

DEPARTMENT OF THE ENVIRONMENT

SUMMARY

The Maryland Department of the Environment (MDE) is the State's primary agency responsible for environmental protection. MDE's mission is to protect and restore the quality of the State's land and water resources. The Department has broad regulatory, planning, and management responsibility for water quality, air quality, solid and hazardous waste management, stormwater management, and sediment control. The FY 2009 – FY 2013 Capital Improvement Program focuses on four goals: 1) reducing point and nonpoint source nutrient pollution of the Chesapeake Bay; 2) providing for safe, reliable, and adequate water and wastewater infrastructure; 3) mitigating flood damage; and 4) remediating sites contaminated by hazardous waste which pose a threat to public health or the environment.

Point Source Nutrient Reduction Strategies: A major focus for MDE's capital program is the reduction of nutrients entering the Chesapeake Bay through employment of Biological Nutrient Removal (BNR) and Enhanced Nutrient Removal (ENR). Extensive studies have identified that excess nutrients from wastewater treatment plant discharges, activities on agricultural and developed land, and sediment runoff from farms, construction sites, and other lands contribute to the degradation of water quality and living resources in the Bay. The results of these studies led to the 1987 Chesapeake Bay Agreement among the Bay States (Maryland, Virginia, Pennsylvania, and the District of Columbia) and the U.S. Environmental Protection Agency to reduce by 40%, from 1985 levels, the controllable loads of nutrients (nitrogen and phosphorus) entering the Bay. To meet the 40% reduction goal for point source discharges (reductions of 16.7 million pounds per year for nitrogen and 1.7 million pounds per year for phosphorus), Maryland has targeted 66 wastewater treatment facilities for nutrient removal upgrades through the use of BNR. These 66 facilities have flows of 500,000 gallons per day or more and they contribute more than 95% of the total sewage treatment plant discharge generated in Maryland. As of December 2007, there are 48 publicly owned wastewater treatment plants in operation with BNR. Based on the 2006 data, annual nitrogen loads have been reduced by 18.3 million pounds per year and phosphorus loads by 1.97 million pounds per year from 1985 levels. Through FY 2008, \$246.9 million in State capital appropriations have been authorized for BNR projects. An additional 18 plants are proposed to complete their BNR upgrades; two are in need of BNR "refinements" to successfully implement ENR. The current estimated cost of upgrades is approximately \$384 million, with the State's share being \$192 million.

Subsequently, as a result of the 2000 Chesapeake Bay Agreement, additional reductions of nitrogen and phosphorus from major wastewater treatment plants were determined necessary for the Bay cleanup. To achieve these new goals (reductions of 24.2 million pounds per year of nitrogen and 1.96 million pounds per year of phosphorus), Enhanced Nutrient Removal (ENR) must be employed at the 66 major wastewater treatment facilities where feasible.

The Bay Restoration Fund was established to provide the funding necessary to upgrade wastewater treatment facilities statewide to achieve Enhanced Nutrient Removal (ENR). It will assist the efforts to further reduce nitrogen and phosphorus loading in the Bay by over 7.5 million pounds of nitrogen per year and over 260,000 pounds of phosphorus per year, which represent over one-third of Maryland's commitment under the Chesapeake Bay 2000 Agreement. The Fund, financed by wastewater treatment plant users, will be used to upgrade Maryland's 66 major wastewater treatment plants with ENR technology so they are capable of achieving wastewater effluent quality of 3 mg/l total nitrogen and 0.3 mg/l total phosphorus. The facilities discharging to the Chesapeake Bay have priority. In addition, an annual fee will be collected from each home served by an onsite septic system. Sixty percent of these funds will be used for septic system upgrades and the remaining 40 percent will be transferred to the Department of Agriculture to be used for cover crops. The current five-year Capital Improvement Program provides \$604 million to complete ENR upgrades.

Nonpoint Source Nutrient Reduction Programs: Nonpoint source nutrient reduction programs focus on nonagricultural runoff from streets, parking lots, and other developed areas. The Stormwater Pollution Control and Small Creek and Estuary Restoration programs include construction of state-of-the-art stormwater management facilities to retrofit outdated stormwater systems and restoration of streams, creeks, estuaries, and wildlife/aquatic habitat through removal of organic-laden sediments and construction

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of structural and non-structural measures to stabilize and protect surface waters and habitat from future erosion and sedimentation. Funding for the Agricultural Cost-Share Program, which provides grants to farmers to adopt best management practices to reduce agricultural runoff, is provided to the Department of Agriculture.

