

COASTAL & HEARTLAND NATIONAL ESTUARY PARTNERSHIP
FISCAL YEAR 2025 BIPARTISAN INFRASTRUCTURE LAW
WORK PLAN AND LONG-TERM PLAN



Sunrise views over Babcock Webb Wildlife Management Area project site in Punta Gorda. / Photo credit: Susan Smart

May 25, 2024

Amended September 20, 2024



1050 Loveland Blvd.
Port Charlotte, FL 33980
(941) 833-6580
www.CHNEP.org

The Coastal & Heartland National Estuary Partnership (CHNEP) is comprised of citizens, elected officials, resource managers and commercial and recreational resource users working to improve water quality and ecological integrity of other natural resources in its boundaries. A cooperative decision-making process is used to address diverse resource management concerns in its 5,416-square-mile area. Many of these partners also financially support the Partnership. The governmental entities in the CHNEP and its service area include:

U.S. Environmental Protection Agency
U.S. Fish & Wildlife Service
U.S. Army Corps of Engineers
U.S. Geological Survey
U.S. Department of Agriculture
National Oceanic & Atmospheric Administration
Florida Department of Environmental Protection
Florida Fish & Wildlife Conservation Commission
Florida Department of Economic Opportunity
Florida Department of Agriculture
Central Florida Regional Planning Council
Southwest Florida Regional Planning Council
Southwest Florida Water Management District
South Florida Water Management District
West Coast Inland Navigation District
Peace River/Manasota Regional Water Supply Authority
Florida Gulf Coast University
University of South Florida
University of Florida
Polk, Sarasota, Manatee, Lee, Charlotte, DeSoto, Hardee, Hendry, Highlands, and Glades Counties
and the incorporated Cities and Towns of Dundee, Haines City, Auburndale, Lake Alfred, Lake Wales,
Lake Hamilton, Lakeland, Winter Haven, Eagle Lake, Bartow, Fort Meade, Bowling Green, Wauchula,
Zolfo Springs, Arcadia, Venice, North Port, Punta Gorda, Fort Myers, Fort Myers Beach, Cape Coral,
Sanibel, Estero, LaBelle, Moore Haven, and Clewiston.

TABLE OF CONTENTS

BIPARTISAN INFRASTRUCTURE FUNDING FOR THE CHNEP	5
CCMP FOCUS IN FY 2025	6
FISCAL YEAR 2025 ANNUAL BIL BUDGET	9
Table 1: Fiscal Year 2025 BIL Budget Overview	9
Table 2: Fiscal Year 2025 BIL Travel Budget	10
CHNEP BIL FUNDED WORK PLAN TASKS	12
Task 1 Management Conference: Administration, Finance, Operations.....	13
Task 3 Research Coordination.....	14
Task 3.2 CHNEP Water Atlas.....	15
Task 3.9 Sarasota County Comprehensive Vulnerability Assessment	17
Task 3.10 Manatee County Comprehensive Vulnerability Assessment	18
Task 3.12 Hendry County Comprehensive Vulnerability Assessment.....	19
Task 3.13 Glades County Comprehensive Vulnerability Assessment.....	20
Task 4 Watershed Coordination	21
Task 4.6 Restoration/Research TBD Projects	22

This Work Plan and tasks above only include those using EPA BIL FY25 funds. Task numbers reflect those used in full EPA 320 FY25 Master Organizational Work Plan for consistency and reporting purposes.

COASTAL & HEARTLAND NATIONAL ESTUARY PARTNERSHIP

Policy Committee

Mr. Brian Smith, Co-Chair

US Environmental Protection Agency, Region 4

Ms. Elizabeth Sweigert, Co-Chair

Florida Department of Environmental Protection

Hon. Sandy Meeks

Hardee County

Hon. Steve Hickox

Desoto County

Hon. Bill Read

City of Lakeland

Hon. Emory Howard

Hendry County

Hon. Tony Whidden

Glades County

Hon. Alice White

City of North Port

Hon. Scott Kirouac

Highlands County

Hon. Robert Heine, Jr.

City of Arcadia

Hon. Donna Peterman

City of Punta Gorda

Hon. Ray Sandelli

Lee County

Hon. Trish Pfeiffer

City of Bartow

Hon. Mike Miller

City of Sanibel

Hon. Jason Bearden

Manatee County

Hon. Jessica Cosden

City of Cape Coral

Hon. Joan Farrell

City of Venice

Hon. Bill Braswell

Polk County

Hon. Fred Burson

City of Fort Myers

Ms. Tracy Mercer

City of Winter Haven

Hon. Mark Smith

Sarasota County

Hon. John R. King

Town of Fort Myers Beach

Hon. Lori Fayhee

Village of Estero

Hon. Ken Doherty

Charlotte County

Vacant

City of Fort Meade

Ms. Allie McCue

Florida Fish & Wildlife Conservation Commission

Mr. John Hall

Southwest Florida Water Management District

Mr. Chauncey Goss

South Florida Water Management District

Mr. Don McCormick

Southwest Florida Regional Planning Council

Ms. Jennifer Codo-Salisbury

Central Florida Regional Planning Council

Management Committee Co-Chairs

Ms. Claire Jubb

& Ms. Melynda Brown

Technical Advisory Committee Co-Chairs

Mr. Ernesto Lasso de La Vega & Mr. Mark Walton

Citizens Advisory Committee Co-Chairs

Mr. Aaron Zimmerman & Mr. Harry Phillips

CHNEP Executive Director

Ms. Jennifer Hecker

BIPARTISAN INFRASTRUCTURE FUNDING FOR THE CHNEP

On November 15, 2021, President Biden signed the Bipartisan Infrastructure Law (P.L. 117-58), also known as the “Infrastructure Investment and Jobs Act of 2021” (IIJA) or “BIL.” The law’s investment in water is nothing short of transformational. It includes \$50 billion to the U.S. Environmental Protection Agency (EPA) for water infrastructure, the single largest investment in water that the federal government has ever made. The BIL provides \$132 million in funding for the 28 longstanding National Estuary Programs (NEPs) for fiscal years 2022 through 2026. This funding is being evenly distributed to the NEPs, annually providing each with approximately \$909,800 in BIL funds. Importantly, NEP BIL funds are available until expended.

