

U00A0103
Department of the Environment – Capital

Capital Budget Summary

(\$ in Millions)

	<i>FY 2009 Approp.</i>	<i>FY 2010 Approp.</i>	<i>FY 2011 Allowance</i>	<i>FY 2011 Adjusted</i>	<i>% Change FY 2010-2011 Adjusted</i>	<i>DLS Recommd.</i>
MD Water Quality Revolving Loan Fund ¹	\$60.000	\$202.000	\$110.000	\$110.000	-45.5%	\$110.000
MD Drinking Water Revolving Loan Fund ²	14.079	40.000	16.500	16.500	-58.8%	16.500
Bay Restoration Fund – Wastewater Projects ³	68.000	200.000	275.000	195.000	-2.5%	235.210
Hazardous Substance Clean-up Program	1.000	0.000	0.800	0.800	100.0%	0.800
Septic System Upgrade Program	6.000	10.000	9.000	9.000	-10.0%	9.000
Biological Nutrient Removal Program	18.448	16.000	33.300	33.300	108.1%	33.300
Supplemental Assistance Program	5.000	5.000	5.000	5.000	0.0%	5.000
Water Supply Financial Assistance Program	3.650	2.500	2.500	2.500	0.0%	2.500
Total	\$176.177	\$475.500	\$452.100	\$372.100	-21.7%	\$412.310

Fund Source						
General	\$8.445	\$0.000	\$0.800	\$0.800	100.0%	\$0.800
Special	106.920	150.591	105.283	105.283	-30.1%	105.283
Federal	33.714	145.875	24.683	24.683	-83.1%	24.683
PAYGO Subtotal	\$149.079	\$296.466	\$130.766	\$130.766	-55.9%	\$130.766
Revenue Bonds	0.000	150.000	150.000	150.000	0.0%	150.000
GO Bonds	27.098	29.034	171.334	91.334	214.6%	131.544
Total	\$176.177	\$475.500	\$452.100	\$372.100	-21.7%	\$412.310

¹ The fiscal 2010 appropriation for the Maryland Water Quality Revolving Loan Fund includes \$92.8 million of American Recovery and Reinvestment Act of 2009 (ARRA) funding.

² The fiscal 2010 appropriation for the Maryland Drinking Water Revolving Loan Fund includes \$26.4 million of the ARRA funding.

³ The fiscal 2011 allowance for Bay Restoration Fund – Wastewater Projects includes \$80.0 million in general obligation (GO) bonds that are intended to partially replace the transfer of \$155.0 million in special fund balance to the general fund under the Budget Reconciliation and Financing Act of 2010. The Governor intends to replace the remainder of the special fund balance, \$75.0 million, in fiscal 2012. Since the \$80.0 million in GO bonds do not reflect actual fiscal 2011 activity, they have been taken out of the fiscal 2011 adjusted column to reflect the amount of funding available for fiscal 2011 activity.

Summary of Issues

Transfer of Bay Restoration Fund – Wastewater Funds to General Fund: The Budget Reconciliation and Financing Act of 2010 transfers \$155 million of cash fund balance and \$45 million of fiscal 2011 special fund revenue from the Bay Restoration Fund – Wastewater account to the general fund. The Governor’s intent is to replace the entirety of the fiscal 2011 special fund appropriation in fiscal 2011 with general obligation (GO) bonds and to replace \$80 million of the cash fund balance in fiscal 2011 and \$75 million in fiscal 2012. **The Department of Legislative Services (DLS) recommends that the Maryland Department of the Environment (MDE) discuss how it intends to accomplish the proposed transfer to ensure that the cash flow needs of projects for which expenditures will be needed will not be compromised.**

Federal Stimulus Funding Update: The American Recovery and Reinvestment Act of 2009 provided for \$92.8 million in Water Quality Revolving Loan Fund projects and \$26.4 million in Drinking Water Revolving Loan Fund projects in Maryland. MDE has encumbered the funding for the projects prior to the February 16, 2010 deadline. In addition, there is the potential to receive recycled federal stimulus I funding from other states and to receive federal stimulus II funding under a bill passed in the U.S. House of Representatives. **DLS recommends that MDE provide the updated project list and final allocation amounts for federal stimulus I funding and comment on any updated information available concerning federal stimulus I funding recycling and federal stimulus II funding availability for Maryland.**

Understated Fiscal 2012-2013 Federal Funding?: The Department of Budget and Management (DBM) appears to be using understated estimates for the amount of federal Clean Water State Revolving Fund and Drinking Water State Revolving Fund funding. This in turn would understate the amount of required State matching funds needed – either general funds or GO bonds. **DLS recommends that MDE and DBM comment on the impact of the increased federal funding match requirement on the capital budget.**

Bay Restoration Fund Shortfall and Options: As noted in the capital budget fiscal briefing, MDE currently estimates that the cost to upgrade the 67 major wastewater treatment plants is \$1.539 billion. The bond revenue, in addition to revenues expended from the fund as pay-as-you-go special funds and any GO bond funds authorized to replace special funds transfers from the Bay Restoration Fund, would fund approximately \$881.0 million, leaving a shortfall of approximately \$659.0 million potentially unfunded. **DLS recommends that \$20.0 million in Blue Plains and \$19.8 million in Back River enhanced nutrient removal upgrade funding be deleted. It is of concern that projects of such magnitude are being started without identified funding. Therefore, the projects should be deferred to a future year when funding to address the projected annual deficit in the Bay Restoration Fund – Wastewater program has been addressed.**

Increased Demand for Septic System Upgrade Program: Chapter 280 of 2009 (Chesapeake Bay Nitrogen Reduction Act of 2009) prohibited new installation or replacement of existing on-site sewage disposals systems on property in the Chesapeake and Atlantic Coastal Bays Critical Area unless the systems utilize the best available nitrogen removal technology. There is now a waiting list for upgrade funding. **DLS recommends that MDE comment on the impact of the income-based sliding scale on the septic system application wait list and the overall status of the wait list.**

Summary of Recommended Actions – PAYGO

<u>Program</u>	<u>Action</u>	<u>Amount</u>
1. Maryland Water Quality Revolving Loan Fund	Approve	
2. Maryland Drinking Water Revolving Loan Fund	Approve	
3. Bay Restoration Fund – Wastewater Projects	Approve	
4. Hazardous Substance Clean-up Program	Approve	
5. Septic System Upgrade Program	Approve	
6. Biological Nutrient Removal Program	Approve	
7. Supplemental Assistance Program	Approve	
8. Water Supply Financial Assistance Program	Approve	
9. Chesapeake and Atlantic Coastal Bays Nonpoint Source Fund	Delete	\$1,880,000
Total		\$1,880,000

Summary of Recommended Actions – Bond

<u>Program</u>	<u>Action</u>	<u>Amount</u>
1. Maryland Water Quality Revolving Loan Fund	Approve	
2. Maryland Drinking Water Revolving Loan Fund	Approve	
3. Bay Restoration Fund – Wastewater Projects	Reduce	\$39,790,000
4. Biological Nutrient Removal Program	Approve	
5. Supplemental Assistance Program	Approve	
6. Water Supply Financial Assistance Program	Approve	
Total		\$39,790,000

Overview

In the Governor’s budget, the Maryland Department of the Environment’s (MDE) fiscal 2011 capital program as introduced includes \$0.8 million in general funds, \$105.3 million in special funds, \$24.7 million in federal funds, \$150.0 million in revenue bonds, and \$171.3 million in general obligation (GO) bonds. The overall change between fiscal 2010 and 2011 is a \$23.4 million decrease. However, if the \$80.0 million GO bond replacement of a fund balance transfer is discounted because the funding is not new, then the difference is a decrease of \$103.4 million. There are two other distortions of the difference between the two years: the one-time American Recovery and Reinvestment Act of 2009 (ARRA) federal stimulus funding in fiscal 2010 and a change in the projected issuance of revenue bonds from fiscal 2009 to 2010.

Fund Balance Transfer

The Governor’s proposed Budget Reconciliation and Financing Act (BRFA) of 2010 transfers \$155 million of Bay Restoration Fund – Wastewater Projects fund balance and \$45 million of fiscal 2011 program revenues to the general fund for a total transfer of \$200 million. As introduced, the 2010 Maryland Consolidated Capital Bond Loan replaces \$80 million of the fund balance transfer and all \$45 million of the fiscal 2011 revenues in fiscal 2011 for a total of \$125 million in GO bonds; the Governor intends to replace the remaining \$75 million of fund balance in fiscal 2012. The \$80 million in GO bond funding that would partially replace the transferred fund balance will not, therefore, support new spending for new design and construction contracts.

ARRA Funding

A second distortion in the difference between fiscal 2010 and 2011 funding is the ARRA funding for the Water Quality Revolving Loan Fund and Drinking Water Revolving Loan Fund. The ARRA provided approximately \$92.8 million for the Water Quality Revolving Loan Fund and \$26.4 million for the Drinking Water Revolving Loan Fund. This represents \$119.2 million in one-time federal funding in fiscal 2010.

Revenue Bonds

A third distortion is MDE’s decision to combine the fiscal 2009 and 2010 revenue bond issuances for Bay Restoration Fund – Wastewater Projects. MDE originally planned to issue \$70 million in revenue bonds in fiscal 2009 and \$80 million in fiscal 2010. Instead, MDE now intends to issue the combined amount of \$150 million in fiscal 2010. Revenue bonds are not appropriated since they are issued by MDE’s Water Quality Financing Administration; therefore, MDE has the flexibility to move revenue bond issuances between years.

Exhibit 1 reflects the changes in MDE’s capital programs between fiscal 2010 and 2011 without the \$80 million in GO bonds programmed to replace partially the Bay Restoration Fund – Wastewater Projects prior year fund balance transfer.

Exhibit 1
MDE Capital Budget Changes by Fund
Fiscal 2010-2011
(\$ in Millions)

<u>Program</u>	<u>Fund</u>	<u>2010</u>	<u>2011</u>	<u>Difference</u>
Maryland Water Quality Revolving Loan Fund	GO	\$3.3	\$3.3	\$0.0
	GF	0.0	0.0	0.0
	SF	86.2	90.2	4.0
	FF	112.5	16.5	-96.0
	RB	0.0	0.0	0.0
Subtotal		\$202.0	\$110.0	-\$92.0
Maryland Drinking Water Revolving Loan Fund	GO	\$2.2	\$2.2	\$0.0
	GF	0.0	0.0	0.0
	SF	4.4	6.1	1.7
	FF	33.4	8.2	-25.2
	RB	0.0	0.0	0.0
Subtotal		\$40.0	\$16.5	-\$23.5
Bay Restoration Fund – Wastewater	GO	\$0.0	\$45.0	\$45.0
	SF	50.0	0.0	-50.0
	RB	150.0	150.0	0.0
Subtotal		\$200.0	\$195.0	-\$5.0
Hazardous Substance Clean-up	GF	\$0.0	\$0.8	\$0.8
Subtotal		\$0.0	\$0.8	\$0.8
Bay Restoration Fund – Septic Systems	SF	\$10.0	\$9.0	-\$1.0
Subtotal		\$10.0	\$9.0	-\$1.0
Biological Nutrient Removal Program	GO	\$16.0	\$33.3	\$17.3
Subtotal		\$16.0	\$33.3	\$17.3
Supplemental Assistance Program	GO	\$5.0	\$5.0	\$0.0
Subtotal		\$5.0	\$5.0	\$0.0
Water Supply Financial Assistance Program	GO	\$2.5	\$2.5	\$0.0
Subtotal		\$2.5	\$2.5	\$0.0
Total		\$475.5	\$372.1	-\$103.4

FF: federal fund
 GF: general fund
 GO: general obligation

MDE: Maryland Department of the Environment
 RB: revenue bond
 SF: special fund

Note: The fiscal 2010 appropriation for the Bay Restoration Fund – Wastewater is \$150 million in revenue bonds to reflect a combined issuance of \$70 million from fiscal 2009 and \$80 million from fiscal 2010. The fiscal 2011 allowance for the Bay Restoration Fund – Wastewater Projects is shown without the \$80 million in GO bonds to reflect that this funding is for replacement of prior year special fund balance transferred to the general fund and not available for new wastewater treatment upgrade activity in fiscal 2011.

Source: Department of Legislative Services

Chesapeake and Atlantic Coastal Bays Nonpoint Source Fund

In addition to the programs shown above, the Chesapeake and Atlantic Coastal Bays Nonpoint Source Fund is budgeted within MDE. The Nonpoint Source Fund receives funds from the Chesapeake and Atlantic Coastal Bays 2010 Trust Fund and is intended to support nonpoint source capital projects that previously were funded under the Small Creeks and Estuaries Restoration Program and the Maryland Stormwater Pollution Control Program. The one project encumbered thus far in fiscal 2010 is the Bear Branch Watershed Improvement Stream Stabilization for \$900,000, which received funding in fiscal 2009, although, **Exhibit 2** shows that the Chesapeake and Atlantic Coastal Bays 2010 Trust Fund expenditure plan for fiscal 2011 reflects additional projects for fiscal 2010. In fiscal 2011, \$1.9 million is reflected in MDE’s pay-as-you-go (PAYGO) budget; however, this was a preliminary number that will be revised when a budget amendment is brought in to reflect the final fiscal 2011 legislative appropriation from the Chesapeake and Atlantic Coastal Bays 2010 Trust Fund. **The Department of Legislative Services (DLS) recommends that the appropriation for the Chesapeake and Atlantic Coastal Bays Nonpoint Source Fund be deleted since the BayStat agencies anticipate bringing in a budget amendment to disburse funding when the Chesapeake and Atlantic Coastal Bays 2010 Trust Fund appropriation is known.**

Exhibit 2
Chesapeake and Atlantic Coastal Bays Nonpoint Source Fund
Planned Expenditures
Fiscal 2009-2011
(\$ in Millions)

<u>Project</u>	<u>2009</u>	<u>2010</u>	<u>Proposed</u> <u>2010 Deficiency</u>	<u>2011</u>
St. Mary’s SW Retrofit, Anne Arundel	\$0.10	\$0.00	\$0.00	\$0.00
Laurel High School LID, Prince George’s	0.07	0.00	0.00	0.00
Bear Branch Restoration, Prince George’s	0.90	0.00	0.00	0.00
Parkside Wetland Retrofit, Baltimore City	0.65	0.00	0.00	0.00
Rockfish Bar and Grill, Anne Arundel	0.11	0.00	0.00	0.00
Tanyard Branch SW Improvement, Talbot	0.00	0.49	0.00	0.00
Western Branch Wetland, Prince George’s	0.00	0.55	0.00	0.00
Moore’s Run Wetlands, Baltimore City	0.00	0.00	0.00	1.87
Greenhill/Hillside, Prince George’s	0.00	0.14	0.00	0.00
Back River Restoration, Baltimore	0.00	0.32	0.15	0.23
Total	\$1.83	\$1.50	\$0.15	\$2.10

LID: low impact development
 SCD: Soil Conservation District
 SW: stormwater

Source: Department of Natural Resources

Overview Issues

1. Transfer of Bay Restoration Fund – Wastewater Funds to General Fund

The BRFA of 2010 transfers \$155 million of cash fund balance and \$45 million of fiscal 2011 special fund revenue from the Bay Restoration Fund – Wastewater account to the general fund. The Governor’s intent is to replace the entirety of the fiscal 2011 special fund appropriation in fiscal 2011 with GO bonds and to replace \$80 million of the cash fund balance in fiscal 2011 and \$75 million in fiscal 2012. This allows for meeting the cashflow requirements of \$275 million in fiscal 2011 for the projects that the department would like to fund which are at various levels of design and construction. The proposed transfer and replacement schedule is shown in **Exhibit 3**.

Exhibit 3
Governor’s Proposed Transfer and Replacement Schedule
Bay Restoration Fund – Wastewater Funding
 (\$ in Millions)

<u>Action</u>	<u>Timeframe</u>	<u>Prior Special Fund Balance</u>	<u>FY 2011 Special Funds</u>	<u>Total</u>
Transfer	Fiscal 2010	\$155		\$155
	Fiscal 2011		\$45	45
Subtotal		\$155	\$45	\$200
Replacement	Fiscal 2011	\$80	\$45	\$125
	Fiscal 2012	75		75
Subtotal		\$155	\$45	\$200

Source: Department of Legislative Services

However, there is some concern about the timing of the Administration’s proposed transfer. The Administration has identified \$115 million in fund balance that may be transferred to the general fund, which leaves \$40 million in funding still to be identified. Ostensibly, the \$40 million would come out of the remaining funds that are intended to support projects for fiscal 2009 and prior years. However, the \$40 million is needed for these projects and thus is not free and clear.

MDE intends to handle this situation by awarding \$40 million to projects in fiscal 2010 and 2011 but then not actually disbursing this funding as cash until fiscal 2012 when the cash flow needs of the projects will require actual expenditure reimbursement payments. One way to back the awards, if need be, would be to allocate a portion of the revenue from the projected \$150 million revenue bond issuance planned for late fiscal 2010 or early fiscal 2011.

DLS recommends that MDE discuss how it intends to accomplish the proposed transfer to ensure that the cash flow needs of projects for which expenditures will be needed will not be compromised.

2. Federal Stimulus Funding Update

The ARRA provided for \$92.8 million in Water Quality Revolving Loan Fund projects and \$26.4 million in Drinking Water Revolving Loan Fund projects in Maryland. MDE has encumbered the funding for the projects prior to the February 16, 2010 deadline. In addition, there is the potential to receive recycled federal stimulus I funding from other states and to receive federal stimulus II funding under a bill passed in the U.S. House of Representatives.

