

Hampton Roads Coastal Resources Technical Assistance Program

Fiscal Year 2007 - 2008



Virginia Coastal Zone
MANAGEMENT PROGRAM



NOVEMBER 2008

PEP08-07

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

**FISCAL YEAR 2007 – 2008
FINAL REPORT**

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

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ABSTRACT

This report describes the environmental technical assistance program conducted by the Hampton Roads Planning District Commission during FY 2007 – 2008 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.

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INTRODUCTION

In March 2007, 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 2007, the HRPDC was awarded financial assistance to maintain its Technical Assistance Program through September 2008. 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 Hampton Roads Watershed Roundtable, ongoing analysis of the impacts of the Chesapeake Bay Agreement and related regulatory initiatives, the regional green infrastructure project, coordination of regional involvement in the state's TMDL process, and the climate change initiative, 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, Wastewater 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, base location decisions and encroachment issues, Outer Continental Shelf Energy 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 2007 – 2008 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, Virginia's climate change and energy initiatives, 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 2007 – 2008 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 land use and growth forecasts.
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 (60) environmental impact assessments and statements for both state and federal projects. Five years ago, review of federal projects for consistency with Virginia's Coastal Zone Management Program was added to the state environmental impact review 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 in FY 2007 – 2008 ranged widely in complexity. They included numerous military construction and Base Realignment and Closure (BRAC) projects, the Virginia Capes Range Complex and Atlantic Fleet Active Sonar Training projects, several college and university building projects, and the "Alternative Energy & Alternate Uses of Existing Facilities on the OCS, Proposed Rule." Additionally, the HRPDC reviewed the issuance of NPDES permits and the reissuance of a number of U.S. Army Corps of Engineers Regional Permits and Letters of Permission that affect shipping and boating in the region. 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, 2007 through September 30, 2008 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 database and reporting system during a previous grant year. The HRPDC began using the 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 four 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. 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 ongoing refinement of the Virginia Coastal Zone Management Program. The HRPDC staff participated in the work group advising the VCZMP staff in the development of the state's Coastal and Estuarine Lands Conservation Program and in the Planning Committee for the 2007 Coastal Partners Workshop.

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. During fiscal year 2007, HRPDC staff participated in the Green Infrastructure Advisory Workgroup hosted by DCR. This included a presentation on Hampton Roads green infrastructure initiatives made to the Workgroup at its December 19, 2007 meeting. HRPDC staff has also continued to participate as a member of the Coastal Policy Team.

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. This project, the Hampton Roads Conservation Corridor Study, was approved by the HRPDC in July 2006. During FY 2005 – 2006, the HRPDC received funding from DCR to conduct workshops on green infrastructure financing and implementation. Following these sessions, the HRPDC continued its green infrastructure research, provided a series of briefings to state and local agencies and interest groups, and made presentations at the Environment Virginia and Virginia GIS Conferences on the green infrastructure efforts in Hampton Roads. These efforts were documented in a locally funded study, Green Infrastructure in Hampton Roads, which was approved by the HRPDC in July 2007. Recommendations in this report included investigation to

determine the feasibility of requiring dedication of green infrastructure in conjunction with new development and consideration of green infrastructure as a component of stormwater management.

During FY 2007 – 2008 HRPDC staff organized a regional workshop on the use of green infrastructure to address military base encroachment issues. The workshop featured presentations on the Readiness and Environmental Protection Initiative (REPI) and case studies of military facilities and localities that have partnered in the application of green infrastructure to buffer military facilities. In addition, HRPDC staff has been involved in a series of presentations on green infrastructure topics at a variety of conferences and professional society meetings.

The HRPDC will continue to partner with the Virginia Coastal Zone Management Program on a regional green infrastructure program in FY 2008 – 2009. The work program for this fiscal year will include integration of the latest Virginia Conservation Lands Needs Assessment modeling, working with HRPDC member localities to integrate evolving future land use plans and continued efforts to implement the green infrastructure program.

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 fourteen (14) 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 December 2006, legislation was enacted establishing the Captain John Smith Chesapeake National Historic Trail. Throughout the study process that preceded this designation, the HRPDC staff monitored this effort, reviewed proposed trail routes, participated in agency meetings regarding these efforts, and provided briefings to the region's localities. After the trail became part of the National Trail System, the NPS began preparation of a Comprehensive Management Plan for the trail. The HRPDC staff continues to monitor this process and provide input as necessary. 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. The HRPDC staff will continue to participate in this process during FY 2008 - 2009.

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. Beginning in FY 1998-1999, this element of the Program 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. Ongoing discussion of the Tributary Strategies Program, evolving water quality standards and related funding and regulatory initiatives 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. Over the past three years, the HRPDC staff has monitored ongoing Chesapeake Bay Program activities in preparation for the next generation of the Chesapeake Bay Watershed Model, revisions to the Tributary Strategies, and development of the TMDL for the Bay. The local governments are briefed regularly on these efforts.

