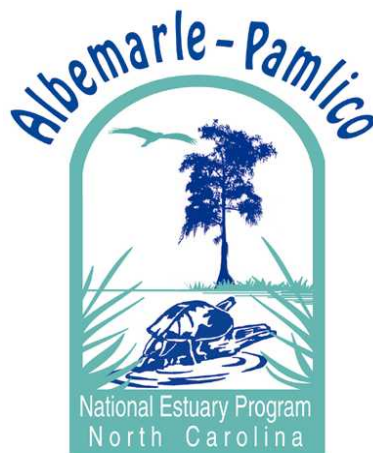


**WORK PLAN
for the
COOPERATIVE AGREEMENT BETWEEN
THE US ENVIRONMENTAL PROTECTION AGENCY
AND
NC DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES**

ALBEMARLE-PAMLICO NATIONAL ESTUARY PROGRAM

OCTOBER 1, 2008 THROUGH SEPTEMBER 30, 2010



**Approved by
Policy Board on
April 29, 2008
Raleigh, NC**

CE-97464802

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INTRODUCTION

Agreement Related Contents of this Document:

- A progress report detailing accomplishments in FY 2008 is provided on pages 7 through 19.
- The FY 2008 Work Plan items are presented on pages 20 through 26.
- The FY 2008 Work Plan budget is presented on page 31.
- Administrative and financial information items are presented on pages 26 through 35.

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 \$591,750 and time extension to September 30, 2009 for Cooperative Agreement #CE-97464802.

Period of Performance:

The period of performance under this agreement is from October 1, 2007 through September 30, 2009.

Principal Contacts:

EPA Project Officer

Fred McManus
US EPA Region IV
61 Forsyth Street
Atlanta, GA 30303
(404) 562 – 9385

APNEP Director

Bill Crowell
Albemarle-Pamlico NEP
1601 Mail Service Center
Raleigh, NC 27699-1601
(919) 715 - 1327



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.

Executive Order #122

On August 2nd, 2007, North Carolina Governor Michael F. Easley signed Executive Order # 122: *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 advisory framework for the program office. A copy of Executive Order #122 is attached and available from the APNEP office at 1601 MSC, Raleigh, NC 27699.

Program Office

The Albemarle-Pamlico National Estuary Program Office coordinates and facilitates the implementation and advancement of the CCMP, the APNEP mission, and the activities of the Policy Board and Advisory Committees. The APNEP Program Office serves as a conduit for information between the Policy Board, Advisory Committees, state and federal agencies, local government, tribes, academia and the public. The main program office is located in the Division of Natural Resource Planning and Conservation within the NC Department of Environment and Natural Resources in Raleigh, NC, with additional program personnel in Washington, and Greenville, NC, and Suffolk, VA.

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 advise, 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 consults 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 develops 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.

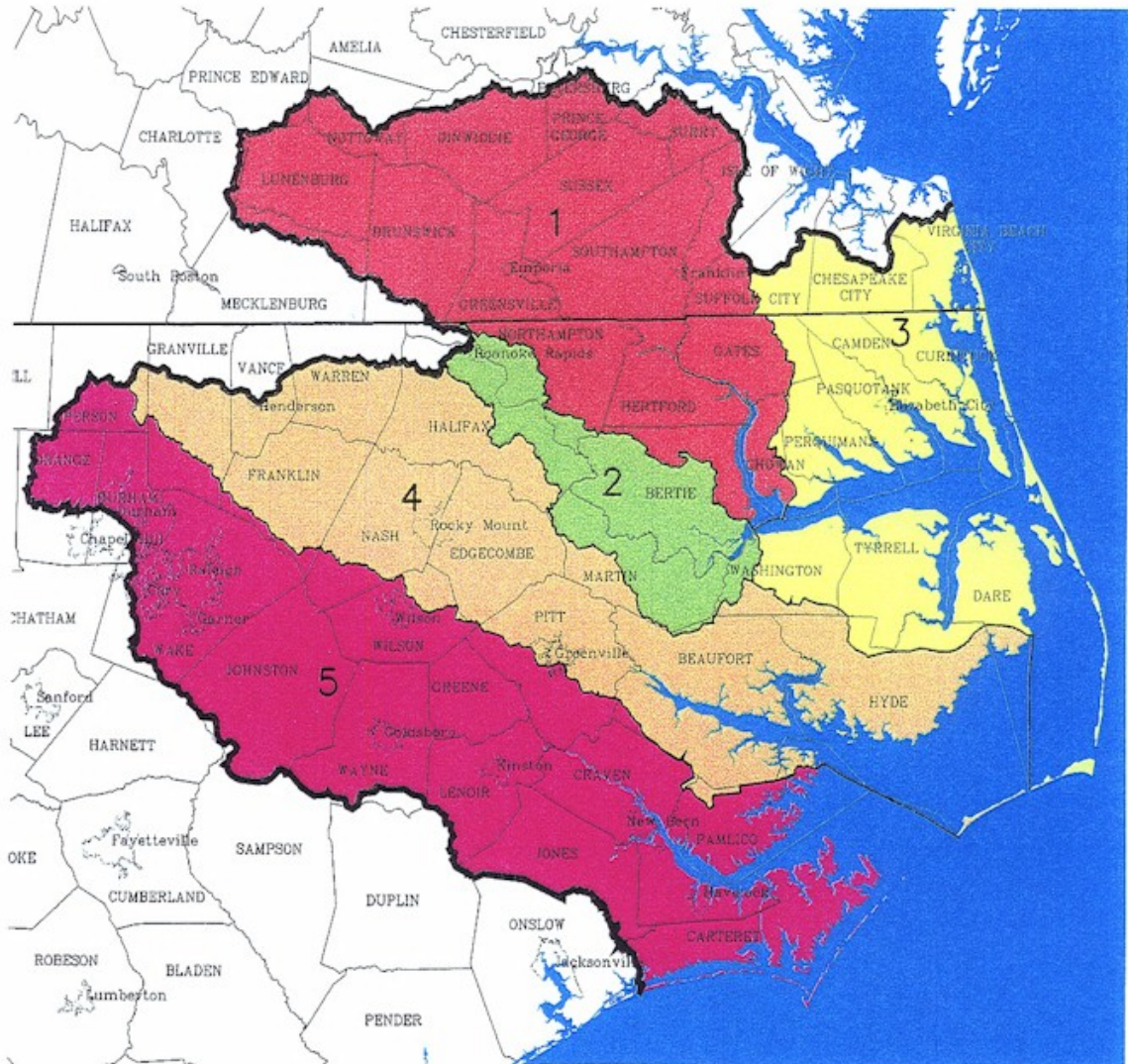
A Committee of Citizen Advisors ("Citizen Advisory Committee") is established to advise and support the Policy Board, and to serve as a liaison to local agencies and interested parties regarding environmental and natural resource management concerns and issues relevant to implementation of the CCMP and the APNEP mission. The Citizen Advisory Committee (CAC) held its first meeting in January, 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) held its first meeting in November, 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) held its first meeting in July, 2004.



