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November 28, 2005

**TO:** The Honorable Mark R. Warner  
Governor of Virginia

The Honorable Members of the General Assembly

**FROM:** Robert G. Burnley *Bob Burnley*  
Director, Virginia Department of Environmental Quality

**SUBJECT: REPORT ON WATERSHED PLANNING AND PERMITTING**

The Department of Environmental Quality has finalized its annual report on watershed planning and permitting activities and the Watershed Planning and Permitting Coordination Task Force (established under §10.1-1194 of the Code of Virginia).

The report summarizes how the participating agencies worked to coordinate and promote watershed planning and permitting in the Commonwealth. It includes information on the Chesapeake Bay initiatives, the Water Quality Assessment Program, the Total Maximum Daily Load Program activities, and local watershed initiatives.

The full text of the report can be found on the Department's website at <http://www.deq.virginia.gov/regulations/reports.html> or by calling Kathy Frahm, Director of Policy, at 804-698-4376.

# **2005 ANNUAL REPORT ON WATERSHED PLANNING AND PERMITTING**



**SUBMITTED BY  
ROBERT G. BURNLEY, DIRECTOR  
DEPARTMENT OF ENVIRONMENTAL QUALITY**

**November 2005**

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## **EXECUTIVE SUMMARY**

This report for the year 2005 is submitted to the Governor and the General Assembly in response to the requirement under §10.1-1193 of the Code of Virginia for an annual report on the Department's watershed planning and permitting activities, the Department's findings and recommendations and the findings and recommendations of the Watershed Planning and Permitting Coordination Task Force, the "Task Force" (established under §10.1-1194 of the Code of Virginia).

The Task Force is composed of the Directors, Commissioners or their designees from the following agencies:

- Department of Environmental Quality - [DEQ]
- Department of Conservation and Recreation - [DCR]
- Chesapeake Bay Local Assistance Department - [CBLAD] <sup>1</sup>
- Department of Mines, Minerals, and Energy - [DMME]
- Department of Forestry - [DOF]
- Department Agriculture and Consumer Services - [VDACS]

<sup>1</sup> NOTE: In 2004, CBLAD became a division of DCR.

The Virginia Department of Health [VDH], while not listed as a member of the Task Force in the Code, also participates.

While the Task Force did not meet during 2004, Task Force members were engaged in watershed planning and permitting activities throughout the year. This report provides information on Chesapeake Bay initiatives, the Water Quality Assessment Program, the Total Maximum Daily Load [TMDL] program activities, and local watershed initiatives.

## **1. INTRODUCTION**

Sections 10.1-1193 through 1197, Article 3, Chapter 11.1 of the Code of Virginia mandate the Department of Environmental Quality, with the assistance of participating state agencies, to coordinate and promote watershed planning and permitting by state and local agencies and authorities.

The legislation also created the Watershed Planning and Permitting Coordination Task Force ("Task Force") composed of the Directors, Commissioners or their designees from the following agencies:

- Department of Environmental Quality - [DEQ]
- Department of Conservation and Recreation - [DCR]
- Chesapeake Bay Local Assistance Department - [CBLAD] <sup>1</sup>
- Department of Mines, Minerals, and Energy - [DMME]
- Department of Forestry - [DOF]
- Department Agriculture and Consumer Services - [VDACS]

<sup>1</sup> NOTE: In 2004, CBLAD became a division of DCR.

The Virginia Department of Health [VDH], while not listed as a member of the Task Force in the Code, also participates.

This report was prepared in accordance with the requirement to report annually on the watershed planning and permitting activities in Virginia (§10.1-1193 of the Code of Virginia). The reporting period was adjusted to end on September 30<sup>th</sup>, 2005 to more closely track the reporting date of October 1.

## **2. TASK FORCE ACTIVITIES**

The Task Force did not meet during the period from January 1<sup>st</sup> through September 30<sup>th</sup>, 2005. However, Task Force members were engaged in watershed planning and permitting activities throughout the year. This report provides information on Chesapeake Bay initiatives, the Water Quality Assessment Program, the Total Maximum Daily Load [TMDL] program activities, and local watershed initiatives.