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 actively alert each other to pending issues and needs for information on a variety of environmental issues, such as stormwater management, TMDLs, and green infrastructure.

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 for 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 was addressed in part through the enactment in 2004 of legislation integrating Commonwealth's several stormwater management programs.)

During FY 2006 – 2007, 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.

In FY 2007 – 2008, HRPDC staff worked with the Virginia Department of Conservation and Recreation to facilitate local government review of the Chesapeake Bay Program's 2030 land use projections. This effort was funded in part by DCR and the VCZMP. HRPDC staff distributed maps and spreadsheets containing the projection information to member localities for review. In addition, HRPDC staff provided a series of briefings to local government staff on the modeling techniques used to develop the projections and the details of the review process. HRPDC staff also answered questions from local government staff on a case by case basis. The results of the review process were collected and summarized by HRPDC staff and returned to DCR.

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. They include participation in focus groups directed at improved communications with local government about Chesapeake Bay issues, coordination of local government input to the annual reports of the Secretary of Natural Resources, facilitation of discussions among the localities regarding watershed planning, and development of a regional technical framework that could be used by the region's localities and others to integrate the myriad of watershed planning initiatives, including 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 was the development of implementation procedures for Phase III of the Chesapeake Bay Preservation Act and the evolving stormwater permit requirements. HRPDC staff also continued to monitor tributary strategy activities. These efforts will continue in FY 2008 – 2009. 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 originally 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 facilitated improved relationships between local governments in the two states. The Councils are no longer active.

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 two times during 2007 – 2008.

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. COE staff has continued to work with several partner agencies to collect information on the Currituck Sound and to start the process of modeling the system. HRPDC staff participated in a stakeholder meeting, which was held in October 2008.

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. Again, this effort is now on hold due to federal funding constraints.

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 (APNEP) 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. In FY 2008 – 2009, the development of the Northwest River Watershed Management Plan will build on the accomplishments of SWAMP and the relationships established between these localities by evaluating land use policies and development controls in a cross-border watershed. HRPDC staff also continues to work with North Carolina through APNEP, regional open space and watershed planning initiatives. 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 NEMO Program

During FY 2007 – 2008, HRPDC staff also provided support for the Virginia NEMO (Nonpoint Education for Municipal Officials), an educational program designed for local land use officials to address the relationship of land use and natural resource protection.

The program targets counties and municipalities, addressing regionally specific needs by focusing on the link between land use and water quality.

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 was available from 2001 to 2007. 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 is underway.) Beginning in July 2007, the COE again began providing financial support to the Steering Committee effort. 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. COE, Currituck Sound Watershed Restoration Study Technical Committee and Hydrologic Work Group.
5. DEQ, Wetlands Regulations Technical Advisory Committee.
6. DEQ, Coastal Partners Workshop Program Committee.

7. DEQ, PCB Technical Advisory Committee.
8. DCR, Watershed Planning Advisory Committee.
9. DCR, Stormwater Management Regulations Technical Advisory Committee.
10. DCR, Chesapeake Bay Preservation Act (CBPA) Phase III Local Government Advisory Committee.
11. DCR, Urban Cost Share BMP Task Force.
12. DCR, Small Municipal Separate Storm Sewer Systems (Phase II) Regulations Technical Advisory Committee.
13. DCR, Construction General Permit Regulations Technical Advisory Committee.
14. Environment Virginia 2008 Program Committee.
15. Virginia Water Resources Research Center, Statewide Advisory Board.

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 and related activities, water supply planning, dam safety, wetlands regulations, lake nutrient standards, water quality standards, nutrient reduction technology for wastewater, nutrient trading, and CBPA implementation. 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 DCR-funded Chesapeake Bay land use review was coordinated through this process.

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 PDCs 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. Two (2) meetings of the Committee were held during the grant year. Staff participated in both meetings and briefed Hampton Roads committees on the outcomes.

- December 2007
- June 2008

HRPDC staff also participated in the VAPDC Environmental Committee, which met in July 2008. Discussion at this meeting focused on the Chesapeake Bay and related TMDL processes. An effort is now underway through the VAPDC to create a standing environmental committee. HRPDC staff will continue to participate in this process.

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 process to develop 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. Proposals for CELCP funding were developed in both 2005 and 2006 through a cooperative process involving the HRPDC, the cities of Chesapeake and Virginia Beach, and DEQ. These proposals were developed by the U. S. Navy and the HRPDC, in cooperation with the two cities. During both FY07 and FY08, the Navy was successful in obtaining funding. The Strategy is also being used by the City of Chesapeake in prioritizing projects under the its 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. During FY 2007 – 2008, the CELCP funding application was revised and resubmitted on behalf of both cities but did not receive funding.