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

ACCOMPLISHMENTS AND PROJECTS

I. FY 2008 ACTIONS & PROJECTS

The following are ongoing or completed actions from the FY 2007 Work Plan that occurred from October 1, 2007 to May 1, 2008.

Program Administration

For more detail see Administration and Financial section.

Watershed Field Coordinator - Virginia

For more detail see Ongoing Projects section.

Board and Committees Support

APNEP worked with its advisory groups (Policy Board, Citizen Advisory Committee, Management Advisory Committee and the Science and Technical Advisory Committee) established under Governor's Executive Order # 122 (8/2/2007) to continue implementation of the CCMP and APNEP mission. The advisory groups are supporting the development of indicators on estuarine health and assisting development of a new Comprehensive Conservation and Management Plan (CCMP). For other projects in more detail, see Ongoing Projects section.

EPA Financial Planning – Program Development

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 made funding available for planning in FY 2007 grant.

Status: Pending outcome of the development of new CCMP
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 provided the base funding to build partnerships and 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. The project is currently underway with the NOAA contractors acquiring and delivering the imagery. See SAV Monitoring in the ongoing projects section for additional information.

Status: Ongoing project
Output: Reports and GIS data, better management of SAV resources
Outcome: New management actions to protect SAV resources
Estimated Cost: \$286,000
Funding Source: EPA/NEP funds for FY 2007 = \$140,000
EPA / NEP funds for FY 2006 = \$20,000

US FWS = \$45,000
NC DENR = \$ 40,000
NC DMF = \$35,000
NC WRC= \$20,000
Leverage: Approx. \$140, 000 +

Citizens' Monitoring Network

For more detail see Ongoing Projects section.

Type: Ongoing – In Progress
Intended Output: Awareness, data
Intended Outcome: Increased environmental awareness
Estimated Cost: \$ 48,545
Funding Source: EPA funds for FY 2008

NC Teaching Fellows (Coastal)

Type: Cancelled due to loss of personnel and additional support
Estimated Cost: \$ 6,000
Funding Source: EPA funds for FY 2008 (\$3000) & FY 2008 (\$3000)

Outreach Activities

APNEP staff continued to be involved in outreach and educational activities, including the APNEP newsletter, e-mail updates and other outreach materials. 5,000 copies of *APNEP Treasures* document is to be printed again using remaining funds from other past projects at a cost \$6,400, or \$1.28 per copy.

Status: Ongoing
Output: Public outreach and involvement
Outcome: CCMP implementation, increased environmental awareness
Estimated Cost: \$ 7,000
Funding Source: EPA funds for FY 2006 and FY 2007
Leverage: To be determined

Web Site

The APNEP web site (www.apnep.org) continues to disseminate information about the mission and goals of the NEP and provide information on progress of CCMP implementation.

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

Local Government Environmental Academy

APNEP is partnering with NC Sea Grant, NC DWQ, UNC Institute of Government, NC Coastal Federation,, NCSU, NCNERR and others to expose newly elected local government officials to the basics of estuarine ecosystem ecology, hydrology, and pollution issues. The academy also provides opportunities for assistance/resources. The

academy will be held April 30 and May 1, 2008 at the River Dunes Community in Pamlico County.

Type: In-Progress
Intended Output: Informed local elected officials
Intended Outcome: Increased environmental awareness, better environmental decisions
Estimated Cost: Pending
Funding Source: \$2,000 EPA funds for FY 2008
Leverage: Pending

Marine Debris

APNEP will partner with NC Division of Coastal Management (NC DCM) and others on a project to reduce the amount of marine debris in the estuary.

