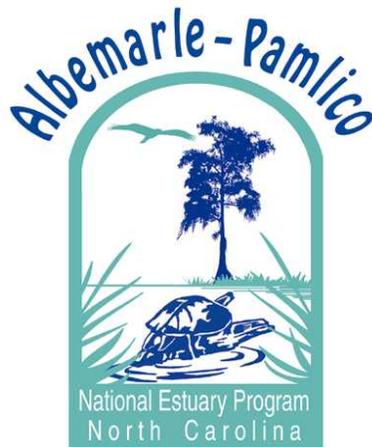


ALBEMARLE-PAMLICO NATIONAL ESTUARY PROGRAM

**Workplan
for the
Cooperative Agreement Between
The United States Environmental Protection Agency
and
North Carolina Department of Environment and Natural Resources
in
Cooperation with the
Virginia Department of Conservation and Recreation**

FY 2010

OCTOBER 1, 2009 THROUGH SEPTEMBER 30, 2012



**Approved by
Policy Board on
May 28, 2009
EPA-RTP Campus, Durham, NC**

CE-97464802

TABLE OF CONTENTS

INTRODUCTION	3
BACKGROUND	4
MAP: Albemarle-Pamlico Estuarine Region	4
AUTHORITY	5
ACCOMPLISHMENTS AND PROJECTS	7
I. FY 2009 ACTIONS & PROJECTS	7
II. FY 2008 ACTIONS & PROJECTS	10
III. FY 2007 ACTIONS & PROJECTS	12
IV. FY 2005 ACTIONS & PROJECTS	13
V. FY 2003 ACTIONS & PROJECTS	13
ONGOING LONG-TERM PROJECTS & ACTIONS	14
I. Board & Committees Support	14
II. Virginia Watershed Field Coordinator	14
III. Citizens' Monitoring Network (CMN)	14
IV. Submerged Aquatic Vegetation (SAV) Monitoring/ Mapping	15
V. Other Projects	16
PROPOSED PROJECTS & ACTIONS FOR FY 2010	17
I. Program Administration & Indirect Costs	17
II. Watershed Field Coordinator - Virginia	17
III. Board & Committees Support	17
IV. Citizens' Monitoring Network	18
V. DWQ Outreach and Engagement Project	18
VI. 2010 Teacher Institute	18
VII. Outdoor Classroom Symposium	19
VIII. 303-D Listed Waters Project (Fishing Creek)	19
IX. Community Involvement and Outreach Activities	19
X. CAC Projects	20
XI. Elizabeth City EcoPark	20
XII. ILT Climate Change Workshop	21
XIII. Ecosystem Assessment Pilot Project (Phase II)	21
XIV. Submerged Aquatic Vegetation (SAV) Image Analysis	21
XV. SAV Monitoring	22
XVI. River Herring Restoration Project	22
ADMINISTRATION AND FINANCIAL	23
I. PROGRAM ADMINISTRATION	23
II. GRANTS TO LOCAL ENTITIES	25
Grants Table	26
III. LEVERAGE FUNDS	27
IV. ESTIMATED FEDERAL COST SHARE (<i>Budget for FY 2010</i>)	28
V. ESTIMATED FEDERAL COST SHARE (<i>Budget for FY 2009</i>)	29
VI. NON-FEDERAL COST SHARE (<i>Match for FY 2010</i>)	30
VII. TRAVEL	31



INTRODUCTION

Agreement Related Contents of this Document:

- A progress report detailing accomplishments in FY 2009 is provided on pages 7 through 10.
- The FY 2010 Work Plan items are presented on pages 17 through 22.
- The FY 2010 Work Plan budget is presented on page 28.
- Administrative and financial information items are presented on pages 23 through 31.

Purpose: The purpose of this agreement is to provide support to the NC Department of Environment and Natural Resources (NCDENR) 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 request for the amount of \$600,000 for a new Cooperative Agreement (number to be assigned), and a time extension to September 30, 2012 for Cooperative Agreement #CE-97464802.

Period of Performance:

The period of performance under a new Cooperative Agreement (number to be assigned by EPA) is from October 1, 2009 through September 30, 2010.

The period of performance under Cooperative Agreement #CE-97464802 is from October 1, 2002 through September 30, 2012 as a no cost time extension.