Progress Toward Using Federal Stimulus I Funding

MDE encumbered the full amount of federal stimulus I funding at the September 16, 2009 Board of Public Works (BPW) meeting and indicated that it would provide BPW with an updated project list and final allocation amounts in February 2010. As of January 1, 2010, 65 of the 67 Water Quality Revolving Loan Fund projects are under construction and 2 are complete; all 15 of the Drinking Water Revolving Loan Fund projects are under construction. **Exhibit 4** shows the funding allocation by MDE, and it is noted that MDE has met the two required funding allocations for subsidized projects and environmentally innovative activities. Examples of environmentally innovative activities for the Water Quality Revolving Loan Fund include living shoreline construction and permeable paving projects; Drinking Water Revolving Loan Fund examples include water meter rehabilitations and solar panels/wind turbines to be installed at a biosolids facility.

Exhibit 4
American Recovery and Reinvestment Act of 2009 Status
As of January 1, 2010

Funding Type	Water Quality Revolving Loan Fund	Drinking Water Revolving Loan Fund	Total
Loan	\$36,049,115	\$11,309,825	\$47,358,940
Grant (DAC/EBD)	34,847,060	7,674,375	42,521,435
Grant (Green Reserve)	21,888,425	7,447,200	29,335,625
Total	\$92,784,600	\$26,431,400	\$119,216,000

DAC: Disadvantaged Community
 EBD: Environmental Benefit District

Note: The federal stimulus I funding has two allocation requirements as follows: (1) subsidization – the State must use at least 50.0% of the funds to provide additional assistance to eligible recipients by way of loan principal forgiveness, negative interest loans (total payments less than the principal of loan), and grants; and (2) environmentally innovative activities – given sufficient project applications, not less than 20.0% of funds must be used for green infrastructure, water or energy efficiency improvements, or other environmentally innovative activities. The subsidization requirement is reflected in the exhibit as a combination of the two types of grants: grant (DAC/EBD) and grant (Green Reserve). The State met the subsidization requirement of 50.0% by allocating 60.3% of the federal stimulus I funding to this purpose. The environmentally innovative activities requirement is reflected as grant (Green Reserve) in the exhibit. The State met the environmentally innovative activities requirement of 20.0% by allocating 24.6% of the federal stimulus I funding to this purpose.

Source: Department of Legislative Services

Recycling of Federal Stimulus I Funding

The tight timeframe for spending federal stimulus I funding and the requirements on its use mean the possibility for the recycling of unspent federal stimulus I funding. For instance, the federal stimulus funding is one-time and must be obligated to projects ready to start construction by February 16, 2010, or else the funding will be reallocated to other states. In addition, there is a requirement for federal stimulus I funding that public building or work construction must be implemented with iron, steel, and manufactured goods produced in the United States unless a waiver is received, which has proven difficult for some states. However, MDE indicates that recycled amounts are expected to be minimal. The U.S. Environmental Protection Agency (EPA) will alert Maryland as to any available funding after March 1, 2010.

Federal Stimulus II Funding

On the heels of federal stimulus I funding is potential federal stimulus II funding. The U.S. House of Representatives has passed the Jobs for Main Street Act, 2010 (House Resolution 2847), but consideration by the Senate is pending. MDE has not received any firm guidance about what to expect in terms of federal stimulus II funding because a bill has not been passed; therefore, no funding has been awarded nor guidelines published. The Jobs for Main Street Act funding as passed by the House of Representatives is shown in **Exhibit 5**.

Exhibit 5
Proposed Water Quality and Drinking Water Funding in Jobs for Main Street Act
Fiscal 2010-2011

<u>Federal Fund</u>	<u>History/Purpose</u>	<u>State Connection</u>	<u>Additional Stimulus</u>	<u>Estimated State Share</u>
Clean Water State Revolving Fund	Created by the amendments to legislation in 1977 that led to the Clean Water Act, which set water quality standards and funded construction of sewage treatment plants	Water Quality Revolving Loan Fund	\$1.0 billion (of which approximately 1.0%, or \$10.0 million, is for administration)	\$24.2 million (approximately 2.44% of \$0.99 billion)
Drinking Water State Revolving Fund	Created by the amendments to legislation in 1996 that led to the Safe Drinking Water Act, which finances infrastructure improvements for drinking water systems	Drinking Water Revolving Loan Fund	\$1.0 billion (of which approximately 1.0%, or \$10.0 million, is for administration)	\$15.3 million (approximately 1.55% of \$0.99 billion)

Source: Department of Legislative Services

While guidelines have not been published, the Jobs for Main Street Act currently has a number of restrictions that are similar to the restrictions in the federal stimulus I funding. The restrictions are as follows:

- funds reallocated if projects are not under contract or construction within eight months of the enactment of the act;
- priority shall be given to projects on a State priority list that are ready to proceed to construction within 12 months of the enactment of the act;
- not less than 50% of funds are to be provided in the form of forgiveness of principal, negative interest loans, or grants;
- to the extent that there are sufficient eligible project applications, not less than 20% of the funds shall be used for projects to address green infrastructure, water or energy efficiency improvements or other environmentally innovative activities;
- none of the funds shall be used for the purchase of land or easements; and
- funds may be used to buy, refinance, or restructure the debt obligations of eligible recipients only where such debt was incurred on or after October 1, 2009.

DLS recommends that MDE provide the updated project list and final allocation amounts for federal stimulus I funding as well as comment on any updated information available concerning federal stimulus I funding recycling and federal stimulus II funding availability for Maryland.

3. Understated Fiscal 2012-2013 Federal Funding?

The Department of Budget and Management (DBM) appears to be using understated estimates for the amount of federal Clean Water State Revolving Fund and Drinking Water State Revolving Fund funding. This in turn would understate the amount of required State matching funds needed – either general funds or general obligation bonds.

Exhibit 6 shows the actual fiscal 2010 federal funding that will be available in State fiscal 2012 and the President’s proposed budget funding for State fiscal 2013. The overall impact from the updated federal funding information is that the State will have to provide an additional \$8.5 million match in fiscal 2012 relative to the 2010 *Capital Improvement Program* (CIP) and an estimated additional \$7.7 million in fiscal 2013. The good news is there appears to be greater levels of federal funding to the states for which Maryland will benefit in the near term. The task is to program the additional State match requirement into the State’s budget at a time when both general and GO bond funds are increasingly scarce.

Exhibit 6
Actual and Proposed Federal Funding and State Match for WQRLF and DWRLF
State Fiscal 2012-2013
(\$ in Millions)

		2012 Actual Funding			2013 Proposed		
		<u>WQRLF</u>	<u>DWRLF</u>	<u>Total</u>	<u>WQRLF</u>	<u>DWRLF</u>	<u>Total</u>
Maryland	Current Estimate	\$49.3	\$21.1	\$70.4	\$46.9	\$19.5	\$66.4
Revenue	DBM Estimate	16.5	7.9	\$24.4	16.5	7.9	24.4
	Difference	\$32.8	\$13.2	\$46.0	\$30.4	\$11.6	\$42.0
Maryland	Current Estimate	\$9.9	\$4.2	\$14.1	\$9.4	\$3.9	\$13.3
Match	DBM Estimate	3.3	2.3	\$5.6	3.3	2.3	5.6
	Difference	\$6.6	\$1.9	\$8.5	\$6.1	\$1.6	\$7.7

DBM: Department of Budget and Management
 DWRLF: Drinking Water Revolving Loan Fund

WQRLF: Water Quality Revolving Loan Fund

Note: The Water Quality Revolving Loan Fund numbers were calculated by taking the *Federal Funds Information for States* federal fiscal 2010 enacted budget and federal fiscal 2012 President’s proposed budget numbers and reducing them by 1% for federal water quality planning. The match was calculated as 20% of the remainder. Drinking Water Revolving Loan Fund numbers were taken as is from the *Federal Funds Information for States* information and the match calculated as 20%.

Source: Department of Budget and Management; *Federal Funds Information for States*; Department of Legislative Services

The Department of Legislative Services recommends that MDE and DBM comment on the impact of the increased federal funding match requirement on the capital budget.

4. Bay Restoration Fund Shortfall and Options

MDE currently estimates that the cost to upgrade the 67 major wastewater treatment plants is \$1.539 billion. The bond revenue, in addition to revenues expended from the fund as PAYGO special funds and any GO bond funds authorized to replace special funds transfers from the Bay Restoration Fund, would fund approximately \$881 million, leaving a shortfall of approximately \$659 million potentially unfunded. Estimated project costs and total fee and bond revenues are shown in **Exhibit 7**.

Exhibit 7
Bay Restoration Fund
Fiscal 2010-2015
(\$ in Millions)

	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
Project Costs	\$217	\$275	\$378	\$241	\$160	\$152
Bay Restoration Fees and Bond Funds	217	275	255	4	2	2
Projected Annual Deficit	0	0	-123	-237	-158	-150

Source: Maryland Department of the Environment

The Bay Restoration Fund Advisory Committee will consider the following options for addressing the shortfall: (1) increase the current \$30 annual household fee – this action would require legislative approval to implement; (2) reduce the percent of grant funding to local governments for enhanced nutrient removal (ENR) projects which is currently being provided at 100% of eligible costs – this action would not require legislation to implement; (3) delay ENR upgrades at certain wastewater treatment plant facilities – this action would not require legislation to implement; and (4) use a portion of the fee for payment of local government bond debt (with terms greater than 15 years) where bond proceeds are used for MDE-approved ENR upgrade costs – this action would require legislative approval to implement.

Legislation that would allow the option of using the fee revenue to support the issuance of local government debt has been presented in the House as House Bill 70 of 2010. Implications of this proposal include:

- **Potential Increased Borrowing Costs:** If it is the intent to allow the bonds issued by local governments to be for a term longer than 15 years (Article III, Section 34 of the State constitution limits the Bay Bonds issued by MDE to 15-year bonds since a tax like the flush fee is pledged or dedicated to debt service), then the State would need to require the source of revenue or security on the bonds to be subject to appropriation as opposed to a direct pledge. This could potentially increase the interest rate and, therefore, the cost paid by the State on the bonds to account for the additional risk to the bondholders.
- **Longer Maturities Result in Greater Total Costs – Collection of Flush Tax for a Longer Duration:** Local governments could issue bonds backed by an appropriation of fees from the Bay Restoration Fund for a period longer than 15 years, which would increase the amount of bond revenues supported by the fee and available to meet the cash flow needs of the construction projects. This would facilitate the ability to undertake more projects in the near term than can currently be supported by the 15-year maturity MDE-issued Bay Restoration Fund bonds. This, however, will increase the total costs of completing the projects much like a 30-year mortgage costs more to service than a 15-year mortgage. This in turn will require the imposition of the flush tax for a longer period to support the longer term of annual debt service appropriations.
- **Local Debt Would Still Count as State-supported Debt:** Although making the State's debt service payments on local government issued Bay Restoration bonds subject to appropriation may avoid the constitutional 15-year limit on State bonds, the bonds would still count as State-supported debt within the debt calculation used to measure and limit the amount of State-supported debt. The five-year CIP already includes a downward revision in the amount of GO bonds projected to be issued in the planning period to account for the fact that the State is currently estimated to breach its debt limits. As a result, while the longer maturities afforded to local government issued bonds could allow for larger bond sales, the State's current debt limits may limit this capacity.

As shown in Exhibit 7, there is a projected annual funding deficit for ENR upgrades starting in fiscal 2012. This deficit is due to cost escalations that have increased the total estimated cost for upgrading the State major wastewater treatments plants from the \$750 million to \$1.0 billion range to \$1.5 billion, a 50% increase above the upper bound of the original estimate.

Right now there is no plan that will address this shortfall. Until there is a plan in place that will allow these projects to be funded with a degree of certainty, larger projects should be considered for deferral. It is recognized that this will impact when projects will be brought online and, consequently, when the upgrades will help the State meet the Chesapeake Bay restoration two-year milestones for nutrient reduction; however, it is strongly recommended that projects with large funding needs not be funded until the shortfall is addressed.

The three projects shown in **Exhibit 8** will require significant funding when the projected annual deficit is greatest. The Blue Plains and Back River upgrades both are at a stage when funding can be deferred until a plan is in place because in fiscal 2011 Blue Plains is scheduled for planning funding and Back River for first-time construction funding. Therefore, these two projects could be deferred to allow for a funding plan to be developed. By deferring funding now in acknowledgement of the need for a funding plan, the State could reduce its exposure to project delays and cost escalations in fiscal 2012 and future years.

Exhibit 8
Funding for Three Largest Wastewater Treatment Plant Upgrades
Prior Fiscal Years to Fiscal 2015
(\$ in Millions)

	<u>Prior Years</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
Blue Plains	\$2	\$20	\$30	\$75	\$75	\$62	\$264
Back River	10	19	85	85	85	90	375
Patapsco	77	30	114	0	0	0	222
Total	\$89	\$69	\$229	\$160	\$160	\$152	\$861
Projected Annual Deficit	\$0	\$0	-\$123	-\$237	-\$158	-\$150	

Source: Department of Legislative Services; Maryland Department of the Environment

MDE notes that (1) the Bay Restoration Fund Advisory Committee will make recommendations to address the projected annual deficit, and (2) Blue Plains has received \$1.2 million in a federal grant for federal fiscal 2010. However, MDE does not indicate when the Bay Restoration Fund Advisory Committee will make its recommendations nor is there any certainty that the recommendations will be feasible or sufficient.

Even though federal fiscal 2010 funding is available for Blue Plains, MDE notes that the future federal funding for Blue Plains is uncertain, which is tantamount to saying that there is no overall cost-share agreement and funding plan for Maryland, Washington, DC, and Virginia to complete the upgrade with federal government financial assistance. Initiating a project of this magnitude without an overall funding plan and cost-share agreement, let alone a structurally sound State funding source should be avoided. This risk is further magnified given that the \$1 billion upper bound cost estimate for upgrading the State’s major wastewater treatment plants has been exceeded by 50% and could grow larger.

The Department of Legislative Services recommends that \$20.0 million in Blue Plains and \$19.8 million in Back River enhanced nutrient removal upgrade funding be deleted. It is of concern that projects of such magnitude are being funded without identified future funding. Therefore, the projects should be deferred to a future year when funding to address the projected annual deficit in the Bay Restoration Fund – Wastewater program has been addressed.

Water Quality Revolving Loan Fund (Statewide)

GO Bonds	\$3,292,000	Recommendation:	Approve
PAYGO SF	\$90,208,000		
PAYGO FF	\$16,500,000		

Bill Text: Provide funds to finance water quality improvement projects. These funds shall be administered in accordance with § 9-1605 of the Environment Article.

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 nonpoint-source projects, such as urban stormwater control projects. The federal act requires a 20% state match.

WQRLF projects are prioritized based on an EPA-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 *Code of Maryland Regulations* 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.

Water Quality Revolving Loan Fund Prior Authorization and Capital Improvement Program

**Authorization Request
(\$ in Millions)**

<i>Fund Source</i>	<i>2009 Approp.</i>	<i>2010 Approp.</i>	<i>2011 Allowance</i>	<i>2012 Estimate</i>	<i>2013 Estimate</i>	<i>2014 Estimate</i>	<i>2015 Estimate</i>
PAYGO GF	\$5.180	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
PAYGO SF	28.920	86.208	90.208	70.400	76.400	95.600	113.600
PAYGO FF	25.900	112.500	16.500	16.500	16.500	16.500	16.500
GO Bonds	0.000	3.292	3.292	3.300	3.300	3.300	3.300
Total	\$60.000	\$202.000	\$110.000	\$90.200	\$96.200	\$115.400	\$133.400

WQRLF's fiscal 2011 allowance totals \$110.0 million and is comprised of \$90.2 million in special funds, \$16.5 million in federal funds, and \$3.3 million in GO bonds. No general funds are included in the allowance; therefore, the \$3.3 million in GO bonds represents the required 20% State match for the federal funds. The 2010 CIP assumes that GO bonds will continue to be provided in future years instead of general funds to meet State matching requirements. The federal funds decrease between fiscal 2010 and 2011 due to the end of the ARRA federal stimulus funding. Through the five-year planning period, \$16.5 million in federal funds is planned annually, which is at odds with the current authorization for fiscal 2012 and the projected fiscal 2013 authorization. Therefore, the projected GO bond authorizations understate the State match for federal funds.

Of note, \$30.0 million in revenue bonds originally were programmed to be issued in fiscal 2009 but were cancelled. MDE states that the issuance was cancelled due to the receipt of \$92.8 million in the ARRA funding, which offset the projected demand that would have been met by the proposed revenue bond issuance.

A total of 14 projects would be funded during fiscal 2011 in the following jurisdictions: Anne Arundel (3), Baltimore City (1), Baltimore County (1), Carroll (1), Dorchester (1), Frederick (1), Harford (1), Howard (1), Queen Anne's (1), St. Mary's (1), Wicomico (1), and Worcester (1). These projects involve expanding and upgrading wastewater treatment plants, extending and rehabilitating public sewer systems, and correcting combined sewer overflow problems.