Type: Pending Action by NC DCM (expected in June 2008)
Intended Output: Informed local elected officials & citizenry
Intended Outcome: Reduction in marine debris in estuary
Estimated Cost: 1,000
Funding Source: EPA funds for FY 2008
Leverage: Pending

Submerged Aquatic Vegetation (SAV) Image Analysis

In FY 2008, APNEP will provide the base funding necessary to lead interpretation of the acquired 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. Expected partners include NC Division of Marine Fisheries, US Fish & Wildlife Service, NC DOT and others. See SAV Monitoring in Ongoing Projects for more information.

Type: Pending
Intended Output: Report, GIS data, maps, educational opportunities
Intended Outcome: Better environmental data, better resource management and planning
Estimated Cost: \$ 30,000
Funding Source: EPA funds for FY 2008
Leverage: Pending

303-D Listed Waters Project

APNEP is working with NC Division of Water Quality and others on a project to remove a water body from the 303-D list of impaired waters.

Type: In-Progress
Intended Output: TBA
Intended Outcome: Restore designated use to a water body
Estimated Cost: \$4,000
Funding Source: EPA funds for FY 2008
Leverage: To be determined

Estuary Live! Spring 2008

Status: Cancelled by NCNERR

2008 Teacher Institute

APNEP has partnered with the UNC Institute for the Environment, NC Division of Water Quality (319 program), the NC Office of Environmental Education and the Environmental Education Fund to offer a teacher training institute July 13-18, 2008 at the Trinity Center in Salter Path, NC. Approximately 30 middle and high school 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.

Status: In- Progress
Output: 20 teachers participated in environmental education training
Outcome: Increased environmental education in schools
Estimated Cost: \$ 31,000 total
Funding Source: \$ 3,000 – remaining funds from Teaching Fellows
\$ 17,000 – 319 funds
\$ 10,000 - UNC
Estimated Leverage: Approximately \$27,000

River Herring Restoration Project (non-320 project)

APNEP staff are currently working with NCDENR and others on a set of immediate and long-term actions that will lead to the restoration of blueback herring (*Alosa aestivalis*) and alewife (*Alosa pseudoharengus*), collectively known as “river herring”, in a manner that is scientifically, economically and socially sound.

Status: In-Progress
Output: Actions to improve water quality and habitat
Outcome: Restoration of regional herring fishery
Estimated Cost: \$ 100,000
Funding Source: NC state appropriation
Leverage: ~\$100,000

Newspapers in Education: Estuaries Newspaper Insert

The News and Observer, the Triangle, NC major-circulation newspaper, printed and circulated a 12-page Albemarle-Pamlico National Estuary Program educational insert in its daily circulation of approximately 170,000 papers, and in newspapers ordered by Newspapers in Education participants, on November 13th, 2007. This insert helped to educate the public about the value of estuaries and to increase awareness about the Albemarle Pamlico National Estuary Program’s work to protect North Carolina’s coastal resources. The News and Observer also printed 10,000 overrun copies of the insert, that are being used by APNEP at presentations, exhibits and festivals, and were distributed to additional schools in the coastal counties.

Output: 170,000 copies in regular circulation; 10,000 overrun copies for APNEP distribution
Outcome: Promote awareness of existing region data and models for pilot APNEP assessment

Estimated Cost: \$ 8,600 total
Funding Source: 7,600 EPA funds for FY 2008
Leverage: \$ 1000 contribution from NC National Estuarine Research Reserve, additional support from DENR Public Affairs

Albemarle-Pamlico Conservation and Communities Collaborative (AP3C)

In October 2006, APNEP became involved with the development of the Albemarle-Pamlico Conservation and Communities Collaborative (AP3C). This partnership emerged as a result by several institutions interested in balancing the long-term conservation of natural systems with opportunities for the well-being of all the region's citizens. It is intended to provide a forum for working collaboratively whenever feasible. These organizations believe it will be possible to realize a sustainable future by avoiding duplicative efforts and missed opportunities. The participating organizations represent a broad spectrum of land and water resource managers and conservation and community advocates, each with a different mission. All are dedicated, through partnership in the AP3C, to providing for human needs while protecting the integrity of the region's ecosystems. In FY 2008, APNEP helped to convene and facilitate a meeting of the AP3C to discuss how to better engage communities in conservation. This meeting drew a diverse representation of community and social issues professionals. In the upcoming year, APNEP will continue to serve on the AP3C steering committee and to take a leadership role in moving the AP3C's agenda forward in a way that compliments APNEP's mission and the implementation of our CCMP.

Output: Community meetings
Outcome: MOA
Estimated Cost: \$ 830.00
Funding Source: NC state appropriation
Leverage: Pending

Coastal Landscape Change Public Listening Sessions

In summer of 2008, APNEP will co-facilitate, with support from the AP3C, several "listening sessions" throughout the program area with the goal of learning how the general public perceives the combined threat of sea level rise and population growth. These listening sessions will provide the public with some basic information about sea level and population change and will solicit public opinion about how they view the changes and threats, what impacts they are already experiencing, and what types of solutions might be pursued. Information from these sessions will help to inform conservation and community planning in light of the significant threat from sea level rise to private property and the natural landscape.

