



Martin O'Malley, Governor
Anthony G. Brown, Lt. Governor
John R. Griffin, Secretary
Eric Schwaab, Deputy Secretary

February 1, 2011

The Honorable Thomas V. Mike Miller, Jr.
President, The Senate of Maryland
State House, H 107
Annapolis, Maryland 21401-1991

The Honorable Michael E. Busch
Speaker, Maryland House of Delegates
State House, H 101
Annapolis, Maryland 21401-1991

Re: Submission of SFY10 –SFY12 Trust Fund Work Plan

Agency: Maryland Department of Natural Resources on behalf of the BayStat Subcabinet

Fund Source: Chesapeake and Atlantic Coastal Bays Trust Fund

Report Authority: § 8-2A-03(d) of the Natural Resources Article

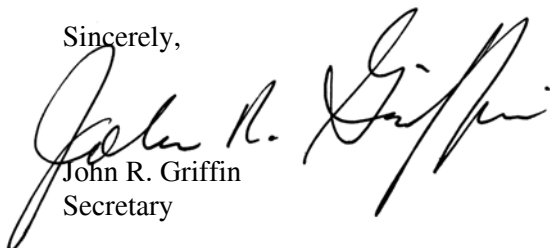
Dear President Miller and Speaker Busch:

In accordance with, § 8-2A-03(d) of the Natural Resources Article, please accept the SFY2010-SFY2012 Annual Work and Expenditure Plan for the Chesapeake and Atlantic Coastal Bays Trust Fund. This Work and Expenditure Plan contains:

- The accounting of all monies distributed from the Trust Fund in State Fiscal Year 2010 (SFY10).
- Provides the expenditure plan and progress for State Fiscal Year 2011 (SFY11).
- Identifies the planned work to be funded with money from the Trust Fund for 2012 (SFY12), including annual nutrient and sediment reduction targets, performance measures, and accountability criteria.
- Detailed project descriptions as provided in the Fiscal Year Breakout section of this report.

The Work and Expenditure Plan can be accessed electronically on Maryland's BayStat website at: <http://www.baystat.maryland.gov/pdfs/2012workplan.pdf>. In addition to the hardcopies filed with the Legislative Library, we are happy to provide Committee Members hardcopies upon request. Should you have any questions or comments regarding this report, please feel free to contact Jeff Horan, on my staff, directly at 410-260-8705, or by email jhoran@dnr.state.md.us.

Sincerely,


John R. Griffin
Secretary

1000 State Office Building • 580 Taylor Avenue • Annapolis, Maryland 21401

410.260.8DNR or toll free in Maryland 877.620.8DNR • www.dnr.maryland.gov • TTY users call via Maryland Relay

cc: Senator Edward J. Kasemeyer, Chair, Budget & Taxation Committee
Senator Joan Carter Conway, Chair, Senate Education, Health & Environmental Affairs
Committee
Delegate Norman H. Conway, Chair, House Appropriations Committee
Delegate Maggie McIntosh, Chair, House Environmental Matters
Delegate Tawanna P. Gaines, Chair, House Transportation & the Environment Subcommittee
Eloise Foster, Secretary, Department of Budget and Management
Robert Summers, Acting Secretary, Maryland Department of the Environment
Earl F. Hance, Secretary, Maryland Department of Agriculture
Richard Eberhart Hall, Secretary, Maryland Department of Planning
Donald F. Boesch, President, University of Maryland Center for Environmental Science
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CHESAPEAKE & ATLANTIC COASTAL BAYS TRUST FUND



SFY2012 Annual Work Plan
January 2011

Submitted
January 21, 2011

Report to:

The President of the Senate
The Speaker of the House
The Senate Education, Health and Environmental Affairs Committee
The Senate Budget and Taxation Committee
The House Environmental Matters Committee
The House Appropriations Committee

CHESAPEAKE AND ATLANTIC COASTAL BAYS TRUST FUND STATE FISCAL YEAR 2012 ANNUAL WORK AND EXPENDITURE PLAN

PUROPOSE OF THIS REPORT

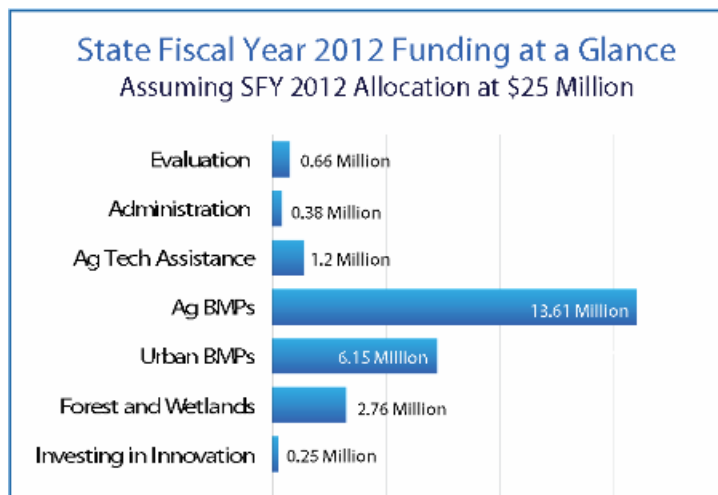
Pursuant to Senate Bill 213 of the Maryland General Assembly, the BayStat Subcabinet submits this Annual Work and Expenditure Plan (Work Plan) for the Chesapeake and Atlantic Coastal Bays Trust Fund (Trust Fund).

CONTAINED IN THIS REPORT

The State Fiscal Year 2012 Work Plan contains the accounting of all monies distributed from the Trust Fund in State Fiscal Year 2010 (SFY10), provides the expenditure plan and progress for State Fiscal Year 2011 (SFY11) and identifies the planned work to be funded with money from the Trust Fund for 2012 (SFY12), including annual nutrient and sediment reduction targets, performance measures, and accountability criteria. The Work Plan also accounts for monies directed or redirected by BayStat in response to changing conditions, opportunities, scientific developments and/or project performance that occurred over the course of a project year.

EXECUTIVE SUMMARY

Now in its third year, the Trust Fund has targeted over \$38 Million to on-the-ground projects removing a total of 1.5 million pounds of nitrogen and 117,000 pounds of phosphorus from the Bay watershed. With the Bay-wide TMDL, the State will be required to ramp up its Bay restoration efforts in which the Trust Fund will be a key component of the State's financing strategy. In January, 2010, BayStat, guided by the Governor's Scientific Advisory Panel (GSAP), fully implemented an allocation process based



on the best available scientific information regarding water quality conditions and cost-effectiveness of nutrient and sediment control measures. As a result of this effort, the projects identified for **State Fiscal Year 2012, will reduce an estimated 2.1 million pounds of nitrogen and 105,000 pounds of phosphorus**, or 30% of the State's nitrogen and 25% of the State's phosphorus goals. Projects were solicited assuming available Trust Fund revenue of \$25 Million for SFY12. In addition, as proposed:

- Direct \$22.5 Million or 90 percent of the overall budget for practices and infrastructure that will employ installers, designers, engineers and construction services.
- Support 26 soil conservation district (SCD) technicians needed to assist local farmers implement restoration activities.
- Target \$8.2 Million to assist local communities in implementing their local watershed restoration plans.
- Leverage over \$26 Million in local, state and federal capital.

INTRODUCTION

Leaders throughout Maryland and the Chesapeake Bay watershed are at a critical point in supporting efforts to protect and restore one of the most remarkable and productive natural resources in the world. In response to the Chesapeake Bay TMDL, Maryland pledged to reduce nutrients and sediments entering the Chesapeake Bay by 7 million pounds of nitrogen, 412,000 pounds of phosphorus and 70,500 tons of sediment by the year 2020.

Though the implementation plan for the TMDL provides state leaders with a roadmap for restoring and protecting the Chesapeake Bay and its watershed lands, the associated costs will prove to be a significant barrier to implementation. Overcoming this barrier will require the state to work with local and federal partners to administer funding through new and innovative approaches that leverage the funds to the greatest extent possible, target the funds to the most cost effective locations and practices, engage the community at large, and hold everyone accountable.

In 2007, State leaders in Maryland took a bold step in their efforts to restore the Chesapeake Bay with the creation of the Chesapeake and Atlantic Coastal Bays Trust Fund (Trust Fund). The Trust Fund allows Maryland to accelerate Bay restoration by focusing limited financial resources on the most effective non-point source pollution control projects. Dollars for the Trust Fund are generated through motor fuel and rental car taxes in Maryland. It is anticipated that when fully-funded, the Trust Fund will generate \$50 Million annually.

APPROACH

The allocation objective of the Trust Fund is to distribute funds through a process that is based on the best available scientific information regarding water quality conditions and cost-effectiveness of nutrient and sediment control measures, is transparent and accountable, and results in the greatest possible benefits to the Chesapeake Bay and its tributaries via reductions in non-point source nutrient and sediment loadings. To guide this allocation process, the BayStat agencies used an allocation process that is designed to be focused, flexible, leveraged, competitive, innovative, engaged, accountable, and adaptive. A six step process has been developed to meet the above objectives:

- Step 1: Target priority areas and practices
- Step 2: Develop initial Work and Expenditure Plans, and issue RFP's
- Step 3: Evaluate proposals and make initial allocation decisions
- Step 4: Legislative Review and approval
- Step 5: Award and Administer Funds
- Step 6: Review, report, and refine.

PARTNER ROLES AND RESPONSIBILITIES

The allocation and implementation of the Trust Fund is a collaborative effort between three partners: the BayStat agencies, the Scientific Advisory Panel, and the Legislature.

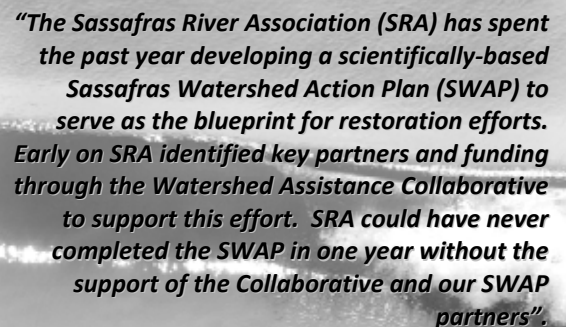
ROLE OF BAYSTAT: BayStat is a powerful tool to assess, coordinate and target Maryland’s Bay restoration programs, and to inform citizens on progress. The BayStat agencies are collectively responsible for the administration of the Trust Fund in a manner consistent with statute. BayStat will direct the administration of the Trust Fund in a manner that applies the best science, holds state agencies and grant recipients accountable for managing the fund, and targets activities in the most cost-effective way possible. BayStat developed an annual Work Plan and Expenditure Plan that identifies work and funding for the next fiscal year, targets Tributary Basins and practices within those basins to generate the greatest possible nutrient reductions per Trust Fund dollar, sets annual implementation goals and expected nutrient and sediment reductions, and establishes performance measures and accountability criteria.

ROLE OF THE SCIENTIFIC ADVISORY PANEL: A Scientific Advisory Panel will be convened to review and provide scientific guidance to BayStat on 1) the proposed Work Plan for the next fiscal year, 2) distribution of funds from the Trust Fund, 3) performance of grants made in previous fiscal years to assess effectiveness and efficiencies, 4) individual grant applications upon request of BayStat, and 5) any funds awarded non-competitively to assess whether those funds can be awarded competitively in future years.

ROLE OF THE LEGISLATURE: The Legislature will have the same review and approval authority over the proposed fund allocation as with any other portion of the Governor’s budget. Any changes resulting from that process will be incorporated into the Work and Expenditure Plan prior to their finalization and the distribution of funds.

WATERSHED ASSISTANCE COLLABORATIVE

In recognition that not all jurisdictions currently have the capacity to implement the anticipated level of funding envisioned with the Trust Fund, Maryland’s State Agencies, the Chesapeake Bay Trust, University of Maryland Extension, the University of Maryland Environmental Finance Center, NOAA and the EPA joined together to provide services and technical assistance to local governments to advance implementation projects. By leveraging resources of existing programs, the Watershed Assistance Collaborative exists to provide coordinated capacity building opportunities to local implementers via financial and technical assistance. Once local capacity is developed through the Collaborative, the jurisdictions are better positioned to compete for Trust Fund, and federal and nonprofit funding opportunities. This Program has also allowed Trust Fund dollars to be directed as much as possible to implementation, while still developing capacity through other funding opportunities.



“The Sassafras River Association (SRA) has spent the past year developing a scientifically-based Sassafras Watershed Action Plan (SWAP) to serve as the blueprint for restoration efforts. Early on SRA identified key partners and funding through the Watershed Assistance Collaborative to support this effort. SRA could have never completed the SWAP in one year without the support of the Collaborative and our SWAP partners”.

