REPORT OF THE DEPARTMENT OF CONSERVATION AND RECREATION

VIRGINIA WATER QUALITY IMPROVEMENT FUND AND THE COOPERATIVE NONPOINT SOURCE POLLUTION PROGRAM

TO THE GOVERNOR AND THE GENERAL ASSEMBLY OF VIRGINIA

COMMONWEALTH OF VIRGINIA
RICHMOND
MARCH 2008

L. Preston Bryant, Jr.
Secretary of Natural
Resources

Joseph H. Maroon
Director

COMMONWEALTH of VIRGINIA

DEPARTMENT OF CONSERVATION AND RECREATION

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March 24, 2008

The Honorable Timothy M. Kaine
Governor, Commonwealth of Virginia
Patrick Henry Building, 3rd Floor
1111 East Broad Street
Richmond, Virginia 23219

Members of the Virginia General Assembly
General Assembly Building
Richmond, Virginia 23219

Dear Governor Kaine and Members of the General Assembly:

I am pleased to submit this annual report, *Virginia Water Quality Improvement Fund and Cooperative Nonpoint Source Pollution Programs*, in accordance with provisions of the Virginia Water Quality Improvement Act of 1997 (WQIA).

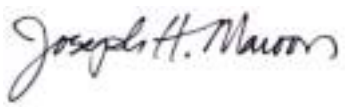
This report describes nonpoint source pollution management program activities undertaken by DCR during 2007 with funds from the Water Quality Improvement Fund, as well as anticipated pollution reductions achieved from these activities. The efforts to address nonpoint source pollution highlighted in this report reflect the Commonwealth's commitment to protecting and restoring water quality in rivers, streams, lakes and the Chesapeake Bay.

The WQIA states that the restoration, protection, and improvement of the quality of state waters is a shared responsibility among state and local governments and individuals, and to that end, it establishes the authority for cooperative programs to be undertaken to reduce nonpoint source pollution. In order to accomplish this, DCR assists local governments, soil and water conservation districts, and individuals with technical and financial assistance made available through WQIF grants and other funding sources.

The activities identified in this report will contribute to Virginia's ambitious program for restoring and protecting the Chesapeake Bay and Virginia's rivers and streams. The Department of Conservation and Recreation will continue its partnership with landowners, soil and water conservation districts, local governments, the agricultural community, the development community, conservation organizations, and staff from other state agencies, including the Department of Environmental Quality and the Department of Forestry, in pursuit of water quality improvements.

As always, we thank you for your leadership and support and look forward to working with you to improve Virginia's water quality.

Respectfully submitted,



Joseph H. Maroon
Director

cc: The Honorable L. Preston Bryant, Jr.

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For Further Information see: http://www.dcr.virginia.gov/soil_&_water/wqia.shtml

Section 1: Water Quality Improvement Act and Fund Overview

The Virginia Water Quality Improvement Act (WQIA) became effective on July 1, 1997. The Act established the Water Quality Improvement Fund (WQIF) to provide funding for water quality improvements throughout the Commonwealth. The fund is the principal source of state cost-share money to implement the nutrient and sediment reduction "Tributary Strategies" prepared pursuant to the Chesapeake 2000 Agreement and the *Code of Virginia.* The fund also provides grants for on the ground practices to control nonpoint source pollution in watersheds in Virginia that drain to waters other than the Chesapeake Bay, called the "Southern Rivers". Section 10.1-104.1 of the *Code of Virginia* gives the Department of Conservation and Recreation (DCR) the lead responsibility for the Commonwealth's nonpoint source pollution management program. This report fulfills the requirement of §10.1–2134 of the WQIA that an annual report be submitted to the Governor and the General Assembly specifying the amounts and recipients of grants made from the Water Quality Improvement Fund (WQIF) and pollution reduction achievements from these grants.

The guidelines for the WQIF that have been adopted by the Secretary of Natural Resources establish the eligible categories of activities for nonpoint source funding support as: Agricultural Best Management Practices Cost-Share Program, Conservation Reserve Enhancement Program, Water Quality Initiative Projects, and Cooperative Nonpoint Source Pollution Program Projects with Local Governments. The Guidelines specify eligible activities within the Chesapeake Bay watershed and the Southern Rivers watersheds, state matching fund requirements, grant review criteria, and grant agreement requirements.

Section II: Historic Summary of WQIF Deposits and Expenditures

There were no deposits to the Water Quality Improvement Fund for fiscal years 2002, 2003, and 2004. In fiscal year 2005 a deposit of $9,417,500 was made to the fund. Additional funding became available through WQIF for nonpoint source implementation in FY 2006. The General Assembly amended budget included $7,500,000 and a General Assembly 2005 action allocated an additional $22,664,600 for a total of $30,164,600. The General Assembly allocated another $39,608,800 in FY 2006 Supplemental funds as a mandatory budget surplus deposit. In fiscal year 2007 a deposit of $3,800,000 was made to the fund plus a $400,000 WQIF interest appropriation. In fiscal year 2008 a $562,000 interest appropriation was made for two specific projects (see Section IV). The majority of available WQIF implementation funds are being directed to the Agricultural BMP Cost-Share Program. Implementation funds are also being used to support the Conservation Reserve Enhancement Program (CREP), as well as competitive grants for Cooperative Nonpoint Source Programs with Local Governments and Strategic Nonpoint Source Water Quality Initiatives that includes programs implemented by the Virginia Department of Forestry and Virginia Tech. A summary of appropriations to the fund is presented in Appendix 2.

Section III: WQIF Funding Summary – FY2006 and FY2007 (General Fund and Surplus Appropriations; Not Including Interest)

The table below summarizes available WQIF funding and allocations to the various program areas from fiscal year 2006 and 2007 deposits. As outlined in the WQIF Guidelines this funding is made available for four categories of nonpoint source pollution control projects. The majority of the funding allocation has been made to support the first category, Agricultural Cost-Share Program. As shown, a total of $52.5 million has been allocated to support the Agricultural BMP Cost-Share Program and over $3.3 million to support the CREP. The project categories of Strategic Water Quality Initiatives and Cooperative Nonpoint Source Program Projects with Local Governments received allocations of over $3.9 million and $4.4 million.

Table 1: WQIF Obligation Schedule

OBLIGATION SCHEDULE

Allocations / Available Funds By Fiscal Year	FY2006	FY2006-Suppl	FY2007	TOTAL
Total WQIF (General Assembly Appropriation)	**$ 30,164,600**	**$ 39,608,800**	**$ 3,800,000**	**$ 73,573,400**
Agriculture BMP Cost-Share	$ 20,000,000	$ 29,500,000	$ 3,000,000	$ 52,500,000
CREP	$ 2,514,910	$ 860,000	$ -	$ 3,374,910
Water Quality Initiatives	$ 1,850,000	$ 1,500,000	$ 600,395	$ 3,950,395
Cooperative NPS Grants	$ 2,400,000	$ 2,036,550	$ -	$ 4,436,550
Reserve	$ 3,399,690	$ 5,712,250	$ 199,605	$ 9,311,545
Total	$ 30,164,600	$ 39,608,800	$ 3,800,000	$ 73,573,400

Adjustments were made to previous program allocations due to revised categorization and agency director priorities: FY2006 Water Quality Initiatives allocation increased by $600,000 and this amount was reduced from Cooperative NPS Grants. FY2006-Suppl for Agriculture BMP Cost-Share allocation incresed to include $1.5 million obligation for Agriculture Cost-Share - NRCS Technical Assistance, for which the funding was previously allocated under to Cooperative NPS Grants.

To reduce the fluctuations of WQIF appropriations the spread the funding over multiple program years. The expenditure schedule for this funding is provided in the table below.

Table 2: WQIF Expenditure Schedule

EXPENDITURE SCHEDULE --- PROPOSED SPENDING

Allocations / Program Year	PY2006	PY2007	PY2008	PY2009	PY2009	TOTAL
Agriculture BMP Cost-Share	$ 10,000,000	$ 17,250,000	$ 19,100,000	$ 5,150,000	$ 1,000,000	$ 52,500,000
CREP	$ 2,514,910	$ 860,000	$ -	$ -	$ -	$ 3,374,910
Water Quality Initiatives	$ 1,080,000	$ 1,500,000	$ 250,000	$ 1,120,395	$ -	$ 3,950,395
Cooperative NPS Grants	$ 2,400,000	$ 2,036,550	$ -	$ -	$ -	$ 4,436,550
Reserve	$ 3,399,690	$ 5,712,250	$ 199,605	$ -	$ -	$ 9,311,545
Total	$ 19,394,600	$ 27,358,800	$ 19,549,605	$ 6,270,395	$ 1,000,000	$ 73,573,400

Section IV: WQIF Interest Appropriations – FY 2007 and FY 2008

This section summarizes specific initiatives authorized in the 2007 and 2008 fiscal years from appropriations made from the interest accrued to the fund.

Nutrient Plan Writers

In FY 2007, a $400,000 WQIF nonpoint source interest appropriation was made for nutrient plan writers. Item 348 #2c of the budget conference report requires DCR to contract with qualified individuals to prepare up to one-half of the 1,100 nutrient management plans required under Virginia Pollution Abatement permits for poultry, dairy, swine and beef operations.

Status: The Department has implemented this program through contracts with Soil and Water Conservation Districts (Districts) in areas where VPA permits are prevalent. As of December 31, 2007, a total of 7,756 acres of plans have been developed through this initiative and an additional 6,248 acres have been committed to be developed. The Department is evaluating other avenues to contract for nutrient management plan development directly with planners rather than contractions through Districts, since this approach has shown to be only variably successful in reaching the private sector planners.

Water Monitoring Equipment – Friends of Shenandoah River

In FY 2008, a WQIF nonpoint interest appropriation for up to $65,000 was made for the replacement of obsolete water quality monitoring equipment for the Friends of the Shenandoah River.

Status: In order to verify that the use of funds is consistent with the intent of the General Assembly, the Department requested a signed letter from the Friends of the Shenandoah River stating the equipment items to be purchased. At present, the letter has not been provided. Funding will be dispersed once the letter is received and approved.

Agricultural BMP Tracking System

In FY 2008, up to $500,000 in WQIA interest was appropriated for use by the Department to improve the computerized agricultural BMP tracking system used by DCR and the state's 47 Soil and Water Conservation Districts (SWCD).

Status: DCR coordinated with VITA to contract with a private vendor to conduct a system analysis study to develop recommendations for modernizing the current system including hardware, software and communications. The contract scope included conducting a baseline analysis of the existing system and development of a ranked system of alternatives for achieving the recommended results. The contractor identified four possible alternatives. The alternative recommendations are being evaluated by a committee to determine the most appropriate alternative. The balance of available WQIF interest funds is expected to be used to cover a portion of the total cost for modernizing the current system based on the selected alternative.

Section V: Agricultural Cost-Share Allocations and SWCD Agreements

Virginia's Agricultural Best Management Practice Cost-Share Program provides financial assistance as an incentive for the voluntary installation of Best Management Practices (BMPs) to improve water quality. Agricultural BMPs are significant components of all the Chesapeake Bay Tributary Strategies and many Total Maximum Daily Load (TMDL) requirements for impaired streams. DCR relies on Soil & Water Conservation Districts (SWCD) to implement this program. The program is focusing on widespread and targeted implementation of cost-effective BMPs.

DCR has established a suite of 5 cost-effective "priority practices". These practices include cover crops, conservation tillage, nutrient management, livestock exclusion (fencing livestock out of streams) and the establishment of riparian buffers. They were chosen because of their cost-effectiveness in reducing nutrients but also because of their history and acceptance within the agricultural community.