Output: Community Meetings, MOA
Outcome: Increased awareness of conservation issues in AP region
Estimated Cost: \$ 1000
Funding Source: EPA funds for FY 2008
Leverage: Pending, ~\$8,000

Sea Level Rise Adaptation Briefing

On April 10th, 2008 APNEP partnered with The Nature Conservancy in convening a meeting about sea level rise adaptation in North Carolina in Manteo, NC. Considering that the AP region is among the top three most threatened areas in the US from sea level rise, this briefing was timely. Leading climate change experts, including Margaret Davidson from NOAA and Stan Riggs from ECU, reviewed the current sea level rise projections for North Carolina while conservationists such as Sam Pearsall of TNC offered practical solutions for how North Carolina could adapt to rising seas. Bill Holman of the Nicholas Institute for Environmental Policy Solutions at Duke University then led the group in a discussion about how North Carolina might be able to pursue some these adaptation strategies. In attendance were approximately 70 people representing of non-profit conservation groups and all levels of government.

Output: Community Meetings
Outcome: Increased awareness of sea level rise & conservation issues in AP region
Estimated Cost: \$ 740
Funding Source: EPA funds for FY 2008
Leverage: ~\$1,000

II. FY 2007 ACTIONS & PROJECTS

The following are ongoing or completed actions from the FY 2007 Work Plan since the last Work Plan report.

2007 Teacher Institute

APNEP partnered with the UNC Institute for the Environment, the NC Office of Environmental Education and the Environmental Education Fund to offer a teacher training institute July 8-13, 2007 at the Trinity Center in Salter Path, NC. Approximately 20 middle and high school teachers are 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.

Status: Complete
Intended Output: 20 teachers trained in environmental education
Intended Outcome: Increased environmental education in schools
Estimated Cost: \$10,000
Funding Source: 6105 – funds from canceled demonstration project
Estimated Leverage: Pending

River Basin Observation Deck

This project features a weather-protected outdoor classroom and nearby observation deck. The observation deck flooring will contain an engraved and painted outline of North Carolina that details the State's 17 river basins and major rivers. A water quality teaching module and activity book were also developed to address NC's 17 river basins, utilizing the river basin deck as a "teaching platform". Kiosks/sign were will be placed in the pavilion to be used for educational programs and the

general public. APNEP funds were used to purchase durable composite decking (recycled materials) and hardware for the deck.

Status: Complete
Intended Output: Watershed education for numerous school groups and others
Intended Outcome: Increased environmental education in schools
Estimated Cost: \$10,000
Funding Source: 6105 – funds from canceled demonstration project
Estimated Leverage: Pending

Local Government Training Workshop

In order to assess the status of the current relationship and potential for greater local involvement, APNEP is working with NCNERR and NC Sea Grant to survey training opportunities for local governments.

Status: In Progress
Output: Report, survey results
Outcome: Better understanding of local government issues and training needs
Estimated Cost: \$ 0
Funding Source: NOAA
Leverage: Pending

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. Several meetings have occurred since that date.

Status: Ongoing
Output: Citizen advisory group
Outcome: Increased environmental awareness and citizen participation
Estimated Cost: Associated travel costs
Funding Source: Virginia Dept. 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 2006 ACTIONS & PROJECTS

The following are ongoing or completed actions from the FY 2006 Work Plan since the last Work Plan report.

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.

Williamston High School Low Impact Development Project

This project installed 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 helps treat runoff from the school site before it enters the waters flowing into the Roanoke River. 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 residential and commercial levels to treat runoff. North Carolina Cooperative Extension and the Town of Williamston led this project.

Status: Complete
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 involved construction of a 35-foot riparian buffer zone adjoining Red Mill Elementary School, and development of an education program with displays and outdoor classroom facilities.

Status: Complete
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

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

This project created of an outdoor classroom/platform at 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. Grant funds were 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: Complete
Intended Output: Boardwalk, outdoor classroom
Intended Outcome: Improved stormwater management, vegetation, and greater student awareness of effects of stormwater
Estimated Cost: \$ 25,000
Funding Source: EPA funds for FY 2006
Estimated Leverage: Pending

IV. FY 2005 ACTIONS & PROJECTS

The following are ongoing or completed actions from the FY 2005 Work Plan since the last Work Plan report.

Submerged Aquatic Vegetation Mapping (Ongoing)

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

Status: Complete – Northern Sounds Area
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.

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 and partners
Estimated Cost: \$8,000
Funding Source: EPA funds for FY 2005

V. FY 2004 ACTIONS & PROJECTS

The following are ongoing or completed actions from the FY 2004 Work Plan since the last Work Plan report.

Atlantic White Cedar Restoration Project / Tide gate

The NC Division of Coastal Management installed a tide gate to reduce the effects of saltwater intrusion in to the Preyer-Buckridge Coastal Reserve and allow for potential habitat restoration of Atlantic White Cedar at the site.

Status: Complete
Intend Output: Tide gate, report, data
Intended Outcome: Habitat restoration
Estimated Cost: \$16,000
Funding Source: EPA funds for FY 2004

VI. FY 2003 ACTIONS & PROJECTS

The following are ongoing or completed actions from the FY 2003 Work Plan since the last Work Plan report.

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. APNEP will continue to address this task in FY 2008 along with indicators.

