Northern Virginia Regional Commission

NVRC COASTAL RESOURCES MANAGEMENT PROGRAM
Final Report for Virginia Coastal Zone Management Program
2005 Technical Assistance Grant (NA05NOS4191180)

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PDC ACTIVITIES……. 2

NVRC Special Project: Pollution Prevention Outreach – Stormwater Education Media Campaign……..... 2

Technical Assistance Workshops……... 3

Watershed Planning Assistance……... 3

NVironment…… 4

Onsite Wastewater Treatment Systems…….. 4

Coastal Resource Protection Teacher Education…….. 4

OTHER ISSUES…… 5

APPENDICIES…… 6

Factors Affecting Water Quality Changes in the Chesapeake Bay Watershed: Implications for Restoration……6

Marketing 101 for Stormwater and Watershed Professionals…….. 8

Conservation Opportunities in Northern Virginia……10

The Northern Virginia Planning Directors Committee Meeting……11

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PDC ACTIVITIES

NVRC Special Project: Pollution Prevention Outreach - Stormwater Education Media Campaign

For each of the past two years, NVRC has received $27,500 annually from Virginia DEQ for its CZM program, of which the media campaign is only one element. These funds enabled the Northern Virginia Regional Commission to coordinate a regional stormwater education campaign in Northern Virginia, an area of almost 2 million people.

Virginia CZM Program dollars were leveraged to yield almost $300,000 in local funds for the purchase of air time and approximately $130,000 in negotiated earned or unpaid media, which include bonus spots, public service announcements, brochure distribution and on-air interviews.

The radio campaign features a 60-second radio spot obtained free of charge through the U.S. EPA "outreach toolkit." The ad is designed to remind citizens to avoid actions that can lead to pollution of local streams, the Potomac River and Chesapeake Bay.

The pollution-causing behaviors (and remedies) targeted are: overuse of fertilizer (read the label), improper dog walking (pick up waste), and improper disposal of motor oil (don't dump). The ad is humorous and has been well received.

2005 Campaign

After a year of planning, the media strategy was launched in May, 2005 with $130,000 in local contributions for the purchase of radio air time.

The spot was aired on nine radio stations in the metropolitan Washington area. Radio stations were selected by a professional media buyer for their ability to reach the target audience in Northern Virginia. The ad was also translated into Spanish and aired on a Spanish radio station.

The 2005 campaign included almost 900 spots of varying length. The media buyer for the campaign negotiated value added opportunities, including public service announcements, bonus spots, web banners, web site promo announcements, and brochure placements for the campaign valued at almost $64,000.

2006 Campaign

In 2006 Northern Virginia local jurisdictions raised the ante by contributing $165,000 in funds to the media campaign. Funds were also set aside to commission a survey to measure the effectiveness of the ad.

More than 1100 radio spots were scheduled for airing on ten radio stations during the four weeks of the campaign. The spots were aired during the weeks of April 17 and 24 and May 8 and 15. In addition to paid advertising, approximately 120 public service announcements per week were aired.

This year's campaign includes a tool kit for local outreach, including press releases, and logos. http://www.novaregion.org/pollution_prevention.htm

Through their participation in the campaign, localities are able to meet minimum control measures required by the ERA Clean Water Act Municipal Separate Storm Sewer System (MS4) for public education and outreach. In addition, the campaign is enabling localities to meet public education goals for Total Maximum Daily Load (TMDL) and Chesapeake Bay Tributary Strategy implementation.

NVRC is working with the Metropolitan Washington Council of Governments to solicit interest in participation from neighboring Maryland and Washington, D.C. jurisdictions. Finally, NVRC will be interviewed on air for public affairs shows on Sunday mornings on four Clear Channel radio stations.

