# COASTAL & HEARTLAND NATIONAL ESTUARY PARTNERSHIP

## FISCAL YEAR 2027 MASTER WORK PLAN


May 28, 2026

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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

**Mr. Craig Hesterlee**, Co-Chair
US Environmental Protection Agency, Region 4

**Ms. Elizabeth Sweigert**, Co-Chair
Florida Department of Environmental Protection

**Hon. Tim Wells**
Hardee County

**Hon. Emory Howard**
Hendry County

**Hon. Scott Kirouac**
Highlands County

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Lee County

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Manatee County

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City of Bartow

**Hon. Joe Kilraine**
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City of Fort Myers

**Hon. John King**
Town of Fort Myers Beach

**Hon. Bill Read**
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**Hon. Demetrius Petrow**
City of North Port

**Hon. Deborah Lux**
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**Hon. Lloyd Weed**
City of Venice

**Ms. Tracy Mercer**
City of Winter Haven

**Hon. Jeff Hunt**
Village of Estero

**Hon. Petrina McCutchen**
City of Fort Meade

**Ms. Allie McCue**
Florida Fish & Wildlife Conservation Commission

**Mr. Chauncey Goss**
South Florida Water Management District

**Mr. John Hall**
Southwest Florida Water Management District

**Ms. Rebekah Harp**
Southwest Florida Regional Planning Council

**Ms. Jennifer Codo-Salisbury**
Central Florida Regional Planning Council

| | | |
|---|---|---|
| Management Committee Co-Chairs | **Ms. Jamie Wolanin** | **& Ms. Melynda Brown** |
| Technical Advisory Committee Co-Chairs | **Ms. Arielle Taylor-Manges** | **& Mr. Stefan Kalev** |
| Citizens Advisory Committee Co-Chairs | **Mr. Aaron Zimmermann** | **& Mr. Harry Phillips** |

CHNEP Executive Director **Ms. Jennifer Hecker**

## FURTHERING FEDERAL ADMINISTRATION PRIORITIES

This annual grant work plan and budget reflect meeting the federal administration priorities. For the US Environmental Protection Agency, these encompass the following:

Pillar 1: Clean Air, Land, and Water for Every American
Pillar 2: Restore American Energy Dominance
Pillar 3: Permitting Reform, Cooperative Federalism, and Cross-Agency Partnership
Pillar 4: Make the United States the Artificial Intelligence Capital of the World
Pillar 5: Protecting and Bringing Back American Auto Jobs

The work of the Coastal & Heartland National Estuary Partnership (CHNEP), part of the National Estuary Program, which is administered by the US EPA, supports achievement of Pillar 1: Clean Air, Land, and Water for Every American and Pillar 3: Permitting Reform, Cooperative Federalism, and Cross-Agency Partnership.

With regards to Pillar 1, the CHNEP supports land and water protection in the "estuaries of national significance" and their watersheds in Central and Southwest Florida. CHNEP directly funds water quality sampling, data analysis and reporting, and dissemination of that water quality data to our state and local governmental members as well as the public through the CHNEP Water Atlas and CHNEP water quality fact sheets. CHNEP has and continues to fund hydrologic restoration projects that reduce flooding to communities while enhancing more natural freshwater flows to tidal rivers and estuaries – essential for maintaining seagrasses, oysters, fish habitats and other economically important marine resources. CHNEP has and continues to fund wetland restoration projects that enhance the ability of these publicly and privately protected areas to naturally cleanse and store stormwater to reduce flooding and provide clean water to downstream communities for recreation, water supply, and commercial use. With the National Estuary Program being funded under Section 320 of the Clean Water Act, we provide critical financial assistance for water resource protection of these estuaries of national significance, which is relied upon and used in combination with other sources of funding to support these natural capital-based communities and economies, ensuring clean land and water for the use and enjoyment of all Americans.

With regards to Pillar 3, CHNEP and the other entities in the National Estuary Program are the finest examples of Cooperative Federalism and Cross-Agency Partnership. As a non-regulatory federal program, the National Estuary Program has no role in any regulatory matters including permitting reform. The partnership is governed through the consensus of our members. Our governing board is comprised of local government elected leaders from the 10 counties and many of the cities therein, as well as state and federal agency officials. The federal funding pulls these entities together to work collectively to draft a required 5-year strategic plan, called the Comprehensive Conservation and Management Plan (CCMP), and to implement that plan through its approval of annual work plans and budgets that undertake projects and initiatives consistent with fulfilling CCMP goals and objectives. This process ensures federal priorities are transferred down to state and local governmental partners and likewise, local community needs and priorities are transferred up to the federal government to ensure that all levels of government are working cooperatively. The CHNEP is the only forum where all levels of government working on water and land protection in Central and Southwest Florida meet together routinely to discuss and collaborate in a cross-agency partnership fashion.

As such, CHNEP is working to ensure that we support the fulfillment of the administration's priorities with regards to Pillars 1 and 3 in a Cooperative Federalism approach, to showcase how federal government can be more efficient in meeting the needs of its citizens in providing clean water and land for every American.

## PREVIOUS YEAR – FY2026 - PROGRAM ACCOMPLISHMENTS

This is a summary of some of the highlights of the Coastal & Heartland National Estuary Partnership over the past fiscal year for each Comprehensive Conservation and Management Plan priority action (Water Quality (WQ), Hydrological Restoration (HR), Fish & Wildlife Habitat Protection (FW), and Public Engagement (PE).