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

ONGOING LONGTERM PROJECTS & ACTIONS

I. Board and Committees Support

The key element of the CCMP's implementation is active citizen participation. On August 2nd, 2007, North Carolina Governor Michael F. Easley signed Executive Order # 122: *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*. Staff work with these advisory groups to guide CCMP implementation, indicator development, and development of a new CCMP.

Type: Ongoing
Intended Output: Partnership building, outreach, CCMP implementation prioritization
Intended Outcome: New and greater public involvement, estuarine indicator development
Estimated Cost: \$ 10,000
Funding Source: EPA funds for FY 2009

II. 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 effective implementation of 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.

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 2009

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

III. 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 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 are compiled by the CMN office at ECU. Information is available to the public on the APNEP web site at <http://www.apnep.org/> and at <http://www.ecu.edu/icmr/cwqmp>.

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

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 \$50,000 (via contract with East Carolina University).
Funding Source: EPA funds for FY 2009

- ❖ 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.”*

IV. Submerged Aquatic Vegetation (SAV) Monitoring

Submerged aquatic vegetation constitutes one of the most important estuarine habitats in the Albemarle-Pamlico Region. 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.

In FY 2007 APNEP provided the base funding necessary to foster acquisition of digital aerial photography of potential SAV habitats in the APNEP and stimulate interest in the entire coastal region. This imagery is a necessary step in providing APNEP partners with information on the current status of SAV in the coastal waters.

Status: In Progress
Output: Report, GIS data, maps, educational opportunities
Outcome: Better environmental data, better resource management and planning
Funding & Source: EPA FY 2008 – \$30,000 - Image analysis

EPA FY 2007 – \$140,000 (\$285K total cost) - In Progress
(digital image acquisition – entire coast)

EPA FY 2006 – \$20,000 - to be attached to FY 2007 funding for
digital image acquisition

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

Partners: NC Division of Marine Fisheries, US Fish and Wildlife Service,
WRC, NOAA, NC Division of Water Quality, NC Division of
Water Resources, ECU, others

V. OTHER PROJECTS

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 the shared river basins.

Status: Planning

Estimated Cost: \$1,000

Funding Source: EPA funds from previous years - budgeted in the FY 2003
Work Plan

- ❖ This action directly supports the CCMP’s Implementation Plan, Objective A, Management Action 2: “*Coordinate implementation of the CCMP.*”

PROPOSED PROJECTS & ACTIONS FOR FY 2009

Projects for FY 2009 will continue to support the implementation strategy as outlined in the CCMP and support program reform and CCMP update efforts.

I. Program Administration & Indirect Costs

For more detail see Administration and Financial section.

Type: Ongoing
Intended Output: Program administration, partnership building, CCMP implementation
Intended Outcome: CCMP implementation
Estimated Cost: \$ 284,275 direct and \$ 14,884 indirect
Funding Source: EPA funds for FY 2009

❖ 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."*

II. Watershed Field Coordinator - Virginia

For more detail see Ongoing Projects section.

Type: Ongoing
Intended Output: Governmental coordination, public involvement
Intended Outcome: CCMP implementation
Estimated Cost: \$ 30,000
Funding Source: EPA funds for FY 2009

❖ 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."*

III. Board and Committees Support

The key element of the CCMP's implementation is active citizen participation through the Policy Board and each of the three Advisory Committees.

Type: Ongoing
Intended Output: Partnership building, outreach, CCMP implementation prioritization
Intended Outcome: New and greater public involvement, estuarine indicator development
Estimated Cost: \$ 10,000
Funding Source: EPA funds for FY 2009

❖ 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."*

IV. Spatially-enabled Content Management System Development: Phase I of APNEP Decision Support System

To begin the development of a comprehensive temporal and spatial database (*Content Management System*) as a form of clearinghouse for pertinent environmental data and modeling information in the AP region. This system will use a new generation of internet portal (mash-up) technology to provide metadata information and data access when possible.

Type: New
Intended Output: Pilot APNEP content management system
Intended Outcome: Promote awareness of existing region data and models for pilot APNEP assessment
Estimated Cost: \$5,000
Funding Source: EPA funds for FY 2009
Leverage: DENR ITS Support & Website interface development
Pending

❖ This project supports the CCMP's Stewardship Plan Objective A: “*Promote local and regional planning that protects the environment and allows for economic growth.*”

V. Imagery Catalog

This project will lead to the development of a catalog of current and historical remote sensing imagery in the public domain taken within the APNEP region. To initiate the process APNEP would sponsor two workshops during FY 2009. The first workshop will be held in Raleigh to discuss the Statewide Mapping Advisory Committee draft protocol to digitize historical imagery and a preliminary review of archives by various local, state, and federal agencies. The second workshop would be more intense (two days), would include representatives from Virginia agencies, and focus on counties within the APNEP pilot region. All imagery catalog information resulting from workshop output would be included in the proposed Phase 1 APNEP Content Management System.

Type: New
Intended Output: Two Workshops
Intended Outcome: Development of an imagery catalog
Estimated Cost: \$ 5,000
Funding Source: EPA funds for FY 2009
Leverage: Pending

❖ This project supports the CCMP's Stewardship Plan Objective A: “*Promote local and regional planning that protects the environment and allows for economic growth.*”

VI. 2009 Teacher Institute

APNEP will partner with the UNC Institute for the Environment, the NC Office of Environmental Education, the Environmental Education Fund and others to offer a teacher training institute during the summer of 2009 at the Trinity Center in Salter Path, NC. Approximately 20-30 middle and high school 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.

