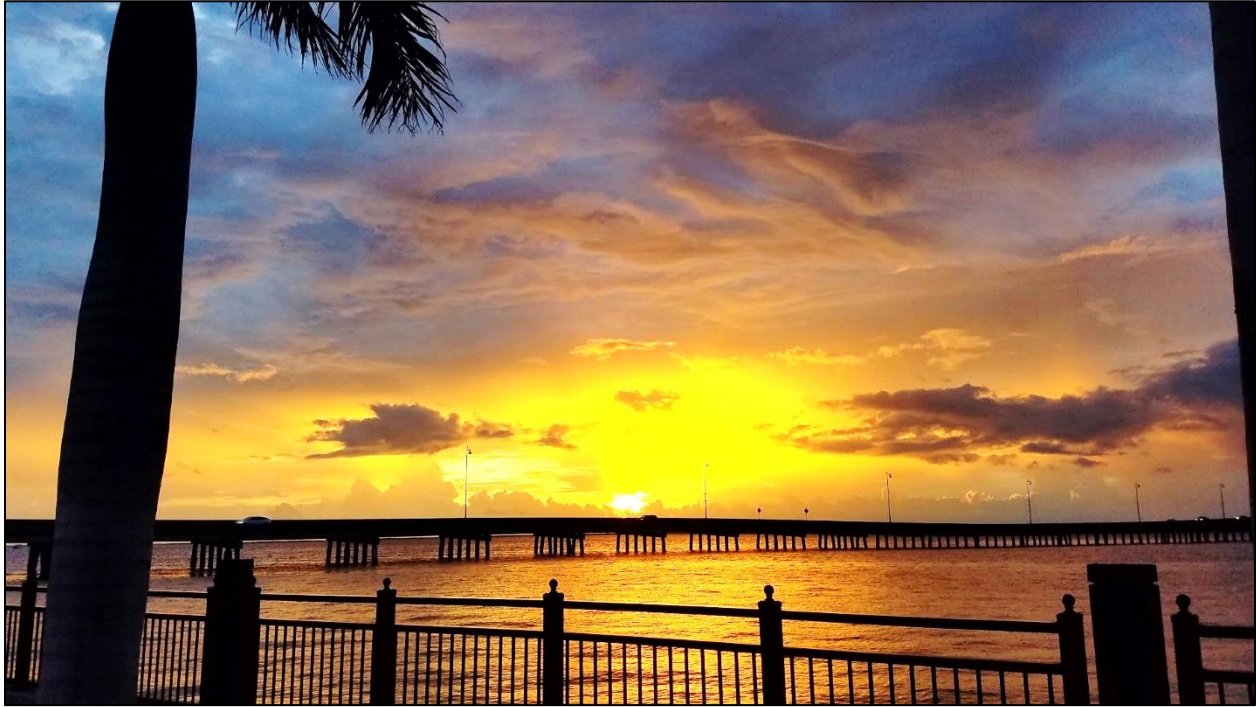


COASTAL & HEARTLAND NATIONAL ESTUARY PARTNERSHIP
FISCAL YEAR 2024-2026 BIPARTISAN INFRASTRUCTURE LAW
WORK PLAN AND LONG-TERM PLAN



Sunset views from the BIL-funded Tiki Point living shoreline project site in Punta Gorda. / Photo credit: Rhonda Paprocki

May 25, 2023



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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.

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COASTAL & HEARTLAND NATIONAL ESTUARY PARTNERSHIP

Policy Committee

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US Environmental Protection Agency, Region 4

Ms. Jennifer Carpenter, Co-Chair
Florida Department of Environmental Protection

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Hon. Ashley Coone
Desoto County

Hon. Alice White
City of North Port

Hon. Emory Howard
Hendry County

Hon. Tony Whidden
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Hon. James Satcher
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Hon. Jessica Cosden
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Mr. Jack Bispham
Southwest Florida Water Management District

Mr. Chauncey Goss
South Florida Water Management District

Mr. Don McCormick
Southwest Florida Regional Planning Council

Ms. Margaret Wuerstle
Southwest Florida Regional Planning Council

Ms. Jennifer Codo-Salisbury
Central Florida Regional Planning Council

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Technical Advisory Committee Co-Chairs

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

Citizens Advisory Committee Co-Chairs

Mr. Harry Phillips & **Ms. Debi Osborne**

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 - with CHNEP being allowed to combine the last three years (FY24-FY26). Due to the long-term nature of BIL funding, each NEP is also required to develop a BIL Long-Term Plan to submit no later than June 1, 2023.

Accordingly, CHNEP has drafted this BIL FY24-FY26 Work Plan and Long-Term Plan to outline how it plans to expend the last three years of 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 FY2024-FY2026

The Fiscal Year 2024-2026 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, as well as research algae bloom remediation techniques.

