

REGIONAL COOPERATION IN STORMWATER MANAGEMENT

FISCAL YEAR 2014-2015

A STATUS REPORT

This report was included in the HRPDC Work Program for FY 2014-2015, approved by the Commission at its Executive Committee Meeting on June 19, 2014

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

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ABSTRACT

This document describes cooperative activities related to stormwater management undertaken by Hampton Roads local governments during Fiscal Year 2014-2015. 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

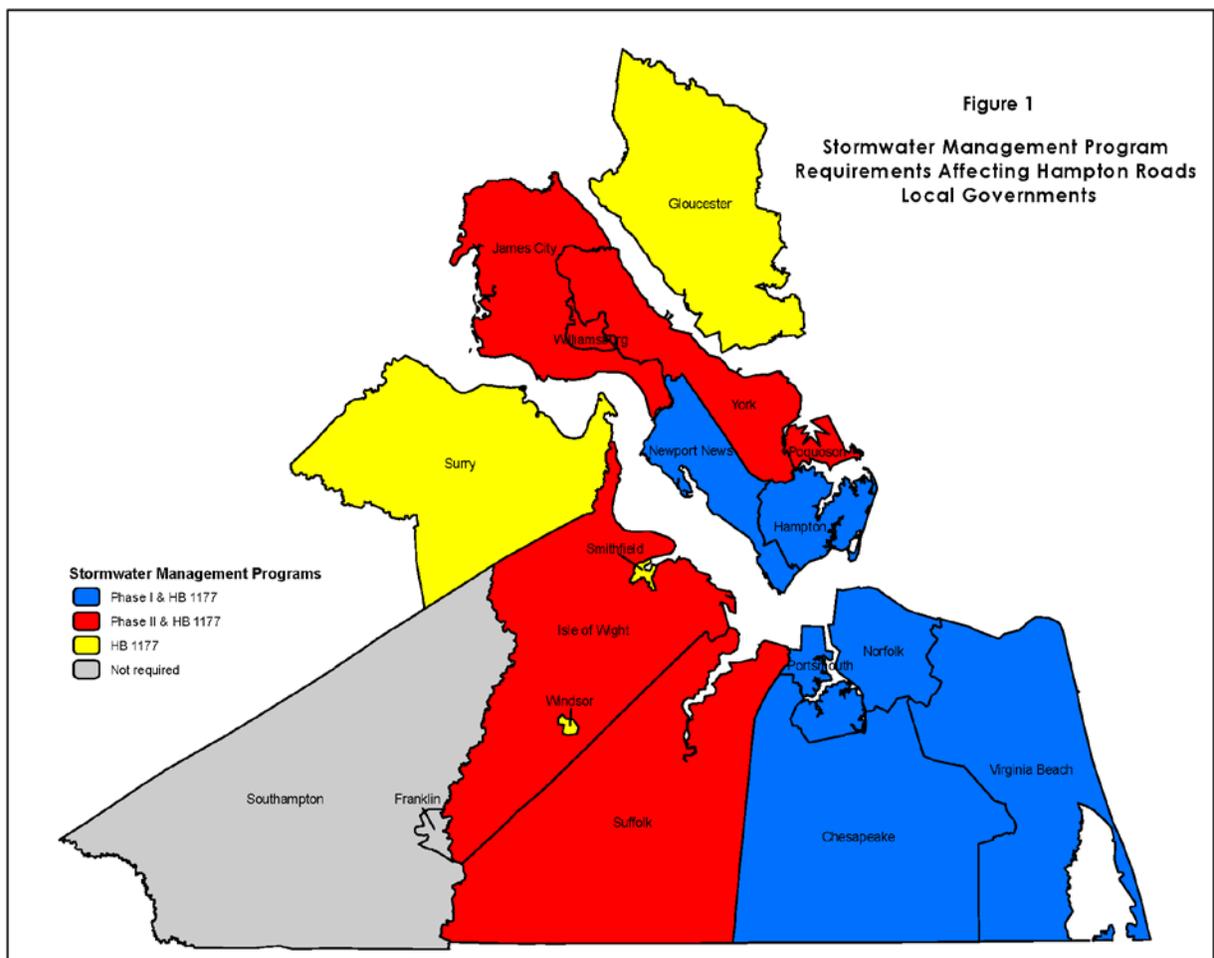
The Hampton Roads Planning District Commission, in cooperation with the regional Stormwater Workgroup, prepared this report.