On July 26th, EPA issued a NEP BIL Funding Implementation Memorandum (memorandum), which applies to funding provided under the BIL and provides guidance on uses of funds, timeframes, how to award the funds, and tracking and reporting requirements. The memorandum describes the process for FY 2022 – FY 2026 BIL funds and may be supplemented by additional implementation memoranda as needed. Unless otherwise noted in this document, the FY 2021 – FY 2024 Clean Water Act §320 National Estuary Program Funding Guidance also applies to BIL funding. It outlines the core goals of BIL funding are to:

- 1) “Tackle the Climate Crisis” by reducing emissions that cause climate change and accelerating resilience and adaptation to climate change impacts; and
- 2) “Take Decisive Action to Advance Environmental Justice and Civil Rights” by promoting EJ and protecting civil rights at the federal, state, and local levels.

As such, it states that NEP projects funded through BIL should seek to: (1) Accelerate and more extensively implement CCMPs, (2) Ensure that benefits reach disadvantaged communities – including that at least 40% of the BIL funding goes to projects benefitting such communities in FY24-26, and (3) Build the adaptive capacity of ecosystems and communities – including addressing climate change and using green and nature-based solutions to enhance resiliency.

It goes on to state that where possible and aligned with the priorities identified in their Comprehensive Conservation and Management Plans (CCMPs), NEPs should engage and educate the public and private sectors on key climate-related vulnerabilities and solutions and provide technical and financial assistance to accelerate progress in response to a changing climate. NEPs should elevate climate efforts through BIL implementation including, but not limited to:

- Assessment and planning projects that involve climate change vulnerability assessments, community resilience and adaptation plans, or hazard mitigation plans.
- Restoration, water infrastructure, green infrastructure, stormwater management, and nonpoint source projects that prioritize innovative climate adaptation, hazard mitigation, and resilience solutions.
- Projects focused on climate-related research, including those that measure, monitor, and increase carbon sequestration.
- Projects focused on climate-related outreach and education.

As with annual appropriations distributed to NEPs to implement CWA §320, the funds distributed under the BIL must implement the management conference and EPA-approved CCMP and Work Plan. Therefore, the CHNEP is required to put forth a BIL Work Plan and Budget for each year. Due to the long-term nature of BIL funding, each NEP is also required to develop a BIL Long-Term Plan, which CHNEP submitted as a FY24-FY26 BIL Work Plan on June 1, 2023.

Accordingly, CHNEP has drafted this BIL FY25 to outline how it plans to expend the FY25 Bipartisan Infrastructure Law funding to further resiliency in the CHNEP area, including addressing climate-related factors that affect improving water quality, restoring hydrology, protecting fish, wildlife and their habitat and increasing public engagement as outlined in the four action plans in the 2019 CHNEP CCMP.

CCMP FOCUS IN FY 2025

The Fiscal Year 2025 BIL Work Plan and Budget reflects the approved 2019 CCMP, which outlines the 5-year organizational strategic plan and has the following visions, goals, objectives, and strategies:

WATER QUALITY

VISION: Waters that meet their designated human uses for drinking, shellfish harvesting, or swimming and fishing, while supporting appropriate and healthy aquatic life.

GOAL: Water Quality Improvement.

OBJECTIVE: Meet or exceed water quality standards for designated uses of natural waterbodies and waterways with no degradation of Outstanding Florida Waters.

STRATEGY: Support comprehensive and coordinated water quality monitoring programs and projects and programs that reduce pollutants entering waterways.

WQ-1: Support a comprehensive and coordinated water quality monitoring and assessment strategy.

- CHNEP will continue working with partners to collect water quality monitoring data and uploading it to the CHNEP Water Atlas for access by interested parties and the public.
- CHNEP will work with our partners to develop new information pages on the Water Atlas as needed.
- CHNEP will continue to fund and support the Coastal Charlotte Harbor Monitoring Network (CCHMN).

WQ-2: Develop water quality standards, pollutant limits, and clean-up plans.

- CHNEP will continue to support, providing technical comment as appropriate, the development and implementation of water quality standards, pollutant limits and clean-up plans.

WQ-3: Reduce urban stormwater and agricultural runoff pollution.

- CHNEP will continue to provide public presentations and information on urban stormwater and agricultural runoff pollution.
- CHNEP will continue to support partners in the implementation of stormwater and agricultural runoff reduction projects.

WQ-4: Reduce wastewater pollution.

- CHNEP will continue to support partners in the implementation of wastewater discharge reduction and reuse projects, as well as septic to sewer conversion projects.

WQ-5: Reduce harmful algae blooms.

- CHNEP will continue to provide public presentations and information on harmful algae blooms and nutrient pollution.

HYDROLOGICAL RESTORATION

VISION: Natural freshwater flow across the landscape to the estuaries.

GOAL: Enhanced and improved waterbodies with more natural hydrologic conditions.

OBJECTIVE: Adequate aquifer recharge and freshwater volume and timing of flow to support healthy natural systems.

STRATEGY: Support data-driven watershed planning and hydrological restoration projects to preserve or restore natural flow regimes and provide sufficient fresh surface and groundwater to natural systems.

HR-1: Conduct data collection, modeling, and analyses to support hydrologic restoration.

- CHNEP will continue to actively participate in gathering data and supporting modeling and analyses as well as fund integrated ground and surface water models to improve decision-making with regards to hydrological restoration projects.