Principal Contacts:

EPA Project Officer

Steven Blackburn
US EPA Region IV
61 Forsyth Street
Atlanta, GA 30303
(404) 562-9397

APNEP Director

William L. Crowell, Jr.
Albemarle-Pamlico NEP
1601 Mail Service Center
Raleigh, NC 27699-1601
(919) 715-1327



AUTHORITY

Federal Water Pollution Control Act

The National Estuary Program was established by Congress in 1987 to improve the quality of *Estuaries of National Significance*. The Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.), Section 320 directs EPA to develop plans for attaining or maintaining water quality in an estuary. This includes: protection of public water supplies; the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife; allowance of recreational activities in and on water; and control of point and nonpoint sources of pollution to supplement existing controls of pollution. Each program establishes a Comprehensive Conservation and Management Plan to meet the goals of Section 320.

Comprehensive Conservation and Management Plan

In 1987, Congress designated the Albemarle-Pamlico Estuarine System as an *Estuary of National Significance* and thus began a comprehensive study effort, called the Albemarle-Pamlico Estuarine Study (APES). The result of this process is the Albemarle-Pamlico National Estuary Program Comprehensive Conservation and Management Plan (CCMP). The CCMP was developed over a 7-year period by representatives from the private and public sectors, including government, industry, business, and environmental interest groups and municipal officials. The plan is a guide for environmental stewardship of the Albemarle-Pamlico estuary system. The CCMP reflects the input of people from the region who will be affected by the plan's recommendations. The CCMP seeks to balance the need for economic growth in eastern North Carolina with the need to secure the environmental future of the region. It was submitted to EPA in October 1994 for approval by NC Governor Jim Hunt. The final CCMP was signed by EPA Administrator Carol Browner in November 1994. It is an outstanding example of watershed and community-based environmental management, and demonstrates how targeted federal assistance can serve as a catalyst to achieve major state and local resource commitments.

North Carolina Governor's 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 replaces Executive Order # 74 (2005), and provides the operational advisory framework for the program office. A copy of Executive Order #122 is attached and is 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 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. 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.



ACCOMPLISHMENTS AND PROJECTS

I. FY 2009 ACTIONS & PROJECTS

Program Administration

For more detail, see Administration and Financial section.

Watershed Field Coordinator - Virginia

Currently vacant. 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 continue to work with EPA staff to identify and develop strategies for leveraging funds beyond EPA grant funds. Upon suggestion of EPA-HQ, funds will be incorporated in the CCMP update process. EPA made funding available for planning in the FY 2007 grant.

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

APNEP staff are working with NC DENR, NC Wildlife Resources Commission (WRC) and others 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 technology to provide metadata information and data access when possible.

Status:	Pending
Intended Output:	APNEP content management system
Intended Outcome:	Promote awareness of existing regional data and models for pilot APNEP assessment; tool for partners
Estimated Cost:	\$5,000
Funding Source:	EPA funds for FY 2009
Leverage:	Pending

Imagery Catalog

APNEP staff are working with partners to develop a catalog of current and historical remote sensing imagery in the public domain taken within the APNEP region. To initiate the process APNEP plans to sponsor two workshops. 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 will include representatives from Virginia agencies, and focus on counties within the APNEP pilot region. All imagery catalog information resulting from workshop output will be included in the proposed Phase 1 APNEP Content Management System.

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

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. 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: Pending
Intended Output: 32 teachers trained in environmental / watershed 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

Ecosystem Assessment Pilot Project: Pasquotank and Chowan Rivers (VA)

This project builds upon the data inventory survey conducted by APNEP in 2006. The Virginia Institute for Marine Sciences is assembling data referenced in the previous 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. 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-making in the development of the eventual APNEP monitoring strategy.

Type: In Progress
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

Submerged Aquatic Vegetation (SAV) Image Analysis

APNEP is working with its partners to provide the base funding necessary to lead interpretation of the acquired digital aerial photography of potential SAV habitats in the APNEP region. Recent personnel changes in NC Div. Marine Fisheries and the State budget



have caused a delay in the interpretation of the images. This imagery is a important and necessary step in providing APNEP and its partners with information on the current status of SAV in the sounds. See SAV Monitoring in Ongoing Projects for more information.

Type: Pending action
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

Citizens' Monitoring Network

For more detail see Ongoing Projects section.

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

303-D Listed Waters Project

APNEP is partnering with NC Ecosystem Enhancement Program, Division of Water Quality and others on efforts to remove Fishing Creek (Tar-Pamlico Basin) from the 303-D list of impaired waters.