A consistent approach is utilized statewide for program year funding allocations for agricultural BMPs. Each SWCD receives a "base" level of funding to implement any of the roughly 30 practices contained within the Agricultural BMP Program Manual. Each SWCD also receives an allocation of funding for the five priority practices mentioned above, and this amount is specified within the DCR/SWCD Cost-Share grant agreements. Each SWCD also receives an allocation to sign up farmers for specific multi-year "contractual" BMPs that include cover crops, and nutrient management plan development and implementation. Funding is also targeted to address TMDLs attributed to nonpoint source pollutants from agricultural sources. The table below provides an overall plan for distribution of available funds. A complete summary of cost-share allocations to Districts is contained in Appendix 3.

Table 3: Agriculture BMP Cost-Share Expenditure Details

AGRICULTURE BMP COST-SHARE DETAILS FOR ABOVE EXPENDITURE SCHEDULE

Program Year	PY2006	PY2007	PY2008	PY2009	PY2010	TOTAL
CBAY: Base - All Practices	$ 4,000,000	$ 4,000,000	$ 3,000,000	$ -	$ -	$ 11,000,000
CBAY: Priority Practices	$ 2,000,000	$ 3,000,000	$ 4,000,000	$ -	$ -	$ 9,000,000
CBAY: Nutrient Mgt. Contracts PY08-10	$ -	$ -	$ 600,000	$ 600,000	$ 600,000	$ 1,800,000
CBAY: Contractual PY07-09	$ -	$ 2,000,000	$ 2,450,000	$ 2,850,000	$ -	$ 7,300,000
CBAY: Targeted TMDL FY06 funds	$ -	$ 750,000	$ 750,000	$ -	$ -	$ 1,500,000
CBAY Sub-Total	***$ 6,000,000***	***$ 9,750,000***	***$ 10,800,000***	***$ 3,450,000***	***$ 600,000***	***$ 30,000,000***
SR: Base - All Practices	$ 3,000,000	$ 3,000,000	$ 2,000,000	$ -	$ -	$ 8,000,000
SR: Priority Practices	$ -	$ 1,500,000	$ 2,500,000	$ -	$ -	$ 4,000,000
SR: Nutrient Mgt. Contracts PY08-10	$ -	$ -	$ 400,000	$ 400,000	$ 400,000	$ 1,200,000
SR: Contractual PY07-09	$ -	$ 500,000	$ 500,000	$ 1,000,000	$ -	$ 2,000,000
SR: Targeted TMDL	$ 1,000,000	$ 1,900,000	$ 2,300,000	$ -	$ -	$ 5,200,000
SR Sub-Total	***$ 4,000,000***	***$ 6,900,000***	***$ 7,700,000***	***$ 1,400,000***	***$ 400,000***	$ 20,400,000
Ag Cost-Share, NRCS Technical Assist.	$ -	$ 600,000	$ 600,000	$ 300,000	$ -	$ 1,500,000
TOTAL Agriculture Cost-Share Pgm.	**$ 10,000,000**	**$ 17,250,000**	**$ 19,100,000**	**$ 5,150,000**	**$ 1,000,000**	***$ 52,500,000***

A table that summarizes designated TMDL water bodies where districts are receiving targeted WQIF cost-share funding in contained in Appendix 4 of this report.

Section VI: Measurable Results –Agricultural Cost-Share Program

A summary of the agricultural BMP implementation activities for July 1, 2006 through June 30, 2007 is provided in the table below. This includes data for number of farmers receiving funding, number of practices installed, acres benefited and estimates of tons of soil loss reduced, pounds of nitrogen reduced, pounds of phosphorus reduced and tons of waste treated, as well as cost share expenditure figures.

Table 4: Animal and Crop Practices – Measurable Results

Animal & Crop Practices - By Basin (Summarized as of 09/04/07)
Reporting Period of July 1, 2006 - June 30, 2007

BASIN	No. Farmers	No. Practices	Acres Benefitted	Tons SL Reduced	Lbs N Reduced	Lbs P Reduced	Tons Waste Treated	Total BMP Cost ($)	State C/S Amount ($)	Other C/S Amount ($)
Albemarle Sound Coas	15	59	1,998.20	1,338.05	7,278.98	1,346.78	0.00	$ 105,236.40	$ 96,161.43	$ -
Atlantic Ocean Coast	36	140	5,988.42	4,293.36	23,355.85	5,857.90	0.00	$ 315,069.00	$ 313,112.50	$ -
Big Sandy	13	13	24.40	112.10	609.83	112.10	0.00	$ 34,996.70	$ 13,147.02	$ 8,460.00
Chesapeake Bay Coast	85	427	12,041.72	9,556.68	51,988.33	12,519.17	0.00	$ 731,568.15	$ 723,173.21	$ -
Chowan-Meherrin	66	422	8,812.92	4,368.41	23,764.20	6,152.25	0.00	$ 398,316.52	$ 264,988.37	$ -
James-Appomattox	32	341	2,339.75	13,265.83	72,166.16	16,004.28	0.00	$ 323,822.38	$ 201,334.59	$ 38,136.10
James-Rivanna	10	14	454.20	1,532.68	8,337.77	1,255.59	2800.00	$ 219,141.58	$ 149,749.87	$ 4,488.25
Lower Chowan	10	36	1,091.80	545.90	2,969.72	883.66	0.00	$ 48,355.66	$ 45,159.57	$ -
Lower James	59	257	8,197.15	14,787.06	80,441.65	17,191.82	48.00	$ 521,341.10	$ 484,020.47	$ -
Lower Potomac	105	219	6,261.18	15,253.55	82,979.31	13,567.76	16.00	$ 1,360,524.80	$ 952,148.38	$ 18,009.04
Lower Roanoke	14	24	198.43	617.61	3,359.80	852.30	0.00	$ 50,018.14	$ 41,589.60	$ -
Middle James	55	121	3,773.53	5,733.50	31,190.25	4,602.52	0.00	$ 1,002,246.66	$ 678,925.69	$ 34,384.60
New River	137	392	7,157.02	57,277.30	311,588.53	55,050.68	2891.20	$ 1,896,530.23	$ 812,529.71	$ 414,200.70
Potomac-Shenandoah	227	565	11,429.17	77,797.79	423,219.96	99,844.65	9087.40	$ 2,620,953.55	$ 1,147,265.36	$ 559,791.95
Rappahannock	151	345	10,220.75	13,764.05	74,876.41	12,361.25	0.00	$ 1,270,243.60	$ 1,045,969.13	$ 17,439.50
Roanoke-Dan	107	221	3,254.56	22,581.79	122,844.93	26,069.55	0.00	$ 752,115.18	$ 529,505.04	$ 79,535.90
Tennessee-Clinch	40	50	3,391.70	14,844.69	80,755.11	16,020.23	154.90	$ 871,998.06	$ 331,367.95	$ 259,663.31
Tennessee-Holston	109	154	4,523.60	34,056.33	185,266.43	36,773.47	201.90	$ 1,840,373.10	$ 698,895.55	$ 557,732.68
Tennessee-Powell	7	7	235.60	1,244.70	6,771.17	1,244.70	132.30	$ 79,152.62	$ 59,669.08	$ -
Upper Chowan	132	1223	24,814.68	11,054.05	60,133.99	16,617.78	98.00	$ 781,711.63	$ 452,257.82	$ 8,154.00
Upper James	58	115	2,784.05	9,601.87	52,234.14	8,511.30	651.00	$ 540,543.90	$ 317,533.19	$ 64,010.00
Upper Potomac	10	16	610.60	2,011.20	10,940.92	1,625.72	0.00	$ 49,502.88	$ 37,784.79	$ -
Upper Roanoke	150	256	6,513.31	29,230.71	159,015.06	31,240.82	324.00	$ 1,715,844.63	$ 1,064,356.16	$ 132,768.80
Yadkin	4	13	155.50	680.40	3,701.37	680.40	0.00	$ 27,748.48	$ 12,298.13	$ 8,183.55
York	112	491	15,573.52	36,834.37	200,379.08	39,083.63	2800.00	$ 1,316,943.10	$ 1,019,600.22	$ 144,886.19
	1744	5921	141,845.76	382,383.98	2,080,168.95	425,470.31	19,204.70	$ 18,874,298.05	$ 11,492,542.83	$ 2,349,844.57

Section VII: Conservation Reserve Enhancement Program

The Virginia Conservation Reserve Enhancement Program (CREP) improves water quality and wildlife habitat by offering financial incentives, cost-share and rental payments to farmers who voluntarily restore riparian buffers, filter strips and wetlands. CREP is an enhancement to the federal Conservation Reserve Program (CRP) program established in 1985 to provide a cost-effective means to address priority agricultural resource problems by targeting federal and state resources to specific geographic regions of particular environmental sensitivity. CREP applications were accepted by the Farm Service Centers within CREP eligible areas until December 31, 2007. The WQIF funding offers landowners a CREP bonus of $100/acre for 100 ft. buffers.

The Virginia CREP program is divided into two regions. The Chesapeake Bay CREP targets Virginia's entire Chesapeake Bay watershed and calls for the installation of 22,000 acres of riparian buffer and filter strips as well as 3,000 acres of wetland restoration. The Southern Rivers CREP aims to establish 13,500 acres of riparian buffer and filter strip plantings and 1,500 acres of wetland restoration. Statewide, these programs are expected to reduce annual nitrogen loads to waterways by more than 710,000 pounds, phosphorus by more than 114,000 pounds and sediment by more than 62,000 tons. To accelerate CREP enrollment in the Chesapeake Bay watershed, additional funding from WQIF is being offered to landowners for a CREP bonus of $100/acre for 100 foot wide buffers. This initiative is intended to achieve roughly 50% (7,000 acres) with 100-foot buffers. A wetlands bonus payment of $ 200/acre is also being offered to Virginia landowners. WQIF funding for the CREP program was provided for the Southern Rivers watershed to add an additional 5,000 acres to its original goal of 10,000.

A summary of CREP cost share assistance to farmers for the period of July 1, 2006 through June 30, 2007 is provided in the two charts below. The first chart summarizes acres of buffer restored and miles of stream buffered as well as estimated reductions for the tons of soil loss, pounds of nitrogen, and pounds of phosphorus**.** The second chart summarizes acres restored by basin by CP- practice.

