fund. The Maryland statute generally provides that a fee of \$2.50 per month billed to each residential dwelling that receives an individual sewer bill and each user of an onsite sewage disposal system or holding tank who receives a water bill. The users of onsite sewage disposal or a holding tank who do not receive a water bill pay a fee of \$30.00 per year to the county. The revenue generated by the fee can be used to award construction grants, as a source of revenue or security for payment of principal and interest on bonds whose proceeds would be deposited in the fund, administrative costs of the fund, reasonable administrative costs incurred by local governments in billing and collecting the fee, future upgrades of wastewater treatment facilities needed for additional nutrient

removal or water quality improvement, costs associated with bond issuance, and projects related to the removal of nitrogen from onsite sewage disposal systems and cover crop activities. It also provides funds to low income owners of failing onsite systems to repair or replace those systems.

The Commission has reviewed all of the white papers and alternatives discussed therein. We have no strong opinion on the proposed revenue sources discussed in the various white papers, other than the flush fee.

The Commission believes that there are significant problems with the flush fee concept, including concerns about use of utility bills to collect fees that are not retained or used directly by the utility and that will, at least in part, be used to cover costs for actions or activities of some who may not pay a flush fee. The Commission is concerned that there are significant sources of nutrients that would not be covered by the flush fee. These concerns could be addressed if the approach for funding nutrient removal projects was a broader based fee. Even the flush fee concept, as administered in Maryland, includes some separate collection responsibility by counties.

The Commission believes that, instead of a flush fee applied on a utility bill and collected by the utility, the counties should be responsible for collecting all fees for the fund and remitting them to the State for ultimate disposition for removal of nutrients. The Commission encourages the DEP to consider alternative mechanisms that would result in a broad based collection approach by counties.

A handwritten signature in cursive script that reads "Amy L. Swann". The signature is written in black ink and is positioned above a horizontal line.

Submitted by: Amy L. Swann, Director  
Water and Wastewater Division

April 1, 2010