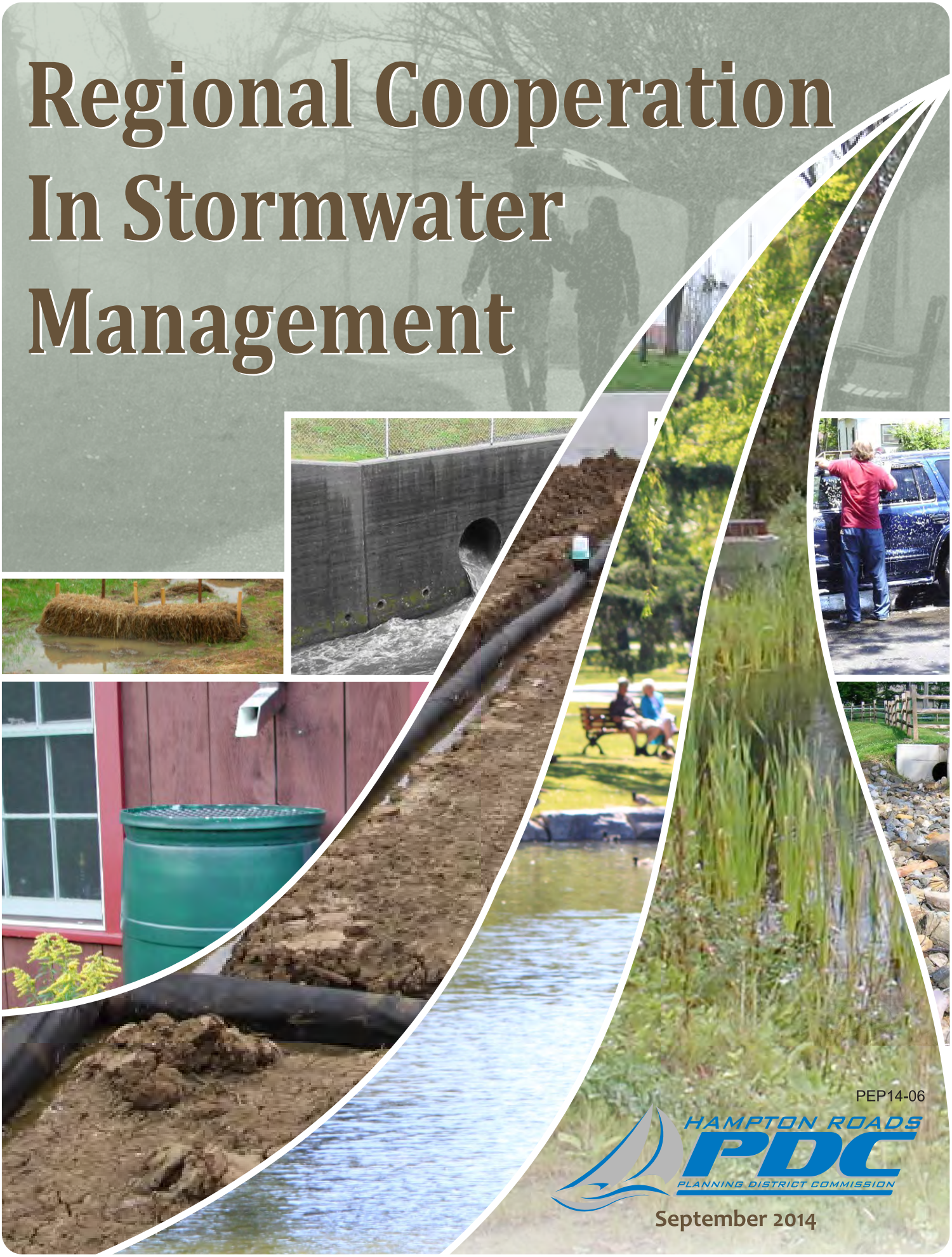
Regional Cooperation In Stormwater Management



PEP14-06

HAMPTON ROADS PDC
PLANNING DISTRICT COMMISSION

September 2014

HAMPTON ROADS PLANNING DISTRICT COMMISSION
RANDY R. KEATON
INTERIM EXECUTIVE DIRECTOR

CHESAPEAKE
JAMES E. BAKER
AMAR DWARKANATH
SCOTT MATHESON
DEBBIE RITTER
ELLA P. WARD

FRANKLIN
BARRY CHEATHAM
R. RANDY MARTIN

GLOUCESTER COUNTY
BRENDA GARTON
JOHN C. MEYER JR.

