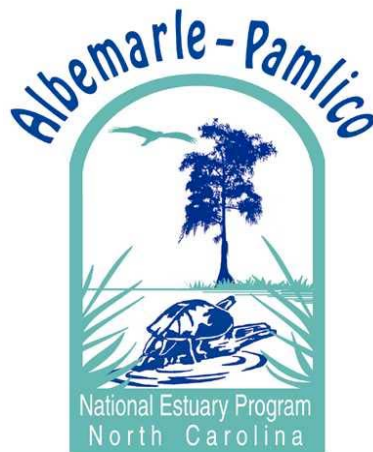


**ANNUAL WORK PLAN
for the
COOPERATIVE AGREEMENT BETWEEN
THE US ENVIRONMENTAL PROTECTION AGENCY
AND
NC DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES**

ALBEMARLE-PAMLICO NATIONAL ESTUARY PROGRAM

OCTOBER 1, 2006 THROUGH SEPTEMBER 30, 2008



**Approved by
APNEP Policy Board on
June 15, 2006**

CE-97464802

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INTRODUCTION

Contents of this document:

- A progress report detailing accomplishments in FY 2006 is provided on pages 8 through 29.
- The FY 2007 Work Plan and budget items are presented on pages 30 through 33.
- Administrative and financial information items are presented on pages 34 through 46.

Purpose: The purpose of this agreement is to provide support to the NC Department of Environment and Natural Resources (DENR) from the US Environmental Protection Agency (EPA) for continuing demonstration of implementation of the unique management strategies recommended in the Albemarle-Pamlico National Estuary Program's (APNEP) Comprehensive Conservation and Management Plan and support for the APNEP Mission to identify, restore and protect the resources of the region. This agreement represents a funding increase for the amount of \$502,600 and time extension to September 30, 2008 for Cooperative Agreement #CE-97464802.

Period of Performance:

The period of performance under this agreement is from October 1, 2006 through September 30, 2008.

Principal Contacts:

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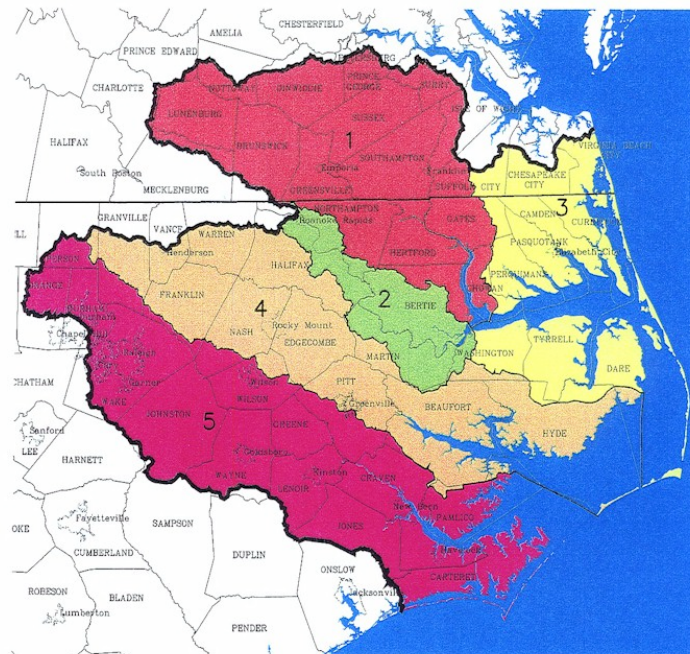
BACKGROUND

The Albemarle and Pamlico Sounds represent the nation's largest lagoonal estuarine system. The system is composed of seven sounds and five major river basins draining over 30,000 square miles of watershed in northeastern North Carolina and southeastern Virginia. The sounds, rivers, creeks, wetlands and terrestrial areas provide habitat for an abundance of animal and plant species. People depend on the system for residential and resort development, food, recreation, mining, forestry, agriculture, business and industry.

The Albemarle-Pamlico National Estuary Program (APNEP), a part of the US Environmental Protection Agency's National Estuary Program (NEP) since 1987, developed a Comprehensive Conservation and Management Plan (CCMP) that was ratified by the Governor of North Carolina and approved by the US EPA in November 1994. The CCMP is intended as a practical, cost-effective and equitable approach to managing the valuable resources of the Albemarle-Pamlico region.

The Program is located in the Office of Conservation and Community Affairs within the NC Department of Environment and Natural Resources with program personnel in Raleigh, Washington, and Greenville, NC and Suffolk, VA.

ALBEMARLE-PAMLICO NATIONAL ESTUARY PROGRAM REGION



- 1 - Chowan River Basin
- 2 - Roanoke River Basin
- 3 - Currituck Sound & Pasquotank River/Albemarle Sound Drainage Basin
- 4 - Tar-Pamlico River & Pamlico Sound Drainage Basin
- 5 - Neuse River Basin & Core Sound/Bogue Sound Drainage Basin



Map prepared April 30, 1999 by the NC Center for Geographic Information & Analysis

EPA IMPLEMENTATION REVIEW 2005

EPA Implementation Review Response

The EPA conducted an Implementation Review with NC DENR and APNEP staff between March and June 2005.

An October 19, 2005 letter stated that the EPA found that the APNEP continues to make “significant progress” in implementing its CCMP and determined that the APNEP “passed” the 2005 Implementation Review and will be eligible for FY 2006, 2007 and 2008 funding authorized by the Clean Water Act §320. A copy of the EPA review letter is attached at the end of this Work Plan.

The EPA review identified the following challenges:

CCMP Update and Changes in Priorities: Develop a process or timetable for CCMP update and priority evaluation. The EPA recommends that the APNEP develop a process that includes a timetable and milestones. The revised CCMP should include necessary actions, information needs, and support mechanisms. The APNEP should consider identifying an interim set of priorities, as well as a mechanism to add to and modify these actions, that takes into account factors affecting environmental issues relevant to the estuaries and sounds.

- *APNEP will be developing a process with the Policy Board for updating the CCMP in FY 2007.*

Visibility: The APNEP’s location within a state agency presents challenges in terms of its ability to appear visible and independent. In order for the APNEP to be seen as inherently autonomous the Program must be, and must be perceived to be, independent of any particular interest group or agency. The Director needs to be able to respond to and act on committee recommendations independent of state agency activities. In addition, the Program should strive to take a leadership role when possible and assert itself as an equal partner in joint ventures. The Program should also strive for recognition when engaged in key activities.

- *APNEP continues to develop partnerships and increase its visibility in watershed and estuarine issues. The CCMP update will provide for an opportunity to facilitate greater involvement and understanding about the program and the CCMP.*

Partnerships and Fundraising: The APNEP’s extensive watershed (30,000 square miles) presents numerous challenges. Limited resources constrain the program’s ability to impact the watershed. This underlines the importance of strategic stakeholder alliances and effective fund-raising efforts. To obtain additional resources for CCMP implementation, the APNEP should develop a strategy that identifies funding needs and alternatives, and provide for diversifying its sources of funding to supplement existing funds. As part of that strategy, the APNEP should work with local governments to

secure at least a minimal annual contribution from them to support the APNEP's work. EPA is prepared to assist the Program in this activity.

- *APNEP will develop a plan to obtain additional resources with the assistance of the EPA as proposed in this work plan. EPA will provide \$10,000 dollars to support this action.*

Environmental Indicators/Monitoring Plan: The STAC work group should begin to develop a comprehensive monitoring strategy and plan, taking into account previous efforts. This plan should include the continuation of the existing monitoring program for the Albemarle-Pamlico estuarine system and sounds that is a part of EPA's National Coastal Assessment (NCA). APNEP needs to identify an ongoing source of funding for that effort. We believe it would be most appropriate for the state of North Carolina to provide funding for the North Carolina component of the NCA. In addition, the plan should be based on the concept of long-term status and trends monitoring or the identification of temporal trends or changes over time. The Program should work with all appropriate government agencies (federal, state, and local) and other stakeholders in the Albemarle-Pamlico region to develop estuarine and freshwater monitoring and indicators.

- *APNEP will continue on its present course to develop a comprehensive monitoring strategy, albeit on a schedule that has indicators by the end of 2006, and a monitoring plan in 2007. The last half of 2006 will see a transition from indicator development being a STAC-driven exercise to a more balanced exercise that reflects more policy and citizen input. Consistent with recommendations in the draft NEP indicator development strategy (issued April 2006), the proposed mechanism for achieving this balance is through the creation of an "Indicator Steering Committee" with representation from the STAC, Policy Board, and Citizens Advisory Committee.*

Environmental Progress: The APNEP protected or restored nearly 38,500 acres of habitat over the 2002-2004 period. This is a significant accomplishment and represents more acreage of habitat protected or restored than any other NEP in Region IV. Yet, the APNEP reports no or very little data regarding "environmental trends" in the estuarine system and its watersheds. Status and trends data are key to evaluating program impacts and results and can be used to send a powerful message to citizens, stakeholders, and elected officials. The Program should identify existing and develop long-term environmental data sets, and use the information to report on environmental progress. The information can also be used to increase support and funding for implementation of the CCMP and for public outreach efforts.

- *APNEP will continue to inventory past and current long-term environmental monitoring projects and programs in the APNEP region. Data from many such monitoring activities will be documented in the monitoring plan and likely assessed in APNEP's future "state of the environment" publications.*

ACCOMPLISHMENTS AND ONGOING PROJECTS FOR FY 2006

Activities for FY 2006 continued to be focused on program improvement and rejuvenation, and coordination with the new Policy Board & Committees for CCMP implementation, as well as demonstration, educational and outreach activities.

It should be noted that demonstration projects for FY 2006 have had several delays related to the “Requests for Proposals” process and in contracting with various parties. It is anticipated that most projects will be completed by December 31, 2006. The status of each project is presented within this Work Plan.

Activities and accomplishments from October 1, 2005 through June 1, 2006, are summarized below:

I. PROGRAM REFORM

Executive Order #74

On May 16th, 2005, North Carolina Governor Michael F. Easley signed Executive Order # 74: *Creation of A Program Office, A Policy Board, and Advisory Committees to Support Natural Resource And Environmental Management in the Albemarle-Pamlico National Estuarine System*. This Executive Order is essential to the future of the APNEP and was developed after more than two years of program review and assessment, and stakeholder participation. This Executive Order provides the operational framework for the program. A copy of Executive Order #74 is attached at the end of this Work Plan.

Program Office

The Executive Order establishes an Albemarle-Pamlico National Estuary Program Office to coordinate and facilitate the implementation and advancement of the CCMP, the APNEP mission, and the activities of the Policy Board and Advisory Committees. The APNEP Program Office will serve as a conduit for information between the Policy Board, Advisory Committees, state and federal agencies, local government, tribes, academia and the public. Additionally, the Executive Order states that the Program Office will be located in the Offices of the Secretary of the North Carolina Department of Environment and Natural Resources.

Policy Board

A Policy Board for the Albemarle-Pamlico watershed is established by the Executive Order to work with DENR and the Program Office to support, evaluate, update, advocate and guide the implementation of the CCMP and the APNEP mission. The role of the Policy Board is to guide, evaluate and support the CCMP implementation process and advance the CCMP and its management actions, and to ensure the highest level of collaboration, coordination and cooperation among state and federal agencies, local governments, the public and various interest groups. The Policy Board will consult with the Advisory Committees and the Program Office for recommendations pertaining to implementation of CCMP management actions at the regional and local level, and the

coordination and development of research and monitoring priorities. A major duty of the Policy Board is to evaluate the relevance of the CCMP and to make recommendations on amending it to address new or emerging issues that may affect the significant natural resources of the Albemarle-Pamlico estuarine system. Additionally, the Policy Board, in cooperation with the Program Office, will develop an annual report, budget and work plan. The Policy Board held its first meeting on October 31, 2005.

Advisory Committees

The Executive Order establishes three advisory committees to assist the Policy Board in guiding the APNEP and CCMP implementation.

A Committee of Citizen Advisors ("Citizen Advisory Committee") is established to advise and support the Policy Board, and to serve as a liaison to local agencies and interested parties regarding environmental and natural resource management concerns and issues relevant to implementation of the CCMP and the APNEP mission. The Citizen Advisory Committee (CAC) held its first meeting on January 20, 2006.

A Committee of Management Agency Representatives ("Management Advisory Committee") is established to facilitate and support the implementation and advancement of the CCMP management actions, and the APNEP mission. The Management Advisory Committee (MAC) should be established by September 31, 2006.

A Committee of Science and Technical Advisors ("Science and Technical Advisory Committee") is established to advise the Policy Board and agencies responsible for implementation of the CCMP on scientific and technical issues. The Science and Technical Advisory Committee (STAC) continues to meet quarterly.

II. FY 2006 ACTIONS & PROJECTS

The following are ongoing or completed actions since October 1, 2005.

Program Administration

For more detail see Administration and Financial, and Ongoing Projects sections.

Status:	Ongoing
Output:	Program administration, partnership building, and CCMP implementation
Outcome:	See specific projects
Estimated Cost:	\$250,366
Funding Source:	EPA funds for FY 2006

Watershed Field Coordinator - Virginia

For more detail see Ongoing Projects section.