The 2008 Clean Water Needs Survey informs the overall need for Water Quality Revolving Loan Fund assistance. MDE indicates that the survey was submitted by the EPA to the Office of Management and Budget in September 2009. The EPA anticipates submitting the survey to Congress in early calendar 2010. The 2004 Clean Water Needs Survey indicated the need for \$3.4 billion for point-source wastewater infrastructure projects and \$680.0 million for nonpoint-source projects. **DLS recommends that MDE comment on the results of the new survey, whether local jurisdictions are using full-cost accounting to address realistically the costs they are incurring and will incur, and on how the anticipated high level of need will be met.**

Water Quality Revolving Loan Fund Data

Fund History

	<i>FY 2009 Actual</i>	<i>FY 2010 Estimated</i>	<i>FY 2011 Estimated</i>
Beginning Balance	\$71,053,431	\$124,704,261	\$38,084,261
Revenue			
General Funds	\$5,180,000	\$0	\$0
General Obligation Bonds		3,292,000	3,292,000
Federal Funds	25,885,926	16,500,000	16,500,000
Federal ARRA Funds	0	94,784,600	0
Investment and Other Income (Administrative Fees)	9,898,381	10,000,000	10,000,000
Loan Repayments and Interest	73,100,773	76,000,000	79,000,000
Total Revenue	\$114,065,080	\$200,576,600	\$108,792,000
Total Available	\$185,118,511	\$325,280,861	\$146,876,261
Encumbrances			
Net Loans (including closeout adjustments)* + ARRA (FY 2010)	\$40,909,721	\$211,049,115	\$110,000,000
ARRA Grants (FY 2010)**	0	56,735,485	0
Revenue Bond Debt Service – Old Bonds	11,857,094	12,000,000	12,000,000
Revenue Bond Debt Service – New Bonds	4,181,705	3,600,000	3,900,000
Operating Expenses	3,465,730	3,812,000	4,193,000
Total Encumbrances	\$60,414,250	\$287,196,600	\$130,093,000
Ending Balance	\$124,704,261	\$38,084,261	\$16,783,261

ARRA: American Recovery and Reinvestment Act of 2009

WQFA: Water Quality Financing Administration

*Loans made as of December 31, 2009 = \$103.2 million (15 projects if three Patapsco and two Hagerstown projects are counted as one each) not including the ARRA funding of \$36 million that was approved at the September 16, 2009 Board of Public Works meeting, for which a final amount has not been decided.

**Grants made as of December 31, 2009 = \$56.7 million as part of the ARRA funding.

The fund data reflects a substantial increase in the amount of projects completed relative to last year at this same time. Last year, at this time, only four loans had been made for \$19.0 million. This year there is \$103.2 million in regular loan activity, \$36.0 million in the ARRA loans, and \$56.7 million in the ARRA grants; although, the ARRA funding is not certain as MDE will bring a final disposition amount to the BPW in February 2010. However, not all the projects for which regular loan funding is encumbered in fiscal 2010 were actually on the list of projects scheduled for funding in fiscal 2010. For instance, the following projects are not on the fiscal 2010 list but are included as encumbrances:

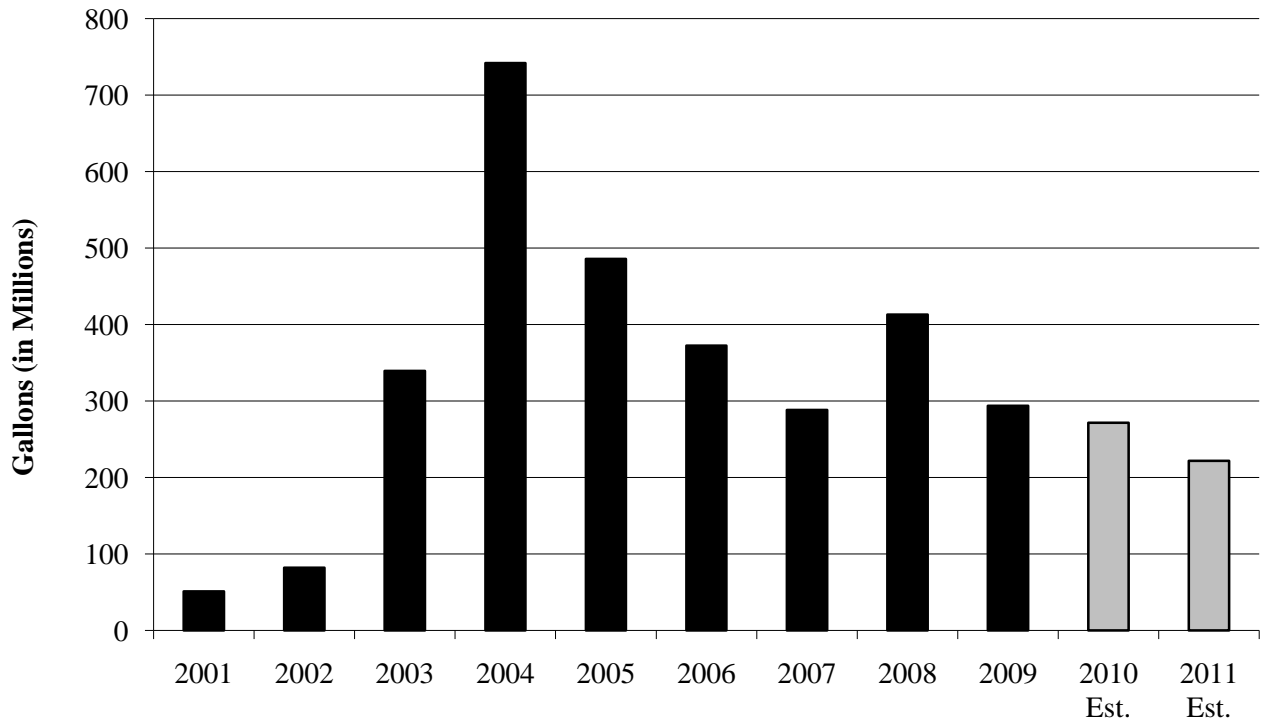
- Friendsville Inflow and Infiltration Reduction project (Garrett County) – \$250,000;
- Deep Creek Conveyance System Pump Station Rehabilitation (Garrett County) – \$310,000;
- Marley-Taylor Water Reclamation Power Co-Generation project (St. Mary’s County) – \$260,000;
- Patuxent Park Sewer Line project (St. Mary’s County) – \$334,000; and
- Hagerstown College System Rehabilitation (Washington County) – \$869,000.

DLS recommends that MDE comment on why the projects above are not included on the list of fiscal 2010 approved projects.

Water Quality Revolving Loan Fund Program Analysis and Performance

As illustrated in **Exhibit 9**, sewage overflows increased between fiscal 2007 and 2008 despite a downward trend since fiscal 2004. Information previously reported on sewer overflows compared data for fiscal 2002 and beyond with fiscal 2001, a particularly dry year. Beginning in fiscal 2006, MDE used a three-year average (2003 through 2005) of 521.8 million gallons. Using this new base comparison, MDE estimates that the overflow gallons were reduced 21% relative to the three-year average in fiscal 2008. Fiscal 2008 overflows increased due to storms that caused power failures to a Washington Suburban Sanitary Commission pumping station, which resulted in a series of overflows. In fiscal 2009, overflows were reduced 44% relative to the three-year average. Further reductions in sewer overflows are projected in the out-years. MDE has noted that funding for sewer rehabilitation and the amount of rainfall will determine future sewer overflow reductions.

**Exhibit 9
Sewage Overflow
Fiscal 2001-2011**



Source: Governor’s Budget Books, Fiscal 2005-2011

Recommended Actions

PAYGO Recommended Actions

1. Concur with Governor's allowance.

GO Bond Recommended Actions

1. Concur with Governor's allowance.

Water Quality Revolving Loan Fund Fiscal 2011 Proposed Projects

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>FY 2011 Amount</u>	<u>Future Request</u>	<u>Total State Share (%)</u>
Anne Arundel	Annapolis Wastewater Treatment Plant – Enhanced Nutrient Removal Project	\$23,127,000	-	\$3,655,800	-	15.8%
Anne Arundel	Broadneck Wastewater Treatment Plant – Enhanced Nutrient Removal Project	23,764,000	-	3,500,000	-	14.7%
Anne Arundel	Patuxent Wastewater Treatment Plant – Enhanced Nutrient Removal Project	11,367,000	-	931,000	-	8.2%
Baltimore City	Patapsco Wastewater Treatment Plant – BNR/ENR Upgrade and Expansion Project	416,031,190	\$8,808,712	33,893,482	-	10.3%
Baltimore	Patapsco Wastewater Treatment Plant – BNR/ENR Upgrade and Expansion Project	416,031,190	-	22,151,000	-	5.3%
Carroll	New Windsor Wastewater Treatment Plant – Biological Nutrient Removal Project	3,500,000	1,000,000	2,500,000	-	100.0%
Dorchester	Dorchester Sanitary District #3 – Madison and Woolford Collection System	8,590,000	-	800,000	-	9.3%
Frederick	Emmitsburg Wastewater Treatment Plant – Enhanced Nutrient Removal Project	24,500,000	-	2,400,000	-	9.8%
Harford	Aberdeen Wastewater Treatment Plant Upgrade	24,893,000	6,563,000	5,000,000	-	46.5%
Howard	Little Patuxent Wastewater Treatment Plant Upgrade	116,289,000	29,225,805	17,946,505	-	40.6%
Queen Anne's	Barclay and Sudlersville – Wastewater Treatment Plant Connection	1,759,755	-	600,000	-	34.1%
St. Mary's	Marlay-Taylor Wastewater Treatment Plant Upgrade	32,519,800	-	8,690,413	-	26.7%
Wicomico	Fruitland Wastewater Treatment Plant Expansion	8,225,000	-	3,931,800	-	47.8%
Worcester	Snow Hill Wastewater Treatment Plant – Biological Nutrient Removal and Expansion Project	15,000,000	2,370,000	4,000,000	-	42.5%
Total		\$1,125,596,935	\$47,967,517	\$110,000,000	\$0	

BNR: biological nutrient removal
 ENR: enhanced nutrient removal

Water Quality Revolving Loan Fund Current Project Status

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>Amount</u>	<u>Amount Encumbered to Date</u>	<u>Amount Remaining to Be Encumbered</u>	<u>Future Request</u>	<u>Total State Share (%)</u>	<u>Status</u>
Allegany	Bedford Road and Jennings Run – Sewer Rehabilitation Project Study	\$1,310,000	\$1,135,000	\$175,000	-	\$175,000	-	100.0%	Design
Allegany	Braddock Run Sewer Rehabilitation Project	1,500,000	-	500,000	-	500,000	-	33.3%	Construction
Allegany	Cedar Street Sewer Rehabilitation Project	750,000	-	700,000	-	700,000	-	93.3%	Construction
Allegany	Cumberland Combined Sewer Overflow	47,000,000	300,000	7,421,940	\$3,800,000	3,621,940	\$578,060	17.7%	Construction
Allegany	Eckhart Sewer Rehabilitation Study	525,000	-	500,000	-	500,000	-	95.2%	Planning
Allegany	Grahamtown Sanitary Sewer Rehabilitation Project	1,000,000	-	500,000	-	500,000	-	50.0%	Construction
Allegany	S – Braddock Run Interceptor Rehabilitation	3,909,066	-	1,371,982	-	1,371,982	-	35.1%	Construction
Allegany	S – Cumberland Wastewater Treatment Plant ENR	38,814,949	-	6,000,000	-	6,000,000	-	15.5%	Construction
Allegany	S – Savage River Dam Flood Gate Replacement	6,000,000	-	6,000,000	-	6,000,000	-	100.0%	Construction

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>Amount</u>	<u>Amount Encumbered to Date</u>	<u>Amount Remaining to Be Encumbered</u>	<u>Future Request</u>	<u>Total State Share (%)</u>	<u>Status</u>
Anne Arundel	Cox Creek Wastewater Treatment Plant Upgrade	158,058,000	-	8,250,333	-	8,250,333	-	5.2%	Design/ Construction
Anne Arundel	Deale Beach Wastewater Collection System	2,377,835	-	2,377,835	2,000,000	377,835	-	100.0%	Construction
Anne Arundel	S – Annapolis Landing Shoreline Protection Project	102,000	-	102,000	-	102,000	-	100.0%	Construction
Anne Arundel	S – Annapolis Urban Watershed Impervious Surface Recovery	2,000,000	-	562,237	-	562,237	-	28.1%	Construction
Anne Arundel	S – Back Creek (Second Street) Force Main Sewer Rehabilitation	1,100,000	-	1,100,000	-	1,100,000	-	100.0%	Construction
Anne Arundel	S – Berrywood Shoreline Protection Project	97,000	-	97,000	-	97,000	-	100.0%	Construction
Anne Arundel	S – Clements Creek Stormwater Restoration	585,000	-	450,000	-	450,000	-	76.9%	Construction
Anne Arundel	S – Dennis Point Living Shoreline Project	506,960	-	506,960	-	506,960	-	100.0%	Construction
Anne Arundel	S – Eastport Sewer Rehabilitation	1,320,000	-	1,230,000	-	1,230,000	-	93.2%	Construction

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>Amount</u>	<u>Amount Encumbered to Date</u>	<u>Amount Remaining to Be Encumbered</u>	<u>Future Request</u>	<u>Total State Share (%)</u>	<u>Status</u>
Anne Arundel	S – Franklin Manor Living Shoreline Project	866,000	-	596,000	-	596,000	-	68.8%	Construction
Anne Arundel	S – Magothy River YR 1 Stormwater Retrofits	415,000	-	415,000	-	415,000	-	100.0%	Construction
Anne Arundel	S – Severn River YR 1 Stormwater Retrofit	335,000	-	335,000	-	335,000	-	100.0%	Construction
Anne Arundel	S – Shady Grove Shoreline Protection Project	617,000	-	612,000	-	612,000	-	99.2%	Construction
Anne Arundel	S – South River YR 1 Stormwater Retrofit	335,000	-	335,000	-	335,000	-	100.0%	Construction
Anne Arundel	S – Southdown Shores Shoreline Protection Project	102,000	-	97,000	-	97,000	-	95.1%	Construction
Baltimore City	Lower Stoney Run Interceptor – Sewer Rehabilitation Project	40,440,441	-	8,084,000	-	8,084,000	-	20.0%	Construction
Baltimore City	Patapsco BNR/ENR Upgrade and Expansion	416,031,190	-	8,808,712	3,000,000	5,808,712	-	2.1%	Construction
Baltimore City	S – Patapsco BNR/ENR Upgrade and Expansion	416,031,190	-	6,000,000	-	6,000,000	-	1.4%	Construction
Baltimore City	S – Westport Waterfront Dryswale Creation	229,724	-	229,724	-	229,724	-	100.0%	Construction
Baltimore	Baltimore County Gravity Sludge Removal	7,478,515	-	2,000,000	2,700,000	-700,000	-	26.7%	Construction

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>Amount</u>	<u>Amount Encumbered to Date</u>	<u>Amount Remaining to Be Encumbered</u>	<u>Future Request</u>	<u>Total State Share (%)</u>	<u>Status</u>
Baltimore	Patapsco Wastewater Treatment Plant – BNR/ENR Upgrade and Expansion	10,015,400	-	10,015,400	8,000,000	2,015,400	-	100.0%	Construction
Baltimore	S – Patapsco BNR/ENR Upgrade and Expansion	416,031,190	-	6,000,000	-	6,000,000	-	1.4%	Construction
Calvert	Calvert Industrial Park – Wastewater Treatment Plant Upgrade	1,180,000	-	733,000	-	733,000	-	62.1%	Construction
Calvert	S – Chesapeake Beach D Street Sewer	1,560,000	-	1,560,000	-	1,560,000	-	100.0%	Construction
Calvert	S – Cox Road Sewer Improvements	760,000	-	760,000	-	760,000	-	100.0%	Construction
Caroline	Ridgely Wastewater Treatment Plant Upgrade	1,700,000	-	1,500,000	1,550,000	-50,000	-	88.2%	Construction
Caroline	S – Federalsburg Sewer Rehabilitation I&I Maple Ave. and South Main St.	889,576	-	400,936	-	400,936	-	45.1%	Construction
Caroline	S – Federalsburg Stormwater Management Marshyhope Creek	1,235,000	-	1,235,000	-	1,235,000	-	100.0%	Construction
Caroline	S – Town of Greensboro Replace RBC with Parkson Geo-Reactor	382,500	-	382,500	-	382,500	-	100.0%	Construction

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>Amount</u>	<u>Amount Encumbered to Date</u>	<u>Amount Remaining to Be Encumbered</u>	<u>Future Request</u>	<u>Total State Share (%)</u>	<u>Status</u>
Carroll	New Windsor Wastewater Treatment Plant – Biological Nutrient Removal Project	3,500,000	-	1,000,000	4,800,000	-3,800,000	-	28.6%	Construction
Carroll	S – Union Bridge Wastewater Treatment	135,000	-	135,000	-	135,000	-	100.0%	Construction
Cecil	S – Rising Sun New Wastewater Treatment Plant	13,804,740	-	1,000,000	-	1,000,000	-	7.2%	Construction
Charles	Benedict Central Sewer Collection and Treatment System	9,000,000	-	3,597,000	-	3,597,000	-	40.0%	Construction
Charles	La Plata Enhanced Nutrient Removal	10,000,000	-	1,000,000	800,000	200,000	-	10.0%	Design
Charles	S – Willow Lane Pump Station Replacement	5,000,000	-	5,000,000	-	5,000,000	-	100.0%	Construction
Charles	S – Willow Lane Sanitary Sewer Upgrade	3,200,000	-	1,000,000	-	1,000,000	-	31.3%	Construction
Dorchester	S – Dorchester County Sanitary District #3 – New Sewer Collection Sys.	8,590,000	-	2,239,385	-	2,239,385	800,000	35.4%	Construction
Dorchester	S – Vienna Wastewater Treatment Plant Energy Efficiency Sys.	1,600,000	-	1,509,512	-	1,509,512	-	94.3%	Construction