HAMPTON
MARY BUNTING
WILL J. MOFFETT
GEORGE WALLACE

ISLE OF WIGHT COUNTY
ANNE SEWARD
DELORES DARDEN

JAMES CITY COUNTY
MARY K. JONES
BRYAN J. HILL

NEWPORT NEWS
JAMES M. BOUREY
McKINLEY L. PRICE
SHARON P. SCOTT

NORFOLK
PAUL D. FRAIM
MARCUS JONES
THOMAS R. SMIGIEL
ANGELIA WILLIAMS
VACANT

Executive Committee Member

POQUOSON
W. EUGENE HUNT JR.
J. RANDALL WHEELER

PORTSMOUTH
JOHN L. ROWE JR.
KENNETH I. WRIGHT

SMITHFIELD
PETER STEPHENSON
T. CARTER WILLIAMS

SOUTHAMPTON COUNTY
MICHAEL W. JOHNSON
BARRY PORTER

SUFFOLK
SELENA CUFFEE-GLENN
LINDA T. JOHNSON

SURRY COUNTY
TYRONE W. FRANKLIN
JOHN M. SEWARD

VIRGINIA BEACH
ROBERT M. DYER
BARBARA M. HENLEY
LOUIS R. JONES
JOHN MOSS
AMELIA ROSS-HAMMOND
JAMES K. SPORE
JOHN E. UHRIN

WILLIAMSBURG
CLYDE A. HAULMAN
JACKSON C. TUTTLE

YORK COUNTY
JAMES O. McREYNOLDS
THOMAS G. SHEPPERD JR.

PROJECT STAFF

WHITNEY S. KATCHMARK	PRINCIPAL WATER RESOURCES ENGINEER
JENNIFER L. TRIBO	SENIOR WATER RESOURCES PLANNER
JILLIAN C. SUNDERLAND	WATER RESOURCES PLANNER
MICHAEL LONG	GENERAL SERVICES MANAGER
CHRISTOPHER W. VAIGNEUR	ASSISTANT GENERAL SERVICES MANAGER
JENNIFER COLEMAN	ADMINISTRATIVE ASSISTANT

REGIONAL COOPERATION IN STORMWATER MANAGEMENT

FISCAL YEAR 2013-2014

A STATUS REPORT

This report was included in the HRPDC Work Program for FY 2013-2014, approved by the Commission at its Executive Committee Meeting on April 18, 2013

Prepared by the staff of the
Hampton Roads Planning District Commission
in cooperation with the
Regional Stormwater Workgroup

September 2014

REPORT DOCUMENTATION

TITLE:
Regional Cooperation in Stormwater Management Fiscal Year 2013-2014: A Status Report

REPORT DATE
September 2014

GRANT/SPONSORING AGENCY
LOCAL FUNDS

AUTHORS:
Whitney S. Katchmark
Jillian C. Sunderland
Jennifer L. Tribo

ORGANIZATION NAME, ADDRESS AND TELEPHONE
Hampton Roads Planning
District Commission
723 Woodlake Drive
Chesapeake, Virginia 23320
(757) 420-8300
http://www.hrpdcva.gov

ABSTRACT

This document describes cooperative activities related to stormwater management undertaken by Hampton Roads local governments during Fiscal Year 2013-2014. Activities described include the regional information exchange process, public information and education, legislative and regulatory issues, cooperative regional studies and related programs. This document is used by the region's twelve localities with stormwater permits to assist them in meeting their permit requirements.