Status: Ongoing
Output: Program administration, partnership building, and CCMP implementation
Outcome: Increased presence of APNEP in Virginia, new Chowan Watershed Roundtable
Estimated Cost: \$30,000
Funding Source: EPA funds for FY 2006

Board and Committees Support

Support activities for the Board and advisory committees, printing, meeting support, etc.

Status: Ongoing
Output: Partnership building, outreach, CCMP implementation prioritization
Outcome: New and greater public involvement, estuarine indicator development
Estimated Cost: \$10,000
Funding Source: EPA funds for FY 2006

Demonstration Projects

Proposals were solicited for demonstration projects to provide environmental benefits in the Albemarle-Pamlico region. Results of the demonstration projects will be transferable to other National Estuary Programs. Project selection was made by the Citizen Advisory Committee on April 7, 2006.

Carteret Community College Shoreline Restoration Project

This project will engage at risk youth through hands-on learning and community mentoring partnerships that allow them to understand the value of wetlands, clean estuaries, and environmental stewardship, resulting in the direct restoration of a shoreline fronting Bogue Sound at Carteret Community College. The project will rely on partnerships between the North Carolina Coastal Federation (NCCF), Carteret Community College (CCC), APNEP, the Boys and Girls Club of America (BGC), and citizen volunteers.

Status: Pending Contract
Intended Output: Involvement of 40 at-risk youth from the local Boys and Girls Club, and 20 community volunteers. College students will serve as mentors to the youth and community volunteers will assist both groups with the wetland planting.
Intended Outcome: Restore .25 acres of wetlands. Additional outreach activities will reach an estimated 500,000 individuals.
Estimated Cost: \$ 20,978
Funding Source: EPA funds for FY 2006
Estimated Leverage: \$ 7,570

Perquimans County High School Constructed Wetland and Environmental Education Project, Phase II

This project is a collaborative venture led by the Perquimans County Schools to improve an outdoor education program for 570 high school science students, their teachers and the local community. The proposed project would build on the successful first stage of the Jennie's Gut Constructed Wetlands Project, funded in part with a 2005 grant from APNEP. The proposed project would improve outdoor teaching and learning opportunities by replacing a pedestrian bridge to allow greater water flow.

Status: Pending Contract
Intended Output: Educational wetland, public involvement.
Intended Outcome: Reduction in sediments, nutrients and toxicants from nonpoint sources, improvement of water quality for a town and community, improved water flow
Estimated Cost: \$ 11,400
Funding Source: EPA funds for FY 2006
Estimated Leverage: \$ 2,000

Williamston High School Low Impact Development Project

This project will install several examples of Low Impact Development (LID) practices on the site of Williamston High School in Martin County, NC. The integrated management practices of a cistern, level spreader, vegetative buffer, bioretention, rain gardens and permeable pavement will help treat runoff from the school site before it enters the Roanoke Basin watershed. The practices will be used to educate students, officials, and citizens of the importance of integrated management practices and how they can be used at the residential and commercial levels to treat runoff.

Status: Pending Contract
Intended Output: Demonstration BMPs installed
Intended Outcome: Reduce erosion and untreated stormwater runoff, improved water quality; reduction in the amount of treated municipal water used for landscaping and other non-potable uses
Estimated Cost: \$ 25,000
Funding Source: EPA funds for FY 2006
Estimated Leverage: Pending

Red Mill Elementary School Riparian Buffer Project and Environmental Education Center, VA

This project will construct a 35-foot riparian buffer zone adjoining Red Mill Elementary School, and develop an education program with displays and outdoor classroom facilities.

Status: Pending Contract
Intended Output: Education program with displays
Intended Outcome: A 35-foot riparian buffer zone
Estimated Cost: \$ 25,000
Funding Source: EPA funds for FY 2006
Estimated Leverage: \$ 17,000

Manteo Middle School Stormwater Demonstration Project

Students, teachers, and volunteers will plant rain gardens in an area designed to catch stormwater from the school's parking lots and roof. Information on stormwater pollution and control will be incorporated into the science curriculum, and signs will inform the public about stormwater problems and control.

Status: Pending Contract
Intended Output: Two landscaped rain gardens with native plants, with signs explaining stormwater runoff and the need to control it, greater student awareness of effects of stormwater
Intended Outcome: Improved stormwater management
Estimated Cost: \$ 14,500
Funding Source: EPA funds for FY 2006
Estimated Leverage: \$ 7,340

Wet and Wild: Utilizing the Wet Detention Pond at P.S. Jones Middle School as an Outdoor Classroom

This project proposes the creation of an outdoor classroom in and around a two-acre wet detention pond that has been constructed on the 88-acre tract of land on which P.S. Jones Middle School and John Small Elementary School are being built. Grant funds will be used to design and construct a wheelchair-accessible observation platform and pier overlooking the detention pond to provide students and teachers with opportunities for scientific study, observation, and data collection. Grant funds will also be used to purchase and introduce plants selected for their documented ability to uptake and/or degrade toxins in pond water.

Status: Project pending feasibility review by NC Cooperative Extension
Intended Output: Boardwalk, outdoor classroom
Intended Outcome: Improved stormwater management, vegetation, greater student awareness of effects of stormwater
Estimated Cost: \$ 25,000
Funding Source: EPA funds for FY 2006
Estimated Leverage: Pending

Other Projects

Funds budgeted in this category were used to supplement the demonstration projects in Virginia.

Status: Allocated to FY 2006 Demonstration Projects (VA) – in progress
Estimated Cost: \$12,000
Funding Source: EPA funds for FY 2006

Submerged Aquatic Vegetation (SAV) Mapping

APNEP plans to continue leading the NC/VA SAV mapping project. The SAV workgroup is currently developing the plans for the next round of flights. See Submerged Aquatic Vegetation (SAV) Monitoring in Ongoing Projects for more information.

Status: Ongoing project
(Note: FY 2006 funds have not been contracted to date)
Output: Reports and GIS data, better management of SAV resources
Outcome: New management actions to protect SAV resources
Estimated Cost: \$20,000
Funding Source: EPA funds for FY 2006
Leverage: Pending

Citizens' Monitoring Network

For more detail see Ongoing Projects section.

Status: Ongoing
Output: Data, citizen involvement
Outcome: Increased knowledge on status of local waters
Estimated Cost: \$56,000
Funding Source: EPA funds for FY 2006

2006 Teacher Institute

APNEP will partner with the Office of Environmental Education and the Environmental Education Fund to offer a teacher training institute at the Trinity Center in Salter Path, NC. Approximately 20 teachers will be provided with curriculum training in earth / environmental sciences with hands-on activities, site visits, and specific content to support inquiry, experiential, and research-based instruction on estuary and water resources. The dates for the institute are July 30, 2006 - August 3, 2006.

Status: In progress
Intended Output: 20 teachers exposed to environmental education opportunities
Intended Outcome: Increased environmental education in schools
Estimated Cost: \$22,000
Funding Source: EPA funds for FY 2006

Outreach Activities and Web Site

APNEP continues to develop a greater capacity of outreach and community involvement, including web site updates and redesign. The APNEP web site (www.apnep.org) will continue to disseminate information about the mission and goals of the NEP and provide information on progress of CCMP implementation. The APNEP web site also carries past issues of *The Beacon*.

Status: In progress
Output: Newsletters, press releases, posters, and web site
Outcome: Increased environmental awareness, implementation of CCMP
Estimated Cost: \$ 1,600
Funding Source: EPA funds for FY 2006 and NC DENR support

Local Government Survey

In order to assess the status of the current relationship and potential for greater local involvement, APNEP contracted for local governments to be interviewed to assess needs that can be addressed by APNEP program actions. The contractor met with representatives of county governments and Councils of Government to determine needs related to implementation of the CCMP.

Status: Complete
Output: 20 local governments reached, reports
Outcome: Better understanding of local government issues
Estimated Cost: \$6,000
Funding Source: NC DENR
Leverage: \$6,000

Estuary Live! Spring 2006

APNEP partnered with the NC National Estuarine Research Reserve and others to offer interactive field trips for students from North Carolina and throughout the world.

Status: Complete
Output: 4 days of broadcast
Outcome: Increased environmental awareness
Estimated Cost: \$ 500
Funding Source: EPA funds for FY 2003
Leverage: \$9,000

CHPP Implementation Booklet

APNEP partnered with the NC Coastal NPS Program and NC DENR to develop an informational booklet highlighting the Coastal Habitat Protection Plan (CHPP) to assist NC DENR in its outreach efforts.

Status: Complete
Output: CHPP implementation booklet
Outcome: Increased environmental awareness
Estimated Cost: \$6,681

Funding Source: NC Coastal NPS Program
Leverage: \$6,681

CHPP Posters

APNEP again partnered with the NC Coastal NPS Program and NC DENR to develop information to assist in the CHPP outreach effort. Staff worked to develop a set of general habitat posters.

Status: Complete
Output: CHPP Implementation posters
Outcome: Increased environmental awareness
Estimated Cost: \$ 3,000
Funding Source: NC Coastal NPS Program
Leverage: \$ 3,000

Legislative Oyster Roast

APNEP participated in an oyster roast held for legislators on Wednesday, May 24th 2006 to draw attention to efforts to restore oyster habitats along the coast and the *North Carolina Oyster Restoration and Protection Action Plan: A Blueprint for Action*.

Status: Complete
Output: Legislative oyster roast, media event
Outcome: Increased environmental awareness
Estimated Cost: \$11,000
Funding Source: NC Coastal Federation, The Nature Conservancy, NCDENR and others
Leverage: \$11,000

Albemarle-Chowan Watershed Roundtable

The APNEP partnered with the Virginia Department of Conservation and Recreation to lead the formation of an Albemarle-Chowan Watershed Roundtable on March 29, 2006. The initial meeting focused on the “state of the watershed” and opportunities to move forward with grant proposals to secure additional resources. Small group discussions centered on outreach/education, planning and research, and implementation.

Status: Ongoing
Output: Citizen advisory group
Outcome: Increased environmental awareness and citizen participation
Estimated Cost: Pending
Funding Source: Virginia Department of Conservation and Recreation
Leverage: Pending

Regional Wetlands Grant: Development of a Comprehensive Assessment and Tracking Methodology for Wetland Functionality in the Chowan Estuary of Western Albemarle Sound

APNEP partnered with Environmental Defense to obtain a Regional Wetlands Grant from the EPA to develop a comprehensive assessment methodology for wetland functionality in the Chowan Estuary of Western Albemarle Sound, as the basis for setting goals for wetland extent and condition, developing programs to achieve those goals, and tracking progress. The work will be used to prioritize short-term actions, and as an integral part of the long-term implementation plans for state and federal resource management in the region.

Status: In Progress
Output: A comprehensive assessment methodology for wetland functionality
Outcome: Greater wetland restoration and conservation
Estimated Cost: \$1,013,968
Funding Source: EPA and Environmental Defense funds for Regional Wetland Grant
Leverage: \$1,013,968

III. FY 2005 ACTIONS & PROJECTS

The following are ongoing or completed actions from the FY 2005 Work Plan since October 1, 2005.

Conservation Assessment for the Albemarle-Pamlico Region, Phase II

The NC Natural Heritage Program is working to identify owners of lands which contain Significant Natural Heritage Areas identified during the Albemarle-Pamlico Estuarine Study from 1989 to 1993, and to meet with the landowners to inform them of the ecological significance of their lands and to encourage their wise stewardship of their properties. Project builds upon FY 2003 project.

Status: In Progress
Output: Data, report
Outcome: Conservation easements or other land protection
Estimated Cost: \$12,000
Funding Source: EPA funds for FY 2005

Submerged Aquatic Vegetation Mapping (Ongoing)

See Submerged Aquatic Vegetation (SAV) Monitoring in Ongoing Projects for more information.

Status: In Progress (Phase II)
Output: Reports and GIS data, better management of SAV resources
Outcome: New management actions to protect SAV resources
Estimated Cost: \$20,000
Funding Source: EPA funds for FY 2005
Leverage: Funds were directly linked to \$20,000 from the NC Wildlife Resources Commission in contracted project. Additional leverage is pending.

Conservation Assessment for the Chowan River Basin in Virginia

APNEP is working with the Virginia Natural Heritage Program to conduct a conservation assessment to identify each habitat type of conservation concern within the region of study. The goal of this project is to improve our knowledge of the conservation needs of Virginia's Chowan River basin's natural heritage resources and develop better conservation targets.

Status: Complete
Output: GIS Data, report
Outcome: Greater understanding of habitat types of conservation concern
Estimated Cost: \$15,000
Funding Source: EPA funds for FY 2005

Wetlands Assessment and Mapping for the Chowan River Basin

APNEP is partnering with the Virginia Institute of Marine Sciences and others to conduct a riparian wetlands survey /assessment along the Chowan River. This process will lead to the development of GIS data layers of the various wetland habitats. Collected data identifies shoreline use, condition, natural habitat environments, and anthropogenic modifications to the shoreline that may impact habitat viability.

Status: Complete
Output: GIS Data, report
Outcome: Greater understanding of wetland status along the Chowan River
Estimated Cost: \$30,196
Funding Source: EPA funds for FY 2005
Leverage: Pending

Estuary Live! Fall 2005

APNEP planned to partner with the NC National Estuarine Research Reserve to offer interactive field trips for students from North Carolina and throughout the world. The broadcast was canceled due to effects of Hurricane Ophelia.

