

HAMPTON ROADS PLANNING DISTRICT COMMISSION

CHESAPEAKE

- REBECCA C.W. ADAMS
- AMAR DWARKANATH
- * CLIFTON E. HAYES, JR.
- ANNE F. ODELL
- ELLA P. WARD

FRANKLIN

- JOSEPH J. SCISLOWICZ
- * ROWLAND L. TAYLOR

GLOUCESTER COUNTY

- JOHN J. ADAMS, SR.
- * WILLIAM H. WHITLEY

HAMPTON

- * RANDALL A. GILLILAND
- ROSS A. KEARNEY, II
- JESSE T. WALLACE, JR.

ISLE OF WIGHT COUNTY

- W. DOUGLAS CASKEY
- * STAN D. CLARK

JAMES CITY COUNTY

- * BRUCE C. GOODSON
- SANFORD B. WANNER

NEWPORT NEWS

- CHARLES C. ALLEN
- * JOE S. FRANK
- RANDY W. HILDEBRANDT

NORFOLK

- ANTHONY L. BURFOOT
- * PAUL D. FRAIM
- DR. THERESA W. WHIBLEY
- REGINA V.K. WILLIAMS
- BARCLAY C. WINN

POQUOSON

- * CHARLES W. BURGESS, JR.
- GORDON C. HELSEL, JR.

PORTSMOUTH

- JAMES B. OLIVER, JR.
- * DOUGLAS L. SMITH

SOUTHAMPTON COUNTY

- ANITA T. FELTS
- * MICHAEL W. JOHNSON

SUFFOLK

- LINDA T. JOHNSON
- * JAMES G. VACALIS

SURRY COUNTY

- * TYRONE W. FRANKLIN
- JUDY S. LYTTLE

VIRGINIA BEACH

- HARRY E. DIEZEL
- ROBERT M. DYER
- BARBARA M. HENLEY
- * LOUIS R. JONES
- MEYERA E. OBERNDORF
- JAMES K. SPORE
- JOHN E. UHRIN

WILLIAMSBURG

- * JACKSON C. TUTTLE, II
- JEANNE ZEIDLER

YORK COUNTY

- * JAMES O. McREYNOLDS
- THOMAS G. SHEPPERD, JR.

*EXECUTIVE COMMITTEE MEMBER

PROJECT STAFF

ARTHUR L. COLLINS

EXECUTIVE DIRECTOR/SECRETARY

PHYSICAL AND ENVIRONMENTAL PLANNING DEPARTMENT

FRANCES D. HUGHEY

ADMINISTRATIVE ASSISTANT

ROBERT C. JACOBS

DIRECTOR OF GRAPHIC & PRINTING SERVICES

MICHAEL R. LONG

GRAPHIC ARTIST/ILLUSTRATOR TECHNICIAN II

BRIAN MILLER

GRAPHIC TECHNICIAN II

RACHAEL V. PATCHETT

REPROGRAPHIC SUPERVISOR

**HAMPTON ROADS TECHNICAL ASSISTANCE PROGRAM
REGIONAL COASTAL RESOURCES MANAGEMENT PROGRAM
FOR HAMPTON ROADS**

**FISCAL YEAR 2005 – 2006
FINAL REPORT**

This report was produced, in part, through financial assistance from the Virginia Coastal Zone Management Program in the Virginia Department of Environmental Quality through Grant No. NA05NOS4191180 from the National Oceanic and Atmospheric Administration. The views expressed herein are those of the authors and do not necessarily reflect the views of NOAA or any of its sub-agencies. Federal financial assistance to this project amounted to \$55,000 or approximately fifty percent of the total project cost.

Preparation of this report was included in the HRPDC Unified Planning Work Program for FY 2005 – 2006, approved by the Commission at its Executive Committee Meeting of March 16, 2005, and in the HRPDC Unified Planning Work Program for FY 2006 – 2007, approved by the Commission at its Executive Committee Meeting of March 15, 2006.

**Prepared by the staff of the
Hampton Roads Planning District Commission**

DECEMBER 2006

PEP06-07

REPORT DOCUMENTATION

TITLE:
**Hampton Roads Coastal Resources
Technical Assistance Program
Fiscal Year 2005-2006**

REPORT DATE
December 2006

GRANT/SPONSORING AGENCY
DEQ/NOAA/LOCAL FUNDS

AUTHORS:
Physical & Environmental
Planning Department

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

ABSTRACT

This report describes the environmental technical assistance program conducted by the Hampton Roads Planning District Commission during FY 2005 – 2006 through its Coastal Resources Management Program. This program encompasses environmental impact review, participation in state and federal programs, coordination of regional environmental programs addressing environmental issues, including the Chesapeake Bay, wetlands, and the Albemarle-Pamlico Estuaries in North Carolina, public information and education and technical assistance to the localities. It contains representative examples of the reports, comment letters, newsletters and associated materials generated and used in assisting the region's sixteen local governments, supporting the Virginia Coastal Zone Management Program and working with the other Planning District Commissions in the Coastal Zone.

ACKNOWLEDGMENTS

This report was produced, in part, through financial assistance from the Virginia Coastal Zone Management Program in the Virginia Department of Environmental Quality through Grant No. NA05NOS4191180 from the National Oceanic and Atmospheric Administration. The views expressed herein are those of the authors and do not necessarily reflect the views of NOAA or any of its sub-agencies.

Preparation of this report was included in the HRPDC Unified Planning Work Program for FY 2005 – 2006, approved by the Commission at its Executive Committee Meeting of March 16, 2005, and in the HRPDC Unified Planning Work Program for FY 2006 – 2007, approved by the Commission at its Executive Committee Meeting of March 15, 2006.

TABLE OF CONTENTS

INTRODUCTION.....	1
PROGRAM OBJECTIVES.....	2
PROGRAM ACCOMPLISHMENTS.....	3
VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM SUPPORT	3
TECHNICAL STUDIES	14
LOCAL ASSISTANCE AND COORDINATION	21
PUBLIC INFORMATION, EDUCATION AND TRAINING.....	34
CONCLUSIONS.....	37
APPENDIX A: LISTING OF ENVIRONMENTAL IMPACT REVIEWS AND REPRESENTATIVE COMMENT LETTERS	
APPENDIX B: SUMMARY OF LOCAL CHESAPEAKE PRESERVATION ACT PROGRAMS MATRIX	
APPENDIX C: ENVIRONMENTAL STRATEGIC PLANNING INITIATIVE DISCUSSION PAPER AND PRESENTATION MATERIALS	
APPENDIX D: DOCUMENTATION OF REPRESENTATIVE HRPDC TECHNICAL ASSISTANCE ACTIVITY	
APPENDIX E: ENVIRONMENTAL GEOGRAPHIC INFORMATION SYSTEM – SAMPLE MAPS	
APPENDIX F: REPRESENTATIVE COMMITTEE AGENDA MATERIALS	
APPENDIX G: HRPDC COMMENTS ON STATE REGULATORY ISSUES	
APPENDIX H: REPRESENTATIVE HRPDC COMMISSION MEETING AGENDA MATERIALS	
APPENDIX I: LOCAL CHESAPEAKE BAY BOARD MEMBER TRAINING – AGENDA AND PRESENTATION MATERIALS	
APPENDIX J: ENVIRONMENTAL EDUCATION CLEARINGHOUSE OVERVIEW AND INDEX	
APPENDIX K: NEWSLETTER COPIES	

INTRODUCTION

In March 2005, the Hampton Roads Planning District Commission submitted a proposal to the Virginia Coastal Zone Management Program (VCZMP) for funding to continue the HRPDC's Technical Assistance Program. Through this program, the HRPDC provides technical assistance on a variety of environmental and coastal resources management issues to the sixteen cities and counties of the Hampton Roads region and to coordinate their response to those issues. It also provides assistance to the eight incorporated towns in the region as well as to a wide variety of private entities. This Program has operated successfully with financial assistance from the Virginia Coastal Zone Management Program since the Program's inception in 1986. In October 2005, the HRPDC was awarded financial assistance to maintain its Technical Assistance Program through September 2006. This report provides an overview of the activities and accomplishments of the Hampton Roads Technical Assistance (Regional Coastal Resources Management) Program during that period.

The Hampton Roads Technical Assistance Program is a comprehensive, interrelated initiative, providing on-call staff capability, a regional coordination mechanism, and related technical studies. It assists the region's localities on short-term local issues, ensures a collective response to regional, state and federal issues as they arise, and facilitates cooperation and coordination among the localities. The ideas for major technical studies, such as the Hampton Roads Tributary Strategy Program including the Lower James River (Hampton Roads) Watershed Roundtable, ongoing analysis of the impacts of the Chesapeake Bay Agreement and related regulatory initiatives, regional green infrastructure project, and analyses of natural resource funding options and permit fee proposals, as well as the staff follow-up to carry them to fruition have been provided through the Technical Assistance Program.

Of particular significance, VCZMP funding for this program has provided seed money allowing the region to undertake new environmental initiatives, such as the Regional Water Supply, Ground Water and Stormwater Management Programs, including the public information and education components of each. These regional initiatives, which continue to evolve, are now institutionalized and have been enhanced through dedicated local funding. These regional programs are unique examples of inter-governmental cooperation in management of coastal resources in the Commonwealth.

The Hampton Roads Technical Assistance Program also enables the HRPDC to participate in and support a number of core elements of the Virginia Coastal Zone Management Program, such as Environmental Impact Review, Wetlands and Dune Regulations, Chesapeake Bay Preservation Act (CBPA) Regulations, and the large number of state Water Quality Programs. This participation results in cost savings to the state in terms of educating localities about state and federal initiatives and coordinating local government input to these efforts. Over the past twenty (20) years, several hundred local government staff members from the region's sixteen local governments have received technical training in wetlands regulations and delineation,

CBPA implementation, erosion and sediment control, stormwater management, low impact development and better site design, flood hazard management, geographic information systems, land conservation and watershed management. Local government board members, staff from other PDCs, and representatives of the private sector have also participated. As a result, the effectiveness of local government implementation has increased.

Through review of environmental impact documents and coastal zone consistency determinations, the regional program has also facilitated rapid resolution of local government concerns with the impacts of state projects, proposed by the Virginia Department of Transportation (VDOT), the Virginia Department of Military Affairs, the Community College System and others, as well as federal projects such as the transportation of nuclear waste materials, harbor dredging, military facility construction and operations, Outer Continental Shelf Oil and Gas Development and related resource management programs.

The Technical Assistance Program allows the HRPDC to serve as a central source of environmental data and information, ranging from wetlands and soils mapping to aerial photographs, water and wastewater data and information about potential hazardous waste disposal activities for local governments and the private sector.

The FY 2005 – 2006 Hampton Roads Technical Assistance Program enabled the region's localities to continue to address, in a comprehensive and integrated fashion, all aspects of coastal resources management - the Chesapeake Bay Program (in all of its facets), implementation of the Albemarle-Pamlico National Estuary Program with North Carolina, environmental impact review, local comprehensive planning, CBPA implementation, wetlands protection, shoreline management, public access, and environmental data base development and analysis through the HRPDC Geographic Information System (GIS). The program has allowed the continuation of regional support for and participation in the VCZMP, regional participation in other state and federal initiatives, completion of necessary technical studies, technical assistance to the region's localities and conduct of public information and education activities.

