

U00A0103
Department of the Environment – PAYGO

Pay-As-You-Go Capital Budget Summary

(\$ in Millions)

	<i>FY 2007 Approp.</i>	<i>FY 2008 Approp.</i>	<i>FY 2009 Allowance</i>	<i>Percent Change</i>	<i>DLS Recommd.</i>
Water Quality Revolving Loan Fund	\$72.618	\$110.000	\$90.000	-18.2%	\$90.000
Drinking Water Revolving Loan Fund	15.702	14.000	32.079	129.1%	32.079
Hazardous Substance Clean-up	0.500	0.850	1.000	17.6%	1.000
Bay Restoration Fund – Wastewater	75.000	85.000	143.000	68.2%	143.000
Bay Restoration Fund – Septic Systems	11.000	6.000	6.000	0.0%	6.000
Biological Nutrient Removal Program	2.212	0.000	0.000	0.0%	0.000
Total	\$177.032	\$215.850	\$272.079	26.1%	\$272.079

Fund Source					
General	\$15.149	\$7.330	\$8.445	15.2%	\$8.445
Special	126.853	79.526	111.920	40.7%	111.920
Federal	35.030	28.994	33.714	16.3%	33.714
PAYGO Subtotal	\$177.032	\$115.850	\$154.079	33.0%	\$154.079
General Obligation Bonds	0.000	0.000	0.000	0.0%	0.000
Revenue Bonds	0.000	100.000	118.000	0.0%	118.000
Total	\$177.032	\$215.850	\$272.079	26.1%	\$272.079

For further information contact: Andrew D. Gray

Phone: (410) 946-5530

Summary of Issues

No Action on Bay Restoration Fund Fee Until Fiscal 2012: The final statutorily mandated January 2008 Bay Restoration Fund Annual Report has yet to be released. However, the Bay Restoration Fund Advisory Committee draft version of the report is not recommending a change to the Bay Restoration fee. **The Department of Legislative Services (DLS) recommends that the Maryland Department of the Environment (MDE) provide the committees with the department’s assessment of the anticipated funding gap and strategies the department is considering to address the problem.**

Septic System Projects Program Starts Slowly: The Septic System Projects program has been authorized a total of \$17.0 million between fiscal 2007 and 2008. However, only encumbrances and expenditures of the fiscal 2007 septic system authorization have occurred so far. Another program concern is the overall potential performance of the program. **DLS recommends that MDE brief the committees on how it plans to expend the Septic System Projects program funding in a timely fashion going forward, what benefits can be expected from targeting septic system funding, and what long-term performance assurances MDE is pursuing.**

Summary of Recommended Actions

1. Concur with Governor’s allowance.

Overview

The Maryland Department of the Environment's (MDE) fiscal 2009 pay-as-you-go allowance includes \$8.4 million in general funds, \$111.9 million in special funds, \$33.7 million in federal funds, and \$118.0 million in revenue bonds. This represents a \$56.2 million, or 26.1%, increase from fiscal 2008. This significant funding increase is largely due to an increase of \$38.0 million in special funds for the Bay Restoration Fund (BRF) Wastewater program, an increase of \$20.0 million in revenue bonds for the BRF Wastewater program, and the first-time inclusion of \$18.0 million in revenue bonds for the Drinking Water Revolving Loan Fund. These increases are partially offset by a decrease of \$20.0 million in revenue bonds for the Water Quality Revolving Loan Fund. The BRF revenue supports enhanced nutrient removal upgrades for the State's 66 largest wastewater treatment plants and the overall demand (greater than \$135.0 million) for water quality-related projects. The Drinking Water Revolving Loan Fund and Water Quality Revolving Loan Fund both continue to include general funds as a match to the federal fund appropriation.

Other changes in the 2009 allowance include an increase for the Hazardous Substance Clean-up program of \$150,000 more in general funds from what was appropriated in the fiscal 2008 budget.

Two programs are level-funded in the allowance – the BRF Septic Systems program at \$6.0 million in special funds and the BRF Sewer Rehabilitation program at \$5.0 million in special funds. Fiscal 2009 is the final year of authorizations for the BRF Sewer Rehabilitation program.

Exhibit 1 shows the administrative expenses associated with the two loan funds and BRF-supported programs. MDE includes salaries and fringe benefits, as well as non-salary expenses, in its direct expenses. Non-salary expenses include contractual services such as a financial advisor, a bond counsel, and an accountant/auditor, as well as office supplies and materials, travel, training, and professional memberships. Indirect expenses are charged at approximately 24.3% of salary and fringe benefits for federal funds and at approximately 16.5% of all special fund expenses. The State is required to provide a 20.0% match for federal funds under both revolving loan funds. No State match is required for direct federal administrative expenses under the Drinking Water Revolving Loan Fund.

**Exhibit 1
Consolidated Administrative Expenses – All Programs**

	FY 2007 Actual	FY 2008 Estimated	FY 2009 Estimated
Sources:			
Special Funds			
Water Quality Revolving Loan Fund (WQRLF)	\$3,703,862	\$3,021,000	\$3,705,000
Drinking Water Revolving Loan Fund (DWRLF)	177,961	188,100	199,500
Bay Restoration Fund (BRF) – Wastewater	497,746	541,500	570,000
Bay Restoration Fund (BRF) – Septic Systems	388,683	410,400	433,200
Subtotal – Special Funds	\$4,768,252	\$4,161,000	\$4,907,700
Federal Funds			
Water Quality Revolving Loan Fund	\$0	\$889,000	\$500,000
Drinking Water Revolving Loan Fund	388,486	393,700	393,700
Subtotal – Federal Funds	388,486	1,282,700	893,700
Total Funds	\$5,156,738	\$5,443,700	\$5,801,400
Uses:			
Direct Expenses	\$4,444,048	\$4,660,000	\$5,015,000
Indirect Expenses	712,690	783,700	786,400
Total Direct and Indirect Expenses	\$5,156,738	\$5,443,700	\$5,801,400

Sources of operating revenue are as follows:

WQRLF: Loan fees of up to 5.0% of annual debt service and up to 4.0% of the federal grant.

DWRLF: Loan fees of up to 5.0% of annual debt service and up to 4.0% of the federal grant.

BRF (Wastewater): Up to 1.5% of the annual BRF Enhanced Nutrient Removal Fee revenue collected.

BRF (Septic): Up to 8.0% of the Maryland Department of the Environment’s portion of annual BRF Septic Fee revenue collected.

Overview Issues

1. No Action on Bay Restoration Fund Fee Until Fiscal 2012

The Bay Restoration Fund (BRF) was created in 2004 primarily to provide grants for enhanced nutrient removal (ENR) pollution reduction upgrades at the State's 66 major wastewater treatment plants (WWTPs). The fund is administered by the Maryland Department of the Environment's (MDE) Water Quality Financing Administration and is financed by a bay restoration fee on users of wastewater facilities and owners of septic systems and sewage holding tanks (septic fund). The fees on WWTP users (and users receiving public drinking water) took effect January 1, 2005, and are being collected through water and sewer bills. The fees on septic system and sewage holding tank owners took effect October 1, 2005, and are being collected by the counties. Most counties sent the BRF septic bills to citizens in 2005, while three counties initiated billings in July 2006.

Revenue Bonds Not Enough

To expedite the ENR upgrades at the 66 major WWTPs, MDE intends to issue bonds starting in fiscal 2008 backed by revenue generated under the program. The timing and amount of bonds issued will depend on the actual fee revenue attained, annual funding needs, and the bond maturities and interest rates. In January 2007, MDE estimated that the BRF program would issue a total of \$530.0 million in revenue bonds through fiscal 2011, which would only support the initially anticipated cost of approximately \$765.0 million to upgrade the 66 major WWTPs. Since January 2007, MDE has revised its bond issuance schedule. MDE now plans to issue \$545.0 million in revenue bonds through fiscal 2012, which would support approximately \$807.0 million of the now estimated \$1.04 billion upgrade cost. Therefore, the current estimate is that \$233.0 million of the cost to upgrade the 66 major WWTPs is currently unfunded.

The BRF Advisory Committee is required to perform an analysis of the capital cost of ENR and to make recommendations regarding the appropriate fee to be assessed in future years to meet the financing needs. The cash flow projection model is usually updated in August, and an annual report is published in January.

Joint Chairmen's Report

The 2007 *Joint Chairmen's Report* required MDE to submit a report containing the following information:

- comparison of estimated and actual revenues, factors contributing to the variance, and options available for WWTP projects if sufficient BRF are not available;
- comparison of construction bid estimates with actual bids, factors contributing to the difference, and how these cost factors may be mitigated; and

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- how the scheduling of projects has progressed relative to expectations, what the differences have been, and why they have occurred.

MDE submitted the required report on July 2, 2007. The findings relevant to each bullet point above are as follows:

- estimated and actual revenues varied by only approximately \$1.0 million; however, the inability to issue 20-year bonds due to the State debt limit of 15-year bonds has reduced the overall revenue projection by \$100.0 million relative to the original revenue estimate; the BRF Advisory Committee will address the shortfall in its January 2008 report;
- estimated and actual construction bids varied with two facilities coming in under the estimated bid and facilities coming in over the bid ranging from 1.0% for the Celanese facility in Allegany County to 60.0% over the estimated bid for the Chestertown facility in Kent County; factors that contributed to facilities coming in over the estimated bid included cost escalation due to material/energy costs, inflation due to the time between the estimate and the actual construction, lack of initial information about all cost components, limited competition due to labor shortage, women and minority-owned wage requirements, and unforeseen project delays such as engineering problems and permit issues; and
- MDE reports that projects are progressing according to schedule.

No Change in BRF Fee

The final statutorily mandated January 2008 *Bay Restoration Fund Annual Report* has yet to be released. However, in a draft version of the report, the BRF Advisory Committee is not recommending a change to the Bay Restoration fee because 100% grants for ENR upgrades are expected to be available through fiscal 2011, and upgrade costs for the Back River, Patapsco, and Blue Plains WWTPs are early estimates at this time. In separate correspondence, MDE states that since the upgrades are preliminary, it would be counterproductive to raise the Bay Restoration fee now and then have to do it again when the final upgrade numbers are known. Also, the District of Columbia Water and Sewer Authority has not provided a final completion date for the Blue Plains upgrade, something that MDE has urged the U.S. Environmental Protection Agency to include in the consent decree expected to be completed in summer 2008.

The Department of Legislative Services (DLS) recommends that the Maryland Department of the Environment (MDE) provide the committees with the department's assessment of the anticipated funding gap and strategies the department is considering to address the problem.