## **3. AGENCY WATERSHED PLANNING AND PERMITTING ACTIVITIES**

### **3.1. CHESAPEAKE BAY INITIATIVES**

#### ***WATER QUALITY STANDARDS***

The U.S. Environmental Protection Agency [EPA] is requiring states to consider nutrient criteria for all waters. In November 2003, DEQ began this process by proposing water quality standards to protect designated uses from the impacts of nutrients and suspended sediments in the Chesapeake Bay ("Bay") and its tidal tributaries. These include criteria for dissolved oxygen,

chlorophyll-a and water clarity. The corresponding use designations are migratory fish spawning and nursery, shallow water habitat for submerged aquatic vegetation, open water, deep water and deep channel water habitat for aquatic life. Information about this process is available on the DEQ website at <http://www.deq.virginia.gov/wqs/rule.html>.

At its March 2005 meeting, the State Water Control Board [SWCB] adopted most of the proposed amendments to Virginia's water quality standards. The amendments include the new and revised use designations and updated numerical and narrative criteria that apply to the Virginia portion of the Bay and its tidal tributaries and are additions to the existing water quality standards regulation, which contains numerical and narrative criteria to protect use designations statewide. These amendments became effective on June 24, 2005.

Proposed amendments to 9 VAC 25-260-310, 9 VAC 25-260-410, and 9 VAC 25-260-530 were deferred by the SWCB and have not been adopted in final form. These proposed amendments pertain to site-specific numerical chlorophyll-a criteria for the James River and the special standard for dissolved oxygen for the Mattaponi and Pamunkey rivers. The SWCB will consider the adoption of these sections at a future meeting. (Note: During a special meeting on November 21, 2005, the SWCB adopted the chlorophyll-a criteria for the James River and the special dissolved oxygen standard for the Mattaponi and Pamunkey Rivers.)

### ***TRIBUTARY STRATEGIES***

The Chesapeake Bay tributary strategies revision started in April 2003 with EPA's publication of water quality criteria for the Bay, and the Bay Program partner state's acceptance of nutrient and sediment load allocations for the major Bay tributaries. These revised annual nitrogen, phosphorus, and sediment basin loading goals became the focus of the reduction efforts and were keyed to attainment of the new water quality standards proposed for the Bay and its tidal tributaries.

Revised tributary strategies ("Strategies") were released by the Secretary of Natural Resources ("the Secretary") for public comment in April 2004. Based on comments received, and several policy decisions made by the Secretary, the Strategy documents were revised and were issued as final in January 2005. The final statewide tributary strategy can be found at [http://www.snr.state.va.us/Initiatives/TributaryStrategies/FinalizedTribStrats/ts\\_statewide\\_All.pdf](http://www.snr.state.va.us/Initiatives/TributaryStrategies/FinalizedTribStrats/ts_statewide_All.pdf).

### ***REGULATORY ACTIONS ON NUTRIENT PERMITTING***

Based on the public comments received on the tributary strategies and a policy statement (<http://www.naturalresources.virginia.gov/Initiatives/TributaryStrategies/StratRevisions.cfm>) issued by the Secretary on August 27, 2004, the point source elements of the Strategies have been revised. Further, the revised control levels in the Strategies now have a direct relationship to permit requirements covered under two regulations,

1. discharge *concentration limits* under Regulation 9VAC25-40: "Regulation for Nutrient Enriched Waters and Dischargers Within the Chesapeake Bay Watershed", and
2. annual *waste load allocations* under Regulation 9VAC25-720: "Water Quality Management Planning Regulation" [WQMP].

The waste load allocations in item 2 have been determined in accordance with the guiding principals of the Secretary's Policy Statement -- a combination of existing design capacity in conjunction with currently available and stringent treatment technologies. The figures used for design capacity and effluent nitrogen and phosphorus levels for each significant discharger (i.e. the revised tributary strategy "Input Decks") can be found at DEQ's Chesapeake Bay website <http://www.deq.virginia.gov/bay/>.

A Notice of Public Comment for both regulatory actions was published in the Virginia Register in February 2005, with public hearings held in mid-March. Final recommendations were presented to the SWCB at its meeting on September 27, 2005. The SWCB concurred with staff recommendation for adoption of the WQMP Regulation and nutrient allocations in the Shenandoah-Potomac basin, Rappahannock basin, and Eastern Shore. It is expected that the SWCB will take final action on the waste load allocations for significant dischargers in the York and James basins at their November 2005 meeting. Additional information on the regulations can be found at <http://www.deq.virginia.gov/bay/multi.html>. (Note: During a special meeting on November 21, 2005, the SWCB adopted the waste load allocations for significant dischargers in the York and James basins.)