PROGRAM OBJECTIVES

At the outset of the FY 2005 – 2006 Hampton Roads Technical Assistance Program, the HRPDC, in cooperation with staff from its member local governments, established six (6) objectives for the Program. These overall objectives, while expanded in scope, have remained largely the same since program inception. They are:

1. To assist the localities of Hampton Roads Virginia to implement the recommendations of the Virginia Coastal Zone Management Program, related state and federal environmental management programs as well as the Chesapeake Bay Program, as embodied in the Chesapeake Bay Agreement 2000 and related state legislation and regulations.

2. To support the Commonwealth of Virginia in implementing the VCZMP through coordination of local and regional review of environmental impact assessments/statements, applications for state and federal environmental permits and related environmental documents and by serving as an information conduit between the state and localities on coastal resource management issues.
3. To complete regional environmental studies, necessary to support local government consideration of the Chesapeake Bay Agreement priorities, including Tributary Strategies.
4. To enable Hampton Roads Virginia to continue to play an active role in the development, implementation and refinement of the Virginia Coastal Zone Management Program, Chesapeake Bay Agreement, Chesapeake Bay Preservation Act and related environmental initiatives.
5. To improve the coordination and quality of local and regional decision-making concerning coastal and related environmental resources.
6. To increase public awareness of the value of coastal resources and of the local and regional efforts to manage them.

To accomplish these objectives, a comprehensive program was structured involving a range of activities in the following categories: VCZMP Program Support, Technical Studies, Local Assistance and Coordination, and Public Information and Education.

PROGRAM ACCOMPLISHMENTS

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM SUPPORT

Environmental Impact Review

The HRPDC staff reviews and comments on all applications for state and federal regulatory permits and the associated Environmental Impact Assessments/Statements. On a monthly basis, the Hampton Roads Planning District Commission is apprised of all EIA/EIS projects that are under review. Generally, no formal action is taken by the Commission as a result of this notification; however, historically, the Commission has requested more extensive HRPDC staff and local government review of an issue.

In the past, review of Corps of Engineers' proposals to revise the Nationwide Permit Program under Section 404 of the Clean Water Act led to extensive comments from the HRPDC and renewal of a regional focus on wetlands issues. This effort led, in part, to extensive involvement of staff from the HRPDC and the member local governments in the state's consideration of wetlands legislation and regulations during the period from 1998 to the present, ongoing development of federal regulations and the

development and refinement of the State Programmatic General Permit. The region's interest in wetlands continues. During the fiscal year, the HRPDC staff and members of the HRPDC Environmental Committees participated in the continued refinement of modifications to the Virginia Water Protection Permit Regulations. The HRPDC staff has continued to work with local government and other interests to ensure that institutional arrangements are in place to address wetlands regulations, mitigation requirements and development issues.

The HRPDC staff reviewed and commented on approximately sixty-six (66) environmental impact assessments and statements for both state and federal projects. An element that was added to the state environmental impact review program five years ago is review of federal projects for consistency with Virginia's Coastal Zone Management Program. By virtue of this addition, the number of projects submitted through the review process and the content of those reviews has increased substantially. Projects reviewed ranged widely in complexity. They included numerous shoreline management and water access projects; several airport facility construction projects; the Baltimore Harbor and Channels Dredged Material Management Plan; and the Outer Continental Shelf Oil and Gas Leasing Program: 2007-2012; and several major military housing privatization projects and mission location studies. A number of the environmental documents reviewed during the project year involved ongoing operational programs, such as the Virginia Beach Hurricane Protection Project. The HRPDC, in cooperation with the localities, worked to ensure that these projects were coordinated and met local government requirements. For most projects, it is not known what the ultimate impact of PDC and local government comments may have been.

Appendix A contains a compilation of all projects reviewed through this program component during the period from October 1, 2005 through September 30, 2006 as well as sample comment letters on representative projects. To improve the information available for consideration by the Commission and to facilitate tracking of local and state actions on environmental documents, the HRPDC staff developed a new database and reporting system during a previous grant year. The HRPDC began using the new reporting form in July 2001. All environmental documents reviewed since that time have been entered into the database.

Coordination of review and comment on environmental documents with the region's localities has historically been problematic, because of time constraints placed on the review process by the state and, in some cases, by project applicants who requested expedited review from the state. Historically, environmental documents were distributed by the state to the Chief Administrative Officers in the localities. Internal distribution did not always go to the same local government staff person and frequently prevented the locality and the HRPDC from commenting within the state's time constraints. In May 2003, local government and HRPDC staff recommended that the region's Chief Administrative Officers designate specific staff persons to coordinate internal review of environmental documents. Following the internal designation of contact points, the DEQ was formally requested to distribute all documents to the

designated staff contact/coordinator. After more than three years of experience with the modified review system, it appears that the review process works much more efficiently.

The HRPDC staff reviewed all Corps of Engineers Permits/Public Notices for private and public agency dredging and other waterfront construction activities. The purpose of this review is to ensure that the localities are aware of the pending project. Data obtained through these reviews is incorporated directly into ongoing HRPDC studies of shoreline management issues in the region, as well as in all local comprehensive plans being prepared by the HRPDC on behalf of the localities. This activity is a follow-up to two technical studies, Regional Shoreline Element of Comprehensive Plans, and Managing Multiple Recreational Use Conflicts in the Waters of Hampton Roads, prepared previously by the HRPDC. Both studies were funded through Virginia Coastal Zone Management Program Competitive Grants and were based on ideas generated through the Regional Coordination Process discussed below.

Based on legislation enacted during the 1996 Session of the General Assembly, all public notices for Virginia Pollutant Discharge Elimination System, Ground Water Withdrawal, Virginia Water Protection, Hazardous Waste and Air Emissions Permits are provided to local governments and PDCs for review. To facilitate this effort, the staff developed and maintains a tracking system and database for all five types of permits.

Participation in State and Federal Programs

Several state and federal environmental programs encourage use of PDCs as a cost-effective mechanism for informing local governments and seeking their input for state and federal program development and accomplishment. For example, the Chesapeake Bay Program in both its 1996 and 2002 Local Government Participation Action Plans, recommended better use of technical assistance providers, such as PDCs, to serve as vehicles to distribute information and outreach on Chesapeake Bay-related issues. It also suggested development of a network of local officials and staff with expertise in dealing with resource protection issues. Virginia's Regional Cooperation Act strongly recommends this type of role for PDCs. Several programs, including the Virginia Coastal Zone Management Program, do use the PDCs in this manner. Historically, NOAA's Section 312 evaluation of the Virginia Coastal Zone Management Program has recognized the benefits and cost-effectiveness of the network of PDCs in supporting the VCZMP and in assisting their member local governments. During the 2006 NOAA evaluation of the Virginia Coastal Zone Management Program, the Evaluation Team provided favorable comments on the role and activities of PDCs during its field evaluation in August 2003. Those comments were formalized in the final Section 312 Evaluation Report.

In the Hampton Roads region, the Hampton Roads Technical Assistance Program and its associated committees provide such a network. Both HRPDC staff and local government members of the HRPDC Advisory Committees frequently serve on state and federal advisory groups. On a regular basis, the participating localities request that the HRPDC staff serve as their representative to these advisory groups.

Alternatively, the Committees may select a local government member to represent the region. In both cases, the HRPDC Committees provide all sixteen-member localities with a mechanism to participate, at least indirectly, in the state or federal program(s). Also, data and information on Hampton Roads conditions are provided by the Hampton Roads representative (HRPDC or local government staff) to state and federal agencies on behalf of the localities, thus minimizing state and federal agency data collection and input costs.

The HRPDC staff worked closely with state and federal agencies on coordination of programs as they affect the Hampton Roads region. This work involved follow-up to previous studies conducted by the HRPDC with VCZMP-funding, serving on advisory committees supporting plan and regulatory development, and development of new cooperative initiatives involving state, local, federal and private entities.

Virginia Coastal Zone Management Program

During the grant period, the HRPDC staff continued to participate in Coastal Zone PDC meetings, contributing to the evaluation of the Virginia Coastal Zone Management Program and the development of strategies for Section 309 issues and priorities. In addition, the HRPDC staff is participating in the work group advising the VCZMP staff in the development of the state's Coastal and Estuarine Lands Conservation Program.

One priority of the VCZMP has been to develop baseline data and analytical tools to assist the state and Tidewater localities in improving their ability to manage coastal resources. During the past year, projects by the Virginia Institute of Marine Science and the Department of Conservation and Recreation, Division of Natural Heritage, to inventory and map significant aquatic resources and areas (blue infrastructure) and a network of land and corridors with important terrestrial features (green infrastructure), respectively, have continued. The HRPDC staff participates as a member of the Advisory Committees for these projects. The HRPDC staff participated, as a member of the Coastal Policy Team, in defining the scopes of work for these projects. During fiscal year 2006, the HRPDC staff continued participation in these important initiatives.

During FY 2004 – 2005, the HRPDC staff received grant funding from the Virginia Coastal Zone Management Program to undertake a regional green infrastructure planning project, building on work accomplished through the Southern Watershed Special Area Management Program. The need for and appropriateness of conducting this project for the entire region was identified through the Regional Coordination process. In part, as preparation for this project, the HRPDC staff arranged a series of briefings by state agency staff for the HRPDC environmental committees on the various blue and green infrastructure projects and related state initiatives. These briefings continued during FY 2005 – 2006, and included briefings on the HRPDC's Conservation Corridor project. This project, the Hampton Roads Conservation Corridor Study, was approved by the HRPDC in July 2006. Final products include a summary

report and associated maps, an educational video and a set of geographic information system files for use by local government. Follow-up work has included a set of workshops on green infrastructure topics, a briefing by HRPDC staff to an Open Space Task Force in Currituck County and a presentation to the Chowan Roundtable on the green infrastructure efforts in Hampton Roads. The HRPDC staff is continuing discussions with local government staff to refine study recommendations.

National Park Service

On a regular basis, the staff continued to work with representatives of the Colonial National Historic Park on National Park Service (NPS) technical studies in the areas of ground and surface water management, natural areas conservation and shoreline management. Insofar as water resources management and natural areas conservation are concerned, this involved technical review and comment on NPS proposals and studies conducted by other federal agencies, such as the U.S. Geological Survey, and private consultants.

A first step in expanding the National Park Service presence in the Chesapeake Bay Watershed was taken with the establishment of the Chesapeake Bay Gateways Program. There are presently nineteen (19) designated Chesapeake Bay Gateways sites and trails in the Hampton Roads region. The HRPDC has historically supported increased funding to assist local governments and nongovernmental organizations in developing and managing Chesapeake Bay Gateway sites.

In August 2005, legislation was enacted authorizing the NPS to study the feasibility of establishing the Captain John Smith Chesapeake National Historic Water Trail. Subsequently, the NPS began a study to determine whether the trail meets the criteria required by the National Trail System Act to become a National Historic Trail. This study included the evaluation of the trail to determine if it is nationally and historically significant, and whether it provides opportunities for public recreation. In addition to the NPS study, the Virginia Department of Conservation and Recreation developed proposed trails to commemorate Captain John Smith's adventures on the James and York Rivers. Throughout this process, the HRPDC staff has monitored both efforts, reviewed proposed trail routes, participated in agency meetings regarding these efforts, and provided briefings to the region's localities.

