Annual Report on Implementation of the Virginia's Chesapeake Bay Tributary Strategies December, 2005



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Introduction

In accordance with commitments made in the Chesapeake 2000 Agreement, Virginia has developed tributary strategies for each of the five river basins within its portion of the Chesapeake Bay Watershed. The strategies articulate the extent of management actions necessary to reduce nutrient and sediment pollution the Chesapeake Bay and its tributary rivers. The management actions are specific to point sources (wastewater treatment and industrial facilities) and nonpoint source (land based sources affected by runoff including agricultural and developed lands). For complete information on the Chesapeake 2000 Agreement, visit the Chesapeake Bay Program's website at www.chesapeakebay.net

The strategies are built around "input decks" which define the number and extent of practices in a form that can be evaluated by the Chesapeake Bay Program computer model that serves as a tool to estimate the nutrient and sediment reductions from various combinations of management practices.

Copies of all of Virginia's Tributary Strategy documents and related information are available at the Secretary of Natural Resource website: www.naturalresources.virginia.gov

This report summarizes actions related to the development and implementation of the strategies in calendar year 2005.

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Part 1: <u>Summary of Major Actions related to Virginia's Tributary</u> Strategies: 2005

January 2005: Secretary of Natural Resources releases Virginia basin-wide Tributary Strategy document.

January 2005: Department of Conservation and Recreation receives EPA authorization for administration of stormwater management programs previously administered by the Department of Environmental Quality.

March 2005: Tributary Strategy documents for Potomac/Shenandoah, Rappahannock, York, James and Eastern Shore released by Secretary of Natural Resources.

March 2005: General Assembly adopts amendments to the Water Quality Improvement Act that sets state policy regarding cost share funding of point and nonpoint source reduction actions.

March 2005: General Assembly passes "Nutrient Credit Exchange" legislation that directs the development and implementation of a watershed general permit by the Department of Environmental Quality and the State Water Control Board.

May 2005: Department of Environmental Quality begins development of the Watershed General Permit authorized by the Nutrient Credit Exchange legislation.

June 2005: State Water Control Board adopts revised water quality standards for Virginia's tidal waters based on criteria developed by the United States Environmental Protection Agency.

July 2005: Secretary of Natural Resources convenes advisory committee to assist in the revision of grant guidance for the Water Quality Improvement Fund.

August 2005: Governor Warner announces \$56.6 million deposit to the Water Quality Improvement Fund from FY 2005 year-end surplus.

September 2005: State Water Control Board adopts Policy for Nutrient Enriched Waters for all dischargers in the Chesapeake Bay watershed and the Water Quality Management Planning regulation for dischargers in the Potomac/Shenandoah, Rappahannock, and Eastern Shore basins.

September 2005: Secretary of Natural Resources releases revised grant guidance for the Water Quality Improvement Fund. Changes were necessary to reflect amendments made to the Water Quality Improvement Act during the 2005 session of the General Assembly.

November 2005: State Water Control Board adopts Water Quality Management Planning regulation for York and James basins.

November 2005: State Water Control Board adopts special dissolved oxygen standard for the York River and numeric chlorophyll standard for the James River.

November 2005: Department of Conservation and Recreation adopts revised Nutrient Management Certification regulations.

December 2005: Governor Warner proposes \$200 million contribution to the Water Quality Improvement Fund to support point source tributary strategy implementation; the largest single year contribution in the history of the fund.

Part II: Point Source Implementation

Implementation of the point source elements of the tributary strategies is the responsibility of the State Water Control Board (the Board) and the Department of Environmental Quality (DEQ). During 2005, the Board and DEQ put in place the regulatory framework that will guide the implementation of the point source elements of the tributary strategies.

