

Albemarle-Pamlico National Estuary Partnership

PROGRAM EVALUATION

For

July 1, 2008 – June 30, 2012

(FY 09 - 12 Workplans)



**North Carolina Department of Environment
and Natural Resources**



US Environmental Protection Agency

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Introduction

Overview

The watershed and sounds of the Albemarle and Pamlico estuary represent the nation's largest lagoonal estuarine system (Figure 1). The system is composed of eight major sounds and six major river basins draining over 28,000 square miles of watershed in North Carolina and 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 mission of the Albemarle-Pamlico National Estuary Partnership (APNEP) is to identify, protect and restore the significant resources of the Albemarle-Pamlico estuarine system. APNEP pursues this mission with guidance and support from its overarching Comprehensive Conservation and Management Plan (CCMP), advisory bodies and regional partners. The Partnership is a formal cooperative effort between the State of North Carolina (NC) and the United States Environmental Protection Agency (EPA), in partnership with the Commonwealth of Virginia (VA). In recognition of the numerous benefits provided by the Albemarle and Pamlico Sounds, the United States Congress designated the Albemarle-Pamlico Estuarine System an "estuary of national significance" in 1987.

The System

Concerted efforts to restore and protect the Albemarle-Pamlico estuary have been ongoing for decades. However, effective management of the sounds requires the study and management of the broader ecosystem that impacts them. The Albemarle-Pamlico ecosystem includes the sounds, the streams and the rivers that flow into them, and the land that catches the rainfall and drains into these rivers (collectively known as the watershed). The Albemarle-Pamlico ecosystem spans a land area of more than 28,000 square miles. It also includes 2 million acres of estuarine waters and 10,000 miles of streams and rivers (Figure 1). The headwaters of this ecosystem are found as far as the mountains of Virginia and the North Carolina Piedmont. The ecosystem includes wetlands, forests, farms, and cities – all of which affect the downstream estuary in complex ways. Some areas are particularly susceptible to environmental degradation, including urban waterways and areas of low elevation. To effectively safeguard the sounds for future generations, it is necessary to protect and restore the entire ecosystem - its water, air, land, and residents.



integrated with the CCMP recommendations, and detailed management actions that described how state agencies would achieve the broader objectives of the plan. The implementation of each management action was explained through critical steps, which specifically stated measures needed to be taken to implement a management action. The potential economic costs and considerations of management actions were also described.

From 1994 to 2003 the program worked to implement the CCMP. In 2003, APNEP engaged in a program assessment and strategic planning exercise through a contract with N.C. State University. This process enabled APNEP to be more effective by identifying strengths and weaknesses of the current program and developing program goals and priorities for the future.

The study resulted in a list of recommendations based on information gained through communications with APNEP stakeholders and from planning retreat participants consulting on the strategic assessment. Following the assessment, the APNEP director and Policy Board worked with the Office of the Secretary of DENR and the NC Governor's office to develop a new citizen involvement structure. This effort resulted in Governor's Executive Order #74 in 2005 and a replacement with minor changes in 2007 leading to Executive Order #122 (Attachment 1). APNEP then proceeded to evaluate program priorities, leading to the program's investigation of ecosystem-based management (EBM) as a collaborative adaptive management approach.

In 2008, given substantial organizational and policy changes of NCDENR and scientific advances since the initial CCMP was adopted in 1994, APNEP staff and the Policy Board began a major evaluation and revision of the document with assistance from its advisory committees and the EPA. APNEP began the process by seeking initial counsel from a broad array of stakeholders.

Following nearly four years of addressing new and emerging issues that may affect the significant natural resources of the Albemarle-Pamlico estuarine system, the *2012-2022 Comprehensive Conservation and Management Plan (CCMP)* was adopted by the Policy Board in March 2012. Also, a new Executive Order (# 133) was issued in November 2012 (Attachment 1). As part of that executive order, the program was formally renamed as a *partnership*, reflecting the importance of coordinated and integrated efforts for protecting and restoring the estuarine ecosystem.

The 2012-2022 Comprehensive Conservation and Management Plan (CCMP) is a significant step forward for the Albemarle-Pamlico National Estuary Partnership. This new CCMP aims to usher in a new era of environmental resource management to ensure these resources are sustained and available to future generations.

The shift from management methods presented in the previous CCMP (1994) is most notably evident in the integration of ecosystem-based management practices. Ecosystem-based management (EBM) includes consideration of human and natural systems, an adaptive management framework, and meaningful engagement with the region's citizens to find environmental management and policy solutions. Following a directive from the



APNEP Policy Board in December 2009 and support from the Board and advisory committees, the CCMP was developed on the foundation of EBM principles.

The 2012-2022 CCMP is organized by asking and then answering four basic questions: what is a healthy Albemarle-Pamlico system, what is the current condition of the system, what are the most significant challenges facing the system over the next 10 years, and what actions should be implemented to best achieve a healthy system? Goals, outcomes, objectives, and actions were carefully crafted through a systems-based analysis of the regional ecosystem. To achieve APNEP's mission, three overarching goals have been established:

Goal 1: A region where human communities are sustained by a functioning ecosystem

Goal 2: A region where aquatic, wetland, and upland habitats support viable populations of native species

Goal 3: A region where water quantity and quality maintain ecological integrity

New CCMP initiatives include protection and restoration efforts to improve water quality and habitats, identification of gaps in knowledge of the system, and engagement of the public to make connections between the natural environment and services provided by the system. APNEP has placed an emphasis on assessment and monitoring to gain further knowledge of the system and facilitate adaptive management.

Finally, as a National Estuary Program, much of APNEP's work is achieved through collaborative partnerships and leveraged resources with others interested in environmental and natural resource management in the region. Many of the objectives and actions in the CCMP rely on involvement from key governmental, non-profit, and other partners.

Management Approach

Since the release of its 1994 CCMP, APNEP has consistently implemented a management approach anchored by two key tenets. With the 2012-2022 CCMP, APNEP reaffirms its fidelity to these principles while further pursuing its newly adopted ecosystem-based management approach.

First, APNEP implements a watershed approach to protecting and restoring the estuarine system. Consistent with this practice, management efforts have been directed from river headwaters to the sounds throughout the region. This ecological approach helps APNEP ensure that issues are addressed in a holistic way, and that APNEP has standing to address issues throughout the watershed.

Second, APNEP takes a partnership approach to achieve its mission. Protection of the Albemarle-Pamlico estuarine system is an enormous undertaking, and the resources directly allocated to APNEP are limited. APNEP seeks to overcome this hurdle by



leveraging partnerships among governments, non-governmental organizations (NGOs), academia, and the public to make significant improvements for the sounds. Most notably, North Carolina and Virginia are parties to a memorandum of agreement to manage the Albemarle-Pamlico estuarine system, and APNEP staff members are hosted by both states. As a result of its broad reach, APNEP is well positioned to fill gaps and identify synergies among its partners.

With the implementation of the 2012-2022 CCMP, APNEP adopts the principles of ecosystem-based management (EBM) to better support its mission. The ecosystem-based management approach includes a systems-based consideration of both human and natural systems, an adaptive management framework, and meaningful engagement with the public to find environmental management and policy solutions.

Summary

Since its inception, APNEP has led or contributed to scores of conservation efforts throughout the region. APNEP's first CCMP in 1994 called for the creation of several important environmental management initiatives that came to fruition in the form of Partnership for the Sounds' Estuarium, the Center for Geographic Analysis, and the N.C. Clean Water Management Trust Fund. Annual restoration and demonstration projects improve habitats and water quality throughout the estuarine system.

APNEP continues its proud tradition of facilitating applied scientific research that began during the APES period, which recently led to the completion of a coast-wide map of submerged aquatic vegetation (SAV) for the estuary. APNEP has supported citizens monitoring for more than two decades. Outdoor classrooms funded by APNEP dot the region, improving water quality while giving students a place to learn about the natural world. These are just a few of the many ways APNEP continues to benefit the sounds and the ecosystems that support them.

Highlights of NEP Achievements (2009-2012)

Much of the work for APNEP for the review period focused on strategic planning and program reform through ecosystem assessment and CCMP development. The period also saw increased coordination with program partners for CCMP development, in and education and outreach activities. Additionally, the program worked to gather data necessary for a programmatic change to a more ecosystem-based management approach. APNEP has strengthened its partnerships with North Carolina, Virginia, and federal environmental agencies (DOI, EPA, USFWS, USGS), as well as other organizations, to develop projects that support APNEP's mission and the CCMP. During this review period APNEP linked each project to the CCMP (or developing CCMP), increasing general awareness of APNEP and the plan.



Program Management Core Elements Response Worksheets



Core Element: Program Implementation and Reporting Sub-element: Financial Management

NOTE: The EPA expects that, in order to be a Fully Performing Program, all baseline expectations are met. Performance measures in the Good and Excellent levels are not required. They are benchmarks for what the Program can do to improve performance given the Program's priorities and organizational capacity.

EXCELLENT	PERFORMANCE MEASURES (FINANCIAL MANAGEMENT)	EVIDENCE/WORKPLAN CITATION and, if necessary, CLARIFYING COMMENTS
N/A	The Program researches, identifies, and tracks prospective donors and funding opportunities (applicable for non-profit organizations).	Not applicable
✓	Program staff, Management Conference members, and volunteers have received finance/fundraising training if appropriate.	APNEP staff, committee members, and other stakeholders investigate external funding and support opportunities for the program. The program secured funding or valuable project support from EPA's Climate Ready Estuaries and Climate Ready Water Utility programs, N.C. Coastal Recreation Fishing License grants, NCDENR's REACH Internships, and Duke University during review period.
✓	The majority of the Program's outreach materials contain funding information (e.g., thanking donors, acknowledging project funding, including a membership form, etc.).	APNEP credits EPA and other partners on final products and other materials where appropriate through the use of names and logos.
GOOD	PERFORMANCE MEASURES (FINANCIAL MANAGEMENT)	EVIDENCE/WORKPLAN CITATION and, if necessary, CLARIFYING COMMENTS
	The Program has a current finance plan (approved by the Management Conference within the past six years) that includes estimated costs, funding sources, goals, responsibilities, and milestones.	Following adoption of the 2012 CCMP, the Policy Board will be presented with a written financial strategy to support CCMP implementation.
✓	The Program integrates finance planning into its annual workplan (i.e., an assessment of funding obtained in the previous year, current funding, and funding to be pursued in the coming year).	Policy Board discusses the budget prior to approval of the annual workplan. The APNEP annual workplan includes funding for projects (both 320 and others). All project descriptions include an estimate of anticipated leverage/match funds. Opportunities for additional funding sources are often discussed at Policy Board meetings.
✓	The Program has a monthly revenue and expenditure tracking system.	The host agency (NC DENR) maintains revenue and expenditure tracking. Daily and monthly reports are available to Director. An NC DENR database (Xtind) records budget, encumbrances and expenditures.
✓	The Program has a case statement (a brief statement outlining accomplishments and results that could occur with additional resources).	APNEP maintains case statements / fact sheets that highlight recent accomplishments. In addition to a general case statement, several others have been developed for target audiences, as identified in APNEP's Communication Strategy. It does not request additional funds as APNEP is housed in a governmental agency (non-lobby). See examples of Case Statements in Attachment 7 and at www.apnep.org

FULLY PERFORMING	PERFORMANCE MEASURES: Baseline Expectations (FINANCIAL MANAGEMENT)	EVIDENCE/WORKPLAN CITATION and, if necessary, CLARIFYING COMMENTS
✓	The Program meets its non-federal match obligation and provides detail in the annual workplan submittal to the EPA about match funding sources and uses (e.g., workplan tasks).	APNEP meets its non-federal match obligation and provides detail in the annual workplan submittal to the EPA about match funding sources and uses (e.g., workplan tasks). See annual workplans at www.apnep.org
✓	The Program has a plan for diversifying and augmenting funding sources that is approved by the Management Conference and includes estimated costs, goals, responsibilities, and milestones.	NC DENR and the NC Clean Water Management Trust fund generally met match. Additionally, all annual workplans contain project descriptions that include an estimate of anticipated leverage/match funds. The annual workplan budget is approved by the Policy Board and includes estimated costs, goals, outputs and outcomes. In 2010 the Policy Board approved a matching funds requirement for projects via an RFP process. See annual workplans for leverage amounts at www.apnep.org .
✓	The Program has the partnerships and strategic alliances to identify and secure resources to implement its COMP.	APNEP has developed a strong network of partnerships. Membership on the Policy Board and advisory committees is diverse and supportive. Furthermore, through working groups and other means, APNEP staff maintains strong working relationships with personnel in state and federal agencies in North Carolina and Virginia that are provide support for APNEP's mission.
MINIMALLY PERFORMING	PERFORMANCE MEASURES (FINANCIAL MANAGEMENT)	EVIDENCE/WORKPLAN CITATION and, if necessary, CLARIFYING COMMENTS
	The Program does not meet <u>all</u> of the performance measures in the Fully Performing level.	

Core Element: Program Implementation and Reporting
 Sub-element: Program Planning and Administration

NOTE: The EPA expects that, in order to be a Fully Performing Program, all baseline expectations are met. Performance measures in the Good and Excellent levels are not required. They are benchmarks for what the Program can do to improve performance given the Program's priorities and organizational capacity.

EXCELLENT	PERFORMANCE MEASURES (PROGRAM PLANNING and ADMINISTRATION)	EVIDENCE/WORKPLAN CITATION and, if necessary, CLARIFYING COMMENTS
✓	The Program encourages professional development opportunities for staff members.	APNEP encourages and supports professional development opportunities for staff members, through enrollment or support courses and attendance at professional meetings. Staff members participate in various professional organizations. Staff members also maintain professional credentials and licenses for which continuing education is a requirement, including the American Institute of Certified Planners and the N.C. State Bar.
✓	The Program is a leader in the transfer of lessons learned in watershed management.	APNEP hosted a successful conference in November 2011 to discuss the status of the AP ecosystem. In 2012 it released a new CCMP and an ecosystem assessment featuring 24 indicators of estuarine health. Additionally, APNEP's STAC has produced several Issue Papers for resource managers and the Policy Board. Finally, staff members have offered presentations for symposiums, national webinars, and interagency working groups. See www.apnep.org for all documents and presentations from the 2011 conference.
GOOD	PERFORMANCE MEASURES (PROGRAM PLANNING and ADMINISTRATION)	EVIDENCE/WORKPLAN CITATION and, if necessary, CLARIFYING COMMENTS
✓	<p>The Program has a Management Conference that:</p> <ul style="list-style-type: none"> o has a written vision statement and/or mission and goals; o is fully engaged in developing and implementing the workplan; o assists in building active partnerships; o ensures broad stakeholder representation in priority setting and Program oversight; o provides a clear and transparent decision-making process that includes the public (e.g., operating procedures, agreements and/or bylaws for committees, etc.); and o has a mechanism for identifying existing and emerging issues. 	The APNEP Management Conference (Policy Board & Advisory Committees) has collectively performed all listed activities. The Governor's Executive Order #133 establishes the stakeholder structure and representation of within APNEP.
✓	The Program is seen as a leader in watershed management.	APNEP continues to be seen as a science-based, unbiased program and a facilitator of citizen involvement in watershed management in the region. The 2012 CCMP with its foundations in ecosystem-based management was well received by the public and APNEP's partners.

FULLY PERFORMING	PERFORMANCE MEASURES: Baseline Expectations (PROGRAM PLANNING and ADMINISTRATION)	EVIDENCE/WORKPLAN CITATION and, if necessary, CLARIFYING COMMENTS
✓	<p>The Program has a Management Conference that:</p> <ul style="list-style-type: none"> o is fully staffed; o provides Program direction; o oversees development and approves annual budget and workplan; o ensures sufficient Program resources; o sets a framework for bringing together diverse interests in a collaborative fashion (e.g., develop synergy among various organizations); o ensures communication between Program committees; o ensures Program actions are based on both stakeholder priorities and good science; o communicates about and supports the Program; and o has a process for reevaluating its priorities. 	<p>During the review period, Executive Order #122 (2007 – 2012) established the stakeholder structure and representation of APNEP. The APNEP management conference was composed of a Policy Board and three Advisory Committees (Science & Technical, Management, Citizens'). Each group had its own operating procedures and policies. The Policy Board is primarily responsible for direction to the program and includes members from each of the advisory committees. <i>Note:</i> It was replaced in Nov. 2012 by Executive Order #133 established a new stakeholder structure composed of a Policy Board and two Advisory Committees (Implementation, Science & Technical). Each group has its own operating procedures and policies.</p>
✓	<p>The Program staff coordinates and supports Management Conference responsibilities.</p>	<p>APNEP staff coordinates and supports all activities of the management conference.</p>
✓	<p>The Program has human resources principles in place (e.g., staff members have position descriptions and periodic performance reviews).</p>	<p>The North Carolina Dept. of Environment and Natural Resources (DENR) host APNEP. All human resource policies, principles, and practices are consistent with the department. The Human Resources Division administers these policies. All APNEP staff members have position descriptions and participate in annual performance reviews and evaluations.</p>
✓	<p>The Program office has autonomy with regard to the host entity (e.g., sets and follows its own priorities, exhibits visibility in the watershed, etc.).</p>	<p>As a State governmental program APNEP has limited autonomy with regard to the host entity, DENR. However, APNEP sets and follows its own priorities and budget as listed in the CCMP and the Management Conference guides annual workplans and actions.</p>
MINIMALLY PERFORMING	PERFORMANCE MEASURES (PROGRAM PLANNING and ADMINISTRATION)	EVIDENCE/WORKPLAN CITATION and, if necessary, CLARIFYING COMMENTS
	<p>The Program does not meet <u>all</u> of the performance measures in the <i>Fully Performing</i> level.</p>	

**Core Element: Program Implementation and Reporting
Sub-element: Outreach and Public Involvement**

NOTE: The EPA expects that, in order to be a Fully Performing Program, all baseline expectations are met. Performance measures in the Good and Excellent levels are not required. They are benchmarks for what the Program can do to improve performance given the Program's priorities and organizational capacity.

EXCELLENT	PERFORMANCE MEASURES (OUTREACH and PUBLIC INVOLVEMENT)	EVIDENCE/WORKPLAN CITATION and, if necessary, CLARIFYING COMMENTS
√	The Program supports citizen recommendations by implementing/supporting priority projects via the annual workplan.	The Policy Board is instrumental in determining budget allocations for specific project types during the annual workplan development process. Members of APNEP's advisory committee members also conduct a formal review of restoration and engagement proposals, recommending projects for funding.
√	The Program has a media/marketing campaign underway, such as a social marketing campaign, with a specific behavior change message related to a CCMP priority issue(s).	APNEP has led, funded, and participated in several social marketing campaigns. An estuary awareness campaign, conducted in partnership with NC DENR and the NC Coastal Reserve, provided a case study for NC DENR's other agencies to emulate. APNEP has also supported other social marketing campaigns by DENR, including campaigns designed to protect SAV, educate North Carolinians about living shorelines, and reduce nutrient runoff.
√	The Program has a brand/image and related graphics, tag lines, etc. that effectively promote and create widespread recognition of the Program.	APNEP has a brand/image and related logo that effectively promote and create widespread recognition of the partnership. APNEP's logo has been adjusted slightly to reflect our new name, but it maintains its unique and identifiable characteristics. A separate cypress logo was developed for specific use in promoting APNEP conferences and symposiums, including 2011's State of the Sounds. The logo is available at www.apnep.org
√	The Program has socio-economic indicators to monitor and report on the impact of outreach and public involvement activities.	APNEP has adopted initial ecosystem indicators with its 2012 ecosystem assessment and CCMP. A partnership priority is to develop the indicators further, including socio-economic indicators, and ecosystem targets necessary to track implementation of the CCMP. Additionally, a suite of website and social media metrics track online engagement.

		with year over year results trending positively. The 2012 assessment and the CCMP are available at www.apnep.org .
✓	Efforts exist to achieve and document behavior change.	APNEP conducts recurrent surveys to identify changes in public attitudes toward water quality and management in the Alameda-Parmico watershed. These were completed in 1991 and 2009. The 2012 CCMP and the accompanying communication strategy focus APNEP's communication efforts.
GOOD	PERFORMANCE MEASURES (OUTREACH and PUBLIC INVOLVEMENT)	EVIDENCE/WORKPLAN CITATION and, if necessary, CLARIFYING COMMENTS
✓	The Program has an active CAC or analogous structure that proposes workplan projects and is represented during Management Conference or executive committee meetings.	APNEP had an active CAC until it was replaced with the Implementation Committee in November 2012. Recruitment for the Implementation Committee is underway. Many of the previous CAC members have indicated a willingness to continue serving on the new committee. Representatives also participated on the Policy Board and the EBM transition team.
✓	The Program, through the communication plan, actively conducts outreach through such things as signage, radio/TV spots, special events, public presentations, topic-specific workshops, etc.	Through the CCMP and its communication plan (attachment 6), APNEP actively conducts engagement and outreach activities. APNEP's website (attachment 8) and social media channels provide significant reach in a large watershed, and the program conducts traditional press outreach as well. Signage is contractually required for APNEP projects With its new home in the world-class Nature Research Center, APNEP is exploring the possibility of routinely hosting estuarine-themed events at the museum.
✓	The Program supports efforts to develop and implement such things as environmental education curricula, teacher training, ecotourism programs, small grant programs, estuary celebrations, and/or citizen recognition programs.	For more than 10 years APNEP has supported a summer teacher institute on watershed and water quality issues. It maintains a growing, standards-based estuarine and watershed lesson plan database. It has recently provided multi-year funding for projects including Shad in the Classroom, observation buoy (BOB) workshops, and bookmark contests that provide opportunities to teach about the estuarine system.