Water and Wastewater Infrastructure: The Department has identified many communities in Maryland with water supply problems, some with potentially serious health risks. In addition, approximately four groundwater systems are estimated to be under the direct influence of surface water and will require modification to meet federal Safe Drinking Water Act regulations for protection from disease-causing organisms (e.g., giardia and viruses). MDE's most recent statewide needs survey has identified some \$3.96 billion in water infrastructure improvements needed throughout Maryland. Water infrastructure projects are funded through the State's Drinking Water Revolving Loan Fund and the Water Supply Assistance Programs. In addition to the pressing need for nutrient removal projects at wastewater treatment plants to effect a Chesapeake Bay cleanup, projects for the upgrade and replacement of obsolete sewage systems are needed to eliminate the discharge of raw sewage and to provide for adequate infrastructure to accommodate planned growth. The 2004 Clean Water Needs Survey identified \$6.1 billion in total wastewater improvement needs throughout the State. Wastewater infrastructure projects are funded through the State's Water Quality Revolving Loan Fund, and the Sewer Rehabilitation and Supplemental Assistance Grant Programs.

Flood Mitigation: Flooding is the highest natural hazard risk in Maryland. Approximately 79,000 structures are prone to flood damage and an estimated 194,000 Marylanders live or work in flood-prone areas of the State. This program provides grants to local jurisdictions for projects which reduce the risk of loss of life and property from flooding. Grant funds may be used to acquire flood-prone properties for demolition or relocation, install flood-warning systems, and construct flood control projects.

Hazardous Substance Control: The Hazardous Substance Cleanup Program provides State participation in the Federal Comprehensive Response, Compensation and Liability Act (Superfund). Funds are used for remedial action at uncontrolled sites listed on the federal "Superfund" National Priorities List. In addition, State funds are used to clean up other uncontrolled waste sites within the State which do not qualify for the federal Superfund, but which pose a substantial threat to public health and the environment. Hazardous material remediation typically involves removal or treatment of contaminated soil, treatment of contaminated water, or construction of caps or other barriers to prevent exposure to contamination. Remediation efforts typically prevent human exposure to contaminants, protect drinking water supplies by removing contamination from groundwater, and prevent the degradation of environmental resources.

CHANGES TO FY 2008 - FY 2012 CAPITAL IMPROVEMENT PROGRAM

Changes to FY 2009

Additions

None

Deletions

Comprehensive Flood Management Grant Program: MDE did not request FY 2009 funding for the Comprehensive Flood Management Grant Program. The Department is continuing to focus its efforts on Hurricane Isabel projects, and is utilizing the unexpended fund balance for these projects.

Changes to FY 2010 - FY 2012

None

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FY 2009 - FY 2013 Capital Improvement Program

Grants and Loans

OFFICE OF THE SECRETARY

Budget Code: UA01

Enhanced Nutrient Removal Program (Statewide)

FY 2009 Total \$138,000

The Enhanced Nutrient Removal Program (ENR) provides grants to local governments to implement enhanced nutrient removal technology at the largest sewage treatment plants in Maryland. The goal of the Program is to fulfill Maryland's commitment under the multi-state Chesapeake Bay Clean Up Agreement for major reductions of nutrients being discharged from sewage treatment plants into the Chesapeake Bay. The ENR Program can provide State grant funding of up to 100% of the eligible capital costs related to the planning, design, and construction of enhanced nutrient removal facilities. The FY 2009 budget will fund ENR upgrades at 31 wastewater treatment plants throughout Maryland. The 31 projects funded in FY 2009 will reduce the nitrogen load to the Chesapeake Bay by approximately 7 million pounds per year and the phosphorus load to the Chesapeake Bay by approximately 1.4 million pounds per year.

<u>Source</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>TOTAL</u>
Special Funds	68,000	23,000	1,000	13,000	4,000	109,000
Revenue Bonds	70,000	170,000	225,000	30,000	-	495,000
TOTAL	138,000	193,000	226,000	43,000	4,000	604,000

Enhanced Nutrient Removal Program Project List

<u>Subdivision</u>	<u>Project</u>	<u>Total Cost</u>	<u>Prior Auth.</u>	<u>State Funding</u>		<u>Total State Share</u>
				<u>FY 2009 Request</u>	<u>Future Request</u>	
Allegany	Cumberland Wastewater Treatment Plant - Enhanced Nutrient Removal	41,996	16,000 PC	14,564 C	-	73%
Allegany	George's Creek Wastewater Treatment Plant - Enhanced Nutrient Removal	22,389	2,000 PC	3,000 C	2,911 C	35%
Anne Arundel	Annapolis Wastewater Treatment Plant - Enhanced Nutrient Removal	14,229	1,000 P	6,800 PC	6,429 C	100%
Anne Arundel	Broadneck Wastewater Treatment Plant - Enhanced Nutrient Removal	14,200	1,000 P	6,500 PC	6,700 C	100%
Anne Arundel	Broadwater Wastewater Treatment Plant - Enhanced Nutrient Removal	14,359	500 P	500 P	13,359 PC	100%
Anne Arundel	Cox Creek Wastewater Treatment Plant - Enhanced Nutrient Removal	59,000	6,000 P	27,000 C	26,000 C	100%