HR-2: Increase fresh surface water and groundwater availability to support healthy natural systems.

- CHNEP will continue to promote water conservation and sufficient flows and levels of freshwater to support natural systems.

HR-3: Preserve and restore natural flow regimes.

- CHNEP will work with partners to identify funding sources to facilitate capital programs that coordinate water storage, flood control, water quality and disaster planning.
- CHNEP will continue participating and providing technical assistance in Everglades' restoration through project review, meeting participation and technical comment.

FISH, WILDLIFE & HABITAT PROTECTION

VISION: A diverse environment of interconnected, healthy habitats that support natural processes and viable, resilient native plant and animal communities.

GOAL: Natural habitat protection and restoration.

OBJECTIVE: Permanently acquire, connect, protect, manage, and restore natural terrestrial and aquatic habitats.

STRATEGY: Promote and facilitate permanent acquisition and effective protection and management of critical natural habitats including wildlife dispersal areas, movement and habitat migration corridors, wetlands, flowways, and environmentally sensitive lands and estuarine habitats.

FW-1: Protect, restore, and monitor estuarine habitats.

- CHNEP will continue to work with Southwest Florida Estuarine Restoration Team (SWERT) partners on designing, permitting, and constructing seagrass, oyster, and other estuarine restoration projects in CHNEP area.

FW-2: Protect, restore, and monitor environmentally sensitive lands and waterways including critical habitat areas.

- CHNEP will continue to share the Habitat Restoration Needs report and maps to support the conservation, management and enhancement of environmentally sensitive lands and critical habitat areas necessary for habitat resilience and migration.
- CHNEP will continue to offer grants to assist engaged citizens that promote the protection and management of public environmental lands and waterways.
- CHNEP will continue to directly engage in funding and project managing habitat restoration projects.

FW-3: Assess and promote the benefits of land, waterway, and estuary protection and habitat restoration.

- CHNEP will continue to use its comprehensive regional Economic Valuation study to promote the economic return on investment from land, water and estuarine protection and restoration investments.

PUBLIC ENGAGEMENT

VISION: An informed, engaged public making choices and taking actions that increase protection and restoration of estuaries and watersheds.

GOAL: Public education and engagement.

OBJECTIVE: Increase the proportion of the population that supports and participates in actions to protect and restore estuaries and watersheds.

STRATEGY: Promote environmental awareness, understanding, and stewardship to the public, new target audiences, and policymakers; and strengthen non-profit partner collaboration in education and engagement programs.

PE-1: Promote environmental literacy, awareness, and stewardship through expanded education and engagement opportunities for the general public.

- CHNEP will continue to share information about routine volunteer events to provide environmental education and public engagement opportunities.
- CHNEP will continue to produce free educational materials and distribute them throughout the CHNEP area.
- CHNEP will continue to disseminate information about public engagement opportunities through Constant Contact, on social media, and on the www.chnep.org website.

PE-2: Expand reach of education and engagement opportunities to new target audiences.

- CHNEP will continue to conduct educational workshops and events, including in underserved communities, as a way to introduce natural resource protection information to new target audiences in that area.

PE-3: Strengthen non-profit partner collaboration in education and engagement programs.

- CHNEP will continue to administer a Conservation Grant program to foster community natural resource protection projects and initiatives that support CCMP implementation, including with non-profit partners.
- CHNEP will continue to seek and work with non-profit organizations on collaborative initiatives.
- CHNEP will continue to sponsor events that foster non-profit partner collaboration to educate and engage the public on issues relating to CCMP implementation.

PE-4: Increase outreach to policymakers to enhance understanding and support for CCMP implementation.

- CHNEP will continue to meet and send information to local, state, and federal policymakers, explaining CHNEP's role in supporting CCMP implementation.

FISCAL YEAR 2025 ANNUAL BIL BUDGET

Table 1: Fiscal Year 2025 BIL Budget Overview

Revenue	
Federal (EPA FY25 Bipartisan Infrastructure Law (BIL) Funding)	\$909,800
Total Revenue	\$909,800
Expenditures	
Travel	\$10,000
Sarasota County Comprehensive Vulnerability Assessment	\$200,000
Manatee County Comprehensive Vulnerability Assessment	\$200,000
CHNEP Water Atlas Maintenance & Improvements	\$120,000
<u>Hendry County Vulnerability Assessment</u>	<u>\$179,800</u>
<u>Glades County Vulnerability Assessment</u>	<u>\$200,000</u>
Total Expenditures	\$909,800

Table 2: Fiscal Year 2025 BIL Travel Budget

Date	Purpose	# Staff	Location	Length of Stay	Travel Mode	Reg. Fee	Estimated Cost
Mar. 2025	NEP/EPA Spring Meeting	1	Washington, DC	4	Air	\$500	\$3,000
Apr. 2025	League of Environmental Educators in Florida	1	Ocala, FL	2	Auto	\$150	\$600
<u>Oct. 2024 - Sep. 2025</u>	Local Travel: Meetings/Mileage	6	Various	1 to 2	Auto	\$0	\$5,750
Subtotal						\$650	\$ 9,350
Total							\$10,000