✓	<p>The Program shares innovations and lessons learned at regional and national meetings (e.g., Estuarine Research Federation (ERF) biennial meeting, The Coastal Society (TCS) biennial meeting, Coastal Zone (CZ) biennial meeting, NEP national meeting, etc.).</p>	<p>APNEP staff made several presentations at the North American Association for Environmental Education and Coastal Estuarine Research Federation meetings in 2011 as well as at annual EPA/ National Estuary Program meetings</p> <p>APNEP reports annually programmatic results to the public and stakeholders through posting of its annual workplan and report on its website. Each current or forthcoming APNEP initiative is detailed on its website under the "initiatives" section. A program priority is to develop a database to record and track progress on implementation of the 2012 CCMP.</p>
✓	<p>The Program reports annually programmatic results to the public and stakeholders (via the Program's website, public database, hard copies, and/or other media) as specified in the NEP Funding Guidance and describes progress linked towards annual workplan goals and milestones.</p>	<p>APNEP reports annually programmatic results to the public and stakeholders through posting of its annual workplan and report on its website. Each current or forthcoming APNEP initiative is detailed on its website under the "initiatives" section. A program priority is to develop a database to record and track progress on implementation of the 2012 CCMP.</p>
<p>FULLY PERFORMING</p> <p>PERFORMANCE MEASURES: Baseline Expectations (OUTREACH and PUBLIC INVOLVEMENT)</p>		
✓	<p>Citizens are involved in Program decision-making and implementation (e.g., Citizens Advisory Committee (CAC) or analogous structure, system for public input, open meetings, public notice of meetings and events, and/or opportunities for reviewing and prioritizing outreach and public involvement projects, etc.).</p>	<p>APNEP management conference is composed of a Policy Board and two Advisory Committees (Implementation, Science & Technical). Each group has its own operating procedures and policies. The Policy Board is primarily responsible for direction to the program and has members from each of the advisory committee. Executive Order #133 establishes the stakeholder structure and representation of APNEP. Before APNEP's reorganization, the CAC actively reviewed proposals and provided substantial guidance for development of the CCMP. The Implementation Committee is expected to continue these functions while providing support for the implementation of APNEP projects and priorities.</p>
✓	<p>The Program has a multi-year, strategic communication plan that includes needs, target audience(s), objectives, project descriptions, deliverables, and deadlines.</p>	<p>APNEP has a multi-year, strategic communication plan aligned with the CCMP which is available at www.apnep.org.</p>
✓	<p>The Program has multi-media communication tools (e.g., newsletters, annual reports, fact sheets, website, listservs, and/or videos/CDs, etc.) that are updated as needed.</p>	<p>APNEP utilizes several multi-media communication tools. The website is updated daily, and social media channels including Facebook, Twitter, LinkedIn, and Flickr are also routinely updated. Substantive updates are provided through an open mailing list and through APNEP's Soundings blog (formerly its newsletter). A calendar of APNEP and high-profile partner events is maintained. An</p>



		RSS feed of news stories relevant to our mission is maintained and used by national organizations to follow regional developments.
√	The Program reports programmatic results to the public and stakeholders (via the Program's website, public database, hard copies, and/or other media) as specified in the NEP Funding Guidance.	APNEP reports project and programmatic results to the public and stakeholders via the website (www.apnep.org), social media, and hard copies provided to advisory committee members.
MINIMALLY PERFORMING		EVIDENCE/WORKPLAN CITATION and, if necessary, CLARIFYING COMMENTS
PERFORMANCE MEASURES (OUTREACH and PUBLIC INVOLVEMENT)		

Core Element: Ecosystem Status and Trends Sub-element: Research*

NOTE: The EPA expects that, in order to be a Fully Performing Program, all baseline expectations are met. Performance measures in the Good and Excellent levels are not required. They are benchmarks for what the Program can do to improve performance given the Program's priorities and organizational capacity.

*The Program has the option to report a "not applicable" for the Research sub-element. However, if not applicable, the Program must include justification that either (1) research is not a priority for the Management Conference, or (2) lack of resources does not allow the Program to conduct or support research efforts.

EXCELLENT	PERFORMANCE MEASURES (RESEARCH)	EVIDENCE/WORKPLAN CITATION and, if necessary, CLARIFYING COMMENTS
✓	Research is used to change policy.	STAC co-chairs authored two letters to the NC Division of Water Quality director on behalf of the STAC regarding the establishment of nutrient criteria and dissolved metals criteria respectively. The 2012 regional ecosystem assessment target readership is natural resource managers. APNEP is developing comments to identify research gaps for the development of numeric nutrient criteria as requested by the N.C. Division of Water Quality.
✓	The Program shares its science and technology research and findings at regional and national meetings (e.g., Estuarine Research Federation (ERF) biennial meeting, The Coastal Society (TCS) biennial meeting, Coastal Zone (CZ) biennial meeting, NEP national meeting, etc.).	APNEP actively shares issues, projects, innovations, and lessons learned at local, regional and national meetings (e.g., Coastal Estuarine Research Federation (CERF) – regional & national, NEP national meetings, etc.
✓	Scientific and technical reports produced by the NEP are peer reviewed.	The STAC Executive Board guided development of, and reviewed the 2012 Ecosystem Assessment with individual indicator assessments reviewed by individuals (often non-STAC) with relevant expertise. All STAC Technical Issue Papers were authored by STAC members and were reviewed by the entire STAC membership. They may be viewed at www.apnep.org .
✓	Program staff sits on state and national science boards and committees.	APNEP staff members participate in various state and national science boards and committees.
GOOD	PERFORMANCE MEASURES (RESEARCH)	EVIDENCE/WORKPLAN CITATION and, if necessary, CLARIFYING COMMENTS
✓	Research is conducted by appropriate partners.	APNEP continues to work with various partners on research needs for the region. During this PE review period APNEP posted an RFP for research projects that supported the 1994



		CCMP and were selected by management conference members. Additionally, APNEP funded and managed the acquisition of digital aerial imagery to allow SAV mapping. APNEP promoted the development of a SAV field protocols by supporting a research team whose partners include investigators from NOAA, East Carolina University, and North Carolina State University in a non-320 funded project.
✓	Research identifies significant, missing data that warrant additional monitoring or sampling.	APNEP's 2012 regional ecosystem assessment provides a discussion of significant, missing data that warrant additional monitoring or sampling. During preliminary development of an APNEP monitoring strategy, all authors used a common indicator monitoring proposal template that includes this information.
✓	The Program uses research results to develop management options and implement solutions.	The research by APNEP resource monitoring and assessment resource teams was used to support the creation of the 2012 CCMP. The STAC has published a series of technical issue papers whose purpose is to facilitate improvements in natural resource management and policy.
✓	Results from research are combined and translated into plain English for reporting to the public.	The STAC has published a series of technical issue papers whose purpose is to facilitate improvements in natural resource management and policy. They are written in a plain English style. Research progress updates are also reported on APNEP's website and social media.
✓	The Program or its partners have established a process to regularly reevaluate its research needs.	The 2012 CCMP directs the program to routinely reassess its research needs and topics. The STAC develops 2yr Action Plans.
FULLY PERFORMING		EVIDENCE/WORKPLAN CITATION and, if necessary, CLARIFYING COMMENTS
✓	The Program or its partners has a process to identify research needs.	The management conference and the public provided input into development of the 2012 CCMP's priority research needs. APNEP is encouraging partners' near-term research focus to be in the area of indicator monitoring and assessment. Research needs to improve monitoring will be identified by the partners' production of monitoring proposals for each indicator under consideration. Likewise, research needs to improve assessment were identified by the partners' contribution to the 2012 regional

		ecosystem assessment.
√	The research needs are consistent with CCMP goals and actions.	The 2012 CCMP highlights partnership priority research needs.
√	The Program's research needs are approved by the Management Conference.	The Policy Board and the advisory committees approve research needs. During the review period the Policy Board held a RFP for restoration and research projects to support CCMP implementation, and selected projects.
MINIMALLY PERFORMING	PERFORMANCE MEASURES (RESEARCH) The Program does not meet all of the performance measures in the Fully Performing level.	EVIDENCE/WORKPLAN CITATION and, if necessary, CLARIFYING COMMENTS



Core Element: Ecosystem Status and Trends
Sub-element: Assessment and Monitoring

NOTE: The EPA expects that, in order to be a Fully Performing Program, all baseline expectations are met. Performance measures in the Good and Excellent levels are not required. They are benchmarks for what the Program can do to improve performance given the Program's priorities and organizational capacity.

EXCELLENT	PERFORMANCE MEASURES (ASSESSMENT and MONITORING)	EVIDENCE/WORKPLAN CITATION and, if necessary, CLARIFYING COMMENTS
	The monitoring plan produces sufficient data to support a comprehensive and integrated analysis of environmental conditions.	The integrated monitoring plan currently under development will meet this criterion.
√	The Program or its partners seeks more efficient and cost-effective technologies for monitoring as appropriate.	The APNEP Monitoring & Assessment Integration Team includes a remote sensing specialist whose responsibility is to ensure that remote sensing will be considered for all APNEP proposed monitoring efforts.
√	The Program trains volunteer groups to improve the quality of data collection.	The APNEP Citizens Monitoring Network Coordinator trains volunteers in QA/QC prior to their joining the network.
GOOD	PERFORMANCE MEASURES (ASSESSMENT and MONITORING)	EVIDENCE/WORKPLAN CITATION and, if necessary, CLARIFYING COMMENTS
√	The Program uses monitoring data to assess and re-direct management actions and programs implemented under the CCMP as necessary.	The Program uses monitoring data to assess and re-direct management actions and programs necessary under the previous CCMP. Monitoring data was used in the development of the 2012 CCMP and the 2012 Ecosystem Assessment.
	The monitoring plan has a schedule for review/updates that is approved by the Management Conference.	The development of APNEP's new monitoring plan was deferred until the identification of ecosystem outcomes, metrics, and targets through the 2012 CCMP process, thus a monitoring plan was not completed this cycle.
√	The Program uses monitoring data to identify gaps in knowledge.	Monitoring data identified and compiled in the integrated monitoring planning exercise were used to assess status and trends for indicators featured in the 2012, with each indicator assessment in turn identifying gaps in knowledge.
√	Available data is analyzed for ecosystem status and trends.	Existing data sources identified in the integrated monitoring planning exercise were used to construct indicator status and trends in the 2012 regional ecosystem assessment.



√	The Program promotes the establishment of volunteer monitoring groups to supplement NEP monitoring efforts.	<p>During the review period APNEP actively supported the APNEP Citizens Monitoring Network (CMN). The CMN currently supports the monitoring of traditional water quality indicators.</p> <p>With the development of an integrated monitoring plan, the ability of volunteer monitoring to supplement the monitoring of other APNEP indicators will be considered. APNEP works with its partners to support other active citizen science/ monitoring projects.</p>
FULLY PERFORMING	PERFORMANCE MEASURES: Baseline Expectations (ASSESSMENT and MONITORING)	EVIDENCE/WORKPLAN CITATION and, if necessary, CLARIFYING COMMENTS
√	The Program has a Scientific and Technical Advisory Committee (STAC) or analogous structure to ensure that Program decision-making is tied to good science.	APNEP has an active STAC to ensure that program decision-making is tied to good and current science. Information the STAC and its activities are posted at www.apnep.org .
√	The Program has indicators in use that are recognized by the Management Conference.	APNEP has indicators in use that are recognized by the Management Conference and are highlighted in the 2012 regional ecosystem assessment.
MINIMALLY PERFORMING	PERFORMANCE MEASURES (ASSESSMENT and MONITORING)	EVIDENCE/WORKPLAN CITATION and, if necessary, CLARIFYING COMMENTS
	The Program does not meet <u>all</u> of the performance measures in the Fully Performing level.	

Core Element: Ecosystem Status and Trends Sub-element: Reporting*

NOTE: The EPA expects that, in order to be a Fully Performing Program, all baseline expectations are met. Performance measures in the Good and Excellent levels are not required. They are benchmarks for what the Program can do to improve performance given the Program's priorities and organizational capacity.

*Refers to Reporting of Ecosystem Status and Trends in the Program study area.

EXCELLENT	PERFORMANCE MEASURES (REPORTING)	EVIDENCE/WORKPLAN CITATION and, if necessary, CLARIFYING COMMENTS
✓	Reports discuss adaptive management strategies.	The 2012 CCMP is based on the principles of ecosystem-based management as an adaptive management strategy. The Management Conference is supportive and actively engaged in of this adaptive management approach.
✓	Reports recognize new and emerging issues to be considered in updates or revisions to the CCMP.	The APNEP STAC has developed several issue papers that recognize new and emerging issues. The 2012 CCMP addresses many issues not included in the 1994 CCMP, including climate change, invasive species, and emerging water quality contaminants (e.g., pharmaceuticals, personal care products). The CCMP is available at www.apnep.org
GOOD	PERFORMANCE MEASURES (REPORTING)	EVIDENCE/WORKPLAN CITATION and, if necessary, CLARIFYING COMMENTS
✓	The Program has an environmental progress report that communicates ecosystem status and trends to the public every three to five years (e.g., "State of the Bay" report, Environmental Report Card, significant newspaper insert, newsletters, websites, etc.).	APNEP produced a regional ecosystem assessment in 2012. The website often provides articles on ecosystem health issues. A copy of the assessment and other materials are available at www.apnep.org . Additionally, APNEP works with the host agency to provide annual environmental reports.
✓	Major reports: <ul style="list-style-type: none"> ○ discuss the Program's goals and priorities, indicators in use, ecosystem status and trends, and maps of study area; ○ discuss the health of the estuary (i.e., habitat, water quality, and living resources); and ○ include conceptual models that represent the best understanding of current ecosystem processes. 	The 2012 regional ecosystem assessment included these criteria. A basic conceptual model was developed for the drafting of the CCMP in 2009-10. APNEP is currently refining their conceptual ecosystem model to assist with CCMP implementation.



PERFORMANCE MEASURES: Baseline Expectations (REPORTING)		EVIDENCE/WORKPLAN CITATION and, if necessary, CLARIFYING COMMENTS
FULLY PERFORMIN G		
√	The Program has an environmental progress report that communicates ecosystem status and trends to the public on a periodic basis (e.g., "State of the Bay" report, Environmental Report Card, significant newspaper insert, newsletters, websites, etc.).	The 2012 regional ecosystem assessment is the first APNEP-sponsored assessment of our region since the early 1990s. A copy is available at www.apnep.org . An updated assessment will be the reference material for a 2013 "state of the region" report for the general public.
√	Major reports: <ul style="list-style-type: none"> ○ are linked to CCMP actions, goals, priorities, indicators, and monitoring systems; ○ feature a narrative description of the Program's study area in plain English explaining the relationship between human activities and impacts on resources; and ○ are approved by the Management Conference. 	All APNEP actions are linked to the CCMP and mission. See www.apnep.org for examples <ul style="list-style-type: none"> • Annual workplan links each action to CCMP actions • Reports and website feature a narrative description of the Program's study area • All final reporting will be under the guidance / approval of the Management Conference.
MINIMALLY PERFORMIN G		
	The Program does not meet <u>all</u> of the performance measures in the Fully Performing level.	
PERFORMANCE MEASURES (REPORTING)		EVIDENCE/WORKPLAN CITATION and, if necessary, CLARIFYING COMMENTS



Workplan Core Elements Narrative Summary



Overview

The Albemarle-Pamlico National Estuary Partnership (APNEP) receives funding for the implementation of the CCMP primarily from the United States Environmental Protection Agency (EPA) in the form of Section 320 grant under the Clean Water Act. As a result of the funding limitations, most of the projects and activities are supported by a wide variety of program partners; for some projects APNEP provides plays a primary role in directing the project with leadership and major funding, while for other projects APNEP plays a significant role but does not lead the project. In other projects APNEP plays supportive role as a partner. However, all APNEP activities are directed at supporting implementation of the CCMP or the Mission, regardless of the role the program plays.

APNEP has received a few additional funds from other sources for particular projects that support the APNEP mission and CCMP implementation. Funding sources include EPA Regional Wetland grants, US Fish and Wildlife grants, and NC Coastal Fishing License Fund grants. While important, these funds are not detailed in this report but are included in leverage and project descriptions within the annual workplans.

An example:

Regional Wetlands Grant: Development of a Comprehensive Assessment and Tracking Methodology for Wetland Functionality in the Chowan Estuary of Western Albemarle Sound
(non-section 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. 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:	Complete
Output:	A comprehensive assessment methodology for wetland functionality
Outcome:	Greater wetland restoration and conservation
Cost:	\$1,013,968 (non-320 federal funds)
Leverage:	\$1,013,968 non-federal
Funding Source:	EPA and Environmental Defense funds for Regional Wetland Grant
Core Element:	Ecosystem Status and Trends
	Sub-element: Assessment and Monitoring
	Sub-element: Research
	Sub-element: Reporting

Each year the Policy Board is involved in development and approval of the annual workplan as part of the 320 grant application for submittal to the EPA. These workplans specifically address EPA CWA Sec. 320 funding and required non-federal matching funds. APNEP provides its proposed non-federal matching funds with expenditures of state funds to improve water quality in the region or provide core program support.

For this Program Evaluation, APNEP is addressing the FY 2009 – 2012 annual workplans and items from the months of July, August and September of 2008. Since the full workplans for this period have been provided to EPA headquarters and Region IV, this Narrative Summary will only hit key workplan items during the evaluation period.



Please refer to the actual annual workplans for specific details about all of the projects. All approved annual workplans from 2001 to the present are available on the APNEP website at www.apnep.org

Each year the APNEP workplan contains a variety of projects that support the mission and implementation of the CCMP. All projects must be tied to the CCMP or the mission. Along with the CCMP objectives or actions to be addressed, the annual workplan project descriptions include intended outputs and outcomes for the activity, as well as anticipated leverage. During the transition to the new CCMP, several workplan projects were established as Request for Proposals to address core APNEP issues such as restoration and education, as opposed to projects addressing specific 1994 CCMP actions. Protection, restoration, and educational activities remain core to APNEP and are addressed in the 2012-22 CCMP, thus the projects and funding remained supportive of the CCMP and the Mission.

Highlights of Approved Annual Workplan Projects

The following descriptions provide a few examples/ highlights of workplan projects and activities within the APNEP workplans for the years covered within this program evaluation cycle. All items in the workplan reference at least one CCMP goal or action or support APNEP's overall mission. Within the workplan, all projects descriptions include intended outputs and outcomes for the project or activity. For this document, items also indicate Program Core and Sub-core elements.

Submerged Aquatic Vegetation (SAV) Mapping and Monitoring

Submerged aquatic vegetation constitutes one of the most important estuarine habitats in 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.

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

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



In beginning 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.

Note: This project has been a major effort for APNEP during this Evaluation period.

Status: Ongoing
Partners: NC Division of Marine Fisheries, US Fish and Wildlife Service, NC Wildlife Resources Commission, Elizabeth City State University, the NC Coastal Nonpoint Source Program, NC Division of Water Resources, NOAA, East Carolina University
Output: Report, GIS data, maps, educational opportunities
Outcome: Better environmental data, better resource management, permitting, and planning
Costs: Ongoing
Leverage: Ongoing
Core Element: Ecosystem Status and Trends
Sub-element: Assessment and Monitoring
Sub-element: Research
Sub-element: Reporting

- ❖ This action supports the 1994 CCMP's Vital Habitats Plan, Objective A: Management Action 2: *“Develop and maintain accurate maps and records of wetlands, fisheries habitats, federal and state endangered species and their habitats, natural areas, and natural communities.”*
- ❖ This work will help to implement 1994 CCMP's Vital Habitats Plan, Objective B: *“Promote the responsible stewardship, protection and conservation of valuable natural areas in the A/P Sounds region.”*
- ❖ This action supports the 1994 CCMP's Vital Habitats Plan, Objective C: *“Maintain, restore and enhance vital habitat functions to ensure the survival of wildlife and fisheries by protecting valuable natural areas and maintaining vital habitat.”*
- ❖ This action supports the 1994 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.”*
 - This action supports the 2012-22 CCMP' Action B3.3: *“Develop and implement a submerged aquatic vegetation (SAV) restoration strategy.”*
 - This action supports the 2012-22 CCMP' Action C2.2: *“Action B2.2: “Develop and implement a submerged aquatic vegetation (SAV) protection strategy.”*



Teacher Institutes

APNEP has led or supported a teacher-training institutes held during the summer since 2005. Each year approximately 20-30 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: On-going
Partners: NC Office of Environmental Education, Environmental Education Fund, UNC Institute for the Environment, NC Division of Water Quality (319 program), NC Wildlife Resources Commission, NC Coastal Federation, NC State Parks, NCNERR, NC Dept. of Public Instruction
Output: 20-30 teachers participated in environmental education training
Outcome: Increased environmental education in schools
Costs: Ongoing
Leverage: Ongoing
Core Element: Program Implementation and Reporting
Sub-element: Outreach and Public Involvement

CCMP:

- ❖ This project supports the 1994 CCMP's Stewardship Plan Goal: *"Promote responsible stewardship of the natural resources of the Albemarle-Pamlico sounds region."*
- ❖ This project supports the 1994 CCMP's Stewardship Plan: Objective B: Management Action 3: *"Enhance and heighten local public involvement in issues affecting the estuary."*
- ❖ This project supports the 1994 CCMP's Stewardship Plan Objective C: *"Ensure that students, particularly in grades K-5, are exposed to science and environmental education."*
- This action supports the 2012-22 CCMP's Action D2.1: *"Provide and promote opportunities for outdoor experiences that connect individuals with the Albemarle-Pamlico ecosystem."*
- This action supports the 2012-22 CCMP's Action D2.2: *"Provide environmental education training opportunities for educators in the region."*

Climate Change Workshop

APNEP partnered with NC DENR, Federal Highways Administration, EPA, NC DOT and other members of the North Carolina Inter-Agency Leadership Team to produce a two-day workshop of planning and adapting to climate change in North Carolina. More detail is available at <http://www.climatechange.nc.gov/>

Status: Complete, March 2-3, 2010
Output: Workshop
Outcome: Informed Planning Community, Resilient communities
320 Cost: \$2,000



Leverage: ~\$20,000
Core Element: Program Implementation and Reporting
Sub-element: Outreach and Public Involvement

- ❖ This project supports the 1994 CCMP's Stewardship Plan Goal: Objective A:
"Promote local and regional planning that protects the environment and allows for economic growth."

2010 CAC Demonstration Projects (RFP)

Proposals were 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 was made by the Citizen Advisory Committee.

Status: All Projects Complete
Output: Community Demonstration Projects.
Outcome: On-the-ground projects that demonstrate environmental benefits/improvements
Costs: \$124,000
Leverage: \$124,000
Core Element: Ecosystem Status and Trends
Sub-element: Assessment and Monitoring
Sub-element: Reporting
Core Element: Program Implementation and Reporting
Sub-element: Outreach and Public Involvement

- ❖ The demonstration projects support the 1994 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."

The following list includes the grant recipients selected for projects:

- The Mid-East Resource Conservation & Development Council was awarded \$19,800 for J.H. Rose High School's In-Stream Constructed Wetlands Schoolyard Demonstration Project. The grant will be used to plant a 0.75-acre constructed wetland, restore 450 linear feet of stream and provide educational programming at J.H. Rose High School in Greenville.
- N.C. Sea Grant was awarded \$20,000 for "Landscaping with Nature in Currituck County," a project that will create an environmental education demonstration site with natural landscape features and native plants at the Currituck County Cooperative Extension Building.
- The N.C. Division of Marine Fisheries was awarded \$8,087 to reduce stormwater flowing into Bogue Sound at the division's headquarters in Morehead City. This is part of a comprehensive stormwater project and will involve re-vegetating part of the Bogue Sound shoreline adjacent to the agency's headquarters and educating the community about stormwater pollution.