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>Amount</u>	<u>Amount Encumbered to Date</u>	<u>Amount Remaining to Be Encumbered</u>	<u>Future Request</u>	<u>Total State Share (%)</u>	<u>Status</u>
Frederick	Ballenger Creek Wastewater Treatment Plant	61,000,000	-	61,000,000	70,000,000	-9,000,000	-	100.0%	Construction
Frederick	S – Ballenger Creek Wastewater Treatment Plant Expansion	151,680,000	-	6,000,000	-	6,000,000	-	4.0%	Construction
Frederick	S – Thurmont Wastewater Treatment Plant High Flow Management	6,134,000	-	6,000,000	-	6,000,000	-	97.8%	Construction
Harford	Aberdeen Wastewater Treatment Plant Upgrade	24,893,000	-	6,563,000	-	6,563,000	5,000,000	46.5%	Design/ Construction
Harford	S – Aberdeen Replace Main Pumping Station Control	297,500	-	297,500	-	297,500	-	100.0%	Construction
Harford	S – Aberdeen Wastewater Treatment Plant Structural Protective Coating	867,000	-	867,000	-	867,000	-	100.0%	Construction
Harford	S – Aberdeen WWTP Biosolid Compost Facility Expansion and Repair	248,000	-	248,000	-	248,000	-	100.0%	Construction
Harford	S – City of Aberdeen – Methane Gas Management Project	119,000	-	119,000	-	119,000	-	100.0%	Construction
Harford	S – Gravity Thickener Center Drive Rebuilds	119,000	-	119,000	-	119,000	-	100.0%	Construction

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>Amount</u>	<u>Amount Encumbered to Date</u>	<u>Amount Remaining to Be Encumbered</u>	<u>Future Request</u>	<u>Total State Share (%)</u>	<u>Status</u>
Harford	S – Poly Aluminum Chloride at Wastewater Treatment Plant	297,500	-	297,500	-	297,500	-	100.0%	Construction
Harford	S – Replace Return Pumps at Wastewater Treatment Plant	297,500	-	297,500	-	297,500	-	100.0%	Construction
Howard	Little Patuxent Wastewater Treatment Plant Upgrade	116,289,000	-	29,225,805	-	29,225,805	17,946,505	40.6%	Design/ Construction
Howard	S – Baltimore/ Washington Industrial Park Stormwater Retrofit	310,000	-	187,500	-	187,500	-	60.5%	Construction
Howard	S – Environmental Design and Resource Center Envirocenter Phase II	1,016,420	-	1,016,420	-	1,016,420	-	100.0%	Construction
Howard	S – Guilford Gardens Stormwater Management Project	120,074	-	100,000	-	100,000	-	83.3%	Construction
Howard	S– Hi Tech Road Stream Restoration	650,000	-	150,000	-	150,000	-	23.1%	Construction
Howard	S – Little Patuxent River YR 1 Stormwater Retrofits	895,000	-	895,000	-	895,000	-	100.0%	Construction
Howard	S – Tall Maple Court Stream Restoration	303,000	-	120,074	-	120,074	-	39.6%	Construction
Kent	S – Chester River Tributary Stream Stabilization	140,000	-	135,000	-	135,000	-	96.4%	Construction

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>Amount</u>	<u>Amount Encumbered to Date</u>	<u>Amount Remaining to Be Encumbered</u>	<u>Future Request</u>	<u>Total State Share (%)</u>	<u>Status</u>
Kent	S – Cypress Street Stream Restoration	75,000	-	35,000	-	35,000	-	46.7%	Construction
Kent	S – Galena Wastewater Treatment Plant Upgrade	1,428,000	-	1,428,000	-	1,428,000	-	100.0%	Construction
Kent	S – Stillpond Shore Erosion Control Project	548,925	-	548,925	-	548,925	-	100.0%	Construction
Montgomery	S – City of Takoma Park Municipal Building Green Roof	100,000	-	70,000	-	70,000	-	70.0%	Complete
Montgomery	S – Germantown Estates Stormwater Pond Retrofit	407,928	-	305,946	-	305,946	-	75.0%	Construction
Montgomery	S – Quaint Acre Area Sewer Main Improvements	2,000,000	-	2,000,000	-	2,000,000	-	100.0%	Construction
Montgomery	S – Takoma Park Water Quality Improvements – 7101 New Hampshire and Linden Ave.	185,000	-	160,000	-	160,000	-	86.5%	Construction
Montgomery	Seneca Wastewater Treatment Plant Upgrade	37,200,000	-	2,438,946	-	2,438,946	-	6.6%	Construction
Prince George's	Bowie Wastewater Treatment Plant ENR	10,758,980	-	500,000	1,800,000	-1,300,000	-	4.6%	Construction
Prince George's	Parkway Wastewater Treatment Plant Upgrade	18,200,000	-	4,700,000	-	4,700,000	-	25.8%	Design/ Construction

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>Amount</u>	<u>Amount Encumbered to Date</u>	<u>Amount Remaining to Be Encumbered</u>	<u>Future Request</u>	<u>Total State Share (%)</u>	<u>Status</u>
Prince George's	S – Beaverdam Site 104 Wetland Restoration	351,900	-	351,900	-	351,900	-	100.0%	Construction
Prince George's	S – Beaverdam Site 20 Stream Restoration	150,000	-	150,000	-	150,000	-	100.0%	Construction
Prince George's	S – Beaverdam Site 26 Water Quality Retrofit	250,000	-	250,000	-	250,000	-	100.0%	Construction
Prince George's	S – Bowie Wastewater Treatment Plant Generator	90,000	-	90,000	-	90,000	-	100.0%	Construction
Prince George's	S – Lower Anacostia Sewer Rehabilitation	8,700,000	-	4,000,000	-	4,000,000	-	46.0%	Construction
Prince George's	S – Town of Edmonston Green Improvements to Decatur Street	1,202,000	-	1,167,000	-	1,167,000	-	97.1%	Construction
Prince George's	S – Town of Riverdale Park YR 1 Stormwater Retrofit	319,000	-	319,000	-	319,000	-	100.0%	Construction
Prince George's	Western Branch Wastewater Treatment Plant Upgrades	72,500,000	-	8,054,429	-	8,054,429	-	11.1%	Design/Construction
Queen Anne's	S – Bloomfield North Building New Permeable Parking Lots	200,000	-	200,000	-	200,000	-	100.0%	Construction

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>Amount</u>	<u>Amount Encumbered to Date</u>	<u>Amount Remaining to Be Encumbered</u>	<u>Future Request</u>	<u>Total State Share (%)</u>	<u>Status</u>
Queen Anne's	S – Centreville, MD 304 Sanitary Sewer Upgrades	599,200	-	599,200	-	599,200	-	100.0%	Construction
Queen Anne's	S – Centreville, MD 213 Sanitary Sewer Upgrades	1,409,100	-	1,409,100	-	1,409,100	-	100.0%	Construction
St. Mary's	S – Marlay-Taylor Methane Power Co-Generation Upgrade	3,430,000	-	3,430,000	-	3,430,000	-	100.0%	Construction
St. Mary's	S – Mill Point Regeneration Stormwater Management Project	340,946	-	340,946	-	340,946	-	100.0%	Construction
St. Mary's	S – Naval Air Station Wastewater Reuse Project	4,613,100	-	2,570,000	-	2,570,000	-	55.7%	Construction
Talbot	S – Cooperative Oxford Lab Shoreline Protection Project	213,500	-	183,500	-	183,500	-	85.9%	Construction
Talbot	S – Easton Utilities Force Main Relocation	1,146,000	-	1,146,000	-	1,146,000	-	100.0%	Construction
Talbot	S – Oxford Contact Tank Rehabilitation	50,000	-	50,000	-	50,000	-	100.0%	Construction
Talbot	S – Oxford Lagoon Sludge Removal	500,000	-	500,000	-	500,000	-	100.0%	Construction
Talbot	S – Russell Train Property Wetland Restoration Project	347,316	-	347,000	-	347,000	-	99.9%	Construction

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>Amount</u>	<u>Amount Encumbered to Date</u>	<u>Amount Remaining to Be Encumbered</u>	<u>Future Request</u>	<u>Total State Share (%)</u>	<u>Status</u>
Talbot	S – Talbot County Biosolids Utilization Facility Upgrade	6,900,000	-	2,700,000	-	2,700,000	-	39.1%	Construction
Talbot	S – Tanyard Branch Wetland Restoration	363,000	-	326,000	-	326,000	-	89.8%	Construction
Washington	Boonsboro WWTP BNR/ENR Upgrade	12,556,394	-	2,000,000	2,000,000	0	-	15.9%	Construction
Washington	S – Hagerstown Collection System Rehabilitation	3,050,000	-	1,422,563	-	1,422,563	-	46.6%	Construction
Washington	Salem Avenue Collection System Rehabilitation Project	1,050,000	-	1,000,000	684,000	316,000	-	95.2%	Construction
Wicomico	Delmar Wastewater Treatment Plant ENR Upgrade	7,940,000	-	2,000,000	-	2,000,000	-	25.2%	Construction
Wicomico	S – Beaglin Park Dam Upgrade	50,000	-	50,000	-	50,000	-	100.0%	Construction
Wicomico	S – Delmarva Power Lift Station Upgrade	2,491,560	-	1,211,800	-	1,211,800	-	48.6%	Construction
Wicomico	S – Fitzwater Street Storm Drain Replacement	35,000	-	35,000	-	35,000	-	100.0%	Construction
Wicomico	S – Fruitland Infiltration and Inflow Removal Phase 3	503,700	-	503,700	-	503,700	-	100.0%	Construction
Wicomico	S – Hebron Wastewater Treatment Lagoon Sludge Removal	272,290	-	272,290	-	272,290	-	100.0%	Complete

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>Amount</u>	<u>Amount Encumbered to Date</u>	<u>Amount Remaining to Be Encumbered</u>	<u>Future Request</u>	<u>Total State Share (%)</u>	<u>Status</u>
Worcester	S – Pocomoke City Wastewater Treatment Plant Upgrade	4,900,000	-	500,000	-	500,000	-	10.2%	Construction
Worcester	Snow Hill Wastewater Treatment Plant – Biological Nutrient Removal and Expansion Project	15,000,000	-	2,370,000	-	2,370,000	4,000,000	42.5%	Planning/ Design
Total		\$2,226,524,109	\$1,435,000	\$269,800,000	\$101,134,000	\$168,666,000	\$28,324,565		

BNR: biological nutrient removal
 ENR: enhanced nutrient removal
 RBC: rotating biological contractor
 WWTP: wastewater treatment plants

S: American Recovery and Reinvestment Act of 2009 federal stimulus project

Note: The amount to be encumbered does not account for American Recovery and Reinvestment Act of 2009 federal stimulus-funded projects that were encumbered at the September 16, 2009 Board of Public Works meeting. This is because a final encumbrance amount is expected in February 2010.

Drinking Water Revolving Loan Fund (Statewide)

GO Bonds	\$2,242,000	Recommendation: Approve
PAYGO SF	\$6,075,000	
PAYGO FF	\$8,183,000	

Bill Text: Provide funds to finance drinking water projects. These funds shall be administered in accordance with § 9-1605.1 of the Environment Article.

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.

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

Drinking Water Revolving Loan Fund Prior Authorization and Capital Improvement Program

**Authorization Request
(\$ in Millions)**

<i>Fund Source</i>	<i>2009 Approp.</i>	<i>2010 Approp.</i>	<i>2011 Allowance</i>	<i>2012 Estimate</i>	<i>2013 Estimate</i>	<i>2014 Estimate</i>	<i>2015 Estimate</i>
PAYGO GF	\$2.265	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
PAYGO SF	4.000	4.383	6.075	4.400	7.950	12.950	12.300
PAYGO FF	7.814	33.375	8.183	7.850	7.850	7.850	7.850
GO Bonds	0.000	2.242	2.242	2.300	2.300	2.300	2.300
Total	\$14.079	\$40.000	\$16.500	\$14.550	\$18.100	\$23.100	\$22.450

The fiscal 2011 DWRLF allowance totals \$16.5 million and is comprised of \$6.1 million in special funds, \$8.2 million in federal funds, and \$2.2 million in GO bonds. No general funds are included in the allowance; therefore, the \$2.2 million in GO bonds represents the required 20% State match for the federal funds. The 2010 CIP assumes that GO bonds will be provided in future years to meet State matching requirements, but that there will be no change in the federal funds expected. This was noted as an overview issue because it is anticipated that the federal fund allowance will increase in fiscal 2012 and 2013, at the very least, and thus will require greater matching funds than are shown here.

Of note, \$18.0 million in revenue bonds originally were programmed to be issued in fiscal 2009 but were cancelled. MDE states that the issuance was cancelled due to the receipt of \$26.4 million in ARRA funding, which offset the projected demand that would have been met by the proposed revenue bond issuance.

A total of eight projects are scheduled to be funded during fiscal 2011, which would improve water services in seven different jurisdictions as follows: Allegany (2), Baltimore City (1), Calvert (1), Dorchester (1), Garrett (1), Washington (1), and Wicomico (1). The GO fund allowance is based on \$829.0 million in federal funds to capitalize water supply revolving loan funds throughout the United States. Maryland's share of this national amount is estimated to be \$11.2 million, requiring a \$2.2 million State match. Up to 31% of the \$11.2 million federal appropriation may be used for nonproject set-asides. Nonproject set-asides are budgeted in MDE's operating budget, as follows: 15% for Local Assistance/Other State Projects; 10% for Safe Drinking Water Program Support; 4% for DWRLF Administration; and 2% for Technical Assistance for Small Systems.

The 2007 Drinking Water Infrastructure Needs Survey and Assessment was published in March 2009. The survey indicates a 20-year national need of \$334.8 billion in 2007 dollars. Maryland's portion of this need is \$5.4 billion. Maryland's primary need by type of project is transmission/distribution at \$3.5 billion followed by treatment at \$1.1 billion and storage at \$0.6 billion. The remainder, \$0.2 billion, consists of projects related to drinking water sources. In terms of the need by system size, Maryland's greatest need is in large systems at \$3.9 billion, followed by medium systems at \$0.9 billion, and small systems at \$0.6 billion. Maryland's documented need has increased over the years as follows: 1995 (\$1.9 billion), 1999 (\$2.2 billion), 2003 (\$4.8 billion), and 2007 (\$5.4 billion). **DLS recommends that MDE comment on the feasibility of financing \$5.4 billion in drinking water-related needs over the next 20 years.**

Drinking Water Revolving Loan Fund Data

Fund History

	<i>FY 2009 Actual</i>	<i>FY 2010 Estimated</i>	<i>FY 2011 Estimated</i>
Beginning Balance	\$4,043,917	\$11,293,183	\$1,263,583
Revenue			
General Funds	\$2,265,000	\$0	\$0
General Obligation Bonds	0	2,242,000	2,242,000
Federal Funds	7,814,000	6,375,400	8,183,000
Federal ARRA Funds	0	26,832,000	0
Investment and Other Income (Administrative Fees)	869,607	900,000	1,000,000
Loan Repayments and Interest	4,742,623	4,900,000	5,200,000
Total Revenue	\$15,691,230	\$41,249,400	\$16,625,000
Total Available	\$19,735,147	\$52,542,583	\$17,888,583
Encumbrances			
Net Loans (including closeout adjustments)* + ARRA (FY 2010)	\$7,672,119	\$35,309,825	\$16,500,000
ARRA Grants (FY 2010)	0	15,122,175	0
Operating Expenses	769,845	847,000	932,000
Revenue Bond Debt Service	0	0	0
Total Encumbrances	8,441,964	51,279,000	17,432,000
Ending Balance	\$11,293,183	\$1,263,583	\$456,583

*Loans made as of December 31, 2009 = \$22.0 million (seven projects if two Hagerstown projects are counted as one).

Note: MDE anticipated issuing \$18 million in revenue bonds in fiscal 2009 but did not due to the availability of American Recovery and Reinvestment Act of 2009 (ARRA) federal stimulus funding.