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

INTRODUCTION

Working through the Hampton Roads Planning District Commission, the region's seventeen member cities and counties and town (Figure 1) cooperated on a variety of stormwater management activities during Fiscal Year 2014-2015. 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 implementing the local Construction General Permit programs, following the Phase I permit renewal process for Prince William, Chesterfield, Fairfax, and Henrico, and coordinating with the Department of Environmental Quality (DEQ) on their own draft Phase I permits. The Hampton Roads Phase I localities received draft MS4 permits on January 26, 2015 and have been in regional and individual negotiations since. In the last six months, the Phase I localities have met multiple times, sought legal counsel, and submitted regional and individual comment letters to DEQ. In

the next year, DEQ has scheduled individual meetings with most of the localities. Permits are expected to be issued in the first half of FY2016.

Phase II Localities

The Phase II General Permit was reissued on July 1, 2013 and required localities to develop an Action Plan within 24 months to address their waste load allocations in the Chesapeake Bay TMDL. During FY 2014-2015, the Phase II localities followed DEQ's development of the Action Plan guidance while developing their Action Plans that were submitted at the end of the fiscal year. Localities utilized the stormwater committee to coordinate on methodologies for MS4 delineation and to share details of plan development. The Phase II localities also focused on implementing their local Stormwater Programs, training staff on stormwater issues, and meeting education and outreach requirements. HRPDC staff developed an online regional training library in FY2015 in order to facilitate compliance with additional training requirements in the reissued MS4 General Permit. 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 seventeen 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 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.

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 Environmental Protection Agency Office of Research and Development to promote sustainability, by representatives of the U.S. Geological Survey to discuss local tide gauge installation and the Chesapeake Bay Program Climate Change Workgroup, by representatives of the VA Department of Game and Inland Fisheries regarding

the revised Wildlife Action Plan, and by DEQ staff on the schedule and expectations for the upcoming Chesapeake Bay Preservation Area compliance reviews and the historical data cleanup for the Chesapeake Bay model update.

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 staff participated in the Middle James River Roundtable and the Albemarle-Chowan Roundtable in FY15.

Regional Technical Environmental Workgroup

In FY 2015, the HRPDC established the Regional Technical Environmental Workgroup in order to provide a forum for local government staff from various departments and consultants to discuss technical details of the implementation of the Chesapeake Bay TMDL as well as local TMDLs. The objectives of the Workgroup are to discuss technical aspects of restoration projects and research, discuss research and development of alternative BMPs, help set regional priorities for approval of BMPs for the Bay TMDL, develop research priorities for filling data gaps, and assist in developing a framework for prioritization of restoration sites. Meetings are open to the public and will be held quarterly. The Workgroup serves an advisory role to the Regional Environmental Committee. In FY2015, meetings were held in September 2014, December 2014, and June 2015.

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 FY15, 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 continued the 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, HRPDC staff has worked with the six Phase II communities to develop and conduct training programs for local government staff. This year the HRPDC staff developed a regional training library and uploaded it to the HRPDC website. The library contains training resources such as webcasts, You Tube videos, and DVD videos. The Stormwater Workgroup also evaluated training videos that are available for purchase. The series produced by the North Central Texas Council of Governments, which covers stormwater pollution prevention for a variety of municipal departments, was very well received and several localities have incorporated the videos into their local training programs.

The Chesapeake Stormwater Network (CSN) offered several webcasts throughout FY15 covering topics of interest to MS4 managers, including crediting urban retrofits and improving residential BMP programs. HRPDC staff registered for the webcasts and provided conference rooms for viewing.

DEQ selected Hampton Roads as the pilot location for their new course, Stormwater Management for Contractors and Operators. The course provides an overview of stormwater management requirements applicable to those persons responsible for demonstrating compliance with the conditions of the construction general permit. HRPDC had expressed a need for this type of training and was pleased to host the first session on January 6, 2015.