- The N.C. Coastal Reserve in Carteret County was awarded \$14,929 for the Carrot Island Habitat Improvement Demonstration Project. The project will improve a 22,000-square-foot dredge spoil habitat through native plantings and fencing and provide public outreach about habitat improvement.
- Dinwiddie Junior High School in Dinwiddie, Va., was awarded \$15,206 for its Outdoor Classroom and Nature Trail. The grant will be used to construct an outdoor classroom area with seating, an educational kiosk and a nature trail with signs identifying native plant species.
- Greensville County, Va. was awarded \$20,000 for phase I of the Uriah Branch Nature Trail. The project will consist of trail development next to the Greensville County Government Complex and construction of an observation deck overlooking the floodplain and wetlands along Uriah Branch stream.

Shad in the Schools

Shad in the Schools is a collaborative project that provides students with an understanding of the science process, inspiration for careers in science, and a desire to protect our waterways through hands-on experience raising American Shad from egg to releasable fry. This is a collaboration led by the US Fish and Wildlife Service, the North Carolina Museum of Natural Sciences and will include Partnership for the Sounds, NC State University, the NC Wildlife Resources Commission, NC Division of Water Quality and the NC Chapter of American Fisheries, the students and teachers. The objective of this project is to build an understanding of the life history of shad and an appreciation for our natural world. The project has three primary components: 1. Classroom project: Equipping classrooms to raise the shad, providing the shad eggs, assisting with the release. 2. Teacher training: one day training on the process of raising shad, overnight canoe workshop on the Roanoke to learn about the ecosystem and 3. Multimedia presentations in both short online segments and a longer High Definition movie to be shown at the Museum and shared throughout the state.

Status: Ongoing

Output: Increased community involvement in water quality and habitat protection

Outcome: Educational program, restoration activities

Cost: \$60,000

Leverage: \$60,000

Core Element: Program Implementation and Reporting

Sub-element: Outreach and Public Involvement

❖ This project supports the 1994 CCMP's Water Quality Plan Goal: *"Restore, maintain or enhance water quality in the Albemarle-Pamlico region so that it is fit for fish, wildlife and recreation,"* and

❖ This project supports the 1994 CCMP's Stewardship Plan Goal: *"Promote Responsible Stewardship of the natural resources of the Albemarle-Pamlico sounds region."*



Habitat Protection and Restoration

Assessment, restoration, and protection of habitats in the Albemarle-Pamlico region are an important CCMP components, and vital to the mission of APNEP, and it's many partners. It is of utmost importance to understand that the level of restoration and protection actions reported could not occur without these partners. Their efforts and collaborations are essential to the success of APNEP and its ability to pursue such projects.

The following charts (A1, A2, A3, and A4) display the number acres of habitat protection and restoration by habitat type category for each of the program review year, as reported to EPA within the NEPORT database under the Government Performance and Results Act (GPRA). Chart A5 displays the cumulative total of acres per habitat type category for 2009-2012. A total of \$85,195,588 was used to protect or restore 92,285 acres.

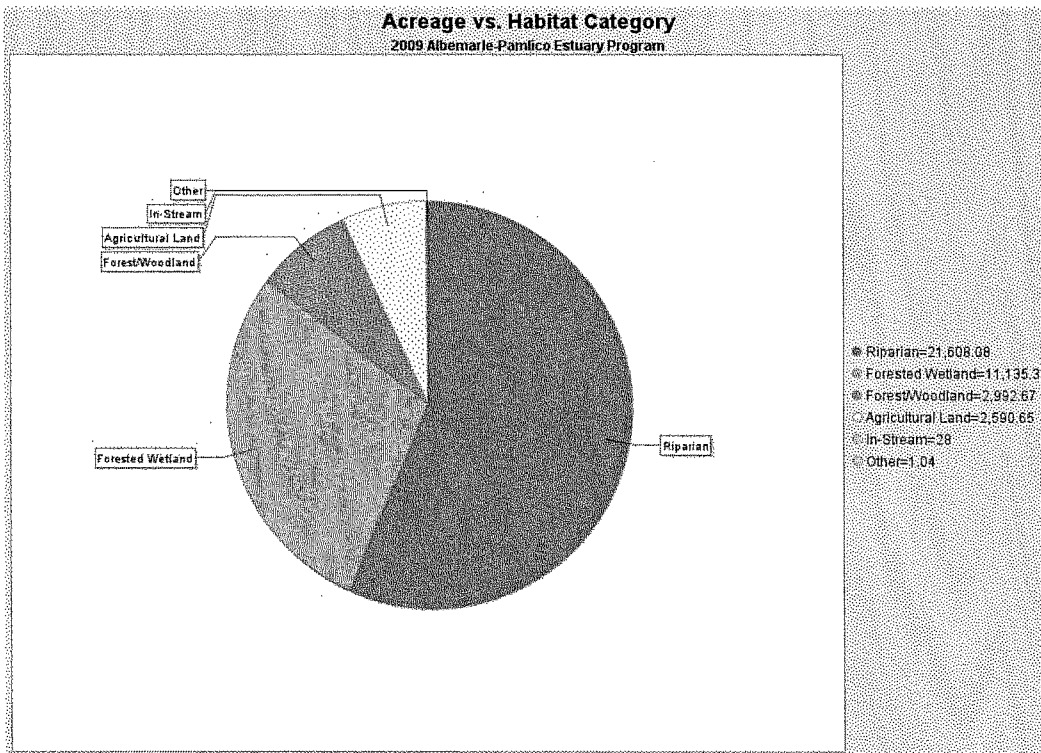


Chart A1: Acres of habitat restored or protected in the APNEP region, 2009.
Data Source: NEPORT



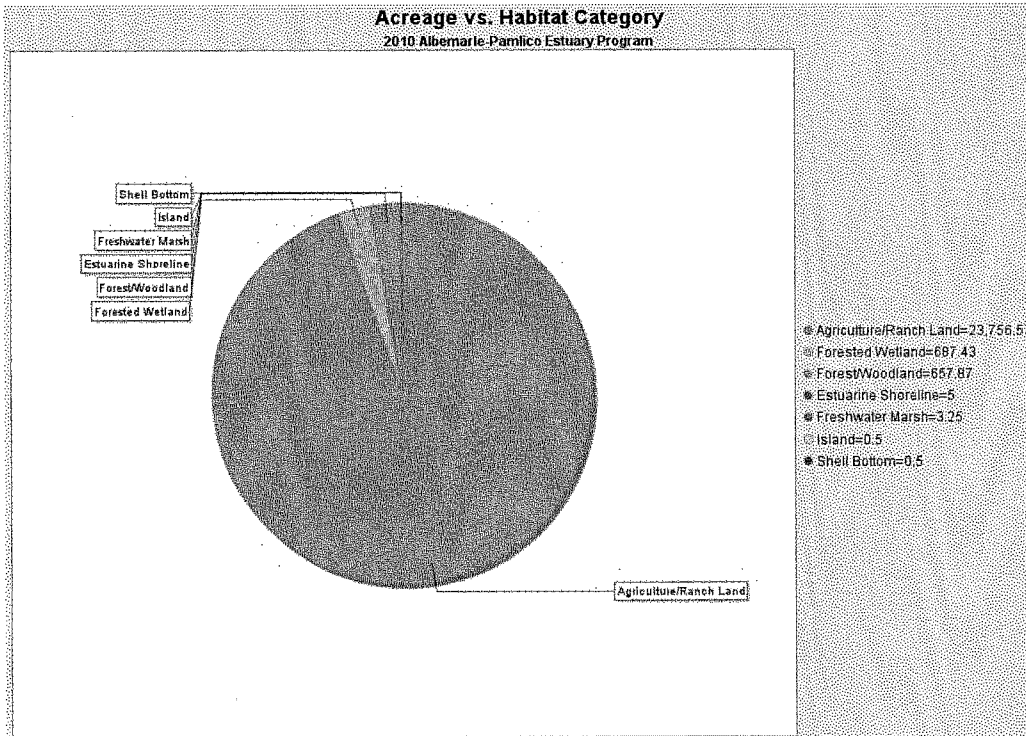


Chart A2: Acres of habitat restored or protected in the APNEP region, 2010.
Data Source: NEPORT

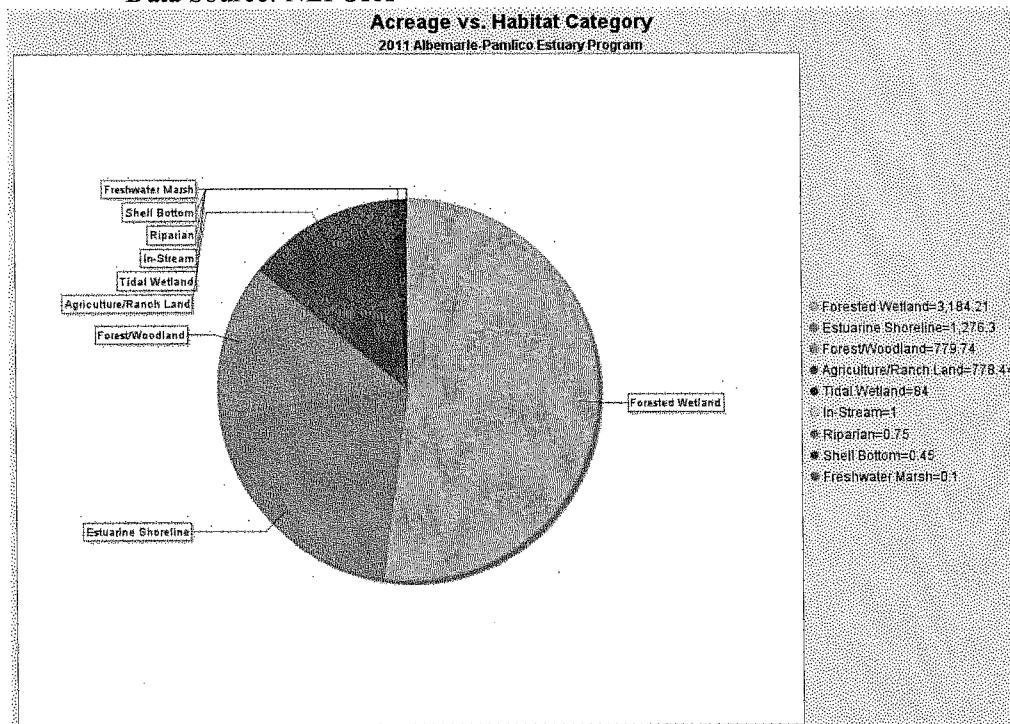


Chart A3: Acres of habitat restored or protected in the APNEP region, 2011.
Data Source: NEPORT

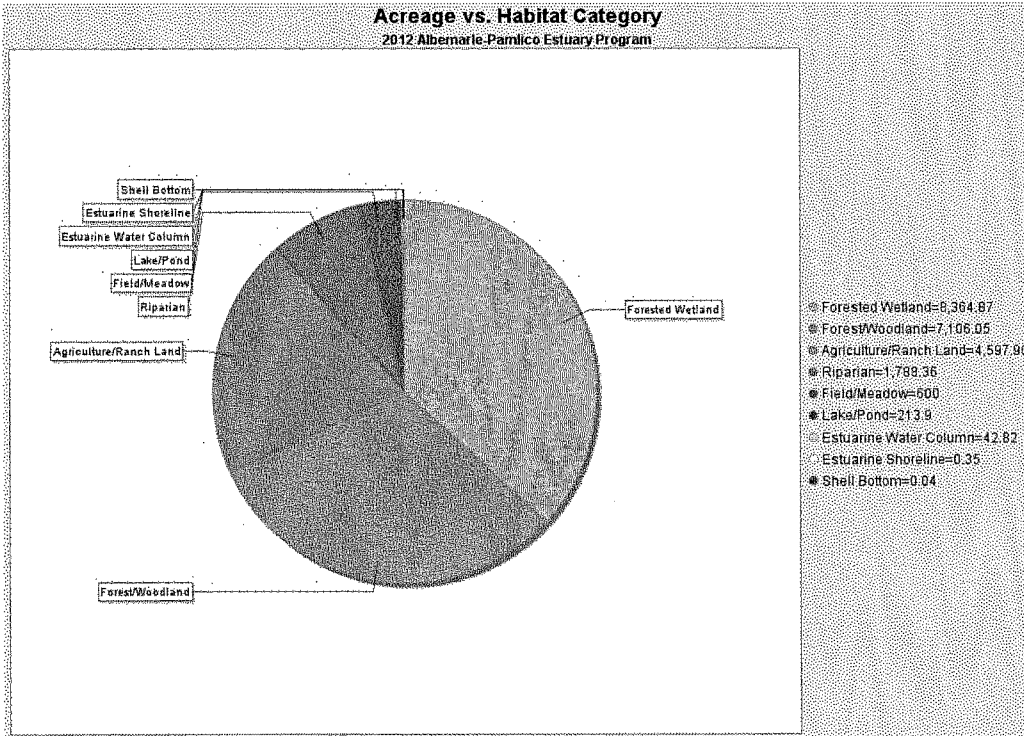


Chart A4: Acres of habitat restored or protected in the APNEP region, 2012.
Data Source: NEPORT

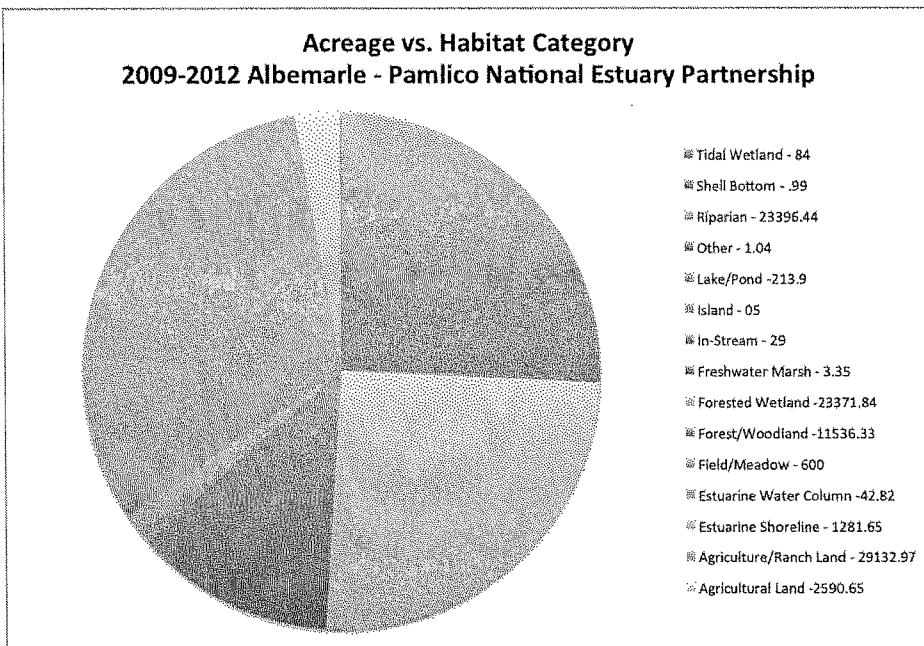


Chart A5: Acres of habitat restored or protected in the APNEP region, 2009-2012.
Data Source: NEPORT



Clean Water Act Implementation Support

Annual workplans submitted to EPA specifically address EPA Clean Water Act Sec. 320 funding and required matching funds. Additionally, APNEP works with many partners to address water quality issues in the region.

APNEP's host agency (Department of Environment and Natural Resources (DENR)) also provided non-federal match with staff (in-kind) for the protection and restoration of water quality through positions and projects throughout the department. A primary partner in this effort is the NC Division of Water Quality. The North Carolina Division of Water Quality (DWQ) is the DENR agency responsible for statewide regulatory programs in surface water and aquifer protection. During the Program Evaluation cycle personnel were responsible for water quality issues, pollution control permits, permit compliance, evaluation of environmental quality/monitoring, and enforcement actions for violations of environmental regulations. Additional information on the division and its role in protecting and enhancing North Carolina's surface waters and groundwater resources can be found on their website at <http://portal.ncdenr.org/web/wq/>

Additionally, the Water Quality Program in the Virginia Department of Environmental Quality is primarily responsible for administering the Clean Water Act and enforcement of state laws to improve the quality of Virginia's waters. Additional information on the program and its role can be found on their website at <http://www.deq.state.va.us/water>. Additionally, the Department of Conservation and Recreation manages the Virginia stormwater program.

Some recent water quality improvements in the Albemarle-Pamlico region are highlighted on the EPA's Section 319 Nonpoint Source Success Stories Web site, a site featuring stories where efforts have led to documented water quality improvements. The success stories and information on environmental improvements for the Neuse River are available at http://www.epa.gov/nps/success/state/nc_neu.htm, while information on the Tar-Pamlico can be found at http://www.epa.gov/nps/success/state/nc_tar.htm.

Challenges and Factors Facing APNEP

APNEP continues to have many challenges. While some of the challenges identified in the 2003-4 internal program assessment and strategic planning exercises remain, many have been addressed by program restructuring, DENR support, partnership growth and the development of the 2012-2022 CCMP. The following is a list of remaining internal challenges for the program based on the internal review.

Communication:

- All communication should be open and designed to keep the most people informed. Communication should include active communication, such as email, list serves, mailings, press releases, etc., as well as passive communication such as the website. New methods of communication and public involvement should be explored (e.g. social networking media).



- Develop a database of APNEP participants with differing levels of participation, such as board and committee members, cooperating agencies, interested participants, associated or interested organizations, and the media. This will aid in implementing communication and outreach.
- Develop an APNEP glossary/dictionary that provides definitions and uses of common terminology. For instance, the words "workplans" and "annual reports" are used interchangeably. Broad understanding, consistency, and shared meaning of terms will assist with overall communication efforts.
- Develop a Communication and Outreach Sub-Committee for the Management Conference.
- Provide a graphical version of APNEP's historical timeline on the website. This will allow newcomers to understand the significance of historical events to APNEP as well as recognize the numerous accomplishments of its long-term partners. Consider other ways to recognize the efforts that have developed and sustained this partnership.
- Communication with non-English speakers continues to present challenges

Comprehensive Conservation and Management Plan Implementation Tracking:

- Clearly and specifically communicate how the CCMP is being tracked.
- Develop an new CCMP tracking mechanism will help determine if the objectives and goals have been met and/or need to be evaluated.

Internal Program Evaluation:

- Regular program evaluation should be conducted to determine if the program structure and processes are allowing APNEP to meet its mission. Include both quantitative and qualitative data in regular program evaluation and in annual reports.
- Develop a reporting format for all partners and projects. A format will allow for objective comparison of reports and aid organizations in submitting reports.

Engagement:

- Continue to evaluate the current Executive Order or develop a new authorization mechanism (such as a Memorandum of Agreement, or a Proclamation).
- Continue to safeguard flexibility in representation in the Management Conference.
- Work with the Management Conference to identify APNEP stakeholders and how to reach them.
- Clearly communicate how feedback will be used.
- Continue to pursue increased representation and participation from Virginia stakeholders in the Management Conference.

APNEP as Facilitator:

- APNEP should strive to play a strong role as convener and facilitator among cooperating partners, potential partners, and the public.
- Guide and integrate efforts of cooperating partners to meet APNEP's mission.
- Make every effort to involve the public in APNEP's mission and create allies.
- Keep abreast of national NEP issues and keep all members informed of these issues.



Additionally, APNEP has several challenges that continue to face the program:

- **Large Geographic Program Boundary**

APNEP's extensive watershed (30,000 square miles) presents numerous challenges. Limited resources constrain the program's ability to impact the watershed. This underlines the importance of strategic stakeholder alliances and effective fund-raising efforts.

As the nation's second largest estuary, the APNEP region includes more than one-third of North Carolina's 100 counties (reaching into 36 counties) and 16 counties and independent cities in southeastern Virginia. The program area also crosses EPA Regions, USFWS regions, and ACOE districts. Additionally, numerous media outlets, school districts, and local issues add to the challenge. The complexity of addressing environmental issues at this scale remains a significant challenge for APNEP.

Because of the region's large geographic area and the vast distances that often need to be traversed, extensive citizen participation and effective environmental change remain difficult. APNEP's pursuit of an ecosystem-based management paradigm is an effort to increase meaningful active citizen participation that will benefit the program and enhance CCMP implementation, leading to adaptive management for positive and trackable environmental change.

- **Non-point Source Pollution**

Nonpoint source pollution continues to be a significant challenge within the watershed. In particular, atmospheric deposition and suburban and agricultural storm water run-off are sources of greatest concern. The primary agricultural non-point source pollutant is sediment that is eroded from tilled fields, drainage ditches, irrigation channels and areas where livestock congregate. Sediment damages streams by burying aquatic organisms, clogging fish gills, reducing water clarity, and blocking light to aquatic plants. The second biggest pollutant of waters is nutrients. Excessive use of fertilizers causes nutrients to drain into streams and other surface waters. High concentrations of nutrients in water lead to overgrowth of algae, increased cloudiness, lower oxygen, and fish kills. Agricultural operations may contribute pesticides from crop production areas. The waste from animal operations and grazing lands can contribute nutrients, bacteria, and pathogens to streams. Nutrient runoff from agricultural land is often addressed through cost-shared projects, but within the Neuse and Tar-Pamlico River basins this source is also regulated by rule. Other non-point sources of concern include; construction and land conversion, forestry, hydro-modification, marinas, onsite wastewater systems, roadways, and loss of wetlands and riparian areas.



- **Limited Funding**

Currently APNEP primarily operates only on EPA Section 320 funds. The recent state budgets do not provide direct funding for the Program. Given the recent and current status of the current state budget, the outlook for additional state financial support appears to be limited for the short term. Limitations in funds to address regional issues can be problematic. Therefore, APNEP recognizes that it cannot accomplish full implementation or advancement of the CCMP without partnerships with federal, state, local agencies and citizen participation. APNEP will be seeking additional funds for future actions. The staff plans, with the support of DENR, to work with the new Management Conference to develop a funding strategy to support CCMP implementation.

- **Other Significant Issues and Emerging Environmental Issues**

Many significant emerging environmental issues presented in the 2008 Program Evaluation materials, such as climate change, sea level rise, invasive species and pharmaceuticals and personal care products (PPCPs) as environmental pollutants were addressed in the development of the new 2012-2022 CCMP.