HRPDC staff worked with the City of Virginia Beach and the Conservation Fund to develop a proposal for the purchase of a set of parcels in the Lynnhaven and Elizabeth River watersheds. The parcels are part of the Hampton Roads Conservation Corridor System and their protection would contribute to a linked system of wetlands and adjacent uplands in the urbanized portion of Virginia Beach. Unfortunately the proposal did not score highly on the list of State priorities and the project was not funded. This proposal was endorsed by the HRPDC. In discussing the project, the Commission directed the staff to develop a system for prioritizing acquisition projects within the region. This system will be developed through the VCZMP funded Green Infrastructure Project during 2008 – 2009.

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. Since 1999, the HRPDC staff has continued to facilitate a regional process through funding

under either the Technical Assistance Program or the DCR Bay Implementation Grant. 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 Zone Resource Management Program Technical Assistance Program for those years. Brief summaries have been included in the last several reports.

The HRPDC staff has continued to be actively involved in the Tributary Strategies component of the Chesapeake Bay Program. Regional efforts have focused on the development of water quality criteria (CBP), water quality standards and associated regulations (state), funding, the state's watershed planning process, the pending revision of the Tributary Strategies, and the pending development of a TMDL for the Bay and its tributaries. 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 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. Although the group met infrequently in 2006, its activity increased in FY 2007 – 2008. HRPDC staff participated in three steering committee meetings in 2008 and assisted with the development of a new York River and Small Coastal Basins brochure and a green infrastructure workshop hosted by the Roundtable. HRPDC staff will continue to participate in the Roundtable in FY 2008 – 2009.

During FY 2007 – 2008, HRPDC staff attended regular meetings of the Albemarle-Chowan Watershed Roundtable and participated in the first annual River Day event

hosted by the group in April 2008. HRPDC staff also participated in meetings of the Virginia Watershed Alliance and assisted with efforts to develop a web site for all Virginia roundtables. HRPDC staff will continue to monitor and participate in these efforts in FY 2008 – 2009.

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.

Through funding from DCR, the HRPDC has expanded the Roundtable concept into a Hampton Roads Roundtable that incorporates a variety of interests from throughout the region. The Roundtable brings together business, agriculture, trade associations, development and building associations, and environmental and citizens groups in an open forum that will promote discussion of regional environmental issues and provide an opportunity for consensus building among these diverse groups. The Roundtable met twice during FY 2007 – 2008 to discuss issues of mutual interest and to determine the future direction of this effort. This group will continue to meet in FY 2008 – 2009.

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 2006 Executive Committee Meeting on the issues and the comprehensive process developed for considering them. This process was successful in achieving regional consensus in developing a Regional Special Order by Consent on Sanitary Sewer Overflows, implementation of the Order, maintaining a concerted regional stormwater management effort, and developing policy level consensus on moving forward with a regional green infrastructure plan.

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. 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 groundwater impact 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.

The region's long experience with cooperative consideration of water resource issues, which received an initial jump-start with funding from the Coastal Zone Management Program, facilitated cooperative consideration of several major issues during FY 2007 – 2008. This effort resulted in major initiatives, funded separately by the local governments, which will continue for the next several years. These include the Hampton Roads Regional Water Supply Plan, which is being developed to comply with the requirements of 9 VAC 25-780 by establishing a planning process and developing a regional water supply plan enabling twenty-four local governments in Hampton Roads to meet the state regulations.

In 1998, the HRPDC completed the study, Managing Multiple Recreational Use Conflicts in the Waters of Hampton Roads, through a VCZMP competitive grant. 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, which 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 also 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. The kiosks were installed in 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. Separate funding to support that effort was obtained from the VCZMP for work conducted during FY 2004 – 2005 and to be conducted in FY 2008 – 2009. As is true of many other initiatives, the idea for this competitive project evolved through the Regional Coordination process. The Hampton Roads Conservation Corridor Study, which was completed in July 2006, is serving as the basis for ongoing regional work.

Two workshops on green infrastructure topics were conducted by the HRPDC in 2006. 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 – Green Infrastructure in Hampton Roads, continued work with Hampton Roads localities to refine and integrate the Conservation Corridor system with future land use plans, and applications for grant funding to support land acquisition in the SWAMP conservation corridors. In FY 2008 – 2009, the development of the Northwest River Watershed Management Plan in partnership with the City of Chesapeake and The Nature Conservancy will build on the accomplishments of SWAMP by integrating with and informing evolving land use policies and development controls within the Rural Overlay District in Chesapeake. This project is designed to enhance the city's efforts to protect water quality in the Northwest River watershed, which serves as its primary drinking water supply.

During 2007 – 2008, HRPDC staff also conducted a review of local Chesapeake Bay Preservation Act programs and developed a compendium of local government forms, procedures and fees. The CBPA Designation and Management Regulations apply to fourteen cities and counties in Hampton Roads as well as to two towns that fall within the Chesapeake Bay watershed. Each of these localities has adopted CBPA programs and policies and each has developed unique forms and procedures to implement those policies. These forms, policies and fee schedules were collected and listed on a dedicated page on the HRPDC website. They are available as a resource for CBPA program managers and others who may need additional information about procedures or applications related to development in Chesapeake Bay Preservation Areas.