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

- Continued coordination of the Coastal Charlotte Harbor Monitoring Network (CCHMN), providing funding for surface water monitoring and staff support, conducting the annual audits, maintaining project Standard Operating Procedures (SOPs) and Quality Assurance Project Plan (QAPP) and hosting the annual meeting.
- Supported the Florida Department of Environmental Protection's Charlotte Harbor Estuaries Volunteer Water Quality Monitoring Network (CHEVWQMN) including updating the Water Atlas Aquatic Preserve pages and CHEVWQMN biannual data updates.

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

- Produced updated Water Quality Fact Sheets by basin that assess current water quality conditions against their established pollutant limits or state water quality standards, making them available on CHNEP website and sending them to partner municipalities in the CHNEP area.

WQ-3: Reduce urban stormwater and agricultural runoff pollution

- Supported partners in the implementation of stormwater and agricultural runoff reduction projects through providing funding resources, technical input and assistance, etc.

WQ-4: Reduce wastewater pollution

- Conducted flood modeling to identify critical wastewater infrastructure in Charlotte, Hardee, Highlands, and DeSoto Counties that are vulnerable to failure through doing their countywide vulnerability assessments and adaptation action area plans.

WQ-5: Reduce harmful algae blooms

- Provided continuous updated harmful algae bloom updates to the public and water managers through the January 2026 Management and Policy Committee Meetings having Blue Green Algae and Red Tide presentations, with those videos now permanently on CHNEP YouTube.

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

- Continued to provide technical support and maintain the collective Charlotte Harbor Flatwoods Hydrological Restoration Initiative webpage on the CHNEP Water Atlas to coordinate efforts to restore the hydrology of a large area in south Charlotte and north Lee counties.

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

- Continued to provide public educational outreach materials and events to reinforce the need of sufficient freshwater for healthy natural wetlands, rivers, and estuaries.

HR-3: Preserve and restore natural flow regimes

- Began the Yucca Pens Hydrological Restoration Project, procuring the services of a contractor to begin detailed engineering design of a seepage wall and ditch blocks to restore more natural sheetflow and rehydrate wetlands on the Yucca Pens Wildlife Management Area.

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

- Participated in the Southwest Ecosystem Restoration Team (SWERT). SWERT partners focus on the restoration and enhancement of estuarine habitat including coastal marshes, mangroves, oyster reefs and seagrass.

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

- Held year 2 project meetings for CHNEP Technical Advisory Committee- Habitat Conservation Subcommittee and site visit in coordination with Florida Fish and Wildlife Conservation Commission, Bonefish & Tarpon Trust, and Charlotte County for NOAA RESTORE project. The project will include fisheries research, mapping, and modeling as well as the creation of decision-making support tools for county and state governments that prioritize locations for restoration and protection of juvenile snook and tarpon habitat in Charlotte Harbor.
- Co-authored published scientific journal article titled "Knowledge Co-Production to Inform Fish Habitat Conservation: A Case Study Highlighting Engagement with Local Government" in the journal *Estuaries and Coasts*.

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

- Continued to provide related educational and technical resources on the CHNEP Water Atlas, in monthly e-newsletter to approx. 5,400 online subscribers, on social media and by sharing related presentations on CHNEP YouTube, in annual nature calendar educational insert, etc.

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

- Designed, published, and distributed 26,000 copies of the 2026 Calendar, which included an educational Harbor Happenings insert to help people identify types of mangroves and seagrasses.
- Organized and hosted a 2-day public Resiliency Summit, with more than 150 participants who came together to discuss hurricane and other extreme weather conditions, as well as ways to enhance community resiliency through adaptation.
- CHNEP created new funding and seagrass fact sheets, making them available on CHNEP website.

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

- Hosted numerous educational events throughout all ten counties in CHNEP area including a Kids Fishing Clinic at the Arcadia Rodeo where with the assistance of volunteers, four educational stations focused on stewardship, habitat, knot tying, and casting were provided to participants.
- Presented technical information at the 28th Biennial Coastal and Estuarine Federation Conference, South Florida Water Management District Resiliency Coordination Forum, University of Florida Water Institute Symposium, amongst other new technical audiences.

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

- Provided Conservation Grants to numerous area non-profits, including for several volunteer clean-ups, volunteer water quality monitoring, educational interpretive signs, habitat restoration and other activities that implement CHNEP Comprehensive Conservation & Management Plan priority actions.
- Supported the Myakka River Management Coordinating Council (MRMCC) to support updates to the MRMCC website, an educational resource about the watershed.

PE-4: Increase outreach to policymakers to enhance understanding and support for Comprehensive Conservation and Management Plans (CCMP) implementation

- Met with numerous local, state, and federal policymakers to educate them about the CHNEP, its CCMP, and the current research and project funding needs of our partners.
- Sent printed CHNEP CCMP to each CHNEP federal legislative office.

## CCMP FOCUS IN FY 2027

The Fiscal Year 2027 Work Plan and Budget reflect the approved 2025 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 upload 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 contribute funding for and to provide staff support to coordinate 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.

### HYDROLOGIC RESTORATION

VISION: Natural freshwater flows 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 support implementation of vulnerability assessment and adaptation plan recommendations to protect water quality and hydrology.
- 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, monitor and restore 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, monitor and restore 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 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 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 all communities

- CHNEP will continue to conduct educational workshops and events, as a way to introduce natural resource protection information to all communities in the area.