Water Quality Revolving Loan Fund (Statewide)

PAYGO GF	\$5,180,000	Recommendation:	Approve
PAYGO SF	\$28,920,000		
PAYGO FF	\$25,900,000		
Revenue Bonds	\$30,000,000		

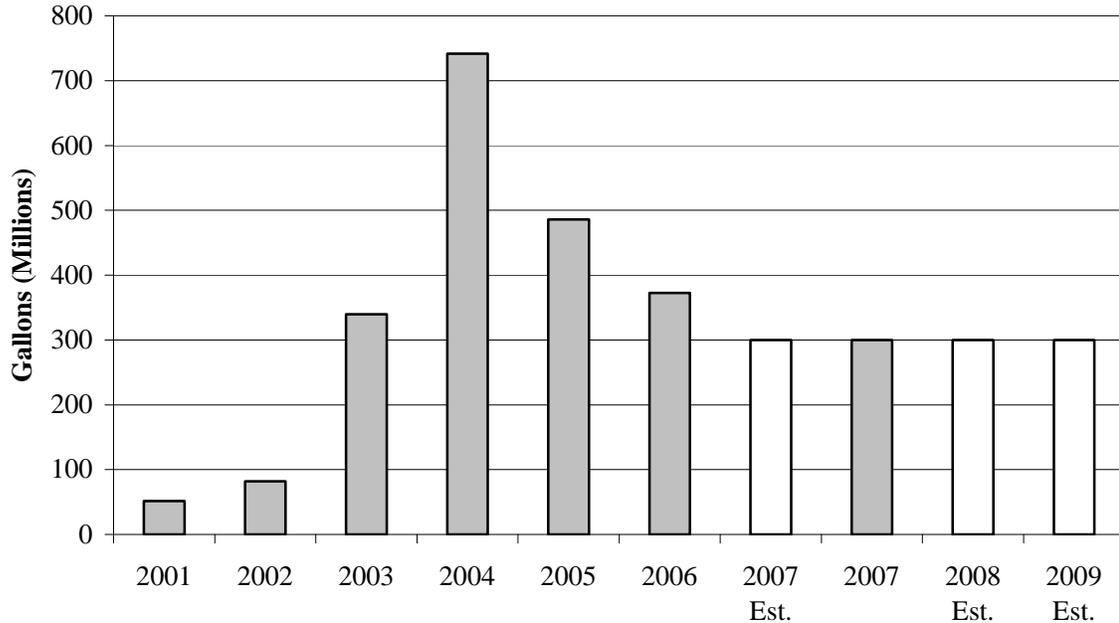
Program Description: The Water Quality Revolving Loan Fund (WQRLF) was created to provide low-interest loans to counties and municipalities to finance water quality improvement projects. The fund was established by the federal government in the Clean Water Act of 1987 and by the State of Maryland in Sections 9-204 and 9-1604 of the Environment Article to replace the federal construction grants program that was phased out. Projects eligible for funding include wastewater treatment plants, failing septic systems, and non-point source projects such as urban stormwater control projects. The federal act requires a 20% state match. As of April 2007, WQRLF had executed approximately \$1.2 billion in low interest loans.

WQRLF projects are prioritized based on a U.S. Environmental Protection Agency-approved Integrated Project Priority System. In accordance with this system, projects meeting the minimum requirements are rated and ranked based on criteria including proposed project benefits and water quality improvement. The second priority ranking phase uses the requirements in Environment Article 9-345 and 9-348 and COMAR 26.03.08 that outline specific criteria for considering, among other things, the severity of water quality problems, readiness to proceed, cost-effectiveness of nitrogen reduction, and expenditure rates. The resulting scores are used to prioritize projects.

Program Performance Analysis: As illustrated in **Exhibit 2**, sewer overflows peaked in fiscal 2004 and have since declined. Information previously reported on sewer overflows compared data for fiscal 2002 and beyond with fiscal 2001, a particularly dry year. Beginning in fiscal 2006, the Maryland Department of the Environment (MDE) used a three-year average (2003 through 2005) of 521.7 million gallons. Using this new base comparison, MDE estimates that the overflow gallons were reduced 42% in fiscal 2007. However, Exhibit 2 also shows that further reductions in sewer overflows are not projected in the out-years. MDE notes that funding levels for sewer rehabilitation and the amount of rainfall determine future sewer overflow reductions. **MDE should be prepared to brief the committees on whether further sewer overflow reductions can be expected in the future.**

Comments: WQRLF's fiscal 2009 allowance totals \$90.0 million and is comprised of \$5.2 million in general funds, \$28.9 million in special funds, \$25.9 million in federal funds, and \$30.0 million in revenue bonds. The \$5.2 million in general funds represents the required State match for the federal funds. The 2008 *Capital Improvement Program* assumes that general funds will be provided in future

Exhibit 2
Sewage Overflow
Fiscal 2001-2009



Source: Governor’s Budget Books, Fiscal 2005-2009

years to meet State matching requirements. If the federal funding level changes in the future, the general fund matching amount will require adjustment. A total of 19 projects would be funded during fiscal 2009 in the following jurisdictions: Allegany (3), Anne Arundel (1), Baltimore City (1), Baltimore County (2), Calvert (1), Charles (2), Frederick (1), Harford (1), Montgomery (1), St. Mary’s (2), Talbot (1), and Washington (3). These projects would involve expanding wastewater treatment plants capacity, upgrading wastewater treatment plants, extending public sewer systems, correcting combined sewer overflow problems, and collecting/treating leachate from a landfill.

Because of high WQRLF demand, \$30.0 million in revenue bonds is needed to recapitalize the WQRLF. In addition, MDE is concerned that it may receive only \$16.4 million in fiscal 2010 in federal funding instead of the \$25.9 million reflected in the 2008 *Capital Improvement Program*. The lower funding is reflected in the President of the United States’ budget. Loan repayments on bond fund loans are required by indenture to be first sent to the WQFA trustee bank and allocated for debt service and other purposes. Therefore, no debt service appropriation is needed.

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MDE states that \$30.0 million in revenue bonds are needed, despite a \$25.8 million WQRLF fund balance projected for the end of fiscal 2009. Biological nutrient removal and enhanced nutrient removal wastewater treatment plant upgrades are anticipated to place increased demands on the WQRLF. MDE states that the revenue bond schedule is determined by the project costs, project scheduling, and loan demand for these wastewater treatment plant upgrades. In addition, MDE notes that the revenue bonds allow for more projects to be financed now with the caveat that lower repayments will be expected in the future due to the need to pay debt service. MDE received funding requests in excess of \$820.0 million in the most recent project solicitation period, which underscores the immediate needs placed on the program. A more complete accounting of need will be ascertained through the Clean Water Needs Survey, which will be completed in fiscal 2009. This survey will update the needs determined in 2004 of \$5.4 billion for point source wastewater infrastructure projects and \$680.0 million for nonpoint source projects.

In October 2007, MDE changed its WQRLF loan rate for disadvantaged and non-disadvantaged communities. The loan rate is based on the average Bond Buyer 11-Bond Index for the month preceding loan closing. Before the loan rate change, the loan rate for disadvantaged communities was 10% of the Bond Buyer 11-Bond Index and 25% for the non-disadvantaged communities. The new rates are 25% for the disadvantaged communities and 50% for the non-disadvantaged communities. MDE notes that the loan rates were changed to allow for annual debt service payments for the proposed revenue bond issuance. **The Department of Legislative Services recommends that MDE discuss what impact the loan rate changes are expected to have on disadvantaged and non-disadvantaged communities seeking WQRLF loans.**

Water Quality Revolving Loan Fund Data (Statewide)

Fund History

	<i>FY 2007 Actual</i>	<i>FY 2008 Estimated</i>	<i>FY 2009 Estimated</i>
Beginning Balance	-\$1,132,411	-\$952,811	\$10,661,208
Revenue			
General Funds	8,152,000	4,240,000	5,180,000
General Obligation Bonds			
Federal Funds	27,669,526	21,179,467	25,885,926
Revenue Bonds – WQFA		50,000,000	30,000,000
Investment and Other Income	12,360,012	11,500,000	11,500,000
Loan Repayments and Interest	59,854,167	55,000,000	55,000,000
Total Revenue	\$108,035,705	\$141,919,467	\$127,565,926
Total Available	\$106,903,294	\$140,966,656	\$138,227,134
Encumbrances			
Net Loans (including closeout adjustments)*	\$92,971,762	\$110,000,000	\$90,000,000
Revenue Bond Debt Service	11,736,297	12,000,000	16,000,000
Revenue Bond Debt Service Reserve	0	5,000,000	3,000,000
Operating Expenses	3,148,046	3,305,448	3,470,721
Total Encumbrances	\$107,856,105	\$130,305,448	\$112,470,721
Ending Balance	-\$952,811	\$10,661,208	\$25,756,413

WQFA: Water Quality Financing Administration

DWRLF: Drinking Water Revolving Loan Fund

*Fiscal 2008 loans made as of 12/31/2007 = \$35.5 million (16 projects)

(\$ in Millions)

<i>Description</i>	<i>2007 Approp.</i>	<i>2008 Approp.</i>	<i>2009 Request</i>	<i>2010 Estimate</i>	<i>2011 Estimate</i>	<i>2012 Estimate</i>	<i>2013 Estimate</i>
PAYGO GF	\$8.152	\$4.240	\$5.180	\$5.200	\$5.200	\$5.200	\$5.200
PAYGO SF	37.903	34.580	28.920	28.950	28.950	28.950	28.950
PAYGO FF	26.563	21.180	25.900	25.900	25.900	25.900	25.900
Revenue Bonds	0.000	50.000	30.000	30.000	30.000	30.000	30.000
Total	\$72.618	\$110.000	\$90.000	\$90.050	\$90.050	\$90.050	\$90.050

Recommended Actions

1. Concur with Governor's allowance.

Fiscal 2009 Proposed Projects

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>FY 2009 Amount</u>	<u>Future Request</u>	<u>Total State Share (%)</u>
Allegany	Cumberland Combined Sewer Overflow	\$29,840,000	–	\$300,000	–	1.0%
Allegany	Cumberland Wastewater Treatment Plant Upgrade	41,995,909	–	11,257,000	–	26.8%
Allegany	George’s Creek Wastewater Treatment Plant – Wastewater Treatment Plant Improvements	22,388,812	–	7,995,000	–	35.7%
Anne Arundel	Sylvan Shores – Public Sewer Service Extension	3,118,092	–	2,346,000	–	75.2%
Baltimore City	Patapsco Wastewater Treatment Plant – Gravity Sludge Thickener Renovation	6,300,000	–	1,920,000	–	30.5%
Baltimore	Hernwood Landfill – Leachate Collection System	1,275,000	–	1,000,000	–	78.4%
Baltimore	Patapsco Wastewater Treatment Plant – Gravity Sludge Thickener Renovation	6,300,000	–	4,080,000	–	64.8%
Calvert	Calvert Industrial Park – Wastewater Treatment Plant Upgrade	700,000	–	630,000	–	90.0%
Charles	La Plata – Southwest Quadrant Sewer System Improvements	1,500,000	–	1,451,000	–	96.7%
Charles	Mt. Carmel Woods Wastewater Treatment Plant Upgrade	5,272,000	\$773,500	2,090,000	–	54.3%
Frederick	Ballenger Creek Wastewater Treatment Plant Expansion	67,900,000	–	30,000,000	–	44.2%
Harford	Havre de Grace Wastewater Treatment Plant – Expansion and Biological Nutrient Removal	49,657,101	24,545,000	7,322,000	–	64.2%
Montgomery	Southlawn Lane – Sewer Extension Project	1,499,800	–	1,146,000	–	76.4%
St. Mary’s	Leonardtown Wastewater Treatment Plant Expansion	23,128,249	13,626,249	4,374,000	–	77.8%
St. Mary’s	Oliver Drive – Public Sewer Service Extension	137,000	–	137,000	–	100.0%
Talbot	Talbot County/Martingham Utilities Cooperative Wastewater Treatment Plant Improvements	2,050,000	–	1,750,000	–	85.4%
Washington	Conococheague Wastewater Treatment Plant Expansion	11,373,665	–	1,652,000	–	14.5%
Washington	Hagerstown Wastewater Treatment Plant – Disinfection Upgrade Phase 3B	8,000,000	–	7,550,000	–	94.4%
Washington	Hagerstown Wastewater Treatment Plant – Headworks Improvements Phase 4	3,350,000	–	3,000,000	–	89.6%
Total		\$285,785,628	\$38,944,749	\$90,000,000	–	