In 2005, the Board adopted revised tidal water quality standards for three criteria (dissolved oxygen, water clarity, and chlorophyll) in five designated uses (anadromous spawning and nursery habitat, shallow water, open water, deep water, and deep channel). These standards are based on criteria developed by the United State Environmental Protection. The standards define the conditions necessary to remove the Chesapeake Bay and portions of its tidal tributaries from the EPA list of impaired waters. Complete information on the standards can be found at http://www.deq.virginia.gov/wqs/

The Board also adopted limits on nutrient discharges from wastewater treatment plants and industrial facilities by revising two existing regulations; the Policy for Nutrient Enriched Waters (9 VAC 25-40), and the Water Quality Management Planning Regulation (9 VAC 25-720).

The combined effect of these regulatory actions is to establish total nitrogen and total phosphorus permit limits for significant dischargers within Virginia's portion of the Chesapeake Bay watershed. Resulting effluent limits will be expressed principally as annual waste load allocations (total pounds released annually), and also as technology-based annual average concentrations (expressed in milligrams per liter of effluent) where authorized by the board. These actions are needed because nutrients discharged from wastewater treatment plants contribute to excessive amounts of nitrogen and phosphorus entering the Chesapeake Bay and its tributaries. For details on this rulemaking process, see www.deq.virginia.gov/bay/multi.html.

Also during 2005, the Board and DEQ began development of the Watershed General Permit authorized by legislation passed during the 2005 session of the General Assembly. Once adopted by the Board, the permit will govern a nutrient credit exchange program among significant dischargers in each of the Chesapeake Bay's tributary basins. More information on the development of the general permit can be found at www.deq.state.va.us/vpdes/

The implementation of the standards and regulations in concert with the Nutrient Credit Exchange general permit will result in significant nutrient reductions that will be capped over time.

Part III: Nonpoint Source Implementation

With the release of the tributary strategy documents, 2005 served as the point of departure for the implementation of the nonpoint source elements of the strategies. The first step was to meet with local partners to explain the contents of the strategies and begin the planning process necessary for effective implementation of the strategies. This section summarizes actions in each of Virginia's five Chesapeake Bay tributary basins as full implementation begins. This report also summarizes actions taken to improve and refine existing programs such as erosion and sediment control that serve as the foundation for effective nonpoint source pollution control. Future reports will offer greater detail on the numbers of practices installed in each basin.

Potomac/Shenandoah Watershed

The implementation of the nonpoint source pollution (NPS) components for the Virginia Potomac Basin is detailed in the *Chesapeake Bay Nutrient and Sediment Reduction Tributary Strategy for the Shenandoah and Potomac Basins* released in March 2005 by the Secretary of Natural Resources. Since the release of the document, Virginia Department of Conservation and Recreation (DCR) staff in the Potomac Watershed office has been meeting with agricultural, urban, and other stakeholders to plan implementation of the practices defined in the strategy.

• Agricultural Best Management Practices

All four Soil and Water Conservation Districts (SWCDs) in the Potomac watershed received cost-share allocations from DCR by July 1. In addition, all four SWCDS received additional funds from DCR to implement certain high-priority nutrient and sediment reducing best management practices (BMPs). DCR Potomac Watershed staff conducted personal visits to all four Potomac watershed SWCDs explaining the "input deck" portion of the Tributary Strategy and soliciting their support.

• Nutrient Management Planning and Implementation

During the 2005 reporting period, DCR nutrient management staff wrote a total of 55 agricultural nutrient management plans in the Potomac and Shenandoah basin covering 7,888 acres of agricultural land. This compares to 71 plans for 7,672 acres during 2004. Plans were prioritized according to the Tributary Strategy document as well as the Department of Environmental Quality 303(d) list of impaired waters. In the urban areas of the Potomac watershed, DCR staff worked with local governments and other state and federal agencies in developing urban nutrient management plans on publicly owned land as well as privately owned golf courses. During 2005, staff developed 46 plans covering 5,039 urban acres in the Potomac and Shenandoah basin. In 2004, 28 plans for 2,998 urban acres were developed. The cumulative total statewide for urban nutrient management acres is currently approaching 80,000 acres, the most of any Chesapeake Bay watershed state. Outreach to major fertilizer companies concerning re-labeling homeowner bags to include a water quality message was successful, as was a spring media campaign titled "Chesapeake Club" that persuaded citizens to fertilize lawns only in the fall (see www.chesapeakeclub.org).