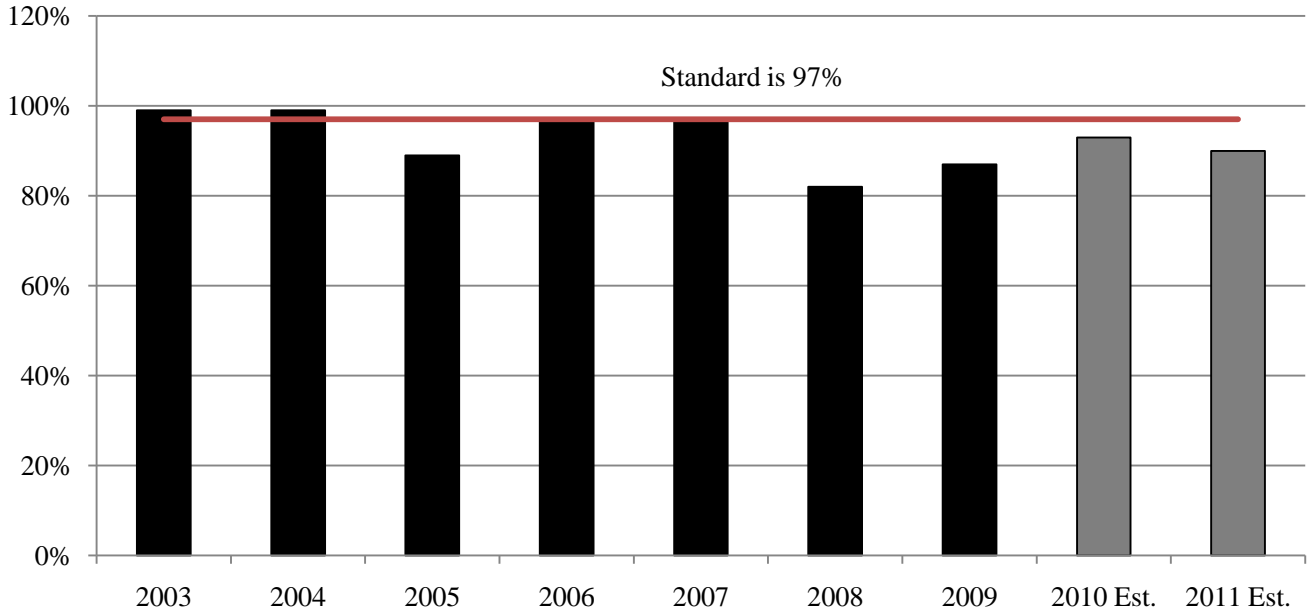
At this time last year, MDE had only made two loans for \$3.6 million. The data above reflects seven projects for \$22 million. However, not all of the projects that account for the \$22 million encumbrance level are on the fiscal 2010 approved list of projects. These projects not found on the approved list are as follows:

- Town of Secretary New Wells project (Dorchester County) – \$70,000;
- Fahrney-Keedy Memorial Home, Inc. project (Washington County) – \$500,000;
- RC Willson Transmission Mains Phase IA project (Washington County) – \$4,817,000; and
- Centreville Arsenic Water Treatment Plant Improvement project (Queen Anne’s County) – \$2,350,000.

Drinking Water Revolving Loan Fund Program Analysis and Performance

As noted in the MDE operating budget analysis, **Exhibit 10** shows that due to the changing nature of the underlying standards to which MDE applies a 97% significant compliance goal, it is difficult to see long-term trends in public water system compliance with rules. Instead, there appears to be a trend toward increasing compliance with a standard for a couple of years after the standard is created until a new standard is developed, and the process starts over. For instance, Maryland met the standard for complying with the 2002 rules in fiscal 2006, but then new rules were developed, and the compliance dropped to 82% in fiscal 2008. Five new federal regulations will require new State rules in fiscal 2010. However, the overall trend is toward a cleaner public water system in Maryland.

Exhibit 10
Marylanders Served by Public Water Systems in
Significant Compliance
Fiscal 2003-2011



Note: Up to fiscal 2008, the basis for significant compliance with public water systems rules was 97% of the rules adopted in 2002. From fiscal 2008 onward, the basis for significant compliance is 97% of the rules adopted since fiscal 2002. In fiscal 2010, State regulations will be adopted to reflect five new federal regulations: arsenic, radionuclide, stage 2 disinfection byproduct, long-term 2 enhanced surface water treatment, and revised lead and copper.

Source: Governor’s Budget Books, Fiscal 2006-2011

Recommended Actions

PAYGO Recommended Actions

1. Concur with Governor's allowance.

GO Bond Recommended Actions

1. Concur with Governor's allowance.

Drinking Water Revolving Loan Fund Fiscal 2011 Proposed Projects

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>FY 2011 Amount</u>	<u>Future Request</u>	<u>Total State Share (%)</u>
Allegany	Mt. Savage Water Distribution System	\$5,750,000	-	\$2,750,000	-	47.8%
Allegany	Shades Lane – New Water Supply System	340,000	-	300,000	-	88.2%
Baltimore City	Montebello Plant 2 – Finished Water Reservoir Improvements	58,080,000	2,000,000	8,103,000	-	17.4%
Calvert	East Prince Frederick Water Supply System – New Well, Tower, and Arsenic Treatment Project	2,000,000	1,000,000	600,000	-	80.0%
Dorchester	Town of Secretary Water Treatment Plant – New Well	235,000	-	100,000	-	42.6%
Garrett	Oakland Water System Study	95,000	-	95,000	-	100.0%
Washington	West End Reservoir – Phase II – New Water Storage Tank	7,334,000	2,000,000	2,000,000	-	54.5%
Wicomico	Salisbury Water Distribution System – Milford Street Elevated Storage Tank	4,702,000	-	2,552,000	-	54.3%
Total		\$78,536,000	\$5,000,000	\$16,500,000	\$0	

Drinking Water Revolving Loan Fund Current Project Status

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>Amount</u>	<u>Amount Encumbered to Date</u>	<u>Amount Remaining to Be Encumbered</u>	<u>Future Request</u>	<u>Total State Share (%)</u>	<u>Status</u>
Allegheny	Ridgedale Reservoir Replacement	\$4,876,280	\$1,570,000	\$1,500,000	-	\$1,500,000	-	63.0%	Construction
Allegheny	S – Mt. Savage Water Transmission	815,000	-	815,000	-	815,000	-	100.0%	Construction
Baltimore City	Montebello Plant 2 Finished Water Reservoir Cover	69,548,000	-	13,468,000	\$11,000,000	2,468,000	\$8,103,000	31.0%	Construction
Baltimore City	S – Montebello Plant 2 Finished Water Reservoir Cover Contract No. 1160	58,080,000	-	6,000,000	-	6,000,000	-	10.3%	Construction
Baltimore City	S – Water Conservation and Efficiency	5,455,761	-	2,636,900	-	2,636,900	-	48.3%	Construction
Calvert	Dares Beach/Chesapeake Heights – New Well	652,500	-	500,000	-	500,000	-	76.6%	Construction
Calvert	East Prince Frederick Water Supply System – New Well, Tower, and Arsenic Treatment Project	2,000,000	-	1,000,000	-	1,000,000	-	50.0%	Construction
Carroll	S – Westminster Water Meter Install	400,000	-	400,000	-	400,000	-	100.0%	Construction
Cecil	Whitaker Woods Water System	2,040,000	-	1,350,000	-	1,350,000	-	66.2%	Planning
Frederick	S – Walkersville Emergency Backup Water Supply Connection	2,422,600	-	67,549	-	67,549	-	2.8%	Construction
Frederick	Walkersville Emergency Backup Water Supply Connection	2,422,600	-	500,000	-	500,000	-	20.6%	Planning
Garrett	Mountain Lake Park Water System Improvements	968,250	-	756,000	175,000	581,000	-	78.1%	Construction

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>Amount</u>	<u>Amount Encumbered to Date</u>	<u>Amount Remaining to Be Encumbered</u>	<u>Future Request</u>	<u>Total State Share (%)</u>	<u>Status</u>
Garrett	S – Mt. Lake Park Water System (contract 2)	912,200	-	733,000	-	733,000	-	80.4%	Construction
Montgomery	S – Rockville Energy Conservation	1,309,500	-	1,309,500	-	1,309,500	-	100.0%	Construction
Queen Anne's	S – Queenstown Comprehensive I	103,451	-	103,451	-	103,451	-	100.0%	Construction
Somerset	S – Rhodes Point Southern Water Works	207,965	-	207,965	-	207,965	-	100.0%	Construction
Somerset	S – Water Treatment and Supply – MD Environ. Service	17,223,855	-	6,000,000	-	6,000,000	-	34.8%	Construction
St. Mary's	Hollywood Water System – New Well	300,000	-	260,000	212,000	48,000	-	86.7%	Planning
St. Mary's	Hollywood Well Arsenic Remediation	571,000	-	516,000	-	516,000	-	90.4%	Construction
St. Mary's	S – Navy Water System Upgrade	750,000	-	750,000	-	750,000	-	100.0%	Construction
Talbot	S – Oxford Water Meter Upgrade	270,000	-	270,000	-	270,000	-	100.0%	Construction
Washington	S – West End Reservoir Tank Phase II	7,334,000	-	3,300,000	-	3,300,000	-	45.0%	Construction
Washington	West End Reservoir – Phase II – New Water Storage Tank	7,334,000	-	2,000,000	2,870,000	-870,000	2,000,000	54.5%	Construction
Wicomico	S – Salisbury New Elevated Water Tower	3,300,000	-	2,993,635	-	2,993,635	-	90.7%	Construction
Wicomico	Salisbury – New Elevated Water Tower	3,300,000	-	2,618,000	-	2,618,000	-	79.3%	Construction
Worcester	S – Holland Forest/Fenwick Manor	845,000	-	845,000	-	845,000	-	100.0%	Construction
Total		\$193,441,962	\$1,570,000	\$50,900,000	\$14,257,000	\$36,643,000	\$10,103,000		

S: American Recovery and Reinvestment of 2009 federal stimulus project

Note: The amount to be encumbered does not account for American Recovery and Reinvestment Act of 2009 federal stimulus-funded projects that were encumbered at the September 16, 2009 Board of Public Works meeting. This is because a final encumbrance amount is expected in February 2010.

Bay Restoration Fund – Wastewater Projects (Statewide)

GO Bonds	\$125,000,000	Recommendation:	Reduce general obligation bonds by \$39.8 million
Revenue Bonds	\$150,000,000		

Bill Text: Provide funds to local governments to implement enhanced nutrient removal technology at the 67 largest wastewater treatment plants in Maryland.

Program Description: The Bay Restoration Fund (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 67 major WWTPs with enhanced nutrient removal (ENR) technology so they are capable of achieving wastewater effluent quality of 3 milligrams per liter (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.

The Bay Restoration Fund – Wastewater Projects program originally incorporated two programs: Enhanced Nutrient Removal and Sewer Rehabilitation. The Sewer Rehabilitation Program’s goal was to ensure a safe and adequate sewer infrastructure, as required by the Clean Water Act; it received final funding in fiscal 2009. The funding allocated to the Sewer Rehabilitation Program is now budgeted in MDE’s operating budget for operations and maintenance of wastewater treatment plants upgraded to ENR status. For fiscal 2011, \$1,000,000 is budgeted in the operating budget for operation and maintenance of WWTPs upgraded to ENR status, which would fund 14 wastewater treatment plants.

The ENR program provides grants to local governments to institute ENR technology at the 67 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*.

Bay Restoration Fund – Wastewater Projects Prior Authorization and Capital Improvement Program

**Authorization Request
(\$ in Millions)**

<i>Fund Source</i>	<i>2009 Approp.</i>	<i>2010 Approp.</i>	<i>2011 Allowance</i>	<i>2012 Estimate</i>	<i>2013 Estimate</i>	<i>2014 Estimate</i>	<i>2015 Estimate</i>
PAYGO SF	\$68.000	\$50.000	\$0.000	\$40.000	\$1.000	\$2.000	\$2.000
GO Bonds	0.000	0.000	125.000	75.000	0.000	0.000	0.000
Revenue Bonds	0.000	150.000	150.000	180.000	0.000	0.000	0.000
Total	\$68.000	\$200.000	\$275.000	\$295.000	\$1.000	\$2.000	\$2.000

Note: In fiscal 2009, \$70 million in revenue bonds were appropriated but never issued. In fiscal 2010, \$80 million in revenue bonds were appropriated which has been increased to \$150 million to reflect a combined fiscal 2009 and 2010 revenue bond issuance.

The fiscal 2011 ENR allowance of \$275 million consists of \$125 million in GO bonds and \$150 million in revenue bonds. As noted in the overview, there are no special funds in the budget because they are transferred to the general fund by the BRFA of 2010. Instead, \$125 million in GO bonds have been programmed which would replace \$45 million of the fiscal 2011 appropriation and \$80 million of the \$155 million prior special fund balance transferred to the general fund. The Governor’s plan is to replace the remainder of the prior special fund balance of \$75 million in fiscal 2012.

The 2010 *Capital Improvement Program* reflects a substantial decrease in special funds through the five-year planning period due to the need to pay debt service on the \$530.0 million in revenue bonds that MDE expects to issue between fiscal 2008 and 2012. Bay Restoration Fund 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 Bay Restoration Fund revenue bond debt service, an appropriation is necessary. MDE has budgeted \$19.6 million for debt service payments in its fiscal 2011 allowance operating budget.

The fiscal 2011 allowance would be used to construct ENR upgrades at 26 major WWTPs including the regional Blue Plains Wastewater Treatment Plant. The 14 separate jurisdictions are as follows: Anne Arundel (5), Baltimore City (1), Baltimore (1), Calvert (1), Carroll (4), Charles (1), Dorchester (1), Frederick (2), Harford (2), Prince George’s (1), St. Mary’s (1), Washington (2), Wicomico (1), and Worcester (2).

Bay Restoration Fund – Wastewater Projects Authorization and Expenditure 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
2006	30.000	30.000	27.288	0.000	2.712
2007	70.000	34.218	13.633	35.782	56.367
2008	80.000	51.624	33.265	28.376	46.735
2009	138.000	0.000	0.000	138.000	138.000
2010	130.000	0.000	0.000	130.000	130.000
Total	\$448.000	\$115.842	\$74.186	\$332.158	\$373.814

As of July 1, 2009. The agency did not provide updated data.

The authorization summary reflects only \$74.2 million in expenditures and an unencumbered balance of \$332.2 million as of July 1, 2009. **The Department of Legislative Services recommends that MDE comment on why encumbrances and expenditures still are not occurring in a timely fashion.**

Bay Restoration Fund – Wastewater Projects Fund Data

Fund History

	<i>FY 2009 Actual</i>	<i>FY 2010 Estimated</i>	<i>FY 2011 Estimated</i>
Beginning Balance	\$128,356,084	\$165,370,788	\$144,861,574
Revenue			
General Funds	\$0	\$0	\$0
General Obligation Bonds	0	0	0
Bay Restoration Fund Fee Revenue	53,355,991	53,890,000	54,429,000
Investment Income	5,848,037	7,017,000	3,344,000
Revenue Bond Proceeds	0	150,000,000	150,000,000
Total Revenue	\$59,204,028	\$210,907,000	\$207,773,000
Total Available	\$187,560,112	\$376,277,788	\$352,634,574
Encumbrances			
ENR Grant Awards ¹	\$14,155,854	\$217,157,825	\$275,000,000
Sewer Rehabilitation Grant Awards ²	2,523,981	7,021,019	0
Operating and Maintenance Awards ³	0	218,820	500,000
Operating Expenses	854,796	808,350	816,435
Debt Service Reserve/Issuance Cost	0	1,500,000	1,500,000
Debt Service Payment	4,654,693	4,710,200	19,560,000
Total Encumbrances	22,189,324	231,416,214	297,376,435
Ending Balance	\$165,370,788	\$144,861,574	\$55,258,139

ENR: enhanced nutrient removal

¹ENR grant awards as of December 31, 2009 = \$150.3 million (12 projects).

²Sewer Rehabilitation Grant Awards as of December 31, 2009 = \$2.2 million (4 projects).

³Operating and Maintenance Awards as of December 31, 2009 = \$0.2 million (7 projects)

MDE has reduced its anticipated grant awards for fiscal 2010 from \$332,157,825 (as of July 1, 2009) to \$217,157,825 (as of December 31, 2009). However, in terms of year-over-year activity, the number of ENR grant awards has increased since this time last year from 4 projects and \$14.4 million (as of December 31, 2008) to 12 projects and \$150.3 million (as of December 31, 2009). Sewer rehabilitation grants also are up from 3 projects and \$1.7 million (as of December 31, 2008) to 4 projects and \$2.2 million (December 31, 2009).

Bay Restoration Fund – Wastewater Projects Program Analysis and Performance

MDE has included nitrogen and phosphorous load reduction numbers that relate specifically to the nitrogen and phosphorus load reductions for the fiscal 2011 proposed projects. The proposed fiscal 2011 projects would reduce nitrogen loading by approximately 8.2 million pounds per year and phosphorus loading by approximately 0.9 million pounds per year.

Exhibit 11 describes the status of efforts to install biological nutrient removal (BNR) and ENR technology at the 67 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 2010, of the 67 major WWTPs, 79% are operating at the BNR level (level with 79% as of January 2009), and 19% are operating at the ENR level (up from 17% as of January 2009). **DLS recommends that MDE comment on why the number of plants in operation has changed so little from last year.**

Exhibit 11 Status of BNR and ENR Construction Fiscal 2010

	<u>BNR</u>	<u>ENR</u>
Pre-planning	1	7
Planning	1	9
Design	5	25
Construction	7	13
Under Operation	53	13
Total	67	67

BNR: biological nutrient removal
ENR: enhanced nutrient removal

Note: The Bay Restoration Fund Advisory Committee added the Hampstead wastewater treatment plant to the 66 major plants to make it 67.

Source: Maryland Department of the Environment

Recommended Actions

GO Bond Recommended Actions

1. Reduce general obligation bonds by \$39.8 million.

UA01A Enhanced Nutrient Removal..... \$ 85,210,000

Allowance
125,000,000

Change
-39,790,000

Authorization
85,210,000

Explanation: This action deletes funding for the Blue Plains and Back River wastewater treatment plant enhanced nutrient removal upgrades. It is of concern that projects of such magnitude are being started despite a substantial projected annual deficit in the Bay Restoration Fund – Wastewater program starting in fiscal 2012. Therefore, the projects should be deferred to a future year when funding to address the projected annual deficit in the Bay Restoration Fund – Wastewater program has been addressed.