Fiscal 2008 Project Status

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>FY 2008 Amount</u>	<u>Future Request</u>	<u>Total State Share (%)</u>	<u>Status</u>
Allegany	Grahamstown Sanitary Sewer Rehab.	\$1,000,000	–	\$500,000	–	50.0%	Design/Construction fiscal 2008
Baltimore	Back River WWTP – Gravity Sludge Thickeners	13,280,260	–	5,000,000	–	37.6%	Construction
Baltimore	Jones Falls Pump Station	6,294,929	–	6,294,929	–	100.0%	Construction
Baltimore	Nollmeyer-Seneca Park Collection System	3,514,435	–	2,583,435	–	73.5%	Construction
Calvert	Chesapeake Beach Emergency Holding Tank	3,452,500	–	3,452,500	–	100.0%	Design/Construction
Calvert	Chesapeake Beach Outfall Replacement Project	779,700	–	779,700	–	100.0%	Construction
Calvert	Chesapeake Beach WWTP Emergency Tank – City of Chesapeake Beach Share	896,000	–	896,000	–	100.0%	Construction
Cecil	Chesapeake Beach WWTP Emergency Tank – City of North Beach Share	755,000	–	755,000	–	100.0%	Construction
Cecil	Elkton WWTP – BNR/ENR Upgrade	40,716,000	–	23,286,990	–	57.2%	Construction
Cecil	Port Deposit New WWTP and Sewer Collection	12,000,000	–	12,000,000	–	100.0%	Design/Construction fiscal 2008
Charles	Benedict Central Sewer Collection and Treatment System	6,258,000	–	3,129,000	–	50.0%	Design
Charles	Mt. Carmel Woods Wastewater Treatment Plant Upgrade	5,272,000	–	773,500	2,089,750	54.3%	Design
Frederick	Village of Lake Linganore Stormwater Project	6,350,000	–	6,350,000	–	100.0%	Construction
Harford	Havre de Grace Wastewater Treatment Plant – Expansion and Biological Nutrient Removal	49,657,101	–	24,545,000	7,322,344	64.2%	Construction
Kent	Worton WWTP – Lagoon Treatment Process	7,150,000	–	2,145,000	–	30.0%	Design/Construction fiscal 2008
St. Mary's	Leonardtown Wastewater Treatment Plant Expansion	23,128,000	–	13,626,249	4,373,751	77.8%	Design; Construction in fiscal 2008
Washington	Boonsboro WWTP Upgrade	1,296,540	–	1,296,540	–	100.0%	Construction
Wicomico	Willards Wastewater Treatment Plant	4,136,157	–	2,586,157	–	62.5%	Construction
Total		\$185,936,622	–	\$110,000,000	\$13,785,845		

Drinking Water Revolving Loan Fund (Statewide)

PAYGO GF	\$2,265,000	Recommendation:	Approve
PAYGO SF	\$4,000,000		
PAYGO FF	\$7,814,000		
Revenue Bonds	\$18,000,000		

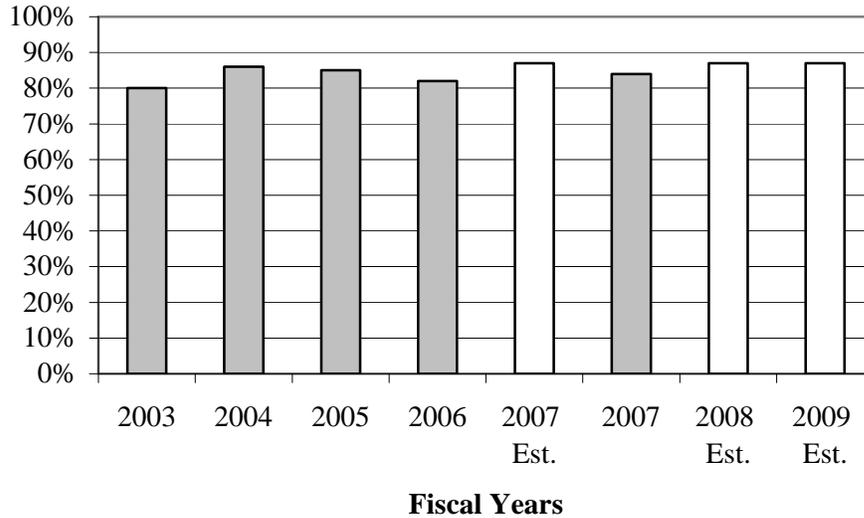
Program Description: The Drinking Water Revolving Loan Fund (DWRLF) was established in accordance with a federal capitalization grant approved by Congress in 1996 in anticipation of future federal capitalization grants. This program was authorized by the General Assembly in 1993 to provide loans to counties and municipalities to finance water supply improvements and upgrades. In accordance with the federal legislation, these funds may also be loaned to private parties. The federal act requires that a minimum of 20% of State matching funds for each year's federal capitalization grant be deposited into the fund. As of June 30, 2007, DWRLF had executed approximately \$114.0 million in low interest loans.

Similar to the Water Quality Revolving Loan Fund, DWRLF projects are prioritized based on an U.S. Environmental Protection Agency-approved Drinking Water Project Priority System that focuses on many criteria, the most important being public health benefit.

Program Performance Analysis: As illustrated in **Exhibit 3**, the measure for the safety of Maryland's water systems increased in fiscal 2007 (84%) relative to fiscal 2006 (82%) but was below the estimate for fiscal 2007 (87%).

Comments: The fiscal 2008 DWRLF allowance totals \$32.1 million and is comprised of \$2.3 million in general funds, \$4.0 million in special funds, \$7.8 million in federal funds, and \$18.0 million in revenue bonds. A total of 13 projects are scheduled to be funded during fiscal 2009, which would improve water services in 13 different jurisdictions: Allegany (3), Baltimore City (1), Carroll (2), Cecil (2), Queen Anne's (1), St. Mary's (1), Washington (2), and Worcester (1). The general fund allowance is based on \$837.5 million in anticipated federal funds to capitalize water supply revolving loan funds throughout the United States. Maryland's share of this national amount is estimated at \$11.3 million, requiring a \$2.2 million State match. Up to 31% of the \$11.3 million federal appropriation may be used for non-project set asides. Non-project set asides are budgeted in MDE's operating budget, and estimates for its categories follow: 15% for Local Assistance/Other State Projects (\$1.7 million); 10% for Safe Drinking Water Program Support (\$1.1 million); 4% for DWRLF Administration (\$0.5); and 2% for Technical Assistance for Small Systems (\$0.2 million).

Exhibit 3
Public Water Systems in Significant Compliance
Fiscal 2003-2009



Source: Governor’s Budget Books, Fiscal 2005-2009

In October 2007, MDE changed its DWRLF loan rate for disadvantaged and non-disadvantaged communities. The loan rate is based on the average Bond Buyer 11-Bond Index for the month preceding loan closing. Before the loan rate change, the loan rate for disadvantaged communities was 10% of the Bond Buyer 11-Bond Index and 25% for the non-disadvantaged communities. The new rates are 25% for the disadvantaged communities and 50% for the non-disadvantaged communities. However, MDE notes that there are subsidies for disadvantaged communities including lower loan rates and loan forgiveness. MDE notes that the loan rates were changed to allow for annual debt service payments for the proposed revenue bond issuance. **The Department of Legislative Services (DLS) recommends that MDE discuss what impact the loan rate changes are expected to have on disadvantaged and non-disadvantaged communities seeking Drinking Water Revolving Loan Fund loans.**

MDE states that the \$18.0 million in revenue bonds included in the fiscal 2009 is needed to meet loan demand. As noted before, the DWRLF loan demand is greater than \$135 million, which is significantly more than the appropriation.

Fiscal 2008 Deficiency

The Governor submitted a deficiency appropriation for the fiscal 2008 operating budget which would increase MDE's federal fund appropriation for DWRLF by \$5,745,000. The federal funds come from non-project set asides that MDE has not able to use and thus is shifting into DWRLF project loans. These funds do not require a general fund match because they were matched in the original appropriation. **DLS recommends that MDE discuss why it has had difficulty spending the set asides from the DWRLF program.**

Drinking Water Revolving Loan Fund Data (Statewide)

Fund History

	<i>FY 2007 Actual</i>	<i>FY 2008 Estimated</i>	<i>FY 2009 Estimated</i>
Beginning Balance	\$26,547,999	\$9,439,947	\$3,558,300
Revenue Bonds			
General Funds	\$4,285,000	\$2,240,000	\$2,265,000
General Obligation Bonds			
Revenue Bonds			18,000,000
Federal Funds	8,266,301	13,558,353	7,814,000
Investment and Other Income	1,198,898	1,200,000	1,200,000
Loan Repayments and Interest	4,090,952	4,295,000	4,400,000
Total Revenue	\$17,841,151	\$21,293,353	\$33,679,000
Total Available	\$44,389,150	\$30,733,300	\$37,237,300
Encumbrances			
Loans*	\$34,382,308	\$26,585,000	\$32,079,000
Operating Expenses	566,895	590,000	590,000
Debt Service Reserve	0	0	0
Total Encumbrances	\$34,949,203	\$27,175,000	\$32,669,000
Ending Balance	\$9,439,947	\$3,558,300	\$4,568,300

*Fiscal 2008 loans made as of 12/31/2007 = \$23.7 million (six projects)

(\$ in Millions)

<i>Description</i>	<i>2007 Approp.</i>	<i>2008 Approp.</i>	<i>2009 Request</i>	<i>2010 Estimate</i>	<i>2011 Estimate</i>	<i>2012 Estimate</i>	<i>2013 Estimate</i>
PAYGO GF	\$4.285	\$2.240	\$2.265	\$2.300	\$2.300	\$2.300	\$2.300
PAYGO SF	2.950	3.946	4.000	4.000	4.000	4.000	4.000
PAYGO FF	8.467	7.814	7.814	7.850	7.850	7.850	7.850
Revenue Bonds	0.000	0.000	18.000	0.000	0.000	0.000	0.000
Total	\$15.702	\$14.000	\$32.079	\$14.150	\$14.150	\$14.150	\$14.150