Procedure manuals and fee schedules are also included where available. HRPDC staff will continue to maintain this site and update the information provided as necessary.

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, energy, climate change, 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, assistance on permit issues, identification of state or federal agencies that may be of assistance for local projects, information about legislation or regulations, 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 also assists private entities, such as the Back Bay Restoration Foundation, Elizabeth River Project, Friends of Powhatan Creek, Hoffler Creek Wildlife Foundation, Lynnhaven River NOW 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 B.

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, Hampton Roads Conservation Corridor 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 NOW in establishing a watershed organization to enhance city, state and federal efforts to restore the Lynnhaven River. Lynnhaven River NOW 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 active involvement in its education and marketing programs.

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 Sediment Remediation Advisory Committee and participated in initiatives to address redevelopment of the Money Point area in the City of Chesapeake, the update of the ERP Watershed Action Plan, the Superfund project at Atlantic Wood Industries, and development of a new water quality initiative. 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 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 2007 – 2008, the areas of emphasis included stormwater management, dam safety, wetlands, wastewater, and Phase III of the Chesapeake Bay Preservation Act.

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 staff continued development and enhancement of the region's Geographic Information System, using ARC/INFO, 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 C 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 in cooperation with the Regional Stormwater Management 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, 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 2007 and 2008, the HRPDC staff continued its efforts to enhance this linkage through the convening of Joint Meetings of several of the Committees.

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 worked to coordinate development, refinement, and implementation of local programs to comply with the Bay Act Regulations, and to develop a regionally consistent approach to use of the Intensely Developed Areas provisions of the Bay Act Regulations. During FY 2007 – 2008, the Committee focused on Phase III of CBPA implementation, which is expected to begin in March 2009. The Committee has two representatives on the Phase III Local Government Advisory Committee, which is a body providing DCR with guidance regarding the procedure and content of Phase III local program reviews. HRPDC staff is also participating in the LGAC process.

During the course of the grant year, the HRPDC staff continued coordination of the ongoing consideration by the region's localities of various watershed issues. Significant activities related to the Tributary Strategy effort included Committee participation in and monitoring of the activities of the York River and Small Coastal Basins Roundtable and the Albemarle-Chowan Roundtable as well as the coordination of the Hampton Roads Watershed Roundtable. Because of regulatory issues associated with stormwater and wastewater, the HRPDC staff and Committees focused on those issues during the year. Therefore, attention to watershed issues 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 Hampton Roads Watershed Roundtable. (Table 1 contains a summary of agency briefings for these Committees. Appendix D contains representative agenda materials for meetings of these Committees.)

- October 4, 2007 - This was a meeting of the Joint Environmental Committee. Wetlands Watch staff provided the Committee with a briefing on the recent analysis of sea level rise and coastal system impacts. U.S. Navy staff provided a briefing on the BST study conducted at Oceana Naval Air Station. URS staff briefed the Committee on a recently completed white paper addressing floodplain management issues. The Committee agreed to proceed with the proposal that Hampton Roads municipalities come together through the HRPDC to have an open dialogue about these issues. DCR-DCBLA staff was present to brief the committee on Phase III LGAC activities and workshops being offered by the department. HRPDC staff provided information on TMDL training workshops and on regulatory and legislative issues.
- November 1, 2007 - This was a meeting of the Joint Environmental Committee. DCR-DCBLA staff provided the Committee with a briefing on the status of ongoing activities, including CBPA program reviews, Phase III development, and training workshops. HRPDC staff provided the Committee with a briefing on the regional training program, the Hampton Roads Watershed Roundtable, and regulatory and legislative issues. The Committee discussed the local costs to implement the dam safety regulations and new legislation and the applicability of the regulations and legislation to federal land. The Committee also expressed a general preference that the 404 Program remain the purview of the Army Corps of Engineers and agreed that more funding should be given to urban localities for water quality programs.
- November 13, 2007 – This was a meeting of the Hampton Roads Watershed Roundtable. It included representation from a diverse set of groups including several environmental organizations, the Tidewater Builders Association, the Virginia Beach Farm Bureau, and the Virginia Ship Repair Association. The Roundtable agreed that the group might also be used for mutual problem solving, proactive planning and plan input on efforts such as TMDLs. Additional suggestions for Roundtable meeting topics included green infrastructure and regional open space planning, rural land development options, No Discharge Zones, stormwater programs, TMDLs and Implementation Plans, collaborative ordinance evaluation, LID, green building/LEED, and sea level rise.
- December 13, 2007 - This was a meeting of the Joint Environmental Committee. DCR-DCBLA staff briefed the Committee on the development of