#### ***WATERSHED GENERAL VPDES PERMIT FOR NUTRIENT DISCHARGES TO THE CHESAPEAKE BAY***

Article 4.02 of the Code of Virginia establishes the Chesapeake Bay Watershed Nutrient Credit Exchange Program. DEQ is developing a watershed general permit for the control of discharges of Total Nitrogen and Total Phosphorus to the Bay watershed with an expected permit effective date of January 1, 2007. A Notice of Intended Regulatory Action [NOIRA] was published in the Virginia Register on May 2, 2005. The public meeting on the proposal was held on May 25, 2005.

Following the close of the public comment period on June 1, 2005, a Technical Advisory Committee [TAC] was formed and several TAC meetings have been held. Additionally, informational meetings will be held prior to submittal of the proposed regulation to the SWCB for authorization to publish a public notice in early 2006. The trading legislation, NOIRA public notice, proceedings from the TAC meetings and notice of all future TAC meetings have been published on the DEQ or Virginia Town Hall websites, <http://www.deq.virginia.gov/vpdes/> or <http://www.townhall.virginia.gov/>.

#### ***WATER QUALITY IMPROVEMENT FUND***

On September 22, 2005, the Secretary of Natural Resources announced the release of revised guidelines for grants from the Water Quality Improvement Fund [WQIF] that was established by the Water Quality Improvement Act of 1997 (§10.1 –2117 of the Code of Virginia). The revision was necessary because the act was amended this year by the General Assembly and Governor Warner. As stated in the Secretary's cover letter to the guidelines, "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 full text of the letter is available at <http://www.snr.state.va.us/Initiatives/TributaryStrategies/MurphyLetter-WQIF.pdf>

In July 2005, \$65.7 million was appropriated for point source implementation and \$26.8 million was appropriated for nonpoint source implementation. Estimates for the revenue surplus indicate an additional \$54.4 million will be apportioned between point source and nonpoint source elements of the fund, but this figure will not be finalized until action is taken on the next state biennial budget by the 2006 General Assembly. Additional details on WQIF grant guidelines for both point source and nonpoint source pollution control projects can be found at <http://www.deq.virginia.gov/bay/WQIFGuidelinesSept2005.pdf>

In anticipation of FY 2005 funds becoming available, DEQ announced the availability of Technical Assistance [TA] Grants and developed a TA application to be used by facilities treating domestic wastewater and as shown on DEQ's list of significant dischargers (<http://www.deq.virginia.gov/bay/TechAssistanceApplication.pdf>). As a result of the solicitations for technical assistance funds, approximately 46 projects are anticipated to be funded. A list of projects and cost-share (where it is known) is shown on the TA grant list at <http://www.deq.virginia.gov/bay/TechAssistanceList.pdf>. With the availability of new funds for construction of nutrient reduction systems in FY06, a Request for Proposals was issued in early October 2005 to the Bay watershed's significant dischargers soliciting application for WQIF grant funds, with a deadline of December 5, 2005.

### **3.2. WATER QUALITY ASSESSMENT PROGRAM UPDATE**

During the Water Quality Assessment process, monitoring results are compared to numerical and narrative water quality standards to determine if the water quality supports the designated uses associated with a particular waterbody, for example, if it is clean enough for swimming, fishing and other uses. If water quality falls below a certain level of cleanliness, DEQ identifies the location, the cause (such as high bacteria counts) and the likely sources (such as failing septic systems or feedlot runoff). Starting in 2004, DEQ combined both the 305(b) Water Quality Assessment and the 303(d) Report on Impaired Waters into the Virginia Water Quality Assessment 305(b)/303(d) Integrated Report. Table 1 presents a summary of findings from this report.

Table 1. Summary of Results Based on the 2004 Water Quality Assessment

<b>Degree of Use Support</b>	<b>Rivers (miles)</b>	<b>Lakes (acres)</b>	<b>Estuary (sq. mi.)</b>
<b>Supports Designated Uses</b> (EPA Categories 1 and 2)	4,436 (8.8%)	9,935 (8.4%)	618 (24.2%)
<b>Insufficient Data</b> (EPA Category 3)	39,144 (77.5%)	17,771 (15.1%)	32 (1.3%)
<b>Impaired</b> (EPA Categories 4 and 5)	6,948 (13.8%)	89,894 (76.5%)	1,907 (74.6%)
<b>Total Size</b>	50,527 (100%)	117,600 (100%)	2,557 (100%)

