



OFFICE OF WETLANDS, OCEANS AND WATERSHEDS

WASHINGTON, D.C. 20460

July 30, 2025

Ms. Jennifer Hecker, Executive Director
Coastal and Heartland National Estuary Partnership
1050 Loveland Blvd., Suite D
Port Charlotte, FL 33980

Dear Ms. Hecker:

Thank you to Coastal and Heartland National Estuary Partnership staff and your many partners for contributing to a successful 2025 Program Evaluation process. We recognize that everyone involved 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 visit (Felicia Burks, EPA Region 4; Curtis Bohlen, Director, Casco Bay Estuary; and Noemi Mercado, EPA Headquarters), enabling the team to meet your staff, visit projects and people in your study area. Below, you will find the results of the Environmental Protection Agency's 2025 Program Evaluation for the review period from July 1, 2019, to September 30, 2024.

The PE team has concluded that the CHNEP continues to make significant progress in implementing its Comprehensive Conservation Management Plan and has rated the CHNEP as *proficient* in the 2025 PE. The CHNEP will receive continued support from the EPA.

I would like to note that your evaluation benefited from the voluntary participation of Mr. Curtis Bohlen, Director of the Casco Bay Estuary, who served in an ex-officio capacity on the PE team. Mr. Bohlen's participation provided the PE team members with an invaluable perspective on the National Estuary Program. Mr. Bohlen also shared information about the Casco Bay Estuary that may be useful for your program and took several lessons learned back to his organization.

The primary purpose of the EPA's overall PE process is to help the EPA determine whether the 28 programs included in the National Estuary Program, authorized under Section 320 of the Clean Water Act are making adequate progress in implementing their CCMPs. Additionally, the PE process helps the EPA document progress made in the areas highlighted in the previous review, recognize strengths from the individual NEP and identify areas for improvement to assist the individual NEP in becoming a stronger program and achieving environmental results. The evaluation process has considerably enhanced the EPA headquarters and regional knowledge of each local NEP and promoted the sharing of innovative projects and approaches across all 28 NEPs. In addition, the EPA uses the evaluation process to assess how local NEPs support the CWA programs and to demonstrate the extent of the local NEPs' contributions to the EPA's Powering the Great American Comeback Initiative, Pillar 1: Clean Air, Land and Water for Every American and Pillar 3: Permitting Reform, Cooperative Federalism, and Cross-Agency Partnership.

The PE process uses a two-category determination of *proficient* and *progressing*. *Proficient* means a local NEP adequately meets programmatic and environmental results. A *progressing* determination means the local NEP is missing elements or underperforming according to the updated 2025 Program Evaluation Guidance criteria. A

progressing determination will prompt a timeline to address those missing elements or opportunities for improvement. This determination is informed by the entire PE package (narrative submission from the NEP, NEPORT data, annual work plans, and the EPA-required annual end-of-year report), on-site visits, and discussions with the NEP.

2025 Program Evaluation Findings

The following summary highlights the PE team's key findings by identifying the CHNEP's: (I) progress made in the areas highlighted in the 2020 program evaluation, (II) strengths and (III) opportunities for improvement. This summary is intended to recognize the program's successes and recommend efforts to strengthen the program. The CHNEP's progress regarding these recommendations will be evaluated in the next PE scheduled for 2030.

I. Progress Made in the Areas Highlighted in the 2020 Program Evaluation Review

Program Implementation and Reporting - Program Planning and Administration

Water Atlas Enhancements

The EPA recommended that the CHNEP continue expanding the Water Atlas website with additional water quality and ecological health metrics linked to the CHNEP's CCMP monitoring plan, as well as more real-time data analysis. The CHNEP has completely redeveloped the organization's data hub website. The CHNEP Water Atlas 2.0 is more functional and offers expanded resources for the public, including new analytical tools and interactive mappers for each water body. In addition, it houses water quality, hydrology, wildlife habitat, resiliency and weather data. The EPA was excited to learn that the CHNEP is intending to create and publish user tutorials for the Water Atlas 2.0, which the CHNEP launched in June 2025, as part of the [CHNEP Water Atlas Tutorials Playlist](#).

The Water Atlas offers an example and inspiration to other local NEPs. The sophisticated online data presentation tool marks the CHNEP as a leader in demonstrating how local NEPs can report to its communities the state of their respective estuaries.

Operational Efficiencies and Improvements

In the prior PE, the EPA recommended that the CHNEP seek ways to control overhead expenses and increase operational efficiencies by developing better systems to identify and reallocate unused resources more readily. To control overhead expenses and increase operational efficiencies, the CHNEP evaluated different alternatives, including changing the host entity. After analyzing various options, the CHNEP determined that changing the host entity was the most effective mechanism to address these issues. At the beginning of FY23, the CHNEP transitioned to a new fiscal host entity, Charlotte County, which provided expanded operational support services and offered more efficient systems for tracking, reporting and expending the CHNEP's financial resources. This change was both necessary and critically important given the doubling of programmatic funding that came with the Infrastructure Investment and Jobs Act funds.