Status: Canceled
Estimated Cost: \$ 0
Funding Source: EPA funds for FY 2003

Under Served Communities – Estuarine Education

APNEP is working with various partners to develop a pilot program in two elementary schools (grades K-4) in the APNEP region to assist students and their families in learning new skills and developing new abilities to enhance their understanding of their connections to the estuary and the environment.

Status: Pending additional funds
Estimated Cost: \$8,000
Funding Source: EPA funds for FY 2005

IV. FY 2004 PROJECTS

The following are ongoing or completed actions from the FY 2004 Work Plan since October 1, 2005.

EPA Financial Planning – Program Development

This project was identified in the FY 2004 work plan to be addressed as funding became available. As APNEP reevaluates its structure, staff and Board members will work with EPA staff to identify and develop strategies for leveraging funds beyond EPA grant funds. EPA staff / contractor will lead this effort. Staff will work with the EPA and the Policy Board or Citizen Advisory Committee to develop the meeting. EPA has made funding available for planning in FY 2007.

Status: New
Intend Output: Report, public involvement
Intended Outcome: Additional resources for CCMP implementation
Estimated Cost: \$10,000
Funding Source: EPA supplemental funds for Financial Planning in FY 2007

Atlantic White Cedar Restoration Project

The NC Division of Coastal Management / Coastal Reserves planned to replant approximately 38 acres of forested wetlands with native hardwood species, cypress, and Atlantic White Cedar at the Preyer-Buckridge Coastal Reserve in winter 2004, but heavy rains and flooding have delayed site preparation and replanting. Staff now plan to install a tide gate to reduce the effects of saltwater intrusion.

Status: Pending
Intend Output: Report, data
Intended Outcome: Habitat restoration
Estimated Cost: \$16,000
Funding Source: EPA funds for FY 2004

Demonstration Projects with Virginia

In an effort to further build partnerships with resource agencies and others in both NC and VA, at least one demonstration project will be developed in the shared river basins.

Status: In Progress - Funds were applied to FY 2006 School Yard Demonstration Projects in Virginia.
Estimated Cost: \$10,000
Funding Source: EPA funds for FY 2004

FY 2005 School Yard Demonstration Projects

School Yard Demonstration Projects were solicited in each of the river basins to provide environmental and educational benefits in the Albemarle-Pamlico region.

Student Wetland Nursery Program

The Student Wetland Nursery Program engages students through hands on projects that enable them to understand the value of wetlands, resulting in the direct restoration of wetlands and continued stewardship of valuable coastal resources. Through this project, students will learn about wetlands and stormwater, construct wetland nurseries on the school grounds, cultivate wetland grasses, and then use these grasses to help restore a wetland area in the Neuse Watershed.

Status: In Progress

Output: Classroom instruction for two middle school science classes (representing at least 50 students and teachers), conduct seed experiments in each classroom to generate 1,000 wetland plants, construct two wetland nurseries at two schools for cultivation of at least 4,000 additional plants (for a total of 5,000 plants), public outreach, assist students to plant wetland grasses at restoration sites, restoring at least one half acre of wetlands. Produce and air a half-hour cable access show available to 500,000 households.

Outcome: Two wetland nurseries at two schools, planting of 5,000 wetland plants, restoring at least one half acre of wetlands. Project knowledge due to a half-hour cable access show detailing the student wetland nursery project.

Estimated Cost: \$13,210

Funding Source: EPA funds for FY 2004

Leverage: \$ 5,000

Washington Montessori School Bio-Swale

Washington Montessori constructed a bio-filter (bio-swale) stormwater treatment system to address excess run off from the roof and gravel parking lot. The system will not only be sufficient for the current 8,000 square foot building, but for future school building expansions as well.

Status: Complete

Output: A bio-filter (bio-swale) stormwater treatment system to address excess run off from the roof and gravel parking lot.

Outcome: Increased environmental awareness for students, teachers and parents, on-site stormwater treatment

Estimated Cost: \$20,000

Funding Source: EPA funds for FY 2004

Northampton Outdoor Learning Center Nature Trail

The Northampton Nature Trail provides students with hands on learning as well as an outdoor learning environment for environmental education. The restored barrow area will serve as the orientation site for the nature trail classroom. The APNEP grant funds were used to construct a teaching shelter and a handicap accessible boardwalk onto an island that exists at a natural pond on the trail site. The Outdoor Learning Center is a short distance from a new K-5 elementary school site.

Status: Complete
Output: Nature trail, boardwalk, and signage
Outcome: Environmental education facility and nature trail, increased environmental awareness
Estimated Cost: \$20,000
Funding Source: EPA funds for FY 2004
Leverage: **Pending**

Gates County High School Outdoor Environmental Learning Site

This project is a collaborative venture led by Gates County Public Schools to plan and construct a boardwalk, bridge and observation platform which will enhance science teaching and learning for 640 high school students and their teachers and increase environmental awareness for the general public of Gates County.

Status: In Progress
Intended Output: Boardwalk, bridge and observation platform, riparian buffer, enhanced science teaching and learning for 640 high school students and their teachers, and increased environmental awareness for the general public of Gates County.
Intended Outcome: Increased environmental awareness
Estimated Cost: \$ 17,215
Funding Source: EPA funds for FY 2004
Estimated Leverage: \$ 1,000

J.E.J. Moore Outdoor Classroom and Nature Trail

This project built an outdoor classroom equipped with an educational kiosk and seating for 35 students, as well as interpretive signs along a nature trail in a wooded wetland area.

Status: Complete
Output: Trail, signage, outdoor classroom
Outcome: Increased environmental awareness
Estimated Cost: \$10,000
Funding Source: EPA funds for FY 2004
Estimated Leverage: \$ 5,500

Perquimans County High School Constructed Wetland and Environmental Education Project

This project is a collaborative venture led by the Perquimans County Public Schools to re-shape and restore a natural wetlands located on the grounds of Perquimans High School, to construct an access boardwalk, bridges and observation deck, and to use the restored accessible wetland as the basis for an outdoor education program for 570 high school science students and their teachers.

Status: Complete
Output: Report, wetland, and environmental awareness
Outcome: Restored wetland, increased environmental awareness
Estimated Cost: \$20,000
Funding Source: EPA funds for FY 2004

Mini-grants

Status: Reallocated to FY 2006 Demonstration Projects
Estimated Cost: \$4,000 - funds were allocated to FY 2006 Demonstration Projects
Funding Source: EPA funds for FY 2004

V. FY 2003 PROJECTS

The following are ongoing or completed actions from the FY 2003 Work Plan since October 1, 2005.

Comprehensive Monitoring Plan

The APNEP Science Coordinator is coordinating the activities associated with development of the indicators and the monitoring strategy. The Science Coordinator has reviewed work efforts previously completed by the program and has conducted meetings with other DENR agency staff to gather information on existing and proposed monitoring programs and projects. The APNEP Science Coordinator, STAC and DENR agency staff will continue to address this task in FY 2007.

Status: In Progress
Intended Output: Plan
Intended Outcome: Enhanced environmental monitoring
Estimated Cost: \$3,000
Funding Source: Unencumbered EPA funds from previous years as necessary

Other Projects

The APNEP worked to develop partnerships to implement projects that support the mission of the APNEP and implementation of the CCMP.

NC Division of Forest Resources (DFR) Forestry BMP Manual Revision

Project to support NC DFR to produce and distribute (via workshops and direct mail-out) the Manual to select forest operators and forestland owners located in the five APNEP River Basins.

Status: In Progress
Output: BMP Manual
Outcome: Increased use and awareness of forestry BMPs
Funding Source: Unencumbered EPA funds from previous years as necessary
Funding: \$15,000
Leverage: **Pending**

VI. FY 2002 WATERSHED DEMONSTRATION PROJECTS

Funds from a previous EPA grant (CE- 994645-94) were dedicated to support a round of watershed demonstration projects. The River Basin Regional Councils selected projects and allocated funding levels in May 2004. The total funds available for the projects was \$250,000 with \$50,000 available per basin. A “Request for Proposals” was open for governmental agencies, educational institutions, and non-profits.

The projects address the main sections of the APNEP Comprehensive Conservation and Management Plan (CCMP): water quality, vital habitats, fisheries and stewardship. The projects should have three main components: 1) they should be physical in-ground projects, 2) they should have a public outreach/education element, and 3) they should have transferable methods. Prospective grant recipients were encouraged to partner with others to leverage additional funds.

The following is a summary for each project active in FY 2006:

Low Impact Development Demonstration and Education for the Upper Neuse River Basin

Demonstrate the effectiveness of Low Impact Development techniques in reducing stormwater runoff

Lead Agency: North Carolina State University Water Quality Group
Partners: DENR Division of Water Quality, NCSU Biological & Agricultural Engineering Dept., NCSU College of Design, Habitat for Humanity
Status: In Progress
Output: Demonstration BMPs
Outcome: Improved stormwater management and water quality
Funding: \$25,000

Leverage: \$170,100

Citizens’ Oyster Gardening Program for North Carolina

Demonstrate a way citizens can assist in restoring native oyster numbers and their ecological functions to the estuaries

Lead Agency: Carteret Community College
Partners: DENR Division of Marine Fisheries, NC National Estuarine Research Reserve, NC Division of Coastal Management, NC Shellfish Growers Association

Status: Complete
Output: Educational workshops, oyster raising materials, website
Outcome: Oysters and habitat, cleaner water
Funding: \$31,946
Leverage: \$1,000

Stormwater Wetland at Pictolus Elementary School

Plan and create a stormwater wetland on a parcel located adjacent to Pictolus Elementary School in Pitt County, NC. The wetland will capture runoff from the school’s parking lot and roof drains, which presently empties into Grindle Creek as untreated stormwater runoff. The site will educate local students about wetlands and serve as an outdoor classroom.

Lead Agency: Pitt County Planning Department
Partners: Pitt County School Board, Cooperative Extension, Coastal Land Trust

Status: In Progress
Intended Output: Wetland, report, educational area
Intended Outcome: Constructed wetland, better stormwater management, improved water quality
Funding: \$31,200
Leverage: \$ 1,000

Bennett’s Millpond Demonstration Project

This project focused on creating a community facility to provide opportunities for environmental education and stewardship. A “green roof” demonstration component is included to analyze the environmental impact of a green roof design on the surrounding microclimate. Outreach components included a Millpond calendar, a biyearly event brochure (for the local counties) and promotional brochure for wider distribution.

Lead Agency: Edenton-Chowan County Schools
Partners: Chowan County Recreation Department, Chowan County
Status: Complete
Output: Outdoor educational facility, brochures, calendar, demonstration green roof
Outcome: Increased environmental awareness
Funding: \$26,740
Leverage: Pending

Town of Gatesville Water Quality Project

Projects consists of stormwater BMP construction and monitoring to determine pollution contribution / changes. Construction delays have slowed the project.

Lead Agency: Albemarle Resource Conservation and Development Council
Partners: Town of Gatesville, Gates Soil & Water Conservation District, NC Department of Transportation, Natural Resources Conservation Service, Citizens
Status: In Progress
Intended Output: Constructed wetland system to serve the town's 160 acre watershed, restored ditch banks and buffers, construct educational display, report
Intended Outcome: Improved water quality and habitat, improved stormwater management
Funding: \$50,000
Leverage: Pending

ONGOING LONGTERM PROJECTS & ACTIONS

I. Submerged Aquatic Vegetation (SAV) Monitoring

The Coordinating Council elected to provide \$20,000 in FY 2002 supplemental funds as seed money to initiate a large-scale, long-term submerged aquatic vegetation (SAV) monitoring effort to assess the extent of SAV coverage in the Albemarle-Pamlico estuaries. An additional \$6,000 was allocated in the FY 2003 Work Plan to support DENR staff in learning about SAV mapping and restoration.

Submerged aquatic vegetation constitutes one of the most common estuarine habitats in North Carolina. The 1990 published estimate of SAV area is 200,000 acres in NC. In the contiguous 48 states, North Carolina is second only to Florida in acreage of SAV, and has twice the acreage reported for Chesapeake Bay. SAV provides food and cover for a great variety of commercially and recreationally important fauna and their prey. Thirteen species of SAV have been reported for the Albemarle-Pamlico estuary. SAV supports many species of fish and shellfish and are major fishery habitats of the shallow sounds behind North Carolina's barrier islands and along the coastal fringes bordering the western side of these sounds.

Previous studies by NOAA and East Carolina University to delineate and quantify the location and extent of SAV, based on conventional color aerial photography and field sampling, were conducted in the late-1980s and early-1990s for major portions of the Albemarle-Pamlico estuary. This information, some of which has been digitized in GIS-format, has proven valuable to habitat managers in their review of dredge and fill related permit applications and has helped Core Sound, Back Sound and western Bogue Sound achieve nomination for designation as Outstanding Resource Waters.

Since that time, no major organized effort to map the location and extent of SAV coverage in the Albemarle-Pamlico estuary has been conducted. SAV is being used as a critical environmental indicator in several other estuarine systems (e.g., Indian River Lagoon, Sarasota Bay, Tampa Bay and Chesapeake Bay). Currently, North Carolina lacks the information necessary to determine reliable trends in SAV distribution and health.

