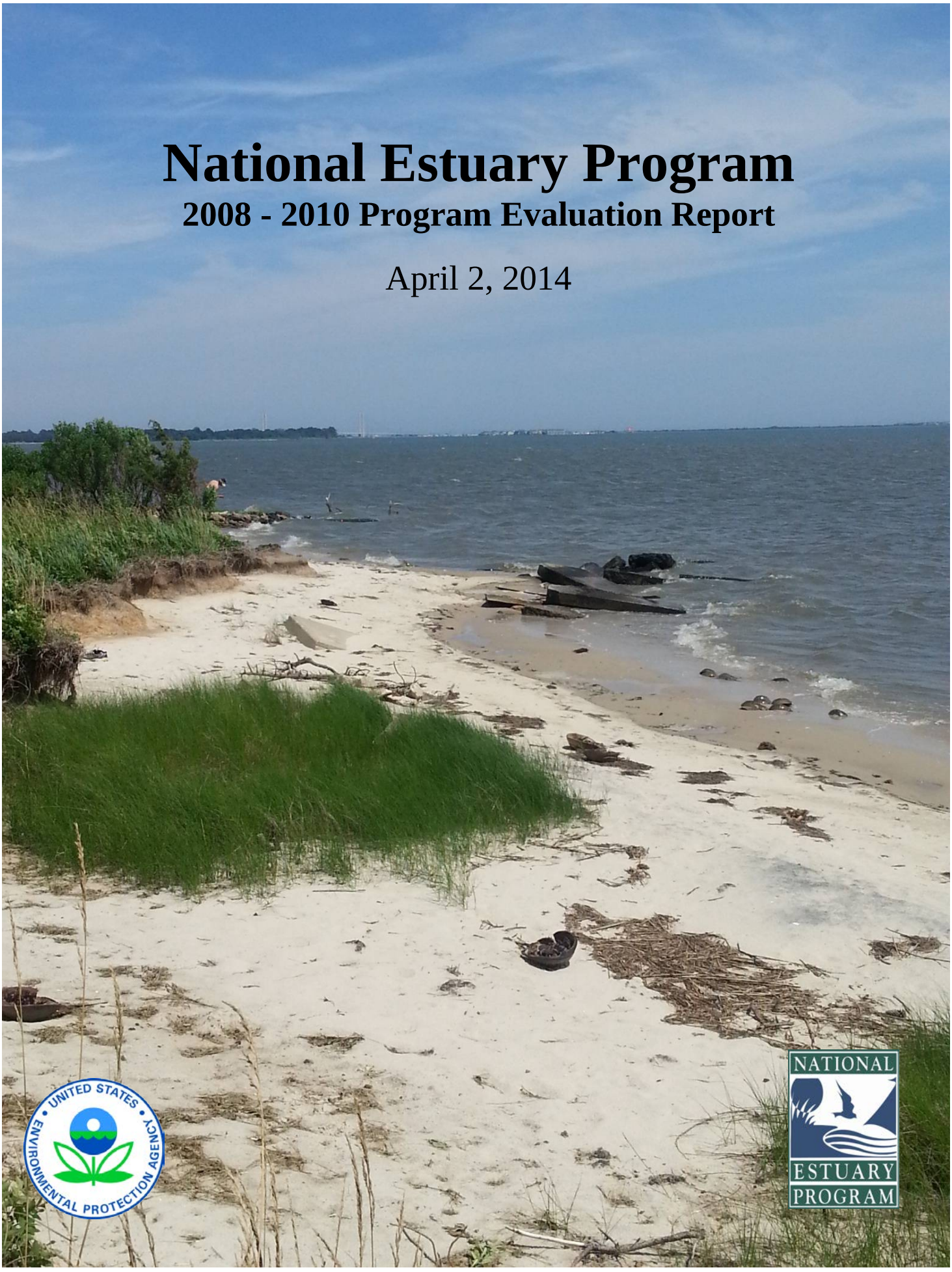
National Estuary Program

2008 - 2010 Program Evaluation Report

April 2, 2014



National Estuary Program
2008 - 2010 Program Evaluation Report

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EXECUTIVE SUMMARY

The National Estuary Programs (NEPs) are place-based watershed management entities that restore and protect 28 estuarine watersheds along the coasts of the continental U.S. and Puerto Rico. This 2008 - 2010 Program Evaluation (PE) Report summarizes the results of the United States Environmental Protection Agency (EPA)-led evaluations of the NEPs that were conducted between February 2008 and September 2010. The PE is a systematic, rigorous assessment that tells a national story about NEP accomplishments and challenges while acknowledging differences in management approaches, in ecosystem type and size, and in human impacts across the 28 watersheds. The 2008 - 2010 PE results reveal the following:

- All 28 programs achieved a *pass* rating and were eligible to receive funding under Clean Water Act (CWA) Section 320.

- Every NEP and its partners supported implementation of CWA core programs.

- Every NEP made progress addressing the challenges that were highlighted during the 2004 - 2006 PE.

- The NEPs' three main strengths were:
  (1) Outreach and public involvement (78 percent) (e.g., newsletters, ecological exhibits, and creation of diversity committees).
  (2) Assessment and monitoring (46 percent) (e.g., indicators in place, volunteer monitoring groups, and monitoring plans approved by management conferences).
  (3) Habitat protection and restoration (36 percent) (e.g., recovering sea grass, improving habitat for salmonids, and restoring impounded marshes).

- The NEPs' three main challenges were:
  (1) Financial management (50 percent) (e.g., inadequate long-term funding mechanisms, insufficiently diverse funding sources, and unexpended grant funds).
  (2) Program planning and administration (46 percent) (e.g., need to maintain staffing levels, need to improve program visibility, need to revise the comprehensive conservation and management plan (CCMP), and need to incorporate emerging issues).
  (3) Water quality (36 percent) (e.g., need to address nonpoint source pollution by identifying sources, need to identify sites where best management practices are needed for nutrient reduction, and need to establish water quality targets to advance seagrass restoration).

- The NEPs leveraged $3.5 billion during the 2008 - 2010 period, which represented a 100 percent increase over funds leveraged by NEPs reviewed during the 2004 - 2006 review cycle.

The PE process has proven to be an effective evidence-based management process that ensures national program accountability and transparency and demonstrates the value of wise federal investment in estuarine and coastal watershed restoration and protection at the local and regional levels.

I. National Estuary Program Overview

Established under Section 320 of the Clean Water Act (CWA) of 1987, the National Estuary Program (NEP) identifies nationally-significant estuaries threatened by pollution, development, or overuse, and requires the preparation of comprehensive conservation and management plans (CCMPs) to ensure the long-term ecological integrity of those estuaries. The approach to estuarine protection and management reflected in §320 emphasizes the importance of collaboration among multiple users and stakeholders in support of the notion that through collaborative planning.

To date, 28 estuaries have been designated as estuaries of national significance (see map on page three). The estuaries range greatly in terms of geographic area and number of political jurisdictions within their watersheds. The "estuary of national significance" designation reflects both that these estuaries face chronic challenges to their water quality and the health and abundance of their living resources and that they are economically important to local, regional, and national economies.

Once an estuary is accepted into the NEP, a management conference is convened, which typically includes EPA employees, employees of other federal agencies, state and local government representatives, non-governmental organizations, local for-profit entities, and members of the general public. Each management conference establishes overall policy for an NEP, identifies the NEP's priorities and objectives, and develops a CCMP, which serves as the blueprint for protecting and restoring the estuary.