Status: Continuing
Intended Output: 20-30 teachers trained in environmental education
Intended Outcome: Increased environmental education in schools
Estimated Cost: \$24,000 total
Funding Source: \$12,000 EPA funds for FY 2009
Estimated Leverage: Approximately \$12,000

❖ This project supports the CCMP's Stewardship Plan Goal: "Promote Responsible Stewardship of the natural resources of the Albemarle-Pamlico sounds rRegion."

VII. Ecosystem Assessment Pilot Project: Pasquotank and Chowan River (VA)

This project will build upon the data inventory survey conducted by APNEP in 2006. The Virginia Institute for Marine Sciences will assemble data referenced in the survey for the Virginia portion of the Pasquotank and Chowan Rivers. Data will include monitoring data on water quality and living resources as well as land use, population trends and other potential ecosystem stressors. Analyses will be conducted for indications of change over the period of record. The goal is to develop a preliminary State of the River Basin report for the Pasquotank and Chowan Rivers. The approach will be holistic in that changes in monitored variables will be tracked throughout river basins and river systems. These stations are monitored by the Virginia Department of Environmental Quality. These data can be further analyzed to look for trends in seasons as well as trends in other monitored parameters. An attempt will be made to trace changes in water quality and living resources back to changes in the basin. This report can serve as a framework for an eventual State of the Sounds report that will include APNEP's finalized indicators. This report can also serve as a guide to decision makers in the development of the eventual APNEP monitoring strategy.

Type: New
Intended Output: Condition Report.
Intended Outcome: Informed decision makers, APNEP indicators
Estimated Cost: \$ 50,000 total
Funding Source: \$ 25,000 EPA funds for FY 2009, \$25,000 VA DCR
Leverage: \$25,000

❖ This project supports the CCMP's Stewardship Plan Objective A: "*Promote local and regional planning that protects the environment and allows for economic growth.*"

VIII. Submerged Aquatic Vegetation (SAV) Image Analysis

APNEP will provide the base funding necessary to lead interpretation of the acquired 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. Expected partners include NC Division of Marine Fisheries, US

Fish & Wildlife Service, NC DOT and others. See SAV Monitoring in Ongoing Projects for more information.

Type: Ongoing
Intended Output: Report, GIS data, maps, educational opportunities
Intended Outcome: Better environmental data, better resource management and planning
Estimated Cost: \$ 30,000
Funding Source: EPA funds for FY 2009
Leverage: Pending

❖ 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.”*

IX. Citizens' Monitoring Network

For more detail see Ongoing Projects section.

Type: Ongoing
Intended Output: Awareness, data
Intended Outcome: Increased environmental awareness
Estimated Cost: \$ 56,000
Funding Source: EPA funds for FY 2009

❖ 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.”*

X. 303-D Listed Waters Project

APNEP will partner with NC Division of Water Quality and others on a project to remove a water body from the 303-D list of impaired waters.

Type: New
Intended Output: TBA
Intended Outcome: Restore designated use to a water body
Estimated Cost: \$10,000
Funding Source: EPA funds for FY 2009
Leverage: To be determined

❖ This project 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.”*

XI. Outreach Activities

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

Status: Ongoing
Intended Output: Public outreach and involvement
Intended Outcome: CCMP Implementation, increased environmental awareness

Estimated Cost: \$4,0691
Funding Source: EPA funds for FY 2009
Leverage: To be determined

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

XII. 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 also carries *The Beacon*.

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

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

XIII. APNEP Public Attitudes toward Estuary Management Survey

This project will repeat a 1991 survey on public attitudes toward water quality and management alternatives in the Albemarle-Pamlico watershed. The results of the original study were used in development of the 1994 CCMP. As APNEP drafts a new CCMP with the support of a steering committee and the management conference, a new survey will help guide a new decade of work and assess how public attitudes and perceptions have changed during more than a decade of CCMP implementation.

APNEP will contract with survey professionals, but APNEP staff will work closely with the survey team to help adapt APNEP's 1991 survey to reflect new interests while retaining a basis for comparison with the older survey. The results of this survey will be provided by the survey consultant, but presentation to the public will be part of APNEP's communication outreach program in 2009 in conjunction with the launch of our new CCMP.

Intended Output: Survey report and data about public attitudes and perceptions that can be used to guide APNEP's future work and evaluate APNEP's accomplishments over the last 15 years.
Intended Outcome: Improved public outreach and messaging due to a better understanding of APNEP staff and project partners of public priorities, interests and attitudes.
Estimated Cost: \$45,000
Funding Source: EPA funds FY 2009

❖ This project supports the development of a new CCMP

XIV. Demonstration Projects

Proposals will be solicited for demonstration projects to provide environmental benefits in the Albemarle-Pamlico region. Results of the demonstration projects will be transferable to all river basins in the Albemarle-Pamlico Region and other National Estuary Programs. Project selection will be made by the Citizen Advisory Committee.