Chesapeake Bay Program

The Hampton Roads Technical Assistance Program continues to enable the HRPDC to participate, on behalf of its member localities, in the Chesapeake Bay Program. Since FY 1998-1999, this element of the Program has received greatly increased emphasis through several initiatives, including the renewal of the Chesapeake Bay Local Government Advisory Committee, establishment of a Metropolitan Areas Work Group, development of the Chesapeake Bay Agreement 2000 and development of new and revised Chesapeake Bay Program Implementation Strategies. The importance of this area of emphasis was stressed by the Commission

in its reaction to staff presentations on the Chesapeake Bay Agreement and related issues during both 2000 and 2001. In Spring 2002, the HRPDC directed the staff to further expand its involvement on behalf of the region's localities in Chesapeake Bay Program initiatives. The general consensus of the Commission was that this was a cost-effective means by which the region could be involved in this important program. Although funding constraints have prevented the HRPDC staff from fully implementing this initiative, it continues to be a major focus of staff and Committee work. Ongoing discussion of the Tributary Strategies Program, evolving water quality standards and related funding and regulatory initiatives has underscored the Commission's interest in and priority for a regional approach to Chesapeake Bay issues. In January 2005, the HRPDC approved a Compendium of Commission positions and comments on the Chesapeake Bay Program and related issues.

Metropolitan Areas Work Group

In Spring 1999, representatives of the HRPDC and several of its member local governments met with their counterparts from the Washington, D.C. and Baltimore. Maryland metropolitan areas, as well as other local governments and regional agencies from throughout the Bay Watershed. These discussions led to the establishment of a Metropolitan Areas Work Group. The MAWG operated for four years as an informal organization discussing Chesapeake Bay and related issues identified by the participants.

Although the MAWG no longer serves as an active forum for metropolitan localities and regional agencies, the original members continue to share information informally through conference calls and extensive use of email. The former members of the MAWG continue to participate in a variety of Chesapeake Bay Program work groups, task forces and committees. The relationships established among the former members continue to enable the metropolitan areas to work together on the Chesapeake Bay Program and related issues. For example, several of the regional agencies are actively involved in developing workshops and training programs to assist local governments in integrating land use and watershed management plans. They also actively alert each other to pending issues and needs for information.

Chesapeake Bay Program Committees

The HRPDC monitors the work of key Chesapeake Bay committees and participates via email or conference call. These include the Chesapeake Bay Local Government Advisory Committee, the Urban Stormwater Work Group, and the Land, Growth and Stewardship Subcommittee. Through the HRPDC Joint Environmental (Hampton Roads Chesapeake Bay and Regional Stormwater Management) Committees, the region's localities receive regular updates on the activities of these committees.

During the 1999 - 2003 period, the HRPDC staff along with the other members of the Metropolitan Areas Work Group participated in the quarterly meetings of the

Chesapeake Bay Local Government Advisory Committee. The HRPDC staff continues to monitor the quarterly meetings and activities of the CBLGAC and, as appropriate, provides regular briefings to the localities.

The Stormwater Directive, which incorporated many of the region's recommendations, was signed by the Chesapeake Executive Council in December 2001 and led to the formation of the Urban Stormwater Work Group. The Work Group continues to focus its efforts on tracking Best Management Practices implementation, determining the costs and effectiveness of various BMPs, developing incentives to the implementation of stormwater management programs and Low Impact Development concepts, analyzing the relationship between municipal stormwater permits and tributary strategies and determining the costs of implementing stormwater management programs. It has not tackled the issue of overlapping and sometimes conflicting and redundant stormwater management regulations, as recommended by the HRPDC staff. (Insofar as Virginia is concerned, that issue has been addressed through the enactment in 2004 of legislation integrating Commonwealth's several stormwater management programs.)

Since 2000, Work Groups of the Land, Growth and Stewardship Subcommittee developed strategies for achieving the commitments in the Chesapeake Bay Agreement 2000 that deal with land use and development issues. These include reduction of harmful sprawl development, brownfields development and tracking of success in both areas. The emphasis of Subcommittee activities has shifted to better integration of land use and watershed planning. The HRPDC staff worked with an ad hoc group of Subcommittee members, many of whom were members of the Metropolitan Areas Work Group, to plan a series of workshops and other training and mentoring activities to assist local governments in efforts to integrate watershed management and land use planning.

During FY 2005 – 2006, HRPDC staff participated in Technical Advisory Committee meetings organized by the Land, Growth and Stewardship Subcommittee to address consistency between regional land use projections in Northern Virginia and Hampton Roads and the Chesapeake Bay Program's 2030 land use projections. The TAC reviewed modeling approaches for trend projections in a number of sectors, including urban growth models and point source outflow trend projections. HRPDC staff will continue to participate in this effort in FY 2006 – 2007.

State Chesapeake Bay Initiatives

Over the past several years, the HRPDC has participated in several initiatives, associated with the Chesapeake Bay Agreement at the state level. During July 2001, two HRPDC Commissioners and staff participated in a Virginia Focus Group to define local government needs for information concerning the Chesapeake Bay Program. The Focus Group also recommended alternatives for improving the Bay Program's communication with local governments and for increasing local government participation in Bay Program activities. Full consideration and implementation of these

recommendations by the Chesapeake Bay Program and the state continues to be stymied by state and federal budgetary constraints.

The 2001 Session of the Virginia General Assembly enacted legislation requiring the Secretary of Natural Resources to report annually to the General Assembly on progress, including local government efforts, toward achieving the Chesapeake Bay Agreement commitments. The HRPDC staff and Committees recommended a coordinated regional approach to reporting. The HRPDC staff coordinated the region's effort to provide local government information during the period from 2001 through 2004. No state request for this information has been received since.

Local watershed planning represents a significant commitment in the Chesapeake Bay Program. The HRPDC staff has participated in the state's effort to develop guidance on local watershed planning, and in previous years has facilitated workshops on watershed planning. In addition, HRPDC staff continues to facilitate discussions among the localities regarding watershed planning.

Working through the HRPDC Environmental Strategic Planning Subcommittee, the HRPDC staff is continuing work on a regional technical framework that could be used by the region's localities and others to integrate the myriad of watershed planning initiatives. Those discussions also involve examining the institutional relationships that would be needed to effectively accomplish integrated watershed planning.

The major focus of regional discussions and work on Chesapeake Bay-related topics during the year continued to be refinement of the Tributary Strategies for Nutrient and Sediment Reduction and review of state implementing regulations. That topic is addressed in more detail in a subsequent section of this report.

North Carolina River Basin Water Quality Planning

Based in part on a 1996 HRPDC staff briefing to the North Carolina Chowan Basin Regional Council, staff from the HRPDC represented Virginia local governments on both the Chowan and the Pasquotank Regional Councils from 1996 to 2005. Staff from the Crater PDC also served on the Chowan Council. The Councils were established by the North Carolina Governor to pursue implementation of the Albemarle-Pamlico National Estuary Program in the Chowan Basin. Much of these two Watersheds lies in Virginia. Membership on the Councils has facilitated improved relationships between local governments in the two states.

The States of North Carolina and Virginia executed an Agreement to work cooperatively in managing environmental issues in the watershed of the Albemarle-Pamlico Sounds Estuary, in October 2001. This formalized efforts begun nearly a decade ago, through HRPDC technical studies and participation in the Albemarle-Pamlico Estuarine Study as well as efforts by the HRPDC, its member local governments and the Virginia Coastal Zone Management Program through the Southern Watershed Special Area Management Program. Through a Bi-State

Technical Advisory Committee, a number of cooperative water quality management and other projects were evaluated during 2003 and 2004. In May 2005, the Governor of North Carolina authorized the formation of the Albemarle-Pamlico National Estuary Program (APNEP) Policy Board, including representatives from Virginia. At the invitation of the State of North Carolina, HRPDC staff is serving on this Board, which met three times during 2005 – 2006.

In 2001, the State of North Carolina instituted, in cooperation with the Corps of Engineers, a comprehensive study of environmental issues, including water quality, in the Currituck Sound Watershed. The HRPDC staff serves on the Technical Advisory Committee for this project. During 2002 and 2003, this effort emphasized technical analysis by the Corps of Engineers. The Technical Advisory Committee began meeting again in 2004. The HRPDC staff is also serving on the water quality and modeling work group. Based on technical work previously accomplished through the SWAMP Program, the HRPDC has been able to help shape the direction of the COE studies. After a period of inactivity, the COE hosted a meeting related to this project in October 2006. HRPDC staff participated in this meeting. A related COE initiative, which involves participation by both states, is a comprehensive study of the Dismal Swamp Canal. The purpose of the study is to determine whether construction of alternatives for reduction in flood impacts, environmental restoration and protection, and related purposes for the city of Chesapeake, Virginia, in the vicinity of the Dismal Swamp and Dismal Swamp Canal, is justified and in the Federal interest. The HRPDC staff is also serving along with local government representatives on the Technical Committee guiding this study.

This combination of initiatives led to discussions among the North Carolina and Virginia localities in the Pasquotank Watershed, facilitated by the HRPDC, focusing on exchange of information and coordination of watershed management efforts. This should further enhance the effectiveness of the Southern Watershed Special Area Management Program (SWAMP), developed through a separate Section 309 Grant Project. In fact, during 2004, the State of North Carolina provided modest financial assistance to the HRPDC to facilitate these ongoing discussions. The partnership between the Southern Watershed Area Management Program and the Albemarle-Pamlico National Estuarine Program has supported the development of a better working relationship between the Cities of Chesapeake and Virginia Beach in Virginia and the Counties of Camden and Currituck in North Carolina. In addition, the grant funding helped to support the continuation of significant watershed planning and environmental education activities in Virginia. Taken together these activities provide a framework for sustaining and improving the management of the significant natural resources of southeastern Virginia and northeastern North Carolina.

DCR Nonpoint Source 319/6217 Programs

Traditionally, HRPDC staff has worked closely with the Department of Conservation and Recreation to assess nonpoint source management needs and programs in response to the requirements of Section 319 of the Clean Water Act and Section 6217 of the Coastal Zone Reauthorization Act. The HRPDC staff has continued

to work with DCR in refining and implementing this program. The management strategy is regularly used by the HRPDC in its efforts to coordinate and facilitate continued enhancement of the region's stormwater management programs.

Other State and Federal Advisory Committees

The HRPDC staff represents the region's localities on a number of other state and federal agency advisory committees. They include:

1. U.S. Army Corps of Engineers (COE), Craney Island Expansion Study Advisory Group and Technical Committee.
2. COE, Elizabeth River Restoration Study Steering Committee. This effort began in 1996-1997 with funding from the VCZMP Technical Assistance Program. HRPDC staff work through 2001 was conducted through a contract with the COE. Because the project did not move forward at that time, while efforts were underway to resolve contractual issues between the COE and localities, no COE contractual assistance has been available since 2001. At the request of the local governments, state and COE, HRPDC staff involvement has continued and been supported, in part, through the TA program. This is another example of VCZMP providing the seed for a regional initiative. (In Fall 2004, agreement was reached among the COE, state and four localities to move forward with the next phase of the project. This consensus, involving legal and technical staffs from the participants was facilitated by the HRPDC. However, federal budget constraints prevented this project from moving forward until Fall 2005. Design of the sediment remediation component of the project underway.) The Steering Committee is continuing to work on development of a long-term strategy for funding this project.
3. COE, Technical Committee, Lynnhaven River Basin Restoration Study. At the request of the City of Virginia Beach, the HRPDC chairs and facilitates the Steering Committee for this project. (This work, under contract to the City of Virginia Beach, is modeled after the successful Elizabeth River Project, described above.)
4. DEQ, Water Supply Permitting Technical Advisory Committee.
5. DEQ, Wetlands Regulations Technical Advisory Committee.
6. COE, Currituck Sound Watershed Restoration Study Technical Committee and Hydrologic Work Group.
7. Secretary of Natural Resources, Water Quality Improvement Fund Advisory Committee.