Table 3: Fiscal Year 2025 BIL Research and Restoration Projects Budget

<u>FY</u>	<u>Funder</u>	<u>Project Title</u>	<u>Amount</u>
<u>2022</u>	<u>EPA BIL</u>	<u>Pine Island Restoration Project</u>	<u>\$ 113,450</u>
<u>2022</u>	<u>EPA BIL</u>	<u>Charlotte County Vulnerability Assessment</u>	<u>\$200,000</u>
<u>2022</u>	<u>EPA BIL</u>	<u>Lee County Vulnerability Assessment</u>	<u>\$200,000</u>
<u>2022</u>	<u>EPA BIL</u>	<u>Tiki Point Living Shoreline Project</u>	<u>\$320,000</u>
<u>2022</u>	<u>EPA BIL</u>	<u>Yucca Pens Hydrological Restoration Project Phase I</u>	<u>\$76,350</u>
<u>EPA BIL FY22 Total</u>			<u>\$909,800</u>
<u>2023</u>	<u>EPA 320</u>	<u>Water Quality Trend Analysis</u>	<u>\$60,000</u>
<u>EPA 320 FY23 Total</u>			<u>\$60,000</u>
<u>2023</u>	<u>EPA BIL</u>	<u>Polk County Vulnerability Assessment</u>	<u>\$200,000</u>
<u>2023</u>	<u>EPA BIL</u>	<u>Highlands County Vulnerability Assessment</u>	<u>\$200,000</u>
<u>2023</u>	<u>EPA BIL</u>	<u>Yucca Pens Hydrological Restoration Project Phase I</u>	<u>\$346,170</u>
<u>EPA BIL FY23 Total</u>			<u>\$746,170</u>
<u>2024</u>	<u>EPA 320</u>	<u>Research & Restoration TBD</u>	<u>\$49,491</u>
<u>EPA 320 FY24 Total</u>			<u>\$49,491</u>
<u>2024</u>	<u>EPA BIL</u>	<u>CHNEP Water Atlas Maintenance & Improvements</u>	<u>\$85,000</u>
<u>2024</u>	<u>EPA BIL</u>	<u>DeSoto County Vulnerability Assessment</u>	<u>\$200,000</u>
<u>2024</u>	<u>EPA BIL</u>	<u>Hardee County Vulnerability Assessment</u>	<u>\$200,000</u>
<u>2024</u>	<u>EPA BIL</u>	<u>Yucca Pens Hydrological Restoration Project Phase I</u>	<u>\$327,480</u>
<u>2024</u>	<u>EPA BIL</u>	<u>Hendry County Vulnerability Assessment</u>	<u>\$20,200</u>
<u>2024</u>	<u>EPA BIL</u>	<u>Research & Restoration TBD</u>	<u>\$67,120</u>
<u>EPA BIL FY24 Total</u>			<u>\$899,800</u>
<u>2025</u>	<u>EPA 320</u>	<u>Lower CCHMN – Water Quality Monitoring</u>	<u>\$13,000</u>
<u>2025</u>	<u>SWFWMD</u>	<u>Upper CCHMN – Water Quality Monitoring</u>	<u>\$74,000</u>
<u>2025</u>	<u>Local</u>	<u>TBD Project Money to cover unanticipated costs</u>	<u>\$20,000</u>
<u>2025</u>	<u>EPA 320</u>	<u>Submerged Aquatic Vegetation Restoration and Water Quality Study</u>	<u>\$260,000</u>
<u>2025</u>	<u>EPA 320</u>	<u>Research & Restoration TBD</u>	<u>\$75,875</u>
<u>EPA, SWFWMD, & Local FY25 Total</u>			<u>\$442,875</u>
<u>2025</u>	<u>EPA BIL</u>	<u>Sarasota County Vulnerability Assessment</u>	<u>\$200,000</u>
<u>2025</u>	<u>EPA BIL</u>	<u>Manatee County Vulnerability Assessment</u>	<u>\$200,000</u>
<u>2025</u>	<u>EPA BIL</u>	<u>CHNEP Water Atlas Maintenance & Improvements</u>	<u>\$120,000</u>
<u>2025</u>	<u>EPA BIL</u>	<u>Hendry County Vulnerability Assessment</u>	<u>\$179,800</u>
<u>2025</u>	<u>EPA BIL</u>	<u>Glades County Vulnerability Assessment</u>	<u>\$200,000</u>
<u>EPA BIL FY25 Total</u>			<u>\$899,800</u>
<u>FY25 Total Research & Restoration Project Budget</u>			<u>\$1,342,675</u>

CHNEP BIL FUNDED WORK PLAN TASKS

The CHNEP projects are organized according to task. There are five tasks, as follows:

Task 1: Management Conference

- 1.1 Materials and Supplies

Task 2: Public Engagement

- 2.1 Conservation Grants
- 2.2 2026 Calendar
- 2.3 Public Engagement Events
- 2.4 Sponsorships

Task 3: Research Coordination

- 3.1 Water Quality and Seagrass Monitoring and Mapping Programs
- 3.2 CHNEP Water Atlas**
- 3.3 Charlotte County Comprehensive Vulnerability Assessment
- 3.4 Polk County Comprehensive Vulnerability Assessment
- 3.5 Highlands County Comprehensive Vulnerability Assessment
- 3.6 Lee County Comprehensive Vulnerability Assessment
- 3.7 DeSoto County Comprehensive Vulnerability Assessment
- 3.8 Hardee County Comprehensive Vulnerability Assessment
- 3.9 Sarasota County Comprehensive Vulnerability Assessment**
- 3.10 Manatee County Comprehensive Vulnerability Assessment**
- 3.11 Water Quality Trends Analysis
- 3.12 Hendry Comprehensive Vulnerability Assessment**
- 3.13 Glades Comprehensive Vulnerability Assessment**

Task 4: Watershed Coordination

- 4.1 Submerged Aquatic Vegetation Restoration
- 4.2 Pine Island Flatwoods Preserve Wetland Habitat Enhancement
- 4.3 Tiki Point Harborwalk Living Shoreline Pilot Project
- 4.4 Yucca Pens Hydrological Restoration Project Phase I
- 4.5 Submerged Aquatic Vegetation Restoration and Water Quality Study
- 4.6 Restoration/Research Project(s) TBD

Task 5: Policymaker Education

- 5.1 Comprehensive Conservation & Management Plan Updating and Reprinting

Note that only those tasks and projects bolded above are funded with FY25 Bipartisan Infrastructure Law funding. This Work Plan and tasks below only include those using EPA BIL FY25 funds. Task numbers will still reflect those used in full EPA 320 FY25 Master Organizational Work Plan for consistency and reporting purposes.