• Stormwater Management

DCR Potomac Watershed staff began implementation of the Virginia Stormwater Management Program (VSMP) in January. New staff was hired and trained, and inspections of construction sites to ensure coverage under the permit began. Staff has made it a priority to meet with each local government to explain the changes in oversight of the program as well as to work cooperatively on achieving compliance with this regulation. Staff has also been participating with US Environmental Protection Agency (USEPA) with a number of Municipal Separate Storm Sewer (MS4) program audits.

• Erosion and Sediment Control

DCR Potomac Watershed staff completed local program review for the towns of Haymarket, Dumfries, Warrenton, and Vienna, as well as the county of Fauquier. Staff continues to work with these local governments on recommended improvements to their local program. DCR Potomac Watershed staff hosted a regional workshop for local government to discuss their respective erosion and sediment programs and learn from each other.

• Outreach, Media and Education

The Potomac Watershed Roundtable was initiated by DCR and is composed of local governments and SWCDs in the Potomac basin. The Roundtable has become established as the premier water quality forum in the Northern Virginia area. Through quarterly meetings and the establishment of a website www.potomacroundtable.org, this group has kept Northern Virginia stakeholders informed of Tributary Strategy implementation efforts as well as provide a regular forum to hear back from member localities and others. The 4th annual Potomac Watershed Forum was held in August at the Manassas campus of George Mason University and was attended by over 200 people. Participants were updated on both NPS and Point Source elements of the Tributary Strategies as well as innovative BMPs to help meet the tributary strategy goals.

DCR Potomac Watershed staff coordinated a "mini-grant" program to provide funds for SWCDs and Virginia Cooperative Extension to conduct outreach and education with farmers and homeowners through field days and other events.

Shenandoah River (Potomac Watershed)

• Agricultural Best Management Practices

The Shenandoah Watershed office of DCR serves four soil and water conservation districts (Headwaters, Mountain, Shenandoah Valley and Lord Fairfax). These districts were presented the Shenandoah Tributary Strategy in the spring of 2005 and then the county input decks over the summer. Allocations of new cost share dollars for Ag BMP practices increased significantly in fiscal year 2005. In July 2005 the districts signed two-year cost share grants with DCR in which the districts were provided new allocations that increased roughly 15%.

With the increase in BMP funding beginning with FY 05, the Lord Fairfax SWCD added two staffers in January 2005 to assist with Ag BMP implementation. In the new fiscal year Lord Fairfax has continued to take advantage of the use of up to 15% of their cost share allocation to recoup expenses related to program administration.

• Nutrient Management Planning and Implementation

It is estimated that 76 nutrient management plans were written to cover areas in the Shenandoah River basin and that these plans covered 15,360 acres. Final numbers will be available at the end of the current accounting period.

• Erosion and Sediment Control

Between January 1 and October 31, 2005 the Staunton office of DCR has conducted four program reviews in the Shenandoah River watershed. The program reviews were: Rockingham County, City of Winchester, Town of Bridgewater and City of Waynesboro. The Staunton office has built up the staff. All E&S positions are now filled – something that has not been the case for several years. In addition, a Stormwater Compliance Specialist has been hired to help deal with the Virginia Stormwater Management Program. This individual is working to bring private developments of one acre or more into compliance with required stormwater permits.

• TMDL Program

Progress has been made on the North River TMDL Implementation Project, which was one of the three pilot projects established by DCR in 2001. Two progress meetings were held this year for the project where the Department of Environmental Quality shared results from water quality monitoring indicating signs of improvement in several of the subwatersheds in the North River watershed. The Holmans Creek TMDL Implementation Plan recently began, and two TMDL Coordinators were hired for the watershed. An implementation kickoff meeting was held in September. Planning for TMDL implementation in Cooks Creek and Blacks Run is coming to a close, with participation from local government and the community. A total of two meetings have been held for the government, agricultural and residential working groups, while three have been held for the urban working group. In addition, a draft TMDL Implementation Plan for the Abrams and Opequon watershed is close to completion led by the Department of Environmental Quality. A final steering committee meeting for the project will be held in November.