Identified below is the CREP practice name for BMP practice numbers (practice numbers are assigned in the DCR cost-share manual) used in the following tables:

CP-21	CREP Filter Strip (Rental only)
CP-22	CREP Riparian Forest Buffer (Rental only)
CP-23	CREP Wetland Restoration (Rental only)
CP-29	CREP Wildlife Habitat Buffer (Rental only)
CRFR-3	CREP Riparian Forest Buffer
CRLF-1	CREP Reporting Marker for Linear Feet Livestock removed but no fence installed, linear feet not reported under SL-6.
SL-6	Grazing Land Protection
WP-2	Stream Protection
WQ-1	Grass Filter Strip
WQ-6B	Wetland Restoration

Table 5: CREP Tracking Summary

Virginia CREP Tracking Summary - By Non-CP-* BMP (Summarized as of 09/08/2007)
Reprting Period of July 1, 2006 - June 30, 2007

BMP	No. Farmers	No. Practices	Acres of Buffer Restored	Miles of Stream Buffered	Tons SL Reduced	Lbs N Reduced	Lbs P Reduced	Total BMP Cost ($)	State CREP Amount ($)	Other Payment Amount ($)
CHESAPEAKE BAY WATERSHED										
CRFR-3	63	84	553.80	0.00	1612.09	8769.74	1585.66	$ 391,545.11	$ 71,514.37	$ 208,793.61
CRLF-1	6	6	19176.00	3.63		0.00	0.00	$ -	$ -	$ -
SL-6	55	62	233669.00	44.26	0.00	0.00	0.00	$ 1,013,713.52	$ 91,001.88	$ 494,285.18
WP-2	4	4	6500.00	1.23	0.00	0.00	0.00	$ 14,533.83	$ 1,849.50	$ 7,267.00
WQ-1	3	3	9.00	1.49	50.01	272.07	72.01	$ 1,358.00	$ 38.25	$ 655.00
Cbay Total	131	159	259,907.80	50.60	1,662.10	9,041.81	1,657.67	$ 1,421,150.46	$ 164,404.00	$ 711,000.79
SOUTHERN RIVERS WATERSHEDS										
CRFR-3	83	90	476.00	0.00	2230.98	12136.50	2373.49	$ 305,950.19	$ 61,768.19	$ 149,301.00
CRLF-1	32	54	240244.72	45.50		0.00	0.00	$ 3,262.00	$ -	$ 1,631.00
SL-6	79	84	153898.00	29.15	0.00	0.00	0.00	$ 981,060.76	$ 63,055.33	$ 468,021.80
WQ-1	29	47	438.10	72.29	159.86	869.58	230.63	$ 51,323.16	$ 10,336.78	$ 22,590.00
WQ-6B	2	2	4.00	0.00	2.00	10.88	2.88	$ 590.00	$ 147.50	$ 295.00
SR Total	225	277	395,060.82	146.93	2,392.84	13,016.96	2,607.00	$ 1,342,186.11	$ 135,307.80	$ 641,838.80
Statewide	**356**	**436**	**654,968.62**	**197.54**	**4,054.94**	**22,058.77**	**4,264.67**	**$ 2,763,336.57**	**$ 299,711.80**	**$ 1,352,839.59**

Table 6: CREP Tracking Summary – Part 2

Virginia CREP Tracking Summary - By Basin By CP-*BMP (Summarized as of 09/08/07)
Reporting Period of July 1, 2006 - June 30, 2007

BASIN	BMP	Acres of Buffer Restored	Total Cost ($)	State C-S Amount ($)	Other C-S Amount ($)
CHESAPEAKE BAY WATERSHED					
James-Appomattox	CP-22	59.20	$ 4,160.50	$ 4,144.00	$ 443.00
James-Rivanna	CP-29	5.80	$ 435.00	$ 435.00	$ -
Middle James	CP-22	115.60	$ 7,869.84	$ 7,869.84	$ -
Middle James	CP-29	0.90	$ 45.00	$ 45.00	$ -
Upper James	CP-22	147.10	$ 9,741.00	$ 9,741.00	$ 1,281.80
Potomac-Shenandoah	CP-22	159.60	$ 10,322.80	$ 11,011.00	$ -
Potomac-Shenandoah	CP-22B	82.50	$ 670.00	$ 670.00	$ 7,580.00
Potomac-Shenandoah	CP-29	3.90	$ 284.50	$ 284.50	$ -
Upper Potomac	CP-22	8.90	$ 549.00	$ 549.00	$ -
Rappahannock	CP-22	141.80	$ 8,697.50	$ 8,697.50	$ -
Rappahannock	CP-22B	49.50	$ 3,780.00	$ 3,780.00	$ -
Rappahannock	CP-29	1.00	$ 74.00	$ 18.50	$ 37.00
York	CP-22	44.60	$ 2,092.50	$ 2,092.50	$ -
Chesapeake Bay Total		820.40	$ 48,721.64	$ 49,337.84	$ 9,341.80
SOUTHERN RIVERS WATERSHEDS					
Albemarle Sound Coas	CP-21	88.00	$ 4,193.00	$ 4,193.00	$ -
Chowan-Meherrin	CP-21	113.10	$ 7,917.00	$ 7,917.00	$ -
Chowan-Meherrin	CP-22	139.90	$ 9,990.00	$ 9,990.00	$ 187.91
Chowan-Meherrin	CP-23	2.30	$ 161.00	$ 161.00	$ -
Upper Chowan	CP-21	177.30	$ 12,441.00	$ 12,441.00	$ -
Upper Chowan	CP-22	35.40	$ 2,500.50	$ 2,500.50	$ -
Upper Chowan	CP-23	1.70	$ 119.00	$ 119.00	$ -
New River	CP-22	50.70	$ 3,772.00	$ 3,772.00	$ 226.00
Roanoke-Dan	CP-21	25.50	$ 922.50	$ 922.50	$ -
Roanoke-Dan	CP-22	20.10	$ 1,488.10	$ 1,410.50	$ 82.60
Upper Roanoke	CP-22	103.60	$ 6,760.60	$ 6,882.50	$ 100.00
Tennessee-Clinch	CP-22	63.20	$ 4,564.90	$ 4,297.50	$ 151.00
Tennessee-Holston	CP-22	61.20	$ 3,842.00	$ 3,402.00	$ -
Southern Rivers Total		882.00	$ 58,671.60	$ 58,008.50	$ 747.51
Statewide Total		**1,702.40**	**$ 107,393.24**	**$ 107,346.34**	**$ 10,089.31**

Section VIII: Strategic Water Quality Initiatives and Cooperative Nonpoint Source Programs

The WQIF provides grants supports two grant programs: Strategic Water Quality Initiatives and Cooperative Nonpoint Source Programs with Local Governments. Projects awarded funding under the Strategic Water Quality Initiatives Program are selected by the DCR Director with approval from the Secretary of Natural Resources or through a competitive selection process. All projects funded under the Cooperative Nonpoint Source Programs with Local Governments are selected through a competitive process. Total project funding awards are split, as required in the *Code*, with a 60% of funded activities in the Chesapeake Bay watershed and 40% in the Southern Rivers watersheds.

Total funding awarded through the 2007 WQIF Request for Proposals for Nonpoint Source Water Quality Improvement Grants was $3,550,000. Of this total, $1,500,000 was obligated for Strategic Water Quality Initiative grant awards and $2,050,000 for Cooperative Nonpoint Source Pollution Program Projects with Local Governments. Only local governments were eligible to receive funding through the later program whereas state agencies, nonprofit organizations, and individuals were eligible for the Strategic Water Quality Initiative funding.

Strategic Water Quality Initiatives

The table below details the expenditure schedule by program year for the funding allocations to the WQIF program for Strategic Water Quality Initiatives. Projects are identified in the table below under the program year that the project allocation or funding commitment was made by DCR, although some projects may be more than one year in length.

Table 7: Water Quality Initiatives Detail

WATER QUALITY INITITIATVES DETAIL FOR EXPENDITURE SCHEDULE

Program Year	PY2006	PY2007	PY2008	PY2009	PY2010	TOTAL
Virginia Dept of Forestry - 2006 Grant ($500K award: $250K each from FY05 & FY06)	$ 250,000	$ -	$ -	$ -	$ -	$ 250,000
Virginia Tech - Precisions Phospohorus Feeding ($400K award: $145K of FY05, $255K of FY06)	$ 255,000	$ -	$ -	$ -	$ -	$ 255,000
Virginia Poultry Litter Transport Incentive Program	$ 300,000	$ -	$ -	$ -	$ -	$ 300,000
Chesapeake Club, Spring 2008 - Rich & Hampton	$ 125,000	$ -	$ -	$ -	$ -	$ 125,000
2007 WQIF RFP - SWQI Grant Awards	$ -	$ 1,500,000	$ -	$ -	$ -	$ 1,500,000
Virginia Dept of Forestry - 2007 Grant	$ -	$ -	$ 250,000	$ -	$ -	$ 250,000
TBD - Poultry Industry, Litter Transport Project	$ -	$ -	$ -	$ 150,000	$ -	$ 150,000
Unobligated - Earmark for DCR Director Initiatives	$ -	$ -	$ -	$ 1,120,395	$ -	$ 1,120,395
TOTAL Water Quality Initiatives	**$ 930,000**	**$ 1,500,000**	**$ 250,000**	**$ 1,270,395**	**$ -**	**$ 3,950,395**

The following is a summary of recent Strategic Water Quality Initiative Grants:

- **Virginia Tech Department of Dairy Science, *Precision Phosphorus Feeding: Targeted Environmental Solutions for Virginia Dairy Farms* (2006 grant award of $400,000 includes $145,000 of FY05 and $255,000 of FY06 funding).** Incentive payments are being offered on a per cow basis for farms that reduce the phosphorus levels in feed in order to reduce the amount of phosphorus in animal manure. Incentive payments will be offered for two years, not to exceed $4,800 per farm per year ($9,600 over the lifetime of the three year farm contracts). Producers receiving the payment will be expected to continue the practice at their own expense in year 3 of the contract.

- **Virginia Poultry Litter Transport Incentive Program ($300,000) –** WQIF funding is being match $300,000 from the Virginia Poultry Federation to offer farmers an incentive for the transport and use of poultry litter as fertilizer on their farm fields. The program targets removal of poultry litter from Page and Rockingham counties and moving it to localities where it can be better used as needed nitrogen and phosphorus. Only farmers in Page, Rockingham, Augusta, Shenandoah, Northampton and Accomack – the state's leading poultry producing counties are not eligible to receive manure. $5 per ton is offered to participants in the eastern part of the state and $12 per ton for Bedford, Campbell, Halifax and all counties to the west. Farms can sign up for initial incentives on up to 500 tons of litter, and then reapply for another 500 tons. Farms receiving the litter must have a nutrient management plan in place to minimize the loss of nutrients to nearby streams. This program is administered through the DCR Regional Soil and Water offices.

- **Chesapeake Club, Spring 2008 Richmond and Hampton Roads ($125,000)** – The successful Chesapeake Club campaign aimed at reducing over-fertilizing of lawns by suburban homeowners will be brought to the Richmond and Hampton Roads markets in spring 2008. The ***Virginia Chesapeake Bay Nutrient and Sediment Reduction Tributary Strategy*** specifically calls for conducting this type campaign in these areas. This campaign was created by the EPA's Chesapeake Bay Program and its partners Virginia and Washington, D.C. initially ran in the Northern Virginia / D.C. market in 2005 and 2006. The WQIF funding is being used to purchase television and newspaper advertising and to conduct post campaign surveys to help evaluate the effectiveness. Last year's survey results showed that approximately 60 percent of those responding to the survey saw messages concerning fertilizer and the Chesapeake Bay. In Hampton Roads, people fertilizing in the spring dropped from 56 percent to 44. In both markets 44 percent said they would use less fertilizer and 35 percent in the Richmond and 36 percent in Hampton Roads said they would fertilize fewer times during the year. The $125,000 in WQIF funding is being contracted with Lewis Media of Richmond for media buys. Additional funding is being provided from other sources to supplement the WQIF funding for media buys and for Opinion Works of Annapolis, MD to conducting pre- and post- advertising campaign surveys.

- **Virginia Department of Forestry (DOF), *Water Quality Improvement Fund Grant Allocations* (2006 grant award of $500,000 included $250,000 each from FY05 and FY20 funds; 2007 grant award of $250,000).** This project supports two forestry nonpoint source pollution programs. A pilot silvicultural best management practice cost-share program is being offered and targeted to watersheds containing TMDL stream segments and other priority watersheds. Funding is available to Virginia loggers for 50 percent of actual cost (not to exceed $2,000) for approved stream crossings. If the stream crossing includes the purchase of a portable bridge, the 50 percent funding level increases to a maximum of up to $4,000 of the actual costs. DOF expects to fund up to 125 logging BMP projects through the 2006 grant award and another 45 through the 2007 award. DOF is also offering an open request for proposals for a Regional Grants Program to fund urban canopy demonstration projects and streamside restoration

including riparian forest buffer plantings, riparian forest buffer plantings where the Conservation Reserve Enhancement Program is not eligible; and vegetative stormwater mitigation projects such as "rain gardens". The funding range is $1,000 to $10,000. A list of funded projects in contained in Appendix 5 of the report.