In May 2015, EPA Region III staff led the Virginia MS4 Forum, a three-day workshop addressing EPA and DEQ oversight, compliance expectations and assistance, and permittee collaboration. The Hampton Roads Phase I and Phase II localities were in attendance.

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	
Urban Stormwater Retrofits – Discovery and Accounting (CSN Webcast)	Sept 2014	
Creating or Enhancing Your Local Residential BMP Program (CSN Webcast)	Sept 2014	
Crediting BMPs Used for New and Redevelopment (CSN Webcast)	Oct 2014	
Best Practices for Retrofit Delivery (CSN Webcast)	Nov 2014	
Stormwater Management for Contractors and Operators (DEQ)	Jan 2015	
VA MS4 Forum (EPA Region III)	May 2015	

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 2014-2015, the regional emphasis was on the development of the Chesapeake Bay TMDL Action Plan Guidance, streamlining the Stormwater Legislation and Regulations, developing guidelines for the use of proprietary BMPs for stormwater regulation compliance, the federal Waters of the US Rule, the state nutrient trading regulations, and development of Virginia's Phase III Watershed Implementation Plan for the Chesapeake Bay TMDL. For each issue, HRPDC staff provided updates to the Regional Technical Environmental Workgroup or Regional Environmental Committee, collected input, and submitted comments on behalf of the Region. If

a stakeholder group was assembled for a particular issue, then the Region elected a representative to serve on behalf of the localities.

Chesapeake Bay TMDL Action Plan Guidance

EPA issued the TMDL for the Chesapeake Bay watershed on December 29, 2010. It was based, in part, on the Watershed Implementation Plans (WIP) developed by the Bay watershed states and the District of Columbia. The Bay TMDL addresses all segments of the Bay and its tidal tributaries that are on the impaired waters list. In its Chesapeake Bay TMDL Watershed Implementation Plans, the Commonwealth committed to a phased approach to reducing nutrients and suspended solids discharging from MS4s. The Special Condition for the Chesapeake Bay TMDL in the General VPDES Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer System (VAR04), effective July 1, 2013, and the eleven Phase I Individual MS4 permits, as they are reissued, requires MS4 operators to develop a Chesapeake Bay TMDL Action Plan that demonstrates future plans to meet the required reductions.

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. DEQ issued the Guidance Memo in August 2014 and held a series of information sessions for local governments. DEQ issued a revised draft in March 2015 in order to address comments and issues identified during the information sessions. HRPDC staff worked with the stormwater committee to develop comments on the revised Guidance and submitted a comment letter on behalf of the localities in April 2015. The final Guidance Memo was issued in May 2015.

Streamlining Virginia Stormwater Laws

In FY15, HRPDC served on the Stormwater Legislation Stakeholders Advisory Group (SAG). The SAG has been charged with streamlining the VA stormwater laws (Stormwater Management Act, Erosion and Sediment Control Law, Chesapeake Bay Preservation Act, and the State Water Control Law) with the goal of proposing revised legislation in the 2016 General Assembly session.

Proprietary BMPs for Stormwater Compliance

The new post-construction water quality requirements require approval from DEQ for use of proprietary BMPs in Virginia. The Stormwater BMP Clearinghouse Committee was established in order to provide guidance to DEQ on BMP listing criteria, Clearinghouse website content, and database design. The Region was represented on the BMP Clearinghouse through January 2015. Regional input was focused on defining the proposed role of the Clearinghouse in approving non-proprietary BMP pollutant removal efficiencies.

At the end of FY14, DEQ issued interim guidance that describes a process for approving these proprietary BMPs and assigning pollutant removal credits: "Interim Use of Stormwater Manufactured Treatment Devices (MTDs) To Meet The New Virginia Stormwater Management Program (VSMP) Technical Criteria, Part IIB Water Quality Design Requirements." In FY15, the Clearinghouse Committee focused on the approval process for

MTDs and discussed how and when the Guidance should be updated or replaced with Regulations. HRPDC staff has been involved with a cooperative effort to request that DEQ add sizing criteria to the Guidance.