According to CWA §320, each management conference is required to:

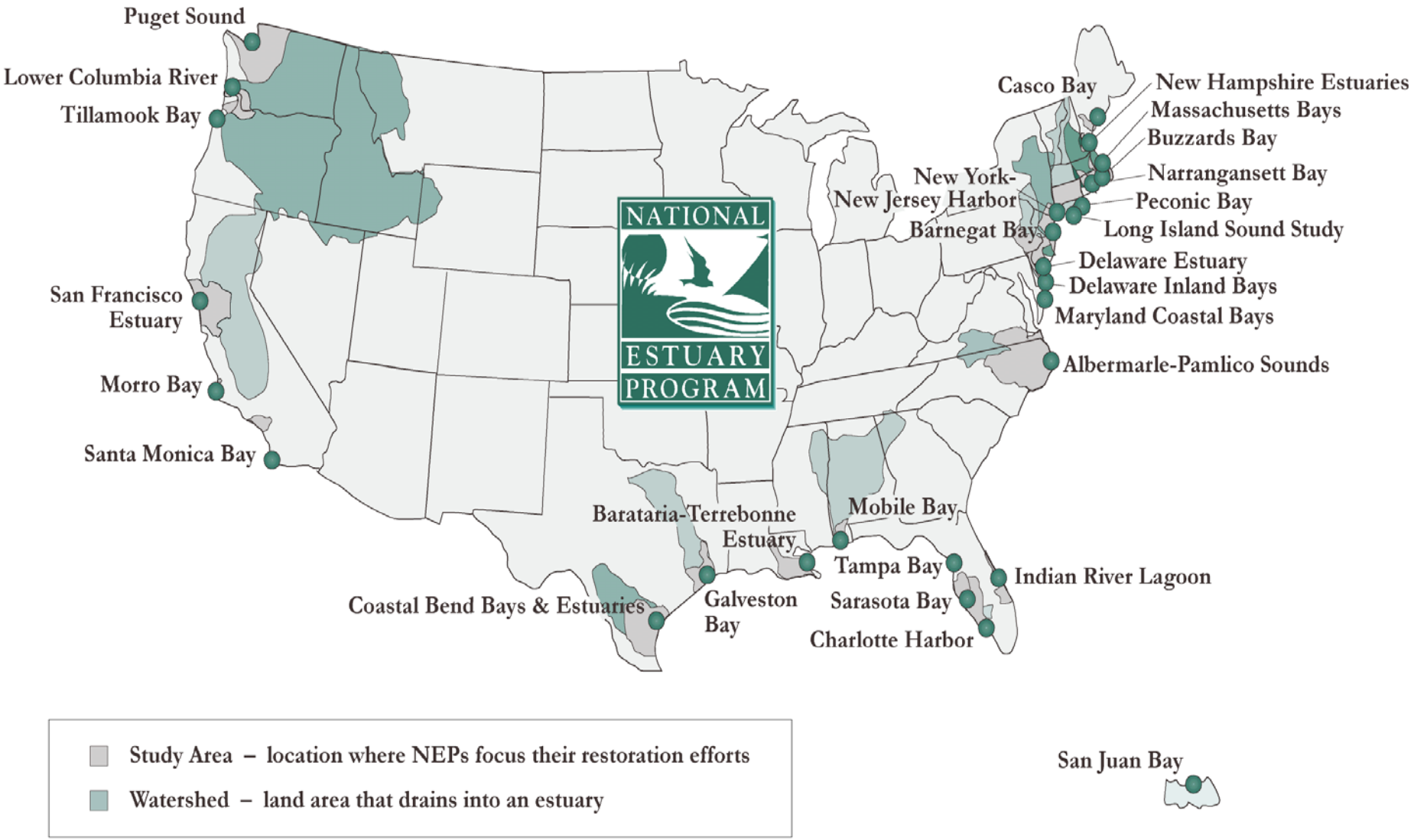
- assess water quality, natural resources, and human use trends
- characterize and identify the causes of environmental problems
- develop the relationship between in-place loads and point and nonpoint loadings of pollutants to the estuarine zone and between the potential uses of the zone, water quality, and natural resources
- develop a CCMP that recommends priority corrective actions and compliance schedules
- develop plans for the coordinated implementation of the CCMP by the states as well as federal and local agencies participating in the conference
- monitor the effectiveness of actions taken pursuant to the CCMP; and review all federal financial assistance programs and federal development projects.

Although each of the estuaries in the NEP is unique, most of the 28 programs face the following environmental challenges: (1) alteration of natural hydrologic flows, (2) aquatic nuisance species, (3) impact of climate change, (4) declines in fish and wildlife populations, (5) habitat loss and degradation, (6) nutrient loads, (7) pathogens, (8) stormwater, and (9) toxics. Each NEP works with their many stakeholders and uses their expertise to collectively develop specific tailored actions that address the environmental problems facing the estuary.

The NEPs take into account the socio-economic dimensions of their estuarine watersheds. When developing watershed priorities, the NEPs' representatives focus on maintaining the integrity of the entire watershed – its chemical, physical, and biological properties, as well as its economic, recreational, and aesthetic values.

In addition to being a management conference participant, EPA provides financial and technical assistance to the NEPs, promotes technical transfer among the 28 programs, and reviews program performance and progress the NEPs make after implementing the CCMPs.

The 28 National Estuary Programs, their study areas, and surrounding watersheds



National Estuary Program
2008 - 2010 Program Evaluation Report

II. Program Evaluation Introduction

The National Estuary Program (NEP) is the U.S. Environmental Protection Agency's (EPA) flagship non-regulatory watershed protection and restoration program. The NEP is a place-based and stakeholder-driven EPA grant program designed to protect and restore estuaries in 28 estuarine watersheds along the coasts of the continental U.S. and Puerto Rico. The NEP is authorized and funded under §320 of the Clean Water Act (CWA) and is listed under two EPA Strategic Plan Goals--Goal 2: Clean and Safe Water, and Goal 4: Healthy Communities and Ecosystems.

During 2008 - 2010, EPA used the September 2007 NEP Program Evaluation (PE) Guidance to assess all 28 NEPs' progress in: (1) implementing their long-term Comprehensive Conservation and Management Plans (CCMPs), and (2) achieving near-term results. EPA used the PE findings to determine whether or not each NEP merited continued funding under §320.

This 2008 - 2010 Program Evaluation Report explains the PE process and summarizes the results of the 28 evaluations conducted by EPA between February 2008 and September 2010. PE Teams comprised of EPA Headquarters and Regional staff and, in some cases, an NEP Director who served in an *ex-officio* capacity, carefully reviewed documentation provided by the NEPs about their 2008 through 2010 activities and accomplishments. The teams also conducted on-site visits to the NEPs and developed a findings letter highlighting: (1) whether each NEP had effectively addressed challenges identified during the previous PE, (2) each NEP's strengths, (3) each NEP's challenges, (4) each NEP's activities supporting CWA core programs (page ten describes the CWA core programs), and (5) whether each NEP was eligible to continue receiving funding under §320.

III. Background, Framework, and Process

This section summarizes the purpose, history, and refinement of EPA's PE. It also describes the PE framework, criteria, process, and review schedule for evaluating each NEP.

A. Background

In accordance with CWA §320, each of the 28 NEPs periodically develops and implements a CCMP that identifies priority water quality and living resource problems in the estuary and establishes priority actions that will improve water quality, habitat, and living resources. Each NEP's CCMP is based on a scientific characterization of the estuary and is developed and approved by a broad-based coalition of stakeholders. The original CCMP is approved by the EPA Administrator and delegated to the Regions for daily oversight.

Funding the NEPs is contingent upon Congress annually appropriating funds for the §320 program. EPA uses the PE results to determine the progress an NEP has made toward implementing its CCMP and its continued eligibility for the funding provided by Congress. In addition, the PEs are a valuable tool for:

- Highlighting environmental results.
- Highlighting strengths and challenges in program management.
- Demonstrating continued stakeholder commitment.

- Transferring lessons learned within EPA, among the NEPs, and with other watershed programs.
- Assisting EPA in making resource allocation decisions to strengthen each NEP.

It is not the purpose of the PEs to rank order or compare the NEPs.

The NEP PE process has been regularly assessed and revised over the years to address the dynamic nature of program management and evaluation needs. EPA began conducting NEP PEs on a biennial basis in 1997. In 2000, the process was streamlined and the review cycle was extended from every two to every three years.