II. Strengths

During the review period, the CHNEP experienced several significant challenges, including: 1) the transition to a new host entity, 2) the COVID-19 pandemic, 3) the influx of the Infrastructure Investment and Jobs Act funds and 4) three hurricanes (Ian, Helene and Milton). Navigating these circumstances tested and revealed the CHNEP's ability to adapt quickly and effectively to multiple stressors. The Management Conference's ability to anticipate, regroup and re-envision a path forward, including efforts to finalize the 2025 CHNEP Comprehensive Conservation Management Plan update (<https://chnep.org/our-plan>), is impressive and reflective of decisive

leadership and guidance, including talented, committed NEP staff. The PE team observed some specific accomplishments during the review period, which are described below.

Healthy Ecosystems

The CHNEP continues to create healthy ecosystems by coordinating partners' efforts around habitat protection and restoration. Some noteworthy examples include:

- Funded and managed two important watershed planning and analysis initiatives. The CHNEP brought into these initiatives one of the most significant traits of the National Estuary Program model, which is bringing actionable science into cooperative federalism to assist local and regional entities in implementing actions to address cross-jurisdictional environmental challenges:
 - Charlotte Harbor Flatwoods Initiative: A multi-agency effort focused on approximately 90 square miles of land, including Fred C. Babcock/Cecil M. Webb and Yuca Pens, to restore the natural flow of freshwater from wetlands in Charlotte and Lee Counties into tidal creeks that flow into downstream Charlotte Harbor and Caloosahatchee estuaries as well as the Charlotte Harbor and Matlacha Aquatic Preserves. The CHNEP funded and managed a data collection and hydrologic restoration modelling and planning project. A final report of this project summarized the results of each model run and provided recommendations on priority restoration projects, actions and the resulting benefits.
 - South Lee County Watershed Initiative: A multi-regional stakeholder group working together to restore waterways and tidal creeks that flow into Estero Bay in southern Lee County. This project expanded and enhanced existing stormwater flood models to better understand how remaining wetlands could potentially store water, reducing flooding in nearby communities and recharging the aquifer. The CHNEP provided funding for the development of a science-based, data-driven integrated surface and groundwater hydrologic model capable of simulating both dry and wet season water levels and flows. The hydrologic model fills data gaps and bridges the various modeling efforts in the area to build a regional watershed-scaled picture.
- The CHNEP worked with partners at the Conservation Foundation of the Gulf Coast and the Southwest Florida Water Management District to restore wetland habitat through exotic invasive plant removal and native planting using novel techniques at the 432-acre Myakka Headwaters Preserve, a hydrologically altered area that is critical to the Myakka River. Additionally, this work produced a report that outlined methods and results that inform best practices for restoring other public lands in the vicinity with the same unique hydrological characteristics.
- The CHNEP funded planning, design and permitting for the Warm Mineral Springs Creek restoration. This hydrologic restoration project provided benefits to both water quality and habitat. Over 15,000 cubic yards of excess non-natural sediment deposited from a man-made beach created around the spring area were removed, improving access to critical manatee habitat. This spring serves as a crucial warm-water refuge for manatees during the colder months in south Florida.

Clean Waters

The CHNEP continued supporting clean waters through its collaboration with multi-jurisdictional organizations. Some noteworthy examples include:

- The CHNEP funded a portion of the monitoring as well as led the coordination of the entire Coastal Charlotte Harbor Monitoring Network (CCHMN), a partnership of agencies that provides monthly water quality data using a probabilistic sampling design, initiated in 2001. Monthly water quality data from ten estuary regions (60 fixed stations) are uploaded to state and federal assessment databases. This creates a consistent, region-wide, and long-term technically sound water quality data that partners utilize to assess ongoing resource management actions and regulatory programs.
- The CHNEP funded a large-scale Water Quality Trend Analysis Project of southwest Florida coastal waters and the CHNEP estuaries from 2000 to 2021. This project involved data mining and cleaning to create a comprehensive period of record dataset suitable for both traditional and novel trend analysis methods, utilizing long-term data available through the Florida Department of Environmental Protection's Watershed Information Network. Tracking and understanding changes in water quality, along with bioindicators such as seagrass and algae, provides a more complete picture of ecosystem health and is essential for managing and restoring coastal ecosystems. Twenty-plus years of water quality data, including nitrogen, phosphorus and chlorophyll-*a* concentrations, were measured against their respective regulatory thresholds and compared with seagrass and macroalgae data collected in the same timeframe. These long-term, curated data sets will continue to serve as a foundation for further analysis and assessment of the success of nutrient reduction projects. With the completion of the Water Atlas data tool, the EPA looks forward to an updated analysis of water quality trends in the CHNEP southwest coast and estuaries through 2025 and beyond, to be published in a future CHNEP State of the Bay or similar report.