Waters of the US Rule

On March 25, 2014, the Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (Corps) jointly proposed a rule defining the scope of waters protected under the Clean Water Act (CWA). Revisions were proposed in light of Supreme Court rulings in 2001 and 2006 that interpreted the regulatory scope of the CWA more narrowly than previously, but created uncertainty about the precise effect of the Court's decisions. The HRPDC Stormwater Workgroup discussed this issue extensively in early FY15 and submitted a comment letter on October 16, 2014. The letter focused on concerns that the rulemaking would make stormwater retrofits and compliance with TMDLs more difficult, and requested that EPA add an exception for stormwater infrastructure to the Rule. On May 27, 2015, the EPA and the Corps finalized the Clean Water Rule to define Waters of the United States. The proposed Rule addressed many of the HRPDC concerns.

Virginia Nutrient Trading Regulations

In 2012, the Virginia General Assembly passed legislation requiring the State Water Control Board to adopt regulations for the certification of nonpoint source nutrient credits. Nonpoint credits include credits generated from agricultural and urban stormwater best management practices, management of animal feeding operations, land use conversion, stream or wetlands restoration, shellfish aquaculture, and other established or innovative methods of nutrient control or removal. Virginia's current trading program involves exchanges between point sources. This regulation is another step towards a successful trading program because it will make additional nonpoint source nutrient credits available for trading between point source to nonpoint source trades or nonpoint to nonpoint trades. This expanded trading program is part of the overall goal of meeting the reductions assigned by the Chesapeake Bay Watershed Implementation Plan and the Chesapeake Bay TMDL.

The regulation will establish the process for the certification of nonpoint source nitrogen and phosphorus nutrient credits and assure the generation of the credits. The regulation includes application procedures, baseline requirements, credit calculation procedures, release and registration of credits, compliance and reporting requirements for nutrient credit-generating entities, enforcement requirements, application fees, and financial assurance requirements. Nonpoint source nutrient credits must be certified by the Department prior to release, placement on the registry and exchange.

In FY2013 and FY2014, the HRPDC served on the Regulatory Advisory Panel established to assist DEQ in developing the certification regulations. DEQ proposed the Regulations for public comment in the Virginia Registrar on December 29, 2014. HRPDC submitted comments to DEQ in March 2015 that supported the definition of management area; requested that a public hearing be held for nutrient certification requests; asked for clarification of credits purchased within MS4s by private parties; and suggested revisions to ensure that the regulations are

protective of local water quality. Final regulations are expected in FY2016.

Virginia's Phase III Watershed Implementation Plan for the Chesapeake Bay TMDL

The EPA established the Chesapeake Bay TMDL on December 29, 2010 that included a Phase I Watershed Implementation Plan (WIP) developed by Virginia that outlined the statewide strategies that would be implemented by each source sector. In March 2012, Virginia submitted its final Phase II WIP to EPA that outlined the management actions that will be implemented by local governments. The HRPDC participated in both efforts on behalf of the local governments and submitted regional input for the Phase II WIP entitled, *Hampton Roads Regional Planning Framework, Scenario, and Strategies*.

Virginia will be required to develop a Phase III Watershed Implementation Plan by 2018 that will describe how Virginia will achieve the required nutrient and sediment reductions from 2017 through 2025. In FY2015, Virginia began the development of this plan with the establishment of the Chesapeake Bay Stakeholder Advisory Group. Meetings in October and March discussed the 2014 Chesapeake Bay Watershed Agreement, BMP Verification process, and Virginia's progress on nutrient reductions by sector.

REGIONAL STUDIES

Water Quality Monitoring Study

In FY14, the HRPDC and the Phase I localities partnered with the USGS and HRSD to create the Hampton Roads Regional Water Quality Monitoring Program (HRRWQMP). The purpose of the study is to characterize the sediment and nutrient loadings from the major urban land-uses in the Hampton Roads region. The data collected during the first three to five years will serve as a baseline for nutrient and sediment loads from MS4s prior to implementation of BMPs to comply with the Chesapeake Bay TMDL. In addition these measured sediment and nutrient loads 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. In FY15, the locations of the 12 stations (2 per Phase I locality) were selected. Seven stations have been installed and are currently collecting flow, turbidity, and temperature data. The remainder of the stations will be installed in FY16. Additional information on the project objectives, site locations, and data collected can be viewed here: <http://va.water.usgs.gov/HRstormwater/index.html>.