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. Currently, these include the South Lee County Watershed Initiative and the Charlotte Harbor Flatwoods Initiative 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 general 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 host routine volunteer events, as well as routinely host and participate in community 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 2024, 2025 and 2026 ANNUAL BUDGET

Table 1: Fiscal Year 2024, 2025 and 2026 BIL Budget Overview

Revenue	
Federal (EPA FY24 Bipartisan Infrastructure Law (BIL) Funding)	\$ 909,800
Federal (EPA FY25 Bipartisan Infrastructure Law (BIL) Funding)	\$ 909,800
Federal (EPA FY26 Bipartisan Infrastructure Law (BIL) Funding)	\$ 909,800
Total Revenue	\$ 2,729,400
Expenditures	
Desoto County Comprehensive Vulnerability Assessment	\$ 200,000
Hardee County Comprehensive Vulnerability Assessment	\$ 200,000
Manatee County Comprehensive Vulnerability Assessment	\$ 200,000
Sarasota County Comprehensive Vulnerability Assessment	\$ 200,000
Glades County Comprehensive Vulnerability Assessment	\$ 200,000
Hendry County Comprehensive Vulnerability Assessment	\$ 200,000
CHNEP Water Atlas Maintenance & Improvements	\$ 285,000
Travel	\$ 30,000
Restoration Project(s) TBD	\$ 1,214,400
Total Expenditures	\$2,729,400

Table 2: Fiscal Year 2024 Travel Budget

Date	Purpose	# Staff	Location	Length of Stay	Travel Mode	Reg. Fee	Estimated Cost
October 2023	RAE Living Shorelines Tech Workshop	1	Galveston, TX	3	Air	\$ 150	\$ 950
October 2023	Grant Management Boot Camp	1	Orlando, FL	3	Auto	\$ 500	\$ 750
Nov. 2023	Coastal Estuarine Research Federation Meeting	2	Portland, OR	5	Air	\$ 595	\$ 3,900
Jan. 2024	Everglades Coalition	1	Coral Springs, FL	4	Auto	\$ 0	\$ 1,300
Feb. 2024	American Water Resources	4	Fort Myers, FL	N/A	Auto	\$ 300	\$ 200
Feb. 2024	Gulf of Mexico Conference	4	Tampa, FL	4	Auto	\$ 1,800	\$ 4,000
Mar. 2024	NEP/EPA Spring Mtg.	1	Washington, DC	4	Air	\$ 300	\$ 2,000
April 2024	League of Environmental Educators in Florida	1	Ocala, Florida	2	Auto	\$ 150	\$ 600
Oct. 2023 - Sep. 2024	Local Meetings/ Mileage	6	Various Florida Locations	N/A	Auto	\$ 300	\$ 7,205
Subtotal						\$ 4,095	\$ 20,905
Total							\$ 25,000

Note: \$10,000 from EPA BIL and \$15,000 from EPA 320

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 2025 Calendar and 2024 Harbor Happenings Magazines
- 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 Manatee County Comprehensive Vulnerability Assessment**
- 3.10 Sarasota County Comprehensive Vulnerability Assessment**
- 3.11 Glades County Comprehensive Vulnerability Assessment**
- 3.12 Hendry County Comprehensive Vulnerability Assessment**

Task 4: Watershed Coordination

- 4.1 Submerged Aquatic Vegetation Restoration
- 4.2 Pine Island Flatwoods Preserve Wetland Habitat Enhancement
- 4.3 Myakka Headwaters Project
- 4.4 Tiki Point Harborwalk Living Shoreline Pilot Project
- 4.5 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 FY24-26 Bipartisan Infrastructure Law funding.*

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

- Management Conference committee meetings for 4 committees, 3x/yr.
- Management Conference adoption of Annual Work Plan before June 1, 2023
- GPRR Reporting through EPA's NEPORT, by September 14, 2023

Milestones

- Administration of Program Office operations and finances, ongoing
- Collaborate with partners on CCMP implementation, ongoing
- Compliance with Host Agency finance and procurement requirements, ongoing
- Compliance with Funders' grant reporting requirements, ongoing

FY 24 Budget

EPA 320 Funds (FY24):

Personnel (Salaries & Benefits)	\$538,810
Staff Travel	\$ 15,000
Overhead Host Administrative Fees	\$184,869
Communications Software and Fees	\$ 9,000

EPA BIL (FY24):

Staff Travel	\$ 10,000
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SWFWMD

Personnel (Salaries & Benefits)	\$ 56,000
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FDEP

Personnel (Salaries & Benefits)	\$ 75,000
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Note: Total personnel costs are \$669,810

Local:

Meeting Support	<u>\$ 7,000</u>
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Task 1 Total Budget	\$ 895,679
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Note: \$10,000 per year travel funded through BIL in FY25 and FY26 as well (for a total of \$30,000 of FY24-FY26 BIL funding)