ACKNOWLEDGMENTS

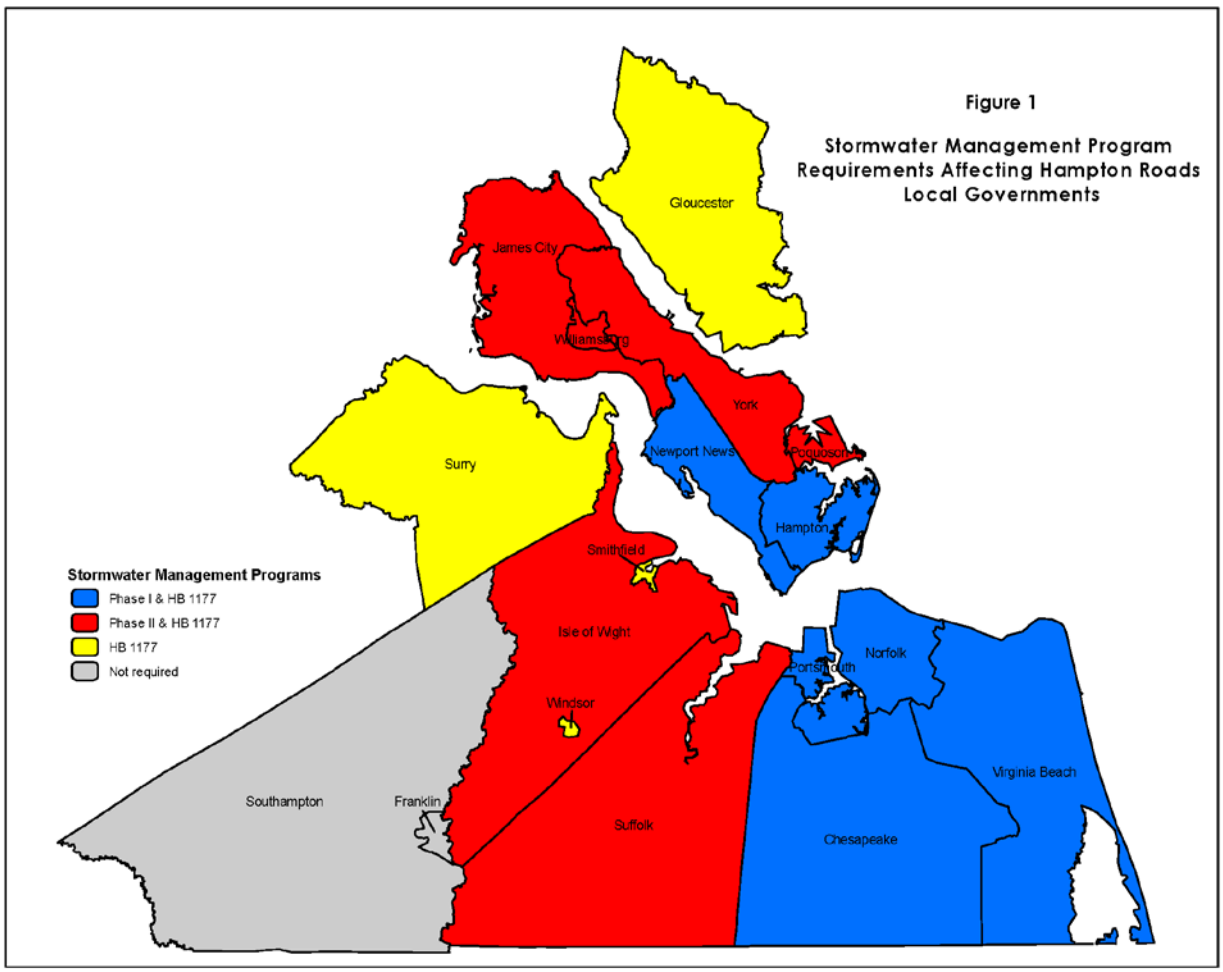
The Hampton Roads Planning District Commission, in cooperation with the regional Stormwater Workgroup, prepared this report.

Preparation of this report was included in the HRPDC Unified Planning Work Program for FY 2013-2014, approved by the Commission at its Executive Committee Meeting of April 18, 2013.

The sixteen member local governments through the HRPDC Regional Stormwater Management Program provided funding.

INTRODUCTION

Working through the Hampton Roads Planning District Commission, the region's sixteen member cities and counties (Figure 1) cooperated on a variety of stormwater management activities during Fiscal Year 2013-2014. This cooperative effort has been underway as a formal adjunct to the Virginia Pollutant Discharge Elimination System Permits (VPDES) for Municipal Separate Storm Sewer Systems (MS4) held by the Cities of Chesapeake, Hampton, Newport News, Norfolk, Portsmouth and Virginia Beach since Fiscal Year 1995-1996. The Cities of Suffolk, Poquoson, Williamsburg, and James City County, Isle of Wight County, and York County joined in 2002 to coordinate Phase II MS4 permit applications. Cooperative activities documented in this report represent a continuation of an ongoing effort, which has involved concerted activity since 1992.