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Anne Arundel	Mayo Large Communal Wastewater Treatment Plant - Enhanced Nutrient Removal	29,451	1,300 PC	1,000 C	337 C	9%
Baltimore City	Patapsco Wastewater Treatment Plant - Enhanced Nutrient Removal	204,361	40,000 PC	12,000 C	69,735 C	60%
Baltimore	Back River Wastewater Treatment Plant - Enhanced Nutrient Removal	117,000	5,000 P	3,000 P	109,000 PC	100%
Calvert	Chesapeake Beach Wastewater Treatment Plant - Enhanced Nutrient Removal	18,460	2,000 P	2,500 PC	1,858 C	34%
Carroll	Freedom District Wastewater Treatment Plant - Enhanced Nutrient Removal	7,000	400 P	300 P	6,300 C	100%
Carroll	Westminster Wastewater Treatment Plant - Enhanced Nutrient Removal	8,600	450 P	450 P	7,700 C	100%
Cecil	Perryville Wastewater Treatment Plant - Enhanced Nutrient Removal	13,200	1,200 PC	1,000 C	654 C	22%
Dorchester	Cambridge Wastewater Treatment Plant - Enhanced Nutrient Removal	6,000	1,600 PC	3,000 C	1,400 C	100%
Frederick	Ballenger Wastewater Treatment Plant - Enhanced Nutrient Removal	67,900	8,969 PC	10,000 C	3,031 C	32%
Frederick	Emmitsburg Wastewater Treatment Plant - Enhanced Nutrient Removal	15,300	1,600 P	5,000 C	400 C	46%
Frederick	Frederick Wastewater Treatment Plant - Enhanced Nutrient Removal	29,278	1,500 P	1,000 PC	26,778 C	100%
Frederick	Thurmont Wastewater Treatment Plant - Enhanced Nutrient Removal	3,230	300 P	2,000 C	930 C	100%
Harford	Aberdeen Wastewater Treatment Plant - Enhanced Nutrient Removal	29,000	2,200 P	6,700 PC	13,100 C	76%

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Harford	Joppatowne Wastewater Treatment Plant - Enhanced Nutrient Removal	10,000	619 P	4,219 PC	5,095 C	99%
Harford	Sod Run Wastewater Treatment Plant - Enhanced Nutrient Removal	46,262	1,500 P	9,249 PC	19,723 C	66%
Howard	Little Patuxent Wastewater Treatment Plant - Enhanced Nutrient Removal	49,800	1,400 P	1,400 P	25,200 C	56%
Montgomery	Seneca Wastewater Treatment Plant - Enhanced Nutrient Removal	7,889	400 P	400 P	7,039 C	99%
Prince George's	Bowie Wastewater Treatment Plant - Enhanced Nutrient Removal	8,200	1,600 PC	4,000 C	1,193 C	83%
Prince George's	Parkway Wastewater Treatment Plant - Enhanced Nutrient Removal	8,360	500 P	330 P	7,480 C	99%
Prince George's	Piscataway Wastewater Treatment Plant - Enhanced Nutrient Removal	2,490	200 P	1,500 C	740 C	98%
St. Mary's	Leonardtown Wastewater Treatment Plant - Enhanced Nutrient Removal	23,128	4,510 PC	618 C	-	22%
Washington	Conococheague Wastewater Treatment Plant - Enhanced Nutrient Removal	11,374	1,500 PC	3,700 C	2,630 C	69%
Washington	Hagerstown Wastewater Treatment Plant - Enhanced Nutrient Removal	10,060	2,087 PC	5,000 C	2,748 C	98%
Washington	Winebrenner Wastewater Treatment Plant - Enhanced Nutrient Removal	8,410	100 P	270 P	2,860 C	38%
Wicomico	Delmar Wastewater Treatment Plant - Enhanced Nutrient Removal	7,940	700	1,000 PC	300 C	25%
TOTAL		908,866	108,135	138,000	371,630	

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Maryland Water Quality Revolving Loan Fund (Statewide)

FY 2009 Total **\$90,000**

The Maryland Water Quality Revolving Loan Fund provides low-interest loans to local governments to finance water quality improvement projects. Projects eligible for funding include wastewater treatment plants, failing septic systems, and nonpoint source projects such as urban stormwater control projects. When federal funds are used to fund these projects, they require a 20% State match. Projects may also be funded in whole or in a combination of Special Funds, Revenue Bonds, Federal Funds, and General Funds. The FY 2009 budget includes funding for nineteen projects in twelve subdivisions.