- **Addressing the challenges**

APNEP is currently working to address many of these challenges. Updated CCMP and actions to address these challenges should allow for greater citizen participation, leveraging of funds, and the development of non-320 funding sources for CCMP implementation.

2009 EPA Implementation Review Challenges and Responses

The EPA Coastal Management Branch conducted a Program Evaluation of APNEP with staff, the STAC Executive Committee, Policy Board, and various partners between March and June 2009.

A December 15, 2009 letter stated that the EPA found that APNEP continues to make “significant progress” in implementing its CCMP and determined that APNEP “passed” the 2009 Program Evaluation and will be eligible for FY 2010, 2011 and 2012 funding authorized under §320 of the Clean Water Act. A copy of the 2009 EPA program evaluation letter is attached to this Work Plan (Attachment 2).

Overall, the Program Evaluation (PE) Team commended APNEP on many of its accomplishments and progress made in areas highlighted in the 2005 Implementation Review. In particular the team applauded APNEP for its commitment to using robust science and technical data to set broad policy goals and to inform project selection as well as the actions of the STAC.

The PE Team commended APNEP for its leadership of local efforts to build the capacity of educators to teach environmental science to students living in economically- and socially-distressed communities. The PE Team was impressed by the partners’ systematic tracking and analysis of post-workshop/ training survey results and by the results



themselves. Those results showed that teachers thought that the workshops and training sessions had enhanced their ability to effectively teach environmental science to a broad cross-section of students. The PE Team had an opportunity to see on-the-ground evidence of workshop impacts when it visited a high-functioning wetland designed and constructed by students whose teacher had attended one of the environmental education workshops.

The PE Team was impressed by APNEP's leadership of multi-faceted outreach and public involvement efforts such as the 2008 public listening sessions that focused on sea level rise impacts on the Albemarle-Pamlico Sound study area. Those listening sessions and follow-up discussions with local civic and business leaders and State policymakers exemplify a well-planned, strategic approach to developing effective climate change adaptation policies and action plans and engaging a broad cross-section of the public.

The PE Team commended APNEP and its partners for their commitment to engaging communities that, while especially vulnerable to sea level rise because of their location and/or lack of economic resources, are not typically provided opportunities for public involvement on environmental issues. Since fewer participants than expected actually attended those listening sessions, partner co-sponsors noted in their final report that in the future, they would use different strategies to more successfully engage members of those communities.

The Team also noted that given the size of APNEP's study area, field staff is critical to effective outreach and priority action implementation in outlying communities. Field staff's daily interaction with community stakeholders enables staff to tap into the pulse of communities, effectively serve as liaisons to the Program offices in Raleigh, and raise awareness among communities about APNEP's mission and priorities. The Team believes that assigning staff to serve in field positions has been an important step toward promoting APNEP's mission and enhancing CCMP implementation throughout the study area.

The EPA review also identified the three challenges as part of the review. APNEP worked with NC DENR, the Policy Board, and EPA Region IV to address these challenges. In response the NC DENR Secretary responded to the PE letter on May 19, 2010 (Attachment 3). Additionally, the annual workplan for each year following the review contained an update of actions to address the challenges.

The following presents the three challenges and the current status/ response:

I. Maintaining Visibility and Independence

EPA was concerned that APNEP's move back to a Division jeopardized the program's status, visibility, and independence, thereby slowing the momentum attained over the past several years and compromising the Program's leadership of efforts to improve Albemarle-Pamlico Sound water quality and living resource conditions. Since APNEP has demonstrated that it operates most effectively when it has visibility and autonomy, EPA recommends that:



- DENR reverse its decision to move APNEP back into a Division.
- DENR re-locate the Program to an organizational home where the Program is highly visible and regarded as a model of ecosystem-based management.

Response: On July 1, 2010 APNEP was relocated within a new Office of Conservation, Planning, and Community Affairs (OCPCA). The Office reports to the Assistant Secretary for Natural Resources. This office integrates programs that provide the science, incentives, and guidance that inform, guide and support conservation of the state's significant natural areas, coastal habitats and working lands. More information on the office may be found at <http://portal.ncdenr.org/web/cpca/>

Placement in this new office strengthens APNEP's role within NCDENR, as opposed to being located within a division, and should enable the program to better accomplish its mission. The Program is more visible and regarded as a model of ecosystem-based management.

II. Demonstrate Environmental Progress

EPA commends the Program for its support of water quality and habitat restoration and protection projects and for its indicator development and monitoring plan design efforts. EPA acknowledges that indicator development and monitoring plan design typically take several years to complete. However, given the increased public sector emphasis on accountability and government stakeholder requests to demonstrate program results, EPA is concerned that the pace of APNEP efforts to set baselines, assess conditions throughout the study area, and measure environmental change is slower than necessary. To promote implementation of monitoring and assessment priority actions, EPA requests that over the next six months:

- DENR provide additional resources to support completion of the STAC monitoring plan.
- The STAC complete development of its monitoring plan and DENR identify resources for monitoring program implementation.
- The State begins conducting a regional ecosystem assessment to help guide the allocation of monitoring resources to waters and other ecosystem components of highest priority.

Also, EPA believes it is important that APNEP, like all NEPs, consider developing a strategy stating that: (1) achievement of on-the-ground environmental results is a Program priority, and (2) the Program will develop a tool for measuring the environmental progress resulting from implementation of Program-supported projects. To promote those efforts, EPA recommends that over the next six months, APNEP should:

- Draft a strategy as described above that would identify funding and staff resources dedicated to strategy implementation.



- Include in its next work plan a description of its protocol for measuring the short-term environmental outcomes of projects that it funds and/or in which it plays a lead support role.
- Begin setting and documenting project-specific baselines as a first step toward measuring environmental results.

Response: As the EPA acknowledged, indicator development and monitoring plan design typically take several years to complete, and APNEP is working to accomplish this important task with input from its many partners. During FY2012, APNEP with support from the STAC completed an ecosystem assessment that evaluated present conditions and provided a measure of baseline conditions throughout the study area for a set of indicators. The assessment also provided update the indicators presented in the 1991 Albemarle-Pamlico Estuarine Study's Status & Trends Assessment (<http://test.apnep.org/techpubs/9101.pdf>).

The APNEP Policy Board adopted a new Comprehensive Conservation and Management Plan (CCMP) at its March 14, 2012 meeting. As a result the Program will use an Ecosystem Based Management (EBM) paradigm established in the new CCMP.

Advantages of the new EBM approach are numerous:

- *This is a significant action by the Program to further the connection between policy development and environmental improvements.*
- *Provides a strategy to achieve on-the-ground environmental results and develop a tool for measuring the environmental progress resulting from implementation of program-supported projects as recommend in the PE letter.*

Additionally, APNEP staff worked with partners to integrate their environmental priorities into the new CCMP using the EBM approach. Better integration between APNEP, partners, including DENR divisions will result in an increased level of support that will benefit APNEP and increase its potential to produce measurable environmental results.

APNEP continues to strive for a strong science-based program for the protection and restoration of our estuary of national significance. With the CCMP in place, staff members are working on a monitoring strategy that uses an EBM, paradigm. The program's EBM approach will provide a strategy to achieve on-the-ground environmental results and develop tools for measuring the environmental progress resulting from implementation of program-supported activities. The EBM approach is well-suited for this purpose and will allow APNEP to adapt its approach over time to address emerging issues.



III. Expedite Funds Draw Down

As of September 30, 2009 APNEP still had an unexpended balance of \$769,805 in FY 2007-2008 and FY 2008-2009 appropriated funds. The PE Team became concerned about APNEP's slow draw down of those funds.

EPA, the Director of APNEP, and a senior DENR official have all agreed that beginning in FY 2010, APNEP and DENR will take steps to ensure that §320 funds are drawn down in an expedited manner:

- The Region IV APNEP Coordinator will regularly monitor APNEP's draw down of old unexpended funds. In late March 2010, the Region will assess whether or not the unexpended balance has been reduced significantly. If not, Region IV will discuss with CMB management the possibility of withholding APNEP's FY 2010 §320 grant award.
- Region IV will no longer approve APNEP project and budget periods exceeding seven years. Beginning in FY 2010, APNEP project and budget periods will not exceed five years.
- Region IV and CMB will take steps to change APNEP's grant cycle to a July 1 - June 30 cycle.
- In FY 2010, the APNEP Director and DENR management will put in place a process that expedites the draw-down of old APNEP funds and ensures the timely draw down of all future §320 awards.

Response: APNEP has taken significant action to expedite the draw-down of the unexpended balance of the FY2007-2008 and FY2008-2009 remaining appropriated CWA §320 grant funds. All projects and expenditures were completed by September 30, 2011.

Additionally, APNEP and DENR have taken the following steps to ensure that §320 funds are drawn down in an expedited manner in the future:

- *The APNEP Director, the Director of the Office of Conservation Planning and Community Affairs, and the DENR Budget Analyst meet monthly to review the budget and implement steps to ensure efficient budgeting and the timely draw-down of all §320 awards.*
- *The APNEP Director requests monthly account statements from the DENR Controller to assess the status of the draw down of federal funds.*
- *The APNEP Director and the Director of the Office of Conservation Planning and Community Affairs meet monthly to address progress on all aspects of the program, including fiscal issues, and ensure progress on challenges expressed by the PE Team.*
- *APNEP is now taking steps to ensure that funds are encumbered prior the final grant year to ensure a timely drawn-down of all federal funds by the end of the 5-year cooperative agreement cycle.*



Additionally, the Program Evaluation letter suggested APNEP develop a protocol for measuring the short-term environmental outcomes of projects that it funds and/or in which it plays a lead support role.

Response: For the past several years APNEP annual workplans have included expected outputs and outcomes, with the implementation of this 2012 work plan APNEP is working to incorporate measures of environmental benefit where possible and adjust its Request for Proposals to require that applicants provide a measure of environmental change for their project. Additionally as APNEP transitions to an EBM framework, staff will develop criteria for an environmental outcomes protocol within the tracking of CCMP actions.



BUDGET SUMMARY



Overview

During this evaluation period, APNEP received a total of \$2,590,550 in USEPA section 320 funds as post-CCMP funding for FY 2009 to FY 2012 and \$103,756 from FY 2008 for the months of July, August, and September, for a total of \$2,694,306 (Table C1).

Chart C1 provides a graphical representation of the total APNEP budget, including non-federal match funds for FY 2009 to FY 2012 and the summer of 2008. More detailed expenditures (line items) can be generated from monthly reports from NC DENR's *Xtnd* budget database and NCAS database. Attachment #4 contains an example of an *Xtnd* monthly budget report and Attachment #5 contains an example of an *Xtnd* year-end budget report.

APNEP has been involved in numerous CCMP implementation projects over this evaluation period. During the evaluation period, most actions are funded under CE-95451210 and CE-97464802. Further detail on the specific grant funding for project can be found in the annual workplans. Additionally, annual workplans for each year contain a table of all active and completed contracts to local entities. A summary of budget and spending on specific projects in the evaluation period is shown in Table C2.

Object Class Categories (320 funds)	7/2008- 9/2008	FY 2009	FY 2010	FY 2011	FY2012	Total
Personnel	\$50,670	\$ 220,091	\$ 206,894	\$ 210,777	\$221,316	\$909,748
Fringe	\$11,346	\$ 49,124	\$ 49,042	\$58,119	\$59,599	\$227,230
Travel	\$2,500	\$ 10,000	\$ 11,000	\$10,000	\$10,000	\$43,500
Equipment			\$ 2,000	\$ 2,000	\$ 2,000	\$6,000
Supplies	\$7,44	\$ 7,060	\$ 3,700	\$ 3,300	\$ 3,400	\$17,460
Contractual (projects)	\$29,636	\$ 268,000	\$ 290,100	\$ 470,000	\$269,000	\$1,326,736
Other (Board support, outreach & other)	\$7,881	\$ 22,069	\$26,795	\$ 7,443	\$14,009	\$78,197
Indirect	1,723	\$ 15,406	\$10,469	\$38,361	\$19,476	\$85,435
TOTAL	\$103,756	\$ 591,750	\$ 600,000	\$ 800,000	\$ 598,800	\$ 2,694,306

Table C1. APNEP budget of section 320 EPA post-CCMP funding during this evaluation period.

Data source: Standard Form 424A for fiscal years 2009-2012.

Note: Detailed expenditures can be generated from NC DENR *Xtnd* budget databases. Example: Attachments #4 and #5.



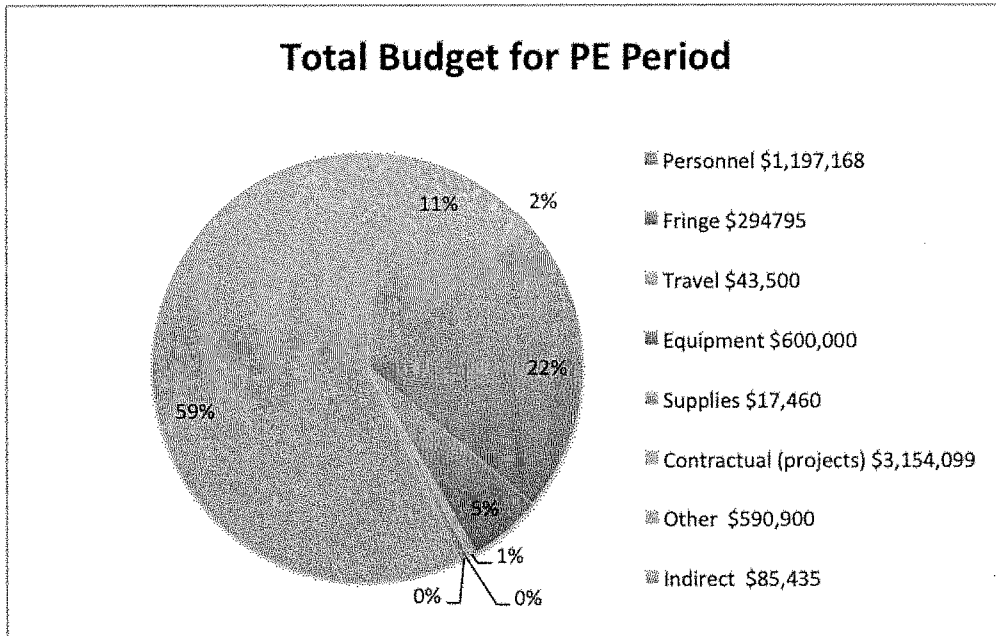


Chart C1. Total APNEP budget including non-federal funds for FYs 2009-2012, and summer 2008.
 Data source: APNEP annual workplans / 424a Forms for FYs 2009-2012, and summer 2008.

Leverage

APNEP reported on leveraged funds to US EPA through the *NEPORT* online reporting system. During this evaluation period for FY2009-2012, 9% of the leveraged funds were primary, with 59% significant, and 32% in a supporting role. Overall, APNEP and its partners leveraged more than 67 times the EPA post-CCMP funding from October 2009-September 2012, with leveraged funds contributing \$96,545,000 toward CCMP implementation (Table C3). The *NEPORT* database contains data and charts with additional leverage information.

GRANTS TO LOCAL ENTITIES (Active October 1, 2007 to June 1, 2008 to July 2012)

Project	Contract #	Budgeted Amount	Expenditure	Project Leader	Purpose	Completion Date/ Status
Shad in the Schools	PO	\$60,000	\$8,752.78	Friends of the NC Museum of Natural Sciences	Students will raise American Shad in the classroom from egg to releasable fry	Sept. 2011
N.C. Environmental Education Plan	MOA	\$6,000	\$6,000	NC DENR: Office of Environmental Education	Printing of the N.C. Environmental Education Plan	July 2010
Submerged Aquatic Vegetation (SAV) mapping	Letter of Agreement / Engineering	\$79,961	\$79,961	Atkins (formerly PBS&J)	Using ArcGIS software, delineate SAV boundaries from aerial imagery of the entire NC coast	June 2011
Teacher Institute 2009	AC2176	\$12,000	\$12,000	Environmental Education Fund	Develop and Implement a Teacher Institute for 25+ teachers	Aug. 2009
Teacher Institute 2008	AC1132	\$3,000	\$3,000	Environmental Education Fund	Develop and Implement a Teacher Institute for 25 teachers	July 2008
Shad in the Schools	6090	\$40,000	\$41,075.21	Friends of the NC Museum of Natural Sciences	Students will raise American Shad in the classroom from egg to releasable fry	Sept. 2012
Remote Sensing of Submerged Aquatic Vegetation (SAV) in the APNEP region	5071	\$73,000	\$9,061.94	NC Dept. of Transportation	Use a Digital Mapping Camera to obtain remotely sensed imagery of selected SAV sites in the APNEP region	Ongoing
Place-Based Education, Essential Standards, and Citizen Science	4589	\$5,946	\$5,946	Duke University	Conduct monitoring of blue crab habitats and water quality around Lake Mattamuskeet and in tidal creeks of the Newport River Estuary	Sept. 2012



Teacher Institute 2012	4588	\$12,000	\$4,885.28	UNC Institute for the Environment	Develop and Implement a Teacher Institute for up to 24 teachers	Aug. 2012
2012 Restoration RFP – Albemarle-Pamlico Peatland Enhancement Project	4438	\$74,500	\$74,500	The Nature Conservancy – NC Chapter	Use strategic restoration and/or enhancement of forested wetlands to increase the resiliency of these systems to climate change, improve water quality of adjacent receiving waters, and re-establish/augment valuable habitat for wildlife	Sept. 2012
2012 Restoration RFP – Jockey's Ridge State Park Community-based Shoreline Restoration	4437	\$16,280	\$16,280.20	NC Coastal Federation	Provide direct restoration of coastal marsh and riparian shorelines; protect and preserve associated intertidal mud flats, submerged aquatic vegetation, and unique riparian areas	Sept. 2012
2012 Restoration RFP – Enhancing Oyster Reef Ecosystems and Their Beneficial Services in Coastal Tidal Creeks	4436	\$45,361	\$20,349.19	UNC Institute of Marine Sciences	Initiate an oyster restoration program that seeks to enhance oyster populations in the low salinity upper portions of coastal tidal creeks in the APNEP region	Sept. 2012
An Inventory of Significant Natural Areas: Brown-water River Floodplains of the Albemarle-Pamlico Region	4355	\$40,117	\$43,871.21	NC Natural Heritage Program	Conduct surveys of natural areas in the brownwater floodplains of the Roanoke and Tar River basins	Sept. 2012
Printing of the 2010 NC Coastal Habitat Protection Plan	3931	\$2,750	2678.20	NC DENR Div. of Marine Fisheries	Print and bind 100 copies of the 2010 NC Coastal Habitat Protection Plan	June 2011



Printing of the 2010 NC Coastal Habitat Protection Plan	3931	\$2,750	\$2,678.70	NC DENR Div. of Marine Fisheries	Print and bind 100 copies of the 2010 NC Coastal Habitat Protection Plan	June 2011
Estuary Awareness: Promoting Awareness and Stewardship of APNEP's Estuarine Habitats and Shorelines	3800	\$27,698	\$24,489.82	NC Coastal Reserve & National Estuarine Research Reserve	Conduct an education campaign in the APNEP region that is complementary across multiple target audiences, including K-12 teachers and students, coastal decision-makers, and the public	Sept. 2011
Estuary Awareness: Environmental Education Bookmark Contest	3799	\$3,200	\$541.00	NC DENR Soil & Water Conservation	Conduct an educational bookmark contest, targeting fifth-grade students across 16 counties, with a theme focused on the estuaries	Jan. 2012
Estuary Awareness: Estuary Essentials Program for Libraries	3798	\$6,560	\$6,527.00	North Carolina Aquarium Society	Conduct presentations across the APNEP region about the estuarine system	Sept. 2011
CAC Projects: Basic Observation Buoy (BOB) Workshop, Construction, and Deployment	3783	\$25,000	24263.25	UNC-Coastal Studies Institute Foundation	Local students will construct and deploy "BOB" units to collect data in the Albemarle-Pamlico Sounds	Sept. 2011
CAC Projects: Living Shoreline to Improve Habitat and Water Quality and Reduce Stormwater Runoff into Bogue Sound	3782	\$8,159	\$8,159	NC Coastal Federation	Conduct a shoreline restoration project by planting native vegetation along the Bogue Sound shoreline in Morehead City	July 2011
CAC Projects: Recycling fishing gear to enhance	3781	\$24,168	\$24,144.10	UNC-Institute of Marine Sciences	Recycled crab pots will be deployed in targeted locations to facilitate	July 2011



shellfish productivity and improve local water quality						oyster settlement and growth to create habitats for oysters.	
CAC Projects: Elizabeth City Middle School Created Stormwater Wetland	3780	\$25,000	\$24,194.84	UNC-Coastal Studies Institute Foundation	Construct a wetland at Elizabeth City Middle School to intercept stormwater from the school's buildings and parking lots	Sept. 2011	
VA Forum: Living in Your Watershed Booklet (Chowan Basin)	3716	\$1,500	\$1,500	South Centre Corridors RC&D Council	Print and distribute copies of an educational booklet to all elementary schools within the Virginia Chowan Watershed	March 2011	
Shad in the Schools	3690	\$60,000	\$60,000	Friends of the NC Museum of Natural Sciences	Students will raise American Shad in the classroom from egg to releasable fry	Sept. 2011	
NC Outdoor Classroom Symposium (2011)	3685	\$9,000	\$71,75.15	Environmental Education Fund	3-day symposium for teachers to provide instructional techniques focused on outdoor learning	April 2011	
Teacher Institute 2011	3684	\$25,000	\$25,000	Environmental Education Fund	Develop and Implement a Teacher Institute for 25+ teachers	Sept. 2011	
Outdoor Learning and Environmental Education Teacher Training Workshop	3356	\$20,000	\$19,700.56	Environmental Education Fund	3-day teacher training workshop focused on integrating environmental education and outdoor learning into PreK-5th grade classrooms	October 2010	
Support for the Incorporation of Ecosystem-Based Management	3343	\$34,995	\$34,995	Virginia Institute of Marine Science	Facilitate and establish ecosystem-based management in the new CCMP and companion	March 2011	

							monitoring plan	
Project WET (Water Education for Teachers) Facilitator Training	3342	\$1,000	\$1,000	\$1,000	NC DENR – Division of Water Resources	Train 10 new facilitators to conduct “WET” workshops throughout the state.	Sep. 2010	
Northeast Ag Expo No-till/Conservation-till Education	3328	\$10,000	\$10,000	\$10,000	Perquimans County, NC	Promote the benefits of conservation tillage to farmers in northeastern North Carolina.	July 2010	
Agricultural Best Management Practices Event	3312	\$10,000	\$10,000	\$10,000	Partnership for the Sounds	Conduct an event to promote innovative farming methods in the Tar-Pamlico river basin.	Sep. 2010	
Elizabeth City Eco-Park	3286	\$25,000	\$23,251.45	\$23,251.45	Elizabeth City	Design for local eco-park	March 2011	
Climate Change: Sea-Level Rise & Restoration of Estuarine Habitat	3284	\$65,538	\$65,538	\$65,538	The Nature Conservancy	Invasive species removal, re-establishment of wetland hydrology, and construction of a fringing oyster reef.	Dec. 2010	
Hydrologic Restoration for Habitat and Estuarine Water Quality Improvement	3282	\$99,967	\$99,967	\$99,967	North Carolina Coastal Federation	Restoration project to restore the hydrology on more than 42,000 acres in Hyde County, N.C.	Dec. 2010	
Assessment of Small Dam Impacts on Freshwater Mussels & Fishes	3281	\$64,009	\$64,009	\$64,009	Appalachian State University	Baseline estimate of mollusk and fish populations near small dams	Dec. 2010	
Manteo High School Constructed Wetland and Outdoor Environmental Education Classroom	3279	\$49,000	\$49,000	\$49,000	Albemarle RC&D Council	Constructing and planting a wetland between Manteo High School and Dough’s Creek.	Dec. 2010	