8. DCR, Watershed Planning Advisory Committee.
9. Virginia Water Resources Research Center, Statewide Advisory Board.
10. DCR, Stormwater Management Regulations Technical Advisory Committee.

Involvement on these Committees includes participation in meetings, review of extensive draft materials, briefing and coordination with local government staff and the Commission, and provision of input reflecting the views of those groups to the Advisory Committee and state or federal agency staff. In some cases, as noted above, the HRPDC has been requested by the participants to chair advisory committees, which expands the effort to include facilitating the consensus and providing logistical support to the committees. On several occasions, the various state agencies and the COE have requested HRPDC staff input and advice concerning ongoing and proposed studies in other areas of Virginia. This advice has focused on appropriate institutional alternatives that could be used to accomplish the studies.

In addition, local government staff have frequently been chosen through the regional coordination process to serve on advisory committees addressing a number of concerns, including stormwater management, water supply planning, dam safety, wetlands regulations, lake nutrient standards, water quality standards, nutrient reduction technology for wastewater, and nutrient trading. In each of these cases, the HRPDC staff provides support to the region's representative and ensures that the local governments have an opportunity through the regional coordination process to have input to the state effort.

Coastal Zone PDC Network

The Coastal PDCs provide a network linking all regional agencies and localities in the Coastal Zone to address environmental issues. Although somewhat more limited in scope, similar networks exist among the Coastal PDCs and their non-coastal counterparts in the southern watersheds insofar as interstate environmental issues with the State of North Carolina are concerned, and with their counterparts throughout the Chesapeake Bay Watershed on Chesapeake Bay related issues. The HRPDC staff has played an integral role in the development and enhancement of these larger networks as well.

Efforts to coordinate activities with the other Coastal PDCs in all facets of environmental planning continued throughout the year. Representative activities focused on exchanging information among the PDCs on the Chesapeake Bay Program including the Chesapeake Bay Agreement, Special Area Management Planning, Blue and Green Infrastructure, septic tanks, erosion and sediment control, stormwater management, financial issues, training for local government staff and general planning issues. The Chesapeake Bay Tributary Strategies effort, which resurfaced as a topic for the Coastal PDCs during 2003, continued throughout 2005 and 2006.

These efforts also involved coordination with non-coastal PDCs on the Chesapeake Bay Agreement, Tributary Strategies, stormwater management and follow-up activities with the State of North Carolina Albemarle-Pamlico National Estuary Program (APNEP), which is funded through the EPA National Estuary Program. The need for and desirability of coordination between the Coastal and non-Coastal PDCs will continue in the coming year in light of implementation activities under the Virginia-North Carolina Bi-State Agreement, ongoing implementation of the Chesapeake Bay Agreement and various watershed planning and water quality management initiatives.

The Coastal PDC Committee develops an annual work program, outlining its activities and priorities for the year. This work program is approved by the Committee and endorsed by the VAPDC Board at their July meetings. The annual work programs continue to focus on monitoring the activities of the Virginia Coastal Zone Management Program, other DEQ programs and the several Department of Conservation and Recreation programs, and exchange of information among the PDCs. Four (4) meetings of the Committee were held during the grant year. Staff participated in three of the four meetings and briefed Hampton Roads committees on the outcomes.

- November 22, 2005
- January 31, 2006
- May 4, 2006
- July 20, 2006

In late 2005, the HRPDC staff participated in the compilation and review of the Section 309 Needs Assessment. HRPDC staff worked with the Institute for Environmental Negotiation at the University of Virginia and Virginia Coastal Zone Management Program staff to provide a complete and accurate account of pertinent activities in Hampton Roads. HRPDC staff also served on the planning committee for the 2005 Coastal Partners Workshop. The Workshop was held on October 5-7, 2005 in Virginia Beach. HRPDC staff presented information on the Southern Watershed Area Management Program at the Workshop.

TECHNICAL STUDIES

Coastal and Estuarine Land Conservation Program Plan

The Coastal and Estuarine Land Conservation Program (CELCP) was established in 2002 for the purpose of protecting coastal and estuarine land with significant ecological, conservation, historical, recreational, or aesthetic value. The CELCP funding process requires the development of a Coastal and Estuarine Land Conservation Program Plan by each coastal state. These plans should outline coastal land conservation priorities and an evaluation process for proposals submitted to the

state. To fulfill this requirement, the VCZMP has developed a draft CELCP Plan for Virginia. HRPDC staff participated in the CELCP Planning Meeting that introduced the draft plan and is assisting with the review and finalization of the plan.

As one element of the Hampton Roads Joint Land Use Study, the HRPDC staff facilitated development of a cooperative approach to land acquisition in the Inter-Facility Traffic Corridor between NAS Oceana and NALF Fentress. This effort involved the Cities of Chesapeake and Virginia Beach and the U.S. Navy. Building on prior work conducted through the SWAMP Program, the “JLUS Strategy” integrated acquisition priorities based on natural resource protection, environmental mitigation, land use compatibility with military air operations and economic issues. The Strategy served as the basis for requests by the U.S. Navy for funding under the Department of Defense Encroachment Partnering Program and by the HRPDC for funding under the Coastal and Estuarine Lands Conservation Program. These proposals were developed by the U. S. Navy and the HRPDC, in cooperation with the two cities. The Strategy is also being used by the City of Chesapeake in prioritizing projects under the City’s Open Space Acquisition Program, developed, in part, through the SWAMP Program, and by the City of Virginia Beach in prioritizing land acquisition opportunities in the area around NAS Oceana.

Tributary Strategies

Through July 1, 1999, the HRPDC participated in the Tributary Strategy development process under a separate VCZMP-funded competitive grant. Refer to HRPDC, Development of Nutrient Management Options for Chesapeake Bay Tributary Strategies - Hampton Roads Planning District: James and York Rivers and Small Coastal Basins - Phase III Final Report, December 1999, for a detailed discussion of this effort. Based on delays in the initial tributary strategy development process, the eventual need to revise the tributary strategies and the need to develop a tributary strategy implementation plan, the HRPDC staff continued to facilitate a regional process through funding under the Technical Assistance Program. A detailed discussion of this effort for the period from July 1, 1999 through September 30, 2003 was included in the HRPDC reports on its Coastal Resource Management Program Technical Assistance Program for those years. A brief summary was included in FY 2003 – 2004 report.

Since 2003, the HRPDC staff has continued to be actively involved in the Tributary Strategies component of the Chesapeake Bay Program. These efforts have been conducted through the Technical Assistance Program and through support from DCR under the Bay Implementation Grant. Regional efforts have focused on the development of water quality criteria (CBP), water quality standards and associated regulations (state), funding, and the state’s watershed planning process. Work efforts have involved monitoring both the Bay Program and state efforts, supporting regional participation in state advisory committees and commenting on draft regulations. It has been accomplished through the Hampton Roads Joint Environmental Committee and the Lower James River (Hampton Roads) Watershed Roundtable.

Through the Roundtable project, a number of private watershed organizations and other interest groups have become engaged in Chesapeake Bay Program initiatives. On a regular basis over the past five (5) years, Roundtable members have been briefed by staff from the HRPDC, local governments, Soil and Water Conservation Districts, state agencies and the Chesapeake Bay Program on the ongoing water quality studies and tributary strategy efforts. They also received briefings from fellow Roundtable members on ongoing projects being conducted within the region by localities, state agencies and private organizations. Communication between those private groups and state and local government staff involved in the development of the tributary strategies and other resource management efforts has been enhanced. This experience has enabled the Hampton Roads region to move forward aggressively in working with the state to develop the Hampton Roads portions of both the James River and the York River Tributary Strategies.

The HRPDC staff and members of the Hampton Roads Joint Environmental Committee continue to be active participants in the state-led effort to revise the York River Tributary Strategy. Again, the participants were prepared for this effort through the long-standing HRPDC effort to facilitate the region's involvement in the Chesapeake Bay Program's efforts. Financial support from the VCZMP Technical Assistance Program has enabled this preparation and participation to occur. During FY 2004 – 2005, HRPDC staff attended quarterly meetings of the York River and Small Coastal Basins Watershed Roundtable. The Group met in September 2006 to discuss the evolution of the Roundtable and determine its direction for the future. HRPDC staff participated in this meeting and continues to monitor the progress of the effort.

The Tributary Strategies process is expected to receive renewed attention during the coming year. The Chesapeake Bay Program has completed the next generation of the Chesapeake Bay Watershed Model. This model is critical to revising the Tributary Strategies. It is understood that the revised Strategies will constitute, at least in part, the implementation plan component of the Chesapeake Bay TMDL, which is now in preparation. Preliminary discussions with the HRPDC Joint Environmental Committee and Strategic Planning Subcommittee have shown support for an effort to develop a regional Tributary Strategy Implementation Plan.

Chesapeake Bay Agreement 2000

During FY 1999 - 2000, the HRPDC staff, in cooperation with the Hampton Roads Chesapeake Bay, Tributary Strategies and Regional Stormwater Management Committees, devoted considerable effort to monitoring the development of the Chesapeake Bay Agreement 2000, providing input to its development and analyzing the impacts of the Agreement on the region's local governments. That work "culminated" in an HRPDC report, Preliminary Analysis of the Potential Impacts on Local Governments Attributable to the Chesapeake Bay Agreement 2000. Based on this analysis, the Commission, at its August 2000 Executive Committee meeting, directed the staff to maintain its active involvement in the Bay Program as it proceeded to finalize strategies and directives and as the state developed legislation to implement the Agreement.

That Commission direction served as the basis for a major work effort by the staff and Committees during the past three years. The HRPDC staff and the HRPDC environmental committees have focused their efforts on providing analysis and input to the development of the various approaches to implementation of the Agreement. In addition to participating in the MAWG and various Bay Program work groups, the HRPDC staff has worked closely with the various state agencies in evaluating alternative implementation, monitoring and communication strategies. The HRPDC staff has also developed informational documents to support Committee deliberations.

The 2001 Session of the Virginia General Assembly enacted legislation requiring the Secretary of Natural Resources to report annually to the General Assembly on progress toward achieving the commitments of the Chesapeake Bay Agreement 2000. In 2001 and 2002, the HRPDC staff coordinated local government response to a survey, which served in part as the basis for the Secretary's report. The HRPDC response described cooperative regional activities directed at the commitments and highlighted innovative local government programs. No additional input has been requested or provided for the 2003, 2004 or 2005 Reports.

