

**Coastal Nonpoint Program Implementation and Administration
FY08 Task 81
Final Report, Grant Period October 1, 2008 to December 31, 2009
Grant# NA08NOS4190466
Compiled by Todd Janeski, VCU, Department of Life Sciences
Virginia Department of Conservation and Recreation, Division of Soil and Water**

This project was funded by the Virginia Coastal Program at the Department of Environmental Quality through Grant FY04: NA08NOS4190466 of the National Oceanic and Atmospheric Administration, Office of Ocean and Coastal Management, under the Coastal Zone Management Act of 1972, as amended.



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Executive Summary

The VCU Environmental Analyst, as retained by the Virginia Department of Conservation and Recreation (DCR), continued to serve as the Coastal Nonpoint Source Pollution Control Program (CNPS) Manager to administer and implement the Virginia Coastal Nonpoint Source Pollution Program at the Virginia Department of Conservation and Recreation. The focus of the Coastal NPS Program is the implementation and expansion of the Virginia Network for Education of Municipal Officials Program (VNEMO). The VCU Environmental Analyst serves other roles and provides additional support to the Virginia DCR in nonpoint source pollution issues, Chesapeake Bay TMDL, grant administration, program and project development and implementation and policy development.

Overview

The Environmental Analyst, at the Virginia Commonwealth University, continued to serve as the Coastal Nonpoint Source Pollution Control Program (CNPS) Manager for the Virginia Department of Conservation and Recreation. Due to the extremely limited funding to support the 56 Management Measures as outlined in the 6217 Guidance, the focus of the Coastal NPS Program is the administration and implementation of the Virginia Network for Education of Municipal Officials Program (VNEMO). The VCU Environmental Analyst/ Coastal NPS Program Manager is the lead of the VNEMO Program, and under this Task is focused on the continued expansion beyond the pilot site to the Coastal Zone. This role is to lead in the development and implementation of a coordinated, collaborative approach to delivering technical assistance to localities to achieve VDCR, VCZM and associated Bay Program goals.

The Virginia NEMO Program is a partnership between the Chesapeake Bay Office of NOAA/EPA/NPS (Chesapeake NEMO), the Virginia CZM Program, and the state of Virginia to provide request-based education and/or technical assistance to localities in Virginia. The program relies upon the DCR Regional Offices (Regional Managers and Watershed/TMDL Coordinators), DCR Division of Chesapeake Bay Local Assistance (DCBLA), Planning District Commissions, Soil and Water Conservation Districts, Watershed groups and other traditional and nontraditional partners as the local government service delivery mechanism. Assistance providers may provide process and planning assistance, ordinance development, buildout analysis, comprehensive planning assistance, technical analysis, economic analysis, or other specialized planning assistance.

Virginia Network for Education of Municipal Officials (VNEMO) is a request-based program to provide local decision makers with the information, tools and capacity to make informed local land use decisions. Through the network approach, the Virginia NEMO Program assists the focus and prioritization of limited resources, taking advantage of a wide range of expertise available, and increase the reach of messaging. It will also help reduce duplicative services and minimize conflicting messages. Network partners currently include:

- Virginia Commonwealth University;
- Virginia Department of Conservation and Recreation Divisions of
 - Soil and Water,
 - Chesapeake Bay Local Assistance,
 - Natural Heritage;
- Virginia Coastal Zone Program;
- Chesapeake Network for Education of Municipal Officials;
- National Fish and Wildlife Federation;
- Center for Watershed Protection
- Virginia Tech and the Virginia Cooperative Extension Community Viability Program;
- Virginia Department of Forestry;
- Coastal Planning District Commissions;
- Soil and Water Conservation Districts;
- Southern Environmental Law Center;
- Watershed Groups.

The VA NEMO Program provides assistance in three broad areas of expertise:

- 1) developing community vision and goals;
- 2) assessing and inventorying natural resources; and
- 3) developing and implementing natural resource and land use management tools.

Within these three areas of expertise, initial NEMO partners can commit the following types of assistance:

- 1) developing stakeholder involvement strategies
- 2) facilitating community visioning and goal setting
- 3) strategic planning
- 4) natural resource and conservation planning
- 5) urban forestry master planning
- 6) low-impact development
- 7) code and ordinance development

The demand for VNEMO assistance is growing at an ever increasing rate. To meet this increased demand the VNEMO Program has been actively recruiting and marketing to possible new partners including the Resource Conservation and Development Program, Virginia Tech Cooperative Extension Agricultural Extension Agents, various State agencies, Local Government Advisory Committee of the Chesapeake Bay Program and directly to the Crater Planning District Commission Regional Locality Planning Director Quarterly meeting.