APNEP has partnered with NC Division of Marine Fisheries, US Fish and Wildlife Service, Elizabeth City State University and the NC Coastal Nonpoint Source Program to conduct aerial photography flights over Back Bay, Currituck Sound and Kitty Hawk Bay.

Status:	In Progress
Output:	Report, GIS data, maps, educational opportunities
Outcome:	Better environmental data, better resource management and planning
Funding & Source:	EPA FY 2002 – \$20,000 - Complete EPA FY 2003 – \$6,000 - Complete

EPA FY 2005 – \$20,000 Contracted (Phase II - In Progress)

EPA FY 2006 – To be contracted with FY 2007 funding for digital image acquisition.

Partners: NC Division of Marine Fisheries, US Fish and Wildlife Service, Elizabeth City State University, the NC Coastal Nonpoint Source Program, and NC Division of Water Resources.

In FY 2007 APNEP will provide the base funding necessary to acquire digital aerial photography of potential SAV habitats in the APNEP region. This imagery is a necessary step in providing APNEP partners with information on the current status of SAV in the sounds. See Submerged Aquatic Vegetation (SAV) Monitoring in Ongoing Projects for more information. Also see FY 2005 and FY 2006 Projects.

II. EPA Supported Nonpoint Source Pollution Related Restoration Project (Tryon Palace)

During FY 2001, APNEP received \$75,000 to support an environmental NPS-related restoration project in the APNEP region. These funds were used to support and leverage Clean Water Management Trust Fund money to construct a wetland and storm water management project associated with Tryon Palace State Historic Site in New Bern, NC. Specifically, these funds are to create a cord grass marshland in the designated area along the confluence of the Neuse and Trent rivers.

The current contract is ongoing and the project is still underway. Ground breaking and site dedication occurred in the fall of 2002. Although much planning has been done, no invoice has yet been received for the specific activity defined for this contract.

- ❖ This action supports the CCMP's Vital Habitats Plan, Objective C, Management Action 3: *“Enhance existing efforts to restore the functions and values of degraded wetlands and vital fisheries habitats. Develop and begin implementing an expanded program to restore wetlands.”*

Status:	In Progress
Output:	Wetland, riparian buffer
Outcome:	Restored wetland, improved water quality and habitat
Estimated Cost:	\$75,000
Funding Source:	EPA dedicated funds for project

III. APNEP Program Administration

Staff are responsible for the coordination, planning and successful completion of APNEP functions including Policy Board and Advisory Committee meetings, APNEP forums and other APNEP-sponsored events. In addition, staff monitors, and often becomes involved in, activities of state resource management agencies that relate to CCMP implementation. Staff also attend meetings, conferences and workshops in order

to stay apprised of technological advancements that may prove beneficial in the APNEP region. Although the Policy Board and Advisory Committee are instrumental in identifying local environmental issues and prioritizing management actions within each basin, most management actions are implemented by various state agencies on a local, basinwide, regional or statewide basis.

Presently, the staff consists of the program office in Raleigh, with the Director, Science Coordinator, and Restoration Specialist. A NC Watershed Field Representative has offices in Raleigh and Washington; the APNEP public involvement office also in Washington houses the Community Development Specialist. The APNEP also has two contract employees: the Citizens' Monitoring Network Coordinator at East Carolina University in Greenville, and the Virginia Watershed Field Representative in Suffolk. For more detail see Administration and Financial section.

Status: In Progress - Ongoing (See Administrative and Financial Section)
Output: Program administration, reports, leverage, presentations
Outcome: Environmental result, CCMP implementation
Estimated Cost: **\$244,427** will be needed for administration and implementation of the APNEP and the CCMP.
Funding Source: EPA funds for FY 2007

IV. Virginia Watershed Field Coordinator

The headwaters for the Pasquotank, Chowan and Roanoke River basins are located within Virginia. One of the most critical components to effectively implement the CCMP within these basins is long-term, comprehensive coordination between North Carolina and Virginia. The Watershed Field Coordinator for Virginia provides coordination and support to APNEP, DENR and the Virginia Department of Conservation and Recreation (VA DCR), and enhances implementation of the CCMP in the Roanoke, Chowan and Pasquotank river basins. The APNEP supports one-half of this position for at least 20 hours per week. The contract has been extended for another year.

❖ The Virginia Watershed Field Coordinator directly supports the CCMP's Implementation Plan, Objective A: Management Action 2: *“Coordinate implementation of the CCMP.”*

Status: In Progress - Ongoing
Output: Program administration, reports, leverage, presentations
Outcome: Environmental result, CCMP implementation
Estimated Cost: \$30,000
Funding Source: EPA funds for FY 2007

V. Citizens' Monitoring Network

The APNEP Citizens' Monitoring Network (CMN) is a network of private citizens who monitor surface water quality in the Albemarle-Pamlico estuary and its tributaries. The

program began as an initiative of the Pamlico-Tar River Foundation in 1988, to protect, preserve and promote the water quality of the Tar-Pamlico River and its watershed. Today, the program includes all waters located in the Albemarle-Pamlico region.

The CMN has three areas of activity: Baseline Monitoring, Targeted Monitoring and Surveys, and Water Quality Education. Program volunteers receive support in each of these areas through water quality education and training, QA/QC workshops, distribution of equipment and supplies, data management/analysis, and networking opportunities. Participants primarily monitor "vital signs" of the estuary. Specifically, parameters tested include: dissolved oxygen, pH, salinity, air and water temperatures, and turbidity to gauge the general health or quality of water in the estuary. Using basic but accurate water quality test kits, citizen volunteers analyze their water samples, observe qualitative factors such as weather conditions and other visual indicators, and record the results.

All monitoring data collected are forwarded to the CMN office at ECU where staff compiles the information and enters the data into reporting form for citizen and government agency use. Information is available to the public on the APNEP website at <http://www.apnep.org/> and at <http://www.ecu.edu/icmr/cwqmp>. This is a very popular program and it continues to be expanded.

Operation of the APNEP Citizens' Monitoring Network (including Coordinator, equipment, supplies, office and lab space and indirect costs) will be continued by extending the contract with East Carolina University.

- ❖ The Citizens' Monitoring Network directly supports the CCMP's Stewardship Plan, Objective B: Management Action 4: *"Expand involvement in the Citizens' Water Quality Monitoring Program (CWQMP) and make the program more interactive with regulatory agencies."*

Status:	In Progress - Ongoing
Output:	Awareness, data
Outcome:	Increased environmental awareness
Estimated Cost:	Continued operation of the Citizens' Monitoring Network (including Coordinator, equipment, supplies, lab space and indirect costs) will require \$56,000 (via contract with East Carolina University).
Funding Source:	EPA funds for FY 2007

VI. Program Enhancements Relating to Smithfield Foods Agreement

In July 2000, the NC Attorney General's Office and Smithfield Foods, Inc. and its subsidiaries, the largest hog producing and pork processing companies in the world, signed a major agreement. It is a legally binding agreement that focuses on the elimination of open-air hog lagoons and spray fields in North Carolina. An element of

the agreement states that the Smithfield companies will play a "leadership role in enhancing the effectiveness of the Albemarle-Pamlico National Estuary Program." Staff has met several times with representatives from Smithfield Farms, the NC Attorney General's Office and NC DENR on topics of interest. Little progress has been made and support intentions are unclear.

In FY 2005 APNEP staff applied for two grants totaling \$940,203 from the Smithfield Environmental Enhancement Grants for SAV mapping and non-point source pollution reduction in Ward Creek. Staff will seek additional partners and resubmit the proposals.

Status: Ongoing
Estimated Cost: No cost
Funding Source: N/A

VII. OTHER PROJECTS

GIS Outreach and Services

The APNEP had contracted with the NC Center for Geographic Information and Analysis (CGIA) to provide GIS support and training as well as accessible and affordable GIS data for planning and educational purposes.

Status: In Progress
Output: GIS data, training, reports
Outcome: Enhanced environmental awareness and management resources
Estimated Cost: \$18,000
Funding Source: EPA funds (Remaining from previous NC CGIA contract)

North Carolina – Virginia Shared Resources Forum

A forum for state resource agencies and local governments in the Roanoke, Chowan and Pasquotank river basins will be held to review resources shared by the two states. This forum has been delayed in order to assess the role of the new Roanoke Bi-State Commission as designated by the General Assembly of both states. Approximately \$1,000 is budgeted for this effort using EPA funds from previous years. The current strategic planning exercise has identified a Governor's agreement as a possible goal for the program. It should also be noted that the APNEP Watershed Field Coordinator for Virginia is playing a key role in inter-state relations with issues in our shared river basins.

❖ This action directly supports the CCMP's Implementation Plan, Objective A, Management Action 2: "*Coordinate implementation of the CCMP.*"

Status: Planning
Estimated Cost: \$1,000
Funding Source: EPA funds from previous years - budgeted in the FY 2003 Work Plan.

PROJECTS & ACTIONS FOR FY 2007

New projects for FY 2007 will continue to support the implementation strategy as outlined in the CCMP and support program reform and CCMP update efforts.

Program Administration

For more detail see Administration and Financial, and Ongoing Projects sections.

❖ These actions support the CCMP's Implementation Plan goal: *“Implement the CCMP in a way that protects environmental quality while using the most cost-effective and equitable strategies.”*

Type: Ongoing
Intended Output: Program administration, partnership building, CCMP implementation
Intended Outcome: CCMP implementation
Estimated Cost: \$ 244,427
Funding Source: EPA funds for FY 2007

Watershed Field Coordinator - Virginia

For more detail see Ongoing Projects section.

❖ These actions support the CCMP's Implementation Plan goal: *“Implement the CCMP in a way that protects environmental quality while using the most cost-effective and equitable strategies.”*

Type: Ongoing
Intended Output: Governmental coordination, public involvement
Intended Outcome: CCMP implementation
Estimated Cost: \$ 30,000
Funding Source: EPA funds for FY 2007

Board and Committees Support

The key element of the CCMP's implementation is active citizen participation. On May 16th, 2005, North Carolina Governor Michael F. Easley signed Executive Order # 74: Creation of A Program Office, A Policy Board, and Advisory Committees to Support Natural Resource And Environmental Management in the Albemarle-Pamlico National Estuarine System. This Executive Order is essential to the future of the APNEP and was developed after more than two years of program review and assessment, and stakeholder participation. Members are currently being recruited to fill the positions on the Policy Board and Advisory Committees.

❖ This action supports the CCMP's Implementation Plan, Objective B: *“Assess the progress and success of implementing CCMP recommendations and the status of environmental quality in the Albemarle-Pamlico Sounds region.”*

Type: Ongoing
Intended Output: Partnership building, outreach, CCMP implementation prioritization
Intended Outcome: New and greater public involvement, estuarine indicator development
Estimated Cost: \$ 5,000
Funding Source: EPA funds for FY 2007

Financial Planning

This project was identified in the FY 2004 work plan to be addressed as funding became available. As APNEP continues with program restructuring, staff and Board members will work with EPA staff to identify and develop strategies for leveraging funds beyond EPA grant funds. EPA staff / contractor will lead this effort. Staff will work with the EPA and the Policy Board or Citizen Advisory Committee to develop the meeting. EPA has made funding available for planning in FY 2007.

Status: New
Intend Output: Report, public involvement
Intended Outcome: Additional resources for CCMP implementation
Estimated Cost: \$10,000
Funding Source: EPA supplemental funds for Financial Planning in FY 2007

Submerged Aquatic Vegetation (SAV) Image Acquisition

In FY 2007 APNEP will provide the base funding necessary to acquire digital aerial photography of potential SAV habitats in the APNEP region. This imagery is a necessary step in providing APNEP partners with information on the current status of SAV in the sounds. See Submerged Aquatic Vegetation (SAV) Monitoring in Ongoing Projects for more information.

❖ This action supports the CCMP's Water Quality Plan goal: *"Restore, maintain or enhance water quality in the Albemarle-Pamlico region so that it is fit for fish, wildlife and recreation."*

Type: Ongoing
Intended Output: Report, GIS data, maps, educational opportunities
Intended Outcome: Better environmental data, better resource management and planning
Estimated Cost: \$ 140,000
Funding Source: EPA funds for FY 2007
Leverage: Pending

Citizens' Monitoring Network

For more detail see Ongoing Projects section.

❖ This action supports the CCMP's Water Quality Plan: Management Action 4: *"Expand involvement in the Citizens' Water Quality Monitoring Program (CWQMP) and make the program more interactive with regulatory agencies."*

Type: Ongoing
Intended Output: Awareness, data
Intended Outcome: Increased environmental awareness
Estimated Cost: \$ 56,000
Funding Source: EPA funds for FY 2007

NC Teaching Fellows (Coastal)

APNEP will partner with NC Teaching Fellows Program, the Cape Lookout Studies Program, Friends of the N.C. Maritime Museum, and the NCNERR to provide a Junior Enrichment Program. Teaching Fellows are required to participate in a number of experiences designed to enhance their campus programs and give insights into the challenges facing them when they enter the classroom. This opportunity will be provided as a Junior Enrichment Program for rising juniors. Participants will receive instruction in the application of practical activities and curriculum related to coastal environments. Participants will receive activity guides and teaching materials.