Rappahannock River and Northern Neck Coastal Basins

Erosion and Sediment Control

Two local erosion and sediment control program reviews were conducted in the Rappahannock watershed during the past year, Stafford and Rappahannock Counties. Program administrators at both counties have started implementing corrective action

agreements to rectify problems identified during the review. These localities as well as many others have made significant steps toward implementation of the tributary strategy. The Town of Orange, through grants from DCR, has encouraged developers to use Low Impact Development (LID) as demonstration projects on several new developments. The Town also held a series of LID workshops, which included broad participation by Town officials, developers, and citizen groups. The Town and the County of Orange are now collaborating in the development of a comprehensive Stormwater Management program and to require LID whenever appropriate.

A collaborative effort between local governments and Northern Neck SWCD resulted in a workshop entitled "Natural Resource Violations". This workshop permitted local government staff in a four county region to better understand environmental laws and regulations and to explore how to best address local violations of these laws. For the fourth year in a row, one-day workshops have been held for realtors. These workshops are aimed at educating real estate agents on agricultural and stormwater BMPs and other practices. This education is then used to pass on information to new landowners in agricultural, suburban, and urban areas.

• Agricultural Best Management Practices

The seven soil and water conservation districts which lie partially or wholly in the Rappahannock Watershed received approximately \$1.7 million this fiscal year. Of these funds, approximately \$1 million was earmarked for the three priority BMPs; cover crops, nutrient management planning, and continuous no-till. While final payments will not be known for some time, initial obligation and signup of cost share funds have outpaced available funding. In some districts, requests within the first three months of the signing period is more than three times available funding.

In addition, DCR nutrient management planners wrote nutrient management plans on over 12,000 acres of agricultural land. Many of these were new plans, reflecting our intense efforts to increase participation in conservation programs.

Other Activities

Partnerships among the Rappahannock-Rapidan Regional Commission, the Culpeper SWCD, the citizens group RappFLOW, and various local governments resulted in a number of regional activities and demonstration projects. These groups collectively provided technical assistance to a subdivision consisting entirely of low impact development and specific stormwater LID practices at the new Germanna Community College. In addition, Rappahannock County, in concert with these partners, assisted in carrying out local water quality monitoring and helped to develop land use controls to pursue address the causes of impairments to the streams within the county.

York River and Lower Coastal Basins

The York River and Small Coastal Basin Roundtable was reformed in the past year and has provided a forum for stakeholders to exchange information regarding water quality and land use issues in the York River, Mobjack Bay, and Piankatank River Watersheds,

as they relate to tributary strategy implementation. The group is developing position statements for practices and policies, affecting water quality in these watersheds. Discussions among participants have centered around agricultural BMPs, low impact development, forest harvesting, nutrient tracking programs, point source regulations, nutrient funding opportunities, and nutrient reduction efforts for on-site sewage disposal systems.

Erosion and Sediment Control

Two local erosion and sediment control program reviews were conducted over the past year in James City County and York County. In addition to these reviews, localities are individually enhancing their effectiveness in stormwater management. A number of local governments have established programs to engage citizens into watershed planning and stormwater management. Such an example is the James City County PRIDE (Protecting Resources in Delicate Environments) mini-grant program. The goal of this is to offer four \$500 grants to residents and community groups to improve water quality through watershed restoration and protection projects, such as wetland restoration and implementation of low impact development practices.

Nutrient Management Planning

The seven soil and water conservation districts which lie partially or wholly in the York Watershed received approximately \$1.5 million this fiscal year. Of these funds, approximately \$1.1 million was earmarked for the three priority BMPs; cover crops, nutrient management planning, and continuous no-till. While final payments will not be known for some time, initial obligation and signup of cost share funds have outpaced available funding. All SWCDs in the tidewater region have had great success with cover crop and continuous no-till signup.