REGIONAL STORMWATER MANAGEMENT PROGRAM GOALS

The HRPDC and local stormwater staffs undertook a comprehensive effort in FY 1998-1999, called the Regional Loading Study. The project included developing a set of regional stormwater management goals to guide the regional program. The goals were presented to

and adopted by the HRPDC at its Executive Committee Meeting in September 1999. They were reaffirmed in the January 2003 approval of the "Memorandum of Agreement (MOA) Establishing the Hampton Roads Regional Stormwater Management Program" and the renewal of the MOA in 2008 and 2013. The adopted Regional Stormwater Management Program Goals, which guide the regional program, are:

- Manage stormwater quantity and quality to the maximum extent practicable (MEP).
  - Implement BMPs and retrofit flood control projects to provide water quality benefits.
  - Support site planning and plan review activities.
  - Manage pesticide, herbicide and fertilizer applications.
- Implement public information activities to increase citizen awareness and support for the program.
- Meet the following needs of citizens:
  - Address flooding and drainage problems.
  - Maintain the stormwater infrastructure.
  - Protect waterways.
  - Provide the appropriate funding for the program.
- Implement cost-effective and flexible program components.
- Satisfy VPDES stormwater permit requirements.
  - Enhance erosion and sedimentation control.
  - Manage illicit discharges, spill response, and remediation.

THE REGIONAL PROGRAM

The Regional Stormwater Management Program initially focused on activities that supported the permit compliance efforts of the six communities with Phase I VPDES Stormwater System Permits, technical assistance to the region's non-permitted communities and regional education and training to support all of the communities. The program has expanded to include the needs of the six communities with Phase II VPDES MS4 permits and the development of locally administered Stormwater Programs which were required starting July 1, 2014.

Phase I Localities

The efforts of the Phase I localities this year have focused on tracking regulatory changes to the Construction General Permit and preparing for local program changes required by revisions of the Virginia Stormwater Management Regulations. Localities have continued to follow the Phase I MS4 permit renewal process in Virginia. The Department of Environmental Quality (DEQ) has reissued the Arlington County permit and set a schedule to reissue all the Phase I

MS4 permits by December 31, 2014. HRPDC staff worked with the localities to review draft permits.

Phase II Localities

In addition to participating in regional efforts related to the Chesapeake Bay TMDL and the revision of the Virginia Stormwater Management Regulations, the Phase II localities followed the development of the Chesapeake Bay TMDL Special Condition Guidance. The Phase II General Permit was reissued on July 1, 2013 and required localities to develop an Action Plan within 48 months to address their waste load allocations in the Chesapeake Bay TMDL. Hampton Roads' Phase II localities were represented on DEQ's technical advisory committee, and HRPDC submitted comments on several drafts on behalf of the localities. During 2013-2014, the Phase II localities also focused on revising their program plans, developing a training plan for stormwater staff, and meeting new education and outreach requirements. HRPDC staff developed a regional training strategy for pollution prevention and will develop a regional training library in FY2015. AskHRgreen.org piloted regional media campaigns for pet waste reduction, proper lawn maintenance, and reduction of fats, oils, and grease. These campaigns will serve to meet Phase II permit requirements for education and outreach for the remainder of this permit cycle.

INFORMATION EXCHANGE

The cornerstone of the Regional Stormwater Management Committee's activities continues to be the exchange of information. This is accomplished through regular monthly meetings to address topics of regional importance, as well as crosscutting issues that affect local stormwater, planning, public works and public utilities staff. In addition, various agencies and organizations utilize this regional forum to engage and inform local governments, as well as to gather feedback.

Monthly Meetings

The sixteen communities participate in the HRPDC Regional Stormwater Program and their staffs meet twice a month. The Stormwater Workgroup meetings provide an opportunity for local stormwater managers to exchange information about successful program activities, utility structures and policies, and technical challenges. The HRPDC Joint Environmental Committee, now referred to as the Regional Environmental Committee, meetings include local stormwater and planning staff plus cooperating agencies such as Department of Conservation and Recreation (DCR), Department of Environmental Quality (DEQ), Virginia Department of Transportation, Hampton Roads Sanitation District, and the US Navy.

Increasingly, the region's localities are affected by and involved in the state's TMDL (Total Maximum Daily Load) Studies and Implementation Plan processes for the Chesapeake Bay and locally impaired water bodies. Issues associated with these programs are also addressed during the monthly meetings. In FY14, the Stormwater Workgroup discussed and provided input to DEQ on the PCB TMDL for the Lower James and Elizabeth River and the bacteria TMDL for the Back and Poquoson Rivers.