Task 1 Management Conference: Administration, Finance, Operations

Objective: Provide committee structure that supports the implementation of the CCMP; support administration of CHNEP; ensure compliance with grant and agreement requirements as awardee and awarder; and seek additional funding support for identified projects.

Description: The CHNEP office provides staff support to the Management Conference, furnishes operations and finance support, ensures compliance with Host Agency procedures, secures funding from partners, and assists partners seeking grants and contracts to implement the CCMP.

CCMP Elements Implemented: All

Outputs/Deliverables/Milestones

- Management Conference committee meetings for 4 committees, 3x/yr.
- Management Conference adoption of Annual Work Plan before June 1, 2024
- GPRA Reporting through EPA's NEPORT, by September 14, 2025
- Collaborate with partners on CCMP implementation, ongoing.
- Compliance with Host Agency finance and procurement requirements, ongoing
- Compliance with Funders' grant reporting requirements, ongoing

FY 25 BIL Budget

Staff Travel	\$ 10,000
--------------	-----------

Outcomes

- Fully informed and engaged CHNEP Management Conference
- Other federal, state, and non-profit grants obtained to funding CCMP implementation.
- Increased participation, understanding and support of NEP mission by partners.
- Continued commitment from partners to fund CHNEP and CCMP activities.
- Funding opportunities and assistance provided to partners to implement initiatives and projects that further CCMP implementation.

Estimated Timeline: FY 25

Task 3 Research Coordination

Work Plan Objective: To ensure collection, reporting and access to consistent region-wide, technically sound water quality and biological data throughout the CHNEP area. To identify and resolve gaps in scientific data and address emerging research needs through partnerships and innovative research.

Description: CHNEP coordinates some water quality sampling as well as works with partners to identify and resolve gaps in water quality and biological data, specifically through refinements to the Monitoring Strategy. In addition, CHNEP assists partners with compiling, analyzing, mapping, and conveying complex technical information in an understandable manner so it can be used to implement effective resource protection and restoration projects. The resulting data is used to assess resource status and trends, to be incorporated into resource management plans.

CCMP Elements Implemented: WQ-1, WQ-2, HR-1, FW-2, and PE-1.

Partners and Roles: outlined below in the respective subtasks.

Outputs/Deliverables/Milestones

- CHNEP Water Atlas: Review and assess uploaded water quality sampling data.
- Water Quality Monitoring: Monthly water quality data, quarterly RAMP participation, and CCHMN annual field audits and meetings
- Seagrass Monitoring: Annual seagrass data
- Seagrass Aerial Mapping: Biennial and 6-year seagrass aerial mapping
- Data Management: Biannual up-dates of water quality data
- Data Access: Ongoing access to water quality data, graphing and analyses and response to data requests.
- Data Analysis and Use: Annual up-dates of water quality contour maps and, and periodic refinement of Research Needs Inventory and environmental indicators

FY 25 Budget

EPA 320 Funds	Staff Time
FDEP Funds (Staff Time)	Staff Time
SWFWMD Funds (Staff Time)	Staff Time
Estimated Total Budget	Staff Time

Outcomes

- Consistent region-wide, technically sound water quality and biological data needed to assess resource status, trends, and complex interactions.
- Public access to water quality and seagrass data to partners via CHNEP Water Atlas
- Increased data analyses, maps, and graphs to enhance and evaluate protection and restoration efforts.
- Increased collaboration of monitoring, mapping and management among resource managers and agencies from throughout the CHNEP Area
- Expanded used of data by partners to assess resource conditions, manage resources and implement effective and efficient management programs and restoration projects.

Estimated Timeline: FY 25

Task 3.2 CHNEP Water Atlas

Project Objective: To ensure continuing access to technical information from throughout the CHNEP area to scientists, resource managers and users, elected officials, and the public through a user-friendly web-based tool. The resulting data, maps and graphs are easily accessible for use to evaluate resource conditions, answer site and topic specific questions, and convey scientific information in an understandable manner to support effective management programs and restoration projects.

Project Description: CHNEP maintains and enhances the CHNEP Water Atlas, a web-based, data management and mapping system that provides historical information, scientific data, water resource maps, resource management actions, volunteer opportunities and current events from throughout the CHNEP area. Tools are available to map, analyze and graph data related to specific locations and topics to assist partners with identifying, prioritizing, and implementing projects that address CCMP water quality, habitat, hydrology, and stewardship goals. CHNEP support includes maintenance, improvements, and enhancements of all the CHNEP Water Atlas components, including home page design and database updates. In addition to maintenance, the CHNEP works with USF to make upgrades and improvements on an annual basis. New Water Atlas Features/Improvements planned for 2025 include:

- Annual Water Quality Trends and Seagrass Analysis: These tasks will update seagrass and algae trend charts, spatial data and calculated acreages on basin pages and interactive map and update results of the WQ trends to include the period of January 1, 2024, to December 31, 2024
- New Lake Okeechobee Waterbody Page & LOSOM Updates to the Lake Okeechobee & Caloosahatchee Estuary Tracker: A new Lake Okeechobee waterbody page will be created with water quality, habitat, hydrology, and climate change maps and customized content, several additional map resources will also be incorporated. The Lake Okeechobee & Caloosahatchee Estuary Tracker will be updated according to the new adopted Lake Okeechobee Service Operating Manual (LOSOM).
- SCCF Data added to Real-Time Data Mapper: This task will be used to expand data available on the Real-Time Data Mapper to include real time monitoring from SCCF RECON (River, Estuary and Coastal Observing Network) sensors.