Through these efforts the VNEMO Program has been able to expand to meet those demands. The expansion included the services of the Center for Watershed Protection through the Circuit Rider project of the Local Government Advisory Committee (LGAC) of the Chesapeake Bay Program, funded by EPA. For numerous years, the LGAC has requested of EPA to develop a program that directly provides technical assistance to local government in achieving various Bay focused water quality goals. In 2009, the EPA awarded the Center for Watershed Protection the grant to provide such services, contingent in Virginia that the partner directly with the Virginia NEO

Program due to it fitting the requested role from LGAC. The initial partnership was to identify the program overlap, set the direction of the partnership and select project sites.

During the project duration, the VNEMO Program conducted two web based trainings to expand the program: 1. *An Introduction to VNEMO* and 2. *Delivering a VNEMO Presentation*. These trainings were targeted to VDCR staff, Virginia Cooperative Extension natural resources staff and other invited guests.

The current level of request is exceeding the available resources. Fortunately, the VNEMO Program is a networked program with significant resources beyond the limited coastal zone funding and can access various partners to meet the requests. The project locations in the coastal zone include:

Charles City County—Ordinance revisions and buildout analysis to protect water quality
Project Goal: Respond to request for assistance from County to assist in development of ordinance language consistent with goals identified in County Comp Plan, to direct growth into urban service areas to protect valuable agricultural resources, water quality, drinking water availability and wildlife habitat.

Services Provided: VCU CES GIS services to provide buildout scenario alternatives, process assistance and outreach strategy development

Mathews County/Middle Peninsula Planning District Commission— Aquaculture/
Waterfront Protection Policy Development

Project Goal : Waterfront preservation ordinance development assistance requested by MPPDC
Services Provided: Coordinated and facilitated evening focus group sessions, mapping exercises and overall delivery of project technical assistance for ordinance language. VT Extension was lead role but unable to meet request services role was transferred to the CNP Coordinator and CNEMO. NEMO provided outline for video presentation script, secured contractor and edited final copy.

N. Potomac Shoreline/Northern Virginia Regional Commission— Climate Change
Adaptation Strategy for Local Official

Project Goal: Developing Climate resilient communities

Services provided: outreach and communication strategy development, coordination, process assistance, meeting facilitation, speaker arrangement, LiDAR for NVRC, MPPDC, HRPDC (see report for Task 11.01 for details)

Richmond County— Comprehensive Planning assistance

Project Goal: As directed by DCR to assist NFWF funded project to integrate Ches Bay Phase 5.x model data and provide assistance to County in Comp Plan revision process

Services provided: overall project coordination and technical assistance for Comprehensive Plan, coordination and facilitation of public educational sessions (including obtaining presenters), session presentations included: DCR SWD, Dept Forestry, VT VCE, RC&D, NNPDC, County staff, CBLAD staff; internal coordination and process facilitation.

Currently, the VNEMO Program resources include a number of “canned” presentations that may be modified to suit specific needs of a locality as well as a subcontracted service provider pool

that is supported by the National Fish and Wildlife Foundation. The presentations currently available include:

- 1) Linking Land, Water and Growth
- 2) Planning the Direction of your Community
- 3) Forest Resources
- 4) Economics of LID (in development)
- 5) Climate Change Adaptation (in development)

Additional VNEMO Projects in Queue or projects with services provided:

Coastal Zone:

Charles City County—Ordinance revisions and buildout analysis to protect water quality

City of Hampton—Bay Act assistance

Fredericksburg—LID Education

Hopewell—Public Open Space and Strategic Planning assistance

Mathews County (1)--Comprehensive Planning assistance

N. Potomac Shoreline—Climate Change Adaptation Strategy for Local Official

Richmond County—Comprehensive Planning Assistance, education and overall process assistance

VNEMO Resources:

- Subcontracted Service Provider Pool (support from NFWF)
- Chesapeake Bay Program Local Government Advisory Committee Circuit Rider Collaboration—Center for Watershed Protection

The NEMO expansion into the Coastal Zone from the pilot site has been successful. The additional partner resources has been beneficial to meeting the demand however, the resources and internal capacity will be soon limited. As the Chesapeake bay TMDL becomes more apparent to the local government, staff the demand will increase. Suggested changes are to formalize the training to VDCR staff to better equip them with the capacity to carry forth group process to advance multiple partner goals while meeting the core nonpoint source pollution program areas.

The CNP Program Manager participated, planned or attended various meetings including the Coastal Policy Team, Coastal PDC meetings, Virginia Stream Alliance, NPSAC, and Healthy Waters Initiative.