In developing the 2001 C2K report for the Secretary, state agencies identified the need to develop a sustainable mechanism for communication between state agencies and local governments, and for supporting local government implementation of the Agreement. The HRPDC staff was invited to participate in an informal work group with staff from the Departments of Chesapeake Bay Local Assistance, Conservation and Recreation and Environmental Quality to explore alternative approaches. The group evaluated a number of institutional mechanisms that could serve these functions, including Watershed Conservation Roundtables, Planning District Commissions and state associations of local governments. Based on this evaluation, the group developed the concept of a Watershed Planning Organization, modeled after the existing transportation planning mechanism, the Metropolitan Planning Organization. The concept was described in a draft paper, "Local Government Involvement in Implementation of the Chesapeake Bay Agreement 2000," included in the FY 2000-2001 HRPDC Technical Assistance Program Report. The basic concept for the Watershed Planning Organization had been previously identified during discussions of the HRPDC Environmental Strategic Planning Subcommittee. In February 2002, the HRPDC staff briefed the HRPDC on this concept and was encouraged to continue pursuing a pilot program with the state agencies. Evaluation and refinement of the WPO concept is continuing through the HRPDC Environmental Strategic Planning Subcommittee, which focuses on technology issues. Based on recent Subcommittee discussions, it is expected that recommendations on implementation of this concept will be provided to both the HRPDC and the state for consideration during 2007.

In March 2006, HRPDC staff prepared and submitted an application to be considered for the Chesapeake Bay Partner Community Award. This application outlined the many successful activities, programs, and technical studies conducted throughout the region to address critical Chesapeake Bay and related environmental

management issues. The application, approved by the HRPDC Directors of Utilities, Chesapeake Bay and Regional Stormwater Management Committees, represented a collaborative effort by HRPDC staff, the region's local governments and regional agencies.

Because the award was originally established to recognize the contributions of individual localities, the Hampton Roads region was not awarded status as a Chesapeake Bay Partner Community. However, the Chesapeake Bay Program expressed interest in adopting a regional award category to give it the time and review necessary to adopt quality benchmarks. HRPDC staff has been asked for its cooperation in helping the Chesapeake Bay Program develop regional benchmarks and application language for the regional award category.

In cooperation with the Hampton Roads Chesapeake Bay Committee, HRPDC staff prepared an updated Summary of Local Chesapeake Bay Programs in Summer 2006. During the early 1990s, staff from the Hampton Roads Planning District Commission and several member localities surveyed the region's localities to compare approaches being employed to meet the CBPA regulations. The survey results were reported on an annual basis through 1992 when the programs of most Hampton Roads localities had been approved. The 2006 Summary represented an extension of this earlier effort and reflected changes to the Chesapeake Bay Preservation Area Designation and Management Regulations, which were amended in December 2001 and became effective in March 2002. The Summary provided information on the status of all of the Hampton Roads localities subject to the CBPA, and was distributed through the Joint Environmental Committee. A copy of the Summary is contained in Appendix B.

Environmental Strategic Planning Studies

The HRPDC staff and Environmental Committees have identified the need for a more proactive approach to involving the Commission in addressing environmental issues during the coming Fiscal Year. The HRPDC staff began this effort by developing a Discussion Paper on major environmental issues facing Hampton Roads over the next 5 – 10 years. This Paper was reviewed and refined through a series of discussions with the Environmental Strategic Planning Subcommittee, the Directors of Utilities Committee and the Joint Environmental Committee. The refined Paper served as the basis for briefing the HRPDC at its September Executive Committee Meeting on the issues and the comprehensive process developed for considering them. Copies of the Discussion Paper and the presentation are included in Appendix C. This process will continue throughout FY 2006 – 2007 and will be supported through a variety of funding sources.

Other Studies

Through its Directors of Utilities Committee, the HRPDC staff finalized, in 1997, Regional Water Supply Watershed Management in Hampton Roads, partially funded under a prior VCZMP grant. Based on this effort, the HRPDC staff, in cooperation with

the Directors of Utilities Committee and the Directors of Planning for the region's sixteen localities, developed a Model Water Supply Watershed Management Ordinance, which was completed in 1999. In 2002, the HRPDC and the region's localities completed, in cooperation with the Virginia Department of Health, an assessment of contamination threats to the region's water supplies (surface and ground) through the state's Source Water Assessment Program. Work to monitor development activities in proximity to the region's water supply intakes continues. In recent months, several localities have requested background information on these efforts from the HRPDC staff. They have indicated a desire to reactivate discussion of these issues. These watershed management planning initiatives are other examples of a VCZMP grant serving as the seed for successful new local initiatives. Similarly, work by the HRPDC to undertake comprehensive planning studies for the member local governments, and, in cooperation with DEQ and the U.S. Geological Survey, to examine Coastal Plain ground water issues and update the Coastal Plain Ground Water Model are examples of a VCZMP-funded project serving as the seed for successful local initiatives. Based on this work, the HRPDC and DEQ are exploring needed modifications to the state's ground water regulatory approach

In 1998, the HRPDC completed the study, Managing Multiple Recreational Use Conflicts in the Waters of Hampton Roads, through a VCZMP competitive grant. During the course of the year, the HRPDC staff continued to respond to requests for information about this study from other parts of the state and the country. This study served as the basis for work through the Section 309 Southern Watershed Area Management Program to develop a Memorandum of Agreement for Waterway Use Conflict Education on the North Landing River. That MOA was executed in October 2001. A copy of the MOA was provided separately to DEQ as part of the project completion report for Phase VI of the SWAMP Program. As indicated in the SWAMP Phase VIII completion report, a draft MOA for Back Bay was prepared. Following intensive public review of the draft MOA, this information was incorporated into educational materials that were more acceptable to the citizens than an MOA, which implied a regulatory program.

In order to implement the North Landing River Water Use Conflict MOA and the related Back Bay Educational Program, educational brochures and signs were developed through the SWAMP Program. Funding through the VCZMP program was also obtained to support construction of informational kiosks to be placed at public access sites in the two watersheds. Signs for the access sites on the North Landing River were funded through the SWAMP Program. For the access sites in the Back Bay Watershed, funding was provided by the VCZMP through the FY 2003 – 2004 TA Program. Through the TA program, the HRPDC staff worked with state and federal agencies to ensure that the kiosks could be placed on state and federal properties. This included the development of contractual agreements with the U.S. Fish and Wildlife Service and the Virginia Department of Game and Inland Fisheries (DGIF) and the obtaining of permits from the DGIF. In order to evaluate the effectiveness of the educational program, a survey was completed in July 2004. The kiosks were installed and a follow-up survey was conducted in the fall of 2005. During 2006, the U.S. Fish

and Wildlife Service instituted a regulatory approach to managing water use in the Back Bay National Wildlife Refuge waters.

Discussions with the City of Virginia Beach about development of an MOA for the Lynnhaven River continue. The MOA is now expected to be part of a new comprehensive watershed management initiative.

Over the past several years, the HRPDC has conducted, in cooperation with the Cities of Chesapeake and Virginia Beach and the Department of Environmental Quality, the Southern Watershed Special Areas Management Program (SWAMP). Several components of the SWAMP Program were completed concurrently with the HRPDC FY 2002-2003 Technical Assistance Program. Although VCZMP funding for the SWAMP Program ended with completion of Phase VIII in 2005, the localities and the state and federal signatories to the various MOAs, developed through SWAMP, have indicated the need to continue a number of SWAMP-related activities. They include the MOA, noted previously and the Multiple Benefits Conservation Plan MOA, which is designed to bring more certainty and effectiveness to the compensatory mitigation process. Absent other funding, support for these efforts is being provided through the Technical Assistance Program. Also, because of the success of the MBCP effort to date, its potential application to the rest of the region has been coordinated with development of the Conservation Corridor (green infrastructure framework) for the region and with the broader "Coastal Visioning" project. Separate funding to support that effort was obtained from the VCZMP for work conducted during FY 2004 – 2005. As is true of many other initiatives, the idea for this competitive project evolved through the Regional Coordination process.

Two workshops on green infrastructure topics were held at the HRPDC in 2006. The first workshop, held on May 25, 2006, provided an overview of green infrastructure initiatives in the mid-Atlantic region. The second workshop, held on September 14, 2006, was focused on funding and implementation issues associated with green infrastructure. In addition to the workshops, several initiatives are underway to capitalize on the Conservation Corridor project. These efforts include continued discussions with the APNEP Program in North Carolina on the development of a green infrastructure network that links across the Virginia/North Carolina border, development of a summary report on green infrastructure efforts in Hampton Roads, continued work with Hampton Roads localities to refine and integrate the Conservation Corridor system with future land use plans and a pending presentation to the Commission on green infrastructure topics.

LOCAL ASSISTANCE AND COORDINATION

Technical Assistance

This element of the Hampton Roads Technical Assistance Program entails staff support and assistance to local governments and private entities as they address key

coastal resources and other environmental issues such as Tributary Strategies, habitat restoration, riparian buffer creation and protection, and other aspects of the Chesapeake Bay Program, wetlands and dune protection, and nonpoint source pollution, in their comprehensive planning process and related activities. Specific local projects to be addressed through this element are identified by the localities throughout the grant year. On average, the HRPDC staff responds to five (5) to ten (10) requests for assistance under this program from the local governments per week. These requests encompass assistance on grant proposals, identification of state or federal agencies that may be of assistance for local projects, identification of technical resources that may be useful to a locality in developing a study, and responding to an elected official's request for information. The localities and others frequently turn to the HRPDC for assistance on GIS mapping and analysis projects. Through this element of the program, the HRPDC staff assists private entities, such as the Back Bay Restoration Foundation, Elizabeth River Project, Friends of Powhatan Creek, Hoffler Creek Wildlife Foundation, Lynnhaven River 2007 and others in their environmental planning and restoration initiatives. Additional technical information on wetlands, hazardous waste sites, soils and aerial photographs is provided to private consultants. It should be noted that the soils information being used for the region's core cities, both in paper and digital form, was initially prepared through a VCZMP grant to the HRPDC. Documentation of a representative technical assistance effort is included in Appendix D.

The HRPDC staff continued to work with representatives of the affected local governments in their review, evaluation and use of recent PDC environmental management reports. The focus of this effort has been on the review and use of the Tributary Strategies studies, Waterway Use Conflict Study and the various stormwater and water resource management studies, completed over the last several years.

Since 2002, the HRPDC staff has worked closely with Lynnhaven River 2007 in establishing a watershed organization to enhance city, state and federal efforts to restore the Lynnhaven River. Lynnhaven River 2007 has formally organized to support watershed planning initiatives being pursued by the City of Virginia Beach and to actively promote private individual efforts at watershed protection and restoration. The HRPDC staff continues to actively support this initiative through participation on its Steering Committee and through active involvement in its education and marketing programs.

The HRPDC staff continued to advise the region's sixteen localities on environmental issues in conjunction with development of and revisions to local comprehensive plans, development regulations and related issues. The primary issues addressed through this program continue to be the evolving state and federal Wetlands Regulatory Programs, Stormwater Management Programs, Ground Water issues and all facets of the Chesapeake Bay Program. All of the region's member localities have received individual assistance through this program during the past year. A major element of this effort continues to be assisting the localities in achieving and maintaining consistency with the Chesapeake Bay Preservation Act Regulations. An increasing emphasis of local government support on environmental issues has been in the

legislative and regulatory arena. During FY 2005 - 2006, the areas of emphasis included stormwater management, wetlands, water supply, nutrient reductions and funding for state environmental programs, such as the Chesapeake Bay Program.

The HRPDC staff assisted several private consultants in the acquisition of aerial photography and related data for use in environmental audits and certifications on the hazardous waste status of various commercial and industrial sites. Several consultants and agencies were assisted in acquiring nonpoint source/stormwater data, information about Best Management Practices including vegetative practices, soils and nontidal wetlands, as well as updates on the status of environmental management programs, including legislation and regulations. HRPDC staff also provided assistance to consultants conducting environmental impact assessments.