The guidance (methodology) for the 2006 305(b)/303(d) Water Quality Assessment was released for public comment on August 22, 2005. The public comment period closed on September 23, 2005. A few changes to the guidance will be made in response to comments received. The 2006 report is due April 1, 2006. It will include an assessment of some of the new Chesapeake Bay-related Water Quality Standards for dissolved oxygen as well as Submerged Aquatic Life Vegetation acreage. Additionally, in conjunction with the Virginia Department of Health, an

assessment of bacteria related water quality at certain public beaches was developed. The 2006 assessment will also include a major update on water quality trends, make greater use of citizen monitoring data and will be accompanied by improved web-based tools for citizens to use for accessing and easily understanding the results.

For most waters identified as impaired, DEQ, in cooperation with many other state and federal agencies, must develop and implement cleanup plans to restore the health of these listed streams. The restoration plans are known as “total maximum daily loads, or TMDLs. This name is based on the total amount of pollution that can enter a stream without harming it. The subsequent section provides additional information on Virginia’s TMDL program.

### **3.3. TMDL PROGRAM ACTIVITIES**

The goal of the TMDL Program is to restore water quality in Virginia’s impaired streams, rivers, lakes and estuaries. Activities under the TMDL Program include TMDL development and TMDL implementation, including TMDL implementation plan [IP] development. TMDL development is governed by a 1999 Federal Court Consent Decree [CD] as well as by the Water Quality Monitoring, Information and Restoration Act [WQMIRA]. WQMIRA also governs TMDL implementation in Virginia.

During the period covered by this report, DEQ, in cooperation with other state and local agencies as well as watershed stakeholders, has been developing reports containing approximately 200 TMDLs to meet a court-imposed deadline of May 1, 2006. General TMDL development summaries are provided in the TMDL Development section below. Specific information on the status of each TMDL development project report can be found at <http://www.deq.virginia.gov/tmdl/develop.html>. Draft and final reports are available for viewing or downloading at [http://gisweb.deq.virginia.gov/tmdlapp/tmdl\\_report\\_search.cfm](http://gisweb.deq.virginia.gov/tmdlapp/tmdl_report_search.cfm).

TMDL implementation has also been progressing. General information on TMDL implementation is provided in the TMDL implementation section below, which also highlights some TMDL areas where the first water quality improvements can be seen.

DEQ, together with DCR and DMME, also developed a progress report that provides summaries of BMP implementation and corresponding water quality responses in six TMDL areas throughout the Commonwealth. The report, among other things, raises some questions about the adequacy of existing programs and funding sources to meet the TMDL implementation needs, especially in the area of nonpoint source control. A copy of the full report is available on DEQ’s TMDL web page. An estimate, prepared jointly by DEQ and DCR upon request by the funding commission established in the General Assembly’s House Joint Resolution [HJR] 640, puts the cost for restoring Virginia’s impaired waters identified by 2004, including the Chesapeake Bay, at approximately \$ 12.5 billion. Of that total, \$ 1 billion is estimated for the southern rivers area, and \$11.5 billion for the Bay watershed. Within the Bay watershed, a cost of \$ 1.1 billion has been estimated for point source upgrades, leaving \$10.4 billion for nonpoint source implementation.

**TMDL DEVELOPMENT**

TMDLs for waters not covered by the CD are developed within a period of no more than 12 years from the date of their first identification as impaired. Where possible, DEQ groups waters in close geographic proximity together for TMDL development, regardless of the initial listing date (see Table 3). This allows a more comprehensive approach to managing water quality in the affected watershed. Tables 2 to 4 show the number of impaired waters and TMDL development progress to date.

Table 2. TMDL Development Progress for CD Waters through September 30, 2005

Basin	Freshwater CD segments with completed TMDLs	Delisted Freshwater CD Segments <sup>1,2</sup>	Remaining freshwater segments scheduled for 2006	Freshwater CD segments scheduled for 2008
Bay/Coastal	3	2	1	4
Chowan	9	6	8	17
James	34	16	2	42
New	9	1	2	0
Potomac, Shenandoah	59	4	12	6
Rappahannock	9	3	4	14
Roanoke	26	6	13	11
Tennessee, Big Sandy	15	3	8	5
York	2	2	8	8
<b>Total</b>	<b>166</b>	<b>43</b>	<b>58</b>	<b>107</b>

