

May 8, 2020

Dr. Joe Costa
Executive Director
Buzzards Bay National Estuary Program
81-B County Rd, Suite E
Mattapoisett, MA 02739

Dear Dr. Costa,

Thank you and the Buzzards Bay National Estuary Program (BBNEP) staff, as well as your partners, for contributing to the 2019 Program Evaluation (PE) process. The purpose of this letter is to provide you with the results of the Environmental Protection Agency's (EPA) 2019 PE. We recognize that you put considerable effort into both the PE package and the responses to our follow-up questions. We also appreciate your facilitation of the PE Team's site visit that enabled the Team to meet your staff and visit projects in your study area.

I would like to note that your evaluation benefited from the voluntary participation of Roberta Swann, Director of the Mobile Bay National Estuary Program, who served in an ex officio capacity on the PE Team. Roberta's participation provided the Team members with an invaluable National Estuary Program (NEP) perspective.

The primary purpose of PE is to help the EPA determine whether the twenty-eight programs included in the NEP are making adequate progress implementing their Comprehensive Conservation and Management Plans (CCMPs). The evaluation process has considerably enhanced the EPA headquarters and regional knowledge of each individual NEP and promoted the sharing of innovative projects and approaches across all twenty-eight NEPs. In addition, the EPA uses the PE 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 the relevant EPA *2018 - 2022 Strategic Plan* goal – Goal 1: A Cleaner, Healthier Environment, Objective 1.2, Provide for Clean and Safe Water.

Based on the PE Team's findings, we believe the BBNEP continues to make significant progress in implementing the CCMP. We are pleased to announce that you have passed the 2019 PE and are eligible for funding authorized by CWA §320.

2019 Program Evaluation Findings

The following summary highlights the PE Team's key findings by identifying the BBNEP's: (I) Progress Made in the Areas Highlighted in the 2014 Program Evaluation, (II) Support of CWA Core Programs, (III) Strengths, and (IV) Challenges. This summary is intended both to recognize the Program's successes and to recommend efforts to strengthen the Program further. The Program's actions in response to these recommendations will be evaluated in the next PE cycle.

I. Progress Made in the Areas Highlighted in the 2014 Program Evaluation Review

The 2014 PE Team indicated in its findings letter that the BBNEP needed to address the following key issue areas:

Program Implementation and Reporting – Financial Management

The 2014 PE found that the scale of the challenges facing the study area was not being met with the level of funding necessary to adequately support essential water quality improvements. This funding gap meant that the number and scale of projects implemented by the BBNEP and its partners were not adequate to meet the goals of the CCMP. At a more specific level, the PE letter recommended building municipal capacity to meet stormwater permit requirements.

The program has increased focused efforts to build municipal capacity through the Stormwater Collaborative and helped the municipalities to step up more to deal with stormwater-related challenges. The Collaborative has brought together participating municipalities to cost-effectively meet stormwater permit requirements. This included having the towns provide more of their own funding for this purpose, in addition to leveraging EPA supplemental funding and Southeast New England Program (SNEP) funding.

Ecosystem Status and Trends – Assessment and Monitoring

The 2014 PE called for the program to undertake a risk-based climate vulnerability assessment. The Program has taken important steps to address the actual impacts of climate change to Buzzards Bay and its surrounding watersheds, worked with municipalities directly to address expected impacts, and obtained needed resources from relevant state programs. The BBNEP also collaborated with the other New England NEPs to create the report "Climate Change Vulnerabilities Scoping Report: Risks to Clean Water Act Goals in the Northeast." This report, however, does not constitute a full vulnerability assessment. EPA again recommends taking this additional step in the "Challenges" section of this PE letter.

Program Implementation and Reporting – Program Planning and Administration

The 2014 PE letter noted the challenge to adequately replace the services provided by two BBNEP staff members who planned to retire and the opportunity to re-focus technical assistance to meet the changing needs of the municipalities.

After assessing municipal needs, the program decided to eliminate the Wetland Specialist position and create a new full-time Stormwater Specialist position. The two Stormwater Specialists have been critical assets to the Program in terms of setting up the Stormwater Collaborative and helping the municipalities effectively address their stormwater issues.