CCMP Elements Implemented: WQ-1, WQ-2, HR-1, FW-1, FW-2, FW-3, PE-1, and PE-3.

Partners and Roles: All entities creating publicly accessible water quality data.

Outputs/Deliverables/Milestones

- Post and provide access to water quality data updates every 6 months.
- Post and provide access to data analyses, maps and graphs as requested.
- Annual Update of WBID Boundaries and NNC Values
- Conducting trend analysis on water quality data annually and providing in user friendly format
- Conducting analysis on seagrass and macroalgae data annually and providing in user friendly format

FY 25 Budget

EPA BIL Funds	\$120,000
Total Budget	\$120,000 + Staff Time

Outcomes

- Data publicly provided to public and resource managers to assess effectiveness of protection and restoration efforts.
- Increased coordination on sampling and monitoring efforts amongst resource managers and agencies in the CHNEP area

Supported BIL Priorities

- 1) Tackle the Climate Crisis” by reducing emissions that cause climate change and accelerating resilience and adaptation to climate change impacts through providing the public all accessible climate change data for the region in one place where they can readily view and utilize.

Estimated Timeline: FY 25

Task 3.9 Sarasota County Comprehensive Vulnerability Assessment

Project Objective: To identify local climate change impacts and vulnerabilities and present adaptation responses that can help reduce community vulnerability and/or increase resilience in Sarasota County, Florida.

Project Description: This project will use the climate adaptation planning process to conduct public workshops and data analysis to identify pre-existing conditions and climate stressors, including vulnerability modeling to develop recommended Adaptation Action Areas (AAA's) for Sarasota County. The Consultant will gather and update the County's vulnerability assessment utilizing new elevation data, updated sea level rise projections, shoreline information, capital project data, social vulnerability index, and stormwater management data. The updated vulnerability modeling with new elevation data will be used to determine infrastructure and habitat impacts as well as areas of increasing vulnerability for a 2030, 2060, and 2100 sea level rise assumption horizon. Using the best available data, the contractor will also incorporate an analysis of stormwater management and social vulnerability using best practices such as the Center for Disease Control's Social Vulnerability Index or other evaluation strategy (identifying vulnerable populations and potential public health risks). That information and input will be synthesized into a summary of current and projected climate changes for the community. The contractor will then use these vulnerability assessments to develop proposed adaptation strategies. One of the foundational concepts of Fla Stat 380.093 and FEMA's CRS program is to assess the flood risk of a community using best available tools, data, and methodologies. The larger goal of both programs is to capture multiple types of weather-related scenarios to project and model how various flood risks would affect the community. This project will produce a final Climate Change Vulnerability Assessment for Sarasota County that meets all Florida Statutory requirements. This will qualify Sarasota County to access additional state funding sources.

CCMP Elements Implemented: potentially all CCMP elements.

Partners and Roles: CHNEP (Funder), Sarasota County

Outputs/Deliverables/Milestones

- Data Collection and Analysis
- Vulnerability Modeling and Analysis (including stormwater, social, etc.)
- Summary of Current and Project Climate Changes
- Summary of Proposed Adaption Strategies and recommended Adaptation Action Areas

FY 25 Budget

EPA BIL Funds	\$ 200,000
Total Budget	\$ 200,000 + Staff Time

Outcomes

- Climate Change Vulnerability Assessment for Sarasota County that meets state Statutory requirements.

Supported BIL Priorities

- 1) "Tackle the Climate Crisis" by reducing emissions that cause climate change and accelerating resilience and adaptation to climate change impacts; in assisting restoration of wetlands that act as carbon sinks and restoration of freshwater hydrological flows that can mitigate saltwater intrusion from sea level rise.
- 2) "Take Decisive Action to Advance Environmental Justice and Civil Rights" by promoting EJ and protecting civil rights at the federal, state, and local levels to identify and address additional vulnerabilities that may affect disadvantaged communities in selected County.

Estimated Timeline: FY 25

Task 3.10 Manatee County Comprehensive Vulnerability Assessment

Project Objective: To identify local climate change impacts and vulnerabilities and present adaptation responses that can help reduce community vulnerability and/or increase resilience in Manatee County, Florida.

Project Description: This project will use the climate adaptation planning process to conduct public workshops and data analysis to identify pre-existing conditions and climate stressors, including vulnerability modeling to develop recommended Adaptation Action Areas (AAA's) for Manatee County. The Consultant will gather and update the County's vulnerability assessment utilizing new elevation data, updated sea level rise projections, shoreline information, capital project data, social vulnerability index, and stormwater management data. The updated vulnerability modeling with new elevation data will be used to determine infrastructure and habitat impacts as well as areas of increasing vulnerability for a 2030, 2060, and 2100 sea level rise assumption horizon. Using the best available data, the contractor will also incorporate an analysis of stormwater management and social vulnerability using best practices such as the Center for Disease Control's Social Vulnerability Index or other evaluation strategy (identifying vulnerable populations and potential public health risks). That information and input will be synthesized into a summary of current and projected climate changes for the community. The contractor will then use these vulnerability assessments to develop proposed adaptation strategies. One of the foundational concepts of Fla Stat 380.093 and FEMA's CRS program is to assess the flood risk of a community using best available tools, data, and methodologies. The larger goal of both programs is to capture multiple types of weather-related scenarios to project and model how various flood risks would affect the community. This project will produce a final Climate Change Vulnerability Assessment for Manatee County that meets all Florida Statutory requirements. This will qualify Manatee County to access additional state funding sources.

CCMP Elements Implemented: potentially all CCMP elements.