Strong Communities

During the review period, the CHNEP led various initiatives to build and support strong communities. The CHNEP successfully:

- Provided 37 Conservation Grants (up to \$9,999 each) for projects that address clean water, habitat protection/restoration, and outreach priorities in the CHNEP area.
- Commissioned an economic valuation study of economic activity tied to natural resources. Overall, the area's natural resources generate more than \$13.6 billion in total annual output, supporting over 148,000 jobs.
- Committed Infrastructure Investment and Jobs Act funds toward Comprehensive Vulnerability Assessments in each of the ten counties (\$200,000-250,000/each) the CHNEP serves. These assessments include modeling of critical assets and infrastructure, as well as planning to adapt them to reduce and mitigate potential environmental and public health risks. Five are now underway.
- Assisted in disaster response and recovery efforts, including coordinating water sampling efforts, assisting in post-storm data analysis, and hosting community cleanups.

III. Opportunities for Continued Improvement

The CHNEP should celebrate its growth and success while continuously improving in the future. The EPA identified the following recommendations to strengthen the CHNEP further.

Clean Waters

Watershed Planning and Restoration

Watershed planning initiatives are crucial for supporting regional watershed restoration by providing a framework for addressing water quality issues, improving habitat and enhancing community well-being. These initiatives involve assessing watershed conditions, identifying stressors, prioritizing projects and implementing strategies to restore and protect terrestrial and aquatic ecosystems.

The EPA recommends continuing to expand watershed planning and restoration activities that support regional watershed restoration initiatives. The EPA recognizes several potential opportunities where robust planning will advance the CWA goals including: 1) conducting further water quality and pollution analysis to identify pollution hotspots and potential remediation and mitigation actions, 2) assisting in adaptation planning to reduce flooding and pollution discharges from hurricanes and other severe weather events and 3) supporting water quality efforts relating to nutrient reduction.

The EPA encourages prioritizing water quality efforts, particularly nutrient load reduction, to support the recovery of aquatic life and healthier ecosystems. The CHNEP's Water Quality Trends Analysis reveals increasing nitrogen levels and nutrient enrichment since 2017, accompanied by a shift from phytoplankton to macroalgae and an ongoing decline in seagrass. The Southwest Florida Water Management District (SWFWMD) 2022 to 2024 seagrass mapping shows mixed results—gains in Pine Island Sound but a 31 percent loss (278 acres) in Charlotte Harbor. Notably, seagrass declined 55 percent between 2018 and 2022. Survey coverage remains fragmented, as the SWFWMD and South Florida Water Management District use different schedules, limiting system-wide assessments. Overall, trends indicate ongoing degradation of water quality and seagrass. Nitrogen and phosphorus reduction is a key strategy to improving water quality. The EPA sees opportunities in this area and recommends that the CHNEP and its partners support multi-pronged approaches for nutrient load reduction, including conducting analysis to target where excess nutrients are coming from. Then, based on that information, added measures can be taken to address those sources, whether they be addressing aging wastewater and stormwater infrastructure or implementing other targeted nitrogen reduction strategies.

Enhanced Water Quality Coordination

The EPA's Data Quality Program supports the EPA's mission to protect human health and the environment and to ensure environmental information, operations, products and services are of known and documented quality for their intended use(s). The CHNEP has served to coordinate water quality sampling and fill identified sampling gaps, leveraging the existing coordination of regional CCHMN water quality sampling to engage in emergency post-event sampling after hurricanes and severe weather events. Good coordination in water quality sampling is crucial for ensuring accurate data collection, consistent methodologies and effective resource allocation, ultimately leading to more robust water quality management and protection efforts. The EPA recommends the CHNEP continue and expand upon recent successes in water quality monitoring with enhanced water quality coordination, following and updating the EPA CCHMN Quality Assurance Project Plan to comply with the EPA's Quality Assurance Standard Directive (CIO 2105-S-02, updated in 2023). This would continue to support consistent water quality sampling, accurate data recording, thorough data analysis and effective emergency post-event sampling coordination in affected waterbodies following hurricanes and severe weather events. This can be used to create an information repository of post-storm samples that can inform recovery efforts, public safety measures and predictive models.

Thank you again for participating in the PE process. We welcome any thoughts or suggestions you may have regarding the evaluation process itself or the EPA's involvement in implementing the CHNEP's CCMP. If you have any questions or comments, please contact me at 202-564-3169 or via email at barger.cindy@epa.gov or Noemi Mercado at 202-566-1251 or via email at mercado.noemi@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Cindy Barger". The signature is fluid and cursive, with the first name "Cindy" and last name "Barger" clearly distinguishable.

Cindy Barger

Chief, Partnership Programs Branch

cc: Brian Frazer, U.S. EPA, Director, Office of Wetlands, Oceans and Watersheds
Stacey Jensen, U.S. EPA, Director, Oceans, Wetlands and Communities Division
Katie Butler, U.S. EPA Region 4, Director, Water Division
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Noemi Mercado, U.S. EPA, HQ NEP Coordinator, PE team member