Uriah Branch Nature Trail, Phase I	3274	\$19,159	\$19,159.46	Greensville County, VA	Construction of a trail and wetlands observation deck	October 2010
J. H. Rose High School – Schoolyard Demonstration Project	3240	\$19,800	\$15,526.28	Mid-East RC&D	Constructed wetland, stream restoration, and educational curriculum	Sep. 2010
Evaluating Restoration Success for Newly Constructed Oyster Reefs	3154	\$67,364	\$67,361.61	Univ. of North Carolina	Research: Oyster Restoration	April 2011
Rates and Processes of Vital Wetland Habitat Loss in the Face of Climate Change	3153	\$58,440.00	\$58,440.00	East Carolina University	Research: Rates and Processes of Vital Wetland Habitat Loss	March 2011
Chowan Ecosystem Assessment II	3141	\$25,000	\$25,000	Virginia Inst. Marine Science	Ecosystem analysis of a portion of the watershed	Dec. 2010
Carrot Island Habitat Improvement	3076	\$14,929	\$11,461.46	NC DENR – Div. Coastal Man.	Dredge spoil habitat restoration	Aug. 2010
Landscaping with Nature in Currituck County	3073	\$20,000	\$20,000	NC Sea Grant	Stormwater control and treatment systems demonstration project	Sept. 2010
Reducing Stormwater Runoff into Bogue Sound	3069	\$8,087	\$7,927.00	NC DENR – Div. Marine Fisheries	Re-vegetate a portion of the Bogue Sound shoreline adjacent to the NCDMF site	March 2011
Clanidge Nursery Stream Restoration Monitoring Study	3008	\$8,000	\$8,000	NC DENR – Div. Forest Resources	Pre-restoration baseline watershed monitoring	June 2011
Teacher Institute 2010	3005	\$24,000	\$23,672.71	Environmental Education Fund	Develop and Implement a Teacher Institute for 25+ teachers	Sept. 2009
Ecosystem Assessment & Synthesis Report	2983	\$68838	\$8,745.88	Univ. of North Carolina - IMS	Ecosystem Assessment Support	Sept. 2011



Citizens' Monitoring Network	2872 3622	\$59,100 \$64,100	\$57,808.23 \$61,294.62	East Carolina University	Outreach / Monitoring	Ongoing/ Reduced
DWQ Outreach and Engagement Project	2837	\$8,000	\$4,798.51	NC DENR- DWQ	Water Quality – Outreach and Engagement	August 2010
Climate Ready Estuaries Pilot Project	2441	\$48,375	\$48,375	Duke University	Local government survey: Communications Strategy	Sept. 2010
2009 Schoolyard Demonstration Project	2399	\$10,200	\$10,200.00	NC Coastal Federation	Stormwater Runoff – Cape Lookout Visitors Center	Dec. 2010
2009 Schoolyard Demonstration Project	2387	\$7,000	\$3,009.61	Pamlico County Schools	Cistern –water saving station	Sept. 2009
2009 Schoolyard Demonstration Project	2385	\$8,000	\$8,800.00	Kitty Hawk Elementary School	Renewable Energy Discovery Zone	Sept. 2009
2009 Schoolyard Demonstration Project	2384	\$12,000	\$8,206.18	E. W. Wyatt Middle School	Nature's Classroom and Exploratory Trail	January 2011
Estuary Management Survey	2099	\$38,000	23672.71	East Carolina University	Measure public attitudes and perceptions; evaluate APNEP's accomplishments; planning	Sept. 2009
Watershed Coordinator (VA)	2052 2972	\$31,730 \$92,540	\$31,730 \$31,730	VA. Dept. Conservation & Recreation	Fund Watershed Coordinator in VA-NC Shared river basins	Ongoing

Table C2. Funds allocated to specific workplans and other projects during the evaluation period.
Data source: APNEP CCMP tracking database.

Fiscal Year	EPA 302 Grant	Leveraging Role	Leveraged Amount
2009	\$ 591,750	Primary	\$1,814,000
		Significant	\$35,769,000
		Support	\$635,000
		TOTAL	\$ 38,217,000
2010	\$ 600,000	Primary	\$2,388,000
		Significant	\$1,996,000
		Support	\$10,646,000
		TOTAL	\$ 15,030,000
2011	\$ 800,000	Primary	\$2,849,000
		Significant	\$14,737,000
		Support	\$3,855,000
		TOTAL	\$ 21,441,000
2012	\$ 598,800	Primary	\$ 2,077,000
		Significant	\$ 4,274,000
		Support	\$ 15,505,000
		TOTAL	\$21,856,000
TOTAL	\$ 1,432,566	Primary	\$ 9,128,000
		Significant	\$ 56,776,000
		Support	\$30,641,000
		TOTAL	\$ 96,545,000

Table C3. Funds leveraged by APNEP during the evaluation period (FYs 2009-2012) according to NEP leveraging role (primary, significant, or support).

Data Source: *NEPORT*

Note: Additional information on leverage can be supplied by the NEPORT database.



ON-SITE VISIT



Overview

The Worksheets and Narrative only provide a small picture of APNEP and its partnerships, projects, activities, challenges and successes. The Program looks forward to hosting the Program Evaluation Team for an on-site visit. APNEP recommends that the on-site visit be at least two days in length to provide ample time for opportunities to view on-the-ground projects within the program area and meetings with key partners and stakeholders in the region.

On-site visit expectations for APNEP include:

- Opportunities to demonstrate partnerships, successes and accomplishments,
- Opportunities to discuss and expand upon the items in the narrative summary,
- Discussion and demonstration of external challenges and factors influencing progress toward environmental milestones and targets and CCMP implementation, and
- Working together on findings and recommendations for program improvements.

An agenda will be developed at least two weeks prior to the onsite visit currently scheduled for April 30-May 2.

For additional information please contact

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And
Visit our website at www.apnep.org



ATTACHMENTS



Attachments

Attachment 1 Executive Orders #122 and #133

Attachment 2 2009 EPA Program Evaluation Letter

Attachment 3 2010 NCDENR Program Evaluation Response Letter

Attachment 4 Sample Monthly Budget Report (*Xtnd*)

Attachment 5 Sample Year-end Budget Report (*Xtnd*)

Attachment 6 Communication Plans

Attachment 7 Case Statements/Informational Handouts

Attachment 8 *Soundings* digital Newsletter (*sample*)



State of North Carolina



MICHAEL F. EASLEY
GOVERNOR

**EXECUTIVE ORDER NO. 122
REPLACING EXECUTIVE ORDER NO. 74
CONCERNING CREATION OF A PROGRAM OFFICE, A POLICY BOARD,
AND ADVISORY COMMITTEES, TO SUPPORT SUSTAINABLE NATURAL
RESOURCE AND ENVIRONMENTAL MANAGEMENT IN THE
ALBEMARLE-PAMLICO ESTUARINE SYSTEM**

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

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

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

WHEREAS, Congress designated the Albemarle-Pamlico estuarine system as an "estuary of national significance" in 1987; and

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

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

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

WHEREAS, the CCMP also recognizes that, from an ecological and economic standpoint, the most effective means to ensure the environmental health and sustainability of the



Albemarle-Pamlico estuarine system is to manage and protect the resources in the five major river basins of the watershed; and

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

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

Section 1. Establishment.

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

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

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

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

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

Section 2. Program Boundaries.

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



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

Section 3. Policy Board.

- A. Membership.
1. The Secretary of the Department of Environment and Natural Resources shall appoint or invite the initial Policy Board membership.
 2. The Policy Board will be broad-based and include the following:
 - a. The Secretary of North Carolina Department of Environment and Natural Resources, or designee;
 - b. The Secretary of Natural Resources of the Commonwealth of Virginia, or designee, is invited to participate;
 - c. The Executive Director of the North Carolina Clean Water Management Trust Fund, or designee;
 - d. One representative of Partnership for the Sounds;
 - e. One representative of Cooperative Extension;
 - f. One representative of Sea Grant;
 - g. Two representatives from each of the Advisory Committees;
 - h. One who shall, at the time of appointment, is actively connected with higher education.
 - i. One who shall, at the time of appointment, is actively connected with local or regional planning;
 - j. One who shall, at the time of appointment, is actively connected with major business or industry;
 - k. One who shall, at the time of appointment, is actively connected with the commercial fishing or seafood industry;
 - l. One who shall, at the time of appointment, is actively connected with agriculture;
 - m. One who shall, at the time of appointment, is actively connected with forestry;
 - n. One who shall, at the time of appointment, is actively associated with a local, state, or national conservation organization;
 - o. One who shall, at the time of appointment, is actively connected with or have experience in finance/banking;
 - p. One who shall, at the time of appointment, is actively connected with communication media;
 - q. One at-large member; and



- r. A representative of the United States Environmental Protection Agency--National Estuary Program is invited to participate as a non-voting ex-officio member.
- 3. Members must reside or have interests within the program boundaries.
- 4. Each member shall serve a three-year term, renewable once consecutively. The membership will have staggered appointments so that one-third of the membership can be reappointed each year.
- 5. Vacancies shall be filled by appointment or invitation from the remaining Board members as set forth in the Board's bylaws.
- 6. The Policy Board may expand its membership, as it deems necessary, upon two-thirds affirmative vote.

B. Duties.

- 1. The role of the Policy Board shall be to guide, evaluate, and support the CCMP implementation process and advancement of the CCMP and its management actions, and to ensure the highest level of collaboration, coordination, and cooperation among state and federal agencies, local governments, the public, and various interest groups.
- 2. The Policy Board shall consult the Advisory Committees for recommendations pertaining to implementation of CCMP management actions at the regional and local level, and the coordination and development of research and monitoring priorities.
- 3. The Policy Board shall advise the state, federal, and local agencies responsible for environmental and natural resource management about concerns and issues relevant to implementation of the CCMP.
- 4. The Policy Board shall make recommendations based on CCMP implementation progress and success, and shall identify and prioritize information needs as described in the CCMP.
- 5. The Policy Board shall evaluate the relevance of the CCMP and consult the Advisory Committees for recommendations on amending the CCMP to address new or emerging issues that may affect the significant natural resources of the Albemarle-Pamlico estuarine system.
- 6. The Policy Board shall be an advocate for the implementation of the CCMP and the APNEP mission and the APNEP.
- 7. The Policy Board, in cooperation with the Program Office, shall assist in the development of an annual report, budget, and work plan that address priorities for implementing and updating the CCMP.
- 8. The Policy Board will have no authority other than as an advisory body.
- 9. The Policy Board shall be responsible for determining its own rules of order, bylaws, chairmanship, attendance requirements, and other matters of protocol.

C. Meetings.

- 1. The Policy Board shall meet at least two times each year or more frequently if deemed appropriate by the Chair or upon request by the Program Director.



2. Federal, state, and local agencies with environmental management responsibilities in the Albemarle-Pamlico watershed are invited to participate in meetings of the Policy Board.
3. All meetings shall be open to the public and noticed in accordance with North Carolina's open meeting laws.

Section 4. Advisory Committees.

A. Citizen Advisory Committee

1. Membership.
 - a. Citizen Advisory Committee (CAC) members must reside, or have interests, within the program boundaries of the Albemarle-Pamlico National Estuary Program.
 - b. Membership shall include:
 1. One representative of the Soil and Water Conservation Districts in North Carolina;
 2. One representative of the Soil and Water Conservation Districts in Virginia is invited;
 3. Two representatives from non-governmental environmental conservation organizations;
 4. One representative of environmental education;
 5. One representative of K-12 education;
 6. One representative from industry or business;
 7. One representative of agriculture;
 8. One representative of commercial fishing or the seafood industry;
 9. One representative of forestry;
 10. One representative of county government;
 11. One representative of municipal or town government;
 12. One representative from each of the following:
 - a. North Carolina League of Municipalities, and
 - b. North Carolina Association of County Commissioners;
 13. One representative from each of the following is invited:
 - a. Virginia Municipal League, and
 - b. Virginia Association of Counties;
 14. One representative is invited to represent the State recognized tribal organizations from within the program boundaries in North Carolina;
 15. One representative is invited to represent the State recognized tribal organizations from within the program boundaries in Virginia; and
 16. Six at-large positions.
 - c. The CAC may expand its membership to include other interested parties as it deems necessary and as set forth in the committee's bylaws.
 - d. Members shall serve a three-year term, renewable once consecutively. The membership will have staggered appointments so that one-third of the membership can be reappointed each year.



- e. The Director of the Albemarle-Pamlico National Estuary Program Office shall nominate the initial CAC membership to be approved by the Policy Board. In making his nominations, the Director shall, to the greatest extent possible, seek to ensure geographic, demographic and social balance, and willingness to serve.
 - f. Vacancies shall be filled by appointment or invitation from the remaining CAC members as set forth in the committee's bylaws.
2. Duties.
- a. The CAC shall be responsible for coordinating CCMP implementation strategies at a local level.
 - b. The CAC shall advise and consult with the Policy Board, Science and Technical Advisory Committee, Management Advisory Committee, the public, and various interest groups, as well as local agencies within the Albemarle-Pamlico watershed regarding implementation of CCMP management actions and advancement of the CCMP at the local level.
 - c. The CAC shall be an advocate for the implementation of the CCMP and the APNEP mission and the APNEP at the local level.
 - d. The CAC will have no authority other than as an advisory body.
 - e. The CAC shall select two members to serve on the Policy Board.
 - f. The CAC shall be responsible for determining its own rules of order, bylaws, chairmanship, attendance requirements, and other matters of protocol.
3. Meetings.
- a. The CAC shall meet at least two times each year, or more frequently if deemed appropriate or upon request by the Policy Board or the Program Director.
 - b. Federal, state, and local agencies with environmental management responsibilities in the Albemarle-Pamlico watershed are invited to participate in meetings of the CAC.
 - c. All meetings shall be open to the public and noticed in accordance with North Carolina's open meeting laws.

B. Science and Technical Advisory Committee

1. Membership.
- a. The Science and Technical Advisory Committee (STAC) will be broad-based and should include scientists and researchers from local colleges, universities, and research institutions, as well as technical staff from federal, state, and local agencies, industry, and environmental organizations.
 - b. All members will be expected to have an advanced degree (Master's or above) and/or extensive experience (at least 6 years), with expertise in scientific and technical fields germane to the mission of the APNEP.
 - c. The Director of the Albemarle-Pamlico National Estuary Program Office shall nominate the initial STAC membership to be approved by the Policy Board. In making his nominations, the Director shall, to the greatest extent possible, seek to ensure broad-based science and technical representation



for research, monitoring, and resource management issues germane to the Albemarle-Pamlico watershed.

- d. Members should have expertise in science and technology relevant to environment and natural resource management, including but not limited to: landscape ecology, terrestrial ecology, wetlands ecology, submerged aquatic ecology, marine biology, hydrology, remote sensing, ecological assessment, engineering, agricultural technologies, forest technologies, soil conservation, water quality modeling, environmental policy, economics, public policy, planning, spatial statistics, and law.
 - e. Each member shall serve a three-year term, renewable once consecutively. The membership will have staggered appointments so that one-third of the membership can be reappointed each year.
 - f. Vacancies shall be filled by appointment or invitation from the remaining committee members as set forth in the committee's bylaws.
2. Duties.
- a. The STAC shall be responsible for recommending research and monitoring activities and needs related to CCMP implementation or advancement to the Policy Board and the Program Office.
 - b. The STAC shall advise and consult with the Policy Board, the public, and various interest groups, as well as local, state, and federal governments within program boundaries on scientific and technical issues affecting implementation and advancement of the CCMP management actions. Members shall advise these groups of actions and information relevant to research and monitoring issues in the Albemarle-Pamlico watershed.
 - c. The STAC will have no authority other than as an advisory body.
 - d. The STAC will serve as a forum for the exchange of scientific information about the Albemarle-Pamlico estuarine system.
 - e. The STAC shall select two members to serve on the Policy Board.
 - f. The STAC shall be responsible for determining its own rules of order, bylaws, chairmanship, attendance requirements, and other matters of protocol.
3. Meetings.
- a. The STAC shall meet at least two times each year, or more frequently if deemed appropriate or upon request by the Policy Board or the Program Director.
 - b. Federal, state, and local agencies with environmental management responsibilities in the Albemarle-Pamlico watershed are invited to participate in meetings of STAC.
 - c. All meetings shall be open to the public and noticed in accordance with North Carolina's open meeting laws.

C. Management Advisory Committee

- 1. Membership.
 - a. The Management Advisory Committee (MAC) will be broad-based and should include representation from federal, state, and local agencies with



- environmental and natural resource management responsibilities within the Albemarle-Pamlico watershed.
- b. The Director of the Albemarle-Pamlico National Estuary Program Office shall nominate the initial MAC membership to be approved by the Policy Board. In making appointments, the Policy Board shall, to the greatest extent possible, seek to ensure that appropriate management agencies are included.
 - c. The MAC may expand its membership as it deems necessary and as set forth in the committee's bylaws.
 - d. Vacancies shall be filled by appointment or invitation from the remaining committee as set forth in the committee's bylaws.
2. Duties.
 - a. The MAC shall be responsible for coordinating, supporting, and advocating CCMP implementation strategies at a state and federal agency level.
 - b. The MAC shall advise and consult with the Policy Board, CAC, and STAC on the implementation of CCMP management actions and advancement of the CCMP at the federal, state, and local agency level.
 - c. The MAC will have no authority other than as an advisory body.
 - d. The MAC shall select two members to serve on the Policy Board.
 - e. The MAC shall be responsible for determining its own rules of order, bylaws, chairmanship, attendance requirements, and other matters of protocol.
 - f. The MAC will serve as a forum for the exchange of management information about the Albemarle-Pamlico estuarine system.
 3. Meetings.
 - a. The MAC shall meet at least two times each year, or more frequently if deemed appropriate or upon request by the Policy Board or Program Director.
 - b. All meetings shall be open to the public and noticed in accordance with North Carolina's open meeting laws.

Section 5. Compensation, Per Diems, and Expenses.

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

Section 6. Effect of Other Executive Orders.

All other Executive Orders or portions of Executive Orders inconsistent herewith are hereby rescinded. This order specifically replaces Executive Order No. 74.

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



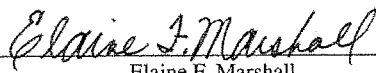
IN WITNESS WHEREOF, I have hereunto signed my name and affixed the Great Seal of the State of North Carolina at the Capitol in the City of Raleigh, this second day of August in the year of our Lord two thousand and seven, and of the Independence of the United States of America the two hundred and thirty-second.





Michael F. Easley
Governor

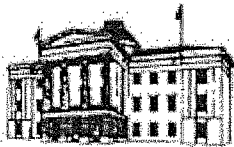
ATTEST:



Elaine F. Marshall
Secretary of State



State of North Carolina



BEVERLY EAVES PERDUE
GOVERNOR

EXECUTIVE ORDER NO. 133

ALBEMARLE-PAMLICO NATIONAL ESTUARY PARTNERSHIP

WHEREAS, Congress designated the Albemarle-Pamlico estuarine system "estuary of national significance" in 1987; and

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

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

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

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

WHEREAS, APNEP has provided extensive information and supported scientific research to address natural resource and environmental issues facing the Albemarle-Pamlico estuarine system since 1988; and

WHEREAS, scientific information from the Albemarle-Pamlico Estuarine Study (1987-1994) was combined with extraordinary involvement by citizens to develop a Comprehensive Conservation and Management Plan (CCMP) that was first adopted in 1994 and revised in 2012; and

WHEREAS, APNEP and its CCMP also recognize that from an ecological, societal, and economic standpoint, the most effective means to sustain environmental health of the Albemarle-Pamlico estuarine system is to identify, manage, and protect the resources in the watershed through adaptive, system-based approaches; and

WHEREAS, APNEP recognizes the importance of engaging and involving the public in making decisions regarding ecosystem-based management;



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

Section 1. Establishment and Structure.

The Albemarle-Pamlico National Estuary Partnership Office (the "APNEP Office") is hereby established to coordinate and facilitate the implementation of the CCMP, and the APNEP mission. The APNEP Office shall serve as a conduit for information, collaborations, and coordination among the state and federal agencies, local governments, tribes, academia, and the public. The Office will be located in the Offices of the Secretary of the North Carolina Department of Environment and Natural Resources ("DENR" or the "Department"). The Department shall be responsible for administrative and fiscal management of the APNEP Office as the federal grant recipient.

Section 2. Advisory Bodies.

The following advisory bodies shall be established to support the implementation of the CCMP and to assist the APNEP Office: a Policy Board, an Implementation Committee, and a Science and Technical Advisory Committee. The Secretary of the Department of Environment and Natural Resources, in consultation with the Director of the APNEP Office, shall appoint the initial membership of the advisory bodies and, to the greatest extent possible, shall seek to ensure geographic, demographic and social balance, and willingness to serve. Unless otherwise authorized by the Governor or the Governor's designee, advisory bodies shall have no authority other than to serve in an advisory capacity as provided herein.

A. Policy Board

1. Purpose

The Policy Board shall work with the APNEP Office and other partners to advise, support, evaluate, update, advocate for, and guide CCMP implementation. The Policy Board is the primary guidance body of the APNEP Office.