<u>Source</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>TOTAL</u>
General Funds	5,180	5,200	5,200	5,200	5,200	25,980
Special Funds	28,920	28,950	28,950	28,950	28,950	144,720
Federal Funds	25,900	25,900	25,900	25,900	25,900	129,500
Revenue Bonds	30,000	30,000	30,000	30,000	30,000	150,000
TOTAL	90,000	90,050	90,050	90,050	90,050	450,200

Maryland Water Quality Revolving Loan Fund Project List

<u>Subdivision</u>	<u>Project</u>	<u>State Funding</u>				<u>Total State Share</u>
		<u>Total Cost</u>	<u>Prior Auth.</u>	<u>FY 2009 Request</u>	<u>Future Request</u>	
Allegany	Cumberland Combined Sewer Overflow	29,840	-	300 C	-	1%
Allegany	Cumberland Wastewater Treatment Plant Upgrade	41,996	-	11,257 C	-	27%
Allegany	George's Creek Wastewater Treatment Plant - Wastewater Treatment Plant Improvements	22,389	-	7,995 C	-	36%
Anne Arundel	Sylvan Shores - Public Sewer Service Extension	3,118	-	2,346 C	-	75%
Baltimore City	Patapsco Wastewater Treatment Plant - Gravity Sludge Thickener Renovation	6,300	-	1,920 C	-	31%
Baltimore	Hernwood Landfill - Leachate Collection System	1,275	-	1,000 C	-	78%
Baltimore	Patapsco Wastewater Treatment Plant - Gravity Sludge Thickener Renovation	6,300	-	4,080 C	-	65%
Calvert	Calvert Industrial Park - Wastewater Treatment Plant Upgrade	700	-	630 PC	-	90%
Charles	La Plata - Southwest Quadrant Sewer System Improvements	1,500	-	1,451 C	-	97%
Charles	Mt. Carmel Woods Wastewater Treatment Plant Upgrade	5,272	774 C	2,090 C	-	54%

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Frederick	Ballenger Creek Wastewater Treatment Plant Expansion	67,900	-	30,000 C	-	44%
Harford	Havre de Grace Wastewater Treatment Plant - Expansion and Biological Nutrient Removal	49,657	24,545 C	7,322 C	-	64%
Montgomery	Southlawn Lane - Sewer Extension Project	1,500	-	1,146 C	-	76%
St. Mary's	Leonardtwn Wastewater Treatment Plant Expansion	23,128	13,626 C	4,374 C	-	78%
St. Mary's	Oliver Drive - Public Sewer Service Extension	137	-	137 PC	-	100%
Talbot	Talbot County/Martingham Utilities Cooperative Wastewater Treatment Plant Improvements	2,050	-	1,750 PC	-	85%
Washington	Conococheague Wastewater Treatment Plant Expansion	11,374	-	1,652 C	-	15%
Washington	Hagerstown Wastewater Treatment Plant - Disinfection Upgrade Phase 3B	8,000	-	7,550 C	-	94%
Washington	Hagerstown Wastewater Treatment Plant - Headworks Improvements Phase 4	3,350	-	3,000 C	-	90%
TOTAL		285,786	38,945	90,000	-	

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Maryland Drinking Water Revolving Loan Fund (Statewide)

FY 2009 Total **\$32,079**

The Maryland Drinking Water Revolving Loan Fund provides low-interest loans to local governments, which finance water supply improvements and upgrades. The Safe Drinking Water Act of 1996 and annual federal appropriations set up a schedule of grants to states to capitalize their revolving funds. These federal grants require a 20% state match. The FY 2009 budget includes funding for thirteen projects in eight subdivisions throughout Maryland.