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: FY24-FY26

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 24 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: FY24-FY26

Task 3.2 CHNEP Water Atlas

Project Objective: To ensure continuing access to technical information from throughout the CHNEP Study 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 2024 include:

- *Lake Okeechobee Waterbody Page:* This task is to develop a Lake Okeechobee waterbody page with the updated waterbody page design, linked to the common map that displays GIS layers for the four categories: water quality, habitat, hydrology, and climate change. The focus of the additions will be water quality (nutrients and salinity) and cyanobacteria (if available), as well as the ecological impacts to the Caloosahatchee Watershed of freshwater releases from Lake Okeechobee (shown in the Estuary Tracker). The Lake Okeechobee & Caloosahatchee Estuary Tracker will be incorporated into the page above the Water Quality section of the page.
- *Improvements to Basin Pages:* This task is to enhance the existing Basin pages to include summary information at the basin-level for water quality and hydrology, highlighted links to featured CHNEP projects, and a new “Climate Change” category in the Related Information section.
- *Adding Real-Time Data Collected by Partners onto the CHNEP Water Atlas Real-Time Data Mapper:* This task is to pull in the Sanibel -Captiva Conservation Foundation (SCCF) River, Estuary and Coastal Observing Network (RECON) Data onto Real-Time Data Mapper.

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 24 Budget:

EPA BIL FY23 Funds: \$95,000

Total Budget: \$95,000 + Staff Time

Note: \$95,000 per year Water Atlas funded through BIL in FY25 and FY26 as well, for a total of \$285,000 of FY24-26 BIL funding.

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

BIL Priorities Supported:

- 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: FY24-FY26

Task 3.7 DeSoto 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 DeSoto 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 DeSoto 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 DeSoto County that meets all Florida Statutory requirements. This will qualify DeSoto County to access additional state funding sources.

CCMP Elements Implemented: Potentially all CCMP elements

Partners and Roles: CHNEP (Funder), DeSoto 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

FY24 Budget:

EPA FY24 BIL Funds:	\$ 200,000
Total Budget:	\$ 200,000 + Staff Time

Outcomes

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

BIL Priorities Supported:

- 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: FY24-FY26

Task 3.8 Hardee 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 Hardee 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 Hardee 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 Hardee County that meets all Florida Statutory requirements. This will qualify Hardee County to access additional state funding sources.

CCMP Elements Implemented: Potentially all CCMP elements

Partners and Roles: CHNEP (Funder), Hardee 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

FY24 Budget:

EPA FY24 BIL Funds:	\$ 200,000
Total Budget:	\$ 200,000 + Staff Time

Outcomes

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

BIL Priorities Supported:

- 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: FY24-FY26

Task 3.9 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 Adaptation Strategies and recommended Adaptation Action Areas

FY24 Budget:

EPA FY24 BIL Funds:	\$ 200,000
Total Budget:	\$ 200,000 + Staff Time

Outcomes

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

BIL Priorities Supported:

- 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: FY25-FY27

Task 3.10 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 Adaptation Strategies and recommended Adaptation Action Areas

FY24 Budget:

EPA FY24 BIL Funds:	\$ 200,000
Total Budget:	\$ 200,000 + Staff Time

Outcomes

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

BIL Priorities Supported:

- 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: FY25-FY27

Task 3.11 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

FY24 Budget:

EPA FY24 BIL Funds:	\$ 200,000
Total Budget:	\$ 200,000 + Staff Time

Outcomes

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

BIL Priorities Supported:

- 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: FY26-FY28

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

FY24 Budget:

EPA FY24 BIL Funds:	\$ 200,000
Total Budget:	\$ 200,000 + Staff Time

Outcomes

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

BIL Priorities Supported:

- 3) "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.

- 4) “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: FY26-FY28

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 24 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
- Increased number and effectiveness of Best Management Practices (BMPs), plans and restoration activities

BIL Priorities Supported:

- 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: FY24-FY26

Task 4.5 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.

Project Location: TBD with preference to disadvantaged communities in the CHNEP area

Partners and Roles: Will be determined upon project selection and approval of CHNEP Policy Committee.

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 24 Budget

FY24 EPA BIL Funds	\$404,800 + Staff Time
FY24 Local Funds:	\$ 20,000 for unanticipated project-related expenses
FY24 Total Budget:	\$424,800 + Staff Time

Prior Funding

FY23 EPA BIL Funds:	\$346,170 + Staff Time
<u>FY22 EPA BIL Funds:</u>	<u>\$76,350</u>
FY22 Total Budget:	\$422,520 + Staff Time

FY22-FY24 Total Budget: \$847,320 + Staff Time

Note: \$404,800 per year Research/Restoration TBD funded through BIL in FY25 and FY26 as well (for a total of \$1,214,400 of FY24-26 BIL funding).

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

BIL Priorities Supported:

- 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: FY24-FY28