*- Kim Kohl, Executive Director,
Sassafras River Association*

Led by the Chesapeake Bay Trust, the Watershed Assistance Collaborative awarded a total of \$266,362 (\$596,362 to date) for planning and design grants awarded to the following communities:

- \$35,000 to the Choptank River/Eastern Bay Conservancy for watershed planning in the Upper Choptank
- \$30,000 to Trout Unlimited for a stream restoration design in the Jones Falls
- \$35,000 to Harford County for a stream restoration design in Wheel Creek (matches Trust Fund efforts in same watershed)
- \$30,000 to Baltimore Harbor Watershed Association for watershed planning in Harris Creek/Watershed 246
- \$32,252 to Baltimore DEPRM for watershed planning in the Loch Raven Reservoir
- \$23,110 to Herring Run Watershed Association for 7 rain garden designs at Baltimore City Schools
- \$35,000 to the Severn Riverkeeper for a Regenerative Stormwater Conveyance design in Clements Creek
- \$26,000 to the West/Rhode Riverkeeper for a treatment wetland design at YMCA Camp Letts
- \$20,000 to Caroline County Department of Planning and Codes for planning in the Tuckahoe

Through the Collaborative's Outreach and Training Program, the University of Maryland Environmental Finance Center and other partners are providing project development, financing strategies and stakeholder development assistance to prepare groups for project implementation. Working with the University of Maryland's SeaGrant Extension, the Watershed Assistance Collaborative is providing direct assistance to local and county governments and their partners to accelerate nonpoint source pollution reduction efforts with its Watershed Restoration Specialists. These specialists are providing on-going support to Trust Fund priority watersheds and other groups to coordinate project implementation, conduct outreach and leverage additional funding opportunities.

Collaborative Spotlight: Howard County Rain Garden Initiative

In conjunction with a Trust Fund grant for the Little Patuxent watershed, Howard County leveraged resources available through the Watershed Assistance Collaborative and partnered with the Maryland SeaGrant to create a Rain Garden Pilot Program in the Red Hill Branch area of the watershed. Amanda Rockler, watershed restoration specialist with the Collaborative, lead and coordinated the effort with the County and Center for Watershed Protection to host a rain garden training and a "win a rain garden" program which resulted in the installation of 20 rain gardens within the watershed. Local contractor Village Gardeners installed the rain gardens.

This successful program received positive feedback, and the demand for similar programs is high. For more information visit:

<http://www.mdsg.umd.edu/CQ/BayBlog/2010/11/18/rain-gardens/>.



Watershed Restoration Specialist, Amanda Rockler discusses native plants used for rain gardens during the resident rain garden demonstration project.

ALIGNING THE TRUST FUND WITH THE CHESAPEAKE BAY TMDL REQUIREMENTS

Since 1972, Section 303(d) of the federal Clean Water Act has required states to identify waters that do not meet water quality standards and publicly report them on a list published every two years. For each of the listed waters, states are to determine the maximum amount of pollution that the waters can withstand and still meet standards. This maximum amount of pollution is called a Total Maximum Daily Load (TMDL). For the past several years, EPA has led a process to develop the Chesapeake Bay TMDL. In recognition of the complexity and scope of a multiple-jurisdictional TMDL, EPA required the State's to demonstrate that achieving the load reductions required by the TMDL can reasonably be met, and to provide a detailed Watershed Implementation Plan, or WIP.

The State of Maryland formally submitted this information in a WIP to the Environmental Protection Agency on December 3, 2010. The Plan identifies 75 strategy options to reduce nitrogen, phosphorous, and sediments from the wastewater, urban runoff, septic, agriculture and air pollution sectors. The Trust Fund represents a major step forward in the State's efforts to finance the Bay TMDL and Maryland's Watershed Implementation Plan. With \$25 Million in SFY12, the Trust Fund provides State leaders with an excellent opportunity to meet its commitments.

ACCOUNTING FOR CHANGE

Recognizing that restoring and protecting the Chesapeake Bay is a complex and constantly changing undertaking, and the demand of the restoration effort requires the Trust Fund allocation and projects to be re-evaluated continuously to respond to performance, changing conditions, opportunities and scientific development – the need to implement contingencies may occur over the course of the current fiscal year. To ensure transparency, details on contingencies taken and the accounting of all monies distributed from the Trust Fund will be provided as part of the Annual Work Plan submission.

In September, 2010, a budget amendment was submitted to DBM for \$5.37 Million to allocate additional revenue received in the fund after the publication of the SFY09-SFY11 Work Plan, to the State's most cost-effective nutrient reduction practices. \$2.97 Million was requested to go to MDA to provide additional revenue to the cover crop program which saw an extremely high enrollment rate for the year. \$2.4 Million was requested from DNR. \$1.4 Million to cover SFY10 contracts which were executed in SFY11 and \$1.0 Million to increase buffers and wetland implementation. A final decision on the amendment is pending.

YEAR IN REVIEW: SFY10 & SFY11 SUMMARY & BUDGET

In total, the Trust Fund targeted \$28.81 Million in SFY10 & SFY11 and leveraged over \$38 Million in federal, state, and local funds. SFY11 marked the end of the Trust Fund “transition period” and all projects identified in SFY09 have been funded. Projects include the remaining 5 of the top 10 Urban/Suburban Stormwater Projects, continued funding and training for the 16 Soil Conservation District (SCD) Technical Assistance positions as well as implementation of cover crop and animal waste management practices. 7 local governments were supported in their efforts to clean up local rivers and streams and are now working on implementing their nonpoint source reduction plans. SFY10 funding includes the expenditure of additional revenue from SFY09 (\$.81M). In September, 2010, a budget amendment was submitted to DBM for \$5.37M to allocate additional revenue to the State’s most cost-effective nutrient reduction practices. \$2.97M was requested to go to MDA to provide additional revenue to the cover crop program which saw an extremely high enrollment rate for the year. \$2.4M was requested from DNR. \$1.4M to cover SFY10 contracts which were executed in SFY11 and \$1.0M to increase natural filters implementation. A decision on the amendment is pending. In the table below is a summary of projects undertaken with SFY10 funds and a list of projects funded with SFY11 funds. Project-specific details, including estimated nutrient and sediment reductions, match, and project status can be found on the corresponding factsheets.

Trust Fund SF10-11 Appropriation & Planned Expenditures

Category	SFY10*			SFY11			Page #
	Allocation in M	Match in M	N Red (lbs/yr)	Allocation in M	Match in M	N Red (lbs/yr)	
Strategic Monitoring¹	\$0.22	\$0.00	0	\$0.40	\$0.00	0	
TOTAL	\$0.22	\$0.00	0	\$0.40	\$0.00	0	
Agency Direct Costs (1.5%)²	\$0.00	\$0.00	0	\$0.30	\$0.00	0	
TOTAL	\$0.00	\$0.00	0	\$0.30	\$0.00	0	
Agency Technical Assistance Costs (MDA)³							
MDA to SCD for BMP Implementation	\$0.75	\$0.00	0	\$0.68	\$0.00	0	
TOTAL	\$0.75	\$0.00	0	\$0.68	\$0.00	0	
Urban/Suburban Stormwater Projects (MDE)⁴							
Tanyard Branch SW Improvement, Talbot Co.	\$0.65	\$0.13	113				
Western Branch Wetland, PG Co.	\$0.55	\$2.48	150				
Moore's Run Wetlands, Balt. City				\$1.87	\$0.80	1,213	
Greenhill/Hillside, PG Co.	\$0.14	\$0.03	126				
Back River Restoration, Balt Co.	\$0.19	\$0.42	606				
TOTAL	\$1.65⁴	\$3.06	995	\$2.10⁴	\$0.80	1,213	
Ag Practices (MDA)⁵							
Cover Crops	\$1.90	\$10.36	265,116	\$9.52	\$5.66	1,328,371	
Forest/Grass Buffers/Wetland Restoration ⁶	\$0.27	\$0.41	64,454	\$0.80	\$0.00	14,570	
Animal Waste Management	\$1.00	\$4.59	46,624	\$0.80	\$10.00	10,745	
TOTAL	\$3.17	\$15.36	376,194	\$11.12	\$15.66	1,353,686	
Targeted Innovative Practices (DNR)⁷							
Little Patuxent ⁸	\$1.13	\$1.43	1,689	\$1.30	\$0.55	49	
Magothy	\$0.36	\$0.24	0	\$0.48	\$0.11	483	
Wheel Creek	\$0.16	\$0.23	0	\$0.37	\$0.29	81	
Tred Avon				\$0.48	\$0.03	1,538	
Watershed 263	\$0.36	\$0.19	72	\$0.48	TBD	TBD	
Middle Chester ⁹	\$0.36	\$0.06	TBD	\$0.52	\$0.04	TBD	
Corsica				\$0.52	\$0.03	16	
Innovative Technology	\$0.25	\$0.00	N/A	\$0.25	\$0.23	N/A	
Natural Filters	\$0.40	\$0.00	1,050	\$1.00	\$0.72	2,626	
TOTAL	\$3.02	\$2.15	2,811	\$5.40	\$2.00	4,793	
GRAND TOTAL	\$8.81	\$20.57	380,000	\$20.00	\$18.46	1,359,692	

*Includes \$.81M from SFY09 Revenue

¹Includes establishment of baseline data, formation of a monitoring strategy, and technical assistance for monitoring plan development.

² Management, administration, and reporting. Agencies waived direct costs for SFY09&10 due to budget restrictions.

³ Funds Soil Conservation District Staff for BMP technical assistance.

⁴ Stormwater BMPs such as retrofits, bioretention, and wetland and stream restoration. Some projects costs have been less than anticipated. Remaining funds to be reprogrammed into additional stormwater retrofits.

⁵ Agricultural BMP installation/incentive programs.

⁶ SFY11 N Reduction Estimates available only through 10/31/10, 33% complete

⁷ Targeted watershed restoration programs, contingency development, and 2 Year Milestone implementation

⁸ Reduction Estimates and match does not include Columbia Associations Projects. Contract scheduled to be executed March, 2011.

⁹ Middle Chester LIG involved a suite of innovative agricultural BMPs. Nutrient reduction estimates of these practices is an outcome of this project.

TRUST FUND PROJECT REPORT

STRATEGIC MONITORING (DNR)

FISCAL YEAR: SFY10 & SFY11

PROJECT OVERVIEW

SFY10 and SFY11 dollars in Strategic Monitoring will continue to be spent on collecting baseline monitoring data in Local Implementation Grant (LIG) watersheds as well as improving on communication and assistance regarding the recently completed Strategic Monitoring document. This Strategic Monitoring document was available for new applicants when preparing proposals in response to the 2012 LIG RFP (http://www.dnr.state.md.us/ccp/funding/pdfs/Monitoring_Strategy.pdf)

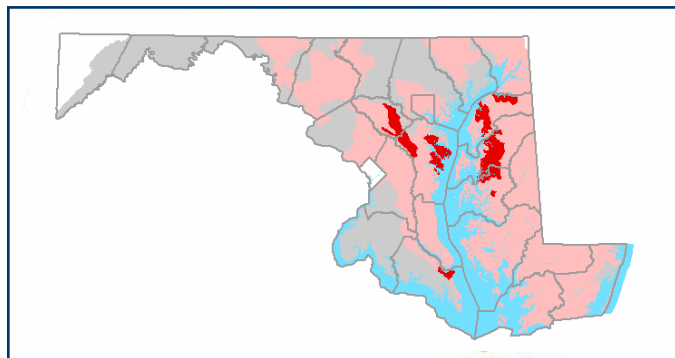
In addition to continued monitoring in the Little Patuxent and Wheel Creek watersheds, flow monitoring and BMP efficiency analysis has been expanded to include both the Magothy River and the Morgan Creek watershed in the Middle Chester. UMCES is continuing to refine and expand on the monitoring strategy and are working to incorporate a stream restoration section.

DNR staff continue to work with Trust Fund recipients in implementing appropriate monitoring strategies, utilize and update the Maryland Stream Atlas and use this information to evaluate new Trust Fund applications, and collecting additional data in watersheds where Trust Fund projects are being installed.