PE-3: Strengthen 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.
- CHNEP will continue to bring partners together, provide resources, and coordinate natural disaster and episodic events response and recovery efforts.

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

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

## FISCAL YEAR 2027 ANNUAL BUDGET

### Table 1: Fiscal Year 2027 Budget Overview

| **Revenue** | |
|---|---|
| Federal (EPA FY26 Programmatic 320 Funding) | $850,000 |
| Partner FY27 Contributions (Local) | $143,000 |
| Partner FY27 Contributions (State) | $131,000 |
| **Total Revenue** | **$1,124,000** |
| | |
| **Expenditures** | |
| Personnel (FY27 EPA 320, SWFWMD, FDEP, Local) | $570,000 |
| Overhead Administrative Fees (Local, FY27 EPA 320) | $256,000 |
| Public Outreach (Local, FY27 EPA 320) | $109,500 |
| Research and Restoration (Local, FY27 EPA 320) | $147,000 |
| Policymaker Education (Local) | $9,500 |
| FY27 Expenditures | $1,092,000 |
| Added to Reserves | $32,000 |
| **Total Expenditures** | **$1,124,000** |

### Table 2: Fiscal Year 2027 Administrative Budget

| Funder | Title | Amount |
|---|---|---|
| EPA 320 FY27 | Host Fees | $180,000 |
| EPA 320 FY27 | Materials and Supplies / Printer Lease | $25,000 |
| EPA 320 FY27 | Travel | $25,000 |
| Local | Meeting Support | $10,000 |
| EPA 320 FY27 | Communication Software & Fees | $16,000 |
| **Total** | | **$256,000** |

### Table 3: Fiscal Year 2027 SWFWMD Budget

| Task | Project | SWFWMD |
|---|---|---|
| 1 (Work Plan Tasks 3 & 4) | Staff Support | $56,000 |
| **Total** | | **$56,000** |

**Table 4: Fiscal Year 2027 Cooperative Funding Revenue**

| Funding Source | 2027 Budget | Type |
|---|---|---|
| **Federal:** | | |
| EPA Section 320 Funding | $ 850,000 | Clean Water Act Section 320 Grant |
| **Total Federal:** | **$ 850,000** | |
| | | |
| Sarasota County | $ 25,000 | County Appropriation |
| Charlotte County | $ 25,000 | County Appropriation |
| Lee County | $ 25,000 | County Appropriation |
| Polk County | $ 25,000 | County Appropriation |
| Manatee County | $ 5,000 | County Appropriation |
| DeSoto County | $ 500 | County Appropriation |
| Hardee County | $ 500 | County Appropriation |
| City of Cape Coral | $ 7,500 | City Appropriation |
| City of Fort Myers | $ 5,000 | City Appropriation |
| City of Punta Gorda | $ 5,000 | City Appropriation |
| City of Sanibel | $ 2,500 | City Appropriation |
| Town of Fort Myers Beach | $ 2,500 | City Appropriation |
| City of Venice | $ 2,500 | City Appropriation |
| City of North Port | $ 1,000 | City Appropriation |
| City of Winter Haven | $ 1,500 | City Appropriation |
| Village of Estero | $ 5,000 | Village Appropriation |
| City of Arcadia | $ 500 | City Appropriation |
| City of Bartow | $ 500 | City Appropriation |
| Peace River Manasota Regional Water Supply Authority | $ 3,500 | District Appropriation |
| **Total Local Government Revenue** | **$ 143,000** | |
| | | |
| FDEP | $ 75,000 | District Appropriation |
| SWFWMD | $ 56,000 | District Appropriation |
| **Total State/District Revenue** | **$ 131,000** | |
| | | |
| **Non-Federal FY27 Revenue** | $ 274,000 | |
| | | |
| **Total FY27 Revenue** | **$ 1,124,000** | |
| | | |
| **Non-Federal Match Requirement** | $ 850,000 | SFWMD-funded project(s) |

**Table 5: Fiscal Year 2027 Travel Budget**

| Date | Conference/Meeting Entity | # Staff | Location | Length of Stay | Travel Mode | Reg. Fee | Estimated Cost |
|---|---|---|---|---|---|---|---|
| Jan. 2027 | Everglades Coalition | 1 | TBD, FL | 4 | Auto | $ -- | $1,300 |
| Feb. 2027 | American Water Resources Association | 2 | Fort Myers, FL | - | Auto | $ -- | $200 |
| Mar. 2027 | NEP/EPA | 1 | Washington, DC | 4 | Air | $300 | $2,400 |
| April 2027 | League of Env. Educators of Florida | 1 | Ocala, FL | 2 | Auto | $150 | $600 |
| April 2027 | Gulf of America All Hands | 1 | TBD | 4 | Air | $200 | $1,300 |
| September 2027 | Resiliency Florida | 1 | TBD, FL | 3 | Auto | $500 | $1,200 |
| Oct. 2026 - Sep. 2027 | Local Travel: Meetings/Mileage | 5 | Various | 1 to 2 | Auto | $585 | $11,100 |
| | | | | | Subtotal | $1,735 | $18,100 |
| | | | | | **Total** | | **$ 25,000** |