Recommended Actions

1. Concur with Governor's allowance.

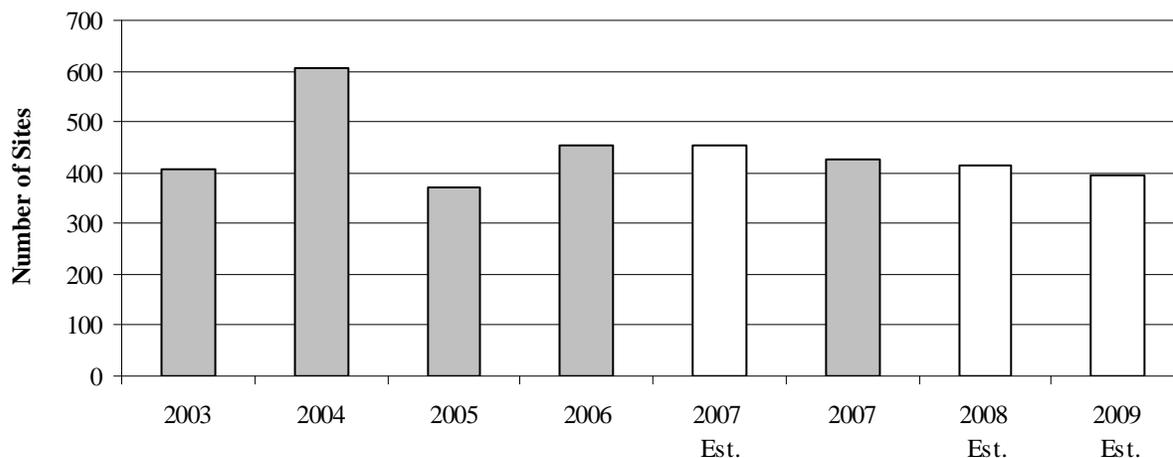
Fiscal 2009 Proposed Projects

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>FY 2009 Amount</u>	<u>Future Request</u>	<u>Total State Share (%)</u>
Allegany	Bowman's Addition Water Project – Phase 2	\$2,545,000	–	\$2,000,000	–	78.6%
Allegany	Ridgedale Reservoir Replacement	3,000,000	–	1,570,000	–	52.3%
Allegany	Westernport Water Treatment Plant Upgrade	5,353,470	–	2,500,000	–	46.7%
Baltimore City	Montebello Plant 2 – Finish Water Reservoir Improvements	36,000,000	–	7,745,000	–	21.5%
Carroll	Hampstead – New Water Blending Facility	580,000	–	560,000	–	96.6%
Carroll	Westminster – Medford Quarry Emergency Water Supply Connection	6,878,000	\$1,000,000	5,578,000	–	95.6%
Cecil	North East Water System – Water Storage Tank Upgrade	2,200,000	–	2,000,000	–	90.9%
Cecil	Perryville Water Treatment Plant – Water Storage Tank Upgrade and Distribution System	14,500,000	11,745,000	2,255,000	–	96.6%
Queen Anne's	Centreville – New Arsenic Treatment Plant, Distribution, and Storage Improvements	5,900,000	–	4,400,000	–	74.6%
St. Mary's	Hollywood – Replacement Wells	420,000	–	300,000	–	71.4%
Washington	Fahrney-Keedy Home and Village Water Treatment Plant Upgrade	1,013,527	–	927,000	–	91.5%
Washington	Hagerstown – New West End Storage Facility	7,114,771	4,454,771	2,003,000	–	90.8%
Worcester	Newark Sanitary Service Area – New Water Storage Tank	461,000	–	241,000	–	52.3%
Total		\$85,965,768	\$17,199,771	\$32,079,000	–	

Fiscal 2008 Project Status

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>FY 2008 Amount</u>	<u>Future Request</u>	<u>Total State Share (%)</u>	<u>Status</u>
Allegany	Clarysville Water Project	\$880,000	–	\$500,000	–	56.8%	Design/Construction fiscal 2008
Allegany	Lonaconing Water Improvements Project – Phase V	3,078,000	–	1,200,000	–	39.0%	Construction
Baltimore	Montebello Filters and Chemical System Improvements	1,500,000	–	1,500,000	–	100.0%	Construction
Calvert	East Prince Frederick Tower and Well	1,540,000	–	1,000,000	–	64.9%	Design No Construction
Carroll	Taneytown/Baltimore Street Water Main Replacement	2,197,370	–	1,447,370	–	65.9%	Design No Construction/Construction fiscal 2008
Carroll	Taneytown/Piney Creek Aquifer New Well	836,000	–	760,000	–	90.9%	Design/Construction fiscal 2008
Carroll	Westminster Medford Quarry Emergency Connection	6,878,360	–	1,000,000	\$5,578,360	95.6%	Construction
Cecil	Perryville Water Filtration and Storage Tank	14,500,000	–	11,745,000	2,255,000	96.6%	Construction
Cecil	Port Deposit Water Treatment and Intake Upgrades	2,123,494	–	582,859	–	27.4%	Design/Construction fiscal 2008
St. Mary’s	Lexington Park Arsenic Removal	840,000	–	840,000	–	100.0%	Construction
Talbot	Martingham Arsenic Removal System	620,000	–	620,000	–	100.0%	Construction
Talbot	Oxford Arsenic Removal Project	1,220,000	–	935,000	–	76.5%	Design/Construction fiscal 2008
Washington	Hagerstown West End Storage Tank Phase I	7,114,500	–	4,454,771	2,002,729	90.8%	Construction
Total		\$43,327,724	–	\$26,585,000	\$9,836,089		

**Exhibit 4
Sites on State Master and Non-State Master List
Fiscal 2003-2009**



Note: Sites continue to be added to and removed from the Non-State master List but not from the State Master List.

Source: Governor’s Budget Books, Fiscal 2005-2009

- Chemical Metals Site – Remediation Project (\$200,000)** – The Chemical Metals Industries Site was contaminated with chlorinated solvents and the Environmental Protection Agency conducted an emergency removal in 1981 and 1982. Subsequently, MDE’s predecessor (the Department of Health and Mental Hygiene’s Office of Environmental Programs) acquired the site and used it as its field office for emergency response. MDE then became concerned about migration of chlorinated solvents; indoor air quality was found to be impacted in the field office and possibly in two adjacent buildings. In fiscal 2007, active venting under the foundations was improved to improve air quality. In fiscal 2009, MDE will continue to operate the active venting, and collect air samples in adjacent homes to ensure that preliminary results of healthy air are correct, and may install active venting in the adjacent homes if necessary. The total estimated cost is \$953,297 and prior authorizations are \$753,297; therefore, the project is anticipated to be completed in fiscal 2009.
- Blenheim Road Site Assessment (\$50,000)** – Perchloroethylene, a commonly used chlorinated solvent, was detected in seven residential wells in the Jacksonville area of Baltimore County in June 2006. Bottled water was distributed to residents, carbon treatment units were installed, and an investigation identified a possible source of the contamination. In fall 2007, contaminants were scheduled to be removed from the wells. The fiscal 2009 allowance provides funding for additional removal of contaminants and monitoring of the

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groundwater. The total estimated cost is \$577,718 and prior authorizations are \$527,718; therefore, the project is anticipated to be completed in fiscal 2009.

- *Site Assessments (\$200,000)* – Site assessments are important for the State because they determine whether the State needs to take responsibility for a site cleanup.

As shown in the Hazardous Substance Clean-up Program Fund Data, the program has \$2.3 million still to be expended in total from fiscal 2004 through 2008. **MDE should be prepared to brief the committees on why there is a significant amount of money still to be expended from fiscal 2004 through 2008.**

Hazardous Substance Clean-up Program Fund Data

Prior Program Activity – All Fund Sources (\$ in Millions)

	<i>FY 2004</i>	<i>FY 2005</i>	<i>FY 2006</i>	<i>FY 2007</i>	<i>FY 2008*</i>
Encumbrances	\$0.949	\$0.428	\$1.383	\$0.789	\$0.389
Expenditures	\$0.857	\$0.164	\$1.148	\$0.636	\$0.372

*As of January 2008

Authorization Summary (\$ in Millions)

<i>Fiscal Year</i>	<i>Authorization</i>	<i>Funds</i>		<i>Balances</i>	
		<i>Encumbered</i>	<i>Expended</i>	<i>To Be Encumbered</i>	<i>To Be Expended</i>
Prior	\$6.330	\$6.330	\$6.330	\$0.000	\$0.000
2004	0.550	0.580	0.534	0.002	0.016
2005	1.500	1.095	0.769	0.405	0.731
2006	1.075	0.926	0.793	0.149	0.282
2007	0.500	0.493	0.115	0.007	0.385
2008	0.850	0.037	0.000	0.813	0.850
Total	\$10.805	\$9.429	\$8.541	\$1.376	2.264

(\$ in Millions)

<i>Description</i>	<i>2007 Approp.</i>	<i>2008 Approp.</i>	<i>2009 Request</i>	<i>2010 Estimate</i>	<i>2011 Estimate</i>	<i>2012 Estimate</i>	<i>2013 Estimate</i>
PAYGO GF	\$0.500	\$0.850	\$1.000	\$1.000	\$1.000	\$1.000	\$1.000

Recommended Actions

1. Concur with Governor's allowance.

Fiscal 2009 Proposed Projects

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>FY 2009 Amount</u>	<u>Future Request</u>	<u>Total State Share (%)</u>	<u>Status</u>
Baltimore City	Chemical Metals Site – Remediation Project	\$953,297	\$753,297	\$200,000	–	100.0%	Under investigation
Baltimore City	Blenheim Road Site Assessment	577,718	527,718	50,000	–	100.0%	Investigation complete/ remediation to begin
Cecil	Dwyer Site Remediation Project	1,300,000	950,000	350,000	–	100.0%	Investigation complete/ remediation to begin
Cecil	Mill Creek – Groundwater Investigation and Perchlorate Contamination	274,088	74,088	200,000	–	100.0%	Under investigation
Statewide	Site Assessments	400,000	200,000	200,000	–	100.0%	Not available
Total		\$3,505,103	\$2,505,103	\$1,000,000	–		

Fiscal 2008 Project Status

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>FY 2008 Amount</u>	<u>Future Request</u>	<u>Total State Share (%)</u>	<u>Status</u>
Anne Arundel	Harundale Well Field Assessment	\$400,000	\$200,000	\$200,000	–	100.0%	Under investigation
Baltimore City	Chemical Metals Site – Remediation Project	953,297	653,297	100,000	200,000	100.0%	Under investigation
Baltimore	Blenheim Road Site Assessment	577,718	377,718	150,000	50,000	100.0%	Investigation complete/remediation to begin
Cecil	Dwyer Site	1,300,000	423,751	526,249	350,000	100.0%	Investigation complete/remediation to begin
Cecil	Montgomery Brothers – Site Improvements	250,000	50,000	200,000	–	100.0%	Completed
Statewide	Site Assessment – Taneytown Cleaners	200,000	–	200,000	–	100.0%	Under investigation
	Site Assessment – Tech Road						Under investigation
	Site Assessment – PK/Auto Clinic (Part of Harundale Well Field)						Under investigation
	Site Assessment – 175 Cleaners						Under investigation
Total		\$3,681,015	\$1,704,766	\$1,376,249	\$600,000		

Bay Restoration Fund – Wastewater Projects (Statewide)

PAYGO SF	\$73,000,000	Recommendation:	Approve
Revenue Bonds	\$70,000,000		

Program Description: The Bay Restoration Fund (BRF) (Chapter 428 of 2004) was created to address the significant decline in Chesapeake Bay water quality due to over-enrichment of nutrients such as phosphorus and nitrogen. This dedicated fund, financed in large part by wastewater treatment plant (WWTP) users, will be used to upgrade Maryland’s WWTPs with enhanced nutrient removal (ENR) technology so they are capable of achieving wastewater effluent quality of 3 mg/L total nitrogen and 0.3 mg/L total phosphorus. Revenue from this fund will also support upgrades to sewer infrastructure and septic systems.