<u>Source</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>TOTAL</u>
General Funds	2,265	2,300	2,300	2,300	2,300	11,465
Special Funds	4,000	4,000	4,000	4,000	4,000	20,000
Federal Funds	7,814	7,850	7,850	7,850	7,850	39,214
Revenue Bonds	18,000	-	-	-	-	18,000
TOTAL	32,079	14,150	14,150	14,150	14,150	88,679

Maryland Drinking Water Revolving Loan Fund Project List

<u>Subdivision</u>	<u>Project</u>	<u>State Funding</u>				<u>Total State Share</u>
		<u>Total Cost</u>	<u>Prior Auth.</u>	<u>FY 2009 Request</u>	<u>Future Request</u>	
Allegany	Bowman's Addition Water Project - Phase 2	2,545	-	2,000 C	-	79%
Allegany	Ridgedale Reservoir Replacement	3,000	-	1,570 C	-	52%
Allegany	Westernport Water Treatment Plant Upgrade	5,353	-	2,500 C	-	47%
Baltimore City	Montebello Plant 2 - Finish Water Reservoir Improvements	36,000	-	7,745 C	-	22%
Carroll	Hampstead - New Water Blending Facility	580	-	560 C	-	97%
Carroll	Westminster - Medford Quarry Emergency Water Supply Connection	6,878	1,000 PC	5,578 C	-	96%
Cecil	North East Water System - Water Storage Tank Upgrade	2,200	-	2,000 C	-	91%
Cecil	Perryville Water Treatment Plant - Water Storage Tank Upgrade and Distribution System	14,500	11,745 C	2,255 C	-	97%
Queen Anne's	Centreville - New Arsenic Treatment Plant, Distribution and Storage Improvements	5,900	-	4,400 C	-	75%
St. Mary's	Hollywood - Replacement Wells	420	-	300 C	-	71%
Washington	Fahrney-Keedy Home and Village Water Treatment Plant Upgrade	1,014	-	927 C	-	92%
Washington	Hagerstown - New West End Storage Facility	7,115	4,455 C	2,003 C	-	91%

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Worcester	Newark Sanitary Service Area - New Water Storage Tank	461	-	241 C	-	52%
TOTAL		85,966	17,200	32,079	-	

Septic System Upgrade Program (Statewide)

FY 2009 Total \$6,000

The Septic System Upgrade Program (SSUP) provides grants to septic system owners to upgrade failing systems and holding tanks with best available technology for nitrogen removal. Priority for this funding is given to failing septic systems in the Chesapeake Bay and Atlantic Coastal Bay's Critical Area. The Bay Restoration Fund Septic fee revenue (\$30 per year per septic/holding tank) is estimated at \$12.6 million annually with 60% allocated to the Maryland Department of the Environment for the Septic System Upgrade Program and the remaining 40% to the Department of Agriculture for cover crops. There are approximately 420,000 on-site septic systems in Maryland. The FY 2009 budget provides funding for approximately 500 septic system upgrades.

<u>Source</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>TOTAL</u>
Special Funds	6,000	6,000	6,000	6,000	6,000	30,000
TOTAL	6,000	6,000	6,000	6,000	6,000	30,000

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Sewer Rehabilitation Program (Statewide)

FY 2009 Total \$5,000

The Sewer Rehabilitation Program provides grants to local governments for combined sewer overflow (CSO) abatement, rehabilitation of existing sewers, and upgrading conveyance systems, including pumping stations. The special funds used to finance this program are derived from a \$2.50 monthly fee charged to all wastewater system users. The FY 2009 budget provides funding for two projects to abate CSOs, two projects to rehabilitate sanitary sewers, and four projects to correct inflow/infiltration problems, in seven subdivisions throughout Maryland.

<u>Source</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>TOTAL</u>
Special Funds	5,000	-	-	-	-	5,000
TOTAL	5,000	-	-	-	-	5,000

Sewer Rehabilitation Program Project List

<u>Subdivision</u>	<u>Project</u>	<u>Total Cost</u>	<u>State Funding</u>			<u>Total State Share</u>
			<u>Prior Auth.</u>	<u>FY 2009 Request</u>	<u>Future Request</u>	
Baltimore City	Baltimore City Lower Stoney Run Service Area - Sewer Rehabilitation	41,856	-	1,000 C	-	2%
Caroline	Federalsburg Inflow and Infiltration Correction at Maple Avenue and South Main Street	1,443	-	600 C	-	42%
Frederick	Thurmont Sewer Collection System - Line Rehabilitation and Replacement	4,939	-	1,000 C	-	20%
Garrett	Mountain Lake Park Sewer Collection System - Sewer Line Replacement	944	-	750 C	-	80%
St. Mary's	Piney Point Sewer Collection System - Sewer Line Repairs/Replacement	1,000	-	500 C	-	50%
Talbot	St. Michaels Region II Sewer Collection System Improvements - Carpenter Street	700	-	200 C	-	29%
Talbot	St. Michaels Region II Sewer Collection System Replacement - Mill Street	700	-	150 C	-	21%
Washington	Hagerstown Sewer Collection System Rehabilitation	5,000	-	800 C	-	16%
TOTAL		56,582	-	5,000	-	

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Hazardous Substance Clean-up Program (Statewide) FY 2009 Total **\$1,000**

This program is responsible for the remediation of hazardous waste contaminated sites that pose a threat to public health or the environment and where there is no responsible party to perform the necessary cleanup. These remediations typically prevent human exposure to contamination, remove contamination from groundwater to protect drinking water supplies, and prevent degradation of environmental resources. The FY 2009 budget includes funds for four projects in three jurisdictions and for statewide site assessments.