State and Federal Agency Program Briefings

Representatives of state and federal agencies frequently brief the Committee on developing issues, regulatory guidance and technical programs. During the year, the Committee was briefed by representatives of the U.S. Army Research and Development Center on the risks to Naval Station Norfolk from sea level rise and climate change, by DEQ staff on the development of TMDLs for local waters, and by DEQ staff on the new Chesapeake Bay Watershed Agreement.

Watershed Roundtables

The Watershed Roundtable approach is Virginia's program to encourage collaboration and information sharing between the public and private sector on nonpoint source pollution management. HRPDC leads the Lower James River (Hampton Roads) Watershed Roundtable and participates in the York River Watershed Council, the Middle James River Roundtable, and the Albemarle-Chowan Roundtable. Members of the Stormwater Workgroup participate in the Hampton Roads Roundtables, along with representatives from other local government departments, regional and state agencies, Soil and Water Conservation Districts and private organizations.

PUBLIC EDUCATION

askHRgreen.org

To support development and operation of the stormwater education program, the HR STORM committee consisting of local stormwater education/public information staff was established in 1997. Beginning in FY11, the HRPDC environmental education programs were combined into a single public awareness program and central resource for environmental education in Hampton Roads known as askHRgreen.org. In June 2011, the askHRgreen.org website launched. The website contains information on earth-friendly landscaping ideas and pointers for keeping local waterways clean, recycling tips, and simple steps to make local living easy on the environment. It also includes a blog written by a team of local experts who work in the region's municipal utility and environmental divisions.

The stormwater subcommittee continues to meet on a monthly basis to discuss education priorities for stormwater. In FY14, the subcommittee focused on ensuring that the regional education campaign fulfills the outreach requirements on the current Phase II General Permit issued July 1, 2013. The subcommittee also started a program to distribute pet waste stations to interested community members throughout Hampton Roads. The activities conducted through the askHRgreen.org campaign for the year are summarized in the askHRgreen.org Annual Report.

TRAINING

Since 2004, the HRPDC staff has worked with the six Phase II communities to develop and conduct training programs for local government staff. This year HRPDC coordinated with DEQ

to host training linked to new local program requirements and certifications. HRPDC hosted several webinars on stormwater BMP design and maintenance and emerging policy approaches like green infrastructure. These webinars allow localities to save money by registering once as a group and local staff has an opportunity to discuss the webinar's recommendations and their applicability to the region.

Training Topic	Last Offered	Previous Dates
Fleet Maintenance	March 2005	
Landscaping	March 2006	
IDDE	Oct 2009	Feb 2008, May 2007
General Pollution Prevention	May 2013	March 2004, Feb 2009
Parks & Open Space Mgt.	March 2011	
LID Practices	June 2010	
Erosion & Sediment Control	May 2013	
Pollution Prevention and Spill Response for Municipal Operations	May 2013	

LEGISLATIVE & REGULATORY MONITORING

This element of the program involves monitoring state and federal legislative and regulatory activities that may impact local stormwater management programs. Based on this monitoring, the HRPDC staff develops briefing materials for use by the localities, including consideration by the governing bodies. As appropriate, the HRPDC staff in cooperation with the Committee develops consensus positions for consideration by the Commission and local governments. The level of effort devoted to this element has increased significantly over the past six years. During 2013-2014, the regional emphasis was on preparing to rollout local stormwater programs and the development of the draft Chesapeake Bay TMDL Action Plan Guidance.

Virginia Stormwater Regulations

Revisions to the Stormwater Regulations were approved by the Soil and Water Conservation Board in May 2011 and were implemented by localities prior to July 1, 2014. In FY14, HRPDC and local government staff continued to serve on the State Stormwater Local Government Advisory Committee. The committee provided input to DEQ on implementation of Local Stormwater Programs including challenges related to the management of grandfathered permits and defining the permit process for "common plans of development".

The region is also currently represented on the State Stormwater BMP Clearinghouse Committee which continues to discuss BMP listing criteria, Clearinghouse website content, and database design. Regional input has been focused on defining the proposed role of the Clearinghouse in approving non-proprietary BMP pollutant removal efficiencies.

HRPDC and local staff have also participated in the regulatory advisory panels for the

Construction General Permit and Nutrient Trading. In each case, the panel representative from the region provided updates to the Stormwater Technical Workgroup or Regional Environmental Committee, collected input, and made recommendations to the panel.