MES has continued to enhance and update the Trust Fund viewer, which allows the user to locate and track progress on Trust Fund projects. The viewer, still in beta form, is available to view at: <http://mesgis.com/baytrusttest/>

PROJECT LOCATION:

Statewide (Target Area Emphasis)



PROJECT CHARACTERISTICS

COUNTY/CITY: Statewide
WATERSHED(S): Statewide
SUBWATERSHED(S): Statewide
PROJECT PARTNERS: DNR
UMCES
MES
AGENCY CONTACT: Jennifer Raulin
DNR
410-260-8745
jrauln@dnr.state.md.us

PROJECT COMPONENTS

<i>PROJECT COMPONENT</i>	Strategic Monitoring/Trust Fund Evaluation SFY10	Baseline Monitoring/Local Gov't Assistance\ SFY10	Trust Fund Viewer Phase II SFY10
<i>LEAD</i>	UMCES	DNR	MES
<i>ACTIVITY</i>	Monitoring Document & Guidance	Monitoring	Tracking & Accountability
<i>LOCATION (Lat/Long)</i>	N/A	Multiple	N/A
<i>TRUST FUND \$</i>	\$50,000	\$152,860	\$17,140
<i>MATCH \$</i>	\$0	\$0	\$0
<i>TOTAL COST</i>	\$50,000	\$152,860	\$17,140
<i>EST. TN REDUCTION</i>	N/A		
<i>EST. TP REDUCTION</i>	N/A		
<i>EST. TSS REDUCTION</i>	N/A		
<i>STATUS / % COMPLETE</i>	25%	25%	90%

TRUST FUND PROJECT REPORT

AGENCY DIRECT COSTS (DNR)

FISCAL YEAR: SFY11

PROJECT OVERVIEW

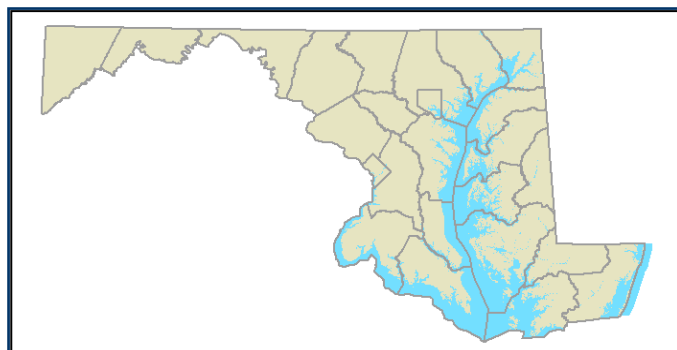
SFY11 marks the first year that the State has taken an allowable 1.5% of the Trust Fund for management and other initiatives related to oversight, tracking, and accountability of the Trust Fund. Funding will be put towards Towson University who hosts Maryland's imap server. These maps are important tools used for decision-making regarding targeting and funding and are used to track progress in several of the State's program, including the Trust Fund. Additional funds go towards fiscal management of the Local Implementation Grant to ensure sound accounting and efficient reimbursement of funds to Trust Fund Recipients. In addition, funding will go towards improved development of the GIS-based Trust Fund viewer.

PROJECT COMPONENTS

PROJECT COMPONENT	Imap Server	Agency Direct Costs
LEAD	Towson U	DNR
ACTIVITY	Imap hosting	Fiscal & GIS management
LOCATION	N/A	
TRUST FUND \$	\$200,000	\$100,000
MATCH \$	\$0	\$0
TOTAL COST	\$200,000	\$100,000
STATUS / % COMPLETE	0%	50%

PROJECT LOCATION:

Statewide



PROJECT CHARACTERISTICS

COUNTY/CITY: Statewide

WATERSHED(S): Statewide

SUBWATERSHED(S): Statewide

PROJECT PARTNERS: DNR
Towson University

AGENCY CONTACT: Jennifer Raulin
DNR
410-260-8745
jraulin@dnr.state.md.us

TRUST FUND PROJECT REPORT

AGENCY TECHNICAL ASSISTANCE (MDA)

FISCAL YEAR: SFY10 & SFY11

PROJECT OVERVIEW

Maryland's 2 Year Milestones require the acceleration of on the ground implementation of agricultural conservation practices. Achievement of this goal requires Soil Conservation Districts to provide adequate technical staff capable of engineering, practice plan and designs, and providing construction and construction over site to assist farmers in implementation of the most cost-effective best management practices to treat water quality needs throughout the state.

16 Soil Conservation District positions have been hired with Trust Fund dollars in the following counties: Allegany, Baltimore, Calvert, Caroline, Cecil, Charles, Harford, Howard, Kent, Prince George's, Somerset, Talbot, Washington, and Wicomico.

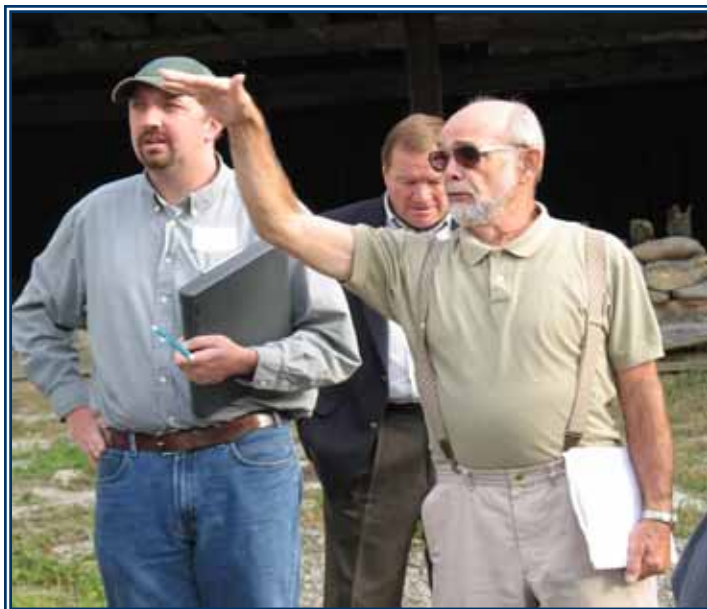
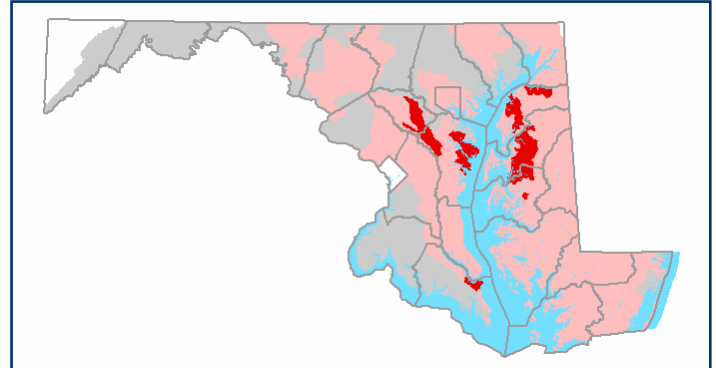


Photo by MDA

PROJECT LOCATION:

Statewide (Target Area Emphasis)



PROJECT CHARACTERISTICS

COUNTY/CITY: Statewide

WATERSHED(S): Multiple

SUBWATERSHED(S): Multiple

PROJECT PARTNERS: Soil Conservation Districts

AGENCY CONTACT: John Rhoderick
MDA
410-841-5700
rhoderjc@mda.state.md.us

PROJECT COMPONENTS

<i>PROJECT COMPONENT</i>	Soil Conservation Staff Hiring		
<i>LEAD</i>	MDA/SCDs		
<i>ACTIVITY</i>	Technical Assistance		
<i>LOCATION (Lat/Long)</i>	Statewide		
<i>TRUST FUND \$¹</i>	\$1,430,000		
<i>MATCH \$</i>	\$0		
<i>TOTAL COST</i>	\$1,430,000		
<i>EST. TN REDUCTION</i>	N/A		
<i>EST. TP REDUCTION</i>	N/A		
<i>EST. TSS REDUCTION</i>	N/A		
<i>STATUS / % COMPLETE SFY10</i>	Goal		Done
	Plans	163 plans/12,897 acres	251 plans/24,228 acres (188%)
	BMPs	363	488 (134%)
	CREP	422 acres	65 acres (15%)
<i>STATUS / % COMPLETE SFY11</i>	Goal		Done
	Plans	326 plans/26,555 acres	TBD
	BMPs	669	TBD
	CREP	375 acres	TBD

¹ Funding includes SFY10 (\$750K) and SFY11 (\$680K)

TRUST FUND PROJECT REPORT

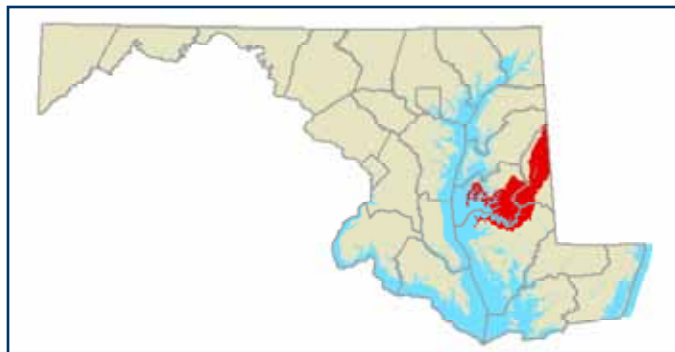
TANYARD BRANCH WATERSHED IMPROVEMENTS (MDE)

FISCAL YEAR: SFY10

PROJECT OVERVIEW

A construction of a 1.8 acre pond/wetland BMP will serve a drainage area of 75 acres and additional ponds/wetlands located at a natural low point near an existing stormdrain collection system. These improvements will treat previously untreated stormwater runoff; thereby improving the water quality in Tanyard Branch in the Lower Choptank Watershed. Talbot County is also receiving SFY11 Local Implementation Grant funds for stormwater management projects for the same watershed.

PROJECT LOCATION: Choptank River



PROJECT COMPONENTS

<i>PROJECT COMPONENT</i>	Tanyard Branch
<i>LEAD</i>	Town of Easton
<i>ACTIVITY</i>	Stormwater Retrofit
<i>LOCATION</i>	38.76667/-76.05
<i>TRUST FUND \$</i>	\$650,000
<i>MATCH \$</i>	\$127,797
<i>TOTAL COST</i>	\$777,979
<i>EST. TN REDUCTION</i>	113 lbs/yr
<i>EST. TP REDUCTION</i>	23 lbs/yr
<i>EST. TSS REDUCTION</i>	6 tons/yr
<i>STATUS / % COMPLETE</i>	Design

PROJECT CHARACTERISTICS

COUNTY/CITY: Talbot

WATERSHED(S): Choptank

SUBWATERSHED(S): Lower Choptank

PROJECT PARTNERS: Town of Easton

AGENCY CONTACT: Jim George
MDE
410-537-3000
jgeorge@mde.state.md.us

TRUST FUND PROJECT REPORT

WESTERN BRANCH WETLAND RESTORATION (MDE)

FISCAL YEAR: SFY10

PROJECT OVERVIEW

Located in Upper Marlboro, Maryland, this project will restore 16 acres of floodplain wetlands and 6 acres of wooded riparian habitat at the Equestrian Center, Courthouse, and Fisherman’s Parking Lot for a total of 106.3 drainage acres. Wetland habitat will be restored and created through the excavation of basins in the floodplain, amendment of soils to impede drainage, planting the sites with a cover crop to control erosion and then planting native vegetation.

PROJECT COMPONENTS

<i>PROJECT COMPONENT</i>	Western Branch
<i>LEAD</i>	Prince George’s County
<i>ACTIVITY</i>	Stormwater Retrofit
<i>LOCATION</i>	38.816667/-76.75
<i>TRUST FUND \$</i>	\$546,325
<i>MATCH \$</i>	\$2,482,675
<i>TOTAL COST</i>	\$3,029,000
<i>EST. TN REDUCTION</i>	150 lbs/yr
<i>EST. TP REDUCTION</i>	30 lbs/yr
<i>EST. TSS REDUCTION</i>	8 tons/yr
<i>STATUS / % COMPLETE</i>	Design

PROJECT LOCATION: Upper Patuxent



PROJECT CHARACTERISTICS

COUNTY/CITY: Prince George’s

WATERSHED(S): Patuxent River

SUBWATERSHED(S): Western Branch

PROJECT PARTNERS: Prince George’s County

AGENCY CONTACT: Jim George
MDE
410-537-3000
jgeorge@mde.state.md.us

TRUST FUND PROJECT REPORT

MOORE'S RUN WETLANDS (MDE)

FISCAL YEAR: SFY11

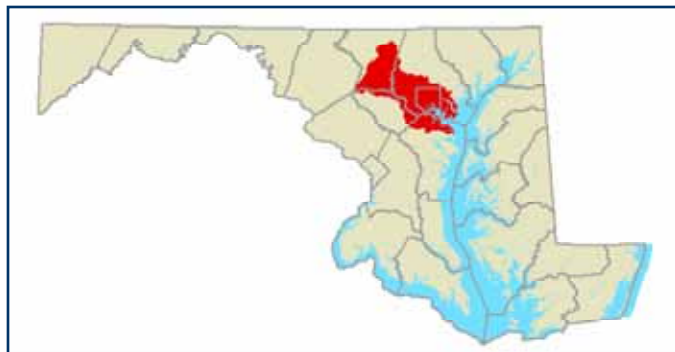
PROJECT OVERVIEW

This project consists of three stormwater control methods- a 4 acre wetland detention pond for stormwater filtration, two debris collection systems, and soil improvement through planting of native and adapted vegetation to reduce sediment and nutrient loading from Moore's Run in the Herring Run watershed.