Type: In Progress
Intended Output: Report, Local engagement
Intended Outcome: Restore designated use to a water body
Estimated Cost: \$10,000
Funding Source: EPA funds for FY 2008-9
Leverage: To be determined

Outreach Activities & Website

APNEP continues to produce and publish its website, newsletter, e-mail updates and other outreach materials. New additions include a Blog, Facebook page and a WiserEarth page. New staff member (Lori Brinn) has received training in website design.

Status: In Progress - Ongoing
Intended Output: Public outreach and involvement
Intended Outcome: CCMP Implementation, increased environmental awareness
Estimated Cost: \$2,000
Funding Source: EPA funds for FY 2009
Leverage: To be determined

Public Attitudes toward Estuary Management Survey

This project repeats a 1991 survey on public attitudes toward water quality and management alternatives in the Albemarle-Pamlico watershed. APNEP has contracted with East Carolina University to adapt APNEP's 1991 survey to reflect new interests while retaining a basis for comparison with the older survey. Results should be available by September 2009.



Status: In Progress
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 by APNEP staff and project partners of public priorities, interests and attitudes.
Estimated Cost: \$39,000
Funding Source: EPA funds for FY 2009

Demonstration Projects

The Citizens' Advisory Committee selected for 6 proposal 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.

Status: Six 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

River Herring Restoration Project

APNEP staff continue to work 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: \$ 200,000 from NC General Assembly (non-320 funds)
Funding Source: NC State Appropriation
Leverage: \$ 200,000

II. FY 2008 ACTIONS & PROJECTS

The following are ongoing or completed actions that occurred from May 1, 2008 to May 1, 2009.

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. See SAV Monitoring in the ongoing projects section for additional information.

Status: Complete
Output: Reports and GIS data, better management of SAV resources
Outcome: New management actions to protect SAV resources
Estimated Cost: \$386,000
Funding Source: EPA, US FWS, NC DENR, DMF, WRC
Leverage: Approx. \$140,000 +

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. Project funds may be reallocated in 2009.

Status: Delayed due to changes at NC DCM
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.

Status: 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

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 of the interest expressed by numerous institutions 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. 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. AP3C institutions assisted in the sea level rise listening sessions that were held in the summer of 2008.

Status: In Progress - Ongoing
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 co-facilitated seven listening sessions with support from the AP3C partner organizations with the goal of learning how the general public perceives the combined threat of sea level rise and population growth. These listening sessions provided 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. The final report is available on the APNEP website at

<http://www.apnep.org/pages/PublicListeningSessionsReport.pdf>

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

III. FY 2007 ACTIONS & PROJECTS

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

Albemarle-Chowan Watershed Roundtables

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 (non-320 funds)



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 (non-320 funds)
Leverage: \$1,013,968

IV. FY 2005 ACTIONS & PROJECTS

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

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 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 LONG-TERM 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.

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.

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 website 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.

Output: Awareness, data
Outcome: Increased environmental awareness
Estimated Cost: \$59,100
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.

Output: Report, GIS data, maps, educational opportunities
Outcome: Better environmental data, better resource management and planning
Funding Source: EPA 320 and others
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 2010

Projects for FY 2010 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: \$ 271,638 direct and \$ 10,469 indirect costs

❖ 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: \$ 32,000

❖ 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. Funds support meetings, speakers, and materials as needed.

Type: Ongoing
Intended Output: Partnership building, outreach, CCMP implementation prioritization
Intended Outcome: New and greater public involvement, estuarine indicator development
Estimated Cost: \$ 10,000

❖ 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. Citizens' Monitoring Network

For more detail see Ongoing Projects section.

Type: Ongoing
Intended Output: Awareness, data
Intended Outcome: Increased environmental awareness
Estimated Cost: \$ 59,100

❖ 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."*

V. DWQ Outreach and Engagement Project

APNEP will work with the NC Division of Water Quality to implement several projects:

- 1) Coastal Stormwater and Riparian Buffer Rules Workshop for Development Professionals - These workshops will focus on the recently revised coastal stormwater rules, which affect all 20 coastal counties as well as the riparian buffer rules, which are in effect throughout the Neuse and Tar-Pamlico River Basins. The workshops will be geared towards development professionals, which may include realtors, home builders, developers, construction crews, and local government staff.
- 2) Information for display and distribution about Riparian Buffers and 401 Water Quality Certifications - This information will focus on the riparian buffer rules in the Neuse and Tar-Pamlico River Basins and the 401 Water Quality Certification Program, which is in effect throughout the entire state. Materials may include a table top display board and panels, brochures, and materials to hand out at events. Information will be geared towards the general public.
- 3) What Lives in our Lakes, Streams and Estuaries? - This project will provide information to focus on students in K-12 understanding the biodiversity the lakes, streams and estuaries. Materials may include zooplankton nets, dip nets, field scopes, and other miscellaneous supplies.