<sup>1</sup> includes 6 partial delists<sup>2</sup> does not include non-consent decree delists

Table 3. TMDL Development Progress for Non-CD Waters through September 30, 2005

Basin	Non-CD Segments with Completed TMDLs	Non-CD Segments with TMDL scheduled to be completed by May 2006	Non-CD Segments with TMDL scheduled to be completed by May 2008
Bay/Coastal	0	0	0
Chowan	0	2	0
James	10	0	30
New	2	1	2
Potomac/Shenandoah	1	7	0
Rappahannock	1	2	14
Roanoke	4	11	12
Tennessee/Big Sandy	0	2	2
York	0	7	0
<b>Total</b>	<b>18</b>	<b>32</b>	<b>60</b>

Table 4. TMDL Development Progress for Shellfish Waters through September 30, 2005

Basin	Shellfish CD Segments with completed TMDLs	Shellfish CD Segments – Delists and Closures	Shellfish CD Segments Scheduled for 2005
Bay/Coastal	4	30	43
Chowan	0	0	0
James	0	2	4
New	0	0	0
Potomac, Shenandoah	9	7	0
Rappahannock	0	3	8
Roanoke	0	0	0
Tennessee, Big Sandy	0	0	0
York	0	6	0
Total	13	48	55

Table 5 shows the various pollutants for which TMDLs have been established, as well as the number of delisted segments. In most cases, delisting occurs when water quality standards for a given pollutant are no longer violated and the segment no longer requires a TMDL. This means that water quality conditions have improved enough so that an impairment no longer exists and the water is removed from the list of impaired waters requiring TMDLs. DEQ's water quality assessment guidance, referenced in section 3.2, contains additional details on listing and delisting.

To date, no delistings have occurred that are directly attributable to TMDL implementation activities, but progress is being made in several areas, as the following section describes.

Table 5. TMDL Activity by Pollutant

TMDL Activity from 1/1/99 to 9/30/05									
	Total	Bacteria	Benthic	PCB	Nitrate	pH	DO	Ammonia	Temp
TMDLs Completed <sup>1</sup> (CD and Non CD)	178	107 shellfish 13	51	5	2	0	0	0	0
CD segments	129								
CD Delistings	43 <sup>2</sup>								
- full	38	17	5		1	5	5	1	4
- partial	6	2	3			1			

<sup>1</sup> Does not include delists

<sup>2</sup> One CD segment was delisted for two pollutants

**TMDL IMPLEMENTATION**

As of September 30, 2005, ten IPs covering multiple impairments have been completed and are in various stages of implementation. Table 6 shows the distribution of the IPs in Virginia's major river basins. Copies of draft and final IPs are made available to the public at <http://www.deq.virginia.gov/tmdl/implement.html>.

Some highlights on TMDL implementation activities between January and September 2005 include:

- A recent evaluation of water quality trends in the Shenandoah Valley demonstrates improving conditions and suggests that TMDL efforts are paying off. Rates of violation of the bacteria water quality standard in 82 valley streams were assessed for the 2000-2005 period and compared to the 1995-2000 period. Of those streams, 70% had improved over the past five years, and only 28% had degraded. Some improvements were large (as high as 52%), and 10 of the top 13 streams with the largest improvements have been the focus of TMDL activities.

Table 6. TMDL Implementation Plans by River Basin (through September 30, 2005)

Basin	IPs Completed	# of segments in completed IPs	IPs Under Contract/in Planning	# of segments in pending IPs
Chowan	1	9	0	0
James	2	2	0	0
New	0	0	2	3
Potomac, Shenandoah	4	10	4	9
Rappahannock	0	0	2	7
Roanoke	1	4	2	8
Tennessee, Big Sandy	2	5	3	5
Shellfish	0	0	1	2
<b>Total</b>	<b>10</b>	<b>30</b>	<b>14</b>	<b>34</b>

- The three “pilot” TMDL implementation projects initiated by DCR in 2001 in Rockingham County (North River), Franklin County (Blackwater River) and Washington County (Middle Fork Holston River) completed the fourth year of a five-year implementation timeline. Progress meetings were held with local stakeholders in each of the project areas.
  - DEQ, DCR, and the Shenandoah Valley Soil and Water Conservation District teamed to hold a series of public meetings to “celebrate” observed water quality improvements in the Dry River, Muddy Creek, and Mill Creek TMDL implementation areas and to thank local citizens for their participation in agricultural BMP programs. Due to TMDL implementation activities, these

streams have experienced 19-29% improvements in bacteria violation rates and have experienced the highest benthic aquatic life ratings ever observed on these streams.