Cooperative Nonpoint Source Programs with Local Governments

On February 15, 2007, DCR issued the 2007 Water Quality Improvement Fund, Request for Proposals (RFP) to provide funding for nonpoint source water quality improvement grants. Six regional workshops were hosted to promote the RFP and to explain application requirements. DCR received 73 proposals requesting over $8 million and matched by almost $12 million by the deadline of May 15, 2007. Details on the projects selected for funding through the including estimated nonpoint source reductions and descriptions are provided on the following four charts. Priority implementation initiatives include those highlighted in the Virginia Tributary Strategies as well as Total Maximum Daily Load implementation or restoration plans. Summaries of each funded project are contained in Appendix 1.

Table 8: Final Grant Awards List – 2007 Virginia Water Quality Improvement Fund – Southern Rivers

Project Sponsor	*Project Title*	WQIF Award Amount	Match Amount
City of Danville	*Retrofit to Existing Impervious Areas with Bioretention*	**$ 28,656**	$ 28,724
City of Roanoke	*Roanoke Water Quality Enhancements*	**$ 83,500**	$ 99,441
City of Virginia Beach*	*Virginia Beach Water Quality Coordination & Program Enhancement Project*	**$ 73,932***	$ 73,932*
Dan River Basin Association	*Dan River Watershed Riparian Buffer Enhancement*	**$ 32,875**	$ 32,875
FishAmerica Foundation	*Power Dam Removal Project*	**$ 200,000**	$ 220,740
Holston River SWCD	*Stabilization Project at Clear Creek Golf Course and Installation of Pet Waste Disposal Systems*	**$ 55,347**	$ 78,221
New River-Highlands RC&D	*New River Streambank Restoration - Phase II*	**$ 96,150**	$ 97,261
Roanoke County Dept of Community Development	*Mudlick Creek Urban Stream Restoration at Garst Mill Park, Phase II*	**$ 110,000**	$ 144,782
Southampton County	*Southampton County Stormwater Management and LID Demonstration Project*	**$ 135,000**	$ 529,798
Upper Tennessee River Roundtable	*Upper Powell Stormwater Management and Abandoned Mined Land Reclamation Project*	**$ 97,340**	$ 97,348
Virginia Department of Game and Inland Fisheries	*Southern Rivers Restoration Project*	**$ 200,000**	$ 200,000
Virginia DMME Division of Mined Land Reclamation	*Hurricane Fork Gob Piles*	**$ 140,000**	$ 140,000
Virginia Polytechnic Institute and State University	*Stroubles Creek Stream Restoration*	**$ 167,200**	$ 167,200
Total Award Amount ~ Southern Rivers Watersheds		**$ 1,420,000**	**$ 1,910,321**

***** The total grant award for the City of Virginia Beach is $133,932. Funding allocations for this project are split between the Southern Rivers Watersheds ($73,932) and the Chesapeake Bay Watershed ($60,000).

Table 9: Final Grant Awards List – 2007 Virginia Water Quality Improvement Fund – Chesapeake Bay

Project Sponsor	*Project Title*	WQIF Award Amount	Match Amount
Augusta County	*LID Retrofit at Existing Commercial Development*	**$ 40,000**	$ 47,601
Cabell Brand Center	*Rainwater Harvesting to Abate Stormwater Runoff*	**$ 109,372**	$ 109,372
Caroline County	*Dawn Decentralized Wastewater Treatment / Septic Replacement; Septic Pumpout Program*	**$ 200,000**	$ 200,000
Christopher Newport University	*Tomahund Created Wetland Treatment Project*	**$ 68,848**	$ 68,848
City of Falls Church Dept of Environmental Services	*Impervious Surface Effectiveness Demo Project*	**$ 93,000**	$ 114,640
City of Manassas	*Winters Branch SWM Enhancement & Stream Valley Restoration*	**$ 150,350**	$ 155,350
City of Norfolk Department of Public Works	*Wetland Restoration*	**$ 165,000**	$ 200,000
City of Virginia Beach*	*Virginia Beach Water Quality Coordination & Program Enhancement Project*	**$ 60,000***	$ 60,000*
City of Waynesboro	*Waynesboro Regional Water Quality Initiative*	**$ 34,064**	$ 42,583
County of Mathews	*Countywide Notification & Tracking of Septic Pumpout Program*	**$ 25,000**	$ 25,000
Culpeper SWCD	*Natural Stream Channel Restoration in the Upper Rappahannock River Basin*	**$ 73,600**	$ 73,600
Fairfax County Park Authority	*Turkeycock Run Stream Restoration; Huntley Meadows Central Wetland Restoration*	**$ 90,000**	$ 410,000
Harrisonburg Parks & Rec.	*Blacks Run Stream Bank Restoration*	**$ 29,100**	$ 44,500
Headwaters SWCD	*Residential Septic Management in Select TMDL Watersheds*	**$ 148,395**	$ 149,546
Lands & Waters, Inc	*Unity of Fairfax Stormwater Management Plan*	**$ 30,000**	$ 70,225
Madison County BOS	*Stormwater Management Project*	**$ 26,000**	$ 26,000
Middle Peninsula PDC	*Middle Peninsula Regional Onsite Wastewater Treatment and Disposal*	**$ 80,000**	$ 80,000
Mount Zion Baptist Church	*Mount Zion Baptist Church Project: The Vision*	**$ 112,680**	$ 112,680
Northern Virginia SWCD	*Tamarack Stables Manure Composting Facility*	**$ 25,254**	$ 27,008
Piedmont SWCD	*Nottoway County Homeowner Septic Education / Repair Program*	**$ 42,150**	$ 44,212
Prince William SWCD	*Chesapeake Bay - Friendly Horse Farm Project*	**$ 121,399**	$ 133,773
Rappahannock County Government	*Rappahannock County Septic System Cost-Share Program Expansion*	**$ 122,960**	$ 170,282
Southside Virginia Family YMCA	*Better Site Designing, Building Strong Communities*	**$ 144,741**	$ 204,859
Thomas Jefferson SWCD	*Gold Mine Creek Clean Up*	**$ 38,087**	$ 41,834
Virginia DMME Division of Mineral Mining	*Cofer Prospect: Acid Mine Drainage Reclamation*	**$ 100,000**	$ 100,000
Total Award Amount ~ Chesapeake Bay Watershed		**$ 2,130,000**	**$ 2,676,913**

Table 10: Grant Award Reduction Estimates – Southern Rivers

2007 WQIF AWARDS ~ NPS REDUCTION ESTIMATES SOUTHERN RIVERS WATERSHEDS

Project Sponsor	Nitrogen (lbs/year)	Phos-phorus (lbs/year)	Sediment (tons / year)	Fecal Colony Forming Units (reduced/year)
City of Danville	22	3	0	
City of Roanoke	361	105	127	
City of Virginia Beach *- combined SR/CBAY - NPS results / 2*	75	30		2.40E+11
Dan River Basin Association	45	35	6	
FishAmerica Foundation	4,617	1,231	1,539	< Estimate divided by 50 years
Holston River SWCD	272	73	91	
New River-Highlands RC&D	3,675	980	1,225	
Roanoke County, Department of Community Development	1,556	632	659	
Southampton County	1,255	163	17	
Upper Tennessee River Roundtable	10	1	56	
Virginia Dept. of Game & Inland Fisheries	489	130	163	
Virginia DMME, Division of Mined Land Reclamation	19	13	32	
Virginia Polytechnic Institute and State University	190	33	242	
SOUTHERN RIVERS TOTAL	12,586	3,429	4,158	2.40E+11
STATEWIDE TOTAL	**135,131**	**8,579**	**7,961**	**1.56E+13**

Table 11: Grant Award Reduction Estimates – Chesapeake Bay

2007 WQIF AWARDS ~ NPS REDUCTION ESTIMATES CHESAPEAKE BAY WATERSHED

Project Sponsor	Nitrogen (lbs/year)	Phos-phorus (lbs/year)	Sediment (tons / year)	Fecal Colony Forming Units (reduced/year)
Augusta County	24	3	1	
Cabell Brand Center	41	5	1	
Caroline County, Dawn Decentralized Wastewater - *combined award*	5,229	2,051		1.3944E+12
Caroline County, Septic Pumpout Program - *combined award*	772			7.47E+12
Christopher Newport University	100,000	120	300	
City of Falls Church, Department of Environmental Services	1,197	156	16	
City of Manassas	450	39		
City of Norfolk, Department of Public Works, Division of Environmental SWM	73	27	0	
City of Virginia Beach *- combined SR/CBAY - NPS results / 2*	75	30		2.40E+11
City of Waynesboro	81	17	0	
County of Matthews	515			49.75W+11
Culpeper SWCD	2,216	591	739	
Fairfax County Park Authority, Huntley Meadows - *combined award*	1,154	150	1,924	
Fairfax County Park Authority, Turkeycock Run - *combined award*	1,154	308	385	
Harrisonburg Parks & Rec.	20	4	1	
Headwaters SWCD	360			3.34E+12
Lands & Waters, Inc	12	2	0	
Madison County BOS	7,794	1,013	106	
Middle Peninsula PDC	59			5.17E+11
Mount Zion Baptist Church	11	1	0	
Northern Virginia SWCD	410	250		
Piedmont SWCD	50			4.37E+11
Prince William SWCD	410	250		
Rappahannock County Government	178			1.54E+12
Southside Virginia Family YMCA	14	2	0	
Thomas Jefferson SWCD	50			4.06E+11
Virginia DMME, Division of Mineral Mining	198	132	330	
CHESAPEAKE BAY TOTAL	122,545	5,150	3,803	1.53E+13

Appendices

Appendix 1:

2007 Virginia WQIF Grant Awards

Chesapeake Bay Watershed – Project Descriptions

Augusta County
LID Retrofit at Existing Commercial Development in August County: A Demonstration Project

A 3.2-acre highly visible commercial property in Augusta County's Greenville village, which was identified as having significant drainage issues, will be retrofitted to incorporate low impact development stormwater management facilities to reduce the impacts of runoff to the impaired South River. An existing ineffective detention basin will be retrofitted with 1,400 square feet of biofilter, a 1,750 square foot bioretention swale will be added along the road frontage, and 25 linear feet of French drain will be installed to direct surface and rooftop runoff from the building to the bioretention facilities. The project will demonstrate the use of bio-filtration practices to treat runoff from commercial properties and will serve as an example for future development in the County. An estimated 3.2 lbs of phosphorus will be reduced annually from this site. $40,000 WQIF, $47,601 Match

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Cabell Brand Center
Rainwater Harvesting to Abate Stormwater Runoff

Rainwater harvesting systems will be installed at a public building and a private building to demonstrate the use of this BMP for reducing rooftop runoff from over 97,000 sq. feet (2.2 acres). These sites will be incorporated into the Virginia Rainwater Harvesting Manual, which with the demonstrations is expected to generate broader acceptance of rainwater harvesting as a BMP for managing stormwater runoff in Virginia. The two systems include: 1) Charlottesville Transit Facility, the 32,000 sq. ft. roof on the administration building will be retrofitted with a system that will be used for washing vehicles and flushing toilets; and 2) Handcraft Services in Richmond, runoff from 65,000 sq. ft. roof at this laundry facility will be captured and reused in the business operation. Based on national average concentrations in stormwater runoff, these systems will reduce estimated annual NPS loads by 40.6 lbs of nitrogen, 5.3 lbs of phosphorus, and 1,104 lbs of sediment. $109,372 WQIF, $109,372 Match

Caroline County
Dawn Decentralized Wastewater Treatment / Septic Replacement; Septic Pumpout Program

Two proposals submitted to WQIF from Caroline County are combined into one award. A Fixed Film Activated Sludge (FAST) alternative wastewater treatment cluster system including individual STEP tanks at each home will be installed to replace 28 failing septic systems (27 homes and one church) in the Dawn Community of Caroline County. This project expands on a FY 2006 WQIF grant award and a larger County initiative, which aims to replace more than 180 individual septic systems experiencing severe drainfield problems with a system that will be owned and operated by the County. The Dawn Community is located at the divide between several creeks feeding both the Mattaponi and Pamunkey Rivers. This project will help to address the fecal coliform impairments for two of the feeder creeks, Reedy Creek and Herring Creek. Calculations from the project's engineer estimate annual NPS reductions of 5,229 lbs of nitrogen and 2,051 lbs of phosphorus for the 28 new systems being connected.