- procedures for Phase III implementation and the revision of guidance documents. HRPDC staff also provided a briefing on a number of subjects, including the Regional Effectiveness Indicators Report, the Hampton Roads Watershed Roundtable, the Smithfield Stormwater Management Program, the TMDL training workshops, the Coastal Partners Workshop, and the Chesapeake Bay Program's 2030 Model. The Committee recommended approval of the Indicators Report by the HRPDC.
- January 3, 2008 - This was a meeting of the Joint Environmental Committee. HRPDC staff briefed the Committee on the status of stormwater permits and CBPA Phase III implementation. This meeting also included the annual committee retreat to discuss the status of regional activities, program direction for FY 2007 – 2008, and the Regional Stormwater Management Program Budget.
 - January 18, 2008. This was a meeting of the Hampton Roads Watershed Roundtable. It included an open forum in which the members offered comments regarding water quality and other issues that might be of interest to the group as a whole. These included redevelopment, buffers, and growth management. The Roundtable members agreed that it is productive for them to meet and to be informed about the activities of the various groups represented. It was also noted that awareness of this group and the regional issues it hopes to address should be raised with the General Assembly. Additionally, the Roundtable agreed that education and information exchange should be a focus for future meetings and discussed the value of input into the TMDL process.
 - February 7, 2008 - This was a meeting of the Joint Environmental Committee. DCR-DCBLA staff briefed the Committee on the development of procedures for Phase III implementation and on the status of annual implementation reports. HRPDC staff provided the Committee with a summary of the environmental planning retreat and discussed stormwater program budgets, which were circulated by letter ballot. Assuming the return of the outstanding letter ballots and favorable responses to them, the Committee agreed to ratify the letter ballot approvals. HRPDC staff also briefed the Committee on the activities of the Hampton Roads Watershed Roundtable, suggestions for new program initiatives, and the status of the Chesapeake Bay Program's 2030 Model.
 - March 6, 2008 - This was a meeting of the Joint Environmental Committee. DCR-DCBLA briefed the Committee on the development of procedures for Phase III implementation and on annual assessment questionnaires, nontidal wetlands guidance training, compliance reviews, and a perennial stream workshop. HRPDC staff provided the Committee with a briefing on the data being used for the Chesapeake Bay 2030 Model, informed the Committee that the grant proposal for the Technical Assistance Program under the

Virginia Coastal Zone Management Program was being finalized for FY 2008 – 2009, and reported on a NOIRA issued for revisions to the state's stormwater management regulations. Committee members agreed that the issues and recommendations in the original comment letter on the regulations remained largely unchanged. HRPDC staff also discussed participation in the Extreme BMP project and several new HRPDC initiatives.

- April 3, 2008 - This was a meeting of the Joint Environmental Committee. DCR-DCBLA briefed the Committee on the status of Phase III and the annual assessment questionnaires. DCR staff provided the Committee with a briefing on the floodplain map modernization program. HRSD staff provided the Committee with a briefing on a multi-tiered approach to microbial source tracking (MST) methods. HRPDC staff provided briefings on the data review for the Chesapeake Bay 2030 Model and the Sustainable Community Planning element of the Virginia CZM Program.
- May 1, 2008 - This was a meeting of the Joint Environmental Committee. DCR-DCBLA staff provided the Committee with an update on agency activities and program initiatives, including annual assessments and Phase III. Chesapeake city staff provided a brief to the Committee on the City's recently completed "State of the Urban Forest Report." Committee members supported exploring options for a regional study and recommended that arborists or equivalents from each locality should convene to discuss activities within each locality. Navy staff provided the committee with a review of the proposed changes to the Water Quality Standards that came out of the triennial review process. HRPDC staff briefed the Committee on the activities of the Plastic Bag Recycling Committee established by Isle of Wight County and provided a report on evolving state initiatives. HRPDC staff also requested that localities submit any additional comments on the 2030 Chesapeake Bay Model data and asked committee representatives who also serve on the Strategic Planning Subcommittee to voice their interest in continuing to serve on the subcommittee. All members present indicated that they would continue to participate.
- June 5, 2008 - This was a meeting of the Joint Environmental Committee. Kimley-Horn staff reported that the Virginia Department of Environmental Quality entered into a Letter of Agreement (LOA) with the City of Virginia Beach concerning historical violations of elements of various wetlands permits (Virginia Water Protection Permits). The LOA included a provision for training of staff from throughout the region in coordination with the HRPDC. The Committee agreed that two training sessions should be held in July 2008. DEQ staff provided the Committee with a briefing on the Virginia Environmental Excellence Program (VEEP). Virginia Municipal League staff provided the Committee with a briefing on VML's new Go Green Challenge program. HRPDC staff provided the Committee with a summary of Mr. Stephen Walz's briefing on state energy policy and the Virginia Energy Plan,

which was made to the HRPDC Executive Committee on May 21, 2008. HRPDC staff also reported that a special bacteria study subcommittee met in April and expressed interest in working with the researchers looking at alternatives to library based bacteria source tracking. Finally, they provided the Committee with a regulatory update, which included the status of state stormwater permits and an update on the CELCP grant process. The Committee agreed that a regional database of priority lands to be acquired for conservation would be useful.