In 2006, EPA again re-evaluated the PE process in response to increased federal requirements for accountability and transparency in reporting results of federal program investments. The re-evaluation led to development, in 2007, of an NEP PE guidance document designed to improve EPA's ability to objectively and transparently assess the programmatic and environmental achievements of the 28 NEP estuaries. Under this guidance, PE reviews are carried out on a triennial basis, (i.e., each NEP was reviewed once during the 2008 - 2010 time frame).

B. Framework

EPA used the NEP evaluation process to collect and assess significant amounts of data about individual NEP accomplishments and environmental outcomes. During the 2008 - 2010 evaluation period, EPA used the following framework described in the 2007 PE Guidance to evaluate the 28 NEPs:

- Standardized and tiered performance measures of NEP programmatic activities; the NEPs submitted information about the programs and EPA evaluated their performances regarding the following topics:
    (1) Financial Management
    (2) Tracking/Reporting
    (3) Program Planning and Administration
    (4) Outreach and Public Involvement
    (5) Research
    (6) Assessment and Monitoring
    (7) Reporting
- A logic model-based work plan summary format to describe the NEPs annual work plan goals, outputs, outcomes, and the linkages of outputs and outcomes (where possible) to reductions of environmental stressors. The NEPs summarized their goals and activities and indicated progress in meeting the environmental milestones established for their goals under the following topics:
    (1) Habitat
    (2) Water Quality
    (3) Living Resources
    (4) Healthy Communities
    (5) Tools
    (6) Training
    (7) Direct Assistance[1]
- Annual reports depicting the number of habitat acres protected and restored by habitat type.
- A description by each NEP of its support for CWA core programs.

[1] Assistance provided by NEPs to towns and cities addressing issues related to specific environmental problems (e.g., climate change, low impact development).

- A description of external factors affecting each NEP's ability to meet its work plan goals and/or to achieve progress implementing its CCMP and adaptive management strategies used by the NEP to manage CCMP implementation in the face of those constraints. Providing this description was optional.
- A description of how an NEP had addressed each challenge identified in the previous PE findings letter.
- A budget summary with an accompanying brief narrative describing how EPA post-CCMP approval funding was used.
- NEP onsite visits providing EPA with the opportunity to observe and learn first-hand about on-the-ground NEP projects and to meet with key NEP stakeholders and partners.

C. Process

Each NEP's PE team reviews the NEP's relevant documents, and discusses with the NEP Director the documents, the NEP's strengths and challenges, and the agenda for the on-site visit. Once a PE team completes its visit of the NEP and the review of the NEP's relevant documents the PE team provides each program with a findings letter fully describing the NEP's strengths and challenges and indicating a rating of *pass, conditional pass,* or *fail*[2]. The findings letter also includes recommendations for improvement along with proposed timeframes for implementing the recommendations. The progress made by NEPs in addressing these challenges is then evaluated during the next PE cycle. Figure 1 lists each NEP and the year in which a PE team reviewed its program.

Figure 1: Program Evaluation Groups and 2008 - 2010 Review Cycle

Group A 2008 (9 Programs)	**Group B 2009 (10 Programs)**	**Group C 2010 (9 Programs)**
Barataria-Terrebonne	Albemarle-Pamlico Sounds	Charlotte Harbor
Casco Bay	Barnegat Bay	Columbia River
Coastal Bend Bays	Buzzards Bay	Long Island Sound
Indian River Lagoon	Delaware Inland Bays	Maryland Coastal Bays
Massachusetts Bay	Galveston Bay	Mobile Bay
Peconic Bay	Narragansett Bay	Morro Bay
San Juan Bay	New York / New Jersey Harbor	Piscataqua Estuaries
Tampa Bay	Partnership for the Delaware Estuary	Puget Sound
Tillamook Bay	Santa Monica Bay	San Francisco Estuary
--	Sarasota Bay	--

IV. 2008 - 2010 National Estuary Program PE Findings

This section summarizes findings from the 28 PEs conducted from 2008-2010, describing the data for two national indicators that EPA requires all NEPs to report on annually: (1) habitat protected and restored, and (2) dollars leveraged by CWA Section 320 funds as well as local indicators of progress each NEP uses to report environmental progress to its local stakeholders, partners, and the general public. These

[2] Each rating has well described thresholds in the 2007 PE Guidance.

indicators are used in publications, such as NEP *State of the Bay* reports, which are included in each NEP's PE submission. This section also summarizes: (1) NEP support for CWA core programs, (2) progress made on challenges highlighted during the 2004 - 2006 PE, and (3) organizational capacity and program management strengths and challenges across all 28 NEPs.

Summation of the 28 PEs findings letters:

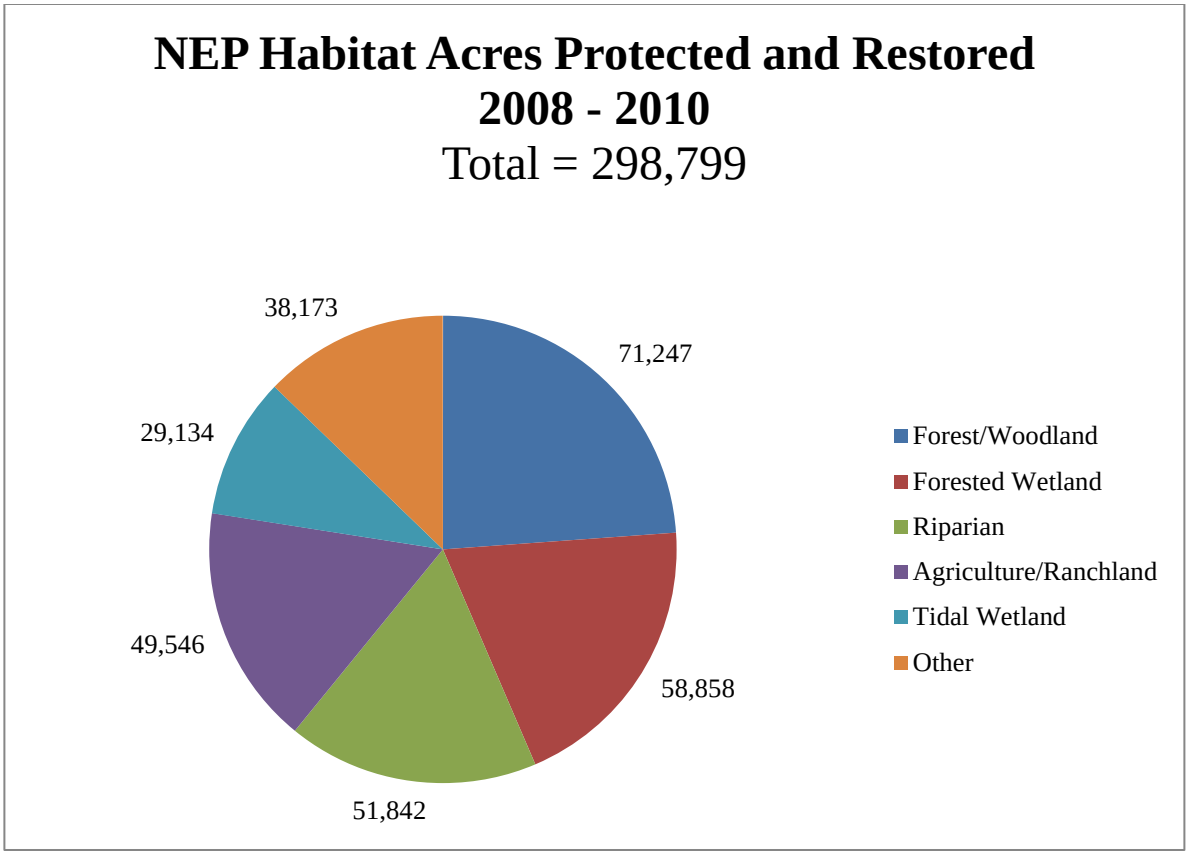
- All 28 programs achieved a *pass* rating and were eligible to receive funding under §320.
- Every NEP and its partners supported implementation of CWA core programs.
- Every NEP made progress in addressing the challenges highlighted during its 2004 - 2006 PE.
- Strengths and challenges were identified in every NEP.