- ❖ The demonstration projects support 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."*

Status: New Projects
Intended Output: Community Demonstration Projects.
Intended Outcome: On-the-ground projects that demonstrate environmental benefits
Estimated Cost: \$50,000
Funding Source: EPA funds FY 2009

XV. River Herring Restoration Project

APNEP staff are currently working with NCDENR on a proposal presenting a set of immediate and long-term actions that will lead to the restoration of blueback herring (*Alosa aestivalis*) and alewife (*Alosa pseudoharengus*), collectively known as "river herring", in a manner that is scientifically, economically and socially sound.

Status: Development
Output: Actions to improve water quality and habitat
Outcome: Restoration of regional herring fishery
Estimated Cost: \$ 150,000 requested from NC General Assembly (non-320 funds)
Funding Source: NC State Appropriation
Leverage: \$ 150,000 +

- ❖ This project supports the CCMP's Vital Habitats 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."*

ADMINISTRATION AND FINANCIAL

I. PROGRAM ADMINISTRATION

Program 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/partner events. In addition, staff monitors, and often becomes involved in, activities of state resource management agencies that relate to CCMP implementation, APNEP mission, 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. Although the Policy Board and Advisory Committees 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, and require staff involvement and interactions.

Indirect Costs

Indirect Charges: NC DENR has negotiated an indirect cost agreement with the US EPA for the Office of Conservation and Community Affairs/Division of Natural Resource Planning and Conservation at a rate of 7 % of all salaries supported by this federal grant. Estimated indirect costs for FY 2009 are \$ 15,406. The rate for FY 2008 was 3.4% (\$7,184).

Administrative Costs

Overall administration costs for FY 2009 are estimated at approximately \$ 284,275 and include salaries, fringe, longevity pay and supplies, IT services and phone, estimated cost of living (3%), training and development.

Personnel

Presently, the APNEP staff consists of the APNEP program office in Raleigh, with the Director, Science Coordinator, and Project Coordinator. The APNEP public involvement office in Washington, NC houses the Public Involvement Coordinator and NC Watershed Field Representative.

The APNEP also has two contract employees: the Citizens' Monitoring Network Coordinator in Greenville, and the Virginia Watershed Field Representative in Suffolk, Virginia. See description under Ongoing Projects for information on these programs.

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 2009

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: Position is currently vacant.

Funding Source: EPA funds for FY 2009

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, guides 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 2009

Project Coordinator

The Project Coordinator 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: Lucy Henry will continue in this role. Ms. Henry joined APNEP on June 15, 2007.

Funding Source: EPA funds for FY 2009

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

Leverage: Match for EPA Grant

Note: Positions, responsibilities and titles may change in FY 2009 among APNEP staff as a result of changes to better administrate the program and reallocate duties. All positions funded under EPA section 320 funds are consistent with North Carolina Office of State Personnel rules and policies.

II. GRANTS TO LOCAL ENTITIES

The Albemarle-Pamlico NEP let fewer contracts in FY 2008 than in previous years and continued to accomplish the tasks presented in the FY 2003 to FY 2007 Work Plans. These items are discussed in the Goals and Accomplishments, and the Ongoing Projects sections of this report.

Most actions have been funded under #CE-97464802. However, funds from a previous EPA grant (CE- 994645-94) have also supported numerous projects. All remaining funds under this grant have been spent.

Additionally, APNEP partnered with Environmental Defense to obtain a Regional Wetland Grant from the EPA in December 2005. This grant (CD-9444206) funds support for the development of a comprehensive assessment and tracking methodology for wetland functionality in the Chowan estuary of Western Albemarle Sound. Environmental Defense is providing 100% of the required matching funds for this grant.

The following table provides an overview of all completed and active grants to local entities since October 1, 2007 for section 320 funds under CE-9746802 or CE- 994645-94.

GRANTS TO LOCAL ENTITIES (Active October 1, 2007 to June 1, 2008)

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 Admin Newsletters, Database	Ongoing	In Progress
Treasures Booklet	\$6,400	Correction Enterprises	Printing of APNEP Treasures Booklet (5,000 copies)	5,000 copies of booklet	May 2008	In Progress
Teacher Institute 2008	\$3,000	Environmental Education Fund	Develop and Implement a Teacher Institute for 25 teachers	Week long Institute Report	July 2008	In Progress
River Basin Deck	\$5,000	NC DFR	Outdoor Classroom /deck	Construction, outreach	May 2008	Complete
AP3C	\$ 828.75	APNEP/ ED	Engaging Citizen in Conservation	Conference	Feb. 2008	Complete
Newspapers in Education (NIE)	\$8,600	APNEP	News & Observer Newspaper – NIE Estuary Insert	Newspaper insert 160,000 copies	Nov. 2007	Complete
Coastal Growth Strategies Meeting	\$2,000	NC Coastal Federation	Workshop on growth management for local governments	Workshop	May 2008	In Progress
Wetland Project	\$227,520 (Non-320 funds)	Environmental Defense	Regional Wetland Grant	Report, Data	September 2007	In Progress

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 2009

In FY 2009, the Albemarle-Pamlico NEP will continue to seek additional avenues for collaborating with other partners to assist in targeting funds to support CCMP implementation goals and the APNEP mission. Where possible, APNEP will actively seek alternative sources of funding for APNEP activities and projects to fulfill the goals of the CCMP.

FY 2008

In FY 2008, the Albemarle-Pamlico NEP continued to seek partners and additional opportunities for partners in targeting actions and funds towards CCMP implementation. APNEP will submit its FY 2008 Leverage results in September 2008.