2. Membership

a. The membership of the Policy Board shall include the following voting members:

- 1) The Secretary of the North Carolina Department of Environment and Natural Resources, or designee;
- 2) Two members of the Implementation Committee;
- 3) Two members of the Science and Technical Advisory Committee;
- 4) A representative of a local or regional council of governments;
- 5) A representative of a local, state, or national conservation organization; and
- 6) Two at-large members.



- b. The Secretary of Natural Resources of the Commonwealth of Virginia, or designee, shall be invited to participate as a voting member.
- c. A representative of the United States Environmental Protection Agency--National Estuary Program shall be invited to participate as a non-voting ex-officio member.
- d. The Policy Board may expand its membership, as it deems necessary, upon two-thirds affirmative vote.

3. Meetings

The Policy Board shall meet as deemed appropriate by the Chair or upon request by the APNEP Director.

B. Implementation Committee

1. Purpose

The Implementation Committee shall work with the Policy Board on CCMP implementation. Committee members shall serve as liaisons to agencies and relevant parties regarding environmental and natural resource management relevant to CCMP implementation.

2. Membership

The membership of the Implementation Committee shall be broad-based and may include the following natural resource management interests within the watershed: local governments; local or regional planning; commerce and industry; education; tourism; fishing or seafood industry; agriculture; forestry; tribal organizations; local, state, or national conservation organizations; soil and water conservation districts; finance; communication and media; education; state agencies; and federal agencies.

3. Meetings

The Implementation Committee shall meet as deemed appropriate by the Chair or upon request by the Director of the APNEP Office.

C. Science and Technical Advisory Committee

1. Purpose

The Science and Technical Advisory Committee shall provide independent advice to the Policy Board and the Implementation Committee on scientific and technical issues, including ecosystem assessment and monitoring in support of CCMP implementation.

2. Membership

- a. The membership of the Science and Technical Advisory Committee shall be broad-based and may include scientists and researchers from local colleges, universities, and research institutes, as well as technical staff from federal and local agencies, industry, and environmental organizations with expertise in science and technology relevant to environment and natural resource management in the Albemarle-Pamlico estuarine system. Representatives of state agencies may serve as non-voting liaisons to the committee.
- b. All members will be expected to have an advanced degree (Master's or above) and/or extensive experience (at least 6 years), with expertise in scientific and technical fields germane to APNEP's mission.
- c. Members should have expertise in science and technology relevant to environment and natural resource management including, but not limited to, landscape ecology, terrestrial ecology, wetlands ecology, submerged aquatic ecology, marine biology, hydrology, remote sensing, ecological assessment, engineering, agricultural technologies, forest technologies, soil conservation, water quality modeling, environmental policy, economics, public policy, planning, spatial statistics, and law.

3. Meetings

The Scientific and Technical Advisory Committee shall meet as deemed appropriate by the Chair or upon request by the Director of the APNEP Office.

D. Administration and Expenses

1. Each advisory body shall be responsible for determining its own rules of order, terms of service, bylaws, chairmanship, attendance requirements, ad-hoc committees, and other matters of protocol. All meetings shall be held in accordance with the Open Meetings Law.
2. Vacancies on an advisory body shall be filled by invitation from the remaining members as set forth in each committee's bylaws.
3. The Department of Environment and Natural Resources, through the APNEP Office, shall provide clerical support and other services required by the advisory bodies.
4. Members of the advisory bodies shall serve voluntarily and without compensation or per diems. Extraordinary expenses may be reimbursed subject to approval by the APNEP Director and in accordance with DENR travel policies, State law, and the policies and regulations of the Office of State Budget and Management.




Section 3. Effect and Duration.

This Executive Order is effective immediately. It supersedes and replaces all other executive orders on this subject and specifically rescinds Executive Order No. 122 issued on August 2, 2007. It shall remain in effect until November 5, 2016, pursuant to N.C. Gen. Stat. § 147-16.2, unless earlier rescinded.

IN WITNESS WHEREOF, I have hereunto signed my name and affixed the Great Seal of the State of North Carolina at the Capitol in the City of Raleigh, this 5th day of November in the year of our Lord two thousand and twelve, and of the Independence of the United States of America the two hundred and thirty-seventh.




Beverly Eaves Perdue
Governor

ATTEST:


Elaine F. Marshall *by Roxanne Maddox*
Chief Deputy Secretary of State

Attachment: 2 2009 EPA Program Evaluation Letter



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

DEC 15 2009

OFFICE OF
WATER

Mr. Dee Freeman, Secretary
North Carolina Department of Environment
and Natural Resources
1601 Mail Service Center
Raleigh, NC 27699-1601

Dear Secretary Freeman:

The purpose of this letter is to provide the results of the Environmental Protection Agency's (EPA) 2009 Program Evaluation (PE) and to thank you and the Albemarle-Pamlico National Estuary Program (APNEP) Director and staff, as well as the Program's partners, for contributing to the 2009 PE process. We recognize that the Program put considerable effort into both the PE package and the responses to our follow-up questions. In addition, we would like to thank APNEP for arranging the on-site visit for the PE Team and for actively participating in meetings and field trips to various sites in the APNEP study area.

The primary purpose of the EPA PE is to help the EPA determine whether the 28 Programs in the National Estuary Program (NEP) are making adequate progress in implementing their Comprehensive Conservation and Management Plans (CCMPs). The evaluation process has added considerably to EPA Headquarters and Regional knowledge of each individual NEP and promotes sharing of innovative projects and approaches across all 28 NEPs. In addition, EPA uses the evaluation process to assess how the NEPs support Clean Water Act (CWA) core programs and to evaluate the extent and effectiveness of the NEPs' contributions to achievement of two relevant EPA 2006 - 2011 *Strategic Plan* goals--Goal 2: Clean and Safe Water, Objective 2.2, Protect Water Quality; and Goal 4: Healthy Communities and Ecosystems, Objective 4.3, Restore and Protect Critical Ecosystems.

Based on the PE Team findings, we believe the Program continues to make significant progress in implementing the APNEP CCMP. The Program has passed the 2009 Program Evaluation and is eligible for continued funding under §320 of the CWA.

2009 Program Evaluation Findings

The following summary highlights the PE Team's key findings by identifying several of APNEP's strengths and recommending areas for improvement. This summary is intended both

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to recognize the Program's successes and to recommend efforts to further strengthen the Program. The Program's response to these recommendations will be evaluated in the next PE cycle.

1. Progress Made in Areas Highlighted in 2005 Implementation Review

Update CCMP and Change Priorities

The PE submission and discussions with the Program confirm that APNEP is now on track to issue a revised CCMP in 2010. The new CCMP will reflect revised goals and objectives and priority actions intended to address current priority problems.

Visibility and Independence

The PE submission and on-site visit confirmed that APNEP became much more visible after it was moved into the Secretary's Office in the Department of Environment and Natural Resources (DENR) in 2002. Moving from a Division to the Secretary's Office elevated the Program's status and gave APNEP name recognition, created opportunities for APNEP to develop relationships with senior staff in other State agencies, and enabled the Program to leverage other organizations' resources.

The PE submission and discussions during the on-site visit described how APNEP's placement in the Secretary's Office had enabled the Program to form important partnerships that helped advance CCMP implementation. During the visit, several APNEP partners commended the Program for its: (1) leadership of water quality and living resources protection and restoration efforts; (2) commitment to environmental education initiatives; (3) ability to effectively communicate its messages using a range of materials that target diverse stakeholder groups and communities; (4) capacity to form productive alliances and to encourage stakeholder collaboration; and (5) capacity to engage expert scientists in planning and implementing critical research, assessment, and monitoring activities.

Now that APNEP has been moved from the Secretary's Office back to a Division, EPA is concerned that the Program may be unable to sustain the visibility and independence it achieved during the past several years. The need for visibility and independence thus continues to be an area for improvement, and will be discussed in further detail in the Challenges section below.

Form More Partnerships and Conduct Effective Fund Raising

The Team was impressed by the large number of productive partnerships and strategic stakeholder alliances that APNEP formed over the past four years. The Team noted that everyone on the APNEP staff has formed effective partnerships with DENR managers and staff, with other State and Federal agency staff, and with representatives from non-profit organizations. With regard to effective fund raising, the PE submission indicates that fund-raising plans will be discussed in the revised CCMP. EPA looks forward to learning more about those plans and about DENR's plans to generate additional sources of matching funds for Program activities.



Develop Environmental Indicators/Monitoring Plan

A March 2009 summary report issued by APNEP's Science and Technical Advisory Committee (STAC) describes progress made since 2005 on environmental indicator and monitoring plan development. For example, the STAC has made significant progress developing individual monitoring plans for each candidate indicator. When completed, those plans will serve as the foundation for APNEP's integrated ambient monitoring program. The PE Team commends APNEP for designing and implementing a comprehensive data collection and analysis effort that supports development of robust indicators. The PE Team also commends APNEP for fully involving the public in indicator selection.

Nonetheless, EPA is concerned that the pace of indicator and monitoring plan development has been slower than the pace recommended in the 2005 Implementation Review findings letter. The letter recommended that the Program complete indicator development by the end of 2005 and monitoring plan development by 2006. Further discussion about this issue appears in the "Challenges" section below.

EPA is also concerned that there may not be sufficient resources to fully implement the monitoring and assessment program once it has been formally adopted by APNEP. EPA advises the Program and its partners to begin identifying now the resources that will be available to support full program implementation.

Demonstrate Environmental Progress

As noted above, the PE Team is encouraged that the Program has made progress developing a comprehensive program for measuring environmental progress. Once monitoring plan development is complete and supporting resources are made available, Program partners will have a very good tool for collecting and analyzing monitoring data and assessing conditions throughout the study area. Further discussion about this issue appears in the "Challenges" section below.

2. Support of CWA Core Programs

In support of the CWA goal to restore impaired waters and protect and restore wetlands, the Program worked with partners to select an impaired water body and to promote State and local efforts to remove that water body from the 303(d) list of impaired waters. EPA looks forward to learning the status of those efforts over the next few years.

Wetlands assessment, protection, and restoration are critical to effective implementation of both the Program's mission and that of partner organizations. EPA NEPORT data depicting acres of APNEP habitat restored and protected reveal that most of that acreage comprises tidal and forested wetlands. Since the study area is so vulnerable to erosion, salt water intrusion, and sea level rise, it is commendable that the Program and its partners have made wetlands restoration and protection a priority. EPA encourages the Program to continue those efforts to sustain wetland resources.



3. Strengths

Research

The PE Team commends APNEP for its commitment to using robust science and technical data to set broad policy goals and to inform project selection. APNEP demonstrates its commitment in several important ways:

- Program staff includes a Ph.D. Program Scientist with expertise in ecological risk assessment and ecosystem-based management. This expert staffer has convened a high-quality, well-respected, multi-disciplinary group of senior scientists to serve on the STAC.
- STAC members are committed to addressing the highest-priority scientific and technical issues facing the Program and its stakeholders. The STAC has complete autonomy to lay the scientific groundwork for Program efforts and is fully involved in development of the comprehensive monitoring and assessment plan. EPA believes that the Program is well-served by the expert scientists leading APNEP scientific and technical initiatives.

The PE Team noted the STAC's development of one- to two-page technical issue papers as the mechanism for introducing scientific and technical issues and STAC recommendations to stakeholders. EPA commends the Program for adopting this innovative approach to communicating complex scientific issues to non-scientists, and looks forward to learning during the next PE if the Program finds this to be an effective approach to educating and engaging non-scientific audiences.

Education and Training

The 2009 APNEP PE submission and discussions with several partner organizations during the May on-site visit highlighted the Program's leadership in several areas, one of which involves promoting the design and delivery of comprehensive environmental education curricula. As a direct result of APNEP leadership and grant support, between 2005 and 2009, expert educators provided water quality and living resource classroom and experiential training to approximately 150 science teachers from across the study area. The PE Team also commends the Program for its leadership of local efforts to build the capacity of educators to teach environmental science to students living in economically- and socially-distressed communities.

The Team was impressed by the partners' systematic tracking and analysis of post-workshop/training survey results and by the results themselves. Those results showed that teachers thought that the workshops and training sessions had enhanced their ability to effectively teach environmental science to a broad cross-section of students. The Team had an opportunity to see on-the-ground evidence of workshop impacts when it visited a high-functioning wetland designed and constructed by students whose teacher had attended one of the environmental education workshops.



Outreach and Public Involvement

Like other NEP study areas, APNEP faces challenges such as habitat loss and excess nutrient loadings to water bodies from agricultural and stormwater runoff. The study area also faces unique environmental and socio-economic challenges¹ that make effective outreach to State and local leaders and community residents both difficult and extremely important.

The Team was impressed by the Program's leadership of multi-faceted outreach and public involvement efforts such as the 2008 public listening sessions that focused on sea level rise impacts on the Albemarle-Pamlico Sound study area. Those listening sessions and follow-on discussions with local civic and business leaders and State policymakers exemplify a well-planned, strategic approach to developing effective climate change adaptation policies and action plans and to engaging a broad cross-section of the public.

The PE Team commends APNEP and its partners for their commitment to engaging communities which, while especially vulnerable to sea level rise because of their location and/or lack of economic resources, are not typically provided opportunities for public involvement on environmental issues. Since fewer participants than expected actually attended those listening sessions, partner co-sponsors noted in their final report that in the future, they would use different strategies to more successfully engage members of those communities.

The Team also noted that given the size of APNEP's study area, field staff is critical to effective outreach and priority action implementation in outlying communities. Field staff's daily interaction with community stakeholders enables staff to tap into the pulse of communities, effectively serve as liaisons to the Program offices in Raleigh, and raise awareness among communities about APNEP's mission and priorities. The Team believes that assigning staff to serve in field positions has been an important step toward promoting APNEP's mission and enhancing CCMP implementation throughout the study area.

4. Challenges

Maintaining Visibility and Independence

Between 1999 and 2002, EPA grew increasingly concerned that APNEP's lack of visibility and independence was a major obstacle to the Program's progress implementing its CCMP. As of 2002, the Program did not have the status of an independent entity with its own distinctive NEP mandate, and had little visibility outside the DENR Division where it was housed. EPA regarded the State's decision to place APNEP in a Division and to make it a low-profile Program as an indicator of the State's lukewarm support for the Program.

¹ E.g., (1) the region's peat soils are degrading quickly, natural communities are in retreat due to saltwater intrusion, and one million acres of land could be lost by 2100 due to rising sea levels; (2) persistent poverty in the study area is a major socio-economic issue: 50 percent of North Carolina's most economically-distressed counties are in the study area, and the regional poverty rate averages 29 percent higher than the state average. From *Public Listening Sessions: Sea Level Rise and Population Growth in North Carolina*, The Albemarle - Pamlico Conservation and Communities Collaborative and The Albemarle - Pamlico National Estuary Program, pages 5-6.



In 2002, senior EPA representatives--Suzanne Schwartz, former Director of the Oceans and Coastal Protection Division; Darrell Brown, former Chief of the Coastal Management Branch; and Tim Jones, NEP Headquarters Coordinator—met with DENR representatives in Raleigh to discuss EPA concerns about the Program's limited implementation of its CCMP. In response to those concerns, DENR moved APNEP into the Secretary's Office and hired both a new Director with greater authority to manage the Program and additional technical staff. The Program went on to successfully form strategic, productive partnerships; garner the support of State and local policymakers, scientists, educators, environmental non-profits, and communities throughout the study area; and co-sponsor initiatives, like the climate change listening sessions, to provide opportunities for the general public to inform policymaking about critical environmental issues.

EPA is concerned that APNEP's move back to a Division jeopardizes the Program's status, visibility, and independence, thereby slowing the momentum attained over the past several years and compromising the Program's leadership of efforts to improve Albemarle-Pamlico Sound water quality and living resource conditions. Since APNEP has demonstrated that it operates most effectively when it has visibility and autonomy, EPA recommends that:

- DENR reverse its decision to move APNEP back into a Division.
- DENR re-locate the Program to an organizational home where the Program is highly visible and regarded as a model of ecosystem-based management.

Demonstrate Environmental Progress

EPA commends the Program for its support of water quality and habitat restoration and protection projects and for its indicator development and monitoring plan design efforts. EPA acknowledges that indicator development and monitoring plan design typically take several years to complete. However, given the increased public sector emphasis on accountability and government stakeholder requests to demonstrate program results, EPA is concerned that the pace of APNEP efforts to set baselines, assess conditions throughout the study area, and measure environmental change is slower than necessary. To promote implementation of monitoring and assessment priority actions, EPA requests that over the next six months:

- DENR provide additional resources to support completion of the STAC monitoring plan.
- The STAC complete development of its monitoring plan and DENR identify resources for monitoring program implementation.
- The State begin conducting a regional ecosystem assessment to help guide the allocation of monitoring resources to waters and other ecosystem components of highest priority.

Also, EPA believes it is important that APNEP, like all NEPs, consider developing a strategy stating that: (1) achievement of on-the-ground environmental results is a Program priority, and (2) the Program will develop a tool for measuring the environmental progress resulting from implementation of Program-supported projects. To promote those efforts, EPA recommends that over the next six months, APNEP should:

- Draft a strategy as described above that would identify funding and staff resources dedicated to strategy implementation.



- Include in its 2010 work plan a description of its protocol for measuring the short-term environmental outcomes of projects that it funds and/or on which it plays a lead support role.
- Begin setting and documenting project-specific baselines as a first step toward measuring environmental results.

Expedite Funds Draw Down

EPA's National Estuary Program FY2008-2009 Funding Guidance encouraged NEPs to expedite implementation of work plan projects and funds expenditure whenever possible.² When the PE Team learned that as of September 30, 2009 APNEP still had an unexpended balance of \$769,805 in FY2007-2008 and FY2008-2009 appropriated funds, the PE Team became concerned about APNEP's slow draw down of those funds.

EPA, the Director of APNEP, and a senior DENR official have all agreed that beginning in FY2010, APNEP and DENR will take steps to ensure that §320 funds are drawn down in an expedited manner:

- The Region IV APNEP Coordinator will regularly monitor APNEP's draw down of old unexpended funds. In late March 2010, the Region will assess whether or not the unexpended balance has been reduced significantly. If not, Region IV will discuss with CMB management the possibility of withholding APNEP's FY2010 §320 grant award.
- Region IV will no longer approve APNEP project and budget periods exceeding seven years. Beginning in FY2010, APNEP project and budget periods will not exceed five years.
- Region IV and CMB will take steps to change APNEP's grant cycle to a July 1 - June 30 cycle.
- In FY2010, the APNEP Director and DENR management will put in place a process that expedites the draw down of old APNEP funds and ensures the timely draw down of all future §320 awards.

Thank you again for participating in the PE process and for DENR's support of APNEP. We welcome any additional thoughts you may have either about the evaluation process itself or about

² "NEPs that spend most of their CWA Section 320 funds on salaries and expenses should set an equivalent expenditure target for the one-year period following the NEP grant award dates. Those NEPs should draw down that targeted amount by September 30 of the following fiscal year.

- Each NEP should aim to spend 50 percent or more of CWA Section 320 funds budgeted in an annual work plan within 18 months of the assistance award date.

- NEPs that are uncertain about whether they will complete a project within the two-year project budget window should notify the EPA Project Officer to discuss approaches for achieving project goals and bringing the project to closure by the approved project end date."



EPA's involvement in the implementation of the APNEP CCMP. If you have any questions or comments, please contact me or Dr. Bernice Smith, Chief, Coastal Management Branch, at (202) 566-1244.

Sincerely,



Paul Cough, Director
Oceans and Coastal Protection Division

cc: William L. Crowell, Jr., Director,
Albemarle-Pamlico National Estuary Program
Dr. John F. Thigpen, Albemarle-Pamlico NEP Policy Board Chair
Suzanne Schwartz, U.S. EPA
Deborah Nagle, U.S. EPA
Darrell Brown, U.S. EPA
Dr. Bernice Smith, U.S. EPA
Linda Rimer, U.S. EPA RTP
Tom Welborn, U.S. EPA Region IV
David Parker, U.S. EPA Region IV
Steven Blackburn, U.S. EPA Region IV
Dr. Curtis Bohlen, Director, Casco Bay Estuary Partnership
Marilyn Katz, U.S. EPA



Attachment: 3 2010 NCDENR Program Evaluation Response Letter





North Carolina Department of Environment and Natural Resources

Beverly Eaves Perdue
Governor

May 19, 2010

Dee Freeman
Secretary

Mr. Paul Cough
Director, Oceans and Coastal Protection Division
US Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Mail Code: 4504T
Washington, DC 20460

Dear Mr. Cough:

I am writing to inform you of the actions that the North Carolina Department of Environment and Natural Resources (DENR) has taken in response to the challenges presented in the December 15, 2009 letter reporting the results of the Environmental Protection Agency's (EPA) 2009 Program Evaluation (PE) of the Albemarle-Pamlico National Estuary Program (APNEP).

I am pleased that APNEP passed the 2009 Program Evaluation and remains eligible for continued funding under §320 of the *Clean Water Act* (CWA). APNEP strives for a strong science-based program for the protection and restoration of our estuary of national significance. The program also works to support core CWA programs, as well as the DENR *Strategic Plan* and the *NC Coastal Habitat Protection Plan*.

Additionally, I am pleased with the recognition of APNEP's many partnerships, successes, and strengths. I assure you DENR will work to further strengthen the program and address the challenges presented in the review letter during the next PE cycle.

The following provides an update on each of the three challenges presented in the December 15th letter:

I. Maintaining Visibility and Independence

The PE letter noted a concern regarding APNEP's relocation to the Division of Natural Resource Planning and Conservation. Effective July 1, APNEP's position within the DENR structure will change. APNEP will become part of a new division which we are planning to call the Division of Conservation. This new division is a merger of several programs within the Department that focus on voluntary conservation activities. Included with APNEP in this new division are the former Division of Soil and Water Conservation, the Natural Heritage Program, the Stewardship Program, and the Conservation Incentives Program. By consolidating these programs, we hope to increase their effectiveness, and strengthen partnerships within the Department. We also believe that this new division will be able to more effectively draw upon existing relationships with outside agencies and organizations. We believe that this change will also reflect Governor Perdue's efforts to increase effectiveness and streamline state government.

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The Secretary's Office has very close ties with APNEP and its Policy Board. It is my intent that the program's inclusion in our newly structured Division of Conservation should strengthen its role within the department; and, in fact, APNEP should be in a position to increase its ability to influence DENR's conservation implementation activities with the new emphasis this division will have on conservation. We will include EPA and the Policy Board in our monitoring of the program and the application of performance measurements used to judge the success of the program within this structure. Most importantly, however, APNEP will enjoy my full support as we move ahead with the program, and my office will insist on its demonstration of environmental progress in achieving the program's goals.