The HRPDC continued to participate on working groups for the Elizabeth River Project. The HRPDC Chairman and Executive Director serve on the ERP Leadership Review Board. The HRPDC staff provides technical support to the Chairman and the Executive Director in these roles. The HRPDC staff continues to serve on the ERP Water Quality Monitoring and Sediment Remediation Advisory Committees and new initiatives to address redevelopment of the Money Point area in the City of Chesapeake and new development in the Scott's Creek area of Portsmouth. The HRPDC staff is also working with the ERP and various governmental groups on a variety of initiatives to restore and manage Paradise Creek. The HRPDC staff continues to work with the ERP staff on other issues, such as stormwater management and development and exchange of educational materials.

The HRPDC staff continued development and enhancement of the region's Geographic Information System, using ARCINFO, ARCVIEW, ARCIMS and ARCGIS. The HRPDC staff continued to work with the localities, other PDCs and state agencies in both Virginia and North Carolina in coordination of GIS planning and implementation. With the HRPDC system now fully functional, a concerted effort is being made to take advantage of this technology in all HRPDC technical studies. GIS development activities have focused on support for ongoing grant-funded technical studies, e.g. Hampton Roads Conservation Corridor Study, for comprehensive planning services, conducted for individual local governments, and other ongoing HRPDC programs. Appendix E contains samples of GIS map coverages produced through the GIS program to support HRPDC technical studies. As with many other components of the HRPDC planning program, VCZMP financial support enabled the HRPDC to establish the environmental component of its GIS system. It provided a seed for the establishment of a comprehensive regional system, which is now capable of supporting a variety of regional initiatives.

Regional Coordination Process

The Hampton Roads Technical Assistance Program enables the HRPDC to maintain the regional coordination process on environmental issues through the Hampton Roads Chesapeake Bay Committee, while also providing links to other

ongoing regional environmental programs. This element supports local government implementation of the Bay Act, coastal resources management, and other state and federal environmental programs. Links to other HRPDC environmental committees, addressing stormwater, wastewater, tributary strategies, water supply, and ground water management, as well as the Chesapeake Bay Program and North Carolina environmental initiatives are maintained through HRPDC staff support and common Committee memberships from both the region's localities and state agencies. During 2005 and 2006, the HRPDC staff continued its efforts to enhance this linkage through the convening of Joint Meetings of several of the Committees.

Through the HRPDC Environmental Strategic Planning Subcommittee process, Committee redundancy was identified as an issue that should be addressed in order to further improve the regional coordination process. In particular, the Subcommittee identified the Hampton Roads Tributary Strategies Project Steering Committee as being redundant with other Committees, especially in light of the perceived role of the Lower James River (Hampton Roads) Watershed Roundtable. The Subcommittee recommended that the Tributary Strategies Committee be abolished. Governmental agency representatives – local government, Soil and Water Conservation Districts and state and federal agencies – continued to serve on the Hampton Roads Chesapeake Bay and/or Regional Stormwater Management Committees. In cases, where they were not already represented on these Committees, they were assigned Committee membership, based on their program responsibilities or expression of interest. Citizen members of the Tributary Strategies Committee and all agency representatives became members of the Lower James River (Hampton Roads) Watershed Roundtable. Based on experience over the past two years, Committee members have indicated that this structure continues to meet their needs.

Chesapeake Bay and Tributary Strategies Process

Historically, a major emphasis of the regional coordination process has been on work with the local governments in responding to the Chesapeake Bay Preservation Act implementation process, while ensuring that local efforts may take advantage of other related initiatives. The Hampton Roads Chesapeake Bay Committee is the primary institutional mechanism for accomplishing this. The Chesapeake Bay Committee focused on development of local programs to comply with the revisions to the Bay Act Regulations, adopted by the Chesapeake Bay Local Assistance Board in December 2001, and development of a regionally consistent approach to use of the Intensely Developed Areas provisions of the Bay Act Regulations. To facilitate local CBPA implementation, the Committee determined that a Regional CBPA Procedures Manual should be developed. The technical work will be accomplished during FY 2006 – 2007.

During the course of the grant year, the HRPDC staff continued coordination of the ongoing consideration by the region's localities of the Tributary Strategies. Significant activities related to the Tributary Strategy effort included Committee participation in and monitoring of the activities of the York River and Lower York Coastal Basins Roundtable, coordination of the Lower James River (Hampton Roads)

Watershed Roundtable, and review of revised water quality standards for the Chesapeake Bay and its Tributaries and associated permitting regulations. Because of regulatory issues associated with stormwater and wastewater, the HRPDC staff and Committees focused on those issues during the year. Therefore, attention to the Tributary Strategies was reduced when compared to previous years.

The following points summarize the activities of the Hampton Roads Chesapeake Bay Committee during the year. Most meetings were joint meetings with the Regional Stormwater Management Committee. (To simplify this discussion, joint meetings of these committees are referred to as meetings of the HRPDC Joint Environmental Committees.) Because of the close link between the activities of those Committees, this section also addresses the activities of the Lower James River (Hampton Roads) Watershed Roundtable. (Table 1 contains a summary of agency briefings for these Committees. Appendix F contains representative agenda materials for meetings of these Committees.)

- October 6, 2005 - This was a meeting of the Joint Environmental Committee. HRPDC staff provided briefings on the activities of the York River Watershed Roundtable and the Lower James River (Hampton Roads) Watershed Roundtable. A review of the Regional Cooperation in Stormwater Management Summary Report was also provided. The Committee approved the Summary Report with minor amendments. DCR staff distributed copies of a memorandum on construction activity pollution prevention enforcement and a letter to the HRPDC regarding effectiveness indicators and water quality nutrient loadings. The Committee agreed that the Permitting and Compliance Indicator should be modified to state that location and design could mitigate the impact of development. They asked that the change be incorporated into the Indicators.
- October 28, 2005 - This was a meeting of the Lower James River (Hampton Roads) Watershed Roundtable. DEQ staff provided a briefing on statewide implementation activities, including an overview of the Chesapeake Bay Watershed Nutrient Credit Exchange Program, the new water quality and Chesapeake Bay standards, and the technology standards and load allocations adopted in September 2005. DCR staff provided an overview of the Virginia Agricultural BMP Cost-Share Program. Staff representing the Tidewater, Colonial, Peanut, Virginia Dare, and James River Soil and Water Conservation Districts provided updates on their programs and activities. DCR staff also provided an overview of the FY 2006 Water Quality Improvement Fund Request for Grant Applications and information on the development of the Lower James River Implementation Plan. The Roundtable suggested that the state should get local and regional input before a plan is developed. The Roundtable agreed that it and the Hampton Roads Joint Environmental Committee should act as an advisory group in this process, and that a subgroup should be selected by HRPDC staff to review projects and make recommendations on priorities to the full Committee.

- December 1, 2005 - This was a meeting of the Joint Environmental Committee. HRPDC staff provided a report on the local Chesapeake Bay Board training session held in November. Local government staff provided an overview of the revisions to the Virginia Water Protection Program General Permit regulations. HRPDC staff also reported that a contract with DCR for facilitation of the Tributary Strategy Implementation Plan process was being developed. A 9-month grant will provide limited funding for roundtable meetings and briefings. The Committee agreed with the concept that production of a plan within that time might not be feasible, but planning options could be screened.
- January 5, 2006 - This was a meeting of the Joint Environmental Committee. A meeting of the Regional Stormwater Management Committee followed. Division of Chesapeake Bay Local Assistance (DCBLA) staff provided a briefing on agency staffing changes and the status of local program reviews. Local government staff provided an update on revisions to the Virginia Water Protection Program General Permit regulations. HRPDC staff briefed the Committee on the HRPDC Stormwater Modeling Project. Three Committee members agreed to assist in the evaluation of available models as part of the project. The meeting also included the annual Committee retreat to discuss the status of regional activities, program direction for FY 2006 - 2007, and the Regional Stormwater Management Program Budget.
- February 2, 2006 - This was a meeting of the Joint Environmental Committee. Virginia Marine Resources Commission staff presented information on the VMRC Wetlands Mitigation and Compensation Policy and Supplemental Guidelines. HRPDC staff briefed the Committee on three NOIRAs issued by DCR regarding updates to dam safety and stormwater management regulations, as well as stormwater permit fees. The Committee endorsed the recommendations of the Environmental Strategic Planning Subcommittee for regional representatives to serve on the Technical Advisory Committees organized to review these issues.
- March 2, 2006 - This was a meeting of the Joint Environmental Committee. The Committee discussed a number of issues related to the implementation of the Chesapeake Bay Preservation Act (CBPA), including the designation of Intensely Developed Areas in urbanized settings and the need to address development on all parcels over 2500 square feet. The Committee also discussed staffing difficulties such as funding deficiencies, recruitment, and retention. The Committee approved an application for recognition of the region as a Chesapeake Bay Partner Community and recommended submission to the Chesapeake Bay Program. HRPDC staff informed the Committee that the Department of Environmental Quality issued a Public Notice requesting comments on proposed amendments to the state's Water Quality Standards to incorporate nutrient standards for lakes and reservoirs,

which were completed with advice from a Technical Advisory Committee that included regional representatives. The Committee approved these comments with the provision that the section on Fishery Assignments mentions fish ladders as another cause for fishery overrating. HRPDC and local government staff provided additional briefings on the regional Green Infrastructure study, DCR stormwater management regulations, and the Tributary Strategies Implementation Plan.

- April 6, 2006 - This was a meeting of the Joint Environmental Committee. DCBLA staff informed the Committee about several training opportunities and workshops being offered on topics related to the CBPA. They also informed the Committee of an Accessory Structure/Redevelopment Survey being used to gather information on the number and types of accessory structures and redevelopment requests localities receive. The Committee discussed the new Wetlands Compensation Policy adopted by the VMRC, the issue of payment of fees in lieu of mitigation, and the approaches being followed in each locality to set such fees. HRPDC staff provided briefings on the HRPDC Environmental Clearinghouse, the Outer Continental Shelf (OCS) oil and gas leasing development process, the Green Infrastructure study, and the update of the CBPA Local Programs Matrix. HRPDC staff also informed the Committee that a model had been selected for the Water Quality Monitoring project. Several members of the Committee expressed interest in participating on a subcommittee to produce a regional Chesapeake Bay Program Policies and Procedures Manual as a stand-alone document.
- May 11, 2006 - This was a meeting of the Joint Environmental Committee. DCR staff briefed the Committee on the development of the Virginia Outdoors Plan 2007. DEQ staff reviewed the Virginia Water Protection Permit Program regulation regarding in-lieu fee funds as a form of compensatory mitigation. The Committee agreed with an HRPDC staff recommendation to reconvene the Proprietary BMP Subcommittee to review vendor proposals, particularly because vendors continue to inquire about the status of the program. The Committee also recommended approval of the updated CBPA Local Programs Matrix with minor revisions.
- June 1, 2006 - This was a meeting of the Joint Environmental Committee. HRPDC staff briefed the Committee on the completion of the Hampton Roads Conservation Corridor Study (HRCCS) project and the availability of the final report and GIS data. The HRPDC staff also informed the Committee that implementation actions for the HRCCS plan began with a workshop in May, and that a second workshop was planned for the summer. HRSD staff briefed the Committee on the General Watershed Permit Regulation allowing point source dischargers to meet nutrient discharge allocations individually or collectively. The Regulation also includes nutrient trading provisions as previously discussed by the Committee.