***Bay Restoration Fund – Wastewater Projects Fiscal 2011
Proposed Projects***

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>FY 2011 Amount</u>	<u>Future Request</u>	<u>Total State Share (%)</u>
Anne Arundel	Annapolis Wastewater Treatment Plant – Enhanced Nutrient Removal	\$23,127,000	\$1,200,000	\$6,000,000	\$6,800,000	60.5%
Anne Arundel	Broadneck Wastewater Treatment Plant – Enhanced Nutrient Removal	23,764,000	1,200,000	6,000,000	6,800,000	58.9%
Anne Arundel	Broadwater Wastewater Treatment Plant – Enhanced Nutrient Removal	14,981,000	500,000	4,600,000	-	34.0%
Anne Arundel	Cox Creek Wastewater Treatment Plant – Enhanced Nutrient Removal	158,058,000	30,000,000	20,000,000	91,484,388	89.5%
Anne Arundel	Patuxent Wastewater Treatment Plant – Enhanced Nutrient Removal	11,367,000	500,000	4,680,000	-	45.6%
Baltimore City	Patapsco Wastewater Treatment Plant – Enhanced Nutrient Removal	416,031,190	95,405,675	30,000,000	96,394,325	53.3%
Baltimore	Back River Wastewater Treatment Plant – Enhanced Nutrient Removal	375,000,000	10,000,000	19,790,000	345,210,000	100.0%
Calvert	Chesapeake Beach Wastewater Treatment Plant – Enhanced Nutrient Removal	18,424,332	850,000	5,000,000	3,050,000	48.3%
Carroll	Freedom District Wastewater Treatment Plant – Enhanced Nutrient Removal	20,600,000	600,000	6,400,000	-	34.0%
Carroll	Hampstead Wastewater Treatment Plant – Enhanced Nutrient Removal	3,000,000	-	150,000	1,850,000	66.7%
Carroll	Taneytown Wastewater Treatment Plant – Enhanced Nutrient Removal	3,300,000	300,000	3,000,000	-	100.0%
Carroll	Westminster Wastewater Treatment Plant – Enhanced Nutrient Removal	15,000,000	820,000	6,000,000	1,780,000	57.3%
Charles	LaPlata Wastewater Treatment Plant – Enhanced Nutrient Removal	10,000,000	1,110,000	5,000,000	2,890,000	90.0%
Dorchester	Cambridge Wastewater Treatment Plant – Enhanced Nutrient Removal	6,000,000	600,000	5,400,000	-	100.0%

U00A0103 – Department of the Environment – Capital

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>FY 2011 Amount</u>	<u>Future Request</u>	<u>Total State Share (%)</u>
Frederick	Emmitsburg Wastewater Treatment Plant – Enhanced Nutrient Removal	24,500,000	500,000	5,210,000	-	23.3%
Frederick	Frederick Wastewater Treatment Plant – Enhanced Nutrient Removal	38,334,675	3,000,000	10,000,000	16,000,000	75.6%
Harford	Joppatowne Wastewater Treatment Plant – Enhanced Nutrient Removal	5,285,500	300,000	2,632,268	-	55.5%
Harford	Sod Run Wastewater Treatment Plant – Enhanced Nutrient Removal	53,296,500	3,050,000	7,227,732	29,590,818	74.8%
Prince George’s	Parkway Wastewater Treatment Plant – Enhanced Nutrient Removal	18,200,000	1,000,000	6,000,000	6,450,000	73.9%
St. Mary’s	Marlay-Taylor Wastewater Treatment Plant – Enhanced Nutrient Removal	32,519,800	1,200,000	6,000,000	6,100,000	40.9%
Washington	Conococheague Wastewater Treatment Plant – Enhanced Nutrient Removal	33,703,610	3,690,000	5,000,000	449,750	27.1%
Washington	Winebrenner Wastewater Treatment Plant – Enhanced Nutrient Removal	16,208,700	400,000	3,180,000	-	22.1%
Wicomico	Fruitland Wastewater Treatment Plant – Enhanced Nutrient Removal	8,225,000	300,000	2,800,000	-	37.7%
Worcester	Pocomoke City Wastewater Treatment Plant – Enhanced Nutrient Removal	4,900,000	200,000	1,950,000	-	43.9%
Worcester	Snow Hill Wastewater Treatment Plant – Enhanced Nutrient Removal	15,000,000	400,000	2,980,000	-	22.5%
Regional	Blue Plains Wastewater Treatment Plant – Enhanced Nutrient Removal	1,080,000,000	2,000,000	20,000,000	242,000,000	24.4%
Statewide	Special Fund Transfer – Bond Available Cash	80,000,000	-	80,000,000	-	100.0%
Total		\$2,508,826,307	\$159,125,675	\$275,000,000	\$856,849,281	

Bay Restoration Fund – Wastewater Projects Current Project Status

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>Amount</u>	<u>Amount Encumbered to Date</u>	<u>Amount Remaining to Be Encumbered</u>	<u>Future Request</u>	<u>Total State Share (%)</u>	<u>Status</u>
Allegany	Cumberland Enhanced Nutrient Removal	\$40,359,000	\$1,000,000	\$28,287,400	\$25,779,000	\$2,508,400	-	72.6%	Construction
Anne Arundel	Annapolis Wastewater Treatment Plant – Enhanced Nutrient Removal	23,127,000	200,000	1,000,000	500,000	500,000	\$12,800,000	60.5%	Design/Construction
Anne Arundel	Broadneck Wastewater Treatment Plant – Enhanced Nutrient Removal	23,764,000	200,000	1,000,000	-	1,000,000	12,800,000	58.9%	Design/Construction
Anne Arundel	Broadwater Wastewater Treatment Plant – Enhanced Nutrient Removal	14,981,000	-	500,000	-	500,000	4,600,000	34.0%	Design
Anne Arundel	Cox Creek Wastewater Treatment Plant – Enhanced Nutrient Removal	158,058,000	-	30,000,000	8,000,000	22,000,000	111,484,388	89.8%	Design/Construction
Anne Arundel	Maryland City Enhanced Nutrient Removal	5,832,000	-	5,700,000	-	5,700,000	-	97.7%	Design/Construction
Anne Arundel	Patuxent Wastewater Treatment Plant – Enhanced Nutrient Removal	11,367,000	-	500,000	500,000	-	4,680,000	45.6%	Design/Construction
Baltimore City	Back River Enhanced Nutrient Removal	375,000,000	5,000,000	5,000,000	-	5,000,000	365,000,000	100.0%	Design
Baltimore City	Patapsco Wastewater Treatment Plant – Enhanced Nutrient Removal	416,031,190	10,000,000	85,405,675	67,000,000	18,405,675	126,394,325	53.3%	Construction
Calvert	Chesapeake Beach Wastewater Treatment Plant – Enhanced Nutrient Removal	18,424,332	-	850,000	-	850,000	8,050,000	48.3%	Planning/Design

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>Amount</u>	<u>Amount Encumbered to Date</u>	<u>Amount Remaining to Be Encumbered</u>	<u>Future Request</u>	<u>Total State Share (%)</u>	<u>Status</u>
Caroline	Denton Enhanced Nutrient Removal	5,529,000	200,000	3,400,000	-	3,400,000	-	65.1%	Design/Construction
Carroll	Freedom District Wastewater Treatment Plant – Enhanced Nutrient Removal	20,600,000	100,000	500,000	-	500,000	6,400,000	34.0%	Planning/Design
Carroll	Mount Airy Enhanced Nutrient Removal	3,565,000	200,000	3,365,000	-	3,365,000	-	100.0%	Construction
Carroll	Taneytown Wastewater Treatment Plant – Enhanced Nutrient Removal	3,300,000	-	300,000	310,000	-10,000	3,000,000	100.0%	Planning/Design
Carroll	Westminster Wastewater Treatment Plant – Enhanced Nutrient Removal	15,000,000	20,000	800,000	-	800,000	7,780,000	57.3%	Planning/Design
Charles	LaPlata Wastewater Treatment Plant – Enhanced Nutrient Removal	10,000,000	110,000	1,000,000	-	1,000,000	7,890,000	90.0%	Design
Dorchester	Cambridge Wastewater Treatment Plant – Enhanced Nutrient Removal	6,000,000	100,000	500,000	-	500,000	5,400,000	100.0%	Planning/Design
Frederick	Ballenger Creek Enhanced Nutrient Removal	151,680,000	-	39,400,000	31,000,000	8,400,000	-	26.0%	Design/Construction
Frederick	Emmitsburg Wastewater Treatment Plant – Enhanced Nutrient Removal	24,500,000	50,000	450,000	-	450,000	5,210,000	23.3%	Planning/Design
Frederick	Frederick Wastewater Treatment Plant – Enhanced Nutrient Removal	38,334,675	-	3,000,000	-	3,000,000	26,000,000	75.6%	Planning/Design/Construction
Frederick	Thurmont Enhanced Nutrient Removal	6,800,000	300,000	3,800,000	-	3,800,000	-	60.3%	Design Construction

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>Amount</u>	<u>Amount Encumbered to Date</u>	<u>Amount Remaining to Be Encumbered</u>	<u>Future Request</u>	<u>Total State Share (%)</u>	<u>Status</u>
Harford	Aberdeen Enhanced Nutrient Removal	24,893,000	200,000	13,130,000	1,500,000	11,630,000	-	53.5%	Design/Construction
Harford	Joppatowne Wastewater Treatment Plant – Enhanced Nutrient Removal	5,285,500	-	300,000	888,000	-588,000	2,632,268	55.5%	Planning/Design
Harford	Sod Run Wastewater Treatment Plant – Enhanced Nutrient Removal	53,296,500	50,000	3,000,000	4,233,000	-1,233,000	36,818,550	74.8%	Planning/Design
Howard	Little Patuxent Enhanced Nutrient Removal	116,289,000	530,000	35,470,000	-	35,470,000	-	31.0%	Design/Construction
Montgomery	Damascus Enhanced Nutrient Removal	4,027,984	325,000	3,425,000	-	3,425,000	-	93.1%	Construction
Montgomery	Poolesville Enhanced Nutrient Removal	3,100,000	100,000	400,000	-	400,000	-	16.1%	Construction
Montgomery	Seneca Enhanced Nutrient Removal	37,200,000	-	9,150,000	-	9,150,000	-	24.6%	Design/Construction
Prince George’s	Bowie Enhanced Nutrient Removal	10,758,980	600,000	8,256,750	8,267,000	-10,250	-	82.3%	Construction
Prince George’s	Parkway Wastewater Treatment Plant – Enhanced Nutrient Removal	18,200,000	-	1,000,000	-	1,000,000	12,450,000	73.9%	Design/Construction
Prince George’s	Piscataway Enhanced Nutrient Removal	6,000,000	-	5,950,000	-	5,950,000	-	99.2%	Design/Construction
Prince George’s	Western Branch Enhanced Nutrient Removal	72,500,000	1,000,000	28,450,000	-	28,450,000	-	40.6%	Design/Construction
St. Mary’s	Marlay – Taylor Wastewater Treatment Plant – Enhanced Nutrient Removal	32,519,800	200,000	1,000,000	-	1,000,000	12,100,000	40.9%	Planning/Design/Construction
Washington	Conocoheague Wastewater Treatment Plant – Enhanced Nutrient Removal	33,703,610	-	3,690,000	-	3,690,000	5,449,750	27.1%	Planning/Design/Construction

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>Amount</u>	<u>Amount Encumbered to Date</u>	<u>Amount Remaining to Be Encumbered</u>	<u>Future Request</u>	<u>Total State Share (%)</u>	<u>Status</u>
Washington	Maryland Correctional Institute – Enhanced Nutrient Removal	3,904,000	-	438,000	-	438,000	3,466,000	100.0%	Planning
Washington	Winebrenner Wastewater Treatment Plant – Enhanced Nutrient Removal	16,208,700	100,000	300,000	-	300,000	3,180,000	22.1%	Planning/Design
Wicomico	Delmar Enhanced Nutrient Removal	7,940,000	200,000	2,740,000	2,344,000	396,000	-	37.0%	Construction
Wicomico	Fruitland Wastewater Treatment Plant – Enhanced Nutrient Removal	8,225,000	-	300,000	-	300,000	2,800,000	37.7%	Planning/Design
Worcester	Snow Hill Wastewater Treatment Plant – Enhanced Nutrient Removal	15,000,000	-	400,000	-	400,000	2,980,000	22.5%	Planning/Design
Total		\$1,841,304,271	\$20,785,000	\$332,157,825	\$150,321,000	\$181,836,825	\$789,365,281		

with \$350,000 in funding. Now the estimate is for the Dwyer Site project to cost \$7.2 million with funding presumably occurring over the next three or four years. MDE indicates that the reasons for the increasing costs are as follows:

- **Large site and difficult terrain** – a 72-acre site overgrown with dense vegetation;
- **Difficulty in identifying the main pollution area** – In March 2009, MDE finally identified the major source of contamination in a monitoring well; and
- **Difficulty in removing/treating the material** – trichloroethylene (also known as trichloroethene) is a colorless liquid that dissolves a little in water but can remain in ground water for a long time and may stick to soil particles and remain for a long time.

A further complicating factor for the Dwyer Site project is that there is no responsible party. According to MDE, Triumph Explosive operated the facility on the Dwyer Site prior to the end of World War II and then was liquidated. The Department of Defense has stated that it did not own the plant, and the current owners inherited the site from their grandfather, thus excluding them from responsibility under Maryland law. **DLS recommends that MDE comment on whether the \$7.2 million current estimate for the Dwyer Site cleanup and remediation is expected to hold and on how the site will be used after the cleanup.**

Hazardous Substance Clean-up Program Authorization and Expenditure 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	\$8.380	\$8.380	\$8.187	\$0.000	\$0.193
2006	1.075	1.075	0.955	0.000	0.120
2007	0.500	0.500	0.456	0.000	0.044
2008	0.850	0.850	0.325	0.000	0.525
2009	1.000	0.697	0.032	0.303	0.968
2010	0.000	0.000	0.000	0.000	0.000
Total	\$11.805	\$11.502	\$9.955	\$0.303	\$1.850

As of December 31, 2009.

The authorization summary reflects an improvement in both the amount of funding encumbered and expended. Between July 1 and December 31, 2009, MDE encumbered \$0.1 million. In the fiscal 2009 analysis, \$1.4 million in fiscal 2008 and prior funding remained to be encumbered and \$2.3 million remained to be expended. This has been reduced to \$0.3 million to be encumbered and \$1.9 million to be expended. However, there was no appropriation, and MDE had a year to encumber and expend funding without additional funds to be encumbered or expended. **DLS recommends that MDE comment on why so little prior year funding has been expended despite the one-year hiatus in funding.**

Hazardous Substance Clean-up Program Analysis and Performance

MDE does not appear to have a formal measure for the measure of the success of the Hazardous Substance Clean-up Program. It once used the number of sites on the State Master List and Nonstate Master List as a measure of the success of the Hazardous Substance Clean-up program; however, that data is not provided in its Managing for Results measures for the fiscal 2011 allowance. Regardless, the measure did not reflect the number of sites successfully remediated through the Hazardous Substance Clean-up program. This is because sites are added to and removed from the list independently of the effectiveness of the Hazardous Substance Clean-up program. **DLS again recommends that MDE provide performance information about the total number of sites identified and remediated annually.**

Recommended Actions

PAYGO Recommended Actions

1. Concur with Governor's allowance.

Hazardous Substance Clean-up Program Fiscal 2011 Proposed Projects

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>FY 2011 Amount</u>	<u>Future Request</u>	<u>Total State Share (%)</u>
Cecil	Dwyer Site – Remediation Project	\$7,193,000	2,693,000	\$800,000	3,700,000	100.0%
Total		\$7,193,000	\$2,693,000	\$800,000	\$3,700,000	

Hazardous Substance Clean-up Program Current Project Status

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>Amount</u>	<u>Amount Encumbered to Date</u>	<u>Amount Remaining to Be Encumbered</u>	<u>Future Request</u>	<u>Total State Share (%)</u>	<u>Status</u>
Baltimore City	Chemical Metals Inc.	\$653,297	\$603,297	\$50,000	\$0	\$50,000	-	100.0%	Under Remediation
Cecil	Dwyer Site	7,193,000	2,493,000	200,000	0	200,000	\$4,500,000	100.0%	Under Remediation
Statewide	Site Assessments	1,201,647	-	201,647	0	201,647	1,000,000	100.0%	
Total		\$9,047,944	\$3,096,297	\$451,647	\$0	\$451,647	\$5,500,000		

MDE issued a RFP to local governments on February 1, 2010. The request is for \$8 million in proposals for fiscal 2011, 2012, or both fiscal years. Effective fiscal 2011, there will not be an MDE direct grant program for septic system upgrades. Instead, all grants will be made on a reimbursable basis to county governments, which in turn will award contracts in compliance with competitive procurements and minority/women business enterprises participation considerations.

The fiscal 2011 allowance includes \$9 million in special funds and would provide for approximately 720 septic system upgrades at approximately \$12,500 per upgrade. The fiscal 2011 allowance is \$1 million less than the fiscal 2010 appropriation; however, the original fiscal 2010 appropriation was only \$1 million until a budget amendment was processed bringing in \$9 million in additional appropriation to handle increased interest. Fiscal 2010 revenues reflect a decrease of approximately \$5 million due to the increase in the percentage of funds for cover crops per the BRFA of 2009. This revenue decrease has not limited the program's appropriation due to available fund balance.