Type: New
Intended Output: Promote awareness of water quality, buffers, and biodiversity
Intended Outcome: New education programs and materials
Estimated Cost: \$8,000
Leverage: Pending

❖ This project supports the CCMP's Water Quality Plan: Objective B: *"Reduce Sediments, Nutrients and Toxicants From Nonpoint Sources."*

VI. 2010 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 2010 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: \$22,000
Estimated Leverage: Approximately \$8,000

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

VII. Outdoor Classroom Symposium

APNEP will partner with the NC Botanical Garden, EE Fund, Office of Environmental Education and others to produce an outdoor classroom symposium, a three-day event focused on techniques for creating outdoor classrooms and strategies for using them to integrate environmental education into curriculum and programs. Pre- and post-symposium and mobile workshops will be offered to supplement and provide demonstrations of the concurrent sessions and keynotes held during the actual symposium. Anticipated attendance is 120-150 participants, primarily teachers and teacher assistants from across the state of North Carolina, although administrators and parent volunteers will also be welcome.

Type: New
Intended Output: 130 teachers exposed to environmental education opportunities on school grounds
Intended Outcome: Increased environmental education in schools
Estimated Cost: \$ 8,000
Leverage: Pending

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

VIII. 303-D Listed Waters Project (Fishing Creek)

APNEP will continue to partner with NC Ecosystem Enhancement Program and the NC Division of Water Quality, and other local partners on a project to remove a Fishing Creek (Tar-Pamlico River Basin) from the 303-D list of impaired waters.

Type: Continuing
Intended Output: TBA
Intended Outcome: Restore designated use to a water body
Estimated Cost: \$8,000
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.*"

IX. Community Involvement and 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: \$6,795
 Funding Source: EPA funds for FY 2009
 Leverage: To be determined

X. CAC Projects

The Citizens’ Advisory Committee will develop proposals to be solicited for projects that implement the CCMP or support the APNEP. 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 type and selections 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: \$75,000

XI. Elizabeth City EcoPark

APNEP will provide seed funds for the creation of an EcoPark in Elizabeth City, NC. The Park would offer nature trails/paths through the woods along Knobb’s Creek, giving access to flora and fauna viewpoints along the way. Project would utilize undevelopable land areas that are in or adjacent to a flood zone. The potential exists to upgrade fisheries spawning and utilize wetlands restoration techniques to improve watershed drainage along Knobb’s Creek. The project consists of all or part of three key land parcels and part of three other adjacent parcels. One key property already is owned by City of Elizabeth City.

Type: New
 Intended Output: Park, increased community involvement
 Intended Outcome: Park, wetland restoration
 Estimated Cost: \$25,000
 Leverage: Pending
 Potential Partners: AP3C, Elizabeth City, Pasquotank County, ECSU, AEDC, CVB, ECPPS, COA, NC DENR, Div of Tourism, Fish and Wildlife, Div. of Community Assistance, HUD, Interior, Agriculture

❖ 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.”*



XII. ILT Climate Change Workshop

APNEP will partner with NC DENR, EPA, NC DOT and other members of the Inter-Agency Leadership Team to produce a workshop of planning and adapting to climate change in North Carolina.

Type: New
Intended Output: Workshop
Intended Outcome: Informed Planning Community
Estimated Cost: \$2,000
Leverage: \$10,000

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

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

Phase II

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.*"

XIV. 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: \$ 25,000
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."*

XV. SAV Monitoring

This project supplement the SAV work that APNEP has been involved in over the past few years. IN the Spring of 2009 APNEP was awarded a grant to test monitoring protocols for SAV monitoring. The funds will be used to support the effort and provide a portion of the match. Funds will be used for boat use and some required travel.