**Table 6: Fiscal Year 2027 Public Outreach Budget**

| Funder | Title | Amount |
|---|---|---|
| Local | CHNEP Sponsorships | $5,000 |
| Local | CHNEP Conservation Grants | $30,000 |
| EPA 320 FY27 | CHNEP Small Publications | $15,000 |
| EPA 320 FY27 | CHNEP Publications (Calendar) | $40,000 |
| Local | CHNEP Publication Support (Contractor) | $5,000 |
| Local | CHNEP Events | $14,500 |
| | **Total** | **$109,500** |

**Table 7: Fiscal Year 2027 Research and Restoration Projects Budget**

| FY | Funder | Project Title | Amount |
|---|---|---|---|
| 2022 | EPA IIJA | Pine Island Flatwoods Preserve Enhancement | $113,450 |
| 2022 | EPA IIJA | Charlotte County Vulnerability Assessment | $200,000 |
| 2022 | EPA IIJA | Lee County Adaptation Plan Focus Areas 15&16 | $200,000 |
| 2022 | EPA IIJA | Tiki Point Harborwalk Living Shoreline | $320,000 |
| 2022 | EPA IIJA | Yucca Pens Hydrological Restoration Phase I | $76,350 |
| | | **EPA IIJA FY22 Total** | **$909,800** |
| 2023 | EPA IIJA | Polk County Vulnerability Assessment Enhancements | $200,000 |
| 2023 | EPA IIJA | Highlands County Adaptation Action Planning | $200,000 |
| 2023 | EPA IIJA | Yucca Pens Hydrological Restoration Phase I | $346,170 |
| | | **EPA IIJAFY23 Total** | **$746,170** |
| 2024 | EPA IIJA | Pine Island Flatwoods Preserve Enhancement | $11,550 |
| 2024 | EPA IIJA | DeSoto County Adaptation Action Planning | $200,000 |
| 2024 | EPA IIJA | Hardee County Adaptation Action Planning | $200,000 |
| 2024 | EPA IIJA | Yucca Pens Hydrological Restoration Phase I | $327,480 |
| 2024 | EPA IIJA | Hendry County Pollywog Creek Stabilization | $20,200 |
| 2024 | EPA IIJA | Water Quality Trend Assessment and Dashboard Tool | $59,117 |
| | | **EPA IIJA FY24 Total** | **$818, 347** |
| 2025 | EPA IIJA | Sarasota County Adaptation Action Planning | $200,000 |
| 2025 | EPA IIJA | Manatee County Adaptation Action Planning | $200,000 |
| 2025 | EPA IIJA | Hendry County Pollywog Creek Stabilization | $179,800 |
| 2025 | EPA IIJA | Glades County Adaptation Action Planning | $200,000 |
| | | **EPA IIJA FY25 Total** | **$779,800** |
| 2025 | EPA 320 FY22-25 | Lower CCHMN – Water Quality Monitoring | $13,000 |
| 2025 | EPA 320 FY22-25 | CHNEP Water Atlas Maintenance | $78,720 |
| 2025 | EPA 320 FY22-25 | Lee County SEASCAPES Project | $100,000 |
| 2025 | EPA 320 FY22-25 | Sarasota County WMS Habitat Restoration Initiative | $230,000 |
| 2025 | EPA 320 FY22-25 | Clean Water Research & Restoration TBD | $368 |
| | | **EPA 320 FY22-25 Carryover Funding Total** | **$422,088** |
| 2025 | EPA IIJA FY22-25 | Clean Water Research & Restoration TBD | $3,869 |
| | | **EPA-IIJA FY22-25 Carryover Funding Total** | **$3,869** |
| 2026 | EPA 320 FY26 | CHNEP Water Atlas Improvements | $31,697 |
| 2026 | EPA 320 FY26 | Polk County Lake Idyl Sediment Inactivation Project | $230,000 |
| 2026 | EPA 320 FY26 | Charlotte County Exceptional Ponds Initiative | $230,000 |
| 2026 | EPA 320 FY26 | Hardee Lakes Habitat Enhancement Conserv. Initiative | $240,000 |
| 2026 | EPA 320 FY26 | Clean Water Research & Restoration TBD Project(s) | $3,000 |
| | | **EPA FY26 Total** | **$754,697** |
| 2026 | EPA IIJA FY26 | Peace River Basin Water Pollution Hotspot Assessment | $119,000 |
| 2026 | EPA IIJA FY26 | SAV and Water Quality Restoration | $260,000 |
| 2026 | EPA IIJA FY26 | Clean Water Research & Restoration TBD Project(s) | $530,800 |
| | | **EPA IIJA FY26 Total** | **$909,800** |
| 2027 | EPA 320 FY27 | CHNEP Water Atlas Maintenance and Improvements | $112,000 |

| | | | |
|---|---|---|---|
| 2027 | Local | CCHMN Lower Charlotte Harbor Water Quality Monitoring | $15,000 |
| 2027 | Local | TBD Project Money to cover unanticipated costs | $20,000 |
| | | **EPA 320 & Local FY27 Total** | **$147,000** |

## STAFF ORGANIZATION CHART AND RESPONSIBILITIES

The FY27 CHNEP staffing plan includes six full-time professionals, including the following positions:


**Executive Director**: Responsible for overall program management including cultivating and strengthening partnerships and soliciting funding.

**Research & GIS Manager**: Responsible for managing research and GIS projects and initiatives.

**Restoration Manager**: Responsible for managing restoration projects and initiatives.

**Conservation Specialist:** Responsible for providing a variety of public outreach and engagement duties, including environmental education programs, volunteer and member support, marketing, etc.