❖ This project supports the CCMP's Stewardship Plan Objective C: *“Ensure that students, particularly in grades K-5, are exposed to science and environmental education.”*

Type: New
Intended Output: Pre-service junior enrichment for 15 NC Teaching Fellows
Intended Outcome: Increased environmental awareness
Estimated Cost: \$ 6,000
Funding Source: EPA funds for FY 2007
Leverage: To be determined

Outreach Activities

This project supports all of APNEP's outreach activities, including the APNEP newsletter, e-mail updates and other outreach materials.

❖ This project supports the CCMP's Stewardship Plan goal: *“Promote responsible stewardship of the natural resources of the Albemarle-Pamlico region.”*

Status: Ongoing
Intended Output: Public outreach and involvement
Intended Outcome: CCMP Implementation, increased environmental awareness
Estimated Cost: \$ 1,173
Funding Source: EPA funds for FY 2006
Leverage: To be determined

Web Site

The APNEP web site (www.apnep.org) will continue to disseminate information about the mission and goals of the NEP and provide information on progress of CCMP implementation. The APNEP web site will also carry *The Beacon*.

❖ This project supports the CCMP’s Stewardship Plan goal: “*Promote responsible stewardship of the natural resources of the Albemarle-Pamlico region.*”

Status: Ongoing
Intended Output: Public outreach and involvement
Intended Outcome: CCMP Implementation, increased environmental awareness
Estimated Cost: Unknown
Funding Source: NC DENR
Leverage: To be determined

Estuary Live! Spring 2007

APNEP will again partner with the NC National Estuarine Research Reserve to offer interactive field trips for students from North Carolina and throughout the world.

Status: Ongoing
Output: 4 days of broadcast
Outcome: Increased environmental awareness
Estimated Cost: \$ 500
Funding Source: EPA funds for FY 2003
Leverage: To be determined

ADMINISTRATION AND FINANCIAL

I. APNEP PERSONNEL

Program staff are responsible for the coordination, planning and successful completion of APNEP functions including Board and Committee meetings, APNEP forums and other APNEP-sponsored/partner events. In addition, staff monitors, and often becomes involved in, activities of state resource management agencies that relate to CCMP implementation, the Albemarle-Pamlico watershed or estuary. Staff also attend meetings, conferences and workshops in order to stay apprised of technological advancements that may prove beneficial in the APNEP region and the program.

Presently, the APNEP staff consists of the APNEP program office in Raleigh, with the Director (*Bill Crowell*), Science Coordinator (*Dean Carpenter*), and Restoration Specialist (*Kelly Williams*). The APNEP public involvement office in Washington, NC houses the Public Involvement Coordinator (*Joan Giordano*) and NC Watershed Field Representative (*Jimmy Johnson*). The APNEP also has two contract employees: the Citizens' Monitoring Network Coordinator (*vacant*) in Greenville, and the Virginia Watershed Field Representative (*Noah Hill*) in Suffolk, Virginia.

In the coming year, the new Policy Board and Advisory Committees will be instrumental in identifying local environmental issues, prioritizing management actions within the watershed, and working through the NEP Program Office to advise the various state and local agencies on CCMP implementation.

Overall administration costs for FY 2007 are estimated at approximately \$ 244,427 and includes salaries, fringe, longevity pay, rent, supplies, and indirect costs.

Program Director

The Program Director administrates and coordinates program activities and the CCMP implementation process, involving interaction with numerous federal and state resource management agencies, universities, interest groups, and the general public. This position manages the post-CCMP grants and associated contracts, provides staff support to the APNEP Policy Board and Advisory Committees, and represents the APNEP at local, state, regional and national meetings.

Personnel: Bill Crowell will continue in this role. Mr. Crowell has been the Director since June 2002.

Funding Source: EPA funds for FY 2007

Public Involvement Coordinator

The Public Involvement Coordinator supports public/ community relations and knowledge concerning issues relating to the Albemarle-Pamlico region; facilitates the implementation of the CCMP; develops and implements educational and outreach programs; promotes dialogue between local government officials and private citizens; and provides liaison responsibility for

the Citizens' Monitoring Network. This position also provides valuable staff support to the Policy Board and Advisory Committees.

Personnel: Joan Giordano will continue in this role. Ms. Giordano has served in this role since 1987.

Funding Source: EPA funds for FY 2007

Science Coordinator

The Science Coordinator assists the Program Director with administration and coordination of the CCMP. This position helps design and implement a comprehensive monitoring strategy and reporting process, guide the Scientific and Technical Advisory Committee (STAC), and reviews project proposals and reports for merit. This position provides staff support to the Policy Board and Advisory Committees.

Personnel: Dean Carpenter will continue in this role. Dr. Carpenter has served in this role since November 2003.

Funding Source: EPA funds for FY 2007

Restoration Specialist /Watershed Field Representative

The Restoration Specialist /Watershed Field Representative assists the Program Director to administrate and coordinate the CCMP implementation process, involving interaction with numerous federal and state resource management agencies, universities, interest groups, and the general public. This position assists in the management of contracts, and provides staff support to the Policy Board and Advisory Committees.

Personnel: Kelly Williams will continue in this role. Ms. Williams has served in this role since October 2003.

Funding Source: EPA funds for FY 2007

Watershed Field Coordinator (NC)

This position provides an essential function as an APNEP liaison to local governments and state agencies. The Watershed Field Coordinator (NC) provides coordination and support to local governments and state agencies to enhance CCMP implementation. This position also provides staff support to the Policy Board and Advisory Committees. This position splits time between the Raleigh and Washington DENR Regional Offices.

Personnel: Jimmy Johnson will continue in this role. Mr. Johnson has served in this role since January 2006.

Funding Source: NC DENR

Watershed Field Coordinator (VA)

Contracted support. See description under Ongoing Projects.

Personnel: Noah Hill will continue in this role.

Funding Source: EPA funds for FY 2007

II. GRANTS TO LOCAL ENTITIES

The Albemarle-Pamlico NEP let numerous contracts in FY 2006 in order to accomplish the tasks presented in the FY 2003 to FY 2006 Work Plans. These items are discussed in the Goals and Accomplishments, and the Ongoing Projects sections of this report.

Additionally, funds from a previous EPA grant (CE- 994645-94) have been dedicated to help support numerous projects. All funds under this grant have been spent or are in contractual obligations and should be spent by December 2007.

An additional grant was received from the EPA in December 2005. This Regional Wetland Grant (CD-9444206) is to develop a comprehensive assessment and tracking methodology for wetland functionality in the Chowan estuary of Western Albemarle Sound. APNEP partnered with Environmental Defense to obtain a Regional Wetlands Grant. Environmental Defense is providing the required matching funds for this grant. Since this project is not funded by the section 320 funds, it is not reported in the following table.

The following table provides an overview of all completed and active grants to local entities since October 1, 2005 for section 320 funds under CE-9746802, CE- 994645-94, or NC DENR funds for APNEP activities.

GRANTS TO LOCAL ENTITIES (October 1, 2005 to June 1, 2006)

Project Title	Funded Amount	Project Leader	Purpose	Deliverables	Completion Date	Status
Watershed Coordinator (VA)	\$30,000	VA. Dept. Conservation & Recreation	Fund Watershed Coordinator in VA-NC Shared river basins	Program support Reports	Ongoing	In Progress
Citizens' Monitoring Network	\$56,000	East Carolina University	Outreach / Monitoring	Program Newsletters Reports, Database	Ongoing	In Progress
Riparian Restoration (Tryon Palace)	\$75,000 EPA dedicated funds for project	Tryon Palace Committee	Riparian Restoration	Shoreline restoration Reports	September 2006	In Progress
Teacher Institute 2006	\$22,000	Environmental Education Fund	Develop and Implement a Teacher Institute for 25 teachers	Week long Institute Report	July 2006	In Progress
Forestry BMP Manual	\$15,000	NC Div. Forest Resources	Develop and Distribute a Forestry BMP Manual	Manual Meetings	September 2006	In Progress
GIS Support	\$18,000	NC CGIA	GIS Support	GIS Services Training	September 2006	In Progress
LID Demo Project	\$25,000	NCSU	Low Impact Development Demo	Construction Documentation Outreach	July 2006	In Progress
SAV Mapping Phase II	\$40,000 (\$20 K from APNEP)	Elizabeth City State University	SAV mapping project Phase I	SAV Mapping GIS	September 2006	In Progress
Pactolus Stormwater Wetland	\$31,200	Pitt County	Construct a Stormwater Wetland	Construction Documentation Outreach	September 2006	In Progress
Conservation Assessment NC Phase II	\$12,000	NC Natural Heritage	Conservation Assessment	Documents GIS	August 2006	In Progress
Town of Gatesville Water Quality Project	\$50,000	Albemarle RC&D	Stormwater Controls	Construction Documentation Outreach	September 2006	In Progress
Student Wetland Nursery Program	\$13,210	NC Coastal Federation	Student Wetland Nursery Program	Construction Outreach	July 2006	In Progress
Gates County High School	\$17,215	Gates County	Outdoor Learning Center Nature Trail	Construction Outreach	September 2006	In Progress

Project Title	Funded Amount	Project Leader	Purpose	Deliverables	Completion Date	Status
Bennett's Millpond	\$26,740	Edenton-Chowan County Schools	Environmental education facility and a "green roof"	Construction Outreach	December 2005	Complete
Conservation Assessment for the Chowan River Basin	\$15,000	Virginia Natural Heritage	Conservation Assessment	Documents GIS	December 2005	Complete
Northampton Outdoor Learning Center Nature Trail	\$20,000	Northampton County	Outdoor Learning Center Nature Trail	Construction Documentation Outreach	December 2005	Complete
Washington Montessori School Bio-Swale	\$20,000	Washington Montessori Charter School	Construct a bio-filter (bio-swale)	Construction Documentation Outreach	December 2005	Complete
Wetlands Assessment and Mapping for the Chowan River Basin	\$30,196	Virginia Institute of Marine Sciences	Wetlands Assessment and Mapping	Documents GIS	May 2006	Complete
Local Government Survey	\$6,000 (NC DENR)	Boyce Hudson	Local Government Survey	Documents	March 2006	Complete
JEJ Moore Outdoor Classroom & Nature Trail	\$10,000	Prince George County Schools	Outdoor Learning Center Nature Trail	Construction Documentation Outreach	April 2006	Complete
Perquimans HS Constructed Wetland	\$20,000	Perquimans County Schools	Wetland	Construction Outreach	March 2006	Complete
Citizens' Oyster Gardening Demo	\$31,946	Carteret Comm. College	Citizens' Oyster Gardening Demo	Oysters Outreach	November 2005	Complete
Carteret Comm. Coll. Shoreline Restoration	\$20,978	NC Coastal Federation	Shoreline Restoration	Shoreline Plantings	Pending	Pending
Perquimans High School Phase II	\$11,400	Perquimans County Schools	Bridge Replacement	Bridge	Pending	Pending
Williamston HS LID Demonstration	\$25,000	Town of Williamston	BMP Construction	BMP Construction	Pending	Pending
Red Mill Riparian Buffer	\$25,000	City of Virginia Beach	BMP Construction Outdoor Classroom	BMP Construction	Pending	Pending
Manteo Middle School Stormwater	\$14,500	Manteo Middle School	BMP Construction	BMP Construction	Pending	Pending
PS Jones Outdoor Classroom	\$25,000	Washington County Schools	BMP Construction Outdoor Classroom	BMP Construction	Pending	Pending

III. LEVERAGE FUNDS

The Albemarle-Pamlico NEP has more actively sought alternative sources of funding for APNEP activities and projects to fulfill the goals of the CCMP. In addition, the APNEP sought out additional avenues for collaborating with other agencies to assist in targeting these program funds towards CCMP and basinwide goals. Where possible, APNEP worked to cost-share projects to increase the effectiveness or the magnitude of projects, even though in several cases the APNEP was not the primary catalyst for the project.

As the program progresses, the APNEP is working to leverage more funds through partnerships, projects and grants. APNEP will be working with NC DENR to develop a strategy for the development of additional state funds for program activities.

Additionally, the APNEP staff will work with EPA staff to identify and develop strategies for leveraging funds beyond the EPA section 320 grant funds.

The APNEP has been successful in its ability to promote the needs, as well as the successes, associated with natural resource management, protection and enhancement efforts in the APNEP region. Several state conservation-funding sources were developed in response to research funded by the Albemarle-Pamlico Estuary Study. These programs include Clean Water Management Trust Fund, Clean Water State Revolving Fund Program, and the North Carolina Conservation Reserve and Enhancement Program.

FY 2005

The APNEP was a primary partner in leveraging nearly seven times the federal grant amount in FY 2005, and assisted in the leverage for projects in the NEP program area at an overall level of approximately 125 times the amount of funds received from the EPA.

FY 2006

During FY 2006, the Program continues to seek additional avenues for collaborating with other partners to assist in targeting program funds towards CCMP implementation goals. APNEP will submit its FY 2006 Leverage results in September 2006.

FY 2007

In FY 2007, the Albemarle-Pamlico NEP will continue to seek additional avenues for collaborating with other partners to assist in targeting program funds towards CCMP implementation goals. Where possible, APNEP will actively seek alternative sources of funding for APNEP activities and projects to fulfill the goals of the CCMP.