In several instances, the PE team rated NEP's effectiveness addressing one component of a topic as a strength while also finding that the NEP faced challenges addressing another component of that same topic. For example, a PE team could have rated as a strength an NEP's ability to obtain funds from local governments while also rating as a challenge that same NEP's lack of a sustainable finance strategy.

A. Environmental Results

The NEPs and their multiple federal, state, and local partners successfully implemented the CCMPs to improve water quality, habitat, and living resources. Their efforts have produced on-the-ground, measurable environmental results leading to improved water quality, increased control and management of erosion and flooding, and increased amounts of native habitat for living resources. Examples of NEP activities yielding environmental results include: creation of artificial reefs; planting riparian buffers; acquiring upland open space for conservation; and re-connecting tidal flow to wetlands. The 2008 - 2010 PEs revealed that the NEPs and their partners restored and protected 298,799 acres of habitat. Figure 2 depicts that acreage by habitat type.

Figure 2: Acres Protected and Restored by Habitat Type



B. Leveraging

The NEPs successfully leverage federal grants to support implementation of their CCMPs. The NEPs obtained these funds by building relationships with Federal, state, local, non-profit, and private-sector partners. In particular, these funds were used to protect and restore hundreds of thousands of acres of habitat and reduced point and nonpoint sources of pollution. The NEPs played primary, significant, or support roles in leveraging these additional resources. Definitions of leveraging roles:

- Primary role: indicates that the NEP played the central role in obtaining leveraged resources.
- Significant role: indicates that the NEP actively participated, but did not lead, the effort to obtain additional resources.
- Support role: indicates the NEP played a minor role in channeling resources toward CCMP implementation.

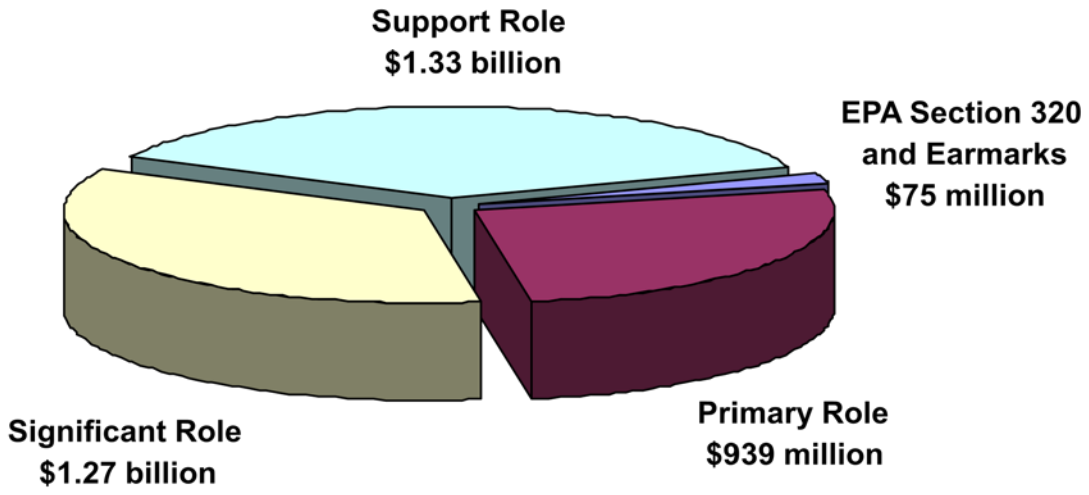
From 2008 - 2010 the NEPs played a primary role in leveraging $939 million, achieving a ratio of $13 for every $1 of EPA grant funds provided. When all roles are combined, the NEPs leveraged $3.5 billion. Figure 3 depicts the funds leveraged by roles as compared with funds appropriated over the three-year period.

Figure 3: Funds Leveraged by NEP Role

2008 - 2010 Leveraging

Over the three-year review period, NEPs received $75 million in EPA funding and generated:

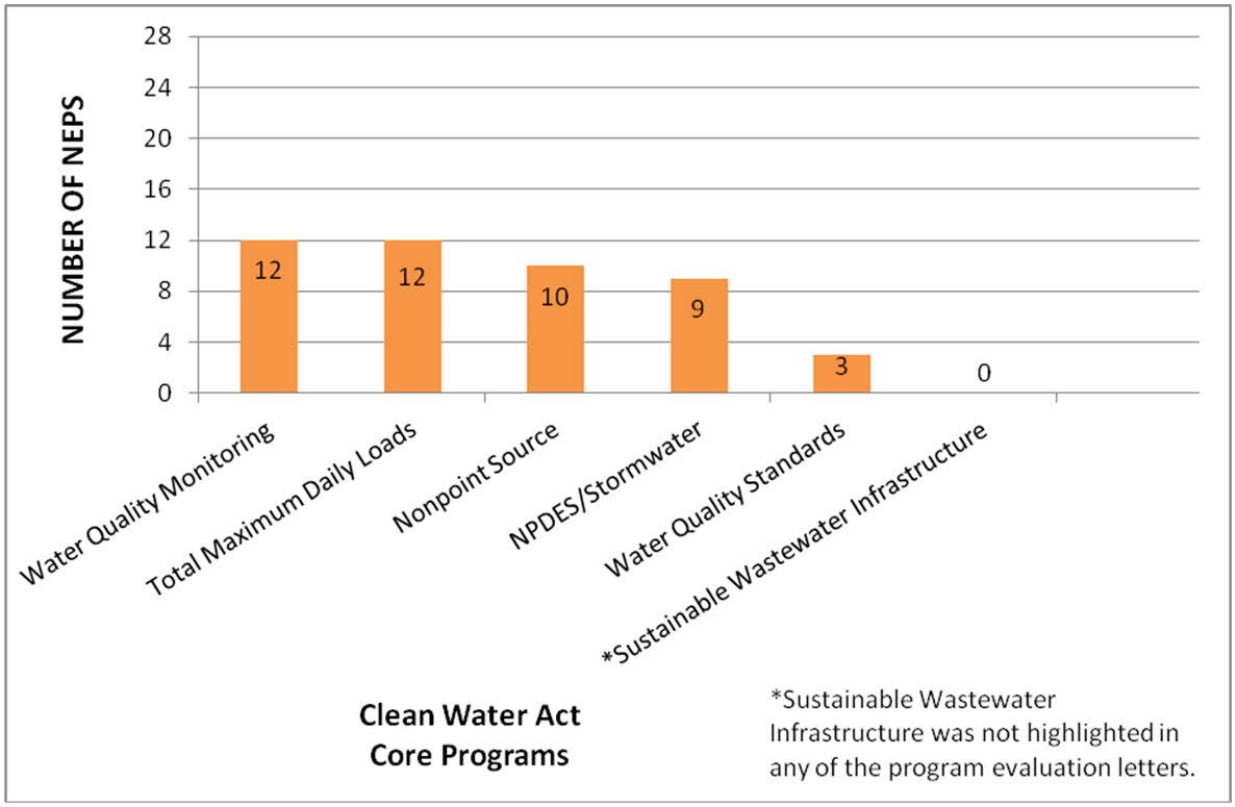
- $3.5 billion (all roles)
- $2.6 billion (significant and supporting role)
- $939 million (primary role only)



C. Support for Clean Water Act (CWA) Core Programs

The goal of the CWA is to restore and maintain the chemical, physical, and biological integrity of our nation's water. The NEPs and their partners supported implementation of CWA core programs[3] through a wide-range of actions designed to improve water quality and address habitat loss and degradation, including reduction of the pollutants that degrade habitat and adversely impact the living resources that inhabit those areas. Figure 4 depicts the number of NEPs supporting each CWA core program and Appendix 1 describes specific examples of NEP CWA core programs support.