Technical Assistance Workshops

When looking at topics for workshops, NVRC considers Virginia CZM objectives, trends in science, and needs of local staff. NVRC specifically looks for workshops where content can be put into action, rather than those that are strictly informational in nature. Under the 2005 grant, four workshops were conducted:

Factors Affecting Water Quality Changes in the Chesapeake Bay Watershed: Implications for Restoration (February 22, 2006), conducted by USGS staff from the Baltimore and Richmond offices, showed how localities can use new information on nutrient and sediment sources, ground water residence time, and nitrogen, phosphorous and sediment delivery factors to prioritize watershed and implementation activities of programs such as watershed plans, Tributary Strategies and Total Maximum Daily Loads (TMDLs). Workshop materials can be found online at http://chesapeake.usgs.gov/workshop22206.html

Marketing 101 for Stormwater and Watershed Professionals (March 29, 2006) drew upon industry experts to show how localities can apply basic commercial marketing techniques to foster behavior change. Topics included an overview of strategic market planning, social marketing, market research and communications. Resource listings, fact sheets, and case studies were distributed.

Conservation Opportunities in Northern Virginia: VCLNA Workshop (September 13, 2006), introduced planners to the GIS-based Virginia Conservation Lands Needs Assessment tool, developed by the Virginia DCR – Division of Natural Heritage. The tool was presented and demonstrated and its potential use in Northern Virginia was discussed.

The Northern Virginia Planning Directors Committee (September 28, 2006) was reconstituted to encourage dialogue between planning directors on environmental issues affecting the region. Topics covered include the proposed state stormwater regulation revisions, the addition of a Low Impact Development (LID) supplement to the Northern Virginia BMP Handbook, and an update on the development of a Water Supply Plan for the region.

Watershed Planning Assistance

NVRC participated at the state level in the development of the technical guide, "Local Watershed Management Planning in Virginia — A Community Water Quality Approach." NVRC staff provided the local government and regional perspective to the multi-stakeholder work group.

At the local level, NVRC serves on the advisory committees of a number of local strategic watershed management planning activities. NVRC staff can draw upon the experiences of many other localities to serve as a resource to local watershed planning efforts.

NVironment

NVRC publishes an annual newsletter as the program's primary outreach tool. *NVironment* presents timely articles focusing on coastal issues and the role of Northern Virginia localities in protecting coastal resources.

The Fall 06 issue includes articles on the unique process of developing the Four Mile Run Restoration Master Plan, the ongoing regional stormwater media campaign efforts, the innovative efforts to educate businesses on properly disposing common toxic office materials through the Know Toxics campaign, and the successful collaboration of Northern Virginia jurisdictions in developing a supplement to the Northern Virginia BMP Handbook that includes LID practices. NVironment is found online at www.novaregion.org

Onsite Wastewater Treatment Systems

While this project, funded by the Virginia Coastal Nonpoint Pollution Program, is complete, work continues toward solving the problems associated with the increased use of alternative onsite wastewater systems (AOWTS). This project was designed to foster sustainable solutions to the management challenges associated AOWTS. Proper management of AOWTS is essential to protect public health, property values and the safety and integrity of surface and ground water.

A technical forum as part of NVRC's project was held in conjunction with the Virginia Onsite Wastewater Recyclers Association (VOWRA) annual conference on October 7, 2004 in Chantilly. In addition, quick guides to alternative onsite wastewater systems for officials and homeowners were developed as part of this project. Guides for officials are intended to present the elements of AOWTS technologies and management implications to support land use decision-making. The guides for homeowners are intended to underscore the importance of maintaining AOWTS to protect family health, property values and ground and surface water quality. Guides are available in PDF format from NVRC.

NVRC continued to work with the Virginia Department of Health (VDH) on a public policy planning committee for the March, 2006 VDH conference and training. VDH would like to encourage the participation of PDCs and local planners in a discussion of AOWTS and implications for public policy for management and land use.

Coastal Resource Protection Teacher Education

NVRC staff conducted a session at the Earth Force Teachers Institute in Alexandria in September. NVRC briefed area teachers on resource protection tools, ranging from blue and green infrastructure and conservation design to low impact development and watershed planning. Teachers were provided with examples of things that students can do to make a difference, from monitoring streams, to reporting erosion and sediment control violations, to testifying before elected officials on natural resource issues.

Earlier in the summer, NVRC staff participated on a panel at the Earth Force Green Teachers Institute conference in Arlington. The purpose of the panel discussion was to

inform teachers from around the U.S. of the watershed issues and watershed outreach education challenges undertaken by governmental agencies across the region.