PROJECT COMPONENTS

PROJECT COMPONENT	Moore's Run Wetlands
LEAD	Baltimore City DPW
ACTIVITY	Stormwater Retrofit
LOCATION	39.320556/-76.535556
TRUST FUND \$	\$1,870,400
MATCH \$	\$804,600
TOTAL \$	\$2,682,000
EST. TN REDUCTION	1213 lbs/yr
EST. TP REDUCTION	243 lbs/yr
EST. TSS REDUCTION	65 tons/yr
STATUS/% COMPLETE	Design

PROJECT LOCATION: Patapsco/Back Rivers



PROJECT CHARACTERISTICS

COUNTY/CITY: Baltimore City
WATERSHED(S): Patapsco/Back Rivers
SUBWATERSHED(S): Back River
PROJECT PARTNERS: Baltimore City DPW
Herring Run Watershed Association
AGENCY CONTACT: Jim George
MDE
410-537-3000
jgeorge@mde.state.md.us

TRUST FUND PROJECT REPORT

GREENHILL/HILLSIDE ROAD STREAM RESTORATION (MDE)

FISCAL YEAR: SFY10

PROJECT OVERVIEW

Based on recommendations from the Greenbelt Lake Watershed Assessment and Wildlife Management Plan, this project will stabilize 623 linear feet of riverine intermittent stream on two unnamed streams above Greenbelt Lake located in the 120.7-acre Lakewood/Woodland Hills watershed. The construction includes grading stream banks, the installation of a coastal plain outfall, a series of step pools, two bed sills and removal of a failing culvert at an existing pedestrian path crossing. The stabilization work will reduce sediment/silt loads to downstream waterways and will promote groundwater infiltration in the coastal plain outfall.

PROJECT LOCATION: Middle Potomac



PROJECT COMPONENTS

<i>PROJECT COMPONENT</i>	Greenhill/Hillside
<i>LEAD</i>	City of Greenbelt
<i>ACTIVITY</i>	Stream Restoration
<i>LOCATION</i>	39/-76.875
<i>TRUST FUND \$</i>	\$137,725
<i>MATCH \$</i>	\$32,275
<i>TOTAL COST</i>	\$220,000
<i>EST. TN REDUCTION</i>	126 lbs/yr
<i>EST. TP REDUCTION</i>	7 lbs/yr
<i>EST. TSS REDUCTION</i>	1 ton/yr
<i>STATUS/% COMPLETE</i>	Design

PROJECT CHARACTERISTICS

COUNTY/CITY: Prince George's
WATERSHED(S): Middle Potomac
SUBWATERSHED(S): Anacostia River
PROJECT PARTNERS: City of Greenbelt
AGENCY CONTACT: Jim George
MDE
410-537-3000
jgeorge@mde.state.md.us

In addition to the stream stabilization, the project will focus on educating the public on water quality issues by involving them in the planting aspect of the project and in offering educational workshops on Low Impact Development

TRUST FUND PROJECT REPORT

BACK RIVER WATERSHED RESTORATION – REDHOUSE RUN AT ST. PATRICK ROAD (MDE)

FISCAL YEAR: SFY10 & 11

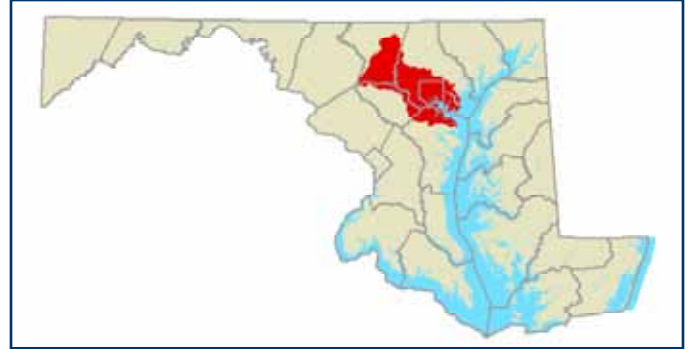
PROJECT OVERVIEW

This stream restoration project consists of restoring approximately 3,000 linear feet of degraded mainstem of Redhouse Run and an unnamed tributary. The restoration will include channel realignment, bank grading, and installation of stone toe protection, imbricated riprap, riffle grade controls, and step pool structures. The project will result in reduction of sediment discharge and nutrient loads and improvement in biodiversity and groundwater discharge in Redhouse Run, Back River, and the Chesapeake Bay. This project is supported by the Back River Watershed Plan and the Upper Back River Small Watershed Action Plan of 2008.

PROJECT COMPONENTS

<i>PROJECT COMPONENT</i>	Back River Restoration
<i>LEAD</i>	Baltimore Co. DEPRM
<i>ACTIVITY</i>	Stream Restoration
<i>LOCATION</i>	39.347259/-76.519955
<i>TRUST FUND \$</i>	\$186,121
<i>MATCH \$</i>	\$418,500
<i>TOTAL \$</i>	\$604,621
<i>EST. TN REDUCTION</i>	606 lbs/yr
<i>EST. TP REDUCTION</i>	32 lbs/yr
<i>EST. TSS REDUCTION</i>	5 lbs/yr
<i>STATUS/% COMPLETE</i>	Construction

PROJECT LOCATION: Patapsco/Back Rivers



PROJECT CHARACTERISTICS

COUNTY/CITY:	Baltimore County
WATERSHED(S):	Patapsco/Back Rivers
SUBWATERSHED(S):	Back River
PROJECT PARTNERS:	Baltimore Co. Dept. of Environmental Protection
AGENCY CONTACT:	Jim George MDE 410-537-3000 jgeorge@mde.state.md.us

TRUST FUND PROJECT REPORT

MARYLAND COVER CROP PROGRAM (MDA)

FISCAL YEAR: SFY10 & SFY11

PROJECT OVERVIEW

The Cover Crop Program is central to Maryland's current 2 year Milestone goals for achieving 3.75 million pound reduction of nutrients. Although the Chesapeake Bay Restoration Fund provides a significant and dedicated funding source for this program, additional resources are required to achieve ambitious goals of having cover crops annually established on nearly half of all cropland statewide.

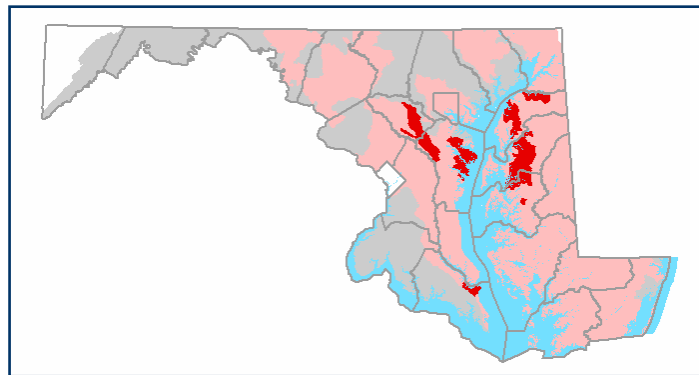
Maryland applied input from the scientific community to incentivize acres where maximum nutrient reductions can be realized. Maryland has requested the Chesapeake Bay Program to re-examine nutrient reduction efficiencies as applied to targeted management scenarios and also to examine efficiencies for commodity small grains that are not fall fertilized.



Photo by MDA

PROJECT LOCATION:

Statewide (Target Area Emphasis)



PROJECT CHARACTERISTICS

COUNTY/CITY: Statewide

WATERSHED(S): Multiple

SUBWATERSHED(S): Multiple

PROJECT PARTNERS: Soil Conservation Districts
Participating agricultural producers

PROJECT CONTACT: Louise Lawrence
MDA
410-841-5700
lawrenl@mda.state.md.us

By and large farmers are supportive of the program but their participation is influenced mostly by the time available after harvest to establish a cover crop, market considerations and weather conditions.

PROJECT COMPONENTS

<i>PROJECT COMPONENT</i>	Application SFY10	Approvals SFY10	Fall Certification SFY10	Process Payments SFY10	Application SFY11	Approvals SFY11	Fall Certification SFY11	Process Payments SFY11
<i>LEAD</i>	MDA/SCDs	MDA	MDA/SCDs	MDA	MDA/SCDs	MDA	MDA/SCDs	MDA
<i>ACRES</i>	330,500	330,500	206,810	206,810	508,304	506,645	TBD	TBD
<i>LOCATION (Lat/Long)</i>	Statewide							
<i>COST¹</i>	\$16,220,309	\$16,220,309	N/A	\$8,873,394	\$27,930,451	\$27,800,347	N/A	TBD
<i>EST. TN REDUCTION²</i>	265,116 lbs/yr (Trust Fund) 975,744 lbs/yr (Other sources) 1,240,860 lbs/yr TOTAL				TBD			
<i>EST. TP REDUCTION²</i>	8,837 (Trust Fund) 32,525 lbs/yr (Other sources) 41,362 lbs/yr TOTAL				TBD			
<i>EST. TSS REDUCTION</i>	N/A							
<i>STATUS/% COMPLETE</i>	100 %				100%			

¹ Total Funding: SFY10: Trust Fund: \$1.9M; BRF: \$10.3M; Other: \$.06M; Total: \$12.36M
SFY11: Trust Fund: \$9.52M; BRF: \$5.63M; Other: \$.03M; Total: \$15.18M

² Reductions based on BayStat averages and acres assigned based on average cost per acre.

TRUST FUND PROJECT REPORT

FOREST/GRASS BUFFERS/WETLAND RESTORATION (MDA)

FISCAL YEAR: SFY10 & SFY11

PROJECT OVERVIEW

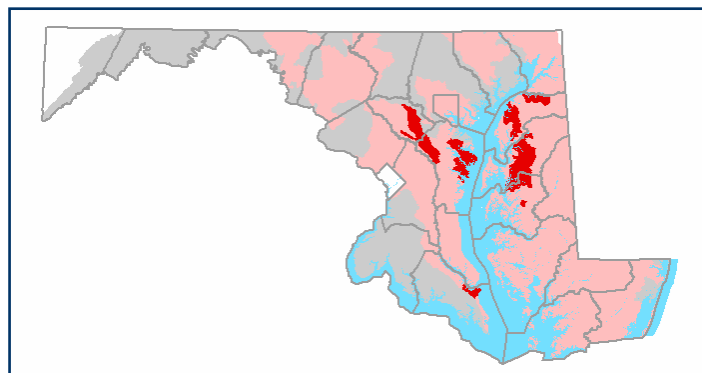
The Conservation Reserve Enhancement Program (CREP) is central to Maryland's current 2 year Milestone goals for achieving 3.75 million pound reduction of nitrogen and 193,000 pounds of phosphorus. BMPs targeted include grass and forest streamside buffers, wetlands and permanent stabilization of highly erodible land. Water quality bonds provide the state's share of funding to implement these BMPs. Trust Funds are used to provide the \$100 per acre signing incentive for new and re-enrolled acres.



Photo by MDA

PROJECT LOCATION:

Statewide (Target Area Emphasis)



PROJECT CHARACTERISTICS

COUNTY/CITY: Statewide

WATERSHED(S): Multiple

SUBWATERSHED(S): Multiple

PROJECT PARTNERS: Soil Conservation Districts
USDA
Participating agricultural producers

PROJECT CONTACT: Louise Lawrence
MDA
410-841-5700
lawrenl@mda.state.md.us

PROJECT COMPONENTS

<i>PROJECT COMPONENT</i>	New Enrollment SFY10	Re-enrollment SFY10	New Enrollment SFY11	Re-enrollment SFY11
<i>LEAD</i>	MDA/SCDs	MDA/SCDs	MDA/SCDs	MDA/SCDs
<i>ACRES¹</i>	1,449.8	2,601	302.2	536.5
<i>LOCATION (Lat/Long)</i>	Statewide			
<i>COST</i>	\$144,980 ¹	\$260,100 ¹	\$30,220 ²	\$53,650 ²
<i>EST. TN REDUCTION³</i>	23,913	40,541	6,011	8,559
<i>EST. TP REDUCTION³</i>	1,301	2,343	403	526
<i>EST. TSS REDUCTION</i>	N/A			
<i>STATUS/% COMPLETE</i>	100% ⁴		33% ⁵	

¹ No allocation to CREP signing incentives in SFY10; redirected \$268,000 from SFY10 cover crop Trust Fund allocation to CREP signing incentives

² \$800,000 allocated in SFY11. MDA has no allocation to CREP for signing incentives; Capital funding supports BMP implementation

³ Calculation based on Baystat assigned reduction based on per practice signing bonus for future implementation of new enrollment acres & ongoing benefits of re-enrolled acres paid in SFY10

⁴ Executed contract, signing incentive paid.