This program incorporates the two BRF supported programs described below.

- ***Enhanced Nutrient Removal (\$138,000,000)*** – This program provides grants to local governments to institute ENR technology at the 66 largest WWTPs in Maryland. Overall, upgrading these WWTPs will reduce nitrogen loading to the Chesapeake Bay and its tributaries by an additional 7.5 million pounds per year, representing approximately one-third of the additional reduction needed for Maryland to reach its commitment under the *2000 Chesapeake Bay Agreement*.
- ***Sewer Rehabilitation (\$5,000,000)*** – The goal of this program is to ensure a safe and adequate sewer infrastructure, as required by the Clean Water Act. The program provides 100% grants to local governments to correct combined sewer overflow problems, rehabilitate existing sewers, correct excessive inflow/infiltration problems, and upgrade pumping stations. This program will help WWTPs operate more efficiently by regulating the flow of water sent to these plants during periods of rain and effectively prevent overflows of untreated sewage.

Program Performance Analysis: The Maryland Department of the Environment (MDE) has included nitrogen and phosphorous load reduction numbers that relate specifically to the nitrogen and phosphorus load reductions for the fiscal 2009 proposed projects. The proposed fiscal 2009 projects would reduce nitrogen loading by approximately 6.2 million pounds per year and phosphorus loading by approximately 1.4 million pounds per year.

Exhibit 5 describes the status of efforts to install biological nutrient removal (BNR) and ENR technology at the 66 major WWTPs. BNR technology allows WWTPs to achieve wastewater effluent quality of 8 mg/L total nitrogen and 3 mg/L total phosphorus. As of January 2008, of the 66 major WWTPs, 69% are operating at the BNR level (up from 68% as of January 2007), and 9% are operating at the ENR level (up from 3% as of January 2007).

Exhibit 5
Status of BNR and ENR Construction
Fiscal 2008

	<u>BNR</u>	<u>ENR</u>
Pre-planning	1	10
Planning	4	29
Design	5	12
Construction	9	9
Under Operation	47	6
Total	66	66

BNR: biological nutrient removal

ENR: enhanced nutrient removal

Source: Maryland Department of the Environment

Comments: The fiscal 2009 ENR allowance of \$138.0 million (\$68.0 million in special funds \$70.0 million in revenue bonds) would be used to construct ENR upgrades at 31 major WWTPs in 16 jurisdictions (Allegany, Anne Arundel, Baltimore City, Baltimore, Calvert, Carroll, Cecil, Dorchester, Frederick, Harford, Howard, Montgomery, Prince George’s, St. Mary’s, Washington, and Wicomico).

The Sewer Rehabilitation Program was authorized for fiscal 2004 through 2009, and so fiscal 2009 is the final authorization for the program. The fiscal 2009 Sewer Rehabilitation Program allowance of \$5.00 million in special funds would be used for the following purposes:

- \$2.65 million for inflow/infiltration correction projects in Caroline, Garrett, St. Mary’s, and Washington counties;
- \$2.15 million for sanitary sewer rehabilitations in Baltimore City, Frederick County, and Talbot County; and
- \$0.20 million to abate sewer overflows in Talbot County.

BRF revenue is collected by the Comptroller and then transferred to the Water Quality Financing Administration (WQFA) accounts. As a result, for WQFA to transfer any funds to the trustee bank for BRF revenue bond debt service, an appropriation is necessary. MDE has budgeted \$5.0 million for debt service payments and \$7.0 million for debt service reserve (a total of \$12.0 million) in its fiscal 2009 allowance operating budget.

**Bay Restoration Fund – Wastewater Project Fund Data
(Statewide)**

Fund History

	<i>FY 2007 Actual</i>	<i>FY 2008 Estimated</i>	<i>FY 2009 Estimated</i>
Beginning Balance	\$32,906,062	\$47,892,298	\$37,494,446
Revenue			
General Funds	\$0	\$0	\$0
General Obligation Bonds	0	0	0
Bay Restoration Fund Fee Revenue	57,465,810	58,000,000	58,000,000
Investment Income	3,954,466	3,500,000	3,500,000
Revenue Bond Proceeds	0	50,000,000	70,000,000
Total Revenue	\$61,420,276	\$111,500,000	\$131,500,000
Total Available	\$94,326,338	\$159,392,298	\$168,994,446
Encumbrances			
ENR Grant Awards ¹	\$42,777,148	\$107,222,852	\$138,000,000
Sewer Rehabilitation Grant Awards ²	3,200,000	9,125,000	5,000,000
Operating Expenses	456,892	550,000	600,000
Debt Service Reserve/Issuance Cost	0	5,000,000	7,000,000
Debt Service Payment	0	0	5,000,000
Total Encumbrances	\$46,434,040	\$121,897,852	\$155,600,000
Ending Balance	\$47,892,298	\$37,494,446	\$13,394,446

ENR: enhanced nutrient removal

¹ ENR Grant Awards as of 12/31/2007 = \$23.0 million (seven projects)

² Sewer Rehabilitation Grant Awards as of 12/31/2007 – \$1.4 million (three projects)

(\$ in Millions)

<i>Description</i>	<i>2007 Approp.</i>	<i>2008 Approp.</i>	<i>2009 Request</i>	<i>2010 Estimate</i>	<i>2011 Estimate</i>	<i>2012 Estimate</i>	<i>2013 Estimate</i>
PAYGO SF	\$75.000	\$35.000	\$73.000	\$23.000	\$1.000	\$13.000	\$4.000
Revenue Bonds	0.000	50.000	70.000	170.000	225.000	30.000	0.000
Total	\$75.000	\$85.000	\$143.000	\$193.000	\$226.000	\$43.000	\$4.000

Recommended Actions

1. Concur with Governor's allowance.

Fiscal 2009 Proposed Enhanced Nutrient Removal Projects

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>FY 2009 Amount</u>	<u>Future Request</u>	<u>Total State Share (%)</u>
Allegany	Cumberland Wastewater Treatment Plant – Enhanced Nutrient Removal	\$41,995,909	\$16,000,000	\$14,564,000	–	72.8%
Allegany	George’s Creek Wastewater Treatment Plant – Enhanced Nutrient Removal	22,388,662	2,000,000	3,000,000	\$2,911,155	35.3%
Anne Arundel	Annapolis Wastewater Treatment Plant – Enhanced Nutrient Removal	14,229,000	1,000,000	6,800,000	6,429,000	100.0%
Anne Arundel	Broadneck Wastewater Treatment Plant – Enhanced Nutrient Removal	14,200,000	1,000,000	6,500,000	6,700,000	100.0%
Anne Arundel	Broadneck Wastewater Treatment Plant – Enhanced Nutrient Removal	14,359,000	500,000	500,000	13,359,000	100.0%
Anne Arundel	Cox Creek Wastewater Treatment Plant – Enhanced Nutrient Removal	59,000,000	6,000,000	27,000,000	26,000,000	100.0%
Anne Arundel	Mayo Large Communal Wastewater Treatment Plant – Enhanced Nutrient Removal	29,451,091	1,300,000	1,000,000	337,000	9.0%
Baltimore City	Patapsco Wastewater Treatment Plant – Enhanced Nutrient Removal	204,361,000	40,000,000	12,000,000	69,735,000	59.6%
Baltimore	Back River Wastewater Treatment Plant – Enhanced Nutrient Removal	117,000,000	5,000,000	3,000,000	109,000,000	100.0%
Calvert	Chesapeake Beach Wastewater Treatment Plant – Enhanced Nutrient Removal	18,460,470	2,000,000	2,500,000	1,857,943	34.4%
Carroll	Freedom District Wastewater Treatment Plant – Enhanced Nutrient Removal	7,000,000	400,000	300,000	6,300,000	100.0%
Carroll	Westminster Wastewater Treatment Plant – Enhanced Nutrient Removal	8,600,000	450,000	450,000	7,700,000	100.0%
Cecil	Perryville Wastewater Treatment Plant – Enhanced Nutrient Removal	13,200,000	1,200,000	1,000,000	654,000	21.6%
Dorchester	Cambridge Wastewater Treatment Plant – Enhanced Nutrient Removal	6,000,000	1,600,000	3,000,000	1,400,000	100.0%
Frederick	Ballenger Wastewater Treatment Plant – Enhanced Nutrient Removal	67,900,000	8,969,225	10,000,000	3,030,775	32.4%
Frederick	Emmitsburg Wastewater Treatment Plant – Enhanced Nutrient Removal	15,300,000	1,600,000	5,000,000	400,000	45.8%

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<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>FY 2009 Amount</u>	<u>Future Request</u>	<u>Total State Share (%)</u>
Frederick	Frederick Wastewater Treatment Plant – Enhanced Nutrient Removal	29,278,000	1,500,000	1,000,000	26,778,000	100.0%
Frederick	Thurmont Wastewater Treatment Plant – Enhanced Nutrient Removal	3,230,000	300,000	2,000,000	930,000	100.0%
Harford	Aberdeen Wastewater Treatment Plant – Enhanced Nutrient Removal	29,000,000	2,200,000	6,700,000	13,100,000	75.9%
Harford	Joppatowne Wastewater Treatment Plant – Enhanced Nutrient Removal	10,000,225	618,775	4,219,000	5,094,718	99.3%
Harford	Sod Run Wastewater Treatment Plant – Enhanced Nutrient Removal	46,262,000	1,500,000	9,249,000	19,723,065	65.9%
Howard	Little Patuxent Wastewater Treatment Plant – Enhanced Nutrient Removal	49,800,000	1,400,000	1,400,000	25,200,000	56.2%
Montgomery	Seneca Wastewater Treatment Plant – Enhanced Nutrient Removal	7,889,000	400,000	400,000	7,039,000	99.4%
Prince George's	Bowie Wastewater Treatment Plant – Enhanced Nutrient Removal	8,200,000	1,600,000	4,000,000	1,193,000	82.8%
Prince George's	Parkway Wastewater Treatment Plant – Enhanced Nutrient Removal	8,360,000	500,000	330,000	7,480,000	99.4%
Queen Anne's	Piscataway Wastewater Treatment Plant – Enhanced Nutrient Removal	2,490,000	200,000	1,500,000	740,000	98.0%
St. Mary's	Leonardtown Wastewater Treatment Plant – Enhanced Nutrient Removal	23,128,000	4,510,000	618,000	–	22.2%
Washington	Conococheague Wastewater Treatment Plant – Enhanced Nutrient Removal	11,373,806	1,500,000	3,700,000	2,630,415	68.8%
Washington	Hagerstown Wastewater Treatment Plant – Enhanced Nutrient Removal	10,060,000	2,087,000	5,000,000	2,748,000	97.8%
Washington	Winebrenner Wastewater Treatment Plant – Enhanced Nutrient Removal	8,410,043	100,000	270,000	2,860,000	38.4%
Wicomico	Delmar Wastewater Treatment Plant – Enhanced Nutrient Removal	7,940,000	700,000	1,000,000	300,000	25.2%
Total		\$908,866,206	\$108,135,000	\$138,000,000	\$371,630,071	