OTHER ISSUES

Future issues include continued protection of riparian areas, maintenance and establishment of riparian buffers and the need for a closer look at the efficacy of mitigation (versus avoidance) of wetland and stream channel impacts in development. Funding is a problem for Planning District Commissions in the more urbanized areas. Costs have risen well in excess of the rate of increase in CZM program funding. Activities in future years may have to be scaled back to better reflect actual funding levels.

Current Virginia CZM structure in meeting PDC needs seems to be working well, and VA CZM is fairly flexible and the nature of the TA grant allows PDCs to respond to technical assistance needs as they arrive.

Working relationship with CZM staff is excellent. CZM staff understands the nature of PDC operations.

Factors Affecting Water Quality Changes In The Chesapeake Bay Watershed: Implications for Restoration

Science and Tools for Prioritizing Local Restoration Activities and Communicating Bay Progress with the Public

Wednesday, February 22, 2006 10:15 a.m. to 12:30 p.m.

Northern Virginia Regional Commission
3060 Williams Drive, Suite 510
Main Conference Room
Fairfax, Virginia

AGENDA

10:15 Sign in, coffee

10:30 Welcome and introductions

PROGRAM

Introduction: Factors affecting water quality and relationship to the tributary strategies Scott Phillips, Chesapeake Bay Coordinator, U.S. Geological Survey

- How are we using models and monitoring for the tributary strategies?
- What are the general factors affecting N, P, and S and delivery and trends?

The following questions will be addressed during each of the presentations:

- How can we use the information on watershed properties, nutrients and sediment transport, and lag times to better prioritize management actions?
- What types of streams, watersheds could be targeted for maximum water quality benefit and cost-effectiveness?

Trends in water quality - Interpreting and communicating water quality data
Doug Moyer, Hydrologist, USGS

- What are the trends in nutrient and sediment concentrations in the watershed?
- All is not what it seems: The importance of adjusting trends for variations in flow
- N, P, and S trends for the Potomac River
- What other types of monitoring are available to assess management actions?

Sources of N and P and watershed properties affecting their transport
John Brakebill, Geographer, USGS

- What are the types and distribution patterns of nutrients in the watershed?

- Impact of in-stream loss of nitrogen: Where is in-stream loss of N likely to occur in our watersheds?
- What are the other watershed properties that affect nutrient transport?
- What types of streams are likely to deliver more nitrogen to the Bay?

The impact of groundwater on nitrogen delivery and ability to meet target water quality results Scott Phillips

- How much does groundwater contribute to the flow of our streams?
- How much nitrogen is delivered via groundwater?
- How long until it surfaces? What is the residence time of groundwater and how does it vary by stream and watershed?
- What is the influence of ground water on the "lag time" between implementing management actions and water-quality response in rivers?

Addressing sediment sources and loadings Alien Gellis, Hydrologist, USGS

- Where are the sediment high yield areas?
- What are the sediment sources? - Using fingerprinting of S to pinpoint sources.
- What are the watershed properties that affect sediment transport?

Wrap up and discussion: Prioritizing local programs and implementation activities for cost-effective results Round table discussion, with opening comments from Scott Phillips and NVRC

- Summarizing lag times for nutrients and sediment: How long does it take to see a response in water quality and living resources in the Bay?
- What are the implications for water quality management actions?
- What are the additional types of information needed by local governments to better implement and assess tributary strategies?

ACKNOWLEDGEMENTS

Many thanks to our presenters: Scott Phillips, Chesapeake Bay Coordinator, USGS; Alien Gellis, Hydrologist, USGS; John Brakebill, Geographer, USGS; and Doug Moyer, Hydrologist, USGS

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Marketing 101 for Stormwater and Watershed Professionals

March 29, 2006, 10 a.m. to 3 p.m.