**Finance and Grants Specialist:** Responsible to a variety of finance and grants support functions relating to grant writing, grant reporting, grant invoicing and reimbursements, etc.

**Administrative Specialist**: Responsible for providing a variety of administrative support functions relating to payroll, database management, donation processing, meeting preparation, etc.

## CLEAN WATER ACT (CWA) CORE PROGRAM GOALS

1) Establishing water quality standards
2) Identifying polluted waters and developing restoration plans
3) Permitting discharges of point pollutants
4) Addressing nonpoint sources of pollution
5) Protecting wetlands
6) Protecting coastal waters
7) Protecting large aquatic ecosystems
8) Ensure clean and safe water for all communities
9) Protect / restore waterbodies & watersheds

## CLEAN WATER ACT CORE PROGRAM SUPPORT FUNCTIONS

CHNEP supports the Clean Water Act (CWA) core programs through direct funding of projects, staff assistance to partners and partner activities. Provided below are representative activities of CHNEP support for CWA core programs during Fiscal Year 2026.

Water Quality Monitoring for Water Quality Standards

The CHNEP coordinates the Coastal Charlotte Harbor Monitoring Network (CCHMN), a regional partnership of agencies that collect monthly water quality data using consistent, technically-sound sampling design. The long-term random sampling of strategically located stations allows for the scientific assessment of water quality status and trends. The CCHMN was created to fill gaps in coastal water monitoring and initiate a unified sampling approach throughout the CHNEP area. CHNEP also contributes to this project by assisting in funding support for the monitoring of upper and lower Charlotte Harbor within the project area. CHNEP creates and maintains the EPA approved Quality Assurance Project Plan (QAPP) and Standard Operating Procedures for the CCHMN, conducts annual field audits and meetings, contracts and assists with field sampling, and compiles and analyzes collected water quality data through the CHNEP Water Atlas. CHNEP and CCHMN partners also participate in the Regional Ambient Monitoring Program (RAMP) which holds quarterly meetings. RAMP participants share current water quality field and laboratory issues and conduct quality assurance field sampling and laboratory analyses. CHNEP provides ongoing support to the CCHMN and the Charlotte Harbor Estuary Volunteer Water Quality Monitoring Network (CHEVWQMN), as their data is entered into the state Watershed Information Network (WIN) database and is used to evaluate status and trends of state, regional, and local estuarine conditions. The data is used locally by CHNEP to develop future water quality targets and numeric nutrient data. Charlotte Harbor is also a Southwest Florida Water Management District (SWFWMD) Surface Water Improvement and Management (SWIM) priority Water Body.

The continuation of consistent data collection throughout this project area will help to assess impairments, determine total maximum daily load limits (TMDL), and develop basin management action plans for the watershed. The gathering of water quality data results in valuable information that is used for guidance on the improvement of water quality based on records starting in 2000.

Controlling Non-Point Sources

The CHNEP funds projects educating or implementing non-point source pollution reduction. Examples include fertilizer restriction brochures and signs, native landscaping workshops, marine debris reduction, rain gardens, etc.

The CHNEP also hosts the CHNEP Water Atlas site, a web-based resource center providing both technical users and interested community members and policy makers with a one-stop shop to find local data on water quality, flow, and habitat to information about educational events and volunteer resources in Central and Southwest Florida. The site includes up-to-date historical data, trend analysis, historical maps and studies, water resource maps, and much more. It is a readily accessible way to find more information about local waterways.

Protecting Wetlands and Coastal Waters

The CHNEP undertakes research and restoration projects that support water quality improvement and restored hydrology including implementing living shorelines, flowways and wetland restoration, oyster and seagrass restoration, and other activities.

## 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:** This ongoing task provides staff support to the Management Conference, furnishes operations and finance support, ensures compliance with Administrative Host 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) each.
- Management Conference adoption of Annual Work Plan before June 1, 2025.
- Government Performance and Review Act (GPRA) Reporting through EPA's National Estuary Program Online Reporting Tool (NEPORT), by September 14, 2025.
- Administration of Program Office's 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.

**FY27 Budget**

| | |
|---|---|
| EPA FY27 Programmatic 320 Funding | |
| Personnel (Salaries & Benefits) | $437,000 |
| Staff Travel | $ 25,000 |
| Communications Software and Fees | $ 16,000 |
| Administrative Charges (Host Fee) | $180,000 |
| SWFWMD FY27 Funding | |
| Personnel (Salaries & Benefits) | $ 56,000 |
| FDEP FY27 Funding | |
| Personnel (Salaries & Benefits) | $ 75,000 |
| Local FY27 Funding | |
| Personnel (Salaries & Benefits) | $ 2,000 |
| Meeting Support | $ 10,000 |
| Total Task Budget | $801,000 |

**Outcomes**

- Fully informed and engaged CHNEP Management Conference that coordinated water resource protection across jurisdictional boundaries at a watershed scale.
- Support for other federal, state, and non-profit grants to fund CCMP implementation.
- Increased participation, understanding and support of National Estuary Partnership (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.

**CWA Core Program Goals/Objectives Addressed:** Potentially all.

## Task 1.1 Materials and Supplies

**Project Objective:** To provide the necessary supplies for the program office to function.

**Project Description:** This ongoing task purchases materials and supplies needed to operate the CHNEP program office.

**CCMP Elements Implemented:** All.

**Outputs/Deliverables/Estimated Milestones**

- Printed materials available for all CHNEP public meetings, including CHNEP Management Conference committee meetings.
- Printed materials sent to all CHNEP member entities, as well as to local, state, and federal elected leaders in the CHNEP area.
- Printer/Copier leasing fees.