Chesapeake Bay TMDL and Virginia Phase II Implementation Plan

The Environmental Protection Agency established a Total Maximum Daily Load for the Chesapeake Bay on December 29, 2010. In November 2010, Virginia submitted its Phase I Watershed Implementation Plan (WIP) that outlined the statewide strategies that would be implemented by each source sector. The Phase II WIP outlined the management actions that will be implemented by local governments. Virginia submitted its final Phase II WIP to EPA on March 30, 2012.

Virginia asked localities to submit input for the Phase II WIP including resource needs. As part of the regional input, the "Hampton Roads Regional Planning Framework, Scenario, and Strategies" report was submitted to the state. In FY14, several issues identified in the report were addressed by the Chesapeake Bay Program. HRPDC and local staff participated in workgroups and expert panels to support research on these alternate BMPs and incorporation of local land use data into the Bay model. During FY14, HRPDC staff participated in the advisory committee for the development of guidance for the Chesapeake Bay TMDL Action Plan provision being placed in MS4 permits to meet TMDL requirements. During the 2014 General Assembly, HRPDC staff worked to allocate funds from the Water Quality Improvement Fund (WQIF) for the development of statewide high resolution land use/land cover data. This data will be utilized by the Chesapeake Bay Program to improve the representation of land use in the Bay Watershed Model.

REGIONAL STUDIES

Water Quality Monitoring Study

In FY14, the HRPDC and the Phase I localities partnered with the USGS and HRSD to kick-off a water quality monitoring study. The purpose of the study is to develop more accurate Coastal Plain nutrient and sediment loading rates and a basic understanding of how these loads vary by land use type. This information will be compared to the loading rates in the Chesapeake Bay Watershed Model and used to improve the accuracy of the Model in the Coastal Plain. It is anticipated that the monitoring site locations will be selected and the stations installed during FY15. Samples will be collected and analyzed for at least five years.

Stormwater Program Matrix

A comprehensive stormwater program matrix, including Phase I and Phase II communities, was developed in FY 2000 which addresses both utility and programmatic issues. HRPDC staff coordinates with local government stormwater program staff to update the information in the matrix annually.

Land and Water Quality Protection Study

In FY13, HRPDC worked on the first and second phase of the Land & Water Quality Protection

study. During the first phase of the project, HRPDC staff analyzed the local consequences of the new water quality requirements for urban and transitional communities and identified available tools to enable localities to meet these requirements while avoiding negative impacts on natural resources. The second phase of the project focused on working with two pilot localities to identify the most appropriate tools and test their application. In FY14, HRPDC staff worked on the third and final phase of the project, which will result in a coastal plain BMP guidance, recommendations for changes to plans and ordinances in the pilot localities, and a modeling effort to evaluate the water quality impacts of various growth scenarios. The study will be completed in FY15.

TECHNICAL ASSISTANCE

The HRPDC continues to serve as a clearinghouse for technical assistance to the localities, as well as a point of contact in arranging short-term assistance from one locality to another. The HRPDC Committee process also provides a forum, allowing state regulatory agency staff to meet with the region's localities to discuss evolving stormwater management regulations. In addition, the HRPDC staff provides technical information and advice to all of the participating localities on a wide variety of issues upon request. In FY14, technical assistance to localities was focused on disseminating information related to the Chesapeake Bay TMDL, Virginia's new stormwater regulations, and evaluating the real world challenges of interpreting and implementing the local stormwater programs.

MEMORANDUM OF AGREEMENT

The Regional Stormwater Management Program was established in 1996 as a formal program of the Hampton Roads Planning District Commission with support and participation from the sixteen member local governments. A Memorandum of Agreement (MOA) was created that outlines the basic regulatory and programmatic premises for the cooperative program, incorporating the Regional Program Goals, described earlier in this report. The MOA establishes a division of program responsibilities among the HRPDC and the participating localities, addresses questions of legal liability for program implementation, and includes other general provisions. The MOA is reauthorized by the signatories every five years and was renewed in 2013.