- The Middle Fork Holston River was recognized by EPA as Virginia's watershed success story for 2005.
- DCR in cooperation with the Peter Francisco Soil and Water Conservation District led the development of an IP for the Willis River watershed in Buckingham and Cumberland Counties and is pursuing the implementation of BMPs.
- DEQ, in cooperation with the Thomas Jefferson Planning District Commission and other local stakeholders developed an IP for Moores Creek in Charlottesville.
- DCR issued technical assistance contracts with the Lord Fairfax Soil and Water Conservation District, Loudoun County Soil and Water Conservation District, Loudoun County Health Department, and Peter Francisco Soil and Water Conservation District to initiate IPs in the Holmans Creek, Catoctin Creek and Willis River watersheds, respectively. Section 319 funds from EPA were directed to these implementation project areas to install agricultural and residential BMPs.
- Several new IPs were initiated which included Thumb, Deep, Carter and Great Runs (Fauquier County); Cooks Creek and Blacks Run (Rockingham County/City of Harrisonburg); Lower Blackwater River, Gills Creek and Maggodee Creek (Franklin County); Big Otter River (Bedford County/Campbell County); Mill Creek and Dodd Creek (Montgomery County/Floyd County) and Little Creek and Beaver Creek (Washington County/City of Bristol).
  - DCR, in cooperation with the City of Harrisonburg, Rockingham County, and other local stakeholders have been working to develop an IP for Cooks Creek and Blacks Run. Blacks Run has been chosen by the Canaan Valley Institute [CVI] as an urban stream demonstration project area. CVI has provided technical assistance and funding for a stream restoration project on Blacks Run that will restore natural stream channel design, provide riparian buffers, and assist in meeting sediment reduction goals called for in the Blacks Run TMDL.
  - DEQ and DCR teamed with three universities across two states to develop an IP for Abrams and Opequon Creeks in Frederick County. The resource team for this project includes Virginia Tech's Biological Systems Engineering Program, the University of Virginia's Institute for Environmental Negotiations, and West Virginia University. The three partners have combined to provide biological, sociological, and economic expertise.
- DEQ has provided training, support, and materials to assist local watershed groups in monitoring E. coli bacteria in their local TMDL water bodies. DEQ has provided these resources to several citizen monitoring groups across the state, and participants in the

program include high school and college educators that are using the opportunity to educate students on water quality and monitoring methods.

- DEQ coordinated the development of an IP for the Chowan watershed bacteria TMDLs and is working with other agencies to obtain funding for BMPs.
- DMME facilitates IP development for coalfield streams and continues to directly implement stream improvement projects. During the past year, the agency has participated with IP development for the Guest River in Wise County and Dumps Creek in Russell County. In addition, the agency has drafted a specific guidance memorandum to address mine permitting processes in TMDL watersheds.
- Three projects are currently being administered by DMME in TMDL watersheds to improve the chemical and biological quality of the impaired stream segments.
  - In Black Creek, Wise County, the agency has initiated a riparian zone restoration project for the lower 1.5 mile segment of the stream. The goal is to improve aquatic habitat. The agency has partnered with the National Fish and Wildlife Foundation.
  - In the Powell River, Lee County, the agency has chemically improved 3.5 miles of stream through completion of the Ely Creek acid mine drainage wetland; a cooperative project between DMME and the U. S. Army Corps of Engineers. The second phase of the project has been initiated and will also consist of wetland construction in Puckett Creek. Ely Creek and Puckett Creek are tributaries to impaired segment of the Powell.
  - In the Guest River, Wise County, two abandoned mined land sites, one a coal tippel targeted in the IP, were reclaimed during 2005. DMME partnered with the Lonesome Pine Soil and Water Conservation District and the Tennessee Valley Authority on the project.

### **3.4. LOCAL WATERSHED INITIATIVES**

#### ***YORK RIVER WATERSHED***

Throughout the past year, the York River and Small Coastal Basin Roundtable held several meetings to educate stakeholders and to critically discuss and analyze regional nonpoint source issues. The forums have focused on stormwater and low impact development, nutrient trading, forest harvesting practices, and onsite disposals systems. The goal thus far has been to raise awareness of forum participants, with the future goal to better engage local governments to ensure that they have the knowledge and available tools to most appropriately address nonpoint source pollution. Watershed planning continues to be a positive factor in the York and coastal watersheds. A regional workshop, including planning district commissions, soil and water conservation districts, EPA, DCR, and local government representatives is scheduled to take place in February 2006. This workshop will build upon past successful watershed planning efforts, such as Dragon Run, and to expand watershed planning to encourage greater participation by more localities.