⁵ Executed contract, signing incentive paid (7/1/10-10/31/10)

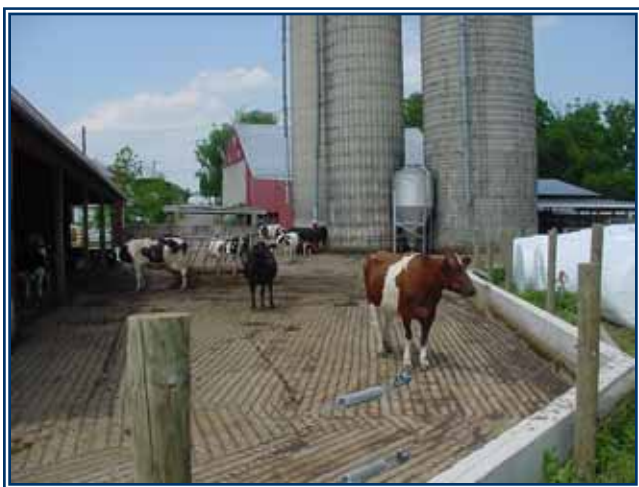
TRUST FUND PROJECT REPORT

ANIMAL WASTE MANAGEMENT BMPs (MDA)

FISCAL YEAR: SFY10 & SFY11

PROJECT OVERVIEW

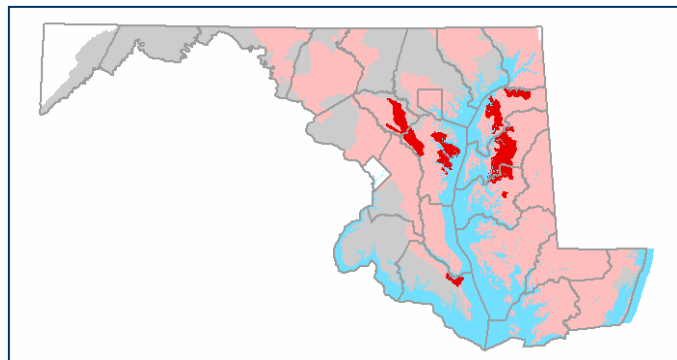
Maryland's 2 Year Milestones emphasize the acceleration of BMPs that address animal waste management. Specific BMPs include poultry and livestock animal waste storage and poultry heavy use areas (HUAs), concrete pads adjacent to waste storage and poultry houses to facilitate clean up and prevent leaching.



Photos by MDA

Examples of Animal Waste Management BMPs.

PROJECT LOCATION: Statewide (Target Area Emphasis)



PROJECT CHARACTERISTICS

COUNTY/CITY: Statewide

WATERSHED(S): Multiple

SUBWATERSHED(S): Multiple

PROJECT PARTNERS: Soil Conservation Districts
Participating agricultural producers

AGENCY CONTACT: Louise Lawrence
MDA
410-841-5700
lawrenl@dma.state.md.us

PROJECT COMPONENTS

<i>PROJECT COMPONENT</i>	Implementation Completed SFY10	Implementation Completed SFY11	Implementation Approved/Pending SFY11
<i>LEAD</i>	MDA/SCDs		
<i>BMPs</i>	Animal Waste Storage, HUAs		
<i>LOCATION</i>	Statewide		
<i>TRUST FUND \$</i>	\$980,000	\$800,000	
<i>MATCH \$</i>	\$4,589,465	\$10,000,000 ¹	
<i>TOTAL \$</i>	\$4,469,465	\$10,800,000	
<i>EST. TN REDUCTION</i>	46,624 lbs/yr ²	10,745 lbs/yr ²	
<i>EST. TP REDUCTION</i>	37,764 lbs/yr ²	7,770 lbs/yr ²	
<i>EST. TSS REDUCTION</i>	N/A		
<i>STATUS/% COMPLETE</i>	100%	10% ³	

¹ MACS SFY11 Capital Allocation

² Calculation based on reduction from animal waster & HUA BMP implementation in FY2010 regardless of funding source

³ \$1.13M spent to date on implemented and pending project from all funding sources

TRUST FUND PROJECT REPORT

LITTLE PATUXENT LOCAL IMPLEMENTATION GRANT (DNR)

FISCAL YEAR: SFY 09, SFY10, & SFY11

PROJECT OVERVIEW

The Little Patuxent Restoration Partners (LPRP) are working together to implement a multi-year plan to restore multiple subwatersheds within the Little Patuxent River Watershed. LPRP offers solutions to address problems such as untreated impervious surfaces, stream erosion, nutrient loads, and sedimentation.

Now in its third year, the LPRP Local Implementation Grant is in full gear and is realizing the vision intended for the Trust Fund: targeted implementation with the goal of demonstrable water quality improvement. A few highlights to date:

- 23 stormwater management retrofit projects are either in design, construction, or complete in the watershed
- A monitoring strategy has been put into place in Howard County and has continued throughout the project period
- In partnership with the Watershed Assistance Collaborative, a successful rain garden education and outreach program was put in place in the Red Hill branch resulting in the construction of 20 rain gardens. This initiative has received very positive press and the Collaborative is looking into ways of expanding this project. Read more: <http://www.mdsg.umd.edu/CQ/BayBlog/2010/1/1/18/rain-gardens/>
- Howard County has redirected its capital improvement funds towards design work, resulting in a “shovel ready” queue of projects 100% of Trust Fund dollars for these stormwater management projects are going for on-the-ground construction, supporting several contractors in the process.

PROJECT LOCATION: Little Patuxent



PROJECT CHARACTERISTICS

COUNTY/CITY:	Howard County
WATERSHED(S):	Little Patuxent
SUBWATERSHED(S):	Red Hill Branch Wilde Lake
PROJECT PARTNERS:	Howard County Columbia Association
PROJECT CONTACT:	Jennifer Raulin DNR 410-260-8745 jrauln@dnr.state.md.us

SFY10 PROJECT COMPONENTS (Year 2 of 3)

PROJECT COMPONENT	Dorsey Building	Atholton Park	Cedar Lane Park	Font Hill Park	Sewall's Orchard	Brampton Hills	St. Johns Green	Paul Mill Road	Public Outreach & Education
LEAD	Howard Co.	Howard Co.	Howard Co.	Howard Co.	Howard Co.	Howard Co.	Howard Co.	Howard Co.	Howard Co.
ACTIVITY	Bioretention SW retrofit	Bioretention SW retrofit	Bioretention SW retrofit	Floating Wetlands (Innovative practice)	Floating Wetlands (Innovative practice)	Stream Restoration	SW Pond Retrofit	Stream Restoration	Outreach & Education
LOCATION	39.236944/-76.826944	39.18611/-76.865833	39.23361/-76.88361	39.27138/-76.85972	39.198333/-76.825833	39.24444/-76.81	39.294167/-76.843889	39.266389/-76.8475	Red Hill Branch
TRUST FUND \$	\$74,000	\$70,000	\$70,000	\$31,000		\$80,000	\$40,000	\$200,000	\$30,000
MATCH \$	\$46,000	\$50,000	\$50,000	\$42,000		\$20,000	\$10,000	\$50,000	\$10,000
TOTAL \$	\$120,000	\$120,000	\$120,000.	\$73,000		\$100,000	\$50,000	\$250,000	\$40,000.
EST. TN REDUCTION	1,435.0 lbs/yr								
EST. TP REDUCTION	252.0 lbs/yr								
EST. TSS REDUCTION	4,842.0 lbs/yr								
STATUS/% COMPLETE	Design 100% Construction 90%	Design 100% Construction 0%	Complete	Complete	Complete	Design/ 100% In Permit On track for December Construction	Construction 10%	Construction 100% Planting after 1 st frost	Complete- 9 raingardens installed

SFY10 PROJECT COMPONENTS (CONTINUED)

<i>PROJECT COMPONENT</i>	Deep Pasture	Mendenhall Court #1	Emerson's Reach	Cloud Leap Court	Tamar Drive	Queen Maria Court	Spinning Seed	Mendenhall Court #2
<i>LEAD</i>	Columbia Association	Columbia Association	Columbia Association	Columbia Association	Columbia Association	Columbia Association	Columbia Association	Columbia Association
<i>ACTIVITY</i>	Bioretention SW retrofit	Grass Swale	SW Mgmt Pond Retrofit	Bioretention SW retrofit	Bioretention SW retrofit	Stream Restoration	Stream Restoration	Stream Restoration
<i>LAT/LONG</i>	39.1830730/ -76.8292558	39.1871455/ -76.8277148	39.2074834/ -76.8280620	39.2091574/ -76.8165800	39.2123250/ -76.8229292	39.2189273/ -76.8179720	39.1834349/ -76.8272240	39.1850433/ -76.8270766
<i>TRUST FUND \$</i>	\$68,000	\$200,600	\$272,000	\$150,000	\$112,000	\$36,000	\$54,000	\$118,000
<i>MATCH \$</i>	\$1,152,600							
<i>TOTAL \$</i>	\$1,687,600							
<i>EST. TN REDUCTION</i>	13 lbs/yr	22 lbs/yr	101 lbs/yr	34 lbs/yr	25 lbs/yr	6 lbs/yr	2 lbs/yr	9 lbs/yr
<i>EST. TP REDUCTION</i>	2 lbs/yr	3 lbs/yr	7 lbs/yr	5 lbs/yr	3 lbs/yr	1 lbs/yr	0 lbs/yr	2 lbs/yr
<i>EST. TSS REDUCTION</i>	600 lbs/yr	1,258 lbs/yr	5,391 lbs/yr	1,628 lbs/yr	1,207 lbs/yr	267 lbs/yr	306 lbs/yr	1,199 lbs/yr
<i>STATUS/% COMPLETE</i>	Design 0%/ Permit 0%/ Construction 0%	Design 0%/ Permit 0%/ Construction 0%	Design 0%/ Permit 0%/ Construction 0%	Design 0%/ Permit 0%/ Construction 0%	Design 0%/ Permit 0%/ Construction 0%	Design 0%/ Permit 0%/ Construction 0%	Design 0%/ Permit 0%/ Construction 0%	Design 0%/ Permit 0%/ Construction 0%

SFY10 PROJECT COMPONENTS (CONTINUED)

<i>PROJECT COMPONENT</i>	Windbell Lane	Smooth Path & Honeyladen Pl.	Owen Brown YMCA
<i>LEAD</i>	Columbia Association	Columbia Association	Columbia Association
<i>ACTIVITY</i>	Bioretention SW retrofit	Bioretention SW retrofit	Bioretention SW retrofit
<i>LAT/LONG</i>	39.1801568/ -76.8370152	39.1883132/ -76.8385371	39.1904343/ -76.8337793
<i>TRUST FUND \$</i>	\$51,000	\$55,000	\$36,000
<i>MATCH \$</i>	See previous page		
<i>TOTAL \$</i>	See previous page		
<i>EST. TN REDUCTION</i>	24 lbs/yr	12 lbs/yr	6 lbs/yr
<i>EST. TP REDUCTION</i>	1 lbs/yr	2 lbs/yr	1 lbs/yr
<i>EST. TSS REDUCTION</i>	318 lbs/yr	598 lbs/yr	267 lbs/yr
<i>STATUS/% COMPLETE</i>	Design 0%/ Permit 0%/ Construction 0%	Design 0%/ Permit 0%/ Construction 0%	Design 0%/ Permit 0%/ Construction 0%



Photos by Amanda Rockler

Before and after photos of Cedar Lane Park Bioretention Project (see next page for additional detail). The main parking lot at the Cedar Lane Park – North Area did not receive water quality treatment. Bioretention was added to the site to help treat site runoff from the parking lot. A bioretention facility now picks up the parking lot drainage and pre-treats it prior to its discharge from the site, thus providing water quality treatment that is not currently being provided. The facility also helps to reduce the volume of water leaving the site, which will help the stream.