**FY27 Budget**

| | |
|---|---|
| EPA FY27 Programmatic 320 Funding | $ 25,000 |
| Total Task Budget | $ 25,000 |

**Outcomes**

- Increased public awareness of CHNEP and CCMP.
- Maintained and expanded CHNEP partnerships.
- Engaged and educated decision-makers and policymakers.
- Efficient and organized operations.

**CWA Core Program Goals/Objectives Addressed:** (4) addressing diffuse, nonpoint sources of pollution, (5) protecting wetlands, (6) protecting coastal waters, (8) ensure clean and safe water for all communities, and (9) protect and restore waterbodies and watersheds.

## Task 2 Public Engagement

**Work Plan Objective:** Provide essential ongoing communications so CHNEP can address specific requirements and issues associated with the CCMP; as well as support the CHNEP Management Conference and partners' public outreach initiatives to further CCMP implementation.

**Description:** This ongoing task provides continuous support of the overall program including website, social media, and regular media. They range from events (workshops, festivals, and trainings) to publications (magazines, calendars, and books), to videos and target audience initiatives.

CHNEP Staff create all the public education and engagement content for the following:

- YouTube: Videos and talks (PDF files with linked with audio) posted share presentations online
- Facebook/Instagram: Routine posts promote CHNEP projects
- Constant Contact: Notices of Management Conference meetings and events are sent to subscribers
- CHNEP website: The CHNEP.org website provides current information about projects, meetings, grant opportunities, and volunteer activities

**CCMP Elements Implemented:** PE-1, PE-2, PE-3, and PE-4.

**Partners and their roles:** CHNEP is the lead in conducting its public outreach activities, doing so in cooperation with and in support of its partners.

**Outputs/Deliverables/Milestones**

- Updated website for Management Conference meetings and activities.
- EventBrite messages to promote and handle registrations for events.
- Constant Contact messages to announce Management Conference meetings.
- Monthly communications through various CHNEP media channels.

**FY27 Budget**

| | |
|---|---|
| EPA FY27 Programmatic 320 Funding | Staff Time |
| FDEP FY27 Funding | Staff Time |

**Outcomes**

- Educated and engaged citizenry who are knowledgeable about the CHNEP and the natural environment of southwest Florida.
- Educational resources and events that enhance protection of natural resources and CCMP implementation.
- New partnerships and strengthened existing partnerships through funding opportunities for projects that implement the CCMP.

**CWA Core Program Goals/Objectives Addressed:** (5) protecting wetlands, (6) protecting coastal waters, (7) protecting large aquatic ecosystems, (8) ensure clean and safe water for all communities, and (9) protect and restore waterbodies and watersheds.

## Task 2.1 Conservation Grants

**Objective:** To implement the CCMP through award of funding to community partners for CCMP-related community projects and initiatives.

**Description:** This ongoing task is to solicit applications and award $500 to $9,999 to selected citizens, organizations, businesses, government agencies, schools, or universities that are undertaking activities outlines in the CHNEP CCMP.

**CCMP Elements Implemented:** All

**Outputs/Deliverables/Milestones**

- Outputs vary with project, but all projects submit a final deliverable with supporting documentation.
- All payments are expected to be processed by September 30, 2026.

**FY27 Budget**

| | |
|---|---|
| Local FY27 Funding | $30,000 |
| Total Task Budget | $30,000 + Staff Time |

**Outcomes**

- Strengthened and expanded partnerships to protect and restore the CHNEP area.
- Engaged citizens assisting in environmental education, research, monitoring, and restoration activities.
- Expanded CHNEP outreach and education.
- Enhanced natural resource protection.

**CWA Core Program Goals/Objectives Addressed:** Potentially all 1) establishing water quality standards, 2) identifying polluted waters and developing restoration plans, 3) permitting discharges of pollutants from point, 4) addressing diffuse, nonpoint sources of pollution, 5) protecting wetlands, 6) protecting coastal waters, 7) protecting large aquatic ecosystems, 8) ensure clean and safe water for all communities, 9) protect and restore waterbodies and watersheds.

## Task 2.2 CHNEP Publications

**Project Objective:** Educate, motivate, and engage the public and partners through creating an annual nature calendar and other periodic publications that showcase the importance and variety of native wildlife and natural environments; as well as raise awareness of CHNEP and its efforts to implement the CHNEP CCMP.

**Project Description:** This ongoing task designs, publishes, and distributes an annual calendar with an educational insert section, with images donated by citizens. Additionally, CHNEP also produces periodic publications including fact sheets on CHNEP activities and progress towards implementing the CCMP.

**CCMP Elements Implemented:** PE-1, PE-2, PE-3, and PE-4.

**Partners and their roles:** Articles and images are donated by interested citizens and Management Conference partners. The calendars are distributed in multiple ways, including U.S. Mail to individual citizens and in bulk to 200+ partners that volunteer to redistribute in their area and at events.

**Outputs/Deliverables/Milestones**

- CHNEP periodic publications/fact sheets.
- CHNEP annual Calendar with educational insert.