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.

Local TMDL and Implementation Plan Development

The state has developed a substantial number of TMDL Studies and 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 and TMDL development process. This has entailed providing opportunities through the Regional Environmental Committee for education of local government staff on the TMDL process, response to the development of TMDLs themselves, and participation in the development of implementation plans.

To assist the region’s localities in addressing this requirement and ensuring that Implementation Plans are feasible, the HRPDC staff is working with DEQ through a cooperative regional partnership to coordinate the TMDL study process with the localities and to develop the required Implementation Plans. In FY14, HRPDC partnered with DEQ and HRSD to develop a study plan to collect stormwater samples from the Elizabeth River watershed and analyze them for PCB concentration in order to support the development of the Lower James and Elizabeth River PCB TMDL. Stations in Chesapeake, Norfolk, Portsmouth, and Virginia Beach were selected because they met the criteria for representative land uses and watersheds where PCBs could be monitored. In FY15, water samples were collected at these stations by HRSD and sent to the DEQ selected laboratory for PCB analysis. The MS4 localities in Hampton Roads funded the data collection and DEQ paid for the analysis. The PCB TMDL for the Lower James and Elizabeth River is expected to be developed in FY16.

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 for 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 FY15, technical assistance to localities was focused on disseminating information related to implementation of and compliance with the Chesapeake Bay TMDL, providing training resources for locality stormwater staff, 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 FY15, AECOM (formerly URS) updated PARS to meet the current needs of the Stormwater Workgroup. Updates included adding stormwater management facility types to match the BMP Clearinghouse, tracking for TSS, and tracking development, redevelopment, impervious, and pervious acres.

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 Participation

The Chesapeake Bay Program is a regional partnership that has led and directed the restoration of the Chesapeake Bay since 1983. Bay Program partners include federal and state agencies, local governments, non-profit organizations and academic institutions. Partners work together through the Bay Program's goal teams, workgroups and committees to collaborate, share information, and set goals. Since the development of the Chesapeake Bay TMDL in December 2010, 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. HRPDC staff has continued to follow the activities of the CBP primarily through participation in the Urban Stormwater Workgroup, the Land Use Workgroup, and the Water Quality Goal Implementation Team. In FY15, local government stormwater staff served on the Street Sweeping, shoreline restoration, and floating wetlands BMP panels that develop Bay Program efficiencies for new stormwater best management practices. HRPDC staff co-chaired the Bay Program's Land Use Workgroup through December 2014. HRPDC staff participated in a Scientific and Technical Advisory Committee (STAC) workshop in March 2015 to evaluate the need for a Bay-wide protocol to test MTDs.

Chesapeake Bay Preservation Act Program

Fourteen of the seventeen 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.

Land and Water Quality Protection Study

In FY13, HRPDC began a three phase project, Land & Water Quality Protection Study, funded by the Virginia Coastal Zone Management Program with 309 funding. The goal of this grant was to identify enforceable policies or changes to enforceable policies for local governments to consider adopting. 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 (Norfolk and Suffolk) to identify the most appropriate tools and test their application. In FY15, HRPDC staff completed the third and final phase of the project, which resulted 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.

Development of Statewide Land Cover Data

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. In FY15, HRPDC staff coordinated with DEQ, VGIN, and the Bay Program to define the scope of work for this project, identify the necessary land cover types, and issue an RFP through VGIN to select a contractor. WorldView Solutions was selected as the service provider at the end of FY15. This data will be utilized by the Chesapeake Bay Program to improve the representation of land use in the Bay Watershed Model. This effort was initiated because localities identified the need for better land cover data as a high priority after reviewing Virginia's Chesapeake Bay Phase II WIP.

CONCLUSION

Through the Hampton Roads Planning District Commission, the seventeen 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 seventeen 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.