2. Demonstrate Environmental Progress

As the EPA acknowledged, indicator development and monitoring plan design typically take several years to complete, and APNEP is working to accomplish this important task with input from its many partners. During 2010, the APNEP Science and Technical Advisory Committee (STAC) will conduct an ecosystem assessment to evaluate present conditions and provide a measure of baseline conditions throughout the study area. This information will be used to measure the amount of environmental change that has occurred since the initial estuarine study. APNEP has contracted with the University of North Carolina to assist in this effort.

The APNEP Policy Board adopted a new approach to addressing and integrating environmental monitoring in the Comprehensive Conservation and Management Plan (CCMP) at its December 16th, 2009 meeting: the Program will use an Ecosystem Based Management (EBM) paradigm as a framework for the new CCMP. APNEP staff are currently working on the new CCMP, with the assistance of an EBM implementation team composed of five Policy Board members, representatives of the NC Division of Water Quality and the US Fish and Wildlife Service, and faculty from the Virginia Institute of Marine Sciences. Also, a college intern, supported in whole by DENR, will assist during the summer of 2010 in drafting the new CCMP.

Advantages of the new EBM approach are numerous:

- This is a significant action by the Program to further the connection between policy development and environmental improvements.
- The PE letter stated that APNEP should consider developing a strategy to achieve on-the-ground environmental results and develop a tool for measuring the environmental progress resulting from implementation of program-supported projects. The EBM approach is well suited for this purpose and will allow APNEP to adapt its approach over time to address emerging issues.
- Most importantly, APNEP staff are working with DENR divisions to integrate their environmental priorities into the new CCMP using the EBM approach. Better integration between the program and DENR divisions will result in an increased level of support that will benefit APNEP and increase its potential to produce measurable environmental results.

I believe that the Program's EBM approach will be successful and emerge as a model for other NEPs. I believe that these actions will make significant progress toward development of a program strategy for measuring environment improvements.

Mr. Paul Cough
May 19, 2010
Page 3

3. Expedite Funds Draw Down

APNEP has taken significant steps over the past few months to expedite the draw-down of the unexpended balance of \$769,805 from the FY2007-2008 and FY2008-2009 appropriated CWA \$320 grant funds. Since January 14th, 2010, APNEP staff have encumbered funds for FY2009 awarded projects, including the Climate Ready Estuary Grant, and awarded grants for on-the-ground community demonstration, restoration and research projects, for a total of \$596,005. The remaining funds (\$173,800) are currently being encumbered under additional contracts or other expenditures. It is expected that all projects will be completed by December 31 and all funds will be expended by February 1, 2011.

Additionally, APNEP and DENR have taken the following steps to ensure that \$320 funds are drawn down in an expedited manner in the future:

- The APNEP Director, the Director of the Division of NRPC, and the DENR Budget Analyst meet monthly to review the budget and implement steps to ensure efficient budgeting and the timely draw-down of all \$320 awards.
- The APNEP Director and Natural Resource Planning Director meet bi-weekly to address progress on all aspects of the program, including fiscal issues, and ensure progress on PE Challenges.

We also look forward to working with the EPA in implementing a process that will allow EPA Region IV and Coastal Management Branch to change APNEP's grant cycle to a July 1- June 30 cycle to match the state fiscal year.

Thank you again for noting APNEP's numerous strengths and identifying a few challenges to enhance the Program. Please feel free to contact me, Assistant Secretary David Knight or APNEP Director Bill Crowell, if you have any additional comments regarding APNEP.

Sincerely,



Dee Freeman

cc: David Knight, DENR Assistant Secretary for Natural Resources
William L. Crowell, Jr., Director, Albemarle-Pamlico National Estuary Program
Tony Reeve, Chair, Albemarle-Pamlico National Estuary Program Policy Board
Bernice Smith, Chief, Coastal Management Branch, US EPA
Marilyn Katz, Coastal Management Branch, US EPA
Steven Blackburn, US EPA, Region IV
Linda Rimer, US EPA, RTP, NC



Attachment 5: Sample Year-end Budget Report (Xtnd)

ACCOUNT	DESCRIPTION	BUDGET	CURRENT	QUARTERLY	TO DATE	BALANCE	ENCUMBRANCES	UNENCUMBERED	RATE
***** A C T U A L *****									
531212	SPR-REG SALARIES-RECT	214,606.00	15,551.79	50,511.95	287,382.67	7,223.33	.00	7,223.33	.97
531462	SPR-REG LONGVTV PAY-REC	1,616.00	.00	1,616.00	1,616.00	.00	.00	.00	1.00
531512	SPR-REG SEC CONTRIB-RECT	15,467.00	3,473.34	3,486.73	14,481.63	985.37	.00	985.37	.94
531522	REG RETIRE CONTRIB-RECT	27,421.00	2,053.61	5,527.15	27,420.64	.36	.00	.36	1.00
531552	WED LNS CONTRIB-RECTS	19,724.00	1,643.76	4,931.28	19,724.00	.00	.00	.00	1.00
531576	FLEXIBLE SPENDING SAVINGS	388.00	26.67	80.01	377.94	10.06	.00	10.06	.97
531XXX	PERSONAL SERVICES	279,222.00	20,449.07	65,647.12	271,002.88	8,219.12	.00	8,219.12	.97
532140	EDU/ADM/UT SERVICES	82.00	.00	81.12	81.72	.28	.00	.28	1.00
532141	LAN SUPPORT SERVICES	189.00	108.37	188.71	159.71	29.29	.00	29.29	.95
53217002	ARMY SVC-TENR AGENCY SV	13,071.00	.00	.00	11,777.13	21,290.87	.00	21,290.87	.16
532196002	RESTORER-PULL BELLY SVC	59,532.00	.00	.00	5,000.00	59,532.00	15,000.00	44,532.00	.25
532199017	MISC-WATER IMPROVE STUD	65,810.00	.00	5,000.00	5,000.00	60,810.00	60,810.00	.00	1.00
532199018	MISC-HARRING SERVICES	99,833.00	3,468.93	19,802.43	26,818.23	89,243.35	8,452.40	81,091.35	.18
532199020	MISC-ENTRION TESTING SVC	27,114.00	.00	24,364.54	24,364.54	2,749.49	2,749.49	.50	1.00
532199028	MISC-TRAINING SERVICES	109,172.00	.00	69,643.84	69,643.84	39,528.16	39,528.16	.60	1.00
532199029	MISC-RESEARCH SERVICES	19,265.00	2,302.07	2,302.07	16,670.14	2,394.86	.00	2,394.86	.88
532440	MAINT AGREEM-TRUCKS	215.00	.00	.00	61.97	153.03	.00	153.03	.29
532441	MAINT AGREEM-OTHER	715.00	.00	.00	.00	715.00	.00	.00	1.00
532517000	WORKSHOP/CONF-ROOM RENT	4,231.00	.00	.00	4,231.59	.59	.00	.59	1.00
532571	RENT/LEASE-TRUCK VEHICLE	5,200.00	94.40	5,105.60	4,944.24	155.76	.00	155.76	.93
532575	RENT/LEASE-SERVER EQUIP	1,606.00	5,000.00	1,606.00	4,932.60	1,673.40	.00	1,673.40	.93
532712	TRANS AIR-OUT STATE, IN U	4,000.00	.00	.00	938.00	3,062.00	.00	3,062.00	.23
532714	TRANSF-GRND - IN STATE	500.00	.00	.00	26.40	473.60	.00	473.60	.05
532715	TRANS GRND-OUT STA, IN US	500.00	.00	.00	112.05	387.95	.00	387.95	.22
532717	TRANS OTHER - IN STATE	387.00	.00	.00	23.83	363.17	.00	363.17	.60
532718	TRANS OTH-OUTSTATE, IN U	2.00	2.00	2.00	2.00	.00	.00	.00	1.00
532721	LODGING - IN STATE	1,470.00	72.42	2,213.44	1,095.43	3,374.98	.00	3,374.98	.73
532721900	WRKSHOP/CONF-LODGE-INT	11,428.00	.00	.00	1,299.14	2,000.86	.00	2,000.86	.29
532722	LODGING-OUT STATE, IN US	3,300.00	.00	223.25	1,011.51	588.69	.00	588.69	.63
532724	MEALS - IN STATE	36.35	.00	327.56	347.75	215.13	.00	215.13	.72
532724900	WRKSHOP/CONF-MEALS-INT	3,811.00	.00	489.70	489.70	3,321.30	.00	3,321.30	.29
532725	MEALS-OUT OF STATE, IN US	1,000.00	34.75	130.00	130.00	869.00	.00	869.00	.42
532727	MISC - IN STATE	100.00	.00	.00	4.00	96.00	.00	96.00	.04
532728	MISC - OUT STATE, IN US	100.00	.00	.00	848.55	1,106.87	.00	1,106.87	.56
532811	TELEPHONE SERVICE	2,500.00	140.31	256.37	256.37	145.44	.00	145.44	.87
532812	TELEPHONE DATA CHRG	257.00	113.77	256.97	256.97	.03	.00	.03	1.00
532813	FEDERAL PHONE SERVICES	1,100.00	71.82	214.56	214.56	16.14	.00	16.14	.77
532815	FEDERAL CALLENDARING	469.00	26.68	79.33	452.86	16.14	.00	16.14	.87
532821	COMPUTER/DATA PROCESS SV	4,453.00	2,316.63	7,954.91	2,877.64	1,576.26	.00	1,576.26	.64



APNEP

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6105 AUTHORIZED MONTHLY BUDGET REPORT Column: 6105 Start: 07/27/2012 End: 07/27/2012
 RUN DATE: 07/27/2012
 ATB6701 - FAH

1610 DEPT OF ENVIRONMENT & NATL RESOURCES
 14300 DEPT GENERAL
 14110 CFC -NAT RESOURCE PLANNING/CONSERV (NRP)
 6105 CFC -ALBERKILL-FARMICO-EPA IMPV GRN

AUTHORIZED MONTHLY BUDGET REPORT
 FOR THE PERIOD ENDING JUNE 29, 2012
 DETAIL REPORT

ACCOUNT	DESCRIPTION	BUDGET	CURRENT	QUARTERLY	ID DATE	BALANCE	ENCUMBRANCES	UNENCUMBERED	RATE
***** A C F O U A L *****									
EXPENDITURES-BUDGET AND ACTUAL									
512822	MANAGED LAN SVC CHARGE	1,560.00	614.08	1,501.41	1,501.41	58.59	.00	58.59	.96
512846	POSTAGE, FREIGHT & DELIV	100.00	6.76	5.76	47.48	52.51	.00	52.51	.47
53242001	POST-PRINTER-MAILING SVCS	6.00	.00	.00	.22	5.78	.00	5.78	.84
53242003	POST-PRINTER-POSTAL MATER	172.00	7.07	25.45	146.15	.00	.00	146.15	.15
532850	PRINT, REPR, PUBLICATION	1,828.00	19.20	835.87	992.13	.00	.00	992.13	.46
532912	MOTOR VEHICLE INSURANCE	53.00	.00	29.17	46.67	6.33	.00	6.33	.88
532930	REGISTRATION FEES	1,570.00	.00	.00	820.00	750.00	.00	750.00	.52
5329XX	UNRECORDED SERVICES	495,896.00	5,282.58	11,631.85	134,896.64	302,099.36	95,503.39	206,595.97	.58
533116	GENERAL OFFICE SUPPLIES	481.00	35.17	115.45	480.11	.89	.00	.89	1.00
533120	DATA PROCESSING SUPPLIES	268.00	.00	.00	267.66	.34	.00	.34	1.00
533158	SECURITY & SAFETY SUPP	283.00	.00	.00	69.27	192.73	.00	192.73	.24
533210001	GAS-MOR-RIGHTWAY VEHICLE	1,400.00	.00	.00	.00	1,000.00	.00	1,000.00	.00
53335001	POST VEH MTRV PRNTS-POR-MN	1,089.00	.00	.00	1,000.38	.61	.00	.61	1.00
533710	SCIENTIFIC SUPPLIES	224.00	221.52	221.42	221.32	.68	.00	.68	1.40
533800	OTHER MATERIALS & SUPP	64.00	.00	.00	63.56	.44	.00	.44	.69
5339XX	SUPPLIES	3,291.00	256.49	336.78	2,095.05	1,195.95	.00	1,195.95	.64
534314	PC/PRINTER EQUIPMENT	1,571.00	.00	.00	3,282.28	278.00	.00	278.00	.92
534319	OTHER EQUIPMENT	500.00	.00	.00	289.47	211.53	.00	211.53	.64
534713	PC SOFTWARE	1,000.00	.00	.00	.90	1,000.60	.00	1,000.60	.60
5349XX	PROPERTY, PLANT & EQUIP	5,071.00	.00	.00	3,580.67	1,490.33	.00	1,490.33	.71
535120	LICENSES & PERMIT COSTS	17.00	12.00	12.00	12.00	.00	.00	.00	.71
535440	INDIRECT (OVERHEAD) COST	23,463.00	1,706.05	5,505.81	22,780.86	682.14	.00	682.14	.29
535430	MEMBERSHIP DUES/SUBSCRIP	430.00	.00	.00	.00	430.00	.00	430.00	.00
5359XX	OTHER EXPENSES & ADJUST	23,910.00	1,718.05	5,517.81	22,792.86	1,117.14	.00	1,117.14	.95
536226	APNEP GRANTS - NGO	186,400.00	.00	7,893.67	71,635.76	95,463.24	37,498.13	57,965.01	.85
536226	APNEP GRANTS-GOVERNMENTA	133,300.00	7,984.62	20,349.19	62,212.37	71,287.63	8,281.31	63,006.32	.52
5369XX	AID & PUBLIC ASSISTANCE	300,000.00	7,484.62	28,240.86	133,248.13	166,751.87	45,779.64	120,972.23	.60
538165	1 TRF TO GREEN SQUARE	3,416.00	436.07	1,571.36	1,844.13	1,571.87	.00	1,571.87	.54
538167	1 TRF TO RYS FIRE/EMVIC	2,437.00	85.00	1,122.00	2,281.90	84.89	.00	84.89	1.01
5389XX	INTERGOVERNMENTAL TRANS	5,613.00	521.07	434.36	4,125.62	1,487.37	.00	1,487.37	.14

Attachment 6: Communication Plans



Communications Strategy

Albemarle-Pamlico National Estuary Partnership
2012-2014

I. Introduction

The Albemarle-Pamlico National Estuary Partnership (APNEP) renews and updates its core communications, education, and outreach strategies through this update to its two-year Communications Strategy. APNEP implements this plan in furtherance of its mission and in accordance with its Comprehensive Conservation and Management Plan.

II. Goals

The goal of this plan is to facilitate the implementation of APNEP's Comprehensive Conservation and Management Plan and support the Partnership's mission. Communications efforts will be prioritized and linked to CCMP objectives, actions, and associated environmental outcomes.

III. Target Audiences

APNEP engages its partners throughout the region to achieve its mission and implementation of the CCMP. The program has identified several target audiences that are well positioned to assist with actions identified in the plan. This list is not exclusive. Instead, it indicates high priority constituencies that can most effectively support and implement the CCMP. These constituencies include local government officials and community leaders; state and federal government officials; science and research community; K-12 educators; partners and funders; and media, including both traditional and digital media.

IV. Media Strategy

1. *Traditional media*

APNEP will coordinate with traditional print, television, and radio outlets to further program strategies contained within its CCMP. Traditional media offers the opportunity to enhance public awareness of regional conservation efforts and the program.

- a. **Press releases.** Press releases will publicize APNEP activities, initiatives and news. This may include but is not limited to publicizing requests for proposals, completion of joint initiatives between APNEP and its partners, and other newsworthy items. Press releases will be coordinated with designated NCDENR staff and staff of partner organizations when appropriate.
- b. **Media relations.** APNEP's staff will develop and maintain relationships with news reporters in the region that cover environmental issues. APNEP will also work through DENR's Communications Office to achieve this aim. As the opportunity arises, local media outlets will be invited to cover newsworthy events.
- c. **Opinion pieces.** APNEP staff will offer program support for Policy Board or advisory committee members who wish to publish opinion pieces regarding environmental issues substantially related to APNEP's mission. All opinion pieces must conform to Policy Board or advisory committee bylaws regarding representation of APNEP its Board or Committees.



2. Digital media

The progression of digital media forums offers an excellent opportunity for APNEP to directly and inexpensively connect with interested members of the public. APNEP will engage its audience by providing a variety of online media content. Trends, services, and capabilities within this medium change at a rapid rate, and APNEP will remain abreast of changing trends and best practices.

- a. **Website.** APNEP retains the capability to instantaneously update content. Where feasible, all program materials should be accessible or viewable at this source. The site should provide an overview of the estuarine system, provide information about the program, detail APNEP's current initiatives, and offer resources of interest to APNEP's target audiences. While current and accurate information must be available, the website must also be curated in a way that ensures navigability and relevant content for the target audience of the program. The website will also perform as a clearinghouse for important APNEP documents such as the annual work plan and budget.
- b. **Social Media.** APNEP will maintain a social media presence on platforms that effectively reach its target audience. APNEP will maintain an engaging and intelligent tone in its online communications. Currently the program maintains a presence on Facebook, Twitter, and LinkedIn, but other forms of social media will continually be evaluated for inclusion in APNEP's communication strategy. All social media relations will be conducted according to "Best Practices for Social Media Usage in North Carolina." Content on the sites should be posted in grammatically correct English. To ensure discipline and a consistent presence, this strategy recommends providing thematic content in a regular manner according to the medium and its target audience. Other program announcements and developments will also be shared as they occur. Social media sites should be regularly monitored for spam or negative commentary. Entries including spam or profane commentary may be deleted, but a record of the entry should be kept in accordance with NC's open records act. Negative but non-profane commentary is uncommon but should remain posted. Comments of this nature should be addressed in concert with the program director, with consultation from NCDENR's Communications Office if necessary.
 - i. **Twitter.** Twitter users are among the most digitally sophisticated of APNEP's audience. Many of these users are young, comfortable with technology, and/or use the service professionally. All of APNEP's content should be posted to Twitter, but the service's 140 character limit requires brevity. APNEP staff will provide regular program updates and communicate directly with other Twitter users. As news clips are updated on the website, notification via Twitter is recommended. A suggested schedule for Twitter posts is as follows.
 - Monday: Offer facts about the Albemarle-Pamlico ecosystem (#soundfacts)
 - Tuesday: Highlight people, organizations, and research in our region (#apnepspotlight)
 - Wednesday: Post a photo from our region (#sightsofthesounds)
 - Thursday: Note interactions through "Ask an ecologist" (#askanecologist) or refer to specific APNEP web content.
 - Friday: News story of the week (#apnepechoes)
 - ii. **Facebook.** Most Facebook users that subscribe to APNEP's content are members of the general public with an interest in conservation issues, and they view content on their personal time. Posts should consider this audience and provide content that is regular but carefully curated. Posts that contain information appropriate for a Twitter post can be expanded to provide more detail for Facebook posts. A major concern of many users is that programmatic content might become overwhelming, and APNEP will aim to post no more than 3 Facebook updates per week except unless extraordinary developments occur. APNEP staff will provide regular program updates and communicate directly with other Facebook users. A suggested schedule for Facebook posts is as follows:
 - Monday: Offer information about the Albemarle-Pamlico ecosystem
 - Wednesday: Sights of the sounds: post a photo from our region
 - Friday: Post news story of the week

- iii. **LinkedIn.** LinkedIn users are mostly professionals working or seeking work in the field of conservation. All APNEP staff members currently have personal LinkedIn accounts, and the group maintains both a group page and a subgroup page targeting science and technology professionals. APNEP will use this medium to offer regular program updates and communicate directly with other LinkedIn users. A suggested schedule for LinkedIn posts is as follows:
 - Tuesday: Highlight people, organizations, and research in our region
 - Friday: News story of the week
- iv. **Flickr.** APNEP shares its photographs on Flickr as well as the other social media sites referenced above. Flickr is the official photo sharing service of the N.C. Department of Environment and Natural Resources and also has limited social media capabilities. Flickr facilitates the exchange of information between partners and contractors by allowing them to instantaneously upload or download pictures for publicity purposes or to fulfill contract obligations.
- c. **Newsletter/Blog.** Historically, APNEP has digitally published a quarterly newsletter, "Soundings." The newsletter contains content on subjects including APNEP projects, partner projects, upcoming events of interest to stakeholders in the region, grant opportunities and relevant news. In order to provide more current content and better integrate information from "Soundings" with its other media offerings, APNEP has transitioned to publishing "Soundings" to a blog format. The newsletter is distributed online and is highly visible on APNEP's home page.
- d. **Mailing list.** APNEP maintains a mailing list hosted by the North Carolina state government's listmail service. Only APNEP staff can send email through this service, but listmail gives subscribers the option to instantly subscribe, unsubscribe, or have emails sent in digest form without the investment of staff resources. Because most environmental professionals communicate primarily through email, this medium enables consistent contact with that target audience. Emails are sent once every week or two, usually referring to a Soundings post and also providing other information of relevance.
- e. **News.** APNEP leverages the resources of the N.C. Department of Natural Resources, the N.C. Department of Agriculture, the Virginia Department of Conservation and Recreation, and the Virginia Department of Environmental Quality to select and post news stories online that are relevant to the program's mission. These clips provide updated daily content for APNEP's home page and are also published via RSS feed and Delicious, a social bookmarking website.

V. Branding and Program Image

APNEP will maintain a current and professional look across various media including its logo, website, newsletter, apparel, signage, and business cards. This objective cuts across all other aspects of this communications strategy by increasing program awareness and encouraging positive impressions of the program and its mission. Initiatives led or funded by APNEP will include the APNEP logo on appropriate documents, signage, and other materials.

VI. Community Engagement Efforts

In addition to its media initiatives, APNEP will implement other engagement and outreach initiatives to effectively engage its target audiences and other program constituencies.

1. **Constituent relations.** All program staff members will work to develop and maintain relationships with its constituents throughout the region, particularly as those constituencies relate to specific job descriptions. APNEP's director and policy and engagement manager will coordinate program relations with state and federal legislators in concert with legislative liaisons for both North Carolina and Virginia.