Exhibit 12 depicts the amount of fiscal 2007-2010 Septic System Upgrade Program grant amounts administered by counties. There are several counties that have received multiple grant awards including Calvert, Caroline, Charles, and Wicomico. Among the septic project applicants, the Canaan Valley Institute has conducted installations in Frederick and Washington counties. The overall amount awarded is \$16.6 million, and \$9.4 million has been spent as of December 31, 2009, leaving \$6.6 million in outstanding grant awards.

Exhibit 13 reflects the septic systems installed by the county-administered program and by MDE directly. Through December 2009, the MDE direct program has installed 1,225 septic systems while the county-administered programs have installed 730 systems. Through fiscal 2010, the MDE direct program has spent \$15 million.

Exhibit 12
Bay Restoration Fund Septic Grant Awards Managed by Jurisdictions
Fiscal 2007-2010 (Through December 31, 2009)

<u>Location</u>	<u>Septic Projects Applicant</u>	<u>Initial BPW Date</u>	<u>Initial Grant Award</u>	<u>Cumulative Grant Payments</u>				<u>Remaining Grant Balance (12/31/09)</u>	<u>Grant Status</u>
				<u>Fiscal 2007</u>	<u>Fiscal 2008</u>	<u>Fiscal 2009</u>	<u>Fiscal 2010</u>		
Anne Arundel	Anne Arundel Co. Health Dept.	12/6/06	\$2,644,000	\$0	\$829,958	\$1,889,559	\$2,448,864	\$0	Closed
Calvert	Calvert Co. Dept of Planning/Zoning	12/6/06	933,000	0	46,272	871,566	932,401	0	Closed
Calvert	Calvert Co. Planning & Zoning #2	11/5/08	1,582,000	n/a	n/a	0	0	1,582,000	Open
Caroline	Caroline Co. Health Dept.	12/6/06	144,000	0	69,510	144,000	144,000	0	Closed
Caroline	Caroline Co. Health Dept. #2	11/5/08	277,000	n/a	n/a	75,445	274,072	0	Closed
Cecil	Cecil Co. Health Dept.	11/5/08	650,000	n/a	n/a	0	188,677	461,323	Open
Charles	Charles Co. Health Dept.	12/6/06	604,000	0	238,287	601,817	601,817	0	Closed
Charles	Charles Co. Health Dept. II	6/17/09	900,000	n/a	n/a	0	0	900,000	Open
Dorchester	Dorchester Co. Health Dept.	11/5/08	409,000	n/a	n/a	46,690	338,916	70,084	Open
Frederick	Canaan Valley Institute/Frederick Co	12/6/06	712,000	0	172,069	593,803	631,907	0	Closed
Harford	Harford Co. Health Dept.	11/5/08	1,038,000	n/a	n/a	0	36,342	1,001,658	Open
Kent	Kent Co. Dept. of Water/WW	12/6/06	597,000	0	96,098	596,404	597,000	0	Closed
State	Maryland Dept. of Natural Resources	12/6/06	287,000	0	0	0	0	0	Closed
Talbot	Talbot Co. Dept. of Natural Resources	12/6/06	1,168,000	0	368,767	751,427	908,927	259,073	Open
Washington	Canaan Valley Institute/Washington #2	11/5/08	750,000	n/a	n/a	127,728	539,160	210,840	Open
Wicomico	Wicomico Co. Health Dept.	12/6/06	771,000	0	523,923	770,601	770,601	0	Closed
Wicomico	Wicomico Co. Health Dept. #2	11/5/08	1,948,000	n/a	n/a	55,231	676,244	1,271,756	Open
Worcester	Worcester Co. Dept. of Environ. Pgms	12/6/06	1,142,000	0	0	291,216	291,216	850,784	Open
	Total		\$16,556,000	\$0	\$2,344,883	\$6,815,488	\$9,380,144	\$6,607,517	

BPW: Board of Public Works

Note: Fiscal 2010 data is through December 31, 2009. Some grants may be reduced at closeout and thus reflect final cumulative grant payments less than the initial grant award.

Source: Maryland Department of the Environment; Department of Legislative Services

Exhibit 13
County Reimbursement and MDE Direct Septic Installations
Fiscal 2008-2010 (Through December 2009)

	<u>2008</u>	<u>2009</u>	<u>2010</u> <u>(through December 2009)</u>	<u>Total</u>
<i>County Reimbursement</i>				
Anne Arundel	44	72	0	116
Calvert	35	49	13	97
Caroline	12	17	7	36
Cecil	0	1	20	21
Charles	19	16	6	41
Dorchester	0	11	4	15
Frederick	14	17	0	31
Harford	0	0	19	19
Kent	12	28	2	42
Talbot	48	52	10	110
Washington	0	16	20	36
Worcester	8	34	17	59
Wicomico	48	19	40	107
Subtotal	240	332	158	730
<i>MDE Direct</i>	51	566	608	1,225
Subtotal	51	566	608	1,225
Total	291	898	766	1,955

MDE: Maryland Department of the Environment

Source: BayStat; Department of Legislative Services

Bay Restoration Fund – Septic System Projects Authorization and Expenditure 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
2006	0.000	0.000	0.000	0.000	0.000
2007	11.000	11.000	8.443	0.000	2.557
2008	6.000	6.000	0.215	0.000	5.785
2009	6.000	4.796	4.140	1.204	1.860
2010	10.000	0.000	0.000	10.000	10.000
Total	\$33.000	\$21.796	\$12.798	\$11.204	\$20.202

*Balance as of July 1, 2009. MDE did not provide updated data.

The authorization summary for the Septic System Upgrade Program reflects information available as of July 1, 2009. As of July, the program had encumbered all but \$1.2 million of fiscal 2009 and prior year funding but still had \$8.2 million in funding to be expended from fiscal 2009 and prior years. MDE’s county reimbursable grant awards account for this low level of expenditures because the award encumbers funds, which the county is then responsible for requesting reimbursement from MDE after project completion. **The Department of Legislative Services recommends that MDE provide updated authorization summary information and comment on the state of expenditure of funding particularly relative to the shift to a completely county reimbursable grant program.**

Bay Restoration Fund – Septic System Projects Fund Data

Fund History

	<i>FY 2009 Actual</i>	<i>FY 2010 Estimated</i>	<i>FY 2011 Estimated</i>
Beginning Balance	\$12,023,510	\$7,936,259	\$632,460
Revenue			
General Funds	\$0	\$0	\$0
General Obligation Bonds	0	0	0
Bay Restoration Fund Fee Revenue	8,900,000	3,000,000	8,700,000
Investment and Other Income	700,000	600,000	600,000
Total Revenue	\$9,600,000	\$3,600,000	\$9,300,000
Total Available	\$21,623,510	\$11,536,259	\$9,932,460
Encumbrances			
Septic Grant Awards*	\$13,117,251	\$10,303,799	\$9,000,000
Operating Expenses	570,000	600,000	600,000
Total Encumbrances	13,687,251	10,903,799	9,600,000
Ending Balance	\$7,936,259	\$632,460	\$332,460

*Grant awards as of December 31, 2009 = \$0.3 million (1 individual septic project). MDE will take a request for proposals to the Board of Public Works in February 2010.

The number of grant awards has decreased since last year from 7 counties and 104 individual septic projects for \$7.93 million (December 31, 2008) to 1 individual septic project for \$0.3 million as of December 31, 2009. The one project is for the Life in Jesus septic system connection to a wastewater treatment plant. However, MDE plans on issuing a request for proposals for the county reimbursable grants in February 2010.

The Bay Restoration Fund Septic System Upgrade Program fund data indicates that MDE anticipates encumbering \$10.3 million in fiscal 2010. This indicates that MDE will use \$0.3 million in carryover funding from prior years since the fiscal 2010 appropriation is \$10.0 million.

Program Analysis and Performance

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. **DLS recommends that MDE comment on why a performance measure that provides an estimate of the impact that this program has on the State's overall level of point-source nutrient pollution has not been provided.**

Issues

1. Increased Demand for Septic System Upgrade Program

Chapter 280 of 2009 (Chesapeake Bay Nitrogen Reduction Act of 2009) prohibited new installation or replacement of existing on-site sewage disposals systems on property in the Chesapeake and Atlantic Coastal Bays Critical Area unless the systems utilize the best available nitrogen removal technology. The legislation also provided for an \$8,000 fine for violations. MDE advises that it continues to provide grants for failing systems in the Critical Area, and that there are failing systems on a waiting list. MDE's priority for funding septic system upgrades is as follows: (1) failing systems in the Critical Area; (2) other failing systems; (3) new or replacement systems in the Critical Area; and (4) other new or replacement systems.

At the time Chapter 280 was passed, there was some confusion about the amount of funding available in the Septic System Upgrade Program to fund the upgrade of systems in the Critical Area. This confusion was compounded by a rapid increase in demand for the program and the reduction of fiscal 2010 revenues used by the program as part of the BRFA of 2009 actions that increased the amount of revenue that went to cover crops from 40.0% of funding to 77.6%, which effectively reduced the program's revenues by \$5 million.

MDE states that it never intended to indicate that all septic system upgrades in the Critical Area would be funded by the program. Instead, the intent was to convey that there was sufficient revenue to upgrade failing septic systems in the critical area. Since new septic systems are not a priority in the allocation of program funding, homeowners seeking to put in new septic systems were never the highest priority recipients of funding. The amount of demand increased from 134 septic systems in the period between November 2008 and January 2009 to 590 septic systems between May and July 2009, which drew on a reduced revenue base as noted above.

Exhibit 14 shows the septic system applications on the wait list as of December 16, 2009. The highest priority goes to the 253 failing systems in the critical area followed by the 479 failing systems outside of the critical area. At issue are the 619 applications for new septic systems in the critical area. The demand is highest for these types of upgrades in St. Mary's, Queen Anne's, Somerset, and Dorchester counties.

**Exhibit 14
Septic System Applications on Wait List
As of December 16, 2009**

	<u>Critical Area</u>	<u>Noncritical Area</u>	<u>Total</u>
Failing	253 (49 county verified; 204 awaiting verification)	479	732
Not Failing	619	1,382	2,001
Total	872	1,861	2,733

Source: Maryland Department of the Environment; Department of Legislative Services

In order to stretch its upgrade funding and provide for equity in terms of ability-to-pay, MDE administratively has implemented income-based sliding scale criteria for septic system grant awards effective January 1, 2010. **Exhibit 15** shows the sliding scale for grant awards.

**Exhibit 15
Income-based Sliding Scale for Septic System Grant Awards**

<u>% of Grant Award</u>	<u>Tax Rate</u>	<u>2008 Taxable Income (Filing Jointly or Household Income)</u>	<u>2008 Taxable Income (Single Filers)</u>
100	10 to 15%	Up to \$65,000	Up to \$32,550
75	25%	\$65,101 to \$131,450	\$32,551 to \$78,850
50	28%	\$131,451 to \$200,300	\$78,851 to \$164,550
25	33 to 35%	Over \$200,301	Over \$164,551

Source: Maryland Department of the Environment

The Department of Legislative Services recommends that MDE comment on the impact of the income-based sliding scale on the septic system application wait list and the overall status of the wait list.

Recommended Actions

PAYGO Recommended Actions

1. Concur with Governor's allowance.

Biological Nutrient Removal Program (Statewide)

General Obligation Bonds **\$33,300,000** **Recommendation: Approve**

Bill Text: Provide not more than \$33,300,000 in grants for projects to remove nutrients at publicly owned sewage treatment works.

Program Description: This program provides cost-share grant funds to local governments to retrofit or upgrade wastewater treatment plants (WWTP) to remove a greater portion of nutrients (nitrogen and phosphorus) from discharges. The goal of the program is to implement the *Chesapeake 2000* agreement point source nutrient reduction strategy. The State provides up to 50% of the total eligible project cost, with the ability to provide 100% of the project cost, as provided under Title 9, Sections 9-348 of the Environment Article.

There are two significant technologies being implemented to reduce nutrients in WWTP effluent: Biological Nutrient Removal (BNR) and Enhanced Nutrient Removal (ENR).

- BNR biologically removes the total nitrogen to an average level of 8 milligrams per liter (mg/L) and the total phosphorus to an average level of 2 mg/L prior to discharging the water into the receiving waters.
- ENR takes water that has gone through the BNR process and further refines the effluent physically, bio-chemically, or chemically to an average level of 3 mg/L nitrogen and 0.3 mg/L phosphorus.

All BNR upgrades implemented by the Maryland Department of the Environment (MDE) will have the capacity to accommodate ENR upgrades in the future.

Prior Authorization and Capital Improvement Program

Authorization Request (\$ in Millions)

<i>Fund Source</i>	<i>2009 Approp.</i>	<i>2010 Approp.</i>	<i>2011 Allowance</i>	<i>2012 Estimate</i>	<i>2013 Estimate</i>	<i>2014 Estimate</i>	<i>2015 Estimate</i>
GO Bonds	\$18.448	\$16.000	\$33.300	\$30.900	\$28.100	\$21.300	\$18.000
Total	\$18.448	\$16.000	\$33.300	\$30.900	\$28.100	\$21.300	\$18.000

The fiscal 2011 allowance provides \$33.3 million in general obligation bonds for BNR upgrades to WWTPs. This funding is \$6.0 million greater than the funding projected for fiscal 2011 in the 2009 *Capital Improvement Program* (CIP). The fiscal 2011 allowance is \$17.3 million more than the fiscal 2010 appropriation because of deferred funding for the Patapsco wastewater treatment plant and to reflect updated project schedules and cost estimates. If the requested \$33.3 million is provided, MDE would be able to fund six projects in five jurisdictions and a regional plant. The majority of the authorization, 67% of the appropriation, is budgeted for the Patapsco wastewater treatment plant upgrade. The Blue Plains wastewater treatment plant upgrade is budgeted for 18% of the appropriation.

In the 2010 CIP, funding for BNR decreases steadily from \$30.9 million to \$18.0 million between fiscal 2012 and 2015. The funding levels reflect the decreasing funding for the Patapsco upgrade, which more than offsets the increased Blue Plains upgrade funding.

Biological Nutrient Removal Authorization Encumbrance and Expenditure 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	\$204.234	\$204.234	\$199.726	\$0.000	\$4.508
2006	15.000	14.719	14.521	0.281	0.479
2007	18.000	18.000	12.841	0.000	5.159
2008	7.874	7.874	3.850	0.000	4.024
2009	18.448	18.448	2.092	0.000	16.356
2010	16.000	7.158	0.141	8.842	15.859
Total	\$279.556	\$270.433	\$233.171	\$9.123	\$46.385

December 31, 2009

As of December 31, 2009, the unexpended balance for fiscal 2010 and prior years is \$46.4 million, of which \$9.1 million is still to be encumbered. This means that \$37.3 million has been encumbered for projects but has not been spent. Of this amount, there is \$0.16 million in unexpended funds for a statewide sewer inflow and infiltration evaluation that are expected to be expended within one year. The remaining unexpended funds are primarily for 18 projects in the following stages:

- **Administrative Closeout** – 3 projects are awaiting administrative closeout; \$1.3 million in unexpended funds, which are expected to be expended within one year;
- **Construction Phase** – 11 projects are being constructed; \$32.7 million in unexpended funds, which are expected to be expended as soon as construction and administrative closeout has been completed; and
- **Design Phase** – 4 projects are completing design; \$3.1 million in unexpended funds.

Program Analysis and Performance

Exhibit 16 shows the status of BNR and ENR construction for the 67 largest publicly operated WWTPs in the State. In **Exhibit 17**, the five projects selected in fiscal 2011 would help remove 7.5 million pounds (lbs) of nitrogen per year and 0.2 million lbs of phosphorus. The projects serve 186,211 homes and on average will take about eight and a half years to complete.

Exhibit 16 Status of BNR and ENR Construction Fiscal 2010

	<u>BNR</u>	<u>ENR</u>
Pre-planning	1	7
Planning	1	9
Design	5	25
Construction	7	13
Under Operation	53	13
Total	67	67

BNR: biological nutrient removal

ENR: enhanced nutrient removal

Note: The Bay Restoration Fund Advisory Committee added the Hampstead wastewater treatment plant increasing the major plants to 67.

Source: Maryland Department of the Environment

**Exhibit 17
Fiscal 2011 Project Data**

<u>Project</u>	<u>Funding Fiscal 2010 (\$ in Millions)</u>	<u>Homes Served</u>	<u>Capacity (mgd)</u>	<u>Nitrogen (Pounds Per Year)</u>	<u>Phosphorous (Pounds Per Year)</u>	<u>Begin – End Project</u>
Patapsco BNR	\$22.150	172,776	73.00	2,223,259	222,326	6/1992 – 3/2013 (21 years)
Hampstead BNR	0.050	3,120	0.90	27,410	2,741	12/2009 – 12/2012 (3 years)
Emmitsburg BNR	2.000	1,164	0.75	22,842	2,284	10/2006 – 9/2012 (6 years)
Winebrenner BNR	1.100	1,049	1.00	30,456	3,046	12/2006 – 5/2011 (4.5 years)
Snow Hill BNR	2.000	2,000	0.50	15,288	1,523	6/1998 – 6/2012 (14 years)
Blue Plains BNR	6.000	544,776	169.60	5,165,270	Not provided	11/2003 – 6/2015 (11.5 years)
Total	\$33.300	724,885	245.75	7,484,525	231,920	

BNR: biological nutrient removal
mgd: millions of gallons per day

Note: The Biological Nutrient Removal program funding for the Blue Plains BNR project reflects the homes served in Montgomery County, Prince George’s County, District of Columbia, and portions of Virginia; however, the capacity and nitrogen pounds reduced per year reflect only the Maryland portion of the total plant capacity. No phosphorus reduction information was provided for the Blue Plains BNR.