Concurrent with the PE Team's visit, Tracy Warncke, who served for many years as the Program's Administrative Assistant, retired. Instead of hiring a new Administrative Assistant, the duties are being accounted for through a combination of the Regional Planner, the Massachusetts Office of Coastal Zone Management (MA CZM), and the Executive Director.

II. Support of CWA Core Programs

Water Quality and Living Resource Monitoring and Research

The BBNEP's CCMP has water quality monitoring embedded in its various Action Plans. The Buzzards Bay Coalition's (BBC) Science Advisory Committee, of which the BBNEP Executive Director is an integral part, continuously reviews the BBC's monitoring efforts. The Program contributes to the writing of the BBC's State of the Bay Report, which is released every four years. The BBNEP also collaborates with partners on a number of targeted studies, such as the Westport salt marsh study. In addition, the Executive Director has authored or co-authored scientific papers for the consideration of local decision makers, such as a 2017 article in *Frontiers in Marine Science* entitled, "Assessing the Impact of Local and Regional Influences on Nitrogen Loads to Buzzards Bay, MA."

Supporting Sustainable Wastewater Infrastructure

The BBNEP has been working with the Wareham Wastewater Pollution Control Facility to test a Permeable Reactive Barrier (PRB) utilizing wood chips for remediation of residual nitrate in treated wastewater. Early results from this technological innovation show that the constructed reactor columns are removing nitrate rapidly and effectively. Though testing continues to address the long-term efficacy of this PRB technology, the promising early results bode well for the improvement of water quality in the local watershed.

A major initiative of the BBC is the Multi-Community Partnership to Reduce Nitrogen in Upper Buzzards Bay that began in 2015. This effort principally involves the evaluation and proposed relocation of the Wareham Wastewater Pollution Control Facility outfall from the Agawam River to the Cape Cod Canal. The BBNEP helped fund this initiative (using SNEP funds), and was also a leader in developing new state regulations, promulgated by MA CZM, to allow for outfall relocation proposals like this one.

III. Strengths

Program Implementation and Reporting - Program Planning and Administration

Effective Use of Partnerships

The BBNEP has a well-thought out Memorandum of Understanding (MOU) with BBC and the Buzzards Bay Action Committee (BBAC) that provides a clear division of labor, but also outlines areas for the partners to work together to achieve environmental results. Through participation on the BBC Science Advisory Committee, funding and technical assistance to municipalities, linkages to land trusts through BBC, and other means, the Program has effectively leveraged partnerships to drive progress towards achieving its CCMP goals. The BBAC provides a forum for municipal governments to exchange ideas, guides the Program's efforts with municipalities, and creates collaborations that cross municipal borders and help work toward regional solutions and regionally consistent strategies. Limiting the \$320-funded grant program to municipalities has helped forge collaborations between lands trusts and watershed non-profits with town conservations commissions, planning departments, and boards of selectmen. These partnerships have only grown and strengthened over the years. In addition, throughout the

program evaluation period, the NEP director has continued to serve on the SNEP Steering Committee and Policy Committee to ensure that the NEP and SNEP efforts complement each other to achieve broader implementation goals of the Buzzards Bay CCMP.

Program Implementation and Reporting – Financial Management

Technical and Financial Assistance

Technical assistance to and funding for municipalities is a major strength of the program. The BBNEP has technical expertise, especially in the realm of stormwater, which has proven to be of immense value to municipalities in its study area. The Program has funded projects to protect the watershed and the Bay, especially in habitat and open space protection. The BBNEP has strategically leveraged SNEP funding very effectively, especially in the area of nutrient management. For example, the Program assisted BBC's successful application for \$200,000 of SNEP funding to collaborate with the Towns of Wareham, Bourne and Plymouth and the Massachusetts Maritime Academy to evaluate the feasibility of relocating the Wareham Wastewater Treatment Facility (WWTF) discharge from the Agawam River to the Massachusetts Maritime Academy's (MMA) existing, well-flushed discharge into the Cape Cod Canal. Moving the discharge was deemed feasible as a result of this evaluation, and steps for the move are now underway.