SFY11 PROJECT COMPONENTS (YEAR 3 OF 3)

<i>PROJECT COMPONENT</i>	Meadowbrook Park Stream Restoration ²	Red Hill Way Stream Restoration ²	Old Willow Way Stream Restoration ²	Salterforth Pond BMP Retrofit*	Bramhope Lane Stream Restoration*	Meadowbrook Park*	Public Outreach & Education
<i>LEAD</i>	Howard Co.	Howard Co.	Howard Co.	Howard Co.	Howard Co.	Howard Co.	Howard Co.
<i>ACTIVITY</i>	Stream Restoration	Stream Restoration	Stream Restoration	Monitoring	Monitoring	Monitoring	Outreach & Education
<i>LAT/LONG</i>	39.24667/ -76.823056	39.2375/ -76.806944	39.25/ -76.854167	39.238485/ -76.809821	39.23549/ -76.823569	39.247018/ -76.823569	Red Hill Branch
<i>TRUST FUND \$</i>	\$230,000	\$200,000	\$200,000	\$140,000			\$30,000
<i>MATCH \$</i>	\$320,000	\$50,000	\$100,000	\$80,000			\$2,000
<i>COST</i>	\$550,000	\$250,000	\$300,000	\$220,000.00			\$32,000
<i>EST. TN REDUCTION</i>	26 lbs/yr	8 lbs/yr	10 lbs/yr	N/A	N/A	N/A	5 lbs/yr
<i>EST. TP REDUCTION</i>	5 lbs/yr	1 lbs/yr	2 lbs/yr	N/A	N/A	N/A	1 lbs/yr
<i>EST. TSS REDUCTION</i>	3,315 lbs/yr	1,020 lbs/yr	1,275 lbs/yr	N/A	N/A	N/A	336 lbs/yr
<i>STATUS/% COMPLETE</i>	Design /33% Permit/ 0% Construction/ Summer 2011	Design/100% Permit/50% Construction/ December 2010	Design/100% Permit/50% Construction/ December 2010	0%-begins January 2011	0%-begins January 2011	0%-begins January 2011	Complete- 10 rain gardens installed

¹ Due to Columbia Association's Budget Cycle, projects identified for funding with SFY11 dollars will not be finalized until March, 2011.

² continued monitoring of sites initially funded in SFY09

TRUST FUND PROJECT REPORT

MAGOTHY LOCAL IMPLEMENTATION GRANT (DNR)

FISCAL YEAR: SFY10 & SFY11

PROJECT OVERVIEW

Anne Arundel County has embarked on a multi-year, comprehensive effort to rehabilitate and restore water quality and ecosystem function to the Cypress Creek subwatershed of the high priority Magothy River (Maryland 8 digit: 02131001). This subwatershed contains primarily residential and commercial land cover and exhibit imperviousness ranging from 24 to 31 percent. Much of this land was developed prior to stormwater management measures and, in those developed areas with stormwater management facilities, the facilities are not necessarily designed or functioning to provide water quality benefits.

Anne Arundel County will implement 4 projects addressing issues such as untreated impervious surfaces, as well as the sedimentation and nutrient loads associated with stormwater runoff and in-stream erosion. These projects will augment the large-scale multimillion dollar North Cypress Creek stream rehabilitation project that the County has allocated funding for.

The projects will utilize the innovative design and practice of step pool conveyance systems (also known as regenerative stormwater conveyance) and sand seepage wetlands. The University of Maryland Chesapeake Biological Lab (UMD-CBL) will continue monitoring Cypress Creek, a multi-year initiative since 2008. UMD-CBL will conduct effectiveness monitoring stormwater retrofits in the watershed measuring flow, nitrogen, and suspended sediments.

PROJECT LOCATION: Magothy



PROJECT CHARACTERISTICS

COUNTY/CITY:	Anne Arundel
WATERSHED(S):	Magothy River
SUBWATERSHED(S):	Cypress Creek
PROJECT PARTNERS:	Anne Arundel County Greater Severna Park Watershed Action Group Magothy River Association Anne Arundel Community College UMD- CBL
AGENCY CONTACT:	Jennifer Raulin DNR 410-260-8745 jraulin@dnr.state.md.us

PROJECT COMPONENTS

PROJECT COMPONENT	Cypress Creek Recreation Area	Dunkeld Manor	Leelyn Drive Dry Pond Retrofit	County Park & Ride @ Arundel Beach
LEAD	Anne Arundel Co.			
ACTIVITY	Bioretention SW retrofit	Regenerative Stormwater Conveyance SW retrofit	Regenerative Stormwater Conveyance SW retrofit	Bioretention SW retrofit
LOCATION (Lat/Long) ¹	39.072/-76.542	39.074/-76.537	39.077/-76.541	39.079/-76.546
TRUST FUND \$	\$840,000 ¹			
MATCH \$	\$350,000			
TOTAL \$	\$1,190,000			
EST. TN REDUCTION	483 lbs/yr			
EST. TP REDUCTION	57 lbs/yr			
EST. TSS REDUCTION	14 tons/yr			
STATUS/% COMPLETE	Design/40% Construction-scheduled for winter 2011	Design-25% Construction/0%	Design /20% Construction/0%	Design/40% Construction-scheduled for winter 2011

¹ \$360K in SFY10, \$480K in SFY11 for design & construction



Shot taken during a storm event at the Park & Ride off of Arundel Beach Road. Bioretention installation at this site will control stormwater and improve runoff water quality in headwaters of Cypress Creek in the Magothy River.

Photo Credit: Solange Filoso

TRUST FUND PROJECT REPORT

WHEEL CREEK (BUSH RIVER) LOCAL IMPLEMENTATION GRANT (DNR)

FISCAL YEAR: SFY10 & SFY11

PROJECT OVERVIEW

The Wheel Creek watershed (unofficially named) is centrally located in Harford County, approximately 3 miles south of the Town of Bel Air. It is a second order tributary to Winters Run (MDEDIGIT 02130702) and Atkisson Reservoir (MDE8DIGIT 02130703) in the Bush River watershed (MDE6DIGIT 021307). Wheel Creek is situated along the eastern edge of the Piedmont physiographic province, drains 435 acres, and contains approximately 27% impervious cover. A mixture of commercial and high density residential land uses dominate the headwaters of the watershed. The remainder of the watershed's land use is dominated by medium and low density residential. The Harford Glen Environmental Education Center, which is part of the Harford County Public School system, is predominately forested and is located in the lower reaches of the Wheel Creek watershed. The Wheel Creek Project includes stream and stormwater designs and community outreach/education, including a rain garden program, to improve water quality in growth-designated area of the County.



Photo by: Christine Buckley

PROJECT LOCATION: Bush River



PROJECT CHARACTERISTICS

COUNTY/CITY: Harford

WATERSHED(S): Bush River

SUBWATERSHED(S): Winters Run

PROJECT PARTNERS: Harford County
Chesapeake Bay National Estuarine Research Reserve
Harford Glen Outdoor Education Center
Otter Point Creek Alliance

PROJECT CONTACT: Jenn Raulin
DNR
410-260-8745
jrauln@dnr.state.md.us

Abingdon Library Rain Garden Applying soil amendments mid-construction. (October, 2010)

PROJECT COMPONENTS

<i>PROJECT COMPONENT</i>	Project monitoring SFY10 & SFY11	Calvert's Walk Stream Restoration SFY10 & SFY11	Wheel Creek Stormwater Retrofit SFY10	Country Walk Stream Restoration SFY11	Stewardship & Rain Garden Projects SFY10 & SFY11
<i>LEAD</i>	Harford Co. DNR	Harford Co.	Harford Co.	Harford Co.	Harford Co. CB-NERR
<i>ACTIVITY</i>	Monitoring	Stream Restoration	Stormwater Retrofit	Stream Restoration	Education & Outreach
<i>LOCATION</i>	Multiple	39.4955/-76.3301	39.4929/-76.3335	39.489/-76.333	Multiple
<i>TRUST FUND \$</i>	\$79,000 ¹	\$201,605 ²	\$30,000	\$154,395	\$65,000 ³
<i>MATCH \$</i>	\$142,000	\$178,756	\$36,991	\$100,000	\$75,000
<i>TOTAL COST</i>	\$221,000	\$380,361	\$66,991	\$254,395	\$140,000
<i>EST. TN REDUCTION</i>	N/A	81 lbs/yr	N/A	N/A	TBD
<i>EST. TP REDUCTION</i>	N/A	4 lbs/yr	N/A	N/A	TBD
<i>EST. TSS REDUCTION</i>	N/A	1,500 lbs/yr	N/A	N/A	TBD
<i>STATUS / % COMPLETE</i>	50%	Design/70% Construction/0%	Design/60%	Design/0%	50%

¹ SFY10: \$25K, SFY11: \$54K

² SFY10: \$50k, SFY11: \$151,605

³ SFY10: \$55K, SFY11: \$10K

TRUST FUND PROJECT REPORT

TRED AVON LOCAL IMPLEMENTATION GRANT (DNR)

FISCAL YEAR: SFY11

PROJECT OVERVIEW

The Tred Avon River is one of the main sub-watersheds to the Choptank River, which has historically been a major source of oysters, fish and other aquatic and wildlife habitat. Water quality in the Tred Avon is degraded by low oxygen, sediment, nutrients, fecal coliform and biological impairments. The upper reaches of the watershed are highly impacted by urban stormwater runoff from both a water quality and aesthetic aspect. The projects selected are targeting high levels of nutrients and sediment deliveries to the river, and addresses homeowner practices and the social aspects of educating and outreach to citizens in the area.

PROJECT LOCATION: Choptank River



PROJECT CHARACTERISTICS

COUNTY/CITY: Talbot County

WATERSHED(S): Choptank River

SUBWATERSHED(S): Tred Avon River

PROJECT PARTNERS: Talbot County
UMD-Cooperative
Extension Service
Environmental Concern,
Inc.

AGENCY CONTACT: Jenn Raulin
DNR
410-260-8745
jraulin@dnr.state.md.us

PROJECT COMPONENTS

<i>PROJECT COMPONENT</i>	Bag filters & catch basin inserts	Non-Agricultural Nutrient Management	Lawn Fertilizer Ordinance	Conversion of Roadside Ditches to Bioswales
<i>LEAD</i>	Talbot Co.	UMD-Cooperative Extension	Talbot Co.	Talbot Co, Environmental Concern
<i>ACTIVITY</i>	SW retrofit	Outreach/Education	Policy	SW Retrofit
<i>LOCATION</i>	Multiple	Watershed-wide	Watershed-wide	Multiple
<i>TRUST FUND \$</i>	\$235,000	\$163,180		\$81,820
<i>MATCH \$</i>	\$0	\$26,230		\$0
<i>TOTAL COST</i>	\$235,000	\$189,410		\$81,820
<i>EST. TN REDUCTION</i>	1,530 lbs/yr ¹	2 lbs/yr	N/A	6 lbs/yr ²
<i>EST. TP REDUCTION</i>	268 lbs/yr ¹	N/A	N/A	1 lb/yr ²
<i>EST. TSS REDUCTION</i>	70 lbs/yr ¹	N/A	N/A	N/A
<i>STATUS / % COMPLETE</i>	0%	0%	0%	0%

¹ Based on an estimate of 367 treated acres

² Assuming 1 acre of bioswale

TRUST FUND PROJECT REPORT

WATERSHED 263 LOCAL IMPLEMENTATION GRANT (DNR)

FISCAL YEAR: SFY10 & SFY11

PROJECT OVERVIEW

Baltimore City, Parks and People Foundation, and their partners are working together to implement a multi-year, multi-initiative plan to restore all sub watersheds located within the Gwynns Falls watershed (Maryland 8 digit: 02130905).

The Watershed 263 Management Plan (referred to as the "Plan") prepared for the City, offers solutions to address problems such as untreated impervious surfaces, nutrient loads, and sedimentation. The general approach of the Plan is to leverage the collective power of the City administration and community groups by implementing specific innovative and cost-effective projects to address the aforementioned problems.

In SFY 10, the City identified four high priority Environmental Site Design (ESD) projects. These projects will provide water quality benefits, nutrient removal, and flow attenuation, through vegetative and structural retrofits.

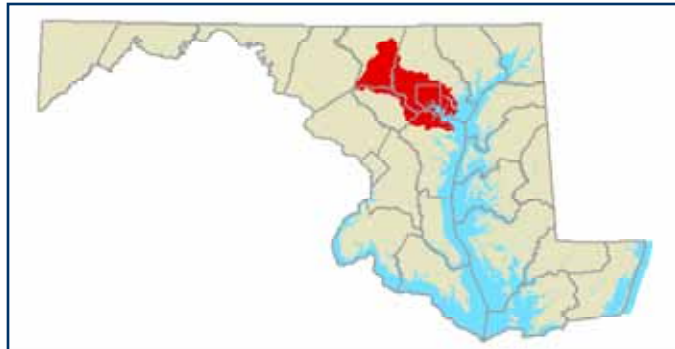
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Photo by: Guy Hager



Impervious surface removal and native vegetation planting at North Mount Street.

PROJECT LOCATION: Patapsco/Back Rivers



PROJECT CHARACTERISTICS

COUNTY/CITY: Baltimore City

WATERSHED(S): Patapsco/Back

SUBWATERSHED(S): Gwynns Falls

PROJECT PARTNERS: Baltimore City DPW
Parks & People Foundation.

AGENCY CONTACT: Jenn Raulin
DNR
410-260-8745
jraulin@dnr.state.md.us

Urban street tree installation at Gilmore Homes



Photo by: Guy Hager

PROJECT OVERVIEW *(continued from previous)*

The expected benefit is reduced sedimentation, phosphorus, and nitrogen flowing into Baltimore's storm sewer system, which empties into the impaired Gwynns Falls. Parks & People is providing community outreach, education, and organizes volunteer-based, on-the-ground community greening projects such as tree planting, vacant lot and schoolyard restoration projects and smaller bio-infiltration facilities such as rain gardens, bio-swales, and rain barrels to decrease impervious surface and will work in conjunction with the City's efforts.