IV. FY 2009 ESTIMATED FEDERAL COST SHARE

Federal Funds Budget FY 2009

The estimated federal funds budget for each NEP for FY 2009 is \$591,750*

IMPLEMENTATION PLAN

Program Administration (<i>Ongoing</i>) (staff salaries, fringe**, longevity, rent, supplies, , etc.)	\$ 284,275
Watershed Field Coordinator (<i>Ongoing- contract with VA DCR</i>)	\$ 30,000
Boards & Committees Support (<i>Ongoing</i>)	\$ 10,000
Estuary Management Survey	\$ 45,000

VITAL HABITATS PLAN

SAV Image Analysis (<i>New</i>)	\$ 30,000
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WATER QUALITY PLAN

Pasquotank and Chowan River Water Quality Assessment (VA)	\$ 25,000
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STEWARDSHIP PLAN

Citizens' Monitoring Network (<i>Ongoing</i>)	\$ 56,000
CMS	\$ 5,000
Imagery Catalog	\$ 5,000
2009 Teacher Institute	\$ 12,000
303-D Listed Waters Project	\$ 10,000
Outreach	\$ 4,069
Demonstration Projects	\$ 50,000

<u>TRAVEL</u>	\$ 10,000
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<u>INDIRECT COSTS</u> (7%)	\$ 15,406
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Total \$ 591,750

* Estimate from EPA on February 21, 2008

** Includes: Fringe Benefits based on Social Security (7.65 %) & Retirement (7.14 %) of position's annual salary
Medical Insurance Plan rate of \$4,138 per year and
Indirect Costs based on 7.0 % of federal salaries.

V. NON-FEDERAL COST SHARE (Match for FY 2009)

Summary of Match Requirements

The North Carolina Department of Environment and Natural Resources intends to provide \$591,047 for the 1:1 non-federal match for FY 2009.

This match will be provided through:

- 1) In-kind services provided by staff support for the NC Field Representative from the Department of Environment and Natural Resources: Office of Conservation and Community Affairs.
- 2) In-kind costs associated with a project to improve water quality through funding of the NC Clean Water Management Trust Fund.

SUMMARY OF STATE MATCH

In-kind Position (salaries and fringe):	\$ 79,047
Clean Water Management Trust Fund Project:	<u>\$ 512,703</u>
TOTAL:	\$ 591,750

In-kind Position Match

The North Carolina Department of Environment and Natural Resources intends to provide \$79,047 as part of the 1:1 non-federal match for FY 2009. The match will be provided through in-kind services provided by staff of the Department of Environment and Natural Resources: Office of Conservation and Community Affairs.

Office of Conservation and Community Affairs

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 position is responsible for program administration, support, community involvement and guiding implementation of the NC Coastal Habitat Protection Plan and the APNEP Comprehensive Conservation and Management Plan.

<u>POSITION</u>	<u>#</u>	<u>SALARY</u>	<u>EFFORT</u>	<u>Match</u>
Field Representative	1	65,218	1.0	65,218
			Fringe* 1.0	<u>13,829</u>
		Total In-Kind Service Match:		79,047

* Fringe is based on Social Security (7.65 %) & Retirement (7.14 %) of position's annual salary, plus Medical Insurance Plan rate of \$4,138 per year.

In-kind Project/Services Match

The North Carolina Clean Water Management Trust Fund intends to provide \$ 512,703 as part of the 1:1 non-federal match for FY 2009. The match will be provided through a water quality improvement project in one or more of the APNEP river basins.

Clean Water Management Trust 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.

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 provided 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 2008

APNEP staff attended a number of meetings and conferences using the allotted travel funds and specific project funds or administration costs. Below is a summary of these activities that have occurred or are currently planned:

Personnel	Date	Purpose	Location	Cost
All APNEP Staff	10/07 to 9/ 2008	Normal Program Activities/ projects	APNEP area	\$ 2,500*
Crowell	3/08	EPA- ANEP/NEP National Meeting	Washington, DC	\$ 1,379
Henry	4/08	SARE Conference	St. Louis, MO	\$ 30
Carpenter	11/07	ERF Conference	Providence, RI	\$643
Giordano	10/07	NAAEE	Virginia Beach, VA	\$ 45
Crowell	7/08	ANEP	Boulder, CO	\$ 2,000*
			Total	\$6,597

*Estimate

FY 2009 Projected Travel Estimates

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, all travel cannot be scheduled a year ahead; therefore, only an estimate can be provided 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 2009: 30 trips, among 4 staff members; average cost per trip approximately \$100. Total \$3,000

EPA-required Out-of-State:

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 2009: 2 trips, 3 persons; average cost per trip per person is approximately \$1000.00 (based on prior travel). Total \$6,000

Other 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 2009: 2 trips, 2 days; average cost per trip approximately \$500.00. Total \$1,000

CURRENT NC DENR TRAVEL RATES

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 2009 Projected Travel

Personnel	Date	Purpose	Location	Estimated Cost
APNEP Staff & volunteers	October to September	Normal Program Activities	Albemarle – Pamlico Region	\$ 3,000
APNEP Staff	November 2008	NEP National meeting	New York	\$ 3,000
APNEP Staff	March 2009	NEP National meeting	Washington, DC	\$ 1,000
APNEP Staff	October to September	Additional National Meetings		\$ 3,000