IV. FY 2007 ESTIMATED FEDERAL COST SHARE

Federal Funds Budget FY 2007

The estimated federal funds budget for each NEP for FY 2007 is \$492,600*

Supplemental funds for Financial Planning is \$10,000

Total Available is \$502,600

IMPLEMENTATION PLAN

Program Administration (<i>Ongoing</i>)	
(staff salaries, fringe**, longevity, rent, supplies, indirect, etc.)	\$ 244,427
Watershed Field Coordinator (<i>Ongoing- contract with VA DCR</i>)	\$ 30,000
Boards & Committees Support (<i>Ongoing</i>)	\$ 5,000
Financial Planning (<i>New</i>)	\$ 10,000

VITAL HABITATS PLAN

SAV Image Acquisition (<i>New</i>)	\$ 140,000
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STEWARDSHIP PLAN

Citizens' Monitoring Network (<i>Ongoing</i>)	\$ 56,000
NC Teaching Fellows (<i>New</i>)	\$ 6,000
Outreach (<i>New</i>)	\$ 1,173

TRAVEL

\$ 10,000

Total \$ 502,600

** Estimate from EPA on April 12, 2006*

*** Includes: Fringe Benefits based on Social Security (7.65 %) & Retirement (6.82 %) of position's annual salary and Medical Insurance Plan rate of \$3,748 per year and Indirect Costs based on 3.8 % of salary.*

V. NON-FEDERAL COST SHARE (Match for FY 2007)

Summary of In-kind Match Requirement

The North Carolina Department of Environment and Natural Resources intends to provide \$492,600 as part of the 1:1 non-federal match and \$10,000 as part of the 1:1 non-federal match for the supplemental funds.

The match will be provided through:

- 1) In-kind services provided by staff of the Department of Environment and Natural Resources Divisions of Water Quality and Forest Resources and the Office of Conservation and Community Affairs.
- 2) Costs associated with the purchase of property for conservation purposes through funding of the NC Clean Water Management Trust Fund.

Below is a list of the intended state match:

<u>POSITION</u>	<u>#</u>	<u>SALARY</u>	<u>EFFORT</u>	<u>Match</u>
<u>OFFICE OF CONSERVATION & COMMUNITY AFFAIRS (OCCA)</u>				
Env. Supervisor	1	82,179	.125	10,272
Admin. Assistant	1	37,090	.125	4636
Field Representative	1	59,441	0.75	<u>44,581</u>
			Salary 1.0	59,489
			Fringe 1.0	12,356
 <u>DIVISION of WATER QUALITY (Surface Water Protection)</u>				
Env. Specialist II	1	33,790	0.5	<u>16,895</u>
			Salary 0.5	16,895
			Fringe 0.5	4,319
 <u>DIVISION of FOREST RESOURCES (Water Quality Forester)</u>				
Service Forester II	1	37,129	0.5	<u>18,565</u>
			Salary 0.5	18,565
			Fringe 0.5	4,560
			Total Salary 2	94,949
			Total Fringe*	<u>21,235</u>
			Total In-Kind Service Match:	116,184

* Fringe is based on Social Security (7.65 %) & Retirement (6.82 %) of position's annual salary, plus Medical Insurance Plan rate of \$3,748 per year.

Implementation Match (In-Kind Services Descriptions)

Office of Conservation and Community Affairs

APNEP is located in the Office of Conservation and Community Affairs (OCCA). NC DENR's Office of Conservation and Community Affairs manages the *One North Carolina Naturally* initiative by leading the development and implementation of a comprehensive statewide conservation plan involving government agencies, private organizations, landowners and the public. Protecting the state's open space areas in this coordinated manner facilitates the more effective use of limited funding sources. OCCA also provides support for development of regional open space plans, providing assistance through regional meetings and resource materials.

The match positions are responsible for program administration, support, community involvement and guiding implementation of the NC Coastal Habitat Protection Plan.

NC Division of Water Quality

The North Carolina Division of Water Quality (DWQ) in the Department of Environment and Natural Resources is the agency responsible for statewide regulatory programs in surface water and aquifer protection.

DWQ's mission is to preserve, protect and enhance North Carolina's surface water and groundwater resources through quality monitoring programs, efficient permitting, responsible management, fair and effective enforcement and excellence in public service.

The position is located in the Washington regional office and is responsible for water quality issues, pollution control permits, permit compliance, evaluation of environmental quality/monitoring, and enforcement actions for violations of environmental regulations. This position represents the Surface Water Protection section.

- ❖ This position supports the CCMP’s Water Quality Plan, Goal: *Restore, maintain or enhance water quality in the Albemarle-Pamlico region so that it is fit for fish, wildlife and recreation.*” and,
- ❖ The CCMP’s Water Quality Plan, Objective E, Management Action 1: *“Continue to track and evaluate indicators of environmental stress, including algal blooms, fish kills, and fish and shellfish diseases.”*

Division of Forest Resources

In August 2002, the "Forestry NPS Unit" was established within the Division's Forest Management Branch. The organization is charged to develop and implement water quality projects that serve to minimize NPS pollution from forest operations. The Unit also practices technology transfer through BMP related education and training workshops and supports publications targeted at forest operators and forestland owners. Unit staff also share a role in normal forest management and incident operations undertaken by the Division.

- ❖ This position supports the CCMP’s Water Quality Plan, Objective B, Management Action 1: *“Strengthen implementation of forestry best management practices through training, education, technical assistance and enforcement.”*

NC CLEAN WATER TRUST MANAGEMENT FUND

Created in 1996, the Clean Water Management Trust Fund (CWMTF) provides grants to local governments, state agencies and conservation non-profits to help finance projects that specifically address water pollution problems. CWMTF funds projects that enhance or restore degraded waters, protect unpolluted waters, and/or contribute toward a network of riparian buffers and greenways for environmental, educational, and recreational benefits.

The following projects within the Albemarle-Pamlico region will be used for match.

Project	Location/ River Basin	Purpose	Amount
Hughes Tract-Upper Broad Creek	Text/ Neuse River	Riparian conservation easement (47 acres)	\$ 386,416
			Total \$ 386,416

CWMTF Project Description

Hughes Tract-Upper Broad Creek

NC Coastal Land Trust, Acquisition/ Hughes Tract-Upper Broad Creek in the Neuse River Basin. Contract is for \$394,000 and is due to end on 4/30/07. Appraisals were received in April 2006. The project as planned will protect through permanent conservation easements 130 acres along Broad Creek, an anadromous fish spawning area. CWMTF funds will be used to purchase easement on 47 of the 130 acres. Tract is in close proximity to other conservation lands. APNEP will use \$386,416 as match for this grant as a conservation purchase.

SUMMARY OF STATE MATCH

In-kind Positions (salaries and fringe):	\$ 116,184
Clean Water Management Trust Fund Projects:	<u>\$ 386,416</u>
TOTAL:	\$ 502,600

VI. TRAVEL

The EPA considers personal, face-to-face contact with peers and colleagues essential for information sharing and technology transfer. As part of the federal grant, EPA provides APNEP with \$10,000 allocated as travel funds for program enhancement, education, and outreach support. These funds are to be used for activities such as:

- 1) Presentations at or participation in national or regional NEP meetings
- 2) Presentations at or participation in workshops or conferences
- 3) Travel to other NEPs or communities to provide peer-to-peer technical assistance
- 4) Travel to other NEPs or watersheds for assistance
- 5) Travel by NEP staff or stakeholders from other NEPs or watershed programs to provide NEP with assistance
- 6) Travel to national or international conferences to share information on the National Estuary Program

Stakeholders may include citizens, members of environmental or public interest organizations, business or industry representatives, academicians, scientists or technical experts. As a requirement of this grant agreement, members of the APNEP core staff are required to attend all meetings called on behalf of the NEPs. These funds cannot be used to pay for travel of Federal employees.

FY 2006

During FY 2006, APNEP staff and citizen volunteers (STAC) attended a number of meetings and conferences using the allotted travel funds. Travel may also be supported by specific project funds or administration costs. Below is a summary of these activities:

Personnel	Date	Purpose	Location	Cost*
Crowell, Carpenter & Giordano	10/05	EPA- ANEP/NEP National Meeting	Newport, RI	\$ 3,000
Crowell, Giordano	12/05	NEP Region IV Meeting	Atlanta, GA	\$ 1,000
Crowell	1/06	NEP Directors Planning Meeting	Cocoa Beach, FL	\$ 500
Crowell	3/06	EPA- ANEP/NEP National Meeting	Washington, DC	\$ 3,000
Crowell	5/06	LCREP Implementation Review	Portland, OR	\$ 1,000
Carpenter	5/06	National WQ Monitoring Meeting	San Jose, CA	\$ 1,300
Staff	9/06	ANEP-EPA/NEP National Meeting	San Francisco	\$ 2,000
APNEP Staff	10/05 to 9/ 2006	Normal Program Activities	APNEP area	\$ 1,500

**Estimate*

FY 2007 Projected Travel

All travel is allocated into three categories: In-State, Out-of-State, and EPA Required. All travel must be consistent with NC DENR travel policies and procedures. Due to the dynamic nature of the NEP, we cannot schedule all travel a year ahead: we can only provide an estimate based on established NC DENR rates (below). Some travel is associated with specific projects, and travel costs are included in budgeted amounts.

In-State:

In-State travel is primarily for program staff to conduct routine business associated with APNEP daily operations, staff training or topical meetings germane to the program. It may also cover non-staff for NEP business (i.e. board and committee members, guest speakers, and experts). Rates are listed below.

In-state estimate for FY 2007: 30 trips, among 4 staff members; average cost per trip approximately \$100. Total \$3,000

Out-of-State:

Out-of-State travel is primarily for program staff to conduct business associated with the NEP, staff training or topical meetings germane to the program. It may also cover non-staff (i.e. board and committee members, guest speakers, experts) for NEP related activities. Rates are listed below.

Out-of-State Estimate for FY 2007: 2 trips, 2 days, average cost per trip approximately \$500.00. Total \$1,000

EPA-required:

The NEP holds two national meetings each year (these may be in same fiscal year or not). Each program is required to participate in the meetings. The Spring meeting is held in Washington, D.C. and the fall meeting location rotates among the different NEP sites. The level of staff participation will vary depending on the agenda for a particular meeting. Generally two members attend. It may also cover non-staff (i.e. Board or Advisory Committee members).

Estimate for FY 2007: 2 trips, total, 3 persons --- average cost per trip per person is approximately \$1000.00 (based on prior travel). Total \$6,000

NC DENR TRAVEL RATES (FY 2006)

Item	In-State	Out of State	Overnight Trip	Day Trip
Breakfast	\$ 7.00	\$ 7.00	Leave Office before 6:00 AM	Leave Office before 6:00 AM; Extend workday by 2 hours
Lunch	\$ 9.25	\$ 9.25	Leave Office by 12:00 Noon; Overnight return after 2:00 PM	Never claimed on day trip
Dinner	\$ 15.75	\$ 17.75		Depart office before 5:00 PM Return after 8:00 PM Extend workday by 3 hours
Breakfast/ Dinner				Leave office before 6:00 AM; Return after 8:00 PM; Extend workday by 5 hours
Hotel (+ taxes)	\$ 59.75	\$ 71.00		

FY 2007 Projected Travel

Personnel	Date	Purpose	Location	Estimated Cost
APNEP Staff & volunteers	October to September	Normal Program Activities	Albemarle – Pamlico Region	\$ 3,000
APNEP Staff	March 2007	NEP National meeting	Washington, DC	\$ 3,000
APNEP Staff	October to September	National Meetings	TBA	\$ 4,000

Attachment 1: Implementation Review Findings

Attachment 2: Executive Order #74



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OCT 19 2005

OFFICE OF
WATER

Mr. Bill Crowell, Director Albemarle-Pamlico
National Estuary Program
North Carolina Department of Environment and Natural Resources
1601 Mail Service Center
Raleigh, NC 27699-3060

Dear Mr. Crowell:

The purpose of this letter is to provide a summary of the Environmental Protection Agency's (EPA) 2005 Implementation Review (IR) and to thank you and the Albemarle-Pamlico National Estuary Program (APNEP) staff, as well as your partners, who contributed to the 2005 IR report. You put considerable effort into the implementation review submission and responses to our follow-up questions. Thank you also for arranging the on-site visit by the IR Team and participating in the associated meetings and field trips.

The implementation review process, now scheduled every three years, continues to prove to be extremely valuable for determining each National Estuary Program's (NEP) progress and effectiveness and thus, each program's funding eligibility. It has added considerably to EPA Headquarters and Regional staff knowledge of each individual NEP, and will promote sharing of effective and innovative initiatives and approaches across all 28 NEPs as well as with other watershed programs around the country. EPA also is using the implementation review process to assess how the NEPs support the core elements of the Clean Water Act (CWA), and to evaluate the extent and effectiveness of the NEPs' contribution to achieving the goals in EPA's *2003 Strategic Plan*. The NEPs' efforts are particularly relevant to Goal 14: Healthy Communities and Ecosystems, Objective 4.3, Protect and Restore Ecosystems, and Goal 2: Clean and Safe Water, Objective 2.2, Water Quality on a Watershed Basis.

This implementation review featured the participation of a volunteer ex-officio NEP Director, Jan Smith, Director of the Massachusetts Bays Program (MBP) NEP. Jan's participation provided the EPA team members with an NEP perspective of the perceived strengths and challenges of the program undergoing the review. In addition, Jan shared ideas from the MBP that should be useful for the APNEP.