**FY27 Budget**

| | |
|---|---|
| EPA FY27 Programmatic 320 Funding | |
| Publications | $40,000 |
| Small Publications | $15,000 |
| Local FY27 Funding | |
| Publications Support | $ 5,000 |
| Total Task Budget | $60,000 + Staff Time |

**Outcome:** Informed public and CHNEP partners all become more knowledgeable and engaged in the stewardship of the natural environment in which they live.

**CWA Core Program Goals/Objectives Addressed:** (5) protecting wetlands, (6) protecting coastal waters, and (7) protecting large aquatic ecosystems.

## Task 2.3 Public Engagement Events

**Project Objective:** Support projects, initiatives, and workshops that educate and engage people about the issues that affect the natural environment in the CHNEP area, so they become better environmental stewards.

**Project Description:** This ongoing task provides information and activities for various audiences, ranging from citizens to environmental professionals to decision-makers. Events also provide opportunities for partners to network, collaborate, and learn about projects and solutions to environmental issues. CHNEP organizes and hosts a large annual regional event that involves presentations followed by resource-protection activities. For 2026, it is the triennial *Watershed Summit* - a long-standing event CHNEP has organized and hosted to convene regional water and land managers to come share new research, restoration techniques, and other information necessary for improving resource management and advancing restoration.

**CCMP Elements Implemented:** PE-1, PE-2, PE-3, and PE-4.

**Partners and their roles:** CHNEP Management Conference members, other partners, and the public participate in all of these events. Local nonprofit and non-governmental partners provide support.

**Outputs/Deliverables/Milestones**

- Plan, promote, and facilitate at least 1 public educational event annually.
- Participate in at least 10 community educational events annually.

**FY27 Budget**

| | |
|---|---|
| Local FY27 Funding | $ 14,500 |
| Total Task Budget | $ 14,500 + Staff Time |

**Outcomes**

- Increased understanding of how personal actions affect the environment.
- Enhanced sense of stewardship in natural resource protection.
- Increased numbers of partners conducting activities that help fulfill the CCMP.
- More professional exchange and technological information transfer amongst partners.

**CWA Core Program Goals/Objectives Addressed:** (4) addressing diffuse, nonpoint sources of pollution, (5) protecting wetlands, (6) protecting coastal waters, (8) ensure clean and safe water for all communities, and (9) protect and restore waterbodies and watersheds.

## Task 2.4 Sponsorships

**Project Objective:** Implementation of CCMP through support of CCMP-related conferences, workshops, and events.

**Project Description:** This ongoing task supports educational environmental conferences, workshops, symposia, etc., which support implementation of the CHNEP CCMP.

**CCMP Elements Implemented:** All

**Outputs/Deliverables/Milestones**

- CHNEP acknowledged as event sponsor with logo on event materials.
- All funds awarded, obligated, and payments processed by September 30, 2026.

**FY27 Budget**

| | |
|---|---|
| Local FY27 Funding | $5,000 |
| Total Task Budget | $5,000 |

**Outcomes**

- Strengthened and expanded partnerships to implement the CCMP.
- Engaged scientists, researchers, stakeholders, and decision-makers in events that educate and inform about research, monitoring, and restoration activities relevant to CHNEP.
- Informed general public, potential partners, and targeted audiences about CHNEP's mission.

**CWA Core Program Goals/Objectives Addressed:** (5) protecting wetlands, (6) protecting coastal waters, and (7) protecting large aquatic ecosystems.

## 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:** This ongoing task entails coordinating 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 periodic refinement of Research Needs Inventory and environmental indicators.

**FY27 Budget**

| | |
|---|---|
| EPA FY27 Programmatic 320 Funding | Staff Time |
| FDEP FY27 Funding | Staff Time |
| SWFWMD FY27 Funding | 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 use of data by partners to assess resource conditions, manage resources, and implement effective and efficient management programs and restoration projects.

**CWA Core Program Goals/Objectives Addressed:** All

## Task 3.1 Water Quality and Seagrass Monitoring and Mapping Programs

**Project Objective:** To ensure collection, reporting, and mapping of consistent, technically sound long-term water quality and seagrass data throughout the CHNEP estuaries and tidal creeks. The resulting data is shared with partners to be used for assessing resource status and trends and implementing effective management programs and restoration projects.

**Project Description:** This ongoing task involves CHNEP's participation in four coastal water quality and seagrass monitoring and mapping programs. CHNEP coordinates the Coastal Charlotte Harbor Monitoring Network (CCHMN), which is a partnership of agencies that provide monthly water quality data using a probabilistic sampling design. CCHMN field and laboratory partners collect and analyze water samples from 60 randomly selected field sites throughout 10 waterbodies each month, including: Lemon Bay, Cape Haze/Gasparilla Sound, Charlotte Harbor, Pine Island Sound, Matlacha Pass, San Carlos Bay, Estero Bay, Tidal Myakka, Peace, and Caloosahatchee Rivers. CHNEP coordination activities for the CCHMN include developing and updating SOPs and field QAPP, conducting annual field audits, hosting annual meetings, participating in quarterly RAMP quality assurance meetings, providing access to the data through the CHNEP Water Atlas, including data graphing, mapping, and reporting, and assisting with field sampling and equipment repair as needed. Additionally, CHNEP supports the CHEVWQMN by uploading and analyzing its data on the CHNEP Water Atlas. CHNEP also supports the Aquatic Preserve seagrass monitoring program and seagrass aerial mapping including reviewing draft results and providing maps of the seagrass results on the CHNEP Water Atlas.