Northern Virginia Regional Commission
3060 Williams Drive, Suite 510
Main Conference Room
Fairfax, Virginia

AGENDA

10:00 **Welcome and Introductions**

10:05 **Market Planning** - Mark Damian Duda, Executive Director, Responsive Management, Harrisonburg, Virginia *Creating Strategies and Plans that Get Results*

- Overview of strategic market planning and social marketing: defining objectives, strategies, market segmentation, marketing mix
- When and how to use market research: quantitative versus qualitative, primary and secondary sources
- Market research findings (what people understand about water issues), what motivates action, messages that resonate - use of words and images
- Case studies, lessons learned

Discussion

12:00 **Lunch**

12:45 **Media Planning** - Deborah Cover-Lewis, President, Media Vision, Bethesda, Maryland
Using the Media to Make Your Messages Matter

- Defining your objective (awareness or behavior change?)
- Targeting your audience
- Developing effective messages
- Working with your budget
- Using the media: timing, media mix, frequency, ad size/spot length
- Advantages of various media
- Taking advantage of added value and earned media: PSAs, internet hot links, literature distribution, talk shows and cross promotion with retailers.
- Evaluating your results, lessons learned for your next campaign

Discussion

1:50 Applying the Principles of Social Marketing - Chris Connor, Director of Communications, U.S. Environmental Protection Agency, Chesapeake Bay Program
Case *study: Chesapeake Club*

2:10 Identifying Resources - Don Waye, Nonpoint Source Outreach Coordinator, U.S. Environmental Protection Agency, Office of Water, Oceans and Watersheds
ERA Outreach Toolkit

2:30 Discussion and Wrap Up

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Virginia Conservation Lands Needs Assessment (VCLNA)
Presentation and Discussion

September 13, 2006
10 a.m. - noon

Presenter: Joe Weber
Virginia Department of Conservation and Recreation, Division of Natural Heritage

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Overview

The Virginia Conservation Lands Needs Assessment (VCLNA) can help guide effective conservation by providing tools that help both government and private organizations identify resource protection areas and that, at the local level, help planners manage growth in a balanced way. As a flexible and widely applicable GIS-based tool, the VCLNA allows the manipulation of issue-specific data sets that can be weighted and overlaid to reflect the needs and concerns of a variety of conservation partners.

The VCLNA can be utilized as a decision support tool for local and regional agencies and organizations in their efforts to employ green infrastructure principles during their planning processes. As a robust, well-documented GIS model, the Virginia Conservation Lands Needs Assessment can be creatively tweaked to offer practical uses for a variety of needs. The ability to add data makes it an excellent framework for future development of protection and growth planning tools.

Contact Information

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http://www.state.va.us/dcr/dnh/vclna.htm

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Virginia Coastal Zone MANAGEMENT PROGRAM

Northern Virginia Regional Commission

Northern Virginia Planning Directors Committee Meeting

September 28, 2006, Noon – 2 p.m.

Northern Virginia Regional Commission
3060 Williams Drive, Suite 510
Chesapeake Conference Room
Fairfax, Virginia

AGENDA

Noon – Welcome and Introductions

Northern Virginia Water Supply Planning Initiative
Norm Goulet, Senior Environmental Planner, Northern Virginia Regional Commission

In 2003 the General Assembly passed legislation that tasked local governments to develop water supply plans. It is incumbent on the local governments to either develop these plans on their own accord, or to enter into a regional water supply planning initiative.

NVRC has been tasked by the Chief Administrative Officers of Northern Virginia to initiate a discussion on the feasibility of conducting this study regionally. Over the summer NVRC staff has been meeting with various utility and local government representatives and we would like to bring all of you up-to-date on this important initiative.

Low Impact Development (LID) Design Supplement
Bill Hicks, Senior Environmental Planner, Northern Virginia Regional Commission

Over the past eight months NVRC has been working to develop a supplement to the Northern Virginia BMP Handbook that will include design, performance and maintenance guidelines for low impact development (LID) practices. As this process has proceeded, it has become apparent that many of the LID approaches have significant impacts on land use and zoning policy. To date, the technical committee has been provided significant input from local public works staff, but has had little interaction with planning department staff. NVRC staff would like to provide and update on this project and to initiate a discussion on some of the policy issues identified during the development of the LID Supplement.

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