- July 10, 2008 - This was a meeting of the Joint Environmental Committee. DCR-DCBLA staff provided the Committee with an update on the local government annual reports process and compliance evaluations. Newport News staff provided the Committee with an overview of the city's Environmental Management System (EMS) program, a strategic approach designed to address environmental issues in a consistent, structured manner that facilitates risk avoidance, reduces regulatory liability, and provides cost savings. DEQ staff provided the Committee with an update on the Draft Water Quality Assessment and Impaired Waters Integrated Report for 2008. The Committee discussed the need for trend analysis and comparable data in the report. They also noted the need for support on stormwater issues. Local government staff provided the Committee with a report on the EPA policy documents suggesting that smart growth techniques may be used as BMPs. The Committee discussed the use of Smart Growth as a planning tool, zoning constraints, and the disconnect between policy and permits. Committee members noted that comments on the EPA recommendations could be made through the Subcabinet on Sustainable Community Investment and through the Stormwater TAC. A committee subgroup agreed to develop a white paper on the subject.
- August 7, 2008 - This was a meeting of the Joint Environmental Committee. DCR-DCBLA staff provided the Committee with an update on the Division's annual report requirements and on the development of the Phase III process. VIMS staff was present to discuss the reduction in advisory services provided to the VMRC and the local wetlands boards and the reasons for the reductions. Committee members indicated that those services are important to local governments and suggested requesting additional funding to restore the level of field support and to support the shoreline management program. HRPDC staff agreed to draft a letter addressing those items for approval at the September PDC meeting. HRPDC staff summarized the presentation on the state's climate change initiative given by Deputy Secretary of Natural Resources Nikki Rovner to the HRPDC at its July meeting. Several Committee members expressed interest in getting more information on the effects of climate change in Hampton Roads and potential actions to prepare for the impacts. HRPDC staff also provided a summary of the first Smart Growth Subcommittee meeting. As a result of their discussions, HRPDC staff prepared a comment letter to send to DCR to request additional reductions in

removal efficiencies to promote redevelopment, modification of the Comprehensive Stormwater Management Plan definition to address infill in urban areas, and adoption of a comprehensive performance zoning scenario similar to LEED for Neighborhood Development rating system.

- September 4, 2008 - This was a meeting of the Joint Environmental Committee. DCR-DCBLA staff provided the Committee with an update on the Division's activities, including annual reports, compliance evaluations, and Phase III development. VIMS staff provided the Committee with a briefing on a number of climate change projects being pursued by the Institute. These projects are generally categorized as mitigation or adaptation responses, with the greatest emphasis placed on the latter. Focus areas include greenhouse gas emissions reduction, carbon sequestration, renewable energy development, shoreline recession management, infrastructure planning, and ecological and erosion vulnerability assessment. Project locations include the York and Lynnhaven Rivers. Committee members inquired about a number of issues, including the level of detail in the data, live feed capability, the effects of increased siltation and sea level rise, and the need for LIDAR. DCR staff provided the Committee with a briefing on the Virginia Networked Education for Municipal Officials (NEMO) program. NEMO was created in the early 1990s to provide information, education, and assistance to local land use boards and commissions on methods for accommodating growth that also incorporates protection of natural resources and community character. Two localities expressed interest in assistance from NEMO. Chesapeake Stormwater Network staff provided the Committee with a briefing on the new Baywide Stormwater Action Strategy and plans for the upcoming Bay Stormwater Partners Retreat. The Committee discussed runoff rate figures, the need for improved facility designs, the need for BMP design guidance specific to Coastal Plain conditions, and the need for a coastal perspective. The Strategy will be kept as an ongoing topic for the Stormwater Committee. HRPDC staff briefed the Committee on the development of a web-based local CBPA program compendium and also provided information on the Environment Virginia 2009 Conference. Although only sponsoring agencies now participate in conference planning, input on topics is still being requested. HRPDC staff compiled local suggestions and prepared a comment package to be sent to the conference organizers. Committee suggestions included sessions on meeting state goals and Phase I requirements and a discussion of SPCC regulations. HRPDC staff also briefed the Committee on the proposed budget and work program development process. Five members agreed to participate on a subcommittee that will develop recommendations in each program area – Water, Wastewater and Stormwater – for consideration by the full committees in the October/November 2008.

During FY 2007 – 2008, the Regional Chesapeake Bay Implementation Subcommittee met five times to discuss matters of common concern. Topics of discussion included proposed local Chesapeake Bay Ordinance revisions, Phase III CBPA implementation,

and local program reviews methods and initiatives. As a result of the Subcommittee's efforts, a compendium of local programs was developed for use as a reference tool for local government staff, developers, builders, and others seeking information on Chesapeake Bay ordinances and regulations throughout Hampton Roads. The compendium is now available through the HRPDC website and can be updated continuously to provide the most current information available on local programs and procedures. Copies of the compendium home page, index, and a sample form are included in Appendix E. The Subcommittee will continue to meet in FY 2008 – 2009 in order to continue discussions of the pending Phase III review program and other issues of mutual interest.