Fiscal 2008 Enhanced Nutrient Removal Project Status

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>FY 2008 Amount</u>	<u>Future Request</u>	<u>Total State Share (%)</u>	<u>Status</u>
Allegheny	Cumberland Wastewater Treatment Plant – Enhanced Nutrient Removal	\$41,995,909	\$1,000,000	\$15,000,000	\$14,564,000	72.8%	Design; Construction Fiscal 2008
Allegheny	George’s Creek Wastewater Treatment Plant – Enhanced Nutrient Removal	22,388,662	–	2,000,000	5,911,155	35.3%	Design; Construction Fiscal 2008
Anne Arundel	Annapolis Enhanced Nutrient Removal	14,229,000	–	1,000,000	13,229,000	100.0%	Planning/Design; Construction Fiscal 2009
Anne Arundel	Broadneck Wastewater Treatment Plant – Enhanced Nutrient Removal	14,200,000	–	1,000,000	13,200,000	100.0%	Planning/Design; Construction Fiscal 2009
Anne Arundel	Broadneck Wastewater Treatment Plant – Enhanced Nutrient Removal	14,359,000	–	500,000	13,859,000	100.0%	Planning/Design
Anne Arundel	Cox Creek Enhanced Nutrient Removal	59,000,000	–	6,000,000	53,000,000	100.0%	Planning/Design; Construction Fiscal 2009
Anne Arundel	Mayo Large Communal Wastewater Treatment Plant – Enhanced Nutrient Removal	29,451,091	–	1,300,000	1,337,000	9.0%	Planning/Design; Construction Fiscal 2009
Baltimore City	Patapsco Wastewater Treatment Plant – Enhanced Nutrient Removal	204,361,000	10,000,000	30,000,000	81,735,000	59.6%	Planning/Design; Construction Fiscal 2008
Calvert	Chesapeake Beach Wastewater Treatment Plant – Enhanced Nutrient Removal	18,460,470	–	2,000,000	4,357,943	34.4%	Design; Construction Fiscal 2009
Caroline	Federalsburg Enhanced Nutrient Removal	5,231,852	360,000	1,972,852	–	44.6%	Construction
Carroll	Freedom District Wastewater Treatment Plant – Enhanced Nutrient Removal	7,000,000	100,000	300,000	6,600,000	100.0%	Planning/Design
Carroll	Mount Airy Enhanced Nutrient Removal	3,565,000	200,000	3,365,000	–	100.0%	Design
Carroll	Westminster Wastewater Treatment Plant – Enhanced Nutrient Removal	8,600,000	–	450,000	8,150,000	100.0%	Planning/Design
Cecil	Perryville Wastewater Treatment Plant – Enhanced Nutrient Removal	13,200,000	200,000	1,000,000	1,654,000	21.6%	Design; Construction Fiscal 2008
Charles	Indian Head Enhanced Nutrient Removal	14,417,681	6,484,000	403,000	–	47.8%	Construction
Charles	La Plata Enhanced Nutrient Removal	3,548,000	–	110,000	3,438,000	100.0%	Planning
Dorchester	Cambridge Wastewater Treatment Plant – Enhanced Nutrient Removal	6,000,000	100,000	1,500,000	4,400,000	100.0%	Planning/Design; Construction Fiscal 2009

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<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>FY 2008 Amount</u>	<u>Future Request</u>	<u>Total State Share (%)</u>	<u>Status</u>
Frederick	Ballenger Wastewater Treatment Plant – Enhanced Nutrient Removal	67,900,000	–	8,969,225	13,030,775	32.4%	Design; Construction Fiscal 2009
Frederick	Brunswick enhanced Nutrient Removal	14,626,149	8,263,000	308,000	–	58.6%	Construction
Frederick	Emmitsburg Wastewater Treatment Plant – Enhanced Nutrient Removal	15,300,000	50,000	1,550,000	5,400,000	45.8%	Planning/Design; Construction Fiscal 2009
Frederick	Frederick Wastewater Treatment Plant – Enhanced Nutrient Removal	29,278,000	–	1,500,000	27,778,000	100.0%	Design; Construction Fiscal 2009
Frederick	Thurmont Wastewater Treatment Plant – Enhanced Nutrient Removal	3,230,000	–	300,000	2,930,000	100.0%	Planning/Design; Construction Fiscal 2009
Harford	Aberdeen Wastewater Treatment Plant – Enhanced Nutrient Removal	29,000,000	200,000	2,000,000	19,800,000	75.9%	Planning/Design; Construction Fiscal 2009
Harford	Havre de Grace Enhanced Nutrient Removal	49,657,101	400,000	10,889,000	–	22.7%	Construction
Harford	Joppatowne Wastewater Treatment Plant – Enhanced Nutrient Removal	10,000,000	–	618,775	9,249,775	98.7%	Planning/Design; Construction Fiscal 2009
Harford	Sod Run Wastewater Treatment Plant – Enhanced Nutrient Removal	46,262,000	–	1,500,000	28,972,290	65.9%	Planning/Design; Construction Fiscal 2009
Howard	Little Patuxent Wastewater Treatment Plant – Enhanced Nutrient Removal	49,800,000	–	1,400,000	26,600,000	56.2%	Planning/Design
Montgomery	Seneca Wastewater Treatment Plant – Enhanced Nutrient Removal	7,889,000	–	400,000	7,439,000	99.4%	Planning/Design
Prince George’s	Bowie Wastewater Treatment Plant – Enhanced Nutrient Removal	8,200,000	600,000	1,000,000	5,193,000	82.8%	Planning/Design; Construction Fiscal 2009
Prince George’s	Parkway Wastewater Treatment Plant – Enhanced Nutrient Removal	8,360,000	–	500,000	7,810,000	99.4%	Planning/Design
Prince George’s	Piscataway Wastewater Treatment Plant – Enhanced Nutrient Removal	2,490,000	–	200,000	2,240,000	98.0%	Planning/Design; Construction Fiscal 2009
St. Mary’s	Leonardtown Wastewater Treatment Plant – Enhanced Nutrient Removal	23,128,000	510,000	4,000,000	618,000	22.2%	Design; Construction in Fiscal 2008
Washington	Conococheague Wastewater Treatment Plant – Enhanced Nutrient Removal	11,373,806	–	1,500,000	6,330,415	68.8%	Planning/Design; Construction Fiscal 2009

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<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>FY 2008 Amount</u>	<u>Future Request</u>	<u>Total State Share (%)</u>	<u>Status</u>
Washington	Hagerstown Wastewater Treatment Plant – Enhanced Nutrient Removal	10,060,000	–	2,087,000	7,748,000	97.8%	Design; Construction Fiscal 2009
Washington	Winebrenner Wastewater Treatment Plant – Enhanced Nutrient Removal	8,410,043	–	100,000	3,130,000	38.4%	Planning/Design
Wicomico	Delmar Wastewater Treatment Plant – Enhanced Nutrient Removal	7,940,000	200,000	500,000	1,300,000	25.2%	Design; Construction Fiscal 2008
Total		\$882,911,764	\$28,667,000	\$107,222,852	\$401,004,353		

Fiscal 2009 Proposed Sewer Rehabilitation Projects

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>FY 2009 Amount</u>	<u>Future Request</u>	<u>Total State Share (%)</u>
Baltimore City	Baltimore City Lower Stoney Run Service Area – Sewer Rehabilitation	\$41,856,259	–	\$1,000,000	–	2.4%
Caroline	Federalsburg Inflow and Infiltration Correction at Maple Avenue and South Main Street	1,443,000	–	600,000	–	41.5%
Frederick	Thurmont System – Line Rehabilitation and Replacement	4,939,000	–	1,000,000	–	20.2%
Garrett	Mountain Lake Park Sewer Collection System – Sewer Line Replacement	943,816	–	750,000	–	79.5%
St. Mary's	Piney Point Sewer Collection System – Sewer Line Repairs/Replacement	1,000,000	–	500,000	–	50.0%
Talbot	St. Michaels Region II Sewer Collection System Improvements – Carpenter Street	700,000	–	200,000	–	28.6%
Talbot	St. Michaels Region II Sewer Collection System Improvements – Mill Street	700,000	–	150,000	–	21.4%
Washington	Hagerstown Sewer Collection System Rehabilitation	5,000,000	–	800,000	–	16.0%
Total		\$56,582,075	–	\$5,000,000	–	

Fiscal 2008 Sewer Rehabilitation Projects Status

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>FY 2008 Amount</u>	<u>Future Request</u>	<u>Total State Share (%)</u>	<u>Status</u>
Allegany	Cumberland Combined Sewer Overflow	\$29,840,000	–	\$2,575,000	–	8.5%	Design/Construction Fiscal 2008
Allegany	Frostburg Combined Sewer Overflow Elimination Project	20,000,000	\$1,000,000	800,000	–	9.0%	Construction
Allegany	Grahamstown Sanitary Sewer Rehabilitation	1,000,000	–	500,000	–	50.0%	Design/Construction Fiscal 2008
Allegany	Westernport Combined Sewer Overflow	19,000,000	–	1,800,000	–	9.5%	Design completed/ Construction Fiscal 2008
Baltimore City	Baltimore City Sanitary Sewer Overflow	35,258,000	2,875,000	1,000,000	–	11.0%	Construction
Caroline	Lockerman Street Lift Station	331,500	–	100,000	–	30.2%	Under Design
Carroll	Taneytown – Baltimore Street Sanitary Sewer Replacement	1,763,930	–	200,000	–	11.3%	Construction
Cecil	Port Deposit Sewer Collection System Rehabilitation	508,200	–	200,000	–	39.4%	Design completed/ Construction Fiscal 2008
Dorchester	Gordon Street Lift Station Upgrade	167,000	–	150,000	–	89.8%	Design completed/ Construction Fiscal 2008
Harford	Havre de Grace Sewer Main Replacement	390,000	–	200,000	–	51.3%	Design
Talbot	St. Michaels Region II Sewer Collection System Improvements	9,700,000	1,000,000	400,000	–	14.4%	Design/Construction Fiscal 2008
Washington	Williamsport I/I Repairs	800,000	–	400,000	–	50.0%	Design completed/ Construction Fiscal 2008
Wicomico	Fruitland I/I Repairs	1,095,000	–	600,000	–	54.8%	Construction
Worcester	Pocomoke City I/I Repairs	350,000	–	200,000	–	57.1%	Design/Construction Fiscal 2008
Total		\$120,203,630	\$4,875,000	\$9,125,000	–		

Bay Restoration Fund – Septic System Projects (Statewide)

PAYGO SF

\$6,000,000

Recommendation: Approve

Program Description: The Bay Restoration Fund (BRF) (Chapter 428 of 2004) was created to address the significant decline in Chesapeake Bay water quality due to over-enrichment of nutrients such as phosphorus and nitrogen. This dedicated fund, financed in large part by wastewater treatment plant (WWTP) users, will be used to upgrade Maryland’s WWTPs with enhanced nutrient removal technology so they are capable of achieving wastewater effluent quality of 3 mg/L total nitrogen and 0.3 mg/L total phosphorus. In addition to the WWTP user fee, a \$30/year per septic/holding tank fee was established. The initial estimate was that there are approximately 420,000 onsite septic systems in Maryland, so the Maryland Department of the Environment (MDE) estimates that an estimated \$12.6 million will be generated annually – with 60% of this revenue being allocated to MDE for the septic system upgrade program and 40% to the Maryland Department of Agriculture for the Cover Crop Program.