Figure 4: NEP Support for CWA Core Programs Identified in 2008 - 2010 PE Findings Letters



D. Progress Made Addressing Challenges Identified in 2004 - 2006 Program Evaluations

All of the NEPs have made progress addressing the challenges identified during the 2004 - 2006 PEs in areas such as: (1) Financial Management (e.g., improved management of annual 320 funds and produced finance fund raising plans), (2) Outreach and Public Involvement (e.g., developed outreach strategy to advanced smart growth principles and targeted outreach and marketing activities towards seasonal residents in the study area), (3) Program Planning (e.g., increased staff and improved work plan activities related to monitoring), and (4) Tracking (e.g., developed database to track CCMP actions and developed mechanism for collecting and analyzing monitoring data). See Appendix 2 for more specific examples of how the challenges were addressed.

[3] Clean Water Act core programs are: Water Quality Monitoring, Total maximum Daily Loads, Nonpoint Source Pollution, National Pollutant Discharge Elimination System (NPDES)/Stormwater, Water Quality Standards, and Sustainable Wastewater Infrastructure.

E. Common Strengths and Challenges

The PE findings document the most common strengths and challenges among the 28 NEPs. The three main strengths for the 28 Programs were:

- Outreach and public involvement (78 percent) (e.g., newsletters, ecological exhibits, and creation of diversity committees).
- Assessment and monitoring (46 percent) (e.g., indicators in place, volunteer monitoring groups, and monitoring plans approved by management conferences).
- Habitat protection and restoration (36 percent) (e.g., recovering sea grass, improving habitat for salmonids, and restoring impounded marshes).

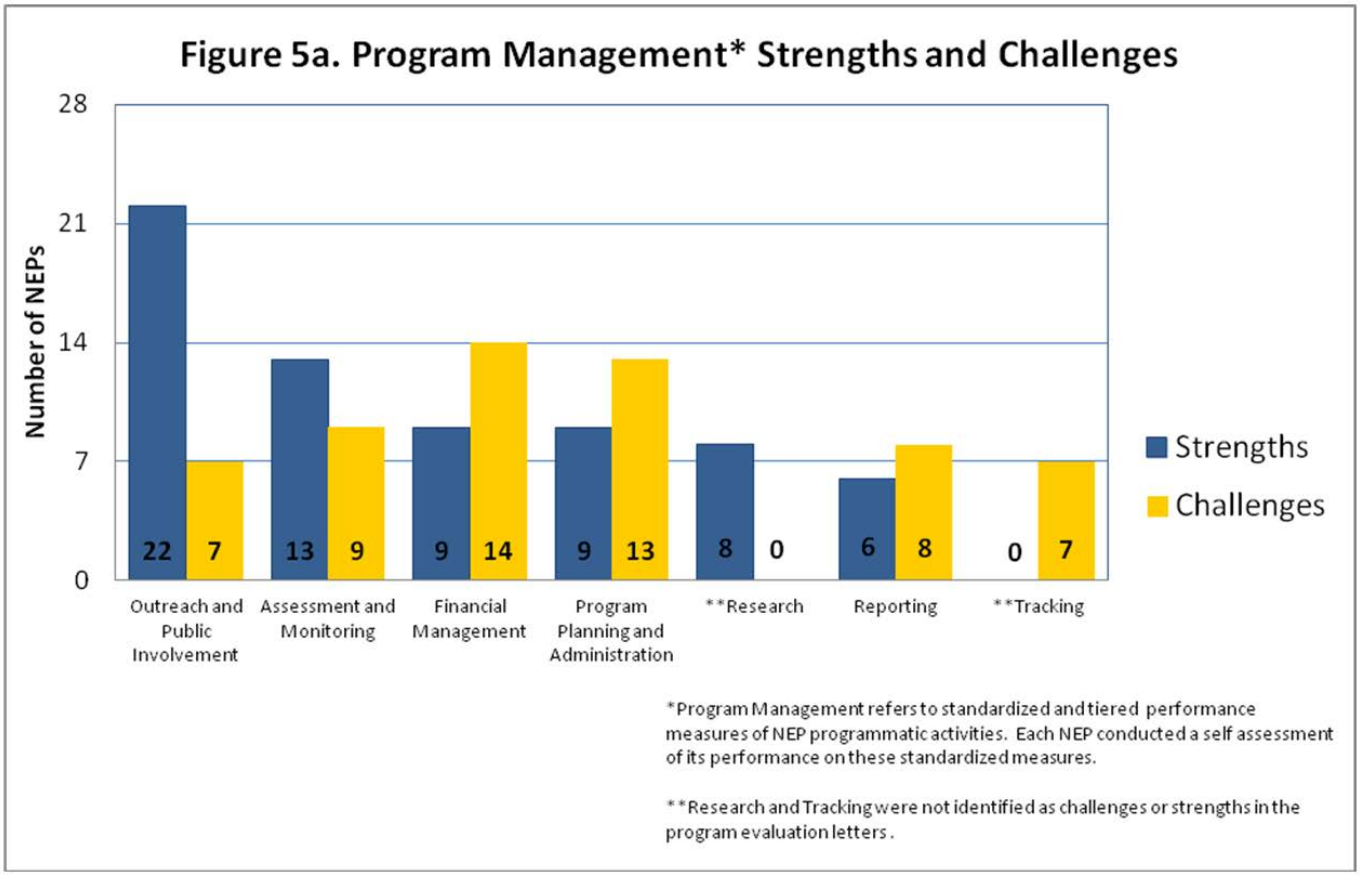
The three main challenges for the 28 Programs were:

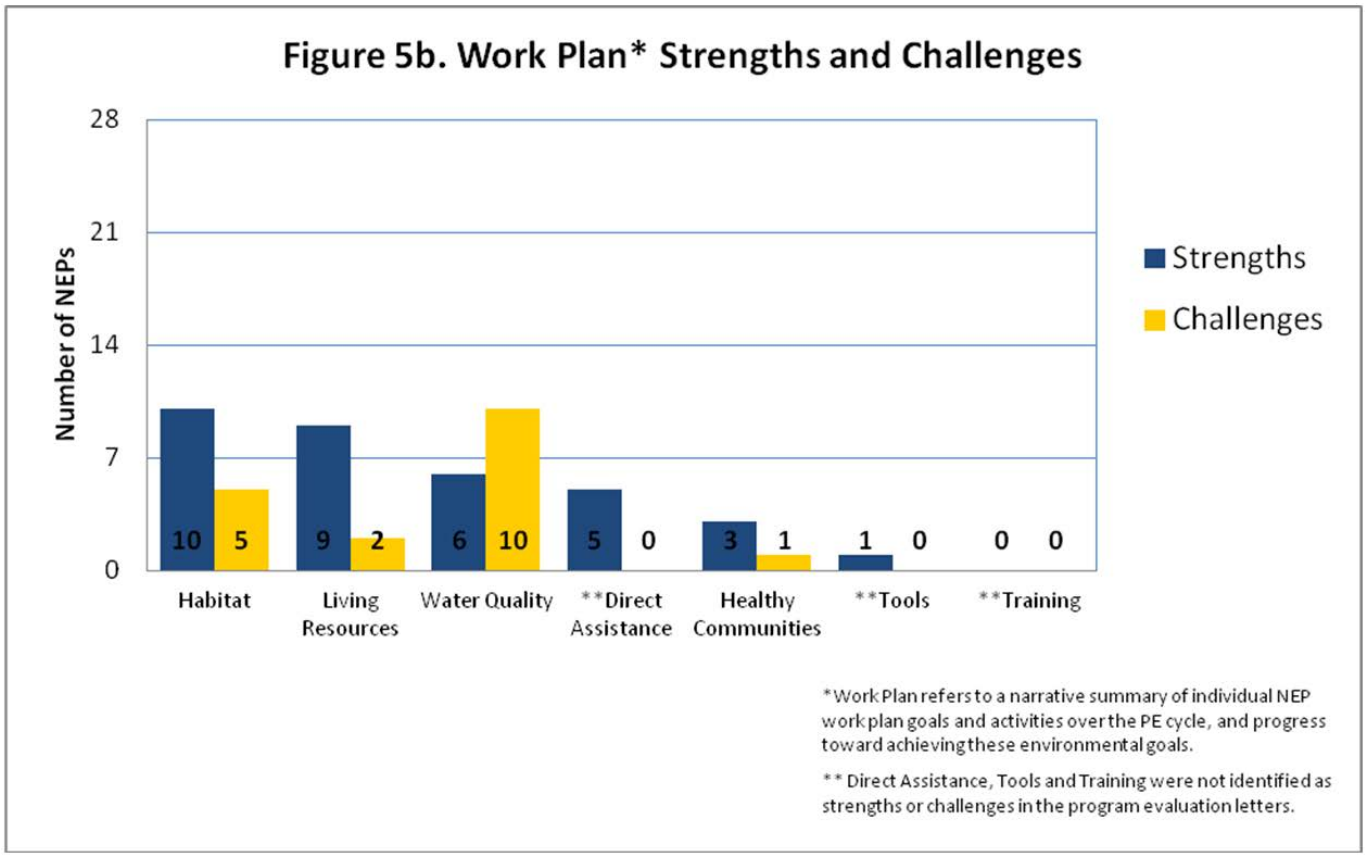
- Financial management (50 percent) (e.g., inadequate long-term funding mechanisms, insufficiently diverse funding sources, and unexpended grant funds).
- Program planning and administration (46 percent) (e.g., need to maintain staffing levels, need to improve program visibility, and need to revise CCMPs and to incorporate emerging issues).
- Water quality (36 percent) (e.g., need to address nonpoint source pollution by identifying sources, need to identify sources where best management practices are needed for nutrient reduction, and need to establish water quality targets to advance seagrass restoration).