<u>Source</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>TOTAL</u>
General Funds	1,000	1,000	1,000	1,000	1,000	5,000
TOTAL	1,000	1,000	1,000	1,000	1,000	5,000

Hazardous Substance Clean-up Program Project List

<u>Subdivision</u>	<u>Project</u>	<u>State Funding</u>				<u>Total State Share</u>
		<u>Total Cost</u>	<u>Prior Auth.</u>	<u>FY 2009 Request</u>	<u>Future Request</u>	
Baltimore City	Chemical Metals Site - Remediation Project	953	753 P	200 C	-	100%
Baltimore	Blenheim Road Site Assessment	578	528 PC	50 C	-	100%
Cecil	Dwyer Site Remediation Project	1,300	950 PC	350 C	-	100%
Cecil	Mill Creek - Groundwater Investigation and Perchlorate Contamination Site Assessments	274	74 P	200 P	-	100%
Statewide		400	200	200 P	-	100%
TOTAL		3,505	2,505	1,000	-	

Subtotals for Office of the Secretary

<u>Source</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>TOTAL</u>
General Funds	8,445	8,500	8,500	8,500	8,500	42,445
Special Funds	111,920	61,950	39,950	51,950	42,950	308,720
Federal Funds	33,714	33,750	33,750	33,750	33,750	168,714
Revenue Bonds	118,000	200,000	255,000	60,000	30,000	663,000
TOTAL	272,079	304,200	337,200	154,200	115,200	1,182,879

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WATER MANAGEMENT ADMINISTRATION

Budget Code: UA04

Biological Nutrient Removal Program (Statewide)

FY 2009 Total \$18,448

This program provides grants to local governments for the removal of nutrients from the discharges of sewage treatment plants. On average, the State provides approximately 50% of the total project cost, with the ability to provide 100% of the cost under the Environmental Article Title 9, Section 9-348. The FY 2009 budget provides funding for BNR upgrades at seven major wastewater treatment plants, located in six jurisdictions throughout the State. The seven projects funded in FY 2009 will reduce the nitrogen load to the Chesapeake Bay by approximately 2,970,000 pounds per year and the phosphorus load to the Chesapeake Bay by approximately 297,000 pounds per year.

<u>Source</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>TOTAL</u>
GO Bonds	18,448	18,000	16,500	16,500	18,000	87,448
TOTAL	18,448	18,000	16,500	16,500	18,000	87,448

Biological Nutrient Removal Program Project List

<u>Subdivision</u>	<u>Project</u>	<u>State Funding</u>				<u>Total State Share</u>
		<u>Total Cost</u>	<u>Prior Auth.</u>	<u>FY 2009 Request</u>	<u>Future Request</u>	
Anne Arundel	Mayo Large Communal Wastewater Treatment Plant - Biological Nutrient Removal	29,451	567 PC	1,000 C	2,483 C	14%
Baltimore City	Patapsco Wastewater Treatment Plant - Biological Nutrient Removal	204,361	6,934 PC	10,000 C	24,379 C	20%
Cecil	Perryville Wastewater Treatment Plant - Biological Nutrient Removal	13,200	700 PC	1,000 C	800 C	19%
Frederick	Emmitsburg Wastewater Treatment Plant - Biological Nutrient Removal	15,300	-	1,448 C	1,052 C	16%
Harford	Havre de Grace Wastewater Treatment Plant - Biological Nutrient Removal	49,657	3,000 C	2,659 C	-	11%
Harford	Sod Run Wastewater Treatment Plant - Biological Nutrient Removal	46,262	500 P	1,341 PC	2,882 C	10%
Wicomico	Delmar Wastewater Treatment Plant - Biological Nutrient Removal	7,940	843 PC	1,000 C	157 C	25%
TOTAL		366,171	12,544	18,448	31,753	

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Supplemental Assistance Program (Statewide) FY 2009 Total **\$5,000**

This program provides supplemental grant assistance to local governments participating in the construction of compliance-related wastewater facility improvements. Funds are targeted for two categories of projects: (1) projects where the community needs to construct improvements to its sewer system infrastructure, but is unable to afford the local share of the construction cost; and (2) projects where the community needs to construct improvements to its sewer system infrastructure, but is unable to completely afford the financing arrangements under the Maryland Water Quality Revolving Loan Fund. To achieve an affordable level of financing for grantees, the program may fund up to 100% of eligible project costs. The FY 2009 budget provides funding for three combined sewer overflow improvement projects, one wastewater treatment plant upgrade, one biological nutrient removal upgrade project, and seven sewer rehabilitation projects.