MDE provides grants to upgrade failing systems and holding tanks with the best available technology for nitrogen removal. Overall, the program gives priority to projects that involve failing systems in environmentally sensitive areas that are ready to proceed.

The septic system program has an initial structure that has been designed to be flexible in order to meet changing needs. Currently, the plan is to run the program on a two-year cycle based on an initial Request for Proposals solicited from county public health departments. In fiscal 2008, 11 jurisdictions submitted proposals and 10 jurisdictions were approved for funding totaling \$9.0 million that will be reimbursed upon completion of projects solicited from septic system owners (prioritized by location within the critical area). In addition, approximately \$2.0 million was allocated to miscellaneous projects that are to be solicited by MDE. For instance, a restaurant owner within the critical area but in a county not associated with the original Request for Proposals has expressed interest to MDE. Therefore, the program is currently structured as a hybrid between a Request for Proposals program that provides grants and a direct delivery of services program.

Program Performance Analysis: MDE has several performance measures that track the impact of its efforts to reduce point-source nutrient loading problems in the Chesapeake Bay and its tidal tributaries. However, MDE does not have a measure that tracks the specific estimated reductions associated with this substantial capital budget program. Instead, MDE’s performance measures simply track the number of septic grants financed. **The Department of Legislative Services recommends again that MDE should include a measure in future performance plans that provides an estimate of the impact that this program has on the State’s overall level of point-source nutrient pollution.**

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Comments: The fiscal 2009 allowance of \$6.0 million in special funds is level with the fiscal 2008 appropriation and provides funding for approximately 500 septic system upgrades at approximately \$12,000 per septic system upgrade. The fiscal 2009 allowance will be allocated based on a January 2009 solicitation for projects. This is the same pattern as the one that is planned for the fiscal 2008 appropriation, which yielded five proposals. MDE has not divulged any details about the five proposals because awards have yet to be made.

Exhibits 6 and 7 depict the fiscal 2007/2008 Septic System Project grant cycle that used the original \$11.0 million appropriation from fiscal 2007. Exhibit 6 shows the approximately \$9.0 million that the 10 jurisdictions requested as reimbursable grants from MDE, and Exhibit 7 shows the allocation of the \$2.0 million in grants managed directly by MDE. MDE states that it is working with large on-site sewage disposal systems with service capacity of 10 to 100 equivalent dwelling units in addition to individual septic grant solicitations.

Exhibit 6
Bay Restoration Fund Septic Grant Awards Managed by Jurisdictions
Fiscal 2007/2008

<u>County/City</u>	<u>Award</u>	<u>Applicants</u>	<u>Installed</u>	<u>MDE Estimate of Septic Systems</u>
Anne Arundel	\$2,644,000	87	23	44,406
Calvert	933,000	24	22	23,479
Caroline	144,000	4	3	7,685
Charles	604,000	37	4	20,543
Frederick	712,000	16	4	34,181
Kent	597,000	12	1	4,422
Queen Anne's (Corsica River)	287,000	3	0	(see Queen Anne's County in Exhibit 7)
Talbot	1,168,000	41	6	7,732
Wicomico	771,000	26	17	18,751
Worcester	1,142,000	27	10	6,002
Total	\$9,002,000	277	90	167,201

Note: The Maryland Department of the Environment (MDE) estimate of septic systems is based on a total number of 468,014 septic systems that MDE used to project septic fee revenue.

Source: Maryland Department of the Environment

Exhibit 7
Bay Restoration Fund Septic Grant Awards Managed by MDE
Fiscal 2007/2008

<u>County/City</u>	<u>Awards</u>	<u>Applicants</u>	<u>Installed</u>	<u>MDE Estimate of Septic Systems</u>
Allegany	\$0	2	0	4,200
Baltimore City	0	0	0	None provided
Baltimore	7,825	3	1	56,200
Carroll	50,000	10	0	31,342
Cecil	0	2	0	19,490
Dorchester	48,088	13	4	6,568
Garrett	0	2	0	10,695
Harford	0	3	0	30,079
Howard	663,600	11	1	23,553
Montgomery	112,999	9	7	48,063
Prince George's	0	1	0	16,743
Queen Anne's (other than Corsica River)	94,368	15	10	9,707
Somerset	0	1	0	5,114
St. Mary's	68,670	9	5	21,882
Washington	16,550	3	1	17,177
Total	\$1,062,100	84	29	300,813

Note: The Maryland Department of the Environment (MDE) estimate of septic systems is based on a total number of 468,014 septic systems that MDE used to project septic fee revenue.

Source: Maryland Department of the Environment

The BRF Septic System Project Fund Data indicates that MDE has carried over unencumbered funds from fiscal 2007 into fiscal 2008. This is reflected in the expectation of \$7,973,291 in awards for fiscal 2008, which is \$1,973,291 more than the fiscal 2008 appropriation. Overall, the fund data appear to reflect a conservative estimate for the BRF fee revenue. Given the current estimates of \$12.0 million per year, it would be expected that the revenue would be on the order of \$7.2 million and not \$6.3 million as shown in the fund data. **MDE should be prepared to brief the committees on why a low fee revenue projection was used, what a more realistic fund balance projection would be, and overall how the expenditure of funds for septic system upgrades is progressing.**

Bay Restoration Fund – Septic System Project Fund Data

Authorization Summary
(\$ in Millions)

<i>Fiscal Year</i>	<i>Authorization</i>	<i>Funds</i>		<i>Balances</i>	
		<i>Encumbered</i>	<i>Expended</i>	<i>To Be Encumbered</i>	<i>To Be Expended</i>
Prior Years	\$0.000	\$0.000	\$0.000	0.000	0.000
2004	0.000	0.000	0.000	0.000	0.000
2005	0.000	0.000	0.000	0.000	0.000
2006	0.000	0.000	0.000	0.000	0.000
2007	11.000	9.337	0.701	1.663	10.299
2008	6.000	0.000	0.000	6.000	6.000
Total	\$17.000	\$9.337	\$0.701	\$7.663	\$16.299

Prior Program Activity – All Fund Sources
(\$ in Millions)

	<i>FY 2004</i>	<i>FY 2005</i>	<i>FY 2006</i>	<i>FY 2007</i>	<i>FY 2008*</i>
Encumbrances	\$0	\$0	\$0	\$9,026,709	\$310,422
Expenditures	\$0	\$0	\$0	\$24,709	\$676,165

*As of 01/31/08.

(\$ in Millions)

<i>Description</i>	<i>2007 Approp.</i>	<i>2008 Approp.</i>	<i>2009 Request</i>	<i>2010 Estimate</i>	<i>2011 Estimate</i>	<i>2012 Estimate</i>	<i>2013 Estimate</i>
PAYGO SF	\$11.000	\$6.000	\$6.000	\$6.000	\$6.000	\$6.000	\$6.000

Issues

1. Septic System Projects Program Starts Slowly

The Septic System Projects program has been authorized a total of \$17.0 million between fiscal 2007 and 2008. However, only encumbrances and expenditures of the fiscal 2007 Septic System authorization have occurred so far. In addition, of the \$11.0 million authorization from fiscal 2007, only \$700,874 has been expended: \$415,743 from the funding reimbursed to counties and \$285,131 for the MDE administered part of the program. This means that \$16.3 million remains to be expended. With \$6.0 million anticipated in future program funding, although a more realistic estimate may be 60% of \$12.0 million or \$7.2 million annually, the program would appear to be heading for large unexpended balances.

Possible Hindrances to Spending

A couple of factors may help to explain MDE's inability to expend Septic System Projects program funding in a timely manner. First, the reimbursed funds to counties were all encumbered (also called awarded) at the same time, but the counties have not submitted invoices for reimbursement in a timely fashion. MDE notes that it is taking a more proactive approach to obtaining invoices from the counties.

Second, there may be reluctance on the part of homeowners to participate in the Septic System Projects program due to the possibility that the septic system upgrade grants would be considered income for federal income tax purposes. MDE has contacted the U.S. Department of Agriculture's Natural Resources Conservation Service to request that septic systems be granted a tax exemption but has not received a ruling yet.

Performance a Concern

Another Septic System Projects program concern is the overall potential performance of the program. Upgrading all 468,014 septic systems in Maryland, at a rate of 500 septic systems a year (the current estimate for project funding), would take approximately 900 years. Targeting of septic system funding is one response to the overwhelming number of septic systems relative to the limited funding. MDE has gathered septic system geographic data for 20 of the 23 counties and expects the data collection to be complete by March 2008. Upon completion, development of a web-based user interface for geographically locating all septic systems in Maryland can begin, with an estimated completion date of June 2008. MDE expects that this geographic information system for septic systems will allow for more effective targeting of funding for bay restoration purposes and for more accurate and timely billing by the counties.

A more long-term performance concern is whether advanced septic systems will be maintained. MDE requires operation and maintenance costs for five years to be included in the initial costs charged by manufacturers for septic system upgrades, but beyond five years there is no such requirement. While large systems (greater than 5,000 gallons per day) are regulated under an

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individual groundwater discharge permit, small systems do not have a similar regulatory framework; therefore, there is no long-term guarantee that septic system performance will be maintained.

The Department of Legislative Services recommends that MDE brief the committees on how it plans to expend the Septic System Projects program funding in a timely fashion going forward, what benefits can be expected from targeting septic system funding, and what long-term performance assurances MDE is pursuing.

Recommended Actions

1. Concur with Governor's allowance.

Fiscal 2009 Proposed Projects

MDE will solicit projects for fiscal 2009 in January 2009.

Fiscal 2008 Project Status

MDE solicited projects for fiscal 2008 in January 2008 and received five proposals. These proposals have not been specified yet because awards have not been made.

Fiscal Summary
Department of the Environment – PAYGO

<u>Program/Unit</u>	<u>FY07 Actual</u>	<u>FY08 Wrk Approp</u>	<u>FY09 Allowance</u>	<u>Change</u>	<u>FY08-FY09 % Change</u>
03 Water Quality Revolving Loan Fund	\$ 75,247,723	\$ 60,000,000	\$ 60,000,000	\$ 0	0%
04 Hazardous Substance Cleanup Program	500,000	850,000	1,000,000	150,000	17.6%
05 Drinking Water Revolving Loan Fund	15,701,212	14,000,000	14,079,000	79,000	0.6%
06 Biological Nutrient Removal Program	2,212,000	0	0	0	0%
11 Bay Restoration Fund – Wastewater Projects	75,000,000	35,000,000	73,000,000	38,000,000	108.6%
12 Bay Restoration Fund – Septic System	11,000,000	6,000,000	6,000,000	0	0%
Total Expenditures	\$ 179,660,935	\$ 115,850,000	\$ 154,079,000	\$ 38,229,000	33.0%
General Fund	\$ 15,149,000	\$ 7,330,000	\$ 8,445,000	\$ 1,115,000	15.2%
Special Fund	126,853,255	79,526,000	111,920,000	32,394,000	40.7%
Federal Fund	37,658,680	28,994,000	33,714,000	4,720,000	16.3%
Total Appropriations	\$ 179,660,935	\$ 115,850,000	\$ 154,079,000	\$ 38,229,000	33.0%

Note: The fiscal 2008 appropriation does not include deficiencies.