Caroline County will establish and implement its septic pump out maintenance program including development of a methodology to notify property owners, further evolution of the BMP tracking and maintenance program, and increased awareness of the program requirements promoted to the public in an effort to bring the county program into compliance with requirements of the Chesapeake Bay Preservation Act. Approximately 1500 septic systems will be pumped out annually. $200,000 WQIF, $200,000 Match

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Christopher Newport University
Tomahund Created Wetland Treatment Project

A total of 5 acres of depression wetland will be created on an abandoned surface mine site and will be used to absorb nitrogen discharged from 50 acres of abandoned mine lands and 250 acres of an active mining operation. The wetlands will be located in Charles City County at Tamahund Plantation, the largest gravel surface mining operation situated along the confluence of the Chickahominy and James Rivers. Excess groundwater from this operation is consistently pumped out of the gravel pit lakes into detention ponds that are used to settle out total suspended soils. The created wetlands will remove nitrate-nitrogen from the active surface mining water via the denitrification processing of anaerobic soils. The wetland is not being constructed to meet any permit requirements, as there are no legal requirements to reduce nitrate loading from the active surface mining operations at this site. This project is estimated to reduce 100,000 lbs of nitrogen annually. $68,848 WQIF, $68,848 Match

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City of Falls Church - Dept. of Environmental Services
Impervious Surface Effectiveness Demo Project

The City of Falls Church will implement a series of low impact development strategies to increase stormwater detention, improve water quality, and reduce the amount and quality of flow to the stormwater system draining to the impaired Four Mile Run and Tripps Run. The City plans to demonstrate sustainable small scale stormwater management practices with the installation of 5-8 stormwater detention facilities, 6 bioretention box filters, 750 linear feet of pervious trails, and by encouraging residents to install 500 rain barrels. This project is estimated to reduce 155 lbs of phosphorus annually. $93,000 WQIF, $114,640 Match

City of Manassas
Winters Branch SWM Enhancement & Stream Valley Restoration & City-Wide Stormwater Operational Improv.

The City of Manassas plans to retrofit the Winters Branch Regional SWM facility treating a 656 acre drainage area with a sediment forebay and wetland plantings to enhance nutrient removal by 2% or +39 lbs of phosphorus. A streambank stabilization effort will also be undertaken. The City of Manassas will make operational improvements in drop inlet cleaning and sweeping operations with grant matching funds. This WQIF funding is for Phase II and continuation of a multi-year project that received a FY 2006 WQIF award. The project will result in estimated annual removal of an additional 60 lbs of phosphorus. $150,350 WQIF, $155,350 Match

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City of Norfolk, Dept. of Public Works, Division of Environmental Strom Water Management
Old Dominion University Wetland Restoration

The City of Norfolk, in partnership with the Elizabeth River Restoration Steering Committee, will coordinate the restoration of 1.1 acres of wetlands and in-stream habitat below Old Dominion University in the City of Norfolk. The project site flows to the most productive section of the main stem of the impaired Elizabeth River. The site currently contains a fragmented vegetative buffer with limited width and function allowing stormwater and pollutants to directly discharge into the Elizabeth River. The properties where the restoration effort will take place are currently owned by the City of Norfolk and Old Dominion University. The City plans to either acquire the ODU property or expand an existing agreement for this restoration effort to lease the ODU property for at least 10 years, as required for maintenance under the WQIF program. $165,000 WQIF, $200,000

City of Virginia Beach
Virginia Beach Water Quality Coordination & Program Enhancement Project

The City of Virginia Beach will expand efforts funded under a 2006 WQIF grant to achieve water quality improvements through numerous activities that directly address NPS pollution reductions and focus on waters where TMDLs have been established. A 22,000 square foot extended detention rain garden will be installed on City property at Alanton Elementary School; over four acres of riparian buffers will be installed along approximately one mile of shoreline on City-owned park and school lands; and a dry detention pond at Virginia Weslyan College will be converted to a wet pond. Other aspects of the project include expansion of an oyster and clam shell recycling program for the Lynnhaven River, and construction of an outdoor classroom with a demonstration rain garden at Creeds Elementary. Estimated annual NPS reductions from this project include 60 lbs of phosphorus and 4.79E11 fecal coliform colony forming units. $133,932 WQIF*, $133,932 Match

** WQIF funding is split between allocations from Chesapeake Bay ($73,932) and Southern Rivers ($60,000).*

City of Waynesboro
Waynesboro Regional Water Quality Initiative - Phase I

This project supports implementation activities to reduce the impacts of stormwater runoff to the South River watershed in the City of Waynesboro through the retrofit of two existing stormwater facilities, installation of six rain gardens, and distribution of ten rain barrels. A sediment forebay will be installed on an existing stormwater pond at the Westwood Elementary School and channel and outlet protection will be updated with adequate protection and check dams to reduce erosion from stormwater dispersed on an adjacent property. A water quality based public outreach program targeted to residents will be initiated to encourage voluntary removal of roof drains and the installation of rain gardens and rain barrels. Six rain gardens and ten rain barrels will be installed at individual residences to demonstrate the benefits of these BMPs for reducing runoff. This project is estimated to reduce 16.6 lbs of phosphorus annually. $34,064 WQIF, $42,583 Match

County of Mathews
Countywide Notification & Tracking of Septic Pumpout Program

In order to ensure current and future compliance with the septic maintenance requirements of the Chesapeake Bay Preservation Act, the County of Matthews will establish a system to document the location of septic systems and to track compliance with the septic maintenance requirements. The project is targeting 1,000 households per year for meeting the program requirements based on an estimated 5,000 homes for which the septic system maintenance applies. $25,000 WQIF, $25,000 Match

Culpeper SWCD
Natural Stream Channel Restoration in the Upper Rappahannock River Basin

Natural stream channel stabilization utilizing fluvial geomorphological methods for long-term stabilization will be used along 3,000 linear feet of steam channel with an average stream bank height of 4.5 feet at a site on Rosson Hollow Run in Madison County. This restoration project will be used to provide training opportunities for SWCD staff and area contractors in order to promote better understanding of the methodology and implementation requirements that can be applied in future natural channel stream restoration projects. This project is estimated to reduce 738.6 tons of sediment annually. $73,600 WQIF, $73,600 Match

Fairfax County Park Authority
Huntley Meadows Central Wetland Restoration; Turkeycock Run Stream Restoration

Two projects submitted to WQIF from the Fairfax County Park Authority were combined into one award. More than twenty acres of wetland will be restored at Huntley Meadows Park located in the City of Alexandria and Fairfax County, treating stormwater runoff from 800 acres with 25%+ impervious surface in the Dogue Creek Watershed. The wetlands restoration project includes installation of a water control device, construction of a sediment forebay, relocation and contouring of sediment and soils, restoration plantings, monitoring, and maintenance. NPS results from the restoration of the wetland are an estimated annual reduction of 150 lbs of phosphorus.

Stream restoration will occur along 1,000 linear feet of degraded stream and stabilization of 1,200 linear feet of stream bank on Turkeycock Run, a tributary to Cameron Run. The project is located at the Green Spring Gardens Park in Fairfax County. Eroded stream banks were identified as one of the top three problems in the County's Cameron Run Watershed Plan. Stabilization of the stream bank will utilize techniques such as coir log toe protection, imbricated rock walls, J weirs, gabions, and riprap. The project includes removal of 200 cubic yards of bed load material that would otherwise be washed down stream during storms. The restoration will prevent erosion of approximately 300 cubic yards and reduce sediment loads by 385 tons annually. $90,0000 WQIF, $410,000 Match

Harrisonburg Parks & Rec.
Blacks Run Stream Bank Restoration

This project will restore 1,000 linear feet of stream bank to serve as a filter strip for runoff along the impaired Blacks Run in the City of Harrisonburg. A concrete retaining wall will be removed, in-stream structures will be used to prevent erosion and to create a more natural stream channel design, and the stream bank will be re-sloped and vegetated. Two-drop inlets from parking area will be removed, 300 square feet asphalt will be replaced with vegetation, and runoff will be directed to the buffer area through the use of curb cuts. This project will also initiate a Proper Lawn Care campaign to educate residents and landscaping professionals on topics such as fertilizing, soil testing, pesticide use, and managing pet waste. Soil test kits will be distributed to citizens in conjunction with the lawn care campaign. This project is estimated to reduce 20 lbs of nitrogen, 3.5 lbs of phosphorus, and 2,550 lbs of sediment annually. $29,100 WQIF, $44,500 Match

Headwaters SWCD
Residential Septic Management in Select TMDL Watersheds

A residential septic maintenance program will be initiated in TMDL watersheds of Augusta County in partnership with the Augusta County Service Authority. The fecal coliform impaired waters of Mossy Creek, Long Glade Run, and Naked Creek will be targeted. The project will result in approximately 275 septic system pump outs, 10 septic system installations, 25 septic system repairs, and 1 alternative system installation. A septic system maintenance tracking program will be established for Augusta County. The system will be used to track dates of needed septic system maintenance, record dates, landowner names, and locations where septic system maintenance is performed. The ultimate goal of the project is to encourage the County to expand their current proposed Source Water Protection Program and to adopt regular septic system maintenance as a countywide ordinance. It is estimated that the BMPs implemented through this project will reduce 360 lbs of nitrogen per year and 3.34E+12 colony forming fecal bacteria. $148,395 WQIF, $149,546 Match.

Lands & Waters, Inc.
Unity of Fairfax Stormwater Management Plan

A detention basin will be converted to a stormwater wetland and a 4,500 square foot roof will be retrofitted with a green roof to reduce the impacts of runoff to Difficult Run from the 5 acre Unity Church of Fairfax site in the Oakton area of Fairfax County. This property will be used to educate the 300+ member church congregation and the community about ways to reduce the impacts of development through the conversion of the dry detention pond to a retention pond, a green roof installed on a main structure of the church, and BayScaping of the entire landscaped area eliminating the use of fertilizers. This initiative serves as a low impact development demonstration site and is estimated to reduce 1.5 lbs of phosphorus annually. $30,000 WQIF, $70,225 Match.