PERMIT ADMINISTRATION AND REPORTING SYSTEM (PARS)

In an effort to streamline reporting and capture data more effectively for local governments, the twelve permitted localities have pooled resources to develop the Permit Administration and Reporting System, or PARS. The region contracted with URS Corporation to develop a web-based data tracking and reporting system. The system is being utilized by local governments to catalog development sites and their associated best management practices (BMPs). The system also enables localities to capture inspection information, catalog stormwater outfalls, document illicit discharge investigations and record public education information. Users can query a variety of reports to satisfy the reporting requirements of their

stormwater permits. In FY12 and FY13, the Stormwater Workgroup reviewed the potential for PARS to track and report the implementation of Chesapeake Bay TMDL strategies, as the Chesapeake Bay Program and DEQ continued to refine the data reporting requirements for BMPs. In FY14, the Stormwater Workgroup expressed interest in obtaining a quote from URS to update PARS to meet their current needs. URS submitted a scope of work in July 2014 that was approved by the Regional Environmental Committee in August 2014.

RELATED PROGRAMS AND PROJECTS

In various combinations, the twelve (12) MS4 communities, as well as their non-permitted counterpart communities, participate in a wide variety of related programs. These programs are noted here because of their relationship with stormwater management.

Chesapeake Bay Program

Over the past several years, the Hampton Roads Region has devoted considerable attention to the ongoing Chesapeake Bay Program (CBP). To facilitate local government participation in Chesapeake Bay Program activities, HRPDC and locality staff have participated in the deliberations of many CBP committees and work groups dealing with urban stormwater, land development, watershed planning, land use development, modeling and local government's role in the Bay Program. Since the development of the Chesapeake Bay TMDL in December 2010, HRPDC staff has continued to follow the activities of the CBP primarily through participation in the Urban Stormwater Workgroup. In FY 2014, local government stormwater staff served on the Street sweeping and IDDE panels that develop Bay Program efficiencies for new stormwater best management practices. HRPDC staff co-chaired the Bay Program's Land Use Workgroup.

Chesapeake Bay Preservation Act Program

Fourteen of the sixteen member localities continue to implement programs in response to the Virginia Chesapeake Bay Preservation Act. Stormwater management is one component of those programs. Although the CBPA is not formally part of the multi-state Chesapeake Bay Program, described above, it serves as one element of local government implementation actions to comply with their MS4 Permits and to meet the goals of the Bay Program.

Water Quality Management Planning

The state is developing a substantial number of TMDL (Total Maximum Daily Load) Studies and subsequent development of TMDL Implementation Plans. This work follows from the classification of the waters by the state as meeting or failing to meet water quality standards. Water bodies that fail to meet water quality standards are classified as "impaired," triggering the requirement to prepare the TMDL study. The HRPDC staff has coordinated regional involvement in the "impaired waters" listing process. This has entailed providing opportunities through the Regional Environmental Committee for education of local government staff on the TMDL process, development of technical comments on the "impaired waters" list and response to the development of TMDLs themselves.

To assist the region's localities in addressing this requirement and ensuring that Implementation Plans are feasible, the HRPDC staff is working with DEQ to devise a cooperative regional partnership to coordinate the TMDL study process with the localities and to develop the required Implementation Plans. This year, Chesapeake, Norfolk, Portsmouth, and Virginia Beach partnered with DEQ, HRPDC, and HRSD to collect stormwater samples from the Elizabeth River watershed and analyze them for PCB concentration. The information will be used in the development of the Lower James and Elizabeth River PCB TMDL.

Sanitary Sewer Overflows

In late 2004, HRPDC staff began implementing an electronic reporting and record keeping system known as the Sanitary Sewer Overflow Reporting System (SSORS). SSORS enables localities to communicate information about sanitary sewer overflows across departmental lines, allowing for easier reporting. The regional fats, oils, and grease abatement program (HR FOG) was created to help wastewater utilities by decreasing overflows due to FOG blockages. However, the FOG education program also benefits the stormwater program because of the potential for FOG to cause illicit discharges to the stormwater system.

CONCLUSION

Through the Hampton Roads Planning District Commission, the sixteen localities of Hampton Roads have established a comprehensive Regional Stormwater Management Program. This program provides technical assistance, coordination, comprehensive technical studies and policy analyses and stormwater education. The Regional Stormwater Management Program enables the region's localities to participate actively and effectively in state and federal regulatory matters. It has enhanced the ability of the twelve localities with VPDES Permits for their Municipal Separate Storm Sewer Systems to comply with permit requirements.

The Regional Stormwater Management Program provides a mechanism through which the strengths of the sixteen local stormwater programs can be mutually supportive. It allows for cost-effective compliance with permit requirements, resolution of citizen concerns with stormwater drainage and water quality matters, and achievement of improved environmental quality throughout the Hampton Roads Region.