Based on the IR Team's findings, we believe that the APNEP is continuing to make significant progress in implementing its Comprehensive Conservation and Management Plan (CCMP). We are pleased to report that the APNEP "passes" the 2005 Implementation Review and will be eligible for FY 2006, 2007 and 2008 funding authorized by the CWA §320. As provided for in our FY 2006 budget appropriation for the NEP, we are providing \$500,000 for FY 2006.

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Albemarle-Pamlico National Estuary Program 2005 Implementation Review Findings

Following is a summary of the key findings identified by the reviewers regarding the APNEP strengths as well as some recommendations regarding potential areas for improvement. The review comments are intended to recognize and applaud the Program's successes and support efforts to further strengthen the Program. The Program's response to these recommendations will be evaluated in the 2008 Implementation Review cycle.

Strengths

- **Education and Outreach:** The APNEP has effectively informed citizens about the value of the watershed through several activities. Highlights include the APNEP's partnership with North Carolina's Office of Environmental Education and Environmental Education Fund to produce a week-long estuarine Teacher Training Institute; the APNEP's continued participation in Estuary Live, a virtual field trip of the estuary; and a well attended day-long symposium that featured CCMP implementation activities. Additional activities worth noting include an enhanced APNEP website that is updated regularly and the quarterly *Beacon* newsletter that provides useful information regarding the Program. This outreach effectively informs the public about water quality, vital habitats, fisheries and habitat health in the estuary, as well as how the public can help protect and restore these resources. It also strengthens public awareness and raises support for the Program. The APNEP is also in the process of developing a communication strategy that will identify its key audiences, develop central messages, and target media to disseminate these messages. We look forward to seeing the APNEP receive more regular coverage from leading television stations and newspapers as its visibility and credibility grow in the watershed .
- **Administrative Capacity:** The APNEP has undertaken numerous actions that have strengthened its ability to implement the Program's CCMP. The Program has increased its independence and stature within North Carolina's Department of Environment and Natural Resources by moving its location to the Office of Conservation and Community Affairs. It has hired a new Director and has given him greater authority to manage the Program. It has hired additional staff to augment its technical capacity and field-based watershed coordination (including one based in Virginia). These changes have strengthened the Program's presence throughout the watershed.

The appointment of a liaison between the APNEP and North Carolina's Division of Coastal Management has improved the coordination between the two programs. A Science and Technical Advisory Committee (ST AC) has been established, which will accelerate the development and tracking of environmental indicators. In addition, the APNEP is undertaking a strategic planning exercise and assessment of its governance structure to help identify the appropriate roles, responsibilities, and activities of the management conference participants. We look forward to seeing the APNEP further

advance its capacity by implementing the recommendations from these activities, such as the new system to track CCMP implementation activities and conduct biennial evaluations of its progress.

- Active Participation in Clean Water Act (CWA) Core Programs: The APNEP has achieved significant success in two key elements of the CWA: water quality monitoring and non-point source pollution control. First, the Citizens Monitoring Network engages many citizen groups in water quality monitoring and stewardship activities. Second, the APNEP was instrumental in the development of a ferry-based monitoring program ("FerryMon") that has become a model for other estuaries across the Nation and has implemented real-time monitoring platforms in three of the river basins. Third, the APNEP has guided submerged aquatic vegetation mapping and monitoring operations. Finally, the APNEP has worked with the State's NonPoint Source Program to conduct workshops and develop outreach materials for contractors on best management practices and clean marinas. We expect that APNEP's support of these and other core water programs will increase through time.

Progress Made in the Areas Highlighted in the 2002 Implementation Review

- The APNEP has made substantial progress on each of the challenges noted in the 2002 Implementation Review. The Program staff, the Secretary and Deputy Secretary of the Department of Environment and Natural Resources (DENR), the Director of DENR's Office of Conservation and Community Affairs, and the Governor's office deserve significant credit for this new direction. As noted earlier, the APNEP increased both the visibility and autonomy of the Program office as well as the number of Program staff. In addition, the APNEP has effectively utilized its EP A Section 320 funds since the 2002 Implementation Review.
- The on-going efforts to restructure the management conference of the APNEP are noteworthy. These efforts to create a structure that reflects the NEP's broad group of stakeholders and the key resource and decision-making partners should benefit the continuing implementation of the CCMP. Your cooperation and coordination with EPA during the drafting of the new Governor's Executive Order to establish the revised structure is very much appreciated.

Challenges

CCMP Update and Changes in Priorities: Although the APNEP intends to update its CCMP, the Program has not yet developed a timetable or process for doing this. We recommend that the APNEP develop a process that includes a timetable and milestones. The APNEP should include necessary actions, information needs, and support mechanisms in the revised CCMP. The APNEP should consider identifying an interim set of priorities, as well as a mechanism to add to and modify these actions, that takes into account factors affecting environmental issues relevant to the estuaries and sounds.

- **Visibility:** The APNEP's location within a state agency presents challenges in terms of its ability to appear visible and independent. In order for the APNEP to be seen as inherently autonomous the Program must be and must be perceived to be, independent of any particular interest group or agency. The Director needs to be able to respond to and act on committee recommendations independent of state agency activities. The APNEP may consider an approach that the Massachusetts Bays Program (MBP) took to enhance its visibility and autonomy. The MBP completed an update of its CCMP that all partners - non-profits, citizens and state agencies - helped craft. The update carefully spelled out which activities each party was responsible for including specific tasks for the MBP staff, and provided a clear definition of what the MBP staff should be doing. The update, after formal adoption by the Management Committee, formed the basis of future priorities and Program direction. In addition, the Program should strive to take a leadership role when possible and assert itself as an equal partner in joint ventures. The Program should also strive for recognition when engaged in key activities.
- **Partnerships and Fundraising:** The APNEP's extensive watershed (30,000 square miles) presents numerous challenges. Limited resources constrain the APNEP's ability to impact the watershed. This underlines the importance of strategic stakeholder alliances and effective fund-raising efforts. To obtain additional resources for CCMP implementation, the APNEP should develop a strategy that identifies funding needs and alternatives, and provides for diversifying its sources of funding to supplement existing funds. As part of that strategy, the APNEP should work with local governments to secure at least a minimal annual contribution from them to support the APNEP's work. EPA HQ is prepared to assist the Program in this activity.
- **Environmental Indicators/Monitoring Plan:** Although an ad-hoc Science Technical Advisory Committee (STAC) work group has drafted and submitted an initial set of environmental indicators to EPA, and a two-day indicator workshop was scheduled for August 2005, the APNEP remains without a monitoring plan framework. The STAC work group should begin to develop a comprehensive monitoring strategy and plan, taking into account previous efforts. This plan should include the continuation of the existing monitoring program for the Albemarle-Pamlico estuarine system and sounds that is a part of EPA's National Coastal Assessment (NCA). APNEP needs to identify an ongoing source of funding for that effort. We believe it, would be most appropriate for the state of North Carolina to provide funding for the North Carolina component of the NCA. In addition, the plan should be based on the concept of long-term status and trends monitoring or the identification of temporal trends or changes over time. The Program should work with all appropriate government agencies (federal, state, and local) and other stakeholders in the Albemarle-Pamlico region to develop estuarine and freshwater monitoring and indicators. The Program should complete the development and approval of environmental indicators by the end of 2005, in conjunction with the development of the monitoring plan scheduled for 2006.

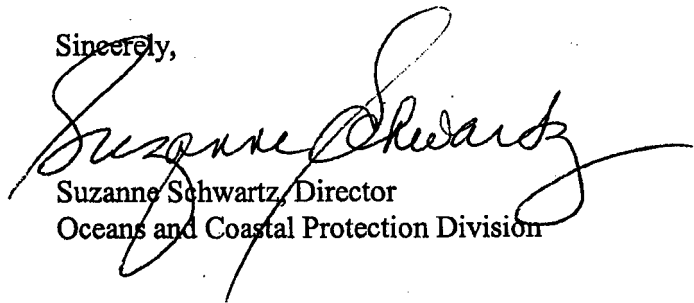
- Environmental Progress: The APNEP protected or restored nearly 38,500 acres of habitat over the 2002-2004 period. This is a significant accomplishment and represents more acreage of habitat protected or restored than any other NEP in Region IV. Yet, the APNEP reports no or very little data regarding "environmental trends" in the estuarine system and its watersheds. Status and trends data are key to evaluating program impacts and results and can be used to send a powerful message to citizens, stakeholders, and elected officials. The Program should identify existing and develop long-term environmental data sets, and use the information to report on environmental progress. The information can also be used to increase support and funding for implementation of the CCMP and for public outreach efforts.

Thank you again for participating in the implementation review process. We welcome any additional thoughts you may have either about the review process itself or about EP A's involvement in the APNEP's CCMP implementation. If you have any questions or comments, please contact me or Darrell Brown, Chief, Coastal Management Branch, at telephone number (202) 566-1256.

cc:

Bill Ross, NCDENR
Dempsey Benton, NCDENR
Robin Smith, NCDENR
Richard Rogers, NCDENR
Jan Smith, Massachusetts Bays NEP
Diane Regas, U.S. EP A
Craig Hooks, U.S. EPA
Craig Vogtt, U.S. EP A
Darrell Brown, U.S. EPA
Jim Giattina, U.S. EP A Region IV
Tom Welborn, U.S. EP A Region IV
Bo Crum, U.S. EP A Region IV
Fred McManus, U.S. EPA Region IV
Bob Howard, U.S. EPA Region IV
Tim Jones, U.S. EPA
Noemi Mercado, U.S. EP A

Sincerely,



Suzanne Schwartz, Director
Oceans and Coastal Protection Division

State of North Carolina



MICHAEL F. EASLEY
GOVERNOR

EXECUTIVE ORDER NO. 74 REPLACING EXECUTIVE ORDERS NO. 75 AND 118 CONCERNING CREATION OF A PROGRAM OFFICE, A POLICY BOARD, AND ADVISORY COMMITTEES TO SUPPORT SUSTAINABLE NATURAL RESOURCE AND ENVIRONMENTAL MANAGEMENT IN THE ALBEMARLE-PAMLICO ESTUARINE SYSTEM

WHEREAS, the Albemarle-Pamlico National Estuary Program (APNEP), formerly known as the Albemarle-Pamlico Estuarine Study, is a cooperative effort established by the State of North Carolina and the United States Environmental Protection Agency; and

WHEREAS, the mission of the APNEP is to identify, restore, and protect the significant resources in the Albemarle-Pamlico estuarine system in North Carolina and southeast Virginia; and

WHEREAS, the APNEP is a collaborative effort involving state, federal, regional, local, educational, and public entities in the protection and enhancement of the Albemarle-Pamlico estuarine system; and

WHEREAS, the APNEP was one of the first National Estuary Programs to be designated under Section 320 of the Clean Water Act; and

WHEREAS, the APNEP has provided extensive information and supported scientific research about natural resources and environmental issues facing the Albemarle-Pamlico estuary program since 1987; and

WHEREAS, scientific information from the Albemarle-Pamlico Estuarine Study was combined with extraordinary involvement by citizens to develop a Comprehensive Conservation and Management Plan (CCMP) entitled "A Guide to Environmental and Economic Stewardship in the Albemarle-Pamlico Region" that was adopted in 1994; and

WHEREAS, the CCMP also recognizes that, from an ecological and economic standpoint, the most effective means to ensure the environmental health and sustainability of the Albemarle-Pamlico estuarine system is to manage and protect the resources in the five major river basins of the watershed; and

WHEREAS, the CCMP also recognizes the importance of involving the public in making decisions regarding natural resources and environmental management, and research;

NOW, THEREFORE, by the authority vested in me as Governor by the Constitution and laws of the State of North Carolina, **IT IS ORDERED:**

Section 1. Establishment.

An **Albemarle-Pamlico National Estuary Program Office** is hereby established to coordinate and facilitate the implementation and advancement of the CCMP, the APNEP mission, and the activities of the Policy Board and Advisory Committees. The APNEP Program Office shall serve as a conduit for information between the Policy Board, Advisory Committees, state and federal agencies, local government, tribes, academia, and the public. The Program Office will be located in the Offices of the Secretary of the North Carolina Department of Environment and Natural Resources (DENR).

A **Policy Board** for the Albemarle-Pamlico watershed shall be established to work with DENR and the Program Office to support, evaluate, update, advocate, and guide the implementation of the CCMP and the APNEP mission.

A Committee of Citizen Advisors ("**Citizen Advisory Committee**") for the Albemarle-Pamlico watershed shall be established to advise and support the Policy Board, and to serve as liaisons to local agencies and interested parties regarding environmental and natural resources management concerns and issues relevant to implementation of the CCMP and the APNEP mission.

A Committee of Science and Technical Advisors ("**Science and Technical Advisory Committee**") for the Albemarle-Pamlico watershed shall be established to advise the Policy Board and agencies responsible for implementation of the CCMP on scientific and technical issues.

A Committee of Management Agency Representatives ("**Management Advisory Committee**") for the Albemarle-Pamlico watershed shall be established to facilitate and support the implementation and advancement of the CCMP management actions and the APNEP mission.

Section 2. Program Boundaries.