DCR nutrient management planners wrote nutrient management plans on over 11,000 acres of agricultural land. Most of these were revised reflecting the majority of farmers' interest in revising nutrient management plans prior to the first of the year.

The Tidewater Resource Conservation & Development Council has taken the lead in organizing regional meetings and promoting Purchase of Development Rights and other agricultural preservation programs. The Council has worked closely with local governments, agricultural community, and planning experts to identify opportunities and to alleviate roadblocks in developing agricultural preservation programs.

<u> James River - Upper</u>

• Agricultural Best Management Practices

Four districts served by the Shenandoah Watershed office have the Upper James watershed within their boundaries. These are Headwaters, Mountain, Natural Bridge and Mountain Castles. These districts were presented the James Tributary Strategy in the spring of 2005 and then the county-by-county input decks over the course of the summer. Allocations of new cost share dollars for Ag BMP practices increased significantly in

fiscal year. In July 2005 the SWCDs signed two-year cost share grants with DCR in which the districts were provided new allocations that increased roughly 15%.

• Nutrient Management Planning and Implementation

47 nutrient management plans were written to cover areas in the Upper James River basin and that these plans covered 10, 311 acres.

• Erosion and Sediment Control

Between January 1 and October 31, 2005 the Staunton office of DCR has conducted 1 program review in the James River watershed. The program review was of the Rockbridge County program. The program review for the City of Buena Vista is currently under way.

For the first time in several years, all erosion and sediment control positions are now filled – something that has not been the case for several years. In addition, a Stormwater Compliance Specialist has been hired to help deal with the Virginia Stormwater Management Program. This individual is working to bring private developments of one acre or more into compliance with the stormwater permits.

• TMDL Program

Currently, a TMDL is being developed for the Upper Jackson River. This plan will integrate goals of the TMDL program with those of Tributary Strategies by incorporating recent nutrient caps for wastewater treatment plants into the waste load allocation required for the TMDL.

James River - Middle

The Piedmont James Tributary Strategy Roundtable is now in its seventh year of operation. The steering committee continues to meet regularly to exchange and disseminate information addressing the strategy and other water quality issues.

• Erosion and Sediment control

Between January 1st and October 31st, DCR regional staff has completed the local program reviews for the counties of Albemarle, Amelia, and Powhatan. Local staff is working with DCR on recommended improvements to their local program. The review for the Town of Farmville is in progress after the completion of the data collection in early November and the remaining review for Nottoway County will be completed soon.

• Agricultural BMPs

The seven soil and water conservation districts which cover most of the Piedmont James watershed received approximately \$666,000 this fiscal year. Of these funds, approximately \$334,624.00 was earmarked for the three priority BMPs; cover crops,

nutrient management planning, and continuous no-till. All SWCDs in the Piedmont James region have participated in the development of the tributary strategy. In July of 2005, they each signed two-year agreements with DCR to continue administering these programs with the newly available funding through Water Quality Improvement Fund.

• Nutrient Management Planning and Implementation

Nutrient management staff has completed 43 nutrient management plans this year that covers over 7,000 acres of agricultural land in the Middle James River basin.

• <u>Stormwater Management and Cooperative Programs</u>

The Alliance for the Chesapeake Bay awarded grant funding this year to SunTrust Mid-Atlantic Bank in Richmond, VA, to help create the largest and highly visible completed green roof in Virginia. A green roof uses plants to absorb and filter rainwater thus reducing the impacts of runoff.

Two pilot projects involving two SWCDs and two local governments focused on improving urban BMP implementation efforts. In Amherst County, local government officials consented to the process and were receptive to recommendations for inclusion of sound land use tools within the comprehensive plan revision. In Fluvanna County, officials are still working on consensus with the final recommendations.

The Henricopolis SWCD successfully guided a public/private partnership project with the Ukrops grocery store chain to install an urban LID project at a new store. With the assistance of a DCR mini-grant, the district and the owner were able to conduct two public outreach events, the first in correlation with Earth Day 2005, and provide signage at the site. Additionally, Ukrops, Inc. is now considering LID techniques on other projects.