For SFY 11, Baltimore City DPW will select 5-7 more specific LID SW retrofits in subwatershed O that may include pervious pavement removal, bioswales, street tree plantings and retrofitting existing urban trees for more growth potential. Parks and People Foundation will continue working with the community on water quality and project outreach, education, and small projects on public & private grounds (such as schools and apartment complexes) including tree plantings, pavement removal and stormwater remediation (LID).

PROJECT COMPONENTS

<i>PROJECT COMPONENT</i>	Community outreach, Education & bioretention projects	Site 1- Fayette & Mount Streets	Site 2- Fayette & Monroe Streets	Site 3- The Park at Lanvale & Gilmore Sts.	Site 4- Bush St.
<i>LEAD</i>	P&P	Baltimore City DPW	Baltimore City DPW	Baltimore City DPW	Baltimore City DPW
<i>ACTIVITY</i>	LID Retrofit: Design & Construction				
<i>LOCATION)</i>	Multiple	39.289538/ - 76.643758	39.289439/- 76.647148	39.289439/ - 76.647148	39.2982/-76.6436
<i>TRUST FUND \$</i>	\$72,000	\$41,244	\$14,000	\$67,977	\$115,480
<i>MATCH \$</i>	\$0	\$40,000	\$20,000	\$50,000	\$80,000
<i>TOTAL COST</i>	\$72,000	\$81,244	\$34,000	\$117,977	\$195,480
<i>EST. TN REDUCTION</i>	40 lbs/yr	0 lbs/yr	12 lbs/yr	18 lbs/yr	2 lbs/yr
<i>EST. TP REDUCTION</i>	82 lbs/yr	49 lbs/yr	14 lbs/yr	20 lbs/yr	215 lbs/yr
<i>EST. TSS REDUCTION</i>	2,445 lbs/yr	407 lbs/yr	85 lbs/yr	166 lbs/yr	1788 lbs/yr
<i>STATUS / % COMPLETE</i>	70%	60%	10%	10%	10%

TRUST FUND PROJECT REPORT

MIDDLE CHESTER LOCAL IMPLEMENTATION GRANT (DNR)

FISCAL YEAR: SFY10 & SYF11

PROJECT OVERVIEW

Kent County government (KC), Chester River Association (CRA), Kent County Soil and Water Conservation District/NRCS (KSCD), University of Maryland (UMD), MD Department of Agriculture (MDA), Ducks Unlimited (DU), and Washington College (WC) hereafter referred to collectively as the Middle Chester Partners (MCP), are working together to implement a multi-year, multi-initiative plan to restore the Middle Chester watershed (Maryland 8 digit: 02130509). The Middle Chester offers the best current measurement data, an existing Watershed Restoration Action Strategy (WRAS), and the greatest opportunity to leverage other programs and initiatives.

Facilitated by the Environmental Finance Center, the MCP identified 3 focus areas which represent the greatest needs/threats to water quality: septics, agriculture, and wetland restoration (see below). Subcommittees were created and priority projects were identified after several meetings. With the assistance of University of Maryland Sea Grant Extension (MDSG), these subcommittees will continue to meet throughout this multi-year grant to identify additional projects, improve processes, and make strategic decisions with limited funding.

(continued on next page)

Photo by Jenn Raulin



Regional Watershed Restoration Specialist surveying a switchgrass buffer in the Middle Chester.

PROJECT LOCATION: Middle Chester



PROJECT CHARACTERISTICS

COUNTY/CITY:	Kent County
WATERSHED(S):	Middle Chester River
SUBWATERSHED(S):	Multiple
PROJECT PARTNERS:	Kent County Chester River Association Ducks Unlimited University of Maryland MDA
AGENCY CONTACT:	Jennifer Raulin DNR 410-260-8745 jrauln@dnr.state.md.us

PROJECT OVERVIEW (continued from previous page)

The main areas of work identified in the Middle Chester:

- Septics: Fully fund repairs of 20 failing septic systems in the Critical Area of the Middle Chester watershed, and facilitate enrollment of these properties in the Bay Restoration Fund for septic system upgrade assistance;
- Wetland Restoration: Spray 30 acres per year of Morgan Creek to remove phragmites; and restore 2 wetland ponds per year on agricultural land; and
- Agriculture: Plant 200 acres of switchgrass in buffers and explore innovative uses for switchgrass as a biofuel as well as pilot a precision agriculture project involving Greenseeker technology.

SFY 10 funding began work on the above initiatives and SFY11 funding will enable the MCP to continue implementing these projects for the next two years.

PROJECT COMPONENTS

PROJECT COMPONENT	Wetland Restoration 6 Sites SFY10 & SFY11	Phragmites Eradication SFY10 & SFY11	Repair failing septic systems SFY10 & SFY11	Switchgrass Buffer Planting SFY10 & SFY11	Precision Agriculture SFY10 & SFY11	Field Tour SFY11	Urban Stream Restoration
LEAD	Ducks Unlimited	Kent Co.	Kent Co.	CRA	MDA/CRA	CRA	Washington College/ Chestertown
ACTIVITY	Wetland Restoration	Wetland Restoration	Septics	Ag BMP	Ag BMP	Outreach/ Education	Stormwater BMP
LOCATION	Multiple	39.237179/- 76.037906	Multiple	Multiple	Multiple	Multiple	39.223909/- 76.072522
TRUST FUND \$	\$198,000 ¹	\$10,500 ²	\$106,000 ³	\$152,350 ⁴	\$192,000 ⁵	\$10,000	\$80,000
MATCH \$	\$16,000	\$ 1,367	\$0	\$40,000	\$0	\$0	\$35,000
TOTAL \$	\$214,000	\$11,867	\$224,689	\$192,350	\$192,000	\$0	\$115,000
EST. TN REDUCTION	TBD	N/A	180 lbs/yr	TBD	TBD	N/A	TBD
EST. TP REDUCTION	TBD	N/A	N/A	TBD	TBD	N/A	TBD
EST. TSS REDUCTION	TBD	N/A	N/A	TBD	TBD	N/A	TBD
STATUS/% COMPLETE	Designs for 2 wetlands/100 % Add'l sites being surveyed	33%	33%	8%	33%	0%	0%

¹ SFY10: \$66K, SFY11: \$132K

² SFY10: \$3,500. SFY11 : \$7K

³ SFY10: \$106K; SFY11: \$118,689

⁴ SFY10: \$68K, SFY11: \$84,350

⁵ SFY10: \$108K; SFY11: \$84K

TRUST FUND PROJECT REPORT
CORSICA LOCAL IMPLEMENTATION GRANT (DNR)
FISCAL YEAR: SFY11

PROJECT OVERVIEW

The Corsica River Restoration Project, now in its 5th year, aims to implement its nationally recognized Watershed Restoration Action Strategy (WRAS). The Corsica Local Implementation Grant implements additional conservation measures in the watershed that are based on learning and local commitment that has developed in the Corsica project thus far. It complements and expands, rather than duplicates, activities that are already funded in the watershed in order to enhance and accelerate results on the ground and in the water column. The original commitment that was demonstrated by Centreville and citizen volunteers in the 2003-2005 timeframe and focused through the Corsica WRAS, was subsequently amplified and enabled by State, Federal and NGO funding. This investment is now engendering a third order effect in the form of Town, County and resident commitment to do even more in order to meet the Corsica Restoration goals and sustain a restored Corsica thereafter. These local entities, with the benefit of strong guidance and support from DNR, have established a clear track record for planning and implementation and for doing this in a way that can be sustained into the future. The projects funding through the Trust Fund focus on stormwater management and compliments the other initiatives such as agriculture and natural filters that are already taking place in the watershed.

PROJECT LOCATION: Corsica



PROJECT CHARACTERISTICS

COUNTY/CITY: Queen Anne's
WATERSHED(S): Upper Eastern Shore
SUBWATERSHED(S): Corsica River
PROJECT PARTNERS: Queen Anne's County
Town of Centreville
Corsica River Conservancy
AGENCY CONTACT: Jenn Raulin
DNR
410-260-8745
jraulin@dnr.state.md.us

PROJECT COMPONENTS:

<i>PROJECT COMPONENT</i>	Bloomfield Park Permeable Pavers	QAC Office Building SWM	Rain barrel Program	WWTP Outfall and Stream Restoration Design	Banjo Lane CPO Repair	Outreach & Volunteer Monitoring	Rain Garden Program- 74 gardens	Symphony Village Bioswale
<i>LEAD</i>	Queen Anne's Co.	Queen Anne's Co.	Centreville	Centreville	Centreville	Corsica River Conservancy	Corsica River Conservancy	Corsica River Conservancy
<i>ACTIVITY</i>	SW retrofit	SW retrofit	Education/ Outreach	SW retrofit	Stormwater retrofit	Outreach & Education	Outreach & Education	Stormwater Retrofit
<i>LOCATION</i>	39.067035/-76.043404	39.045384/-76.064422	Multiple	39.048333/-76.065278	39.04619/-76.06234	Watershed-wide	Watershed-wide	39.024935/-76.067834
<i>TRUST FUND \$</i>	\$50,000	\$200,000	\$10,000	\$30,000	\$30,000	\$32,000	\$148,000	\$20,000
<i>MATCH \$</i>	\$15,250	\$15,250	\$0	\$0	\$0	\$0	\$0	\$0
<i>TOTAL COST</i>	\$65,250	\$215,250	\$10,000	\$30,000	\$30,000	\$0	\$148,000	\$20,000
<i>EST. TN REDUCTION</i>	2 lbs/yr	12 lbs/yr	N/A	N/A	N/A	N/A	2 lb/yr	N/A
<i>EST. TP REDUCTION</i>	N/A	2 lbs/yr	N/A	N/A	N/A	N/A	N/A	N/A
<i>EST. TSS REDUCTION</i>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>STATUS / % COMPLETE</i>	0%	0%	0%	0%	0%	0%	0%	0%

TRUST FUND PROJECT REPORT

INNOVATIVE TECHNOLOGY/CONTINGENCY DEVELOPMENT (DNR)

FISCAL YEAR: SFY10 & 11

PROJECT OVERVIEW

The Innovative Technology Fund was established with the goal of accelerating Bay restoration through the development of new technologies. At the 2007 Chesapeake Bay Program Executive Council Meeting (EC), the State of Maryland agreed to promote investments in technologies that would accelerate Bay restoration efforts. The Innovative Technology Fund is made possible through funding from the Trust Fund, the Environmental Protection Agency's Chesapeake Bay Implementation Grant (CBIG) and in partnership with the University of Maryland's Industrial Partnership (MIPS) and the Mtech Ventures Program.

Projects are selected based on their ability to achieve Maryland's restoration goals. By supporting innovative technologies, the State demonstrates their commitment to investing in research and development as a way to improve efficiency and maximize return on investment while supporting Maryland businesses.

The following companies have been supported through the Trust Fund's Chesapeake Bay Seed Capital Fund:

- *Zymetis, Inc.*, a biotechnology company that has developed breakthrough & enabling enzyme technology for the blossoming biofuels industry.
- *Traffax, Inc.*, a software company that can impact the reduction of car emission through better traffic data that allows for route diversion during congestion, as well as improved signal operation in urban networks.

PROJECT LOCATION: Statewide



PROJECT CHARACTERISTICS

COUNTY/CITY:	Statewide
WATERSHED(S):	Multiple
SUBWATERSHED(S):	Multiple
PROJECT PARTNERS:	University of Maryland
AGENCY CONTACT:	Sarah Lane DNR 410-260-8788 slane@dnr.state.md.us

- *Smart Slope, LLC*, produces and sells vegetated concrete retaining walls that will help to diminish heat island effects, as well as reduce stormwater, sediment and nutrient runoff.

(continued on next page)

PROJECT OVERVIEW (continued from previous)

For the Research & Development fund, several projects have been supported:

- *Avihome, LLC*, Plenum Floor Ventilation for Poultry Houses; new flooring (in research phase) will result in a drier fecal product that will concentrate the nitrogen waste from the chicken therefore reducing its potential to pollute the environment in the form of runoff and ammonia emission.
- *Proparts, LLC*, proposed wind turbine technology that produces zero emissions will reduce greenhouse gases by decreasing household electrical demand on coal fired power plants.
- *Stancills, Inc.*, is developing a light weight low carbon footprint green roof planting media with improved physical properties that will increase the success and implementation of green roofs.
- *Maryland Environmental Plastics, LLC*, is inventing biodegradable plastic seed pots uniquely designed to allow for proper root growth for greater plant establishment and restoration in the Chesapeake Bay.
- *Blue Wing Environmental Solutions and Technologies, LLC*, is evaluating floating treatment wetlands for the removal of nitrogen and phosphorus in poultry waste lagoons.