Type: New
Intended Output: Testing of monitoring protocols.
Intended Outcome: SAV monitoring plan
Estimated Cost: \$1,000
Leverage: \$112,000

❖ 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."*

XVI. River Herring Restoration Project

APNEP staff will continue to work with NCDENR and others 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: \$100,000
Funding Source: NC State Appropriation (non-federal)
Leverage: \$ Pending

❖ 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 Division of Natural Resource Planning and Conservation at a rate of 5.10 % of all salaries supported by this federal grant. Estimated indirect costs for FY 2010 are \$ 10,469. The rate for FY 2009 was 7 % (\$15,406).

Administrative Costs

Overall administration costs for FY 2010 are estimated at approximately \$ 271,636 and include salaries, fringe, longevity pay, equipment, supplies, IT services and phone, office space rent, and training and development. Administration costs FY 2009 was budgeted at \$ 284,275.

Personnel

Presently, the APNEP staff consists of the APNEP program office in Raleigh, with the Director, Program Scientist, Community Specialist and Watershed Management Coordinator. The APNEP office in Washington, NC houses the 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. Bill Crowell will continue in this role. Mr. Crowell has been the Director since June 2002.



Community Specialist

The Community Specialist 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 Citizens' Advisory Committee. Lori Brinn will continue in this role. Ms. Brinn joined APNEP in October 2008.

Program Scientist

The Program Scientist 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. Dean Carpenter will continue in this role. Dr. Carpenter has served in this role since November 2003.

Watershed Management Coordinator

The Watershed Management 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. The position assists in the management of contracts, and provides staff support to the Policy Board and Advisory Committees. Lucy Henry will continue in this role. Ms. Henry joined APNEP in June 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. Jimmy Johnson will continue in this role. Mr. Johnson has served in this role since January 2006. Position is funded by NC DENR and provide a portion of the non-federal match for the 320 grant.

Note: Positions titles and some responsibilities changed 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 2009 than in previous years and continued to accomplish the tasks presented in the FY 2003 to FY 2008 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. In additional project APNEP partnered with Environmental Defense to obtain a Regional Wetland Grant from the EPA in December 2005 and 2007. 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.

The following table provides an overview of all completed and active grants to local entities since October 1, 2008 for section 320 funds under CE-9746802.



GRANTS TO LOCAL ENTITIES (Active October 1, 2008 to May 1, 2009)

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
Estuary Management Survey	\$38,000	East Carolina University	Measure public attitudes and perceptions; evaluate APNEP's accomplishments: planning	Survey, Report	Sept. 2009	In Progress
Teacher Institute 2009	\$12,000	Environmental Education Fund	Develop and Implement a Teacher Institute for 25+ teachers	Week long Institute Report	Aug. 2009	In Progress
Chowan Ecosystem Assessment	\$25,000	Virginia Inst. Marine Science	Ecosystem analysis of a portion of the watershed	Report, Indicator Support	Sept. 2009	In Progress
303-D Waters Restoration (Fishing Creek)	\$14,000	NC Ecosystem Enhancement Program	Support efforts to remove Fishing Creek from 303-D impaired waters list	Report, Community Involvement	Sept. 2009	In Progress
Schoolyard Demonstration Project	\$12,000	East Wake Academy	Outdoor Classroom & Boardwalk	Outdoor Classroom & Boardwalk	Sept. 2009	In Progress
Schoolyard Demonstration Project	\$12,000	Edward W. Wyatt Middle School	Nature's Classroom and Exploratory Trail	Outdoor Classroom & Trail	Sept. 2009	In Progress
Schoolyard Demonstration Project	\$8,000	Kitty Hawk Elementary School	Renewable Energy Discovery Zone	Energy Learning Center, solar panels	Sept. 2009	In Progress
Schoolyard Demonstration Project	\$7,000	Pamlico County Schools	Cistern –water saving station	Cistern	Sept. 2009	In Progress
Schoolyard Demonstration Project	\$10,200	NC Coastal Federation	Stormwater Runoff – Cape Lookout Visitors Center	Stormwater BMP	Sept. 2009	In Progress
Wetland Project	\$227,520 (Non-320 funds)	Environmental Defense Fund	Regional Wetland Grant	Report, Data	Sept. 2009	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 2010

In FY 2010, 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 2009

In FY 2009, 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 2009 Leverage results in September 2009.