In April 2008, researchers from Virginia Tech, the University of Florida, and the University of North Carolina presented information on bacteria source tracking techniques to the Joint Environmental Committee. A subcommittee was created in response to concern from members about the effects of bacteria on water quality and the difficulty of source identification. The task of the subcommittee is to review the latest source tracking techniques and develop a proposal for pursuing a regional methodology for bacteria source tracking for impaired waters within Hampton Roads. The subcommittee met in May 2008 and has been working with the researchers to develop a study outline and cost estimates. This work will continue in FY 2008 – 2009.

TABLE I
SUMMARY OF AGENCY BRIEFINGS
JOINT ENVIRONMENTAL COMMITTEE
October 2007 - September 2008

Date	Agency	Topic
10/4/2007	Wetlands Watch US Navy URS Division of Chesapeake Bay Local Assistance	Sea Level Rise Bacterial Source Tracking Study Floodplain Management Issues Chesapeake Bay Preservation Act programs
11/1/2007	Division of Chesapeake Bay Local Assistance	Chesapeake Bay Preservation Act programs
12/13/2007	Division of Chesapeake Bay Local Assistance	Chesapeake Bay Preservation Act programs
2/7/2008	Division of Chesapeake Bay Local Assistance	Chesapeake Bay Preservation Act programs
3/6/2008	Division of Chesapeake Bay Local Assistance	Chesapeake Bay Preservation Act programs
4/3/2008	Division of Chesapeake Bay Local Assistance Department of Conservation and Recreation HRSD	Chesapeake Bay Preservation Act programs Virginia Flood Plain Mapping Program Fecal Bacteria Studies
5/1/2008	Division of Chesapeake Bay Local Assistance City of Chesapeake US Navy	Chesapeake Bay Preservation Act programs Urban Forestry Program State Water Quality Standards
6/5/2008	Kimley-Horn Department of Environmental Quality Virginia Municipal League	Wetlands Training Virginia Environmental Excellence Program Go Green Challenge
7/10/2008	Division of Chesapeake Bay Local Assistance City of Newport News Department of Environmental Quality City of Chesapeake/City of Hampton	CBPA implementation activities Local EMS Experience DEQ 305 (b) Water Quality Assessment Report Smart Growth as a BMP
8/7/2008	Division of Chesapeake Bay Local Assistance VIMS	CBPA implementation activities Wetlands Advisory Service
9/4/2008	Division of Chesapeake Bay Local Assistance VIMS Department of Conservation and Recreation Chesapeake Stormwater Network	CBPA implementation activities Climate Change State NEMO Program Baywide Stormwater Action Strategy

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 F.

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. For the second year in a row, DEQ staff briefed the Committee about ongoing discussions with the COE on modifications to the State Programmatic General Permit, management enhancements to the state program, and potential state assumption of the Section 404 Program. This briefing led to a significant discussion and Committee input to DEQ. 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 renewed 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. Permit applications for the Phase II localities were developed and issued consistent with new Phase II regulations. This is a continuation of activities

conducted from 1987 to 1995 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 and implement a regionally consistent approach to the Regulations requiring Virginia Stormwater Management Program Permits for Municipal Separate Storm Sewer Systems. The six Phase I localities have been operating under state permits since 1996. The six localities received their Phase II VPDES Permits in March 2003. In March 2004, 2005, and 2007, the HRPDC coordinated the effort by these six localities to complete their annual permit reports. Annually, considerable input is provided to the six Phase I localities for their annual reports. Work continues to develop and refine program elements consistent with those permits. Stormwater permit administration continues for the third year.

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. The MOA was re-executed in March 2008.

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. 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 2006, 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 and permit regulations affecting water supply projects became 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 Safe 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 proposal 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 Memorandum of Agreement to guide this process was executed by the HRPDC and 24 localities in Spring 2007. HRPDC staff research, data collection, and analysis are underway, in cooperation with the Directors of Utilities Committee.

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 and 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 web-based reporting system for sanitary sewer overflows, the Hampton Roads Sanitary Sewer Overflow Reporting System (SSORS), 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. Efforts to further enhance the SSORS system to include GIS capabilities and other improvements were begun. 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 and HRSD. The agreement should be finalized before the end of December 2008.