PROJECT COMPONENTS

PROJECT COMPONENT	Innovative Technology Fund
LEAD	UMD/DNR
ACTIVITY	Ammonia emission reductions, stormwater retrofit, air emission reductions, natural filters
LOCATION	N/A
TRUST FUND \$	\$500,000 ¹
MATCH \$	\$225,000 ²
TOTAL \$	\$725,000
EST. TN REDUCTION	TBD
EST. TP REDUCTION	TBD
EST. TSS REDUCTION	TBD

¹ 250K each year in SFY10 & SFY11

² EPA Chesapeake Bay Implementation Grant for R&D projects with University of Maryland MIPS program

TRUST FUND PROJECT REPORT

NATURAL FILTERS IMPLEMENTATION ON LOCAL PUBLIC LANDS (DNR)

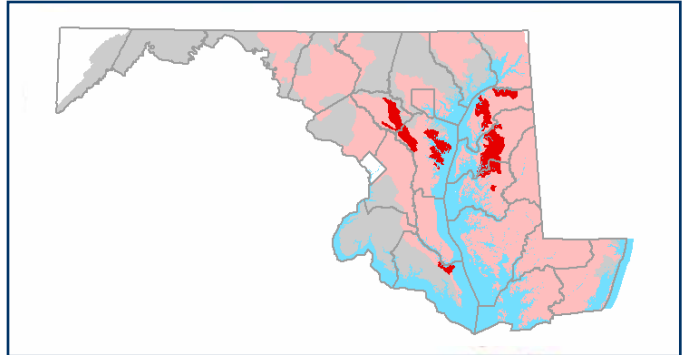
FISCAL YEAR: SFY10 & SFY11

PROJECT OVERVIEW

The project focuses on the installation of vegetative filters on public lands to help achieve the accelerated Bay restoration goals. Projects may include, but are not limited to: forested and/or grass buffers on county or municipal park land; enhancement or conversion of stormwater facilities to wetland function; and other bioremediation projects that help filter adjacent land.

PROJECT LOCATION:

Statewide (Target Area Emphasis)



Photos by Kristen Fleming

PROJECT CHARACTERISTICS

COUNTY/CITY: Multiple

WATERSHED(S): Multiple

SUBWATERSHED(S): Multiple

PROJECT PARTNERS: Queen Anne's Co. Parks & Rec., QAC BOE, Columbia Association, St. Mary's Co., Carroll Co. Bureau of Resource Mgmt., Anacostia Watershed Association, Harford Co. Parks & Rec, Washington Co SCD, Coastal Bays, Worcester Co. Parks & Rec.

PROJECT CONTACT: Kristen Fleming
Maryland Department of Natural Resources
410-260-8813
kfleming@dnr.state.md.us

PROJECT COMPONENTS

<i>PROJECT COMPONENT</i>	Natural Filters on Public Lands
<i>LEAD</i>	Maryland Dept of Natural Resources
<i>LOCATION</i>	Multiple
<i>ACTIVITY</i>	Riparian Buffer Planting, Reforestation, Bioremediation, Wetlands Restoration
<i>TRUST FUND \$</i>	\$1,400,000 ¹
<i>MATCH \$</i>	\$725,000
<i>TOTAL \$</i>	\$2,125,000
<i>EST. TN REDUCTION</i>	3,676 lbs/yr
<i>EST. TP REDUCTION</i>	253 lbs/yr
<i>EST. TSS REDUCTION</i>	46 lbs/yr
<i>STATUS/ % COMPLETE</i>	15%

¹ SFY10: 400K; SFY11: \$1M

STATE FISCAL YEAR BREAKOUT SECTIONS

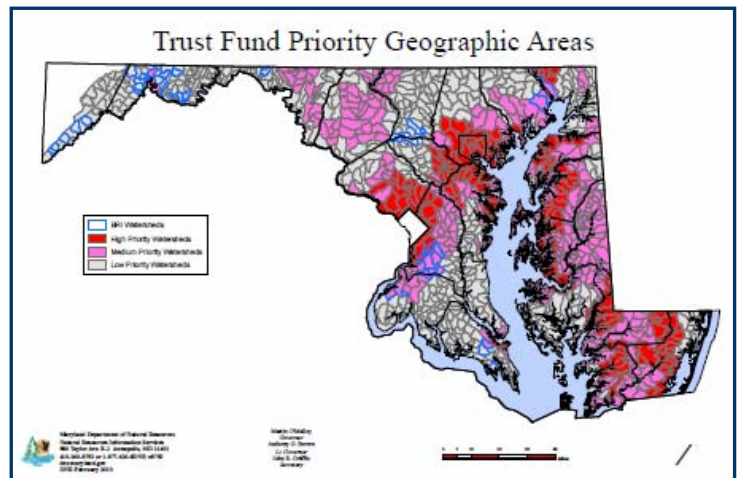
SFY 12 PLANNED EXPENDITURES

STATE FISCAL YEAR 2012 WORK PLAN APPROACH

It was the objective of the BayStat agencies to develop the SFY 12 work plan through as competitive a process as possible, that it be based on the best available scientific information regarding water quality conditions and cost-effectiveness of nutrient and sediment control measures and that it ultimately result in the greatest possible benefit to the Chesapeake Bay. To guide this process, the agencies fully implemented the allocation process originally envisioned in the creation of the Trust Fund. A process designed to be focused, flexible, leveraged, competitive, innovative, engaged, accountable, and adaptive.

TARGETING PRIORITY AREAS AND PRACTICES

With the guidance of the Governor's Scientific Advisory Panel (GSAP), BayStat recommended targeted geographic areas using information from the USGS SPARROW model (both phosphorus and nitrogen) as well as local knowledge and expertise. The Coastal Bays watersheds were prioritized based on the expertise of University of Maryland Scientists working in that region. To maximize available Bay restoration resources, MDE's Biological Restoration Initiative criteria were used to identify opportunities to leverage MDE's 319 grants. To target practices, BayStat prioritized the non-point source best management practices using those identified in the State's 2-Year Milestones. Detailed information on the targeting strategy used for the SFY 12 Workplan can be found at: <http://www.dnr.state.md.us/ccp/funding/pdfs/TrustFundPriorities.pdf>.



SOLICIT PROPOSALS

The agencies released a Request for Proposals on March 3, 2010 to local governments and non-government organizations focused on the implementation of the non-point source pollution reduction actions identified in Maryland's current 2 Year Milestone in priority geographic areas. With the intent to maximize available Bay restoration resources, the 2012 solicitation also included available funding leveraged through MDE's 319 Program and the Chesapeake Bay Trust. In total, 28 proposals were submitted by local communities for over \$92 Million in requests bringing to light the importance of the Trust Fund to local restoration efforts.

From this request, the GSAP provided the state agencies with a subset of local proposals (12 in total) in which the State agencies were tasked to integrate - to the greatest extent possible - implementation activities to complement local efforts. In addition to the integrated activities in the highest ranked watersheds, the GSAP reviewed ranked statewide proposals from the agencies based on short and long-term cost effectiveness of their expected nutrient and sediment reductions (i.e. cover crops). The results of that review are reflected in the SFY 12 Work Plan.

IMPLEMENTATION DETAILS

The Work Plan assumes \$25 Million in State Fiscal Year 2012. The base budget, 8.9% of the total funding, includes funds for long-term strategic monitoring and assessment, agency direct costs for administration and tracking, and agricultural technical assistance staff which are on-the-ground positions that support implementation of agricultural BMPs. In addition, funding is allocated to invest in new technologies in order to identify and quantify new nutrient reduction methods.

Over 91% of the funding was competed and targeted to the greatest extent possible through local and state GSAP reviews. \$13.3 Million (53.2%) of the funding will go to MDA for implementation of agricultural BMPs including cover crops, CREP signing bonuses, and precision agriculture. \$2.21 Million (8.8%) is targeted for natural filters projects (e.g. buffers and wetlands) managed by DNR and \$1.0 Million (4.0%) will go to SHA to do stormwater retrofit pilot in the Anacostia watershed. The remaining funds, \$6.26 Million will be directed to projects that will support local watershed restoration plans. Selected implementation partners include:

- | | |
|--------------------------------|-----------------------------------|
| Anne Arundel County | Columbia Association |
| Baltimore County | Herring Run Watershed Association |
| Harford County | Sassafras River Association |
| Howard County | Department of Agriculture |
| Prince George’s County | Department of Natural Resources |
| Town of Centreville | State Highways Administration |
| 16 Soil Conservation Districts | University of Maryland |

SFY12 PROPOSED BUDGET

Base Budget (Non Competed)						
Targeted Area	Targeted Activity	Project Partner	Trust Fund Request (M)	Anticipated Load Reduction (lbs/yr)		
				TN	TP	TSS
Statewide	Strategic Monitoring & Assessment-1%	DNR/UMD	\$0.40			
	Agency Direct Costs-1.5%	DNR	\$0.38			
	Investing in Research & Development	DNR	\$0.25			
	Innovative Technology Fund	DNR/UMD	\$0.25			
	Agricultural Technical Assistance	MDA	\$1.20			
Total			\$2.23	N/A	N/A	N/A

Integrated Targeted Projects to Meet Maryland's Milestones (Completed)						
Targeted Area	Targeted Activity	Project Partner	Trust Fund Request (M)	Anticipated Load Reduction (lbs/yr)		
				TN	TP	TSS
Lower NW Branch (Anacostia) 02140205	1 SWM Project	PG Co.	\$2.85	1,736	301	215,200
	Outreach/Education ¹	PG Co.	\$0.00			
	Natural Filters-15 Acres	DNR	\$0.01	603	44	9
	Cover Crops-246 Acres	MDA	\$0.01	1,477	49	
	Roadway SWM- 31 acres	SHA	\$1.00	114	16	5,777
	Evaluation & Management	PG Co.	\$0.03			
Back River 02130901	3 SWM Projects ²	Balt. Co.	\$0.57	637	97	42,575
	3 acres buffer planting	HRWA	\$0.06	79	10	2,220
	Outreach/Education ¹	HRWA/BRRC ³	\$0.00	3		68
	Evaluation & Management	Balt. Co.	\$0.01			
Little Patuxent River 02131101	2 SWM Projects	Howard Co	\$0.60	181	16	127
	Buffers & Wetlands	Howard Co/CA ⁴	\$0.49	207	27	5,880
	Residential Raingarden Program ¹	Howard Co/CA	\$0.00	33	3	3,800
	Cover Crops-138 Acres	MDA	\$0.01	829	28	
	Evaluation & Management	Howard Co/CA	\$0.11			
Sassafras River 02130610	Treatment Wetlands	SRA ⁵	\$0.13	75	7	6,200
	Raingardens/Rainbarrels ¹	SRA	\$0.00			
	7500 acres poultry manure incorp.	SRA/UMD	\$0.13	39,000	37,500	
	Natural Filters- 15 Acres	DNR	\$0.08	402	29	6
	Cover Crops- 8,319 Acres	MDA	\$0.32	49,953	1,664	
	Evaluation & Management	SRA	\$0.03			
Corsica River 02130507	1 SWM Project	Centreville	\$0.25	1,056	184	66
	4 SWM Projects (.375M from 319 Program)	Centreville	\$0.00	86	7	
	Natural Filters-8 Acres	DNR	\$0.04	201	15	3
	Cover Crops-2,385 Acres	MDA	\$0.09	14,321	447	
Magothy River 02131001	1 Innovative SWM Project	AA Co.	\$0.42	1,900	72	73,200
	Evaluation & Management	AA Co.	\$0.05			
Wheel Creek 02130703	4 SWM Projects	Harford Co.	\$0.46	524	82	20
	Evaluation & Management	Harford Co.	\$0.04			
Upper Chester 02130510	Precision Agriculture	QAC SCD	\$0.06	10,500		
	Natural Filters- 8 Acres	DNR	\$0.04	201	15	3
	Cover Crops-8,211 Acres	MDA	\$0.32	49,304	1,642	
Statewide	Cover Crops-305,700 acres	MDA	\$11.75	1,835,621	61,140	

Statewide	CREP Bonus Payments	MDA	\$0.80	87,890		
Statewide	Natural Filters	DNR	\$2.05	22,694	1,654	326
	High Priority Public Land	DNR	\$0.78	8,641	630	125
	Medium Priority Public Land	DNR	\$1.26	14,053	5,911	201
Total			\$22.78	2,119,625	105,049	355,480
GRAND TOTAL			\$25.00	2,119,625	105,049	355,480

¹ Identified for potential funding through CBT

² Match potential of \$1.6M via MDE 319 funds

³ Herring Run Watershed Association/ Back River Restoration Committee

⁴ Columbia Association

⁵ Sassafra River Association

Martin O'Malley, Governor



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