- July 6, 2006 - This was a meeting of the Joint Environmental Committee. URS staff briefed the Committee about the Hampton Roads Public Works Academy (HRPWA). HRPWA provides public works career training for a variety of career tracks. The purpose of the Academy is to refresh and upgrade knowledge, skills and abilities of current employees, provide opportunities for career development and continuing education, educate, advise and recruit future employees, promote regional cooperation and consistency, and provide the lowest possible cost for training. HRPDC staff provided the Committee with information about the Lynnhaven River TMDL Implementation Plan process. HRPDC staff also informed the Committee about a small grant from DCR to support development of an Implementation Plan for the Lower James River (Hampton Roads) Tributary Strategy. Finally, a questionnaire was distributed to Committee members regarding staffing, fees, and other components of local stormwater and E&S programs. The information was being compiled to address some of the Stormwater TAC's questions regarding Stormwater program costs.
- August 3, 2006 - This was a meeting of the Joint Environmental Committee. DEQ staff provided the Committee with a briefing on the 2006 Water Quality and Impaired Waters Integrated Report. DEQ staff also provided a report on the TMDL Program. The Committee participated in an extended discussion of both topics, and several Committee members discussed issues concerning TMDL reporting, the relationship of the 2010 deadline to development of Implementation Plans, and the need for more public support and resources. DCBLA staff provided an update on activities at the agency, including compliance evaluations. They also noted that the DCBLA workshop series would continue with a session on watershed and land use management integration to be held in Richmond and another workshop to be held at VIMS to address riparian buffers. DCR staff reported on a new system for E&S program review using a checklist for components and based on a 100-point scale. Final copies of the CBPA Local Programs Matrix were also distributed at this meeting.
- September 7, 2006 - This was a meeting of the Joint Environmental Committee. VIMS staff provided the Committee with a briefing on the mapping tools that are available for use in conjunction with coastal management efforts in Virginia. Available tools include the Chesapeake Bay Shoreline Inventory (Shoreline Situation Reports), the Virginia Shoreline Manager's Assessment Kit (SMAK), and the Wetlands Mitigation Targeting Tool, which are available through the Center for Coastal Resources Management web site. HRPDC staff provided a status report on the progress of the development of the new Stormwater Management Regulations and explained the intent of the HRPDC Environmental Strategic Planning Process to discuss environmental issues and solutions with the Commission on a regular basis. The Committee reviewed and discussed both issues. Environment Virginia 2007 staff provided the Committee with a briefing on the

conference and asked for ideas for sessions that would address the interests of local government staff. Committee members offered a number of suggestions for improving the conference and making it more accessible to local government staff. Finally, DEQ staff provided the Committee with a briefing on the potential state assumption of the 404 Wetlands Permitting Program.

TABLE I
SUMMARY OF AGENCY BRIEFINGS
JOINT ENVIRONMENTAL COMMITTEE
October 2005 - September 2006

Date	Agency	Topic
10/6/2005	Department of Conservation and Recreation	Stormwater Management Program Indicators of Effectiveness
12/1/2005	City of Chesapeake	Virginia Water Protection Program General Permit regulations
1/5/2006	Division of Chesapeake Bay Local Assistance	Chesapeake Bay Preservation Act programs
	City of Chesapeake	Virginia Water Protection Program General Permit regulations
	Department of Conservation and Recreation	Stormwater Permits
2/2/2006	Virginia Marine Resources Commission	Virginia's Wetlands Mitigation and Compensation Policy and Supplemental Guidelines
	Division of Chesapeake Bay Local Assistance	Chesapeake Bay Preservation Act programs
	Department of Conservation and Recreation	Stormwater Permits
3/2/2006	City of Virginia Beach	Lake Nutrient Standards
	City of Virginia Beach	DCR Stormwater Management Regulations
4/6/2006	Division of Chesapeake Bay Local Assistance	Chesapeake Bay Preservation Act programs
	Department of Environmental Quality	Virginia Water Protection Permit Program
5/11/2006	Department of Conservation and Recreation	Virginia Outdoors Plan 2007
	Department of Environmental Quality	Virginia Water Protection Permit Program
6/1/2006	Hampton Roads Sanitation District	VPDES General Watershed Permit for Nutrient Discharges and Nutrient Trading
7/6/2006	URS	Hampton Roads Public Works Academy
8/3/2006	Department of Environmental Quality	Impaired Waters List
	Department of Environmental Quality	Total Maximum Daily Load Program
	Division of Chesapeake Bay Local Assistance	Chesapeake Bay Preservation Act programs
	Department of Conservation and Recreation	Erosion and Sediment Control Program
9/7/2006	VIMS	Shoreline Management Tools
	Environment Virginia Committee	Environment Virginia 2007 Conference
	Department of Environmental Quality	Virginia Wetlands Program

As indicated in the previous synopsis of meetings conducted as part of the Regional Coordination Process, the HRPDC staff facilitated development of consensus comments by the Committees on a number of state and federal regulatory issues and programs. Copies of representative comment packages are included in Appendix G.

Other Environmental Coordination Processes

Wetlands Process

During the course of the year, the HRPDC staff monitored developments associated with the state and federal wetlands regulatory programs, advising the localities on recent court decisions, federal regulatory guidance, technical studies and development, implementation of the State Programmatic General Permit by the Norfolk District of the Corps of Engineers, and ongoing revisions of the Virginia Water Protection Permit. Information on wetlands issues has been exchanged electronically and through the monthly meetings of the HRPDC Environmental Committees. The involvement of staff from VMRC and DEQ in Committee meetings as well as new DEQ initiatives related to wetlands will reinvigorate the Committee consideration of wetlands regulatory issues.

The discussions of the HRPDC staff and the HRPDC Ad Hoc Wetlands Advisory Committee positioned the region so that it could proactively respond to the Virginia Water Protection Permit Regulations. They have also laid the groundwork for the region to examine a number of implementation options to facilitate compliance with these regulations. As noted previously, the Multiple Benefits Conservation Plan model, developed through the SWAMP Program, is being evaluated as a vehicle for moving forward with a regional response to the Wetlands Regulations. It also assisted in developing a green infrastructure program for the region. The green infrastructure/conservation corridor study provides another vehicle for use in addressing wetlands issues.

Stormwater Management

Efforts to coordinate local government stormwater management programs are continuing. Key issues being considered through this process are establishment and operation of stormwater utilities, compliance with state and federal regulations, public education, state efforts to implement the consolidated stormwater program, and development of applications for renewal of the stormwater Municipal Separate Storm Sewer System (MS4) permits for the region's six larger municipalities. Major emphasis is being placed on the development of new state stormwater management regulations and negotiation of the Phase I MS4 permits. This is a continuation of activities conducted since the late 1980s through both the Technical Assistance Program and competitive grants from the VCZMP. As indicated in previous reports, a formal regional stormwater management program, funded through special local assessments, has been established and has continued to grow since 1997. The VCZMP funding provided the seed to establish this program. Building on this prior work, the HRPDC staff is

facilitating successful locally funded efforts by the region's localities to develop a regionally consistent approach to the Regulations requiring Virginia Pollutant Discharge Elimination System Permits for Municipal Separate Storm Sewer Systems. That effort reached fruition in March 2003 when six localities received their Phase II VPDES Permits. In March 2004 and 2005, the HRPDC coordinated the effort by these six localities to complete their first annual permit reports. Work continues to develop and refine program elements consistent with those permits.

Also, during 2003, the HRPDC and the member localities finalized a Memorandum of Agreement, formally establishing the Regional Stormwater Management Program. The MOA outlines the duties and responsibilities of the HRPDC and the localities to develop and implement regional stormwater management programs, establishes the funding mechanism to support those programs and addresses liability issues. It provides a strong institutional framework for long-term program development and planning to resolve stormwater related water quantity and quality problems.

Water Supply

In May 1993, the staff was requested to take on a significant new activity - development of a local/regional position on the proper role of state government in water supply planning, regulation and/or provision. Initiated, in part, as a response to the State Water Commission's effort to develop a state water policy, this activity, originally funded through a VCZMP Technical Assistance Grant, has evolved into a comprehensive locally funded water resource management program. Passage of a new study resolution by the General Assembly in 2002, action by the Governor to make water supply a key focus of his Administration and the drought of 2002 returned the question of state water law and policy to the forefront. Reflecting regional input, developed through the Directors of Utilities Committee, legislation was enacted during the 2003 Session of the General Assembly to establish a state water planning program, involving preparation of local and/or regional water supply plans. Because of its earlier work on this topic, the Hampton Roads region was positioned to play an influential role in this effort. From 2003 through the present, the HRPDC staff and Directors of Utilities Committee participated in the state's Technical Advisory Committee, reviewing and commenting on draft materials developed through this process. The basic planning regulation became effective in November 2005. Permit regulations affecting water supply projects are expected to become final in 2007.

In 1997, the HRPDC staff in cooperation with the HRPDC Directors of Utilities and Directors of Planning Committees, completed Water Supply Watershed Management In Hampton Roads, the preparation of which was partially funded through a competitive grant from the VCZMP. Based on the report's recommendations, the HRPDC staff in cooperation with the Committees developed a Model Water Supply Watershed Management Ordinance. With financial assistance from the Virginia Department of Health, the HRPDC staff and Committees successfully completed the Hampton Roads Source Water Assessment Program, which is required to meet federal

Drinking Water Regulations and which was one of the primary technical recommendations of the VCZMP-funded effort. Efforts to integrate the Model Ordinance and the SWAP data and recommendations into local land use planning and regulation are continuing. Several localities have recently expressed a desire to revisit and enhance this watershed protection initiative. Again, the VCZMP provided the seed, through financial support for the local coordination process and a comprehensive technical study, for an important local initiative.

In January 2004, the HRPDC Directors of Utilities Committee endorsed a plan to develop a regional water supply plan for the Hampton Roads Region that ensures the long-term availability of a high quality, safe water supply for the citizens of Hampton Roads and enables the localities of the Hampton Roads Region to meet the local and regional water supply planning requirements of the Commonwealth of Virginia. All local governments in Hampton Roads must submit to DEQ a local water supply plan or participate in the submittal of a regional water supply plan. The local governments in Hampton Roads recognize the benefits, in terms of cost, coordination and regulatory compliance, of proceeding with a Regional Water Supply Planning Process. Consensus regional goals to guide the water supply planning program have been developed. A draft Memorandum of Agreement to guide this process was approved by the HRPDC in October 2006. The local review and approval process is underway. HRPDC staff research and data collection is also underway.

Wastewater

Fat, oil and grease (FOG) discharged by residential, commercial and institutional and industrial users present a significant problem for wastewater collection and treatment systems. To address these problems, a growing number of local governments have adopted public education regulatory programs dealing with FOG management. Since this is a problem region-wide, it made sense to approach it collaboratively. A small subcommittee was formed under the auspices of the Hampton Roads Planning District to begin the initial phases of a regional FOG education effort. The subcommittee evaluated and analyzed local SSO data and noticed patterns in residential areas, as well as "restaurant alleys". With a limited initial budget, baseline research was conducted and the initial phases of the program will focus on residents and restaurants.

A regional reporting system for sanitary sewer overflows has increased efficiencies for localities as well as the Department of Environmental Quality. Coordinated by the HRPDC in conjunction with the member localities, HRSD, URS Corporation and the DEQ, this effort fully automated reporting requirements for sanitary sewer overflows in the region. HRPDC staff continues to manage the database and provide technical assistance for participating localities and the DEQ. In addition to streamlining the reporting process, localities are able to conduct queries and generate reports to increase efficiencies in their systems. HRPDC staff has presented this system at a variety of conferences and meetings across the Commonwealth, with the long-term goal of attempting to take the system statewide.