Ecosystem Status and Trends –Research

The BBNEP provides technical guidance and information to academics, researchers, and students conducting research in Buzzards Bay. The program also reviews data for its partners. From 2015 to 2018, the NEP awarded, administered, and oversaw \$1.7 million in SNEP applied research and management grants on behalf of Region 1. For example, the program funded a UMASS-Amherst study called, "Gypsum as a Phosphorus and Sediment Control Agent in Cranberry Floodwaters," which had a goal to develop a management practice to control phosphorus in the discharges of cranberry bog harvest floodwaters. The program's participation in the BBC's Science Advisory Committee gives it a voice to articulate continuing research needs for the Bay and its surrounding watersheds.

IV. Challenges

Program Implementation and Reporting - Program Planning and Administration

Enhancing Support from Host Organization

The program should consider strategizing with its host organization, MA CZM, to explore potential new ways of supporting the BBNEP from the main Boston Office. While the Program benefits from a close relationship with its MA CZM Regional Coordinator, and MA CZM provides financial assistance for the BBNEP's office space, additional technical assistance may be available to BBNEP from the Boston office. The MA CZM and the BBNEP should explore efficient ways for the Program to access this potential additional support.

Program Implementation and Reporting – Financial Management

Finance Plan and Increased Funding

The current BBNEP CCMP does not articulate funding priorities or propose actions or strategies for garnering new resources other than listing potential funding sources. Consistent with EPA’s FY2017 – FY2019 Clean Water Act §320 National Estuary Program Funding Guidance, the program should update its finance strategy no later than the planned 2023 CCMP update. The program should further explore options for dedicated state funding. Finally, the BBNEP should look at diversifying funding options, consistent with what is allowable under EPA’s funding guidance and as a state-hosted organization.

Ecosystem Status and Trends – Assessment and Monitoring

Perform a climate change vulnerability assessment

The EPA’s NEP Funding Guidance calls for integrating climate change vulnerability assessment findings and planned response approaches into an updated CCMP. While the BBNEP is addressing climate vulnerability and prioritizing how it does so through its work planning process, we strongly encourage the program to conduct a full risk-based vulnerability assessment. This vulnerability assessment should be consistent with the EPA NEP Funding Guidance. Doing a full assessment will allow the Program to clarify climate-related impacts and prioritize what to address. The vulnerability assessment should be completed by September 2021. The findings of the vulnerability assessment can help inform the goals and actions that will be articulated in the 2023 CCMP update.

Program Implementation and Reporting – Outreach and Public Involvement

Increasing visibility and highlighting accomplishments

The program should highlight its accomplishments and increase visibility of the BBNEP both locally and at the national level, which can benefit the Program in terms of technical resources and exchange with partners it may not otherwise have any contact with. For example, the BBNEP should participate in the EPA’s NEP StoryMap to highlight some of its programmatic successes. Given the BBNEP’s strengths in assisting its local communities, the program should tout its environmental successes, share lessons learned in how to work with local communities, and explain how that has benefited the program itself. The BBC’s existing strategic communications plan should consider how to more effectively tout the BBNEP’s successes, such as displaying the Program’s contributions clearly on their website.

Program Implementation and Reporting – Program Planning and Administration

Partner with neighboring NEPs

Finally, we suggest the BBNEP explore opportunities to work more closely with the Narragansett Bay NEP and Massachusetts Bay NEP. Buzzards Bay, Narragansett Bay, and Massachusetts Bay have many similar issues, share geographic proximity, and work with Massachusetts partners. Working together jointly on issue-specific areas can multiply

programmatic impact, and joint proposals may also increase opportunities for funding within these shared issue areas.

Thank you again for participating in the PE process. We welcome any additional thoughts you may have either about the evaluation process itself or about EPA's involvement in the implementation of the BBNEP CCMP. If you have any questions or comments, please feel free to contact me at (202) 566-2954 or Romell Nandi of my staff at (202) 566-1203.

Sincerely,

Robert Benson

Robert Benson
Acting Chief, Partnership Programs Branch
Office of Wetlands, Oceans and Watersheds
U.S. Environmental Protection Agency

Enclosure

cc: John Goodin, EPA, Director, Office of Wetlands, Oceans and Watersheds
Brian Frazer, EPA, Director, Oceans, Wetlands, and Communities Division
Mel Cote, EPA Region 1, Chief, Water Division, Surface Water Branch
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