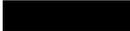
<u>Source</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>TOTAL</u>
GO Bonds	5,000	5,000	5,000	5,000	5,000	25,000
TOTAL	5,000	5,000	5,000	5,000	5,000	25,000

Supplemental Assistance Program Project List

<u>Subdivision</u>	<u>Project</u>	<u>State Funding</u>				<u>Total State Share</u>
		<u>Total Cost</u>	<u>Prior Auth.</u>	<u>FY 2009 Request</u>	<u>Future Request</u>	
Allegany	Cumberland Combined Sewer Overflow	29,840	4,147 PC	500 C	2,353 C	24%
Allegany	Frostburg Combined Sewer Overflow Elimination Project	20,000	1,347 PC	500 C	3,153 C	25%
Allegany	Westernport Combined Sewer Overflow	19,000	2,224 PC	900 C	1,876 C	26%
Cecil	Rising Sun Wastewater Treatment Plant Upgrade	9,036	400 P	300 C	300 C	11%
Charles	Benedict Central Sewer Collection and Treatment System	6,258	400 P	300 C	529 C	20%
Dorchester	Christ Rock Public Sewer Service Extension	805	-	500 C	-	62%
Dorchester	Susquehanna Point, Madison, and Woolford - Sewer Collection System Installation	7,990	243 P	500 C	-	9%
Frederick	Thurmont Sewer Collection System - Sewer Line Rehabilitation and Replacement	4,939	-	400 C	-	8%
Harford	Oaklyn Manor - Phase II Sewer System Installation	2,950	400 P	195 C	-	20%
Talbot	St. Michaels Region II Sewer Collection System Improvements - Carpenter Street	700	-	305 C	-	44%

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Talbot	St. Michaels Region II Sewer Collection System Replacement - Mill Street	700	-	300 C	-	43%
Wicomico	Delmar Wastewater Treatment Plant - Biological Nutrient Removal	7,940	281 P	300 C	-	7%
TOTAL		110,158	9,442	5,000	8,211	



DEPARTMENT OF THE ENVIRONMENT

Water Supply Financial Assistance Program (Statewide)

FY 2009 Total \$3,000

This program provides grants to assist small communities in the acquisition, design, construction, and rehabilitation of publicly owned water supply facilities throughout the State. The grant funds enable the State to continue its efforts to protect public health and enhance the quality of life. The program may fund up to 87.5% of the total eligible project cost and a minimum 12.5% local match is required. The FY 2009 budget provides funds for twelve projects in eight jurisdictions, which will provide safe and adequate water supplies to 19,775 homes.

<u>Source</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>TOTAL</u>
GO Bonds	3,000	2,500	2,500	2,500	2,500	13,000
TOTAL	3,000	2,500	2,500	2,500	2,500	13,000

Water Supply Financial Assistance Program Project List

<u>Subdivision</u>	<u>Project</u>	<u>State Funding</u>				<u>Total State Share</u>
		<u>Total Cost</u>	<u>Prior Auth.</u>	<u>FY 2009 Request</u>	<u>Future Request</u>	
Allegany	Bowman's Addition Water Project- Phase 2	2,545	200 P	300 C	-	20%
Allegany	Frostburg Water Treatment Plant - Filter Upgrades	120	-	100 C	-	83%
Allegany	Lonaconing Water Improvement Project - Phase V	3,078	-	450 C	-	15%
Allegany	Ridgedale Reservoir Replacement	3,000	300 PC	200 C	-	17%
Allegany	Westernport Water Treatment Plant Upgrade	5,353	600 C	300 C	-	17%
Caroline	Greensboro Water Line Replacement	600	100 P	355 C	-	76%
Cecil	Port Deposit Water Treatment and Intake Upgrades	2,123	541 C	200 C	309 C	49%
Dorchester	Christ Rock - Public Water System Connection	553	-	295 C	-	53%
Frederick	New Market - Water Line Extension	1,527	-	100 C	-	7%
Harford	Glen Heights - Public Water System Connection	2,200	500 PC	500 C	-	46%
Somerset	Mariners Water Association - Water Line Replacement	368	-	100 C	-	27%
St. Mary's	Hollywood - Arsenic Wells Mitigation	420	-	100 C	-	24%
TOTAL		21,887	2,241	3,000	309	

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Maryland Stormwater Pollution Control Program (Statewide) FY 2009 Total **\$838**

This program provides matching grants of up to 75% of project costs (with a maximum of \$500,000 per project) to local governments for stormwater management (retrofit) projects to reduce nonpoint source pollution from existing developed areas. Grantees must contribute a minimum of 25% of the total project cost. The FY 2009 budget includes funding for three projects, which address stormwater runoff for 328 drainage acres.