Madison County BOS
Stormwater Management Project

A local stormwater management ordinance will be developed for Madison County to better manage the increase in land development and reduce the adverse impacts associated with stormwater runoff. The ordinance will include a section of low impact development to encourage its use as an alternative to traditional development. Estimates for nutrient loads from development occurring in the county with and without a stormwater ordinance suggest that the ordinance may reduce as much as 1,013 lbs of nutrients annually. $26,000 WQIF, $26,000 Match

Middle Peninsula PDC
Middle Peninsula Regional Onsite Wastewater Treatment and Disposal Funding Phase II

The Middle Peninsula PDC will provide financial assistance to 10-13 homeowners to repair or replace failing septic systems. The project aims to repair or replace 5-6 septic systems with properly functioning conventional systems, and to replace 6-7 failed septic systems with properly functioning alternative systems where soil conditions require alternative systems. This project will target septic system replacement and repairs in impaired stream segments of the Middle Peninsula including the Counties of Gloucester, Essex, King and Queen, King William, Mathews and Middlesex and the Towns of Tappahannock, Urbanna and West Point. The project will reduce an estimated 58.8 lbs of nitrogen and 5.2E+11 fecal colony forming units. $80,000 WQIF, $80,000 Match

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Mount Zion Baptist Church
Mount Zion Baptist Church Expansion Project: The Vision

Thirteen raingardens, 0.59 acres of grass pavers and porous trailway underlain by 6-inches of a sand filters, and underground extended detention units (Raintank^{TM}) will be installed to manage stormwater at the Mount Zion Baptist Church site in Spotsylvania County. Most of the roofs at the site will drain to rain gardens, which will work in series with the underground extended detention. A portion of the water from the extended detention facility will be diverted to a manhole structure for storage as irrigation water. The project goes beyond the stormwater requirements of Spotsylvania County. The project serve as a demonstration in the use of elements of the LID approach, including reduction in impervious surface and Integrated Management Practices (IMP) on a small site, and will provide examples of how existing sites may be retrofitted with rain gardens. The 2.73-acre LID site is estimated to reduce phosphorus loads by an additional 1.4 lbs annually. $112,680 WQIF, $112,680 Match

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Northern Virginia SWCD
Tamarack Stables Manure Composting Facility

A manure composting facility will be installed at the Tamarack Stables, small-acreage horse operation in the Pohick Creek Watershed of Fairfax County. This facility has a high density of horses with approximately two horses per acre, which is allowed in Fairfax County. The stables currently have twenty horses on a fourteen-acre parcel of which ten acres are in pasture. This site will serve as a demonstration facility serving an eight-to-ten mile radius, the typical distance horse owners come to board horses. Other local horse keepers frequent this operation for local horse events. An average of 200-300 horse enthusiasts visit Tamarack Stables each year. Based on laboratory analysis of horse waste that shows an average of 5 lbs of nitrogen and 3 lbs of phosphorus present in every ton of manure, and estimated 82 tons of waste given the 20 horses with 50% confinement, the estimated annual NPS reductions are 410 lbs of nitrogen and 250 lbs of phosphorus. $25,254 WQIF, $27,007 Match

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Piedmont SWCD
Nottoway County Homeowner Septic Education / Repair Program

An educational campaign will be conducted to encourage a large number of homeowners in Nottoway County to voluntarily perform maintenance of their septic systems. Homeowners who attend workshops will be provided the opportunity to participate in a septic pumpout and repair costs share program. Cost share assistance will be provided for approximately 13 pumpout and 10 septic system repairs, while the program expects to achieve a substantially higher number of each through voluntary participation. WQIF funding will be targeted to properties located within watersheds for impaired stream segments. Estimated annual reductions include 49.53 lbs of nitrogen and 4.37E12 colony forming fecal bacteria. $42,150 WQIF, $44,212 Match

Prince William SWCD
Chesapeake Bay - Friendly Horse Farm Project

The goal of this project is to identify and development affordable BMP options so that all horse farms can improve land stewardship. Current zoning ordinances in Prince William County will be reviewed to see how they address environmentally sound horse keeping practices with the intention to recommend zoning text amendments for items such as allowable stocking rates. There are an estimated 3,900 horses in the County. Two horse farms will be selected to serve as models for the installation of BMPs such as buffers, stream crossings, fencing, watering systems, sacrifice areas, manure composing, roof runoff collection, nutrient management, and pasture renovation and management. One model farm will be less than 10 acres and one model farm will be larger than 10 acres but likely less than 50 acres. $121,399 WQIF, $133,773 Match

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Rappahannock County Government
Rappahannock County Septic System Cost-Share Program Expansion

A project funded under a FY 2006 WQIF grant will be expanded to target all TMDL streams in Rappahannock County providing cost-share assistance for septic system replacement and repair. The target area includes the bacteria impaired segments of the Rush River, Hughes River, Hazel Run, Thornton River, and Rappahannock River. The project aims to pump out/inspect 200 septic systems, repair 20 existing systems, and replace 6 systems that must be relocated due to defective drainfields. Estimate annual reductions include 170 lbs of nitrogen and 1.54E+12 colony forming fecal bacteria. $122,960 WQIF, $170,282 Match

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Southside Virginia Family YMCA
Better Site Designing, Building Strong Communities

The YMCA family fitness facility in Prince Edward County will incorporate Better Site Design principles into the construction of their new site to serve as a model for future development in the County. The new YMCA site is located in the County's Industrial Park and is only the fourth site to be developed in the 20 parcel park. Porous concrete pavement will be used instead of asphalt on at least 56% of the site's parking lots. A bioretention basin will collect runoff from the driveway area, two islands in the parking lot will be converted to bioretention filter strips, runoff from two parking lots will be directed to grassed swales instead of curb and gutter, and a series of cisterns will collect runoff from the 22,000 square foot roof to be used as irrigation water for the athletic fields. In addition, an urban nutrient management plan will be implemented to ensure proper application of fertilizers on the athletic fields. The Industrial Park is adjacent to the Little Buffalo Creek, upstream of the confluence with the impaired Buffalo Creek a tributary to the Appomattox River. This project will serve as a low impact development demonstration site increasing reductions in annual phosphorus loads by an additional 1.8 lbs. $144,741 WQIF, $204,859 Match

Thomas Jefferson SWCD
Gold Mine Creek Clean Up

The Goldmine Creek cleanup is a pilot project of the Thomas Jefferson SWCD to holistically address an impaired stream segment with a completed TMDL. Grant funding will be used to address the onsite wastewater element of the clean-up effort, only one aspect of the four-part approach. The *2005 Bacteria TMDLs for York River Basin* estimated the number of septic system problems in the Goldmine Creek watershed to be 10 straight pipes and 37 failing systems. The SWCD is targeting 11 of these units and aims to complete 7 septic tank repairs, 2 septic tank installations/replacement of straight pipes, and installation of 2 alternative septic systems. The larger clean-up effort also includes addressing problems of small acreage horse facilities, protection of forested riparian buffers and other open space, and implementation of agriculture BMPs for livestock farms. This project will annually reduce an estimated 49.5 lbs of nitrogen and 40.58E+10 colony forming fecal bacteria. $38,087 WQIF, $41,834 Match

Virginia DMME, Division of Mineral Mining
Cofer Prospect: Acid Mine Drainage Reclamation

Watershed restoration will be performed at the Cofer Prospect abandoned lead-zinc-copper mine in Louisa County. The Virginia DMME plans to clear 4 acres of mine spoil, averaging 2 feet in thickness (12,800 cubic years of material). The restoration will reduce or eliminate the generation and discharge of sediment and acid mine drainage into Contrary Creek. The Cofer Prospect site and two unsealed mine shafts were identified as the primary sources of the TMDL ph impairment to Contrary Creek. Matching funds for this restoration effort will be provided from the Orphaned Land Program. The project is estimated to reduce 330 tons of sediment annually and 16,530 tons of toxic sediment in total. $100,000 WQIF, $100,000 Match

City of Danville
Retrofit to Existing Impervious Areas with Bioretention

At least three bioretention basins or bio-filters will be constructed as stormwater retrofits to treat runoff from approximately 3 acres of impervious area that currently drain directly to the Dan River. The appropriate best management practices will be selected based on the final site location and soils investigation. This project will be used to educate the public and demonstrate the City's desire to be part of the stormwater pollution solution. This project will reduce an estimated 2.8 lbs of phosphorus annually. $28,656 WQIF, $28,724 Match.

City of Roanoke
Roanoke Water Quality Enhancements

Three specific projects will be undertaken by the City of Roanoke to address benthic impairments to Tinker Creek/Glade Creek. A denuded area 1,200 feet long by 40 feet wide along the Tinker Creek in Eastgate Park will be re-vegetated to reduce direct conveyance of sediment into the creek. Stream restoration will be performed on a 150 linear feet (6 feet average bank height) section of Tinker Creek using a combination of traditional and bioengineering techniques and natural stability concepts. The Statesman detention pond, which drains 140 acres with mixed land use, will be retrofitted to remove a rubber liner and vegetation will be established to allow the first flush volume to be filtered for water quality. A pictorial chronology of each project from start to finish will be created to raise citizen awareness of how individuals, government, and corporate entities can work together to come better environmental stewards. This project will reduce an estimated 104 lbs of phosphorus and 127 tons of sediment annually. $83,500 WQIF and $99,441 Match.

City of Virginia Beach
Virginia Beach Water Quality Coordination & Program Enhancement Project

The City of Virginia Beach will expand efforts funded under a 2006 WQIF grant to achieve water quality improvements through numerous activities that directly address NPS pollution reductions and focus on waters where TMDLs have been established. A 22,000 square foot extended detention rain garden will be installed on City property at Alanton Elementary School; over four acres of riparian buffers will installed along approximately one mile of shoreline on City-owned park and school lands; and a dry detention pond at Virginia Weslyan College will be converted to a wet pond. Other aspects of the project include expansion of an oyster and clam shell-recycling program for the Lynnhaven River and construction of an outdoor classroom with a demonstration rain garden at Creeds Elementary. Estimated annual NPS reductions from this project include 60 lbs of phosphorus and 4.79E11 fecal coliform colony forming units. $133,932 WQIF*, $133,932 Match

* WQIF funding is split between allocations from Chesapeake Bay ($73,932) and Southern Rivers ($60,000).

Dan River Basin Association
Dan River Watershed Riparian Buffer Enhancement

Up to 20 acres will be planted in riparian buffers at locations within the Virginia portion of the Dan River watershed in Henry, Halifax, Pittsylvania, and Patrick counties. This project will target locations along the Dan River and/or its tributary streams, particularly where water quality impairments have been identified. This project will improve water quality as well as address a widespread lack of understanding on the part of riparian landowners and the general public regarding the importance of riparian buffers. Protection of riparian corridors was identified as the top priority in the 2006 Dan River Watershed Protection Plan. $32,875 WQIF, $32,875 Match.

Fish America Foundation
Power Dam Removal Project

The Fish America Foundation and the Virginia Rural Area Conservation and Economic Restoration Initiative aim to remove the Power Dam, which is at a high risk for catastrophic failure, and the accumulated sediment from behind the dam to eliminate the risk of possible contaminants in the sediment being released to the waterway. The failing Power Dam is located on the impaired Pigg River in Franklin County. The Power Dam is currently at full storage capacity for accumulated sediments and in its current state significant precipitation events cause scouring behind the dam sending large pulses of sediments, nutrients, and bacteria down river. Removal of the dam will open 80 miles of waterway for aquatic species including several miles of habitat for the federally endangered *Roanoke logperch* and a number of other rare aquatic species. The exact amount of sediment to be removed from behind the dam is still to be determined. At a minimum the project will remove 76,950 tons of sediment as well as the associated nitrogen and phosphorus. $200,000 WQIF, $220,740 Match.

Holston River SWCD
Stabilization Project at Clear Creek Golf Course and Installation of Pet Waste Disposal Systems

Streambank stabilization and pet waste management are two urban control measures identified in the Beaver/Little Creek TMDL Implementation Plan that will be implemented in this project. A total of 1,365 linear feet of stream bank will be stabilized at several sites on Clear Creek, a tributary to Beaver Creek, using vegetation and/or heavy armor materials such as riprap and coconut logs; and 2,882 linear feet of lakeshore will be restored and protected using vegetative buffers and heavy armoring along the Clear Creek Golf Course in Washington County. In addition, up to ten pet waste disposal stations will be purchased and installed at three public parks in the City of Bristol. Educational posters and brochures on picking up pet waste will be distributed to veterinarian clinics, kennels, and pet supply stores in the Beaver and Little Creek Watershed. Stabilization of stream bank and lakeshore sites are estimated to reduced 282 tons of sediment from eroding annually. The pet waste stations will result in a 25% pollution reduction for fecal coliform bacteria loads from pets. $55,347 WQIF, $78,220 Match.

New River Highlands RC&D
New River Streambank Restoration - Phase II

Streambank restoration and protection of 6,600 linear feet will be undertaken by the New River Highlands RC&D. Restoration activities are targeted to 5 sites benefiting impaired stream segments in the New River watershed. Preliminary sites are located along Knob Fork and Little River in Grayson County, Little Reed Island in Wythe County, Toms Creek in Montgomery County, and Claytor Lake in Pulaski County. The project will focus on new BMPs such as stream barbs or deflectors, streambank toe protection, J hooks, and vegetative controls such as cedar tree revetments, bio logs, sloping, shaping and establishment of vegetation. Riparian buffers will be established at all sites. An estimated 1,225 tons of sediment will be reduced annually through streambank and stream channel stabilization. $96,150 WQIF, $97,261 Match.