In several instances, the PE team rated NEP's effectiveness addressing one component of a topic as a strength while also finding that the NEP faced challenges addressing another component of that same topic. For example, a PE team could have rated as a strength an NEP's ability to obtain funds from local governments while also rating as a challenge that same NEP's lack of a sustainable finance strategy.

Figures 5a and 5b depicts the strengths and challenges most common to the 28 NEPs and Appendix 3 and Appendix 4 describe examples of those strengths and challenges.

Figures 5a and 5b: Common Program Management and Work Plan Strengths and Challenges Identified in 2008 - 2010 PE Findings Letters





V. The Program Evaluation Process as a Management Tool

Managing an environmental program like the NEP is challenging, partly because of the many varied and complex factors impacting local environmental conditions and decision making. The PE process yields information that EPA uses to identify where additional assistance is needed and to revise reporting requirements to promote a focus on new and emerging environmental issues that affect NEP study areas and coastal communities. The process also promotes accountability, transparency, adaptive management, and technical transfer among the NEPs. Examples of how EPA uses PE findings as a national program management tool include the following:

- PE data informs EPA about the extent of NEP support for CWA core programs. The data informs EPA about which NEPs are minimally involved in support of those core programs. EPA then collaborates with those NEPs to promote increased support for those core programs.
- Identification of NEP challenges prompts EPA to target its resources toward initiatives enabling the NEPs to better address those challenges. Examples of EPA targeted support include:
    (1) Sponsoring webcasts about nutrient management, and wetlands protection and restoration.
    (2) Funding an NEP exhibit at the Baltimore Aquarium to promote public awareness of the importance of estuaries and generate support for the local NEP.
    (3) Funding the Office of Science and Technology's Biological Condition Gradient project aimed at developing ecological criteria to help protect water quality in several NEPs.
    (4) Providing grants for development of NEP climate adaptation strategies and implementation of climate vulnerability assessments (Climate Ready Estuaries Project).
- Utilizing lessons learned from the NEPs to educate EPA program offices and other Federal agencies.

Examples of how individual NEPs use PE findings as a local program management tool include:

- Documenting progress on addressing priority environmental challenges to include: (1) nutrient loads, (2) toxics, (3) stormwater, (4) habitat loss and degradation, (5) pathogens, (6) decline in fish and wildlife populations, (7) alteration of natural hydrologic flows, (8) climate change, and (9) aquatic nuisance species.
- Targeting efforts and resources toward challenges that limit the effectiveness of their protection and restoration efforts.
- Communicating about lessons learned from CCMP implementation among NEPs.

VI. Trends

In 2008, EPA released a PE Report that summarized the results from EPA's PEs of the 28 individual NEPs conducted during 2004 - 2006. A comparison of 2004 - 2006 PE Report results to 2008-2010 PE Report results reveals that:

- All 28 NEPs supported CWA core programs during each reporting period. In both periods, the greatest level of NEP support was for two programs--Total Maximum Daily Loads and Water Quality Monitoring.
- The NEPs leveraged $3.5 billion during the 2008 - 2010 period, which represented a 100 percent increase over funds leveraged by NEPs reviewed during the 2004 - 2006 review cycle. Until 2007, land acquisition projects dominated the uses of primary leveraging. Beginning in 2008,

large wastewater treatment and stormwater projects took over the role as the largest use for primarily leveraged dollars accounting for over 35 percent of primary leveraged dollars.

- The number of NEP habitat acres protected and restored during the 2008 - 2010 period was 298,799, which was a 42 percent decrease from the number of acres reported by NEPs during the 2004 - 2006 review cycle. It is difficult to determine the precise cause of this decline, but it may have been attributable to a number of factors such as: (1) the 2010 Deepwater Horizon oil spill in the Gulf of Mexico, (2) the economic downturn and resulting decrease in federal and state funding, and (3) hurricanes in the Gulf and Atlantic.

VII. Conclusion

The 2008 - 2010 PE findings reinforce EPA's view that the NEP is a model watershed protection and restoration program. The NEP has made significant achievements in implementing effective and innovative management solutions for the benefit and protection of water quality and living resources in some of our Nation's most important estuaries. This success is a result of the strong partnerships formed within each NEP, the collaborative efforts made with local stakeholders, and effective management of each NEP's program.

The data shows that the PE process is an effective evidence-based and transparent approach for ensuring NEPs are utilizing public funds in accordance with the requirements of the law. It also documents that NEPs continue to address challenges and target the increased achievement, measurement, and reporting of environmental outcomes.

Appendix 1: Examples of NEP Support for CWA Core Programs Identified in 2008 - 2010 PE Findings Letters (ongoing activities)

Clean Water Act		
Core Programs	**#of NEPs**	**Examples**
Water Quality Monitoring (WQM)	12	• Monitoring of dissolved oxygen in surface and bottom waters to analyzed temporal duration of hypoxia. • Funding an ongoing effort to monitor marsh response to stormwater discharges adjacent to a pumping station. Monitoring data will be used to evaluate whether and how to redirect stormwater discharges to adjacent marshes. • Developing protocols for surface water quality monitoring. • Working with NOAA to develop three conceptual models that relate the occurrence of toxins within the system to the health of salmonids in the study area. • Continuing support for *LagoonWatch,* the nation's second largest estuarine volunteer water quality monitoring program. • Establishing a volunteer monitoring program with a quality assurance plan approved by EPA. • Collaborating with the EPA Atlantic Ecology Division to develop innovative monitoring approaches to reduce the cost and increase the timeliness of monitoring for hypoxic events. • Conducting extensive watershed monitoring programs that measure sewage treatment plants discharges, stormwater flows, and atmospheric deposition. • Developing protocols for surface water quality monitoring such as toxicity identification evaluation procedures for pyrethroid-caused toxicity. • Managing a local corps of citizen volunteers that monitors 20 sites for nutrient concentrations. • Expanding monitoring efforts for emerging pollutants within the estuary. • Implementing monitoring efforts to better understand eutrophication and water quality degradation of Barnegat Bay.
National Pollutant Discharge	9	• Trainings to help communities comply with