IV. FY 2010 ESTIMATED FEDERAL COST SHARE

Federal Funds Budget FY 2010

The estimated federal funds budget for each NEP for FY 2010 is \$600,000*

IMPLEMENTATION PLAN

Program Administration (staff salaries, fringe**, longevity, rent, supplies, etc.)	\$ 271,636
Watershed Field Coordinator	\$ 32,000
Boards & Committees Support	\$ 10,000
Community Involvement & Outreach	\$ 6,795

VITAL HABITATS PLAN

SAV Image Analysis	\$ 25,000
SAV Monitoring Support	\$ 1,000

WATER QUALITY PLAN

Pasquotank and Chowan River Water Quality Assessment Phase II	\$ 25,000
Elizabeth City EcoPark	\$ 25,000
DWQ Outreach	\$ 8,000

STEWARDSHIP PLAN

Citizens' Monitoring Network	\$ 59,100
2010 Teacher Institute	\$ 22,000
Outdoor Classroom Symposium	\$ 8,000
303-D Listed Waters Project (Fishing Creek)	\$ 8,000
CAC Projects	\$ 75,000
ILT Climate Change Workshop	\$ 2,000

TRAVEL \$ 11,000

INDIRECT COSTS (5.10%) \$ 10,469

Total \$ 600,000

** From EPA in April 2009*

*** Includes: Fringe Benefits based on Social Security (7.65 %) & Retirement (8.14 %) of position's annual salary
Medical Insurance Plan rate of \$377.22 per year and
Indirect Costs based on 5.10 % of federal salaries.*



Note: APNEP Policy Board requested that the previous year's budget be included in the workplan for review purposes.

Federal Funds Budget FY 2009

Federal funds budget for each NEP for FY 2009 was \$ 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
-----------------------------------	-----------

WATER QUALITY PLAN

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

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
----------------------	-----------

<u>INDIRECT COSTS</u> (7%)	\$ 15,406
-----------------------------------	-----------

Total \$ 591,750

*** 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 2010)

Summary of Match Requirements

The North Carolina Department of Environment and Natural Resources intends to provide \$600,000 for the 1:1 non-federal match for FY 2010.

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):	\$ 84,372
Clean Water Management Trust Fund Project:	<u>\$ 515,628</u>
TOTAL:	\$ 600,000

In-kind Position Match

The North Carolina Department of Environment and Natural Resources intends to provide \$84,372 as part of the 1:1 non-federal match for FY 2010. 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

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	72,500	1.0	<u>72,500</u>
			Fringe* 1.0	<u>11,872</u>
		Total In-Kind Service Match:		<u>84,372</u>

* Fringe is based on Social Security (7.65 %) & Retirement (8.14 %) of position's annual salary, plus Medical Insurance Plan rate of \$377.22 per year.



In-kind Project/Services Match

The North Carolina Clean Water Management Trust Fund intends to provide \$ 515,628 as part of the 1:1 non-federal match for FY 2010. 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, APNEP will allocate \$11,000 as travel funds for program support, 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 2009

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	\$ 6,000
Crowell	3/09	EPA- ANEP/NEP National Meeting	Washington, DC	\$ 1,500
Carpenter, Brinn	11/08	EPA- ANEP/NEP National Meeting	NYC, NY	\$2,500
			Total	\$10,000

**Estimate*

FY 2010 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 2010: 30 trips, among 4 staff members; average cost per trip approximately \$120. Total \$3,600

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 2010: 2 trips, 3 persons; average cost per trip per person is approximately \$1050.00 (based on prior travel). Total \$6,300

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 2010: 2 trips, 2 days; average cost per trip approximately \$525.00. Total \$1,050



CURRENT NC DENR TRAVEL RATES

Item	In-State	Out of State	Overnight Trip	Day Trip
Breakfast	\$ 7.50	\$ 7.50	Leave Office before 6:00 AM	Leave Office before 6:00 AM; Extend workday by 2 hours
Lunch	\$ 9.75	\$ 9.75	Leave Office by 12:00 Noon; Overnight return after 2:00 PM	Never claimed on day trip
Dinner	\$ 16.75	\$ 19.00		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)	\$ 63.75	\$ 75.50		

FY 2010 Projected Travel

Personnel	Date	Purpose	Location	Estimated Cost
APNEP Staff & volunteers	October to September	Normal program activities	Albemarle – Pamlico Region	\$ 3,000
APNEP Staff	October 2009	NEP national meeting	Portland, OR	\$ 3,000
APNEP Staff	March 2010	NEP national meeting	Washington, DC	\$ 2,000
APNEP Staff	October to September	Additional relevant national meetings	TBA	\$ 2,000