Roanoke County, Department of Community Development
Mudlick Creek Urban Stream Restoration at Garst Mill Park, Phase II

Approximately 2,900 linear feet of stream will be targeted for restoration along Mudlick Creek at the Garst Mill Park in Roanoke County. The project will restore the equilibrium channel geometry recreating meanders and utilizing the floodplain to reduce streambank erosion, restoring the in-stream habitat structure, and augmenting the riparian cover through native vegetation plantings. This project continues with Phase II of a 2006 WQIF grant aimed at restoring another section of this same creek. Restoration along Mudlick Creek, a tributary of the Roanoke River, and will help to address impairments to this larger waterway. Estimated annual NPS reductions from this project are 1,556 lbs of nitrogen, 532 lbs of phosphorus, and 659 tons of sediment. $110,000 WQIF, $144,782 Match.

Southampton County
Southampton County Stormwater Management and LID Demonstration Project

Southampton County will voluntarily implement a stormwater management program to manage anticipated growth from the Port of Virginia expansion and other future development. Implementation of low impact development (LID) principles will be encouraged in the new stormwater management ordinance. The County will also construct a large-scale LID demonstration at a 493 acre site planned as a developing distribution center/Industrial Park to serve as an example to developers, engineers, and County staff. The bioretention and infiltration BMPs at the Industrial Park will encompass approximately 4 acres. An estimated 163 lbs of phosphorus will be reduced annual as a result of this project. $135,000 WQIF, $529,798 Match.

Upper Tennessee River Roundtable
Upper Powell Stormwater Management and Abandoned Mined Land Reclamation Project

Seven impervious surface retrofits will be constructed to treat drainage from 2.32 acres with an average of 87% impervious surface at the Coeburn High School. These retrofits include five bio-retention basins totaling 4,700 square feet and two grassed swales. The bioretention facilities are intended to improve water quality in Toms Creek, a tributary to the Guest River in Wise County, reducing sediment loads contributing to the Aquatic Life Use TMDL impairment as identified in the Guest River TMDL Implementation Plan. In addition, seven acres of abandoned coal mining lands will be reclaimed through establishment of permanent vegetation across the site and stabilization of 200 feet of stream channel. The reclamation activities are at a site in Keokee, Lee County and will help to improve water quality in the headwaters of the North Fork Powell River. Estimates annual NPS reductions include 2.2 lbs of phosphorus from the stormwater retrofits and 56 tons of sediment from the abandoned mine land reclamation. $97,340 WQIF, $97,347 Match.

Virginia Department of Game & Inland Fisheries
Southern Rivers Restoration Project

Stream restoration will occur on over 7,000 linear feet at numerous sites in the Upper Tennessee and Upper Roanoke River Basin where rare aquatic species occur. Natural channel design methods, soil bioengineering, and riparian plantings averaging 35 feet in width will be used at multiple sites. The project is targeting restoration of 4,000 linear feet of critical riparian and streambank habitat in the Upper Roanoke River Basin within the North Fork Roanoke sub-watershed and 3,000 linear feet in the Upper Tennessee River Basin, particularly Beaver Creek, Bluestone River, Guest River, and Upper Clinch River sub-watersheds. In addition, a stormwater retrofit will be installed to reduce sedimentation in the Beaver Creek Watershed. The sites identified for stream restoration will help to address impairments on several streams located in the City of Bristol, and Montgomery, Tazewell, Washington, and Wise Counties. The stream restoration aspect of this project is estimated to reduce 2,580 tons of sediment. $200,000 WQIF, $200,000 Match.

Virginia Department of Mines, Minerals and Energy
Hurricane Fork Gob Piles

Four acres of barren and eroding gob piles (coal waste) will be reclaimed and 200 feet of riparian buffer restored at a site along the Hurricane Fork of Dumps Creek. The project is located immediate above the impaired sediment of Dumps Creek, for which resource extraction from past mining activities is identified as the primary source of the benthic impairment. Total dissolved solids and total suspended solids in Hurricane Fork will be reduced through an estimated annual reduction of 32.5 tons of sediment. $140,000 WQIF, $140,000 Match.

Virginia Polytechnic Institute and State University - Wynn
Stroubles Creek Stream Restoration

A total of 7,290 linear feet along Stroubles Creek and an unnamed tributary will be restored at the Virginia Tech Foundation's Heath Farm in Montgomery County. This site was identified in the Stroubles Creek TMDL Implementation Plan based on the need for stream restoration and establishment of forested riparian buffer to reduce sediment loadings. Standard methods of streambank stabilization and restoration will be implemented and monitored for effectiveness including bank reshaping and stabilization, and natural channel design. A Priority 4 restoration for reshaping and revegetating the banks will be conducted on 4,440 linear feet, and a Priority 2 restoration for natural channel design will be conducted on 2,850 linear feet. Riparian buffers will be installed along the majority of the impaired reach. Virginia Tech students will use the site as an outdoor stream laboratory to study the effectiveness of various stream restoration techniques. $167,200 WQIF, $167,200 Match.

Appendix 2

WQIF Historic Appropriations

The table below summarizes historic appropriations to the Virginia Water Quality Improvement Fund for nonpoint source pollution reduction implementation programs administered by the Department of Conservation and Recreation.

Virginia DCR Water Quality Improvement Fund				
Fiscal Year	**General Fund and Surplus Appropriations**	**Reserve Fund (Not Availabe To DCR)**	**Interest Appropriation (Includes DEQ Transfers)**	**Total DCR WQIF Appropriations Available To DCR**
FY 1998	$ 5,000,000		$ -	$ 5,000,000
FY 1999*	$ 8,390,000		$ -	$ 8,390,000
FY 2000**	$ 20,584,606		$ 1,402,763	$ 21,987,369
FY 2001	$ 11,000,000		$ 1,000,000	$ 12,000,000
FY 2002	$ -		$ 1,912,292	$ 1,912,292
FY 2003	$ -		$ -	$ -
FY 2004	$ -		$ 424,695	$ 424,695
FY 2005	$ 9,417,500	$ (226,616)	$ -	$ 9,190,884
FY 2006	$ 69,773,400	$ (9,111,940)	$ -	$ 60,661,460
FY 2007	$ 3,800,000	$ (199,605)	$ 400,000	$ 4,000,395
FY 2008	$ -	$ -	$ 565,000	$ 565,000
TOTAL	$ 127,965,506	$ (9,538,161)	$ 5,704,750	$ 124,132,095
NOTES:				
*The FY1999 total General Assembly appropriation was $16,750,000. The budget bill identified that of this total $8,390,000 was allocated for FY1999 and $8,360,000 for FY2000.				
** The FY2000 general fund and surplus appropriation includes the FY2000 allocation of $8,360,000 noted above, plus a $9,831,250 general fund deposit in FY2000, and an additional $2,393,356 deposit approved by the Secretary of Natural Resources. FY2000 total includes $500,000 earmark to DCR-DPRR for Virginia Land Conservation Fund.				
** The FY2000 figure includes a $500,000 earmark to DCR-DPRR for the Virginia Land Conservation Fund; and $475,000, which DCR later reallocated to CBAY projects funded under the FY1999 project code.				

Appendix 3

Allocations of Agricultural Cost-Share Funds to Soil and Water Conservation Districts

	Program Year 2008 - SWCD Allocations								
	Prepared 5/25/07	BAY	BAY	BAY	BAY	SR	SR	SR	SR
B	C	D	E	F	G	H	I	J	K
Grand Total 2008		$3M for 2008	$4M	2008 Cont Pr.	2008 BAY	$2M for 2008	$2.5M for 2008	2008 $400K	2008 SR
BAY and SR		base All	2008 Prior. Pr.	$600K NM-1 & 2	Total Program	SR base All	SR PP All	Cont. PR.	Total Program
Combined	SWCD				Allocation				Allocation
$ 132,974.08	APPOMATTOX RIVER	$ 3,502.43	$ 24,368.57	$ 2,763.71	$ 30,634.71	$ 24,078.63	$ 61,858.05	$ 16,402.69	$ 102,339.37
$ 32,051.08	BIG SANDY					$ 27,109.42	$ 3,723.69	$ 1,217.97	$ 32,051.08
$ 178,610.29	BIG WALKER					$ 63,070.32	$ 108,626.89	$ 6,913.07	$ 178,610.29
$ 290,262.61	BLUE RIDGE	$ 6,534.91	$ 3,326.86		$ 9,861.77	$ 144,641.32	$ 122,275.11	$ 13,484.42	$ 280,400.84
$ 475,130.85	CHOWAN BASIN					$ 10,317.00	$ 349,860.00	$ 114,953.85	$ 475,130.85
$ 189,315.40	CLINCH VALLEY					$ 89,759.81	$ 95,325.19	$ 4,230.40	$ 189,315.40
$ 292,494.07	COLONIAL	$ 112,219.39	$ 145,239.68	$ 35,035.00	$ 292,494.07				
$ 576,417.00	CULPEPER	$ 310,880.22	$ 249,787.78	$ 15,749.00	$ 576,417.00				
$ 154,439.20	DANIEL BOONE					$ 91,738.86	$ 58,660.55	$ 4,039.78	$ 154,439.20
$ 705,000.22	EASTERN SHORE	$ 278,677.73	$ 114,857.07	$ 42,892.14	$ 436,426.93	$ 147,057.28	$ 92,870.05	$ 28,645.96	$ 268,573.29
$ 131,367.51	EVERGREEN					$ 71,059.30	$ 57,403.72	$ 2,904.50	$ 131,367.51
$ 272,730.93	HALIFAX					$ 137,093.35	$ 114,157.65	$ 21,479.93	$ 272,730.93
$ 321,419.36	HANOVER-CAROLINE	$ 104,767.22	$ 158,863.13	$ 57,789.00	$ 321,419.36				
$ 617,430.88	HEADWATERS	$ 322,029.46	$ 271,269.65	$ 24,131.76	$ 617,430.88				
$ 60,452.89	HENRICOPOLIS	$ 3,499.75	$ 48,703.82	$ 8,249.32	$ 60,452.89				
$ 233,612.62	HOLSTON RIVER					$ 137,276.82	$ 90,304.64	$ 5,831.15	$ 233,412.62
$ 124,379.33	JAMES RIVER	$ 41,801.36	$ 39,874.62	$ 9,651.65	$ 91,327.63	$ 17,130.71	$ 9,181.23	$ 6,739.86	$ 33,051.81
$ 344,280.19	JOHN MARSHALL	$ 129,107.68	$ 205,203.61	$ 9,969.00	$ 344,280.19				
$ 213,325.51	LAKE COUNTRY					$ 59,391.15	$ 129,792.54	$ 24,141.83	$ 213,325.51
$ 70,499.46	LONESOME PINE					$ 50,436.13	$ 18,218.11	$ 1,845.21	$ 70,499.46
$ 629,488.00	LORD FAIRFAX	$ 134,489.91	$ 474,188.09	$ 20,810.00	$ 629,488.00				
$ 357,283.87	LOUDOUN	$ 110,478.69	$ 241,818.19	$ 4,987.00	$ 357,283.87				
$ 92,425.62	MONACAN	$ 33,496.93	$ 45,561.08	$ 13,367.60	$ 92,425.62				
$ 266,183.59	MOUNTAIN	$ 58,555.29	$ 205,745.26	$ 1,883.04	$ 266,183.59				
$ 266,759.54	MOUNTAIN CASTLES	$ 75,145.78	$ 162,206.58	$ 2,966.00	$ 240,318.36	$ 8,892.71	$ 15,857.74	$ 1,690.74	$ 26,441.19
$ 351,628.82	NATURAL BRIDGE	$ 227,255.42	$ 120,639.86	$ 3,733.55	$ 351,628.82				
$ 232,225.14	NEW RIVER					$ 80,240.58	$ 143,071.93	$ 8,912.63	$ 232,225.14
$ 454,991.88	NORTHERN NECK	$ 217,471.44	$ 136,771.45	$ 100,749.00	$ 454,991.88				
$ 10,483.27	NORTHERN VA	$ 6,586.56	$ 3,896.71	$ -	$ 10,483.27				
$ 107,528.10	PATRICK					$ 69,178.10	$ 35,095.83	$ 3,254.17	$ 107,528.10
$ 219,812.86	PEAKS OF OTTER	$ 3,504.72	$ 22,435.43		$ 25,940.16	$ 94,561.18	$ 95,421.82	$ 3,889.70	$ 193,872.70
$ 449,606.59	PEANUT	$ 62,231.08	$ 203,248.17	$ 25,356.15	$ 290,835.39	$ 47,334.57	$ 81,712.63	$ 29,724.01	$ 158,771.20
$ 106,148.37	PETER FRANCISCO	$ 14,164.37	$ 87,022.98	$ 4,961.03	$ 106,148.37				
$ 235,794.50	PIEDMONT	$ 68,417.92	$ 100,921.43	$ 20,210.82	$ 189,550.16	$ 26,641.58	$ 17,606.61	$ 1,996.14	$ 46,244.33
$ 297,099.45	PITTSYLVANIA					$ 112,870.39	$ 157,588.62	$ 26,610.45	$ 297,099.45
$ 44,609.91	PRINCE WILLIAM	$ 5,960.31	$ 33,367.60	$ 5,282.00	$ 44,609.91				
$ 357,282.51	ROBERT E. LEE	$ 89,694.83	$ 101,212.02	$ 4,882.42	$ 195,789.28	$ 72,017.21	$ 79,752.33	$ 9,723.69	$ 161,493.23
$ 188,656.55	SCOTT COUNTY					$ 101,703.16	$ 81,663.63	$ 5,289.77	$ 188,656.55
$ 678,094.18	SHENANDOAH VALLEY	$ 305,658.98	$ 339,143.19	$ 33,392.00	$ 678,094.18				
$ 379,633.92	SKYLINE			$ -		$ 176,834.15	$ 190,298.85	$ 12,500.92	$ 379,633.92
$ 190,388.93	SOUTHSIDE					$ 38,434.14	$ 132,806.86	$ 19,147.93	$ 190,388.93
$ 125,113.30	TAZEWELL					$ 64,548.62	$ 58,831.27	$ 1,733.41	$ 125,113.30
$ 383,925.14	THOMAS JEFFERSON	$ 143,676.69	$ 225,462.37	$ 14,786.08	$ 383,925.14				
$ 253,718.34	THREE RIVERS	$ 36,465.17	$ 134,448.16	$ 82,805.00	$ 253,718.34				
$ 137,509.14	TIDEWATER	$ 50,158.90	$ 58,636.24	$ 28,714.00	$ 137,509.14				
$ 113,942.89	TRI-COUNTY/CITY	$ 53,384.57	$ 40,780.32	$ 19,778.00	$ 113,942.89				
$ 170,005.11	VIRGINIA DARE	$ 4,592.00		$ 5,099.22	$ 9,691.22	$ 37,583.46	$ 97,034.60	$ 25,695.83	$ 160,313.89
$ 12,516,302.99	Totals:	$ 3,014,309.59	$ 3,998,999.83	$ 599,993.49	$ 7,613,302.91	$ 2,000,999.95	$ 2,499,000.14	$ 403,000.00	$ 4,903,000.08