2. **Full Participation by Committee Members.** APNEP will encourage active participation by Policy Board and advisory committee members in APNEP outreach activities as they are scheduled.
3. **Incentivizing public involvement.** APNEP will incentivize the incorporation of an outreach component into each APNEP funded project. These outreach activities should emphasize APNEP as a *sponsor* or *partner*.
4. **Engagement.** Through its initiatives, APNEP will educate community leaders regarding APNEP's mission, its management plan, and relate how plan actions will affect their communities.
5. **Outreach Materials.** APNEP will maintain updated materials that provide an overview of APNEP, its mission, and the Albemarle-Pamlico estuary. These materials include case statements, program presentations, and other program documents. These materials will remain available both online and in paper form.
6. **Committee Role in Engagement.** APNEP will encourage Policy Board and advisory committee members to serve as ambassadors for APNEP in their other professional roles, including their primary employment and professional organizations. APNEP staff will share program materials that facilitate this role.
7. **Conferences.** As resources allow, APNEP will host or sponsor conferences that promote its general mission or specific initiatives.
8. **Full Membership.** APNEP staff and committees will seek to maintain full membership on APNEP boards and committees. Ad hoc committees will be created as needed and provide board members with opportunities and responsibilities to support the Program.
9. **Cooperation.** APNEP will facilitate inter- and intra-agency cooperation to achieve CCMP goals.

VII. Support of CCMP

APNEP's communications efforts are and will continue to be specifically tailored to support specific CCMP actions and objectives. All CCMP actions will be generally supported using the tools and approaches described in this strategy. Effective implementation of many CCMP actions will heavily rely upon effective communications efforts. As necessary, more detailed communications approaches will be developed for the implementation of specific CCMP actions.

VIII. Evaluation of Communications Efforts

APNEP will continually evaluate its communications plan and associated strategies to identify areas of strength and weakness.

1. **Performance Metrics.** APNEP has developed and will continue monitoring metrics of communications performance. These metrics are available through Google Analytics and integrated social media monitoring tools. Also, APNEP will evaluate communications efforts according to indicators developed to monitor the implementation and effectiveness of CCMP efforts. Results will be reported annually.
2. **Feedback.** APNEP will solicit feedback from its membership and the general public regarding its communication efforts.
3. **Social Network Analysis.** Pending available resources, APNEP will incorporate social network analysis tools into its ecosystem-based management toolkit to provide information on the structure and function of the conservation community in the Albemarle-Pamlico region. An initial study is underway, which will allow APNEP to examine the utility of these indicators for future use.



Albemarle-Pamlico National Estuary Program Outreach and Communication Strategy

2008-2010

INTRODUCTION

The Albemarle-Pamlico National Estuary Program (APNEP) has developed this outreach and communication strategy to provide guidance in fulfilling its mission and implementing the Comprehensive Conservation and Management Plan (CCMP). APNEP has determined that the most effective outreach strategy meeting the program's goals will target decision-makers and educators. However, APNEP does support efforts to inform and involve stakeholders in the APNEP region. This approach also acknowledges and complements the numerous education and outreach activities that our partners are already undertaking.

GOAL

To increase the visibility of the Albemarle-Pamlico National Estuary Program and its core partners' accomplishments toward implementing the program mission and the Comprehensive Conservation and Management Plan (CCMP).

The purpose of this Outreach and Communication Strategy is to increase support from decision makers for our present and future activities. The target audiences for this outreach plan are:

- The media;
- Local, state, and federal officials and legislators;
- Community leaders; and
- Educators

OBJECTIVES

1. Increase awareness of APNEP by having a consistent and recognizable face, message, logo, etc.
2. Create, disseminate and update complementary outreach materials to target audiences, as necessary, and maintain a quality Web site.
3. Maintain an informative newsletter.
4. Develop and maintain relationships with municipal and state officials, legislators and congressional delegates in North Carolina and Virginia.
5. Develop and maintain relationships with media reporters and editors (newspapers, TV, radio, etc)
6. Educate community leaders about ways to promote APNEP's mission and CCMP implementation and how those actions will benefit them.
7. Obtain resources to accomplish these outreach strategies.
8. Encourage active participation by Policy Board and Advisory Committee members in APNEP in outreach activities.
9. Incorporate, as appropriate, an outreach component in each APNEP funded project.
10. Evaluate Outreach Strategy on an annual basis.

STRATEGIES TO BE ACCOMPLISHED UNDER EACH NUMBERED OBJECTIVE

1. **Consistent and recognizable "face".**
 - a. Create improved, consistent written and other materials for distribution (e.g., logo, color, font, design, "branding").



- b. Maintain a current display unit to reflect our “look.”
- c. Connect, wherever possible, with the EPA’s National Program.
- d. Have board members, advisory committee members and staff attend specific meetings and events where decision-makers are present. Create a list of important events and find someone to represent APNEP at each. Examples may include meetings and events of environmental and non-profit organizations, chambers of commerce, the legislature, league of conservation voters, some trade shows, and council of governments.

2. Complementary Outreach materials and Web Site

- a. Create a presentation about APNEP as a resource for board and advisory committee members to share with other organizations.
- b. Work with N.C. DENR office of public affairs to maintain a consistent and professional program image.
- c. Create and distribute a “State of the Sounds Report” by 2010.
- d. Maintain informational handouts (case statement) and update as needed.
- e. Establish a *Wikipedia* page for the program and a presence on social networking sites including *Facebook*.
- f. Evaluate the usefulness a blog or micro-blog for the program Web site. Take action if appropriate
- g. Create a subcommittee to review, evaluate and update, if needed, Web site layout, including links, and information to meet objectives of this plan (e.g. update “look” to be consistent with new brochure, highlight current projects).
- h. Add APNEP to VA DCR web site.

3. Maintain an informative newsletter

- a. Include content relevant to APNEP projects, partner projects, upcoming events of interest to stakeholders in the region, grant opportunities and relevant news.
- b. Distribute the program newsletter monthly via email to Management Conference and other stakeholders, and have a copy accessible and free of charge for the public on the APNEP Web site.
- c. Create an online sign up form for the program newsletter for the public and members of partnering organizations.

4. Relationships with municipal, state and Congressional officials.

- a. Attend the annual spring meeting of EPA’s National Estuary Programs in Washington, D.C.
- b. Meet with congressional delegations as appropriate
- c. Generate press release(s) about APNEP congressional funding and other support.
- d. Administer educational presentations to state legislative committees as requested.
- e. Participate in events at the N.C. General Assembly where appropriate.
- f. Invite Congressional and state legislators to events where appropriate; update legislators at least once per year on APNEP activities.
- g. Meet with the staff of local Congressional offices to raise program awareness when appropriate.
- h. Continue to develop and strengthen town and municipal relationships by supporting and partnering on projects.
- i. Co-sponsor an issues forum for local decision-makers, legislators and others.

4. Media:



- a. Help support the N.C. DENR office of public affairs' database of media contacts and deadlines based on media outlets of interest to target audiences in the N.C. DENR Web portal.
- b. Develop a relationship with environmental reporters, editors and assignment desk personnel.
- c. Invite to board meetings when appropriate
- d. Respond to requests from reporters and follow up on relevant stories
- e. Disseminate press releases about upcoming APNEP events and projects.
- f. Have board members and staff write opinion/editorial pieces as needed.

5. Educate community leaders.

- a. Work with community leaders and businesses to emphasize the positive connection between economic development and a healthy environment.
- b. Recognize the positive environmental impacts of these groups within the APNEP program area (e.g. Clean Marinas).
- c. Attend community events.
- d. Use relationships with citizens' advisory committee and policy board members to strengthen ties with local communities.
- e. Develop materials highlighting local business anecdotes/testimonials about how a healthy environment is good for business.

6. Obtain Resources for Outreach Activities.

- a. Review staffing and support needed to implement APNEP's outreach and communication strategy and options for meeting these needs.
- b. Effectively communicate with the Policy Board member who represents public relations and media.
- c. Seek funding and in-kind contributions to support projects and outreach opportunities.

7. More active Board participation.

- a. Continue orientation program/ process for new board and advisory committee members.
- b. Create Ad Hoc committees as needed and provide board member with opportunities and responsibilities to support the Program.
- c. Encourage board members to represent and discuss APNEP with groups in addition to their primary affiliate/organization and emphasize joint projects.
- d. Encourage board members to represent and discuss APNEP with local, state and national representatives.
- e. Involve all board members in at least one project and/or committee per year.

8. Outreach Component in funded projects.

- a. Include an outreach component consistent with the goal and objectives described above in each APNEP project.
- b. These outreach activities should emphasize APNEP as a *partner*.

9. Evaluate Outreach Program

- a. Assess program outreach and communications progress annually and modify the Outreach and Communications Strategy as needed.



- b. Evaluate the success of the program over a longer term.

PRIORITIES AND TIME LINE

2008-2009:

1. Develop a consistent and recognizable face (written materials, web site home page) –*Strategy 1a.*
2. Update Display Board (Outreach Committee and designer). *Strategy 1b.*
3. Develop a portable presentation for Board members about the APNEP program. *Strategy 2a.*
4. Develop or enhance the following program outreach components consistent with the goals and objectives of this document:
 - APNEP’s relationship with N.C. Department of Environment and Natural Resources and Virginia Department of Conservation and Recreation.
 - Establish a contact person in charge of APNEP outreach and communications
 - Generate a fact sheet about the program
 - Staff/board training in media relations
5. Organize an event for state legislators and governor’s staff on relevant committees to educate them about APNEP
(e.g., a breakfast event. - staff and board) *Strategy 3c,d.*

2009-2010:

1. Organize a State of the Sounds Conference and develop a report for distribution. (Staff - Board) *Strategy 2b,c.*
2. Meet with local staff of congressional delegates and Governor’s staff. (Staff, Board) *Strategy 3e.*
3. Give presentations to potential partnering organizations. (APNEP staff/Board) *Strategy 2a.*
4. In mid-2009, create a subcommittee to evaluate the APNEP Web site. (Subcommittee, Staff) *Strategy 2d.*
5. Reassess the Outreach and Communications Strategy, (Outreach Committee, Staff) *Strategy 9a.*



Attachment 7: Case Statement/Informational Handouts

APNEP maintains case statements/ informational handouts for its various target audiences. The front page (below) provides an overview of the program, while the back page provides resources for each target audience. At the time of this submission, the products below are undergoing minor revisions to reflect APNEP's name change and other slight improvements.

Albemarle-Pamlico National Estuary Program

Our mission:
To identify, restore and protect the significant resources of the Albemarle-Pamlico estuarine system.

Our approach:
The Albemarle-Pamlico National Estuary Program pursues its mission with guidance and support from its advisory bodies, regional partners and its ecosystem-based Comprehensive Conservation and Management Plan. APNEP's initiatives are guided by input from a diverse group of regional partners and stakeholders. Together, we work to protect and enhance one of the nation's most valuable estuaries.

APNEP's comprehensive approach is designed to preserve the integrity of the entire estuarine ecosystem, with a special emphasis on improving water quality in the region's rivers and sounds.

APNEP was among the first of 28 National Estuary Programs established by the Clean Water Act. APNEP is a cooperative effort jointly supported by the N.C. Department of Environment and Natural Resources and the Virginia Department of Conservation and Recreation. Financial support is provided by a grant from the U.S. Environmental Protection Agency.

The Albemarle-Pamlico estuary was designated as "an estuary of national significance" in 1987, and it continues to be recognized as a nationally important resource through its recent designation as one of "America's Great Waters." With more than 3,000 square miles of estuarine waters and a drainage basin of 28,000 square miles, the Albemarle-Pamlico is among the nation's largest and most significant estuarine ecosystems. Due to the mixing of nutrients from land and sea, estuaries produce more food per acre than even the richest farmland. Estuaries provide habitat for 75 percent of America's commercial fish catch and between 80 and 90 percent of America's recreational fishing catch. In North Carolina, the Albemarle-Pamlico estuary supports billions of dollars of economic activity per year through industries including commercial and recreational fishing, tourism and shipping.

Albemarle - Pamlico

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Mailing list - bit.ly/apneplist

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Recent APNEP Accomplishments

Identify

Since 1987, APNEP has funded or supported more than 100 applied research initiatives designed to improve the working knowledge of the Albemarle-Pamlico estuarine system.

These studies are available at www.apnep.org/research-reports. Recent studies have evaluated oyster restoration approaches in the sounds, provided insights on rates of wetland habitat loss and catalogued barriers to anadromous fish migration.



Protect

Since 2000, APNEP and its regional partners have protected or restored more than 250,000 acres of land in the Albemarle-Pamlico region. Every acre helps preserve vital terrestrial habitats and natural areas while filtering runoff to the sounds. In areas of strategic importance, APNEP staff, advisory committee members and partners provide expertise and diverse stakeholder perspectives to support the development of sound public policy at the state and local level.

Restore

APNEP routinely supports ecosystem restoration efforts. Several recent hydrological restoration efforts have shown significant water quality improvements on a large scale. Shoreline restoration efforts improve wetland habitats and reduce erosion while demonstrating their value for private and public property protection. New oyster reefs filter millions of gallons of water, provide habitat for saltwater fish and increase the bounty of our coastal fisheries.

Engage

APNEP engages the stakeholders of the Albemarle-Pamlico region on many levels to improve the estuarine ecosystem. APNEP's environmental education initiatives prepare the next generation to address environmental challenges. APNEP also works among states and agencies to facilitate government cooperation at all levels, and the program's advisory structure provides a forum for hundreds of stakeholders and experts to shed light upon estuarine issues. Regional residents can stay current on program developments through various media channels and publications offered by APNEP, including a news feed, routinely published articles and social media.

Monitor

To ensure responsible stewardship of our sounds and the financial resources invested to protect them, APNEP coordinates with its agency partners to monitor and report on indicators of environmental health. The results of these monitoring efforts are compiled in a comprehensive assessment of the Albemarle-Pamlico ecosystem, which allows managers to target resources in areas where they are most needed.

Visit
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Twitter - twitter.com/APSounds

LinkedIn - [bit.ly/apnep](https://www.linkedin.com/company/apnep)
Mailing list - [bit.ly/apneplist](https://www.apnep.org)

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Resources for University Students

To achieve its mission, APNEP engages college students across the region. These efforts help the program develop cost-effective initiatives and provide applied training to the next generation of environmental scientists and managers.

Internships

APNEP hosts interns interested in ecosystem-based management, science, education, policy and law. APNEP traditionally hosts one paid REACH intern each summer (<http://portal.ncdenr.org/web/hr/reach>). Volunteer interns will be also considered on a case-by-case basis in Raleigh, Washington (N.C.), or Suffolk. A cover letter, three references and a CV may be sent via email to any APNEP staff member. Materials received before April 15 will receive priority consideration for summer positions. Interns will participate in a variety of projects and working groups, and internships often provide flexibility to meet individual goals.



Client-based Research

APNEP has partnered with graduate students and faculty from several institutions to study management issues in the Albemarle-Pamlico region. Social network analysis, ecosystem-based management frameworks and invasive species response strategies are examples of areas where APNEP has provided opportunities for work. APNEP participates in formal client-based research programs and also welcomes specific inquiries from interested students or faculty.

News and Social Media

APNEP prides itself on being a great source of current information on environmental issues in the Albemarle-Pamlico region. The APNEP website (www.apnep.org) features a daily news feed as well as routinely published articles on APNEP initiatives. Also, you can join our mailing list at www.apnep.org or find us on Facebook, LinkedIn or Twitter!

Grants

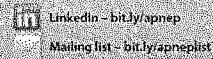
APNEP occasionally offers grants for applied scientific research in the Albemarle-Pamlico region. To be notified of grant opportunities, please join the APNEP listserv at www.apnep.org or follow us on Facebook or Twitter. APNEP also maintains a list of open grants and several grant databases at www.apnep.org/grants.



Twitter - twitter.com/APSounds

Visit
apnep.org

for more information



Mailing list - bit.ly/apneplist



Science and Technology Initiatives

APNEP's science and technology initiative engages experts from many disciplines to support ecosystem-based management approaches in the Albemarle-Pamlico region.

For more information, visit www.apnep.org/scitech.

Science & Technical Advisory Committee (STAC)

The STAC provides scientific and technical guidance to APNEP on measures to restore, protect and monitor the natural resources of the Albemarle-Pamlico region. Scientists and technical experts may indicate their interest in serving by sending a vitae or resume to APNEP's program scientist. Service on the STAC requires a moderate time commitment. Meetings are open to the public, and visiting scientists are especially welcome. For more information visit www.apnep.org/stac.

Monitoring and Assessment Teams

APNEP's monitoring and assessment teams play a key role in APNEP's monitoring design and implementation. The teams also work with the STAC and APNEP staff to develop and review ecosystem assessments, which provide a foundation for the program's decision-making efforts. Scientists and technical experts may indicate their interest in serving by sending a vitae or resume to APNEP's program scientist. Service with a team requires a minimal time commitment, and all demonstrating appropriate levels of expertise are welcome. For more information, visit www.apnep.org/ma-teams.



Grants

APNEP occasionally offers grants for applied scientific research in the Albemarle-Pamlico region. For notification of grant opportunities, please join the APNEP listserv at www.apnep.org or follow us on Facebook or Twitter. APNEP also maintains a list of open grants and several grant databases at www.apnep.org/grants.

Letters of Support

APNEP is pleased to offer letters of support for applied research initiatives that improve our understanding of the Albemarle-Pamlico region. Research objectives should align with management actions in APNEP's Comprehensive Conservation and Management Plan. Please contact APNEP's program scientist for details.

Research Reports

APNEP has financed more than 100 applied research studies since its inception in 1987. These reports are viewable online and available in a searchable database. Visit apnep.org/research-reports.

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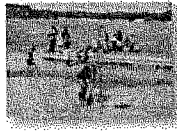
Resources for Local Governments

APNEP and its partners offer a number of services that can be used by local governments to improve their local riverine or estuarine environments. Many of these tools also provide further economic and environmental benefits for localities and the broader region in which they are situated.

Visit www.apnep.org/local-governments for more information.

Planning Tools

APNEP's partners maintain several tools that can assist local governments in planning that enhances and protects their environmental resources. A list of these tools may be found at www.apnep.org/planning-tools. Upon inquiry, APNEP staff can recommend or discuss specific tools and provide other relevant information or training based on local needs.



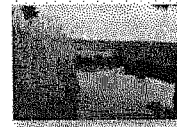
Letters of Support

Local governments in the Albemarle-Pamlico region working to secure external funding for environmental initiatives are encouraged to contact APNEP staff to inquire about a letter of support.



Environmental Expertise

APNEP engages a wide variety of scientists, managers and other experts regarding environmental affairs in the Albemarle-Pamlico region. These professionals are often available to provide expertise on local environmental challenges or help bring resources to address an issue.



Grants

APNEP routinely offers grants for restoration projects and community engagement initiatives in the Albemarle-Pamlico region. For notification of grant opportunities, please join the APNEP listserv at www.apnep.org or follow us on Facebook or Twitter. APNEP also maintains a list of open grants and several grant databases at www.apnep.org/grants.

Risk Analysis for Water Infrastructure

As part of its commitment to protect the Albemarle-Pamlico estuary, APNEP is working with federal, local and private sector partners to support drinking water and wastewater utilities as they consider how to adapt to climate pressures like flooding, hurricanes and eventual sea level rise. A member of APNEP's staff can provide further details for utilities interested in participating.



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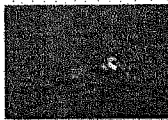


Resources for Educators

To foster public stewardship of the Albemarle-Pamlico region's natural resources, APNEP supports a variety of educational programs and initiatives for educators. For more information, visit www.apnep.org/educators or contact any member of APNEP's staff.

Sound Learning Teacher Institute

Each summer since 2002, APNEP has supported the Sound Learning Teacher Institute. Traditionally, this week-long summer opportunity has been offered at no cost to educators. During this residential program, educators experience a variety of coastal habitats and wildlife and receive instruction from some of North Carolina's most highly-regarded scientists and environmental educators. For notification of this opportunity, please join the APNEP listserv at www.apnep.org or follow us on Facebook or Twitter.



Ask an Ecologist

"Ask an ecologist" allows students and teachers to ask questions directly to APNEP staff and a network of environmental experts throughout the Albemarle-Pamlico region. Students can see their questions addressed on APNEP's home page (www.apnep.org), often by national experts on a topic. APNEP recommends sending in questions at the beginning of a unit, which allows time to respond and an opportunity to compare classroom learning with expert field observations.



Lesson Plans and Educational Materials

APNEP maintains a searchable database of downloadable lesson plans and other educational materials related to the Albemarle-Pamlico ecosystem. Lesson plans and materials are aligned to both the N.C. Standard Course of Study and the Virginia Standards of Learning.

Shad in the Classroom

APNEP is one of many partners supporting the development and implementation of the Shad in the Classroom program. This program allows students to gain hands-on experience raising American shad from egg to releasable fry. Teachers are provided with all necessary materials for raising and releasing American shad, as well as training workshops and multimedia resources designed to complement instruction.



Grants

APNEP routinely offers grants that may interest educators. In the recent past, APNEP has funded several outdoor classroom projects that support both environmental education and water quality restoration. APNEP can also provide letters of support to teachers working to secure external funding. To receive grant announcements, please join the APNEP listserv at www.apnep.org or follow us on Facebook or Twitter.



Visit [apnep.org](http://www.apnep.org) for more information

Facebook - facebook.com/APNEP
Twitter - twitter.com/AP5ounds

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Mailing list - bit.ly/apneplist

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Attachment 8: Soundings Newsletter (sample)

For latest edition see: <http://portal.ncdenr.org/web/apnep/soundings>

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"A lot of good things start in Virginia"

By Jim Hawhee, APNEP Policy and Engagement Manager
January 24, 2013

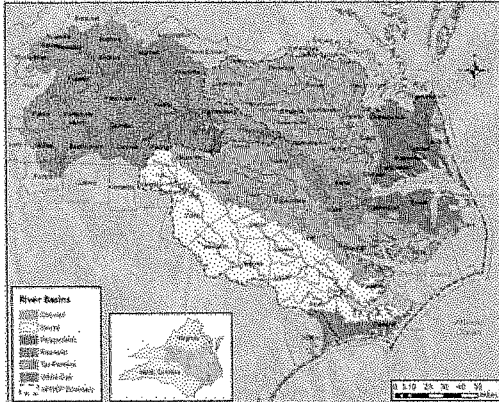


Virginia's state flag

You might be forgiven for thinking APNEP is solely a North Carolina program.

After all, you're reading this on a North Carolina government website, our headquarters are in Raleigh, and the waters of the Albemarle-Pamlico Sounds are almost entirely in the Tar Heel State.

Yet over half of the water entering Albemarle Sound comes from Virginia. With no direct outlet to the sea, this water also flows through Pamlico Sound before making its way to the Atlantic Ocean. For these reasons, the Old Dominion is an important partner in efforts to improve North Carolina's estuaries.



Click the image for a larger map of the Albemarle-Pamlico watershed