Lower James River & Lynnhaven Coastal Basins

The implementation of the Nonpoint Source Pollution (NPS) components plan for the Lower James and Lynnhaven portions of the James watershed has been a cooperative effort between the state, regional, local and federal agencies. This Tributary Strategy team has been meeting regularly to develop an effective regional approach to implement the restoration targets listed in the Lower James River Tributary Strategy Input Deck. Using the nonpoint source implementation plan contained in the tributary strategy as a guide the following actions have been taken.

• Agricultural Best Management Practices

DCR has increased cost share allocations for agricultural BMP implementation. Nutrient Management Planning and Implementation

DCR staff has written a total on five nutrient management plans in the Lower James since January 2005 covering 1941 acres. DCR staff are working with the Lower James

Roundtable and local governments staff to formulating an approach to help assist local governments in urban nutrient management on publicly owned land. The Colonial SWCD has been working with homeowner associations within their District on urban nutrient management.

• Stormwater Management

The Lower James Roundtable identified street sweeping as an important BMP for meeting sediment reductions goals and requirements in the Lower James. Street sweeping is currently not included as a BMP in the Chesapeake Bay Watershed Model. This is due in part to a lack of quantifiable data on current street sweeping practices. HRPDC, with funding from DCR, is currently reviewing local street sweeping programs and doing a literature review of current street sweeping practices to help determine the effectiveness of the practice in reducing nutrients and sediment.

Regional Environmental Organizations such as the Elizabeth River Project and Lynnhaven 2007 are currently working with business and landowners to help reduce stormwater runoff through stormwater BMP demonstrations projects such as installing rain gardens on school grounds for use as outdoor classroom and working with homeowner on backyard buffer and living shoreline initiatives.

• Erosion and Sediment control

DCR staff has completed the local program review for the cities of Hampton, Newport News and Virginia Beach. Local staff is working with DCR on recommended improvements to their local program.

• Chesapeake Bay Preservation Act

Fourteen localities, including the six cities with Phase I MS4 Permits and the six localities with Phase II MS4 Permits, are implementing Virginia Chesapeake Bay Preservation Act programs. Through the HRPDC Chesapeake Bay Committee, which also involves the region's non-permitted communities, staff members responsible for implementation of that program share information on successful program activities. These efforts are closely coordinated with the Regional Stormwater Management Committee. The two Committees routinely meet to address technical and regulatory issues of common concern.

• NPS Implementation and Tracking

Urban BMP tracking is a major issue within the Lower James River watershed. DCR staff is working with localities to develop a cost effective tool to track urban BMP implementation. DCR is currently tracking the majority of agricultural BMPs through its cost share programs. However, voluntary BMP tracking may become more important in the future in order to assure that there is an accurate picture of BMP implementation.

• Outreach, Media and Education

The Suffolk Virginia Cooperative Extension (SVCE) office held two seminars for residents of the city of Suffolk. A Waterfront Property Management seminar and a "Fall" Into Your Lawn Educational Event were held. These events were paid for through minigrants with the DCR and EPA's Chesapeake Bay Program. Lawn care with healthy waters in mind was the theme of events with a focused on environmentally sound lawn establishment and maintenance. Golf course managers, commercial lawn care companies, homeowner's associations, and local homeowners were the target audience. Over 270 people attended the events.

The Peanut SWCD and SVCE teamed up to provide a Horse Management seminar on September 19, 2005. This educational event was targeted towards horse owners in the City of Suffolk. The event outlined proper pasture management principles to reduce erosion and introduced attendees to proper best management practices for use on horse operations. Over 75 residents attended the event. During the event the Peanut SWCD demonstrated proper use of the no-till seeder drill for use in planting pastures.