Partners and Roles: CHNEP (Funder), Manatee County

Outputs/Deliverables/Milestones

- Data Collection and Analysis
- Vulnerability Modeling and Analysis (including stormwater, social, etc.)
- Summary of Current and Project Climate Changes
- Summary of Proposed Adaption Strategies and recommended Adaptation Action Areas

FY 25 Budget

EPA BIL Funds	\$ 200,000
Total Budget	\$ 200,000 + Staff Time

Outcomes

- Climate Change Vulnerability Assessment for Manatee County that meets state Statutory requirements.

Supported BIL Priorities

- 1) "Tackle the Climate Crisis" by reducing emissions that cause climate change and accelerating resilience and adaptation to climate change impacts; in assisting restoration of wetlands that act as carbon sinks and restoration of freshwater hydrological flows that can mitigate saltwater intrusion from sea level rise.
- 2) "Take Decisive Action to Advance Environmental Justice and Civil Rights" by promoting EJ and protecting civil rights at the federal, state, and local levels to identify and address additional vulnerabilities that may affect disadvantaged communities in selected County.

Estimated Timeline: FY 25

Task 3.12 Hendry County Comprehensive Vulnerability Assessment

Project Objective: To identify local climate change impacts and vulnerabilities and present adaptation responses that can help reduce community vulnerability and/or increase resilience in Hendry County, Florida.

Project Description: This project will use the climate adaptation planning process to conduct public workshops and data analysis to identify pre-existing conditions and climate stressors, including vulnerability modeling to develop recommended Adaptation Action Areas (AAA's) for Hendry County. The Consultant will gather and update the County's vulnerability assessment utilizing new elevation data, updated sea level rise projections, shoreline information, capital project data, social vulnerability index, and stormwater management data. The updated vulnerability modeling with new elevation data will be used to determine infrastructure and habitat impacts as well as areas of increasing vulnerability for a 2030, 2060, and 2100 sea level rise assumption horizon. Using the best available data, the contractor will also incorporate an analysis of stormwater management and social vulnerability using best practices such as the Center for Disease Control's Social Vulnerability Index or other evaluation strategy (identifying vulnerable populations and potential public health risks). That information and input will be synthesized into a summary of current and projected climate changes for the community. The contractor will then use these vulnerability assessments to develop proposed adaptation strategies. One of the foundational concepts of Fla Stat 380.093 and FEMA's CRS program is to assess the flood risk of a community using best available tools, data, and methodologies. The larger goal of both programs is to capture multiple types of weather-related scenarios to project and model how various flood risks would affect the community. This project will produce a final Climate Change Vulnerability Assessment for Hendry County that meets all Florida Statutory requirements. This will qualify Hendry County to access additional state funding sources.

CCMP Elements Implemented: potentially all CCMP elements.

Partners and Roles: CHNEP (Funder), Hendry County

Outputs/Deliverables/Milestones

- Data Collection and Analysis
- Vulnerability Modeling and Analysis (including stormwater, social, etc.)
- Summary of Current and Project Climate Changes
- Summary of Proposed Adaptation Strategies and recommended Adaptation Action Areas

FY 25 Budget

<u>EPA BIL Funds</u>	<u>\$ 179,800</u>
<u>Prior Funding</u>	
<u>FY24 EPA BIL Funds</u>	<u>\$ 20,200</u>
<u>Total Budget</u>	<u>\$ 200,000 + Staff Time</u>

Outcomes

- Climate Change Vulnerability Assessment for Hendry County that meets state Statutory requirements.

CWA Core Program Goals/Objectives Addressed: (2) identifying polluted waters and developing restoration plans to restore them, (4) addressing diffuse, nonpoint sources of pollution, (5) protecting wetlands, (6) protecting coastal waters through the National Estuary Program, (7) protecting large aquatic ecosystems, (8) Ensure clean and safe water for all communities, and (9) Protect and restore waterbodies and watersheds of the EPA Strategic Plan.

Task 3.13 Glades County Comprehensive Vulnerability Assessment

Project Objective: To identify local climate change impacts and vulnerabilities and present adaptation responses that can help reduce community vulnerability and/or increase resilience in Glades County, Florida.

Project Description: This project will use the climate adaptation planning process to conduct public workshops and data analysis to identify pre-existing conditions and climate stressors, including vulnerability modeling to develop recommended Adaptation Action Areas (AAA's) for Glades County. The Consultant will gather and update the County's vulnerability assessment utilizing new elevation data, updated sea level rise projections, shoreline information, capital project data, social vulnerability index, and stormwater management data. The updated vulnerability modeling with new elevation data will be used to determine infrastructure and habitat impacts as well as areas of increasing vulnerability for a 2030, 2060, and 2100 sea level rise assumption horizon. Using the best available data, the contractor will also incorporate an analysis of stormwater management and social vulnerability using best practices such as the Center for Disease Control's Social Vulnerability Index or other evaluation strategy (identifying vulnerable populations and potential public health risks). That information and input will be synthesized into a summary of current and projected climate changes for the community. The contractor will then use these vulnerability assessments to develop proposed adaptation strategies. One of the foundational concepts of Fla Stat 380.093 and FEMA's CRS program is to assess the flood risk of a community using best available tools, data, and methodologies. The larger goal of both programs is to capture multiple types of weather-related scenarios to project and model how various flood risks would affect the community. This project will produce a final Climate Change Vulnerability Assessment for Glades County that meets all Florida Statutory requirements. This will qualify Glades County to access additional state funding sources.

CCMP Elements Implemented: potentially all CCMP elements.

Partners and Roles: CHNEP (Funder), Glades County

Outputs/Deliverables/Milestones

- Data Collection and Analysis
- Vulnerability Modeling and Analysis (including stormwater, social, etc.)
- Summary of Current and Project Climate Changes
- Summary of Proposed Adaptation Strategies and recommended Adaptation Action Areas

FY25 Budget

<u>EPA BIL Funds</u>	<u>\$ 200,000</u>
<u>Total Budget</u>	<u>\$ 200,000 + Staff Time</u>

Outcomes

- Climate Change Vulnerability Assessment for Glades County that meets state Statutory requirements.