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

**Partners and Roles:** In addition to CHNEP staff: Charlotte County, Lee County, Cape Coral, Florida Department of Environmental Protection (FDEP), FWRI, SWFWMD (RAMP Water Quality Monitoring), FDEP Estero Bay Aquatic Preserve (EBAP), Friends of Charlotte Harbor Aquatic Preserve (CHAP), and Charlotte Harbor Environmental Center (CHEVWQMN Water Quality Monitoring), FDEP CHAP, EBAP, & South District (Seagrass Sampling Transects), and SWFWMD & SFWMD (Seagrass Aerial Mapping).

**Outputs/Deliverables/Milestones**

- CCHMN: Monthly water quality data, annual field audit results, annual meeting, and quarterly RAMP participation.
- CHEVWQMN: Monthly water quality data and biannual quality assurance results.
- Seagrass Monitoring: Annual seagrass transect data.
- Seagrass Aerial Mapping: Seagrass aerials and maps from SWFWMD every 2 years and from SFWMD every approximately 5-6 years.
- RAMP: participation in quarterly meetings.

**FY27 Budget**

| | |
|---|---|
| Local FY27 Funding | $15,000 + Staff Time |
| Total Task Budget: | $15,000 |

Budget Details including In-kind Contributions:

CCHMN Water Quality Monitoring

| | |
|---|---|
| $15,000 | Local Funding (Lower CCHMN) |
| In-kind | Charlotte County, Lee County, Cape Coral, SWFWMD, FDEP |

RAMP Water Quality Monitoring

| | |
|---|---|
| In-kind | Charlotte County, Lee County, Cape Coral, FDEP, FWRI, SWFWMD |

CHEVWQMN Water Quality Monitoring

| | |
|---|---|
| In-kind | FDEP CHAP, EBAP |
| In-kind | Friends of CHAP and EBAP |
| In-kind | Charlotte Harbor Environmental Center |
| Seagrass Sampling Transects | |
| In-kind | FDEP (CHAP, EBAP, & South District) |
| Seagrass Aerial Mapping | |
| In-kind | SWFWMD, SFWMD |

**Outcomes**

- Coordinated monthly water quality sampling.
- Consistent region-wide, technically sound water quality and seagrass data needed to assess resource status, trends, and complex interactions.
- Technical comment provided on appropriate resource management actions and regulatory programs.

**CWA Core Program Goals/Objectives Addressed:** (1) establishing water quality standards, (2) identifying polluted waters and developing restoration plans, (4) addressing diffuse, nonpoint sources of pollution, (5) protecting wetlands, (6) protecting coastal waters, (7) protecting large aquatic ecosystems, (8) ensure clean and safe water for all communities, and (9) protect and restore waterbodies and watersheds.

## Task 3.2 CHNEP Water Atlas Maintenance and Improvements

**Project Objective:** To ensure continuing access to technical data and information gathered from throughout the CHNEP area to provide to scientists, resource managers and users, elected officials, and the public through a user-friendly web-based tool. Additionally, the objective is to add features to the CHNEP Water Atlas to expand the technical data, data analysis tools, and other enhancements to make it a more 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:** This ongoing task involves maintenance and enhancement of 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.

**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 data annually and providing in user friendly format.

**FY27 Budget**

| | |
|---|---|
| EPA FY27 Programmatic 320 Funding | $112,000 |
| Total Task Budget | $112,000 + 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.
- Access to water quality, seagrass, and algae data to partners via CHNEP Water Atlas.
- More user-friendly and intuitive website design for users to facilitate increased utilization.

**CWA Core Program Goals/Objectives Addressed:** (2) identifying polluted waters and developing restoration plans, (4) addressing diffuse, nonpoint sources of pollution, (5) protecting wetlands, (6) protecting coastal waters, (7) protecting large aquatic ecosystems, (8) ensure clean and safe water for all communities, and (9) protect and restore waterbodies and watersheds.

## Task 3.3 Charlotte County Comprehensive Vulnerability Assessment

**Project Objective:** To identify vulnerabilities and risks to critical assets and infrastructure in Charlotte County, Florida.

**Project Description:** This ongoing task is to use a state-mandated vulnerability assessment process and conduct public workshops, data analysis, and modeling to identify vulnerabilities and risks to critical assets and infrastructure in Charlotte County, Florida. The Consultant will gather and update the County's vulnerability assessment utilizing new elevation data, updated water levels and shoreline information, capital project data, and stormwater management data. Vulnerability modeling will look at what assets are vulnerable to flooding in 100-year rainfall events. This project will produce a final Comprehensive Vulnerability Assessment for Charlotte County that meets all Florida Statutory requirements. This will qualify Charlotte County to access additional state funding resources.

**CCMP Elements Implemented:** HR-3, PE-3 and PE-4.

**Partners and Roles:** CHNEP (Funder), Charlotte County

**Outputs/Deliverables/Milestones**

- Data Collection and Analysis of Critical Assets and Infrastructure.
- Vulnerability Modeling and Analysis.

**FY27 Budget**

| | |
|---|---|
| EPA FY22 IIJA Funding | $ 200,000 |
| Total Task Budget | $ 200,000 + Staff Time |

**Outcomes**

- Comprehensive Vulnerability Assessment for Charlotte County that meets statutory requirements and therefore, makes Charlotte County eligible for additional state funding.

**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, (7) protecting large aquatic ecosystems, (8) ensure