<u>Source</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>TOTAL</u>
GO Bonds	838	1,000	1,000	1,000	1,000	4,838
TOTAL	838	1,000	1,000	1,000	1,000	4,838

Maryland Stormwater Pollution Control Program Project List

<u>Subdivision</u>	<u>Project</u>	<u>State Funding</u>				<u>Total State Share</u>
		<u>Total Cost</u>	<u>Prior Auth.</u>	<u>FY 2009 Request</u>	<u>Future Request</u>	
Allegany	Frostburg Stormwater Retrofit	250	-	188 C	-	75%
Howard	Brampton Hills Stormwater Retrofit	255	-	150 C	-	59%
Montgomery	Stoney Creek Stormwater Management Pond Retrofit	2,640	-	500 C	-	19%
TOTAL		3,145	-	838	-	

DEPARTMENT OF THE ENVIRONMENT

Small Creek and Estuary Restoration Program (Statewide) FY 2009 Total **\$663**

This program provides grants to local governments for water quality cleanup projects in small creeks and estuaries. Typically, projects include dredging of polluted stream beds and streambank/channel stabilization. On average, projects are funded on a 50/50 cost-share basis with local governments; however, by law, MDE may provide up to 87.5% of the total project cost. The FY 2009 budget will provide funds for four projects that will rehabilitate approximately 5,650 linear feet of highly-eroded stream channel.

<u>Source</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>TOTAL</u>
GO Bonds	663	500	500	500	500	2,663
TOTAL	663	500	500	500	500	2,663

Small Creek and Estuary Restoration Program Project List

<u>Subdivision</u>	<u>Project</u>	<u>State Funding</u>				<u>Total State Share</u>
		<u>Total Cost</u>	<u>Prior Auth.</u>	<u>FY 2009 Request</u>	<u>Future Request</u>	
Baltimore	Lower Spring Branch Stream Restoration Project	1,130	-	270 C	-	24%
Baltimore	West Branch Stream Restoration at UMBC Stadium	530	-	15 P	-	3%
Harford	Plumtree Run at Tollgate Road Stream Restoration	430	-	215 C	-	50%
Howard	Cherry Creek Stream Restoration - Reach 2	442	-	163 C	-	37%
TOTAL		2,532	-	663	-	

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Comprehensive Flood Management Grant Program (Statewide)

The Comprehensive Flood Management Grant Program provides grants to local governments for flood mitigation projects which reduce the risk of loss of life and property from flooding. Grant funds may be used to acquire flood-prone properties for demolition or relocation, install flood warning systems, and construct flood control projects, including engineering studies required to support design of these projects. The program's funds cover up to 75% of the non-federal project costs and are used primarily to match funds from the Federal Emergency Management Agency and the U.S. Army Corps of Engineers. Local governments being served contribute the remainder of the non-federal match.

<u>Source</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>TOTAL</u>
GO Bonds	-	500	500	500	500	2,000
TOTAL	-	500	500	500	500	2,000

Subtotals for Water Management Administration

<u>Source</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>TOTAL</u>
GO Bonds	27,949	27,500	26,000	26,000	27,500	134,949
TOTAL	27,949	27,500	26,000	26,000	27,500	134,949

Subtotals for Grants and Loans

<u>Source</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>TOTAL</u>
GO Bonds	27,949	27,500	26,000	26,000	27,500	134,949
General Funds	8,445	8,500	8,500	8,500	8,500	42,445
Special Funds	111,920	61,950	39,950	51,950	42,950	308,720
Federal Funds	33,714	33,750	33,750	33,750	33,750	168,714
Revenue Bonds	118,000	200,000	255,000	60,000	30,000	663,000
TOTAL	300,028	331,700	363,200	180,200	142,700	1,317,828

Total Program - Department of the Environment

<u>Source</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>TOTAL</u>
GO Bonds	27,949	27,500	26,000	26,000	27,500	134,949
General Funds	8,445	8,500	8,500	8,500	8,500	42,445
Special Funds	111,920	61,950	39,950	51,950	42,950	308,720
Federal Funds	33,714	33,750	33,750	33,750	33,750	168,714
Revenue Bonds	118,000	200,000	255,000	60,000	30,000	663,000
TOTAL	300,028	331,700	363,200	180,200	142,700	1,317,828