During 2005, the U.S. Environmental Protection Agency and DEQ advised the Hampton Roads localities of their intent to develop consent orders with the region's localities and the regional wastewater treatment agency to manage sanitary sewer overflows. This initiative implements the EPA's national enforcement policy concerning wet weather flows. The Hampton Roads localities and the HRSD agreed to work through the HRPDC to develop a regional approach to the initiative. For two years, the region worked with DEQ to develop a Regional Consent Order. The Order is supported by Regional Technical Standards to guide the necessary technical studies, evaluation, and operation of the wastewater system as well as design of future facilities. To ensure that the technical requirements of the Order and the Regional Wet Weather Management Plan, which is being developed, are implemented in a cooperative fashion, thirteen localities, HRSD, and the HRPDC have executed a Memorandum of Agreement. This agreement will outlive the Consent Order. In September 2007, the State Water Control Board approved the Regional Consent Order Package.

Since execution of the Consent Order, the Hampton Roads Capacity Team continues to address issues of regional importance, including reporting requirements and compliance with the Order. A Hampton Roads Fat Oils and Grease (HR FOG) program is currently being developed to improve regional consistency in grease control device installation, maintenance, enforcement, and training. Additional efforts targeted to homeowners regarding proper disposal of FOG include advertising and development of a new website.

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 Lower James River (Hampton Roads) Watershed Roundtable into the 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.

The HRPDC Environmental Strategic Planning Subcommittee 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. Because of the effectiveness of the Subcommittee process in dealing with cross-cutting issues, 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 and briefings 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 G 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. During the year, briefings were given to the HRPDC on the following topics: the state water quality assessment report/impaired water list, stormwater management, Total Maximum Daily Load (TMDL) studies and plans, sanitary sewer overflows, the State Energy Plan, and the work of the Climate Change Commission.

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, City Councils/County Boards, and Town Councils 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 Green Infrastructure, Stormwater Management, Sanitary Sewer Overflows, and Water Supply.

- October 20, 2007: LEAD Virginia, Environmental Regulations: Costs, Benefits, and Implications
- October 22, 2007: Regional Technical Standards Training (Chesapeake), HRPDC wastewater programs
- October 24, 2007: Regional Technical Standards Training (Newport News), HRPDC wastewater programs
- November 7, 2007: New River Valley Green Infrastructure Workshop, Green Infrastructure
- November 16, 2007: RC&D Workshop (Charlottesville), Green Infrastructure

- November 29, 2007: TMDL Workshop, TMDL 101
- November 30, 2007: TMDL Workshop, TMDL 101
- December 6, 2007: Coastal Partners Workshop, Green Infrastructure
- January 25, 2008: NOVA Urban Forestry Roundtable (Fairfax), Green Infrastructure
- February 2008: DCR-DCLBA Wetlands and RPA Buffer Training
- March 14, 2008: Hampton Roads GIS Users Group, GIS at the HRPDC
- March 27, 2008: VAPA Conference (Reston), Bay-wide TMDL Panel
- April 2, 2008: Environment Virginia 2008, Water Supply Planning Panel
- April 29, 2008: APA National Conference (Las Vegas), Green Infrastructure
- May 12, 2008: Regional Technical Standards Training(Chesapeake), HRPDC wastewater programs
- May 13, 2008: Regional Technical Standards Training (James City County), HRPDC wastewater programs
- June 17, 2008: Governor's Commission on Climate Change (Blacksburg), Linkage of land use planning and climate change
- June 24, 2008: James City County Board of Supervisors, Stormwater Requirements/Water Supply Planning
- July 17, 2008: Tidewater Builders Association, Developers Council, SSO and Stormwater Regulations
- July 24, 2008: Wetlands Workshop, Regulatory Compliance
- July 25, 2008: Wetlands Workshop, Regulatory Compliance
- September 16, 2008: National Academy of Public Administration, DOD Office of Economic Adjustment, Hampton Roads Joint Land Use Study

A number of these presentations addressed multiple programs. Programs and activities covered included water supply planning, green infrastructure, TMDL regulations, pollution prevention, the overall HRPDC water resources program, watershed modeling, wetlands regulations, regional environmental education initiatives, and the regional stormwater management program.

The regional environmental education committees, collectively known as HR Green - the Hampton Roads Water Efficiency Team (HR WET), HR STORM, HR FOG (Fats, Oils, and Grease) 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.

As part of the Newspapers in Education (NIE) youth education project, HR Green partnered with the region's newspapers, The Virginian-Pilot and Daily Press, to develop a Hampton Roads-specific education piece about the region's watershed. While many pre-developed pieces are available to the schools through NIE, HR Green sought this opportunity to educate the region's youth on topics tailored to the Hampton Roads region. In addition to providing regional stormwater information, HR Green used this initiative to incorporate the watershed and water quality Standards of Learning requirements developed by the Virginia Department of Education (VDOE) along with regions specific information. A teacher guide was also developed and distributed. The tab, We All Live on the Water, was partially funded through a grant by the Chesapeake Bay License Plate Fund and matched with local government contributions and HRPDC staff time. The print pieces were distributed to the schools in April and May 2008.

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 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 H 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 I.

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.hrpdcva.gov).

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 wetlands permit training and the TMDL planning process. A representative training agenda and presentation materials are contained in Appendix J.

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, watershed management, 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.