**66 Major Wastewater Treatment Plants
Fiscal 2008 Updated BNR and ENR Status and Budget
January 30, 2008**

MAJOR WWTP	Total Estimated Cost (Including Local Cost)	Estimated State BNR Share					Estimated State ENR Share					Other/Local Cost
		BNR Status	BNR Eligible Design Capacity	Total State BNR (Subject to Change by Eligibility Determination)	BNR Grant Encumbered	Future Enc.	ENR Status	ENR Eligible Design Capacity	Total State ENR (Subject to Change by Eligibility Determination)	BRF ENR Grant Encumbered	Future Enc.	
Aberdeen	29,000,000	Operation	4.00	-	-	-	Planning	4.000	22,000,000	200,000	21,800,000	7,000,000
Annapolis	14,229,000	Operation	10.00	-	-	-	Planning	13.000	14,229,000	-	14,229,000	-
APG - Aberdeen*	-	Operation	2.80	-	-	-	Operation	2.800	-	-	-	-
Back River	117,000,000	Operation	180.00	-	-	-	Planning	180.000	117,000,000	5,000,000	112,000,000	-
Ballenger Creek	67,900,000	Operation	6.00	-	-	-	Design	6.000	22,000,000	-	22,000,000	45,900,000
Blue Plains (MD Portion)	507,200,000	Design***	169.60	74,000,000	8,223,009	65,776,991	Planning	169.600	264,000,000	-	264,000,000	169,200,000
Bowie	8,200,000	Operation	3.30	-	-	-	Design	3.300	6,793,000	600,000	6,193,000	1,407,000
Broadneck	14,200,000	Operation	6.00	-	-	-	Planning	6.000	14,200,000	-	14,200,000	-
Broadwater	14,359,000	Operation	2.00	-	-	-	Planning	2.000	14,359,000	-	14,359,000	-
Brunswick	14,626,149	Construction	0.70	4,797,000	2,750,000	2,047,000	Construction	1.400	8,571,000	8,263,000	308,000	1,258,149
Cambridge	6,000,000	Operation	8.10	-	-	-	Planning	8.100	6,000,000	100,000	5,900,000	-
Celanese	16,845,359	Operation	1.25	3,606,578	3,593,919	12,659	Operation	2.000	2,333,382	2,333,382	-	10,905,399
Centreville	2,912,000	Operation	0.38	-	-	-	Pre-planning	0.500	2,912,000	-	2,912,000	-
Chesapeake Beach	18,460,470	Operation	1.18	-	-	-	Design	1.500	6,357,943	-	6,357,943	12,102,527
Chestertown	9,598,416	Construction	0.90	3,045,273	2,470,000	575,273	Construction	1.500	2,000,000	2,000,000	-	4,553,143
Conococheague	11,373,806	Operation	4.10	-	-	-	Planning	4.100	7,830,415	-	7,830,415	3,543,391
Cox Creek	59,000,000	Operation	15.00	-	-	-	Planning	15.000	59,000,000	-	59,000,000	-
Crisfield	10,270,523	Construction	1.00	2,026,100	2,026,100	-	Construction	1.000	4,231,000	4,231,000	-	4,013,423
Cumberland	41,995,909	Operation	15.00	-	-	-	Design	15.000	30,564,000	1,000,000	29,564,000	11,431,909
Damascus	1,900,000	Operation	1.50	-	-	-	Planning	1.500	1,000,000	325,000	675,000	900,000
Delmar	7,940,000	Design	0.65	2,000,000	843,000	1,157,000	Design	0.850	2,000,000	200,000	1,800,000	3,940,000
Denton	5,000,000	Operation	0.80	-	-	-	Pre-planning	0.800	3,100,000	-	3,100,000	1,900,000
Dorsey Run (State)	3,900,000	Operation	2.00	-	-	-	Planning	2.000	3,900,000	-	3,900,000	-
Easton	38,113,191	Operation	2.35	8,930,000	8,930,000	-	Operation	4.000	8,660,000	8,660,000	-	20,523,191
Elkton	40,716,010	Construction	2.70	8,842,410	7,373,988	1,468,422	Construction	3.050	7,960,000	7,960,000	-	23,913,600
Emmitsburg	15,300,000	Planning	0.75	2,500,000	-	2,500,000	Planning	0.750	7,000,000	50,000	6,950,000	5,800,000
Federalsburg	9,819,000	Construction	0.75	2,360,000	2,019,000	341,000	Construction	0.750	3,360,000	3,360,000	-	4,099,000
Frederick	29,278,000	Operation	8.00	-	-	-	Design	8.000	29,278,000	-	29,278,000	-
Freedom District	7,000,000	Operation	3.50	-	-	-	Planning	3.500	7,000,000	100,000	6,900,000	-
Fruitland	3,100,000	Operation	0.50	-	-	-	Pre-planning	0.800	3,100,000	-	3,100,000	-
Georges Creek	24,907,507	Design	0.60	5,037,000	5,037,000	-	Design	0.600	10,430,000	10,430,000	-	9,440,507
Hagerstown	10,060,000	Operation	8.00	-	-	-	Design	8.000	9,835,000	650,000	9,185,000	225,000
Havre De Grace	49,657,101	Construction	1.89	5,659,000	3,000,000	2,659,000	Construction	2.275	11,289,000	11,289,000	-	32,709,101
Hurlock	7,007,578	Operation	2.00	2,507,171	2,507,171	-	Operation	1.650	941,148	941,148	-	3,559,259
Indian Head	14,417,681	Construction	0.50	2,931,451	2,841,451	90,000	Construction	0.500	6,887,000	6,484,000	403,000	4,599,230
Joppatowne	10,000,000	Operation	0.95	-	-	-	Planning	0.950	9,932,268	-	9,932,268	67,732
Kent Island	35,018,817	Operation	2.14	8,525,817	8,725,817	(200,000)	Operation	3.000	6,493,000	6,493,000	-	20,000,000
La Plata	3,548,000	Operation	1.00	-	-	-	Planning	1.500	3,548,000	110,000	3,438,000	-
Leonardtown	23,128,000	Operation	0.68	-	-	-	Design	0.680	5,128,000	510,000	4,618,000	18,000,000

Analysis of the FY 2009 Maryland Executive Budget, 2008

MAJOR WWTP	Total Estimated Cost (Including Local Cost)	Estimated State BNR Share					Estimated State ENR Share					Other/Local Cost
		BNR Status	BNR Eligible Design Capacity	Total State BNR (Subject to Change by Eligibility Determination)	BNR Grant Encumbered	Future Enc.	ENR Status	ENR Eligible Design Capacity	Total State ENR (Subject to Change by Eligibility Determination)	BRF ENR Grant Encumbered	Future Enc.	
Little Patuxent	49,800,000	Operation	22.50	-	-	-	Planning	25,000	28,000,000	530,000	27,470,000	21,800,000
Marlay Taylor (Pine Hill Run)	11,400,000	Operation	6.00	-	-	-	Planning	6,000	11,400,000	-	11,400,000	-
Maryland City	2,150,000	Operation	2.50	-	-	-	Planning	2,500	2,150,000	-	2,150,000	-
Maryland Correctional Institute (State)	3,400,000	Operation	1.23	-	-	-	Pre-planning	1,600	3,400,000	-	3,400,000	-
Mattawoman	29,451,091	Operation	15.00	-	-	-	Pre-planning	20,000	15,300,000	-	15,300,000	14,151,091
Mayo Large Communal	29,451,091	Planning	0.615	4,050,054	-	4,050,054	Planning	0,820	2,637,000	-	2,637,000	22,764,037
Mount Airy	3,565,000	Operation	1.20	-	-	-	Design	1,200	3,565,000	200,000	3,365,000	-
Northeast River	3,700,000	Operation	2.00	-	-	-	Pre-planning	2,000	3,700,000	-	3,700,000	-
Parkway	8,360,000	Operation	7.50	-	-	-	Planning	7,500	8,310,000	-	8,310,000	50,000
Patapsco	204,361,000	Design	73.00	41,313,000	9,481,410	31,831,590	Design	73,000	121,735,000	10,000,000	111,735,000	41,313,000
Patuxent	5,180,000	Operation	7.50	-	-	-	Planning	7,500	5,180,000	-	5,180,000	-
Perryville	13,200,000	Design	1.65	2,500,000	700,000	1,800,000	Design	1,650	2,854,000	200,000	2,654,000	7,846,000
Piscataway	2,490,000	Operation	30.00	-	-	-	Planning	30,000	2,440,000	-	2,440,000	50,000
Pocomoke City	3,500,000	Operation	1.40	-	-	-	Planning	1,470	3,500,000	-	3,500,000	-
Poolesville	3,100,000	Operation	0.63	-	-	-	Pre-planning	0,750	3,100,000	-	3,100,000	-
Princess Anne	3,400,000	Operation	1.26	-	-	-	Pre-planning	1,260	3,400,000	-	3,400,000	-
Salisbury	81,021,487	Construction	6.80	22,817,000	16,473,594	6,343,406	Construction	8,500	3,000,000	3,000,000	-	55,204,487
Seneca Creek	7,889,000	Operation	5.00	-	-	-	Planning	20,000	7,839,000	-	7,839,000	50,000
Snow Hill	3,712,000	Pre-Planning	0.50	800,000	800,000	-	Pre-planning	0,500	2,912,000	-	2,912,000	-
Sod Run	46,262,000	Planning	20.00	4,723,105	-	4,723,105	Planning	20,000	30,472,290	-	30,472,290	11,066,605
Swan Point**	-	Operation	0.600	-	-	-	Operation	0,600	-	-	-	-
Talbot County Region II (St. Michael's)	13,036,277	Construction	0.50	2,747,247	2,747,247	-	Construction	0,660	2,000,000	2,000,000	-	8,289,030
Taneytown	3,300,000	Operation	1.10	-	-	-	Pre-planning	1,100	3,300,000	-	3,300,000	-
Thurmont	3,230,000	Operation	1.00	-	-	-	Planning	1,000	3,230,000	300,000	2,930,000	-
Western Branch	75,147,000	Operation	30.00	-	-	-	Planning	30,000	24,242,422	1,000,000	23,242,422	50,904,578
Westminster	8,600,000	Operation	5.00	-	-	-	Planning	5,000	8,600,000	-	8,600,000	-
Winebrenner WWTP	8,410,043	Planning	1.000	2,236,528	100,000	2,136,528	Planning	1,000	3,230,000	100,000	3,130,000	2,943,515
Total	1,930,097,506			217,954,734	90,642,706	127,312,028			1,054,718,868	98,619,530	956,099,338	657,423,904
BNR: biological nutrient removal												
ENR: enhanced nutrient removal												
* To be funded by the U.S. Army.												
** To be funded by private developer.												