Appendix 4

TMDL Implementation Projects

WQIF TMDL Targeted Agricultural Cost-Share TMDL Implementation Projects						
River Basin	**HU**	**TMDL Name**	**Sub Watershed**	**City or County:**	**SWCD**	**Pollutant(s):**
	B08	Opequon Creek	Opequon Creek	Clarke, Winchester	Lord Fairfax	E. Coli, Sed.
	B09	Abrams Creek	Abrams Creek	Frederick, Winchester	Lord Fairfax	E. Coli, Sed.
	B10	Middle River	Middle River	Augusta	Headwaters	E. Coli, Sed.
	B13	Moffett Creek	Moffett Creek	Augusta	Headwaters	E. Coli, Sed.
	B14	Christians Creek	Christians Creek	Augusta	Headwaters	E. Coli, Sed.
	B14	Middle River	Middle River	Augusta	Headwaters	E. Col
	B15	Middle River	Middle River	Augusta	Headwaters	E. Coli, Sed.
	B15	Polecat Draft	Polecat Draft	Augusta	Headwaters	E. Coli
	B19	Mossy Creek	Mossy Creek	Rockingham	Headwaters	E. Coli/Benthic
	B24	Long Glade Run	Long Glade Run	Rockingham	Headwaters	E. Coli
	B28	Naked Creek	Naked Creek	Augusta	Headwaters	FC
	B30	South River	South River	Augusta	Headwaters	E. Coli
	J02	Appomattox River Watershed	Spring Creek	Prince Edward	Piedmont	E. Coli
	J03	Appomattox River Watershed	Little Sandy Creek	Prince Edward	Piedmont	E. Coli
	J04	Appomattox River Watershed	Busch River	Prince Edward	Piedmont	E. Coli
	J05	Appomattox River Watershed	Briery Creek	Prince Edward	Piedmont	E. Coli
	J06	Appomattox River Watershed	Saylers Creek	PE & Amelia	Piedmont	E. Coli
	J08	Appomattox River Watershed	Flat Creek	Amelia	Piedmont	E. Coli
	J09	Appomattox River Watershed	Nibbs Creek	Amelia	Piedmont	E. Coli
	J11	Appomattox River Watershed	Deep Creek & West Creek	Nottoway & Amelia	Piedmont	E. Coli
	K14	Chowan River	Nottoway River & Big Hounds Creek	Lunenburg, Nottoway & PE	Southside	E. Coli
	K15	Chowan River	Little Nottoway River	Nottoway	Piedmont	E. Coli
	K16	Chowan River	UT-Hurricane Branch	Nottoway	Piedmont	Benthic
	L13	Pigg River Watershed	Old Womans Creek & Leesville Lake	Pittsylvania	Pittsylvania	E.Coli
	L14	Pigg River Watershed	Upper Pigg River & Story Creek	Franklin	Blue Ridge	E.Coli
	L15	Pigg River Watershed	Big Chestnut Creek	Franklin	Blue Ridge	E.Coli
	L16	Pigg River Watershed	Lower Pigg River	Franklin	Blue Ridge	E.Coli
	L17	Pigg River Watershed	Snow Creek	Pittsylvania	Pittsylvania	E.Coli
	L18	Pigg River Watershed	Pigg River	Pittsylvania	Pittsylvania	E.Coli
	L34	Falling River Watershed	Falling River	Campbell	Robert E. Lee	E. Coli
	L36	Turnip Creek	Turnip Creek	Charlotte	Southside	E.Coli
	L37	Club Creek	Club Creek	Charlotte	Southside	E.Coli
	L39	Ash Camp Creek Watershed	Ash Camp Creek and Twittys Creek	Charlotte	Southside	E.Coli/Sed.
	L40	UT-Buffalo Creek	UT-Buffalo Creek	Charlotte	Southside	E.Coli
	N36	New River Basin	Bluestone River	Tazewell	Tazewell	E. Coli, Sed.
	N37	New River Basin	Laurel Fork	Tazewell	Tazewell	DO/E.Coli/Sed.
Clinch-Powell	P01	Clinch River Watershed	Clinch River	Tazewell	Tazewell	Sed.

Appendix 5

Department of Forestry Grant Awards

Virginia Department of Forestry - 2006 WQIF Grant Funds Awarded to Projects				
Grantee	**Project**	**Location**	**Ches Bay**	**Grant Amount Funded**
CHESAPEAKE BAY WATERSHED				
Nansemond River HS	Rain garden at high school	Suffolk	Y	$ 633.00
City of Charlottesville	install a stormwater detention pond	Charlottesville	Y	$ 11,260.00
Potomac Conservancy	Raingarden retrofit & Stream restoration and protection/Happy Creek	Front Royal	Y	12,809.10
Hoffler Creek	Make Way for the Natives, stream bank planting, invasive removal, coir placement & planting	Portsmouth	Y	9,990.00
Temperance Elem School	LID for Temperance Elem School Gym, Raingardens	Amherst Co	Y	10,000.00
Pedlar River Institute	Horsley Creek Watershed Riparian Restoration	Monroe	Y	1,355.00
Piedmont Housing Alliance	Forest View Rehabilitation Phase II, Raingarden	Charlottesville	Y	$ 7,552.29
Harrisonburg, City of	Purcell Park Raingarden	Harrisonburg	Y	1,700.00
The Opequon Watershed Inc	Town Run Riparian Buffer Demo	Winchester	Y	4,956.00
The Opequon Watershed Inc	Town Run Floodplain Wetland BMP Demo	Winchester	Y	7,150.00
The Opequon Watershed Inc	Hedgebrook Farm Floodplain Wetland BMP Demo	Winchester	Y	10,000.00
RappFLOW	Old Schoolhouse Riaprian Buffer & Raingarden Demo	Sperryville	Y	4,250.00
Chesapeake Arboretum	Chesapeake Arboretum Riparian Buffer Restoration	Chesapeake	Y	5,000.00
Front Royal UF Advisory Council	Happy Creek Bank Stabilization	Front Royal	Y	5,000.00
Leesburg	Urban Tree Canopy	Leesburg	Y	10,000.00
Purcellville	Urban Tree Canopy	Charlottesville	Y	6,000.00
Charlottesville	Urban Tree Canopy	Purcellville	Y	2,250.00
Lexington	Urban Tree Canopy	Lexington	Y	3,600.00
City of VA Beach	HRAREC Rain garden	Virginia Beach	Y	3,365.00
Fox Heritage	Lake Martin riparian buffer	Oakton	Y	10,000.00
		Subtotal - Chesapeake Bay Watershed		**$126,870.39**
SOUTHERN RIVERS WATERSHEDS				
Eastside Community Enhancement Center/Dinwiddie	Riparian buffer and 2 rain gardens	Dinwiddie	N	$5,201.45
Blacksburg, Town of	Trees & Vegetative Plantings to Improve Stroubles Creek Watershed, Wong Park	Blacksburg	N	9,999.00
Roanoke VGC & Roanoke, City of	Roanoke River Tree Planting	Roanoke	N	10,000.00
New River Highlands RC&D, Council for the Friends of South Fork Holston River	Riverside Environmental Park, stream restoration, rain gardens	Wytheville	N	8,900.00
Reynolds Homestead FRRC, Patrick SWCD	Reynolds Homestead Riparian Planting Project	Critz	N	$ 716.25
Roanoke Council of Garden Clubs	Roanoke Garden Club Rain garden	Roanoke	N	9,250.00
Roanoke County	Riparian Buffer Planting Palm Valley, Carvin Creek	Roanoke	N	10,000.00
New River Highlands RC&D	Rural Retreat Elem Sch Rain Garden & BMPs	Wytheville	N	7,000.00
Upper Tenn. River Roundtable	Pennington Gap Greenway Riparian Buffer	Pennington Gap	N	10,000.00
New River - Highlands RC&D	Claytor Lake Buffer Stabilization	Pulaski	N	10,000.00
Hillary Little	Waterford Farm Riparian Project buffer enhancement	Nassawadox	N	120.00
		Subtotal Southern Rivers Watersheds		**$81,186.70**