

**Virginia NEMO Support for Sustainable Community Planning**

**FY08 Task 11.01**

**Final Report, Grant Period October 1, 2008 to September 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, implemented the Virginia Network for Education of Municipal Officials Program (VNEMO) in support of the Virginia Planning District Commission's task to provide local planning projects around the topic of Planning for Adaptation to Climate Change. The VNEMO Program directly assisted the Northern Virginia Regional Commission, Middle Peninsula Planning District Commission and the Hampton Roads Planning District Commission.

### **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 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.

The Environmental Analyst, leading the VNEMO Program under Task 11.01, provided services to the Virginia Planning District Commissions (PDCs) to implement the Virginia Coastal Zone Management Program's FY2008 Section 306 Focal Area, "Sustainable Community Planning". The anticipated assistance was identified to be in the areas of Blue-Green Infrastructure Planning and Community Planning for Adaptation to Climate Change. The initial approach was intended to support those PDCs through expansion of their capacity and provision of additional technical resources to further the level of support to those projects at the local level.

The Coastal NPS Program Manager implemented the VNEMO Program, in coordination with Chesapeake NEMO, supporting the Northern Virginia Regional Commission (NVRC) in their efforts to assist their regional communities in planning for sustainable shorelines and near-shore communities in the development, restoration, protection, and revitalization along Northern Virginia's tidal waters. These efforts were planning specifically for a rise in sea level and the overarching support of the development of a regional climate change adaptation toolbox for Northern Virginia.

The VNEMO Program continued a strong role with the implementation of the project in

coordinating specific roles and responsibilities within the program delivery and context of the Shoreline Project, under the guidance of the NVRC, the VNEMO client. The VNEMO Program worked closely with the NVRC in the development of the community engagement plan and process to best access the input and participation from the northern Virginia communities. These steps included the use of the Chesapeake Watershed Network Web 2.0 tool, to coordinate and host the group through the use of multiple email listserves, shared resources sites, wiki collaboration tools ([www.chesapeakekenetwork.org](http://www.chesapeakekenetwork.org)). For this project, an internal group was formed on the Network site to coordinate internal communication and material sharing. In addition, an external group was formed with all project partners that included 25 members from the community, representing local staff and personnel from military establishments.

The VNEMO program assisted in the development of the outline that guided the facilitation process and outreach strategy for the meetings. In preparation of each public meeting, the VNEMO Program assisted in the recommendation and development of materials for the groups to use as discussion pieces. The VNEMO Program also assisted in the development of process to best lead groups in discussion of those materials. These types of discussion included the identification of valuable resources, vulnerable areas and overall areas of concern due to population density. The outcome of the discussion supported the overall project intent that local government and regional partners want more information to make better local decisions.

For each of the public meetings, the VNEMO Program provided the facilitation of the meetings including leading the post presentation process to obtain the input from the participants in each topic area. The initial meeting of the local government working group, the VNEMO Program secured the speaker, Tom Smith, DCR Natural Heritage Division Director, to present on the background of climate change science, the International Panel Climate Change's 2007 assessment, and to report on the status and outcome of the Governor's panel on Climate Change. Mr. Smith emphasized the predicted changes in hydrology and temperature due to climate change, specifically indicating there are likely increases in storm intensity and frequency for the Mid-Atlantic coast. Mr. Smith continued indicated these changes will likely necessitate the changes at the local level and how resource agencies evaluate and respond to issues. The discussion process was outlined and lead by Chesapeake and Virginia NEMO. For following public meeting, the VNEMO, Chesapeake NEMO and NVRC secured Gwen Shaughnessey of the Maryland Chesapeake and Coastal Program to present an example case study of Worcester County, MD's efforts with adaptation planning.

The NVRC secured a Virginia Tech Graduate student as an intern to assist in the development of an Policy overall summary document covering the aspects of climate change, including sea level rise and storm surge. The document presented case studies, local policy changes in other US cities, and suggestions for the working group to consider as implementations at the local level, the local jurisdictions included King County, WA; North Carolina; Delaware, Somerset County, MD; and San Francisco, CA. To support the NVRC, the VNEMO Program provided technical review and revisions of the document to improve the local partners' ability to ascertain the information that was necessary to make informed decisions. The VNEMO Program, working with the NVRC, outlined the public engagement process to lead the discussion following the presentation of that document.

Overall, the VNEMO Program provided support to the Northern Virginia Regional Commission's Sustainable Shorelines project through assistance at four public working group meetings, 13 internal coordination and planning meeting at a total of 272.5 community service hours (based upon the NEMO Program internal tracking metric). The NEMO Program provided assistance in the support to the NVRC, development of overall process of local partner engagement, meeting facilitation, meeting coordination, use of webinar for meeting and communication, shared space within the Chesapeake Watershed Network, technical review of the materials printed and produced, and other overall assistance to the NVRC as needed.

To additionally support the Coastal PDCs working on the Planning for Adaptation to Climate Change/Sustainable Shorelines, the NEMO Program was able to secure Light Detection and Ranging (LiDAR) data, **at no cost**, for many parts of the Coastal Zone including for the Northern Virginia Regional Commission, the Middle Peninsula Planning District Commission and the Hampton Roads Planning District Commission. The data were provided by NEMO with the intent to assist in the analysis of vulnerable areas subject to sea level rise and storm surge and to advance those Coastal PDCs' toward other projects where those data may be valued. The NVRC was able to utilize these data to develop more detailed mapping products to communicate to the working groups the visualization of the impacts that may be associated with a sea level rise in various scenarios. These maps also provided the basis for identification of gaps in information.

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