The boundaries of the Albemarle-Pamlico National Estuary Program are the geographic area of each of the following river basins as defined by the hydrologic boundaries ascribed to them by the North Carolina Department of Environment and Natural Resources:

1. Neuse (including areas of the White Oak River Basin that drain to Core and Bogue sounds),
2. Tar-Pamlico (including areas draining directly into the northern Pamlico Sound)
3. Roanoke (that portion of the basin below Lake Gaston dam),
4. Chowan (including the portion of the basin located in Virginia),

5. Pasquotank (including waters and areas that drain directly into the Albemarle Currituck, Croatan, and Roanoke sounds, as well as that portion of the basin located in Virginia).

Section 3. Policy Board.

- A. Membership.
 1. The Policy Board will be broad-based and include the following:
 - a. The Secretary of North Carolina Department of Environment and Natural Resources or designee;
 - b. The Secretary of Natural Resources of the Commonwealth of Virginia or designee is invited to participate;
 - c. The Executive Director of the N.C. Clean Water Management Trust Fund;
 - d. One representative of Partnership for the Sounds;
 - e. One representative of Cooperative Extension;
 - f. One representative of Sea Grant;
 - g. Two representatives from each of the Advisory Committees;
 - h. One, who shall, at the time of appointment, be actively connected with high education;
 - i. One, who shall, at the time of appointment, be actively connected with local or regional planning;
 - j. One, who shall, at the time of appointment, be actively connected with major business or industry;
 - k. One, who shall, at the time of appointment, be actively connected with the commercial fishing or seafood industry;
 - l. One, who shall, at the time of appointment, be actively connected with agriculture;
 - m. One, who shall, at the time of appointment, be actively connected with forestry;
 - n. One, who shall, at the time of appointment, be actively associated with a local, state, or national conservation organization;
 - o. One who shall, at the time of appointment, be actively connected with or have experience in finance/banking;
 - p. One, who shall, at the time of appointment, be actively connected with communication media;
 - q. One at-large member;
 - r. A representative of the U.S. Environmental Protection Agency – National Estuary Program is invited to participate as an ex-officio member.
 2. Members must reside or have interests within the program boundaries.
 3. The Secretary of the Department of Environment and Natural Resources shall appoint or invite the initial Policy Board membership.
 4. Each member shall serve a three-year term, renewable once consecutively. The membership will have staggered appointments so that one-third of the membership can be reappointed each year.
 5. Vacancies shall be filled by appointment or invitation from the remaining Board members as set forth in the Board's bylaws.
 6. The Policy Board may expand its membership, as it deems necessary, upon two-thirds affirmative vote.

B. Duties.

1. The role of the Policy Board shall be to guide, evaluate, and support the CCMP implementation process and advancement of the CCMP and its management actions, and to ensure the highest level of collaboration, coordination, and cooperation among state and federal agencies, local governments, the public, and various interest groups.
2. The Policy Board shall consult the Advisory Committees and the Program Office for recommendations pertaining to implementation of CCMP management actions at the regional and local level, and the coordination and development of research and monitoring priorities.
3. The Policy Board shall advise the state, federal, and local agencies responsible for environmental and natural resources management about concerns and issues relevant to implementation of the CCMP.
4. The Policy Board shall make recommendations based on CCMP implementation progress and success, and shall identify and prioritize information needs as described in the CCMP.
5. The Policy Board shall evaluate the relevance of the CCMP and consult the Advisory Committees and the Program Office for recommendations on amending the CCMP to address new or emerging issues that may affect the significant natural resources of the Albemarle-Pamlico estuarine system.
6. The Policy Board shall be an advocate for the implementation of the CCMP and the APNEP mission and the APNEP.
7. The Policy Board, in cooperation with the Program Office, shall develop an annual report, budget, and work plan that addresses priorities for implementing and updating the CCMP.
8. The Policy Board shall be responsible for determining its own rules of order, bylaws, chairmanship, attendance requirements, and other matters of protocol.

C. Meetings.

1. The Policy Board shall meet at least two times each year or more frequently if deemed appropriate by the Chair or upon request by the Program Director.
2. Federal, state, and local agencies with environmental management responsibilities in the Albemarle-Pamlico watershed are invited to participate in meetings of the Policy Board.
3. All meetings shall be open to the public and noticed in accordance with North Carolina's open meeting laws.

Section 4. Advisory Committees.

A. Citizen Advisory Committee

1. Membership.
 - a. Citizen Advisory Committee (CAC) members must reside, or have interests, within the program boundaries of the Albemarle-Pamlico National Estuary Program.
 - b. Membership shall include:
 - (1) One representative of the Soil and Water Conservation Districts in North Carolina;
 - (2) One representative of the Soil and Water Conservation Districts in Virginia is invited;

- (3) Two representatives from non-governmental environmental conservation organizations;
 - (4) One representative of environmental education;
 - (5) One representative of K-12 education;
 - (6) One representative from industry or business;
 - (7) One representative of agriculture;
 - (8) One representative of commercial fishing or the seafood industry;
 - (9) One representative of forestry;
 - (10) One representative of county government;
 - (11) One representative of municipal or town government;
 - (12) One representative from each of the following:
 - (a) N.C. League of Municipalities, and
 - (b) N.C. Association of County Commissioners;
 - (13) One representative from each of the following is invited:
 - (a) Virginia Municipal League, and
 - (b) Virginia Association of Counties;
 - (14) One representative is invited to represent the State recognized tribal organizations from within the program boundaries in North Carolina;
 - (15) One representative is invited to represent the State recognized tribal organizations from within the program boundaries in Virginia; and
 - (16) Six at-large positions.
- c. The CAC may expand its membership to include other interested parties as it deems necessary and as set forth in the committee's bylaws.
 - d. Members shall serve a three-year term, renewable once consecutively. The membership will have staggered appointments so that one-third of the membership can be reappointed each year.
 - e. The Director of the Albemarle-Pamlico National Estuary Program Office shall nominate the initial CAC membership to be approved by the Policy Board. In making his nominations, the Director shall, to the greatest extent possible, seek to ensure geographic, demographic, and social balance, and willingness to serve.
 - f. Vacancies shall be filled by appointment or invitation from the remaining CAC members as set forth in the committee's bylaws.
2. Duties.
 - a. The CAC shall be responsible for coordinating CCMP implementation strategies at a local level.
 - b. The CAC shall advise and consult with the Policy Board, Science and Technical Advisory Committee, Management Advisory Committee, the public and various interest groups, as well as local agencies within the Albemarle-Pamlico watershed regarding implementation of CCMP management actions and advancement of the CCMP at the local level.
 - c. The CAC shall be an advocate for the implementation of the CCMP and the APNEP mission and the APNEP at the local level.
 - d. The CAC will have no authority other than as an advisory body.
 - e. The CAC shall select two members to serve on the Policy Board.

- f. The CAC shall be responsible for determining its own rules of order, bylaws, chairmanship, attendance requirements, and other matters of protocol.
3. Meetings.
- a. The CAC shall meet at least two times each year, or more frequently if deemed appropriate or upon request by the Policy Board or the Program Director.
 - b. Federal, state, and local agencies with environmental management responsibilities in the Albemarle-Pamlico watershed are invited to participate in meetings of the CAC.
 - c. All meetings shall be open to the public and noticed in accordance with North Carolina's open meeting laws.

B. Science and Technical Advisory Committee.

1. Membership.
- a. The Science and Technical Advisory Committee (STAC) will be broad-based and should include scientists and researchers from local colleges, universities, and research institutions, as well as technical staff from federal, state, and local agencies, industry, and environmental organizations.
 - b. All members will be expected to have an advanced degree (Master's or above) and/or extensive experience (at least 6 years) with expertise in scientific and technical fields germane to the mission of the APNEP.
 - c. The Director of the Albemarle-Pamlico National Estuary Program Office shall nominate the initial STAC membership to be approved by the Policy Board. In making his nominations, the Director shall, to the greatest extent possible, seek to ensure broad-based science and technical representation for research, monitoring, and resource management issues germane to the Albemarle-Pamlico watershed.
 - d. Members should have expertise in science and technology relevant to environment and natural resources management, including but not limited to: landscape ecology, terrestrial ecology, wetlands ecology, submerged aquatic ecology, marine biology, hydrology, remote sensing, ecological assessment, engineering, agricultural technologies, forest technologies, soil conservation, water quality modeling, environmental policy, economics, public policy, planning, spatial statistics, and law.
 - e. Each member shall serve a three-year term, renewable once consecutively. The membership will have staggered appointments so that one-third of the membership can be reappointed each year.
 - f. Vacancies shall be filled by appointment or invitation from the remaining committee members as set forth in the committee's bylaws.
2. Duties.
- a. The STAC shall be responsible for recommending research and monitoring activities and needs related to CCMP implementation or advancement to the Policy Board and the Program Office.
 - b. The STAC shall advise and consult with the Policy Board, the public, and various interest groups, as well as local, state, and federal governments within program boundaries on scientific and technical issues affecting

- implementation and advancement of the CCMP management actions. Members shall advise these groups of actions and information relevant to research and monitoring issues in the Albemarle-Pamlico watershed.
 - c. The STAC will have no authority other than as an advisory body.
 - d. The STAC will serve as a forum for the exchange of scientific information about the Albemarle-Pamlico estuarine system.
 - e. The STAC shall select two members to serve on the Policy Board.
 - f. The STAC shall be responsible for determining its own rules of order, bylaws, chairmanship, attendance requirements, and other matters of protocol.
3. Meetings.
- a. The STAC shall meet at least two times each year, or more frequently if deemed appropriate, or upon request by the Policy Board or the Program Director.
 - b. Federal, state, and local agencies with environmental management responsibilities in the Albemarle-Pamlico watershed are invited to participate in meetings of STAC.
 - c. All meetings shall be open to the public and noticed in accordance with North Carolina's open meeting laws.

C. Management Advisory Committee.

- 1. Membership.
 - a. The Management Advisory Committee (MAC) will be broad-based and should include representation from federal, state, and local agencies with environmental and natural resource management responsibilities within the Albemarle-Pamlico watershed.
 - b. The Director of the Albemarle-Pamlico National Estuary Program Office shall nominate the initial MAC membership to be approved by the Policy Board. In making appointments, the Policy Board shall, to the greatest extent possible, seek to ensure that appropriate management agencies are included.
 - c. The MAC may expand its membership as it deems necessary and as set forth in the committee's bylaws.
 - d. Vacancies shall be filled by appointment or invitation from the remaining committee as set forth in the committee's bylaws.
- 2. Duties.
 - a. The MAC shall be responsible for coordinating, supporting, and advocating CCMP implementation strategies at a state and federal agency level.
 - b. The MAC shall advise and consult with the Policy Board, CAC, and STAC on the implementation of CCMP management actions and advancement of the CCMP at the federal, state, and local agency level.
 - c. The MAC will have no authority other than as an advisory body.
 - d. The MAC shall select two members to serve on the Policy Board.
 - e. The MAC shall be responsible for determining its own rules of order, bylaws, chairmanship, attendance requirements, and other matters of protocol.

- f. The MAC will serve as a forum for the exchange of management information about the Albemarle-Pamlico estuarine system.
- 3. Meetings.
 - a. The MAC shall meet at least two times each year, or more frequently if deemed appropriate, or upon request by the Policy Board or Program Director.
 - b. All meetings shall be open to the public and noticed in accordance with North Carolina's open meeting laws.

Section 5. Compensation, Per Diems, and Expenses.

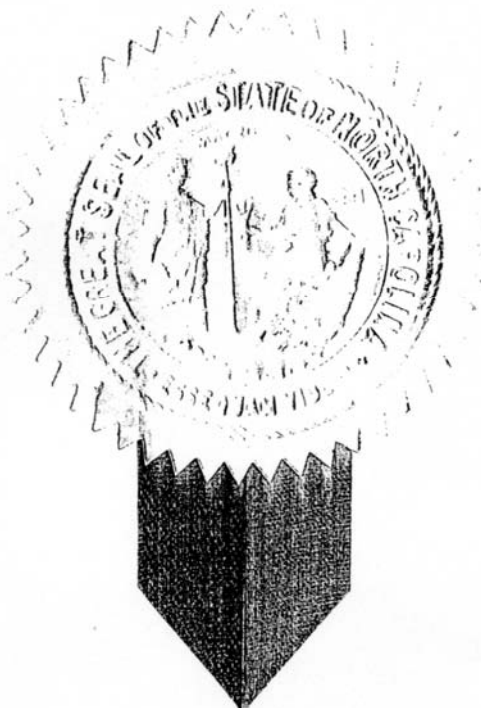
Members of the APNEP Policy Board and Advisory Committees shall serve voluntarily and without compensation or per diems. Extraordinary expenses may be reimbursed subject to approval by the Program Director.

Section 6. Effect of Other Executive Orders.

All other Executive Orders or portions of Executive Orders inconsistent herewith are hereby rescinded. This order specifically replaces Executive Orders #75 and #118.

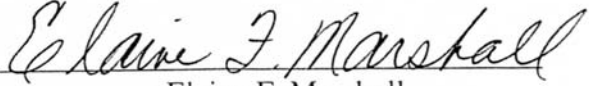
This Order shall become effective immediately and remain in effect until rescinded.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the Great Seal of the State of North Carolina at the Capitol in the City of Raleigh this 16th day of May 2005.




Michael F. Easley

ATTEST:


Elaine F. Marshall
Secretary of State