CWA Core Program Goals/Objectives Addressed: (2) identifying polluted waters and developing restoration plans to restore them, (4) addressing diffuse, nonpoint sources of pollution, (5) protecting wetlands, (6) protecting coastal waters through the National Estuary Program, (7) protecting large aquatic ecosystems, (8) Ensure clean and safe water for all communities, and (9) Protect and restore waterbodies and watersheds of the EPA Strategic Plan.

Task 4 Watershed Coordination

Work Plan Objective: To coordinate partner efforts around protection and restoration on a watershed scale.

Description: CHNEP to coordinate protection and restoration efforts including mapping, monitoring, reporting (including in the annual development of the Government Performance and Review Act (GPRA) report). Additionally, CHNEP staff will provide technical support in watershed initiatives such as: Southern Water Use Caution Area (SWUCA) Recovery Strategy, Minimum Flows and Levels, Reasonable Assurance Plans, Basin Management Action Plans, Southwest Florida Comprehensive Watershed Management Plan, Charlotte Harbor Flatwoods Initiative, Lehigh Watershed Initiative, South Lee County Watershed Initiative, and Caloosahatchee River Watershed Protection Plan. Southwest Florida Estuarine Restoration Team (SWERT) facilitates region-wide estuarine habitat restoration that addresses endangered smalltooth sawfish critical habitat. CHNEP also participates in state and federal processes to identify landscape scale conservation corridors with public and private partnerships to provide habitat and species migration and climate change adaptation. Additionally, CHNEP participates in Everglades Restoration projects relevant to the CHNEP Study Area; this includes participating on the Science Coordination Group on behalf of Southwest Florida. As opportunities arise, CHNEP also assists partners in conducting restoration activities.

CCMP Elements Implemented: All

Partners: CHNEP, Florida Gulf Coast University, Florida SeaGrant, Coastal Wildlife Club, Lee County Parks and Recreation Department, Lee County Department of Natural Resources, Charlotte Harbor Environmental Center, Sanibel-Captiva Conservation Foundation, Friends of Charlotte Harbor Aquatic Preserves, Lee County Conservation 2020 Program, Calusa Land Trust, City of Fort Myers, Mote Marine Lab, Sarasota Estuary Program, and Tampa Bay Estuary Program.

Outputs/Deliverables/Milestones

- GPRA Report
- Technical support for Charlotte Harbor Flatwoods Initiative, Lehigh Watershed Initiative, & South Lee County Watershed Initiative

FY 25 Budget

EPA 320 Funds	Staff Time
FDEP Funds	Staff Time
SWFWMD Funds	Staff Time
Total Budget	Staff Time

Outcomes

- Improved resource management
- Annual summaries of partners' restoration activities through the GPRA report

Supported BIL Priorities

- 1) "Tackle the Climate Crisis" by reducing emissions that cause climate change and accelerating resilience and adaptation to climate change impacts; in assisting restoration of wetlands that act as carbon sinks and restoration of freshwater hydrological flows that can mitigate saltwater intrusion from sea level rise.
- 2) "Take Decisive Action to Advance Environmental Justice and Civil Rights" by promoting EJ and protecting civil rights at the federal, state, and local levels to identify and address additional vulnerabilities that may affect disadvantaged communities in selected County.

Estimated Timeline: FY 25

Task 4.6 Restoration/Research TBD Projects

Project Objective: To solicit and award funding for a restoration/research project that addresses the CCMP Priority Actions has long-term applicability and serves as a model for addressing habitat restoration and improvement and resource management challenges.

Project Description: CHNEP will fund a restoration/research project(s) that implements CCMP Priority Actions, has long-term applicability, and serves as a model for addressing habitat restoration and resource management challenges. Assurances of long-term conservation use of the area after restoration/research is completed is an essential component of the project, as are monitoring restoration success and informing and educating the public about habitat values and restoration/research methods. Proposed projects should address at least one Priority Problems and implement one Priority Action, be transferable, demonstrate value to the community, and include monitoring and educational components.

CCMP Elements Implemented: Will be determined upon award.

Partners and Roles: Will be determined upon award.

Outputs/Deliverables/Milestones

- Habitats will be restored and protected within 2 years of project selection and remain in conservation use long term.
- Restoration/research techniques will be transferable to other projects and locations following completion of the project.
- Success monitoring methods, results and educational tools will be available to guide design and implementation of additional cost-effective restoration following completion of the project.

FY 25 Budget

<u>EPA 320 Funds</u>	<u>\$75,875</u>
<u>Local Funds</u>	<u>\$ 20,000 for unanticipated project-related expenses</u>
<u>Prior Funding:</u>	
<u>FY24 EPA Funds</u>	<u>\$49,491</u>
<u>FY24 BIL Funds</u>	<u>\$67,120</u>
<u>Total Budget</u>	<u>\$212,486+ Staff Time</u>

Outcomes

- Restoration and success monitoring methods will be available to designing and implementing future restoration project.
- Collaboration and technical information exchange will be enhanced between partners.
- Identified CHNEP restoration needs will be filled.

Supported BIL Priorities

- 1) “Tackle the Climate Crisis” by reducing emissions that cause climate change and accelerating resilience and adaptation to climate change impacts; in assisting community to undertake restoration projects that enhance their resiliency.
- 2) “Take Decisive Action to Advance Environmental Justice and Civil Rights” by promoting EJ and protecting civil rights at the federal, state, and local levels to identify and address climate mitigation needed in disadvantaged communities in the CHNEP area.

Estimated Timeline: FY25