#### ***RAPPAHANNOCK RIVER WATERSHED***

The Rappahannock River Basin Commission has taken the lead on regional efforts to more specifically define how the Rappahannock Tributary Strategy can be implemented at the local level. This Nonpoint Source Workgroup, as part of the Commission, is comprised of a broad range of stakeholders from throughout the watershed. This workgroup has had presentations and discussions ranging from responsibility of Tributary Strategy implementation to development of implementation tools for local governments. With these discussions underway, the next step will be to more actively engage the Commission members, and ultimately, each local government into enhancing specific local programs, such as stormwater and land use planning.

#### ***POTOMAC RIVER WATERSHED***

The Northern Virginia Area Roundtable has been very involved this year in the support of the Potomac Tributary Strategy. This DCR supported Roundtable hosted a successful Potomac Forum IV for over 200 Northern Virginia stakeholders in late August at George Mason University's Prince William Campus. Presentations from DCR and DEQ on the Tributary Strategies Implementation for both point and non-point sources of pollution were highlighted. Numerous local governments presented talks on successful non-point source implementation efforts such as green roofs, urban nutrient management, street sweeping, and continuous no-till. The Roundtable also established a website for members that includes meeting minutes and presentations for quarterly Roundtable meetings. Both of these outreach efforts help keep the Northern Virginia area informed of important state efforts.

#### ***ROANOKE RIVER WATERSHED***

The Upper Roanoke Roundtable helped organize the Fall Roanoke River Clean-up and Celebration held on October 1<sup>st</sup>. The event was a huge success with a good turnout, and received an excellent review in the *Roanoke Times* as an effective clean-up. An estimated 24 tons of trash were pulled from streams and stream banks by over 350 volunteers and collected by the City of

Roanoke. Back at Wasena Park, volunteers enjoyed food and live music, and there were about a dozen booths set up for exhibits. The City of Roanoke, Explore Park, Clean Valley Council, Roanoke Natural Foods Co-Op, Tom's of Maine and a number of other volunteers coordinated and supported this effort. The roundtable also remains very active in supporting the Virginia Save Our Streams program. The Upper Roanoke River Roundtable received the Water For Life award from the Southeastern Rural Community Assistance Program [RCAP] during the National Drinking Water Week luncheon held on May 4th at Hotel Roanoke. The award was in recognition of the roundtable's contribution to enhance the quality of life in the community. Three members of the Roundtable's Board of Directors attended the luncheon and awards ceremony.

### ***BIG SANDY RIVER WATERSHED***

The Big Sandy River Basin Coalition [BSRBC] is currently planning for their annual meeting scheduled for April 2006. Several ongoing efforts will be culminating at that time, one of which involves an increase in the number of directors from five to twenty-one. Also, the BSRBC Board recently met to further galvanize partnership efforts with the Ohio River Sanitation Commission [ORSANCO], a regulatory entity that has the potential to assist the BSRBC in encouraging certain localities in Kentucky and West Virginia to comply with water quality regulations. On the horizon, new program initiatives by CVI, called the Highlands Action Program, make the Big Sandy a good candidate for more resources that can help address water quality issues and community revitalization efforts.

### ***UPPER TENNESSEE RIVER WATERSHED***

The Upper Tennessee River Roundtable [UTRR] has one year remaining in the three-year EPA grant that was received in 2003. Many projects are underway as the UTRR is trying not only to achieve the objectives, but also exceed them. Although implementation is in full swing for the EPA Grant, they are beginning to realistically consider "life after the EPA Grant" by searching for other grant possibilities through the Highlands Action Program, the Water Quality Improvement Fund, and other sources. UTRR also recently hired a coordinator to implement the "Assign-A-Highway" Program, which uses probation and parole labor to pick up litter on court-appointed highway segments. The program is working remarkably well. They hope to expand the program statewide. Finally, the Regional Wastewater Study Commission for Southwest Virginia recently presented their findings to a delegation of Southwest Virginia legislators in hopes that these documented projects will find favor for funding with the 2006 Virginia General Assembly.