The CNP Program Manager has been partnering with Chesapeake NEMO, Maryland Chesapeake and Coastal Program, NOAA OCRM and others to develop a Pre-Forum workshop on Climate Change Adaptation Planning to be held prior to the Chesapeake Watershed Forum in Shepherdstown, WVA, in October 2009. The CNP Program Manager will provide an overview of various US case studies presenting local government responses to climate change and an introduction to adaptation planning. Participants likely to participate will be from local government. Also at the Chesapeake Watershed Forum, the CNP Program Manager will present the draft NEMO Presentation on Climate Change Adaptation.

Additional Technical Assistance—The CNP Program Manager was requested by the National

Fish and Wildlife Foundation to participate in the review of the Chesapeake Bay Small Watershed Grant process. This process involved the review of nearly 50 proposals for projects that met the minimum requirements for qualifications.

During the grant cycle, the CNP Program Manager was a successful applicant to the National Fish and Wildlife Foundation for \$700,000 to develop a low impact development research, testing, certification and training facility at the Virginia Science Museum. This project will demonstrate, teach and monitor such practices as porous pavement, a 12000 sf green roof, bioretention cells, tree well filters and a rainwater harvesting system that will serve the museums exterior water needs. The project will include an analysis of the CSO system and develop a CSO management plan that focuses on source control as a means of managing CSO events. A cost benefit analysis will be done to communicate the economic benefits of using LID to solve the challenges of CSO issues. The project will include a significant climate change adaptation component evaluating the cost benefit of utilizing LID as an adaptation strategy to address CSOs. The VCU Climatologist, NOAA CSC and other project partners will model the hydrologic changes due to climate change for the region and modify the LID CSO Study to compare the potential changes in hydrology that may affect the Richmond region and demonstrate how a proactive approach can reduce the costs to the City in their CSO program. The Program Manager partnered with the Science Museum of Virginia and the Science Museum of Virginia Foundation to develop the proposal and included such partners as: Virginia Commonwealth University, Virginia Tech, University of New Hampshire, VA Dept of Conservation, Alliance for the Chesapeake Bay, NOAA Coastal Services Center and Chesapeake Bay Program Office, and the City of Richmond. The total budget will exceed \$1.6M and will be complete in 2012. The site will serve as a training facility for the VDCR SWM Program training component. The CNP Program Manager/ VNEMO Program Manager will implement trainings specifically for local officials to inform on the benefits of LID and climate change adaptation planning using LID. The museum staff will develop educational programs tailored to meet the Virginia standards for learning and general public.

During the project period, the CNP Program Manager managed **\$3,018,023** in State of Virginia Water Quality Improvement Fund Grants throughout the Chesapeake Bay Watershed for the Virginia Department of Conservation. These projects were to implement various best management practices to address nonpoint source pollution and included stream restoration, green roof construction, manure management sites, and urban engineered stormwater treatment practices.

The CNP Program manager served as Chair of the Virginia Stream Alliance. The Virginia Stream Alliance (VSA) was formed in 2005 by Executive Order 90 stating:

...the Virginia Stream Alliance (hereinafter called the Alliance) will formalize and coordinate a Stream Restoration Initiative for the Commonwealth of Virginia. This Alliance is created to facilitate cooperation among both government and non-government entities to effectively promote stream restoration activities at the state and local levels...

The purpose of the Virginia Stream Alliance is to further advance the science and implementation of stream restoration throughout the Commonwealth. Three meetings were

facilitated with the entire group, as well as a smaller planning group to develop a participant survey. The CNP Program Manager developed, implemented and analyzed the results of the survey to set the course of the Virginia Stream Alliance for the future, the results of which were shared in the June meeting.

The funds that were extended were used to support the implementation of assistance through the VNEMO Program, specifically to support the staff time of a VCU GIS Specialist to assist in the development of the buildout analysis in Charles City County, as previously mentioned. Charles City County is undergoing their Comprehensive Planning Process and is including the establishment of Urban Development Areas. The VCU GIS Specialist obtained the necessary data to begin the foundation of the buildout analysis process working with the County staff. The County requested the VNEMO Program to provide: assistance in conducting a buildout analysis to support the policy development process in the County Comprehensive Planning revision, assistance in outlining the planning process and community engagement component for the various scenarios.

Suggested changes to the CNP—due to the uncertain funding outlook, DCR has determined the highest and best utilization and focus of the program is on local land use technical assistance with the remaining funding. In addition, the future prospects of the Coastal funding from FY10 are zeroed for the Coastal NPS Program, funding diversity is being sought to support the activities to support the VNEMO Program, these may include funding from Chesapeake Bay Program, USEPA 319 Nonpoint Source Pollution Program, NFWF, Sea Grant or other public grant offerings.

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