Elimination System (NPDES)/Stormwater		NPDES stormwater general permits. • Supporting the development of community stormwater fee systems to finance stormwater water quality improvement projects. • Developing and disseminating an interactive and web-based stormwater field guide that provides detailed information on low-impact development techniques. • Placing markers with pollution prevention messages on stormwater collection systems describing the adverse impacts of improper disposal of oil, animal feces, paint, and litter. • Sponsoring the Long Creek Watershed Management Plan. A plan in which landowners could become eligible for low-interest state revolving fund loans, enabling them to finance stormwater best management practices. • Helping the County of Los Angeles develop a stormwater fee system to finance the development, operation, and maintenance of stormwater water quality improvement projects and facilities. • Designing projects to better address stormwater management issues, specifically: 1) impervious surface mapping, 2) alternative development schemes, 3) pollutant loading analysis, and 4) code analysis and recommendations. • Funding municipalities subject to Phase II Stormwater requirements. Funds supported: 1) stormwater mapping, 2) illicit discharge identification and elimination work, and 3) direct technical assistance. • Funding development of a stormwater Standard Operating Procedures (SOP) manual for a 14-municipality regional partnership. The SOP is being used as a model by other municipalities and agencies nationwide.
Nonpoint Source (NPS)	10	• Developing a draft model nitrogen loading general bylaw that prompted development of a revised nutrient management strategy. • Assisting local government in developing resolutions targeting fertilizer usage and stormwater in new development and retro-fit projects. • Providing funds to local government to address onsite sewage pollutant sources. • Working with the agricultural community to promote less polluting farming practices.

		• Promoting reduction of nonpoint sources pollution with projects like culvert enhancements and initiation of the "Performance Based Environmental Policies for Agriculture". • Creating the 166-acre Sebastian Stormwater Park, a living filter that treats runoff from 1,400 acres of the surrounding watershed. • Managing the implementation of the $1.15 million EPA Targeted Watershed Initiative Grant for the Schuylkill River by addressing four of the major threats identified in the Schuylkill Watershed source assessment: 1) abandoned mine drainage, 2) agriculture, 3) sewage discharges, and 4) stormwater. • Implementing dog waste control programs in the Pike Creek and St. Jones Watershed. • Addressing onsite sewage pollutant sources resulting in the opening of 1,300 acres of shellfish beds. • Working with Worcester County to pass a law requiring that new replacement septic systems have the capacity to remove nutrients.
Total Maximum Daily Loads (TMDLs)	12	• Supporting TMDL development to address excess nitrogen in certain water segments within the Peconic Bay. • Leading the development of bacteria TMDLs for Hampton Harbor and Little Harbor in New Hampshire. • Supporting projects to help meet trash, pathogen, and metals TMDL reduction targets in local water bodies. • Coordinating the Nitrogen Management Consortium to identify nitrogen load allocation necessary to meet water quality goals in Tampa Bay. • Initiating a water quality monitoring program in Cohasset Harbor; data from this project will support the development of a TMDL for nutrients. • Promulgating the Delaware Inland Bays pollution-control strategies to comply with the TMDL for nitrogen and phosphorus in the Inland Bays watershed. • Supporting TMDL development for pathogens and zinc by investigating failing on-site septic facilities and groundwater contamination in Oso Creek, improving the understanding of sources of legacy pollution from zinc smelters in Nueces

		Bay, and conducting bacteria source tracking in Copano Bay. • Developing a TMDL for nitrogen that establishes an enforceable schedule for point and nonpoint source nitrogen reduction for the Long Island Sound over a 15-year period. • Working with partners to remove a specific water body from the 303(d) list of impaired waters. • Collecting monitoring data and developing load allocations this led to the development of bacteria and sediment TMDLs for Morro Bay. • Implementing urban pesticide toxicity TMDL applicable to all urban creeks in the San Francisco Bay. • Supporting development of TMDLs associated with nonpoint source pollution from sugarcane production in the Upper Barataria Basin.
Water Quality Standards (WQS)	3	• Working with Oregon DEQ to refine its sedimentation standard. • Using an optical model to establish water quality targets for color, turbidity, and chlorophyll *a* in the greater Charlotte Harbor estuarine complex. • Supporting work of the *Coalition for Water Security* that will publish new stream flow standards to protect source water and aquatic life.
Sustainable Wastewater Infrastructure (SWI)	0	No examples were provided in PE finding letters.

Appendix 2: Examples of NEPs' Progress Made in Areas Highlighted in 2004 - 2006 PE Findings Letters[4]

Program Management	
Element	**Examples**
Financial Management	• Secured funding match from state. • Improved management of annual 320 funds. • Modified selected state grant and loan programs to ensure compliance with Program's agenda. • Produced Finance Fund Raising Plan. • Created a funding strategy so that the NEP does not compete for funding with other NGOs.
Tracking	• Developed database to track CCMP actions. • Developed mechanism for collecting and analyzing monitoring data. • Increased capacity to obtain more information from partners about their CCMP implementation efforts. • Integrated three separate mechanisms for tracking CCMP implementation. • Implemented methodology for determining long-term environmental trends.
Program Planning and Administration	• Established a formal office management structure. • Revised CCMPs to address current priority problems. • Increased total number of staff and retained staff in the Program. • Improved work plan activities related to monitoring. • Developed strategic plan that established the strategic direction for the program and the foundation for its projects.
Outreach and Public Involvement	• Developed outreach strategy to advanced smart growth principles. • Distributed Atlas data via website and direct mailing. • Selected new members of the public to serve on the management conference and Public and Education Team. • Targeted outreach and marketing activities towards seasonal residents in the study area. • Developed a public involvement strategy to elicit feedback from the public and stakeholders.
Research	• Identified research priorities with particular attention to biological indicators.
Assessment and Monitoring	• Increased monitoring efforts for bay scallop restoration. • Developed a set of basin-wide environmental indicators. • Expanded monitoring database and integrated monitoring efforts with state to avoid duplication. • Developed individual monitoring plans for each candidate indicator. • Enhanced website with an interactive Geographic Information System-based map that spatially depicts monitoring results and restoration projects.
Reporting	• Published State of the Bay Report.

[4] Based on how NEPs addressed challenges identified in 2004 – 2006 PE cycle.

Appendix 3: Examples of NEPs Strengths Identified in 2008 - 2010 PE Findings Letters

Program Management			
	Element	**#of NEPs**	**Examples**
	Financial Management	9	• Obtaining funds from local governments. • Updating finance plans and developing a case for finance support. • Getting additional revenues from fees charged to partner organizations for grant management and administrative services.
	Tracking	0	
	Program Planning and Administration	9	• Maintaining excellent relations with host organization allowing the Program to use all §320 money for projects and activities. • Facilitating environmental planning for the Regional Sediment Management Plan in New York-New Jersey Harbor. • Developing strategic plans to assess needs and prioritize resource investments.
	Outreach and Public Involvement	22	• Contributing to the documentary *Washing Away* about Barataria-Terrebonne residents' efforts to remake their lives in the aftermath of hurricanes Katrina and Rita. • Installing a permanent ecological exhibit to market the NEP and to provide citizens with generally information about the NEP study area. • Creating a Diversity Advisory Committee to increase environmental awareness and promote job training of individuals from under-served communities.
	Research	8	• Carrying out restoration research associated with maritime forest and marsh lands to improve wildlife habitat. • Supporting research projects that measure PCBs and Hg concentrations in striped bass and bluefish. • Assessing climate change vulnerability for southwest Florida.
	Assessment and Monitoring	13	• Installing two real-time water quality monitoring stations. • Establishing and supporting volunteer monitoring program. • Assessing changes in water flow due to climate change.
	Reporting	6	• Publishing a *Status and Trends of Inland Wetland and Aquatic Habitat in the Corpus Christi Area.* • Publishing *Currents of Change,* a report on status and trends for the Narragansett Bay. • Publishing State of the Bay Reports (e.g., Sarasota Bay and Maryland Coastal Bays).