### ***SHENANDOAH RIVER WATERSHED***

The Shenandoah Pure Water 2000 Forum held a two day meeting on June 17-18 to discuss major issues in the watershed. Agenda items included water supply, land conservation, open space planning, and conservation easements. A plan was discussed as to what courses of action needed to take place to protect the watershed. The group also recently hosted a forum to discuss the fish kill on the South Fork of the Shenandoah. The history of fish kills was discussed as well as what

measures can be taken to avoid this in the future. The meeting resulted in DEQ offering to conduct more analytical monitoring in the future.

### ***JAMES RIVER WATERSHED***

The Upper James Roundtable is proceeding with its application to become a Resource Conservation & Development council. If the roundtable achieves this status, it is believed that it will receive 1.5 full-time employees. The roundtable also hosted a workshop at Lake Moomaw. Topics that were discussed included water quality/quantity, historical resources, and the lake's importance as a recreational attraction. Discussions as to what significant changes may be occurring in the future were also held.

The Lower James River Roundtable, hosted by the Hampton Roads Planning District Commission, has focused on incorporating the changes to the statewide stormwater programs and evaluating the long-term effects these changes will have on local stormwater issues. Currently, in conjunction with the Cooperative NPS Program initiative of the WQIF, the Roundtable is developing the first iteration of an implementation plan for the Lower James portion of the *Chesapeake Bay Nutrient and Sediment Reduction Tributary Strategy for the James River, Lynnhaven and Poquoson Coastal Basins, March 2005*.

DCR continues to assist the Elizabeth River Project [ERP] in the implementation of the Paradise Creek Watershed Management Plan, acting as technical advisors for the Elizabeth River Restoration Trust Fund and working with ERP on the development of a watershed management plan for a section of the Elizabeth River known as Money Point.

The City of Virginia Beach, Hampton Roads Planning District commission, DEQ, DCR and other state and federal agencies have developed a draft IP for the Lynnhaven River bacteria TMDL, which outlines a strategy and the proposed actions to reduce anthropogenic loading of bacteria to the level set forth in the TMDL study with the goal of achieving the water quality standard for fecal coliform for shellfishing waters.

### ***EASTERN SHORE WATERSHEDS (BAY/SEASIDE)***

The Eastern Shore Watersheds Network, a diverse group of Eastern Shore stakeholders, continues to make strides in coordinating and implementing the *Chesapeake Bay Nutrient and Sediment Reduction Tributary Strategy for Virginia's Eastern Shore, March 2005*. Through grants from several funding sources, the Network has focused on increased implementation of agricultural BMPs and citizen education. Educational and outreach events such as the Saxis and Onancock Water Trails, the Eastern Shore Watershed Festival and the quarterly publication *Shore Outdoors* have been effective at reaching a cross section of stakeholders. The Network is currently developing projects with the Eastern Shore Planning District Commission and with other partners that address both additional agricultural initiatives and urban initiatives such as using GIS mapping for buffer restoration and region stormwater planning using GIS. Both Accomack and Northampton Counties are considering implementation activities through the Cooperative NPS Program initiative of the WQIF.

***ALBEMARLE SOUND WATERSHED***

The Southern Watershed Area Management Program [SWAMP], hosted by the Hampton Roads Planning District Commission continues to work with the Albemarle-Pamlico National Estuary Program in an effort to exchange planning and environmental management information with the neighboring North Carolina counties.

In addition, using the Multiple Benefits Conservation Plan [MBCP] and the Conservation Corridor Plan previously developed by the program, SWAMP is currently working with the cities of Virginia Beach and Chesapeake on any possible wetland mitigation as a result of the proposed Southeastern Parkway Project. The MBCP is designed to be a strategy for increasing the number and type of benefits derived from wetland compensation and other types of conservation in the Southern Watershed Area.

***CHOWAN RIVER WATERSHED***

The Chowan Roundtable continues to work on capacity building with the Albemarle-Pamlico National Estuary Program in both the Virginia and North Carolina portions of the Chowan watershed. Recently the Chowan Roundtable, in coordination with Chowan Basin Soil and Water Conservation District and the Blackwater/Nottoway River Keepers Association has completed the Chowan Study Area IPs for the Nottoway, Blackwater and Raccoon study areas in September 2005.

In addition DCR has added to the state's natural area preserve system by the acquisition of an additional 216 acres in Sussex and Prince George Counties, Nottoway River Watershed.