Beginning in 2001, the HRPDC staff and the Directors of Utilities Committee developed a comprehensive approach to addressing wastewater issues in Hampton Roads. In addition to the educational and reporting efforts described above, a series of studies identified the need for additional facilities for drying grit and grease removed from the wastewater system and the feasibility of providing regional facilities to address that need. One facility is presently being designed through the Hampton Roads Sanitation District (HRSD), based on an agreement facilitated by the HRPDC staff. An agreement for a second facility is being facilitated by the HRPDC staff with five Peninsula localities, HRSD and the Virginia Peninsulas Public Service Authority.

The Directors of Utilities Committee is developing a cooperative approach to working with the Virginia Department of Environmental Quality and the U.S. Environmental Protection Agency to address issues associated with sanitary sewer overflows. The Directors of Utilities Committee is moving toward consensus on a regional consent order with DEQ to satisfy state and federal regulatory expectations. To facilitate consideration of the technical aspects of the issue, a subcommittee (Capacity Team) has recently been convened.

Through the regional coordination process, the HRPDC works to ensure that local government planning and implementation activities in the areas of stormwater management, water supply and ground water management, wastewater, Chesapeake Bay Preservation Act and Virginia Coastal Zone Management Program are coordinated and mutually supportive. The synergy inherent in this coordination process provides opportunities for local government innovation and enhancement of activities in each of these areas.

Environmental Strategic Planning Process

The HRPDC staff continues to work with the HRPDC Hampton Roads Chesapeake Bay, Regional Stormwater Management, and Directors of Utilities Committees, as well as the three regional environmental education programs, to evaluate and enhance the HRPDC Environmental Planning Program. This effort is directed at ensuring that HRPDC activities assist the localities in the most cost-effective and comprehensive fashion. This has resulted in a number of improvements to HRPDC program management and direction and has enhanced the effectiveness of several regional positions. Accomplishments of this ongoing strategic planning effort include:

- Joint Meetings of the environmental committees, including the Hampton Roads Chesapeake Bay and Regional Stormwater Management Committees.
- Increased use of electronic communications.
- Restructuring of the environmental committees in response to the creation of the Lower James River (Hampton Roads) Watershed Roundtable.

- Integration of regional environmental education programs, under the name HR3.
- Preparation of several environmental education materials through HR3.
- Review, analysis and preparation of regional comments regarding water quality standards, nutrients, technology standards, wetlands and stormwater regulations.
- Examination of cross-cutting issues, such as watershed management planning and appropriate institutional arrangements to more effectively address such issues.

During FY 2005 – 2006, the HRPDC Environmental Strategic Planning Subcommittee met four (4) times and spent considerable time addressing Outer Continental Shelf (OCS) oil and gas leasing, dam safety regulations, nutrient standards, stormwater regulations, historic resources, watershed planning, the HRPDC budget and work program and a comprehensive approach to involving the Commission in addressing environmental issues. The Subcommittee, in effect, functions as an executive committee of the primary environmental committees. It enables the staff and localities to focus attention on a limited number of critical issues and develop consensus recommendations, which, in turn, were recommended by the primary committees to the Commission for consideration. Copies of positions developed by the Subcommittee, recommended by the primary committees and endorsed by the Commission are included in Appendix G. Because of the effectiveness of the Subcommittee process in dealing with cross-cutting issues and the new focus on watershed planning, the Subcommittee process is continuing.

PUBLIC INFORMATION, EDUCATION AND TRAINING

An integral component of the Hampton Roads Technical Assistance Program is the provision of public information and education on environmental issues in the Hampton Roads region. Provision of public information and education was identified by the participating localities at the outset of the program in 1986 as a critical need that could be met cooperatively through the HRPDC. Since that time, the HRPDC staff has provided written communications to the Commission and a wide range of interest groups on environmental issues and has provided regular briefings to many of those groups. These efforts continued during the grant year.

To ensure that the members of the HRPDC are kept informed about the status of ongoing HRPDC environmental program activities and pending environmental issues that may affect the Hampton Roads region, Project Status Reports on the HRPDC Coastal Resources Management Program and related issues are included in the Monthly Agendas for the HRPDC Executive Committee and Commission Meetings. Appendix H includes copies of representative HRPDC meeting agenda materials. In

addition to the written Agenda materials, the HRPDC staff also routinely briefs the Commission on environmental issues of importance.

The HRPDC staff has provided briefings on regional environmental programs, environmental issues and state and federal regulations to a variety of groups. They include civic leagues, business and professional organizations, service clubs, schools and interest groups. The HRPDC staff has presented papers on related HRPDC technical studies and programs at several state, regional and national conferences. A number of briefings were also provided to state agency Boards, Legislative Commissions, local government Planning Commissions and City Councils/County Boards on regional environmental projects and issues.

During the grant period, the HRPDC staff represented the region in several major panels and presentations on environmental issues. They included:

- July 14, 2005 – Offshore Energy Task Force
- September 27, 2005 – Public “Outreach” Meeting, Wetlands and Development (Cohosted with DEQ)
- September 27, 2005 – American Water Works Association Virginia Section Meeting
- October 2005 - Present (Bimonthly) – Region 2 Math & Science Coalition
- October 2005 - Present (Bimonthly) – South Hampton Roads Resource Conservation & Development (RC&D) Council
- October 5, 2005 – Coastal Partners Workshop
- October 24, 2005 – Virginia Geographic Information Systems Conference
- November 7, 2005 – The College of William and Mary (law class)
- November 30, 2005 - Regional Chesapeake Bay Board Member Training
- March 2, 2006 – Virginia Envirothon Training
- March 7, 2006 – Area VI Soil and Water Conservation District Annual Meeting
- March 20, 2006 – Virginia Lakes and Watershed Association
- March 23, 2006 – Virginia Dare Soil and Water Conservation District Board
- March 29, 2006 – Chowan Watershed Roundtable Kick-off Meeting

- March 30, 2006 – Stormwater Phase II Training
- April 4, 2006 – Currituck County, NC Open Space Task Force
- April 19 - 20, 2006 – Environment Virginia 2006
- April 21, 2006 – Virginia Chapter, American Society of Landscape Architects
- May 25, 2006 – HRPDC Green Infrastructure Workshop
- June 7, 2006 – Department of Forestry Green Infrastructure Class Reunion
- June 8, 2006 – DCR Watershed Planning Workshop
- August 8, 2006 – DEQ Food Waste Recovery Workshop
- August 23, 2006 – *Dialogue* (TV)
- August 24, 2006 – Hampton Roads Alliance of Environmental Educators Conference, Environmental Awards
- August 24, 2006 – Hampton Roads Alliance of Environmental Educators Conference, Partnerships
- September 14, 2006 – HRPDC Green Infrastructure Workshop
- September 19 - 20, 2006 – State Environmental Education Conference
- September 26, 2006 – Chowan Watershed Roundtable

A number of these presentations addressed multiple programs. Programs and activities covered included the implications of the Chesapeake Bay Agreement 2000 and related state and federal initiatives for local governments, Tributary Strategies, TMDL Regulations, pollution prevention, the overall HRPDC water resources programs, wetlands regulations, regional environmental education initiatives, and the regional stormwater management program. A representative training agenda and presentation materials are contained in Appendix I.

The regional environmental education committees – the Hampton Roads Water Efficiency Team (HR WET), HR STORM and HR CLEAN – continue to work together to address common issues and to enhance the effectiveness of their educational programs. This is an ongoing effort, which requires consensus among a wide range of local government departments. To date, the joint educational efforts have focused on improving the cost-effectiveness of media contracts, distributing funding through an educational mini-grant program, production of a family activity book and production of joint advertising in regional publications.

In 2003, the HRPDC instituted a Regional Environmental Education Clearinghouse at the request of the region's localities. The recommendation was developed through the HRPDC Environmental Committees. Incorporating educational materials developed by the HRPDC as well as the sixteen member local governments, state agencies and environmental organizations, the Clearinghouse is to be a web-based resource for the region's environmental programs. While extensive work to share materials on stormwater management, water conservation and litter control and recycling has been ongoing for a number of years, the Clearinghouse is the first attempt to ensure that materials developed by all of the participants in the regional environmental programs on all related topics are available in one location. Appendix J contains an overview of the Clearinghouse and a current index of materials.

On a quarterly basis, the HRPDC prepares and distributes a newsletter, Hampton Roads Review, to nearly 3,000 individuals and groups throughout Hampton Roads. Through January 1998, the newsletter included a special insert, called Environmental Reviews and later, Environmental Update. The insert, as well as other topical (transportation, economics and census) inserts, was eliminated from the newsletter following that issue, as part of an agency restructuring of the public information program. As a result of this restructuring, the space devoted to the programs of each of the functional departments has been increased. To enhance the effectiveness of all HRPDC public information materials, HRPDC Special Reports on specific topics may be developed and distributed to supplement the regular newsletter. Copies of Hampton Roads Review produced during the grant year are included in Appendix K.

The HRPDC staff has devoted considerable attention and effort over the past year to the continued refinement of the Commission's Internet Home Page (www.hrpdc.org). The Home Page contains copies of all newsletters, occasional complete copies of HRPDC technical reports and an overview of Commission activities. It now includes an extensive section devoted to the HRPDC environmental planning program, including links to a number of other federal, state, local and private sector sites. Efforts to further enhance the Home Page remain ongoing.

Through the Hampton Roads Joint Environmental Committee, HRPDC staff has provided training on a variety of topics to localities. Subjects over the past year included blue-green infrastructure, shoreline management, nutrient source tracking, water quality standards, wetlands mitigation and the TMDL planning process.

CONCLUSIONS

Through the Hampton Roads Technical Assistance Program, the HRPDC has provided technical assistance to its member local governments and others; has delivered public information and education to the citizens and government officials of the region; has conducted important technical studies; and has coordinated a regional

approach to participation in state and federal environmental programs, while also providing cost-effective support to the Virginia Coastal Zone Management Program.

The Hampton Roads Technical Assistance Program conducted through the VCZMP is a cost-effective solution to the need for environmental cooperation and coordination in the Hampton Roads Region of 3000 square miles and 1.6 million residents. It provides a vehicle for the sixteen member local jurisdictions, a number of state and federal agencies and others to exchange information and develop coordinated approaches to environmental management issues, while concurrently providing technical support for routine local government planning and management activities. Based on state and federal legislative and executive branch response to comments and recommendations developed through this process, it is an effective means for the region's localities to communicate their views on environmental issues. It also provides a cost-effective means of ensuring that this region can participate in and support important environmental initiatives of the Commonwealth, such as the Virginia Coastal Zone Management Program and the Chesapeake Bay Program. It also appears to be a cost-effective mechanism for the Virginia Coastal Zone Management Program and related state environmental programs to use in communicating with and soliciting input from local government. Over the years, funding from the VCZMP through the Hampton Roads Technical Assistance Program has provided the region with the seed to establish a number of new regional programs in the areas of water supply planning and coordination, stormwater management and environmental education. The HRPDC and its member local governments continue to believe that the Hampton Roads Technical Assistance Program is an extremely valuable and cost-effective approach to environmental planning and management in the Hampton Roads Region.