Work Plan			
	Element	**#of NEPs**	**Examples**
	Habitat	10	• Improving in-stream habitat for salmonids by removing fish barriers. • Enhancing tidal marshes and recovering sea grass. • Restoring impounded marshes to a naturally-functioning state by installing gated culverts and removing dozens of dikes.
	Water Quality	6	• Designating Massachusetts coastline as a vessel sewage no-discharge zone. • Developing Connecticut's Nitrogen Credit Exchange Program. Thirty four percent of the 74 participating sewage treatment plants were then eligible to sell a total of $2.07 million in nitrogen credits. • Supporting development of GIS databases for municipal stormwater drainage systems.
	Living Resources	9	• Promoting bay scallop restoration by employing new seeding techniques. • Revitalizing the oyster population by planting and transplanting oyster shell. • Eradicating invasive species (e.g., blackberry and knotweed).
	Healthy Communities	3	• Providing public access for wildlife observation and sustainable recreational use of the lands and waters in the bays and outer islands. • Developing an eco-tourism project in a minority community. • Mapping access sites to the waterfront of the New York-New Jersey Harbor.
	Tools	1	• Adopting residential fertilizer use legislation as a nutrient management tool.
	Training	0	
	Direct Assistance	5	• Providing assistance on issues such as stormwater management and invasive species. • Working with partners to re-locate communities, taking into account smart growth principles. • Creating a Community Technical Assistance Program to build capacity of municipalities to protect and manage natural resources.

Appendix 4: Examples of NEPs Challenges Identified in 2008 - 2010 PE Findings Letters

Program Management			
	Element	**#of NEPs**	**Example**
	Financial Management	14	• Establish long-term funding mechanisms with diverse, sustainable funding sources. • Lack of dedicated state funding. • Expedite §320 funds drawn down in a timely manner.
	Tracking	7	• Implement a CCMP tracking system and make it available to the public. • Link work plan actions with outcomes. • Set quantifiable measures for nitrogen reduction to demonstrate improvements in study area.
	Program Planning and Administration	13	• Maintain staff levels to support program implementation. • Improve program visibility. • Define roles and responsibilities for management conference.
	Outreach and Public Involvement	7	• Have an independent website to increase NEP visibility. • Target public with limited awareness of NEP's water quality and living resources issues. • Improve outreach strategy by defining goals, priorities, and activities.
	Research	0	
	Assessment and Monitoring	9	• Develop or expand estuarine indicators (e.g., include wetlands and colonial nesting birds). • Expand monitoring efforts to better understand connection between people and the ecosystem. • Develop indicators for climate change.
	Reporting	8	• Develop a State of the Bay report to communicate status and trends to stakeholders and public.

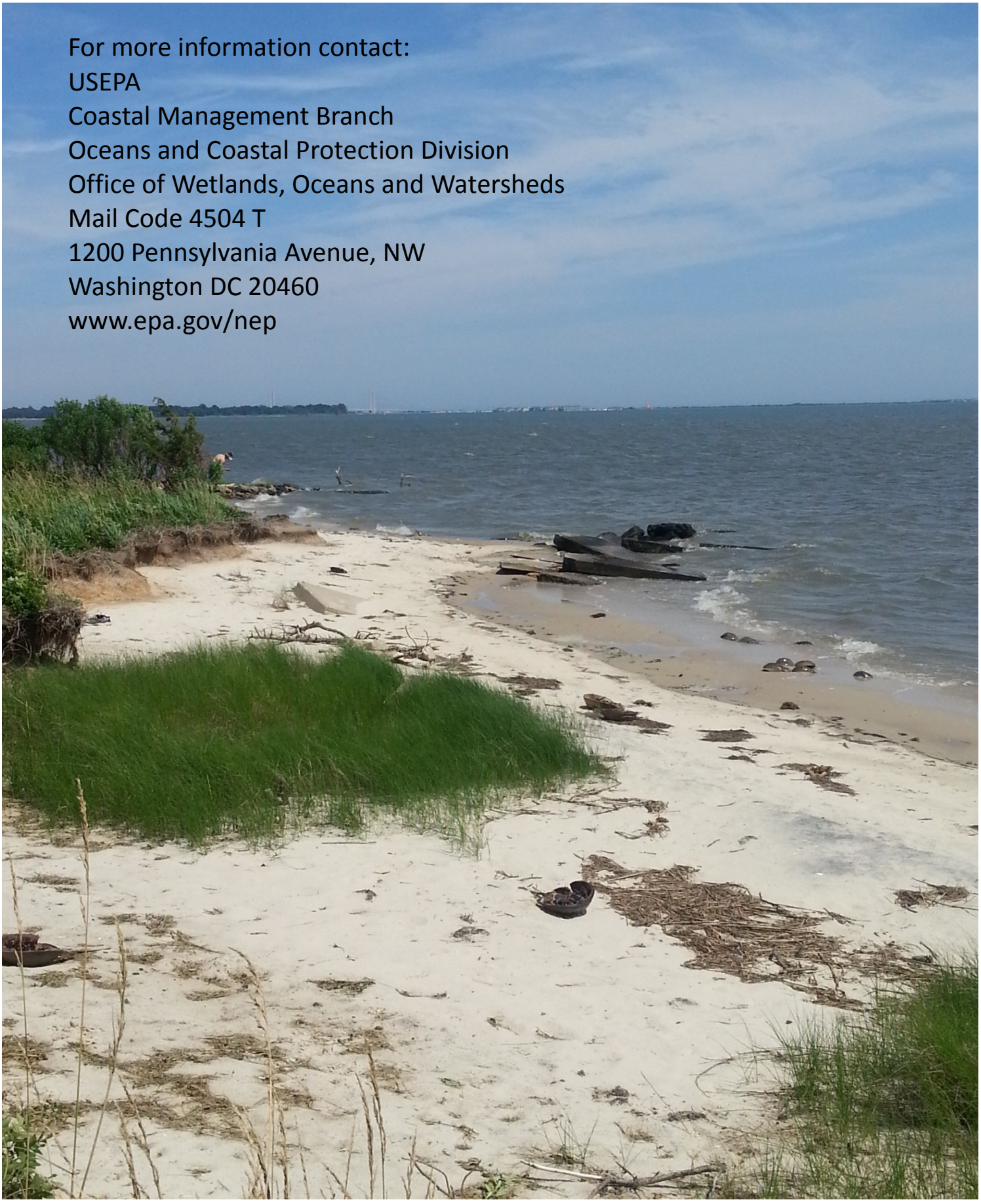
Work Plan			
	Sub-element	**#of NEPs**	**Example**
	Habitat	5	• Improve habitat plan by clarifying its purpose and proposed use. • Improve focus on implementing wetlands restoration projects. • Identify and prioritize species and types of habitats to be protected in the study area.
	Water Quality	10	• Establish water quality targets for adopted sea grass targets for each bay segment. • Develop list of sites where best management practices are most needed for nutrient reduction to meet TMDL. • Address pollution from nonpoint sources by identifying sources and effects on water quality.
	Living Resources	2	• Address the decline in bay scallop and winter flounder (no longer support commercial harvests). • Address the decline in the numbers of brown pelicans.
	Healthy Communities	1	• Address the increased amount of impervious surface resulting from development to accommodate high rate of population growth.
	Tools	0	
	Training	0	
	Direct Assistance	0	

Appendix 5: Program Evaluation Report Methodology

This PE Report summarizes the information that was captured in each of 28 PE letters that EPA provided to the NEPs between 2008 and 2010. A PE Team made up of the EPA HQ Team Leader, the EPA Regional NEP Coordinator, and in many cases an ex-officio NEP Director developed a letter. Team members and the NEP Director to whom the letter was addressed reviewed and commented on the final PE findings letter before it was signed by the Director of the Oceans and Coastal Protection Division.

Review teams analyzed each NEP's supporting documentation regarding topics listed in the September 2007 PE Guidance. The teams then identified each NEP's strengths, challenges, support of CWA core programs, and progress made in the areas highlighted in the previous PE cycle identified in the PE letters.

The draft PE Report was reviewed by CMB employees, the Oceans and Coastal Protection Division management, EPA regional coordinators, and NEP directors. The final PE Report was issued after briefing and seeking input from the Office of Wetlands, Oceans, & Watersheds senior management.



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