Source: Maryland Department of the Environment

Recommended Actions

GO Recommended Actions

1. Concur with Governor's allowance.

Biological Nutrient Removal Program Fiscal 2011 Proposed Projects

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>FY 2011 Amount</u>	<u>Future Request</u>	<u>Total State Share (%)</u>
Baltimore City	Patapsco Wastewater Treatment Plant – Biological Nutrient Removal	\$416,031,190	\$33,594,666	\$22,150,000	\$19,405,334	18.1%
Carroll	Hampstead Wastewater Treatment Plant – Biological Nutrient Removal	3,000,000	-	50,000	450,000	16.7%
Frederick	Emmitsburg Wastewater Treatment Plant – Biological Nutrient Removal	24,500,000	500,000	2,000,000	1,773,860	17.4%
Washington	Winebrenner Wastewater Treatment Plant – Biological Nutrient Removal	16,208,700	100,000	1,100,000	-	7.4%
Worcester	Snow Hill Wastewater Treatment Plant – Biological Nutrient Removal	15,000,000	449,631	2,000,000	1,050,369	23.3%
Regional	Blue Plains Wastewater Treatment Plant – Biological Nutrient Removal	1,080,000,000	6,831,231	6,000,000	63,168,769	7.0%
Total		\$1,554,739,890	\$41,475,528	\$33,300,000	\$85,848,332	

Biological Nutrient Removal Program Current Project Status

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>Amount</u>	<u>Amount Encumbered to Date</u>	<u>Amount Remaining to Be Encumbered</u>	<u>Future Request</u>	<u>Total State Share (%)</u>	<u>Status</u>
Baltimore City	Patapsco Wastewater Treatment Plant – Biological Nutrient Removal	\$416,031,190	\$25,652,873	\$7,941,793	\$0	\$7,941,793	\$41,555,334	18.1%	Construction
Frederick	Emmitsburg Wastewater Treatment Plant – Biological Nutrient Removal	24,500,000	-	500,000	0	500,000	3,773,860	17.4%	Planning/ Design
Harford	Havre de Grace Wastewater Treatment Plant – Biological Nutrient Removal	47,190,393	4,500,000	1,158,207	1,158,207	0	-	12.0%	Construction
Worcester	Snow Hill Wastewater Treatment Plant – Biological Nutrient Removal	15,000,000	49,631	400,000	0	400,000	3,050,369	23.3%	Planning/ Design
Total		\$502,721,583	\$30,202,504	\$10,000,000	\$1,158,207	\$8,841,793	\$48,379,563		

Supplemental Assistance Program (Statewide)

General Obligation Bonds **\$5,000,000** **Recommendation: Approve**

Bill Text: Provide not more than \$5,000,000 in grants to provide assistance to grant and loan recipients to meet the local share of construction costs.

Program Description: This program provides grant assistance to local governments for planning, designing, and constructing wastewater treatment plant (WWTP) improvements, for connection of older communities with failing septic systems, for correction of combined sewer overflows and sanitary sewer overflows, and for correction of excessive infiltration and inflow throughout the State. Funds are targeted principally to two types of projects: (1) maintaining compliance at existing WWTPs; and (2) eliminating failing septic systems in older communities. Funds are directed principally to projects where local governments need a subsidy to undertake the needed water quality or public health project. This program is often used in conjunction with other sources of federal and State financial assistance to achieve project affordability. This program funds up to 100% of eligible costs for sewer projects and up to 25% of the Biological Nutrient Removal project costs for small, lower-income jurisdictions.

In addition, this program is taking over for the Sewer Rehabilitation Program, which no longer is receiving Bay Restoration Fund – Wastewater funding.

Prior Authorization and Capital Improvement Program

Authorization Request (\$ in Millions)

<i>Fund Source</i>	<i>2009 Approp.</i>	<i>2010 Approp.</i>	<i>2011 Allowance</i>	<i>2012 Estimate</i>	<i>2013 Estimate</i>	<i>2014 Estimate</i>	<i>2015 Estimate</i>
GO Bonds	\$5.000	\$5.000	\$5.000	\$5.000	\$5.000	\$5.000	\$5.000
Total	\$5.000	\$5.000	\$5.000	\$5.000	\$5.000	\$5.000	\$5.000

The \$5.0 million fiscal 2011 allowance for this program is level with fiscal 2010 program funding and is consistent with the amount anticipated in the 2009 *Capital Improvement Program*. The fiscal 2011 allowance will assist nine projects in five jurisdictions in these major categories:

- \$2.1 million for four combined sewer overflow projects;
- \$1.5 million for two biological nutrient removal upgrade projects;

- \$0.8 million for two sewer rehabilitation projects; and
- \$0.7 million for one inflow and infiltration correction.

Supplemental Assistance Program Authorization Encumbrance and Expenditure 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	\$58.094	\$57.987	\$57.760	\$0.107	\$0.334
2006	4.000	4.000	3.499	0.000	0.501
2007	6.000	6.000	5.115	0.000	0.885
2008	5.000	4.893	3.570	0.107	1.430
2009	5.000	4.936	0.365	0.064	4.635
2010	5.000	0.300	0.126	4.700	4.874
Total	\$83.094	\$78.116	\$70.435	\$4.978	\$12.659

December 31, 2009

As of December 31, 2009, the unexpended balance for fiscal 2010 and prior years is \$12.7 million of which \$5.0 million is still to be encumbered. This means that approximately \$7.7 million has been encumbered for projects but has not been spent. These unexpended funds are primarily for 21 projects in the following stages:

- **Administrative Closeout** – two projects are awaiting administrative closeout; \$0.052 million in unexpended funds, which are expected to be expended within one year;
- **Construction Phase** – ten projects are being constructed; \$4.2 million in unexpended funds, which are expected to be expended as soon as construction and administrative closeout has been completed; and
- **Design/Planning Phase** – nine projects are in the planning phase; \$3.4 million in unexpended funds.

Program Analysis and Performance

The Supplemental Assistance Program has provided more than \$78 million for compliance, public health, and system deficiency issues. However, preliminary results from the 2008 Clean Water Needs Survey (anticipated to be sent to Congress in early calendar 2010) indicate that there is over \$464 million needed to eliminate combined sewer overflows and \$979 million to eliminate sanitary sewer overflows over the next 20 years. In addition, in the Maryland Department of the Environment's most recent solicitation for projects, \$752 million was requested for Supplemental Assistance Program projects.

Recommended Actions

GO Bond Recommended Actions

1. Concur with Governor's allowance.

Supplemental Assistance Program Fiscal 2011 Proposed Projects

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>FY 2011 Amount</u>	<u>Future Request</u>	<u>Total State Share (%)</u>
Allegany	Braddock Run Interceptor – Inflow and Infiltration Correction	\$3,909,066	-	\$650,000	\$350,000	25.6%
Allegany	Cumberland Combined Sewer Overflow	47,000,000	\$5,147,000	500,000	16,478,000	47.1%
Allegany	Frostburg Combined Sewer Overflow Elimination Project	20,000,000	2,347,000	500,000	2,153,000	25.0%
Allegany	Westernport Combined Sewer Overflow	19,000,000	3,354,693	400,000	6,245,307	52.6%
Charles	Benedict Central Sewer Collection and Treatment System	9,000,000	400,000	400,000	-	8.9%
Dorchester	Cambridge – Combined Sewer Overflow Project	2,684,000	600,000	650,000	-	46.6%
Dorchester	Susquehanna Point, Madison, and Woolford – Sewer Collection System Installation	8,590,000	1,043,355	400,000	-	16.8%
Frederick	Emmitsburg Wastewater Treatment Plant – Biological Nutrient Removal	24,500,000	543,590	700,000	593,340	7.5%
Worcester	Snow Hill Wastewater Treatment Plant – Biological Nutrient Removal	15,000,000	100,000	800,000	850,000	11.7%
Total		\$149,683,066	\$13,535,638	\$5,000,000	\$26,669,647	

Supplemental Assistance Program Current Project Status

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>Amount</u>	<u>Amount Encumbered to Date</u>	<u>Amount Remaining to Be Encumbered</u>	<u>Future Request</u>	<u>Total State Share (%)</u>	<u>Status</u>
Allegany	Cumberland Combined Sewer Overflow	\$47,000,000	\$4,647,000	\$500,000	-	\$500,000	\$16,978,000	47.1%	Construction
Allegany	Frostburg Combined Sewer Overflow	20,000,000	1,847,000	500,000	-	500,000	2,653,000	25.0%	Construction
Allegany	Westernport Combined Sewer Overflow	19,000,000	2,854,693	500,000	-	500,000	6,645,307	52.6%	Construction
Caroline	Federalsburg Maple Avenue and South Main Street – Inflow and Infiltration Correction	889,576	-	300,000	\$300,000	-	-	33.7%	Construction
Caroline	Federalsburg Wastewater Treatment Plant – Biological Nutrient Removal Project	9,487,713	495,000	685,000	-	685,000	-	12.4%	Construction
Charles	Benedict Central Sewer Collection and Treatment System	9,000,000	-	400,000	-	400,000	1,400,000	20.0%	Design
Dorchester	Cambridge – Combined Sewer Overflow Project	2,684,000	-	600,000	-	600,000	1,000,000	59.6%	Construction
Dorchester	Susquehanna Point, Madison, and Woolford – Sewer Collection System Installation	8,590,000	743,355	300,000	-	300,000	400,000	16.8%	Construction

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>Amount</u>	<u>Amount Encumbered to Date</u>	<u>Amount Remaining to Be Encumbered</u>	<u>Future Request</u>	<u>Total State Share (%)</u>	<u>Status</u>
Kent	Chesterville Wastewater Collection and Treatment System	1,933,050	-	500,000	-	500,000	-	25.9%	Construction
Kent	Edesville – Lover’s Lane Wastewater Collection System Project	950,000	-	450,000	-	450,000	-	47.4%	Construction
Talbot	Talbot County/ Martingham Utilities Cooperative – Wastewater Treatment Plant Improvements	3,063,000	100,000	100,000	-	100,000	-	6.5%	Construction
Worcester	Pocomoke City – Sewage Acceptor Station	125,000	-	65,000	-	65,000	-	52.0%	Construction
Worcester	Snow Hill Wastewater Treatment Plant – Biological Nutrient Removal	15,000,000	-	100,000	-	100,000	1,650,000	11.7%	Planning/ Design
Total		\$137,722,339	\$10,687,048	\$5,000,000	\$300,000	\$4,700,000	\$30,726,307		

Water Supply Financial Assistance Program (Statewide)

General Obligation Bonds \$2,500,000 Recommendation: Approve

Bill Text: Provide funds for assistance to State and local government entities to acquire, design, construct, rehabilitate, equip, and improve water supply facilities. The funds shall be administered in accordance with §§ 9-20 through 9-426 of the Environment Article and in accordance with the Code of Maryland Regulations (COMAR) 26.03.09.

Program Description: The General Assembly created the Water Supply Financial Assistance Program in 1982 to address the deteriorating condition of the State’s water supply infrastructure and the lack of adequate financing available to local governments to upgrade water supply systems. This program provides grants to assist small communities in the acquisition, construction, equipping, rehabilitation, and improvement of publicly owned water supply facilities. The State may provide up to 87.5% of total eligible project costs (not to exceed \$1.5 million per project), and a minimum 12.5% local match is required. In recent years, all assistance has been in the form of grants rather than loans. This program is often used in conjunction with other sources of federal and State financial assistance (such as the Drinking Water Revolving Loan Fund) to achieve project affordability.

Prior Authorization and Capital Improvement Program

**Authorization Request
(\$ in Millions)**

<i>Fund Source</i>	<i>2009 Approp.</i>	<i>2010 Approp.</i>	<i>2011 Allowance</i>	<i>2012 Estimate</i>	<i>2013 Estimate</i>	<i>2014 Estimate</i>	<i>2015 Estimate</i>
GO Bonds	\$3.650	\$2.500	\$2.500	\$2.500	\$2.500	\$2.500	\$2.500
Total	\$3.650	\$2.500	\$2.500	\$2.500	\$2.500	\$2.500	\$2.500

The fiscal 2011 allowance of \$2.5 million is level with both the fiscal 2010 appropriation and the 2009 *Capital Improvement Program* (CIP). The 2010 CIP anticipates level funding at \$2.5 million annually in future years.

Six projects in five jurisdictions are funded in the fiscal 2011 allowance, which would help provide safe drinking water for 38,212 households.

Water Supply Financial Assistance Program Authorization Encumbrance and Expenditure 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	\$55.815	\$55.815	\$54.511	\$0.000	\$1.304
2006	1.900	1.900	1.760	0.000	0.140
2007	2.500	2.500	1.689	0.000	0.811
2008	3.000	3.000	2.135	0.000	0.865
2009	3.650	3.650	1.197	0.000	2.453
2010	2.500	1.010	0.019	1.490	2.481
Total	\$69.365	\$67.875	\$61.311	\$1.490	\$8.054

December 21, 2009

The amount encumbered so far in fiscal 2010 includes a project – Bowman’s Addition Water Project in Allegany County for \$250,000 – that was not included on the Maryland Department of the Environment’s (MDE) list of projects as of July 1, 2009.

As of December 31, 2009, the unexpended balance for fiscal 2010 and prior years is \$8.0 million, of which \$1.5 million is still to be encumbered. This means that \$6.5 million has been encumbered for projects but has not been spent. These unexpended funds primarily are for 19 projects in the following stages:

- **Administrative Closeout** – 4 projects are awaiting administrative closeout; \$0.5 million in unexpended funds, which are expected to be expended within one year;
- **Construction Phase** – 11 projects are being constructed; \$3.8 million in unexpended funds, which are expected to be expended as soon as construction and administrative closeout has been completed; and
- **Design Phase** – 4 projects are being designed; \$2.2 million in unexpended funds.

Program Analysis and Performance

MDE has provided water supply grants through the Water Supply Financial Assistance Program that have helped provide financial assistance to approximately 32,497 households in 91 communities. The 2007 Drinking Water Infrastructure Needs Survey indicated that costs related to community water systems serving a population of 10,000 or fewer were \$761.3 million for the 20-year survey period. These costs break down as follows: transmission/distribution (\$390.4 million), treatment (\$152.8 million), storage (\$125.0 million), source (\$77.1 million), and other (\$15.9 million). **The Department of Legislative Services recommends that MDE comment on how the Water Supply Financial Assistance Program funding meets the needs of the 2007 Drinking Water Infrastructure Needs Survey.**

Recommended Actions

GO Bond Recommended Actions

1. Concur with Governor's allowance.

***Water Supply Financial Assistance Program Fiscal 2011
Proposed Projects***

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>FY 2011 Amount</u>	<u>Future Request</u>	<u>Total State Share (%)</u>
Allegany	Frostburg Water System – Raw Water Transmission Main Upgrades	\$1,590,509	-	\$500,000	-	31.4%
Allegany	Lonaconing – Water Improvement Project – Phase V	6,898,000	\$1,080,521	400,000	-	21.5%
Dorchester	East New Market – New Wells	95,808	-	70,000	-	73.1%
Harford	Havre de Grace Water System – Water Main Replacement	1,350,000	-	750,000	\$250,000	74.1%
Wicomico	Salisbury Water Distribution System – Milford Street Elevated Storage Tank	4,702,000	-	630,000	-	13.4%
Worcester	Snow Hill Water System – Federal and Ironshire Streets – Water Main Replacement	390,681	-	150,000	-	38.4%
Total		\$15,026,998	\$1,080,521	\$2,500,000	\$250,000	

Water Supply Financial Assistance Program Current Project Status

<u>Subdivision</u>	<u>Project Title</u>	<u>Estimated Cost</u>	<u>Prior Auth.</u>	<u>Amount</u>	<u>Amount Encumbered to Date</u>	<u>Amount Remaining to Be Encumbered</u>	<u>Future Request</u>	<u>Total State Share (%)</u>	<u>Status</u>
Allegany	Lonaconing – Water Improvement Project – Phase V	\$6,898,000	\$780,521	\$300,000	\$300,000	-	\$400,000	21.5%	Construction
Calvert	Dares Beach/Chesapeake Heights – New Well	652,500	-	100,000	-	\$100,000	-	15.3%	Construction
Calvert	East Prince Frederick – New Tower, Well and Arsenic Treatment System	2,000,000	-	400,000	-	400,000	-	20.0%	Construction
Caroline	Federalsburg – Water Main Improvements	338,404	-	160,000	160,000	-	-	47.3%	Construction
Cecil	North East – Route 7 Water Distribution System	1,501,000	-	140,000	-	140,000	-	9.3%	Planning
Cecil	Whitaker Woods Water System	2,040,000	-	300,000	-	300,000	-	14.7%	Planning
Garrett	Grantsville – North and East 12” Water Line Extension	1,291,125	-	500,000	-	500,000	-	38.7%	Construction
Kent	Edesville – Lover’s Lane Water Extension	650,000	-	300,000	-	300,000	-	46.2%	Construction
Wicomico	Salisbury – New England Water Tower	3,300,000	-	300,000	300,000	-	-	9.1%	Construction
Total		\$18,671,029	\$780,521	\$2,500,000	\$760,000	\$1,740,000	\$400,000		