HR STORM, the stormwater education program of the Hampton Roads Planning District Commission (HRPDC), is a coalition of local government staff members who come together to share ideas and pool resources for targeted educational program efforts about stormwater management. This program uses various media outlets to educate citizens on nonpoint source and stormwater management issues.

Eastern Shore

Implementing Nonpoint Source Pollution (NPS) components of the Eastern Shore Tributary Strategy has been a cooperative effort between state and federal agencies and the Eastern Shore Watershed Network (ESWN). ESWN is a diverse group of Eastern Shore stakeholders including the Eastern Shore Soil and Water Conservation District, staff of Accomack and Northampton counties, Accomack-Northampton Planning District Commission, Eastern Shore Resource Conservation & Development Council, the Eastern Shore Coast Keeper and citizens. The ESWN's role includes logistics, outreach, and implementation planning for the tributary strategies. This Tributary Strategy Team has been meeting regularly to develop an effective regional approach to implement the restoration targets listed in the Eastern Shore Tributary Strategy Input Deck. Using the states Eastern Shore Tributary Strategy NPS implementation plan as a guide the following actions have been accomplished:

• Agricultural Best Management Practices

DCR has increased cost share allocations for agricultural BMP implementation.

• Nutrient Management Planning and Implementation

DCR staff has written a total of 18 nutrient management plans on the Eastern Shore since January 2005, covering 5,224 acres.

• Stormwater Management

Both Accomack and Northampton Counties are considering applying for funding for implementation of regional stormwater planning using GIS through the Cooperative NPS Program initiative of the Water Quality Improvement Fund (WQIF).

• Erosion and Sediment control

DCR staff has completed the local program review for Accomack County and is currently reviewing the local programs for Northampton County and town of Cape Charles. Local staff is working with DCR on recommended improvements to their local programs and seeking funding to implement DCR recommendations.

• Chesapeake Bay Preservation Act

As part of Tributary Strategy Implementation Planning the Eastern Shore SWCD and the Accomack-Northampton PDC have developed a GIS tool to analyze and map the presence or absence of vegetative shoreline buffers along the perennial streams in the Chesapeake Bay watershed in Accomack and Northampton counties.

An effort to access the cumulative impacts of land use practice that may be affecting the tidal waters of the Eastern Shore of Virginia is being planned. The baseline information will be assembled in a single database by watershed for the bayside Virginia Eastern Shore. It is planned that this information will later be placed in GIS format that can be used by planning commissions, wetlands boards and boards of zoning appeals when reviewing proposals and applications.

NPS Implementation and Tracking

The Eastern Shore Network has begun work on tracking regulated, cost share and voluntary agricultural and urban BMP implementation. Currently initiatives are underway to develop GIS tracking tools to better target BMP implementation for buffer restoration agricultural cost share. The counties are looking at developing similar tools for use in their stormwater management programs.

• Outreach, Media and Education

The Eastern Shore SWCD "Linking Chesapeake Bay Initiatives" program demonstrated the connections between resource use and resource protection. This event was paid for through a mini-grant with the DCR and EPA's Chesapeake Bay Program. Events were held on June 11 and 18, 2005. Over 70 local community members, business leaders, and elected officials participated. Participants of each event were given an introduction to the agencies and organizations working with each area's outstanding and unique natural resources and learned about various aspects of Chesapeake Bay conservation, restoration, and protection.

The Eastern Shore's Annual Watershed Festival provides a day filled with activities and informative displays by agencies and organizations. Over 30 agencies and organizations hosted informational and hands-on displays about the resources in the watershed. These displays emphasized the commitment to individual stewardship needed to protect the areas natural resources. Attendance has grown from to over 500 participants in 2005.

The Eastern Shore Environmental Education Council, a spin-off of the ESWN, has been publishing a four-page newspaper insert as a seasonal environmental guide to area resources. The publication is produced on a quarterly basis and is called "Shore Outdoors". It reaches a readership of over 12,000 or 65% of area households. Each issue is developed with a particular focus including the importance of the habitat on the Eastern Shore, bayscaping, defining and understanding of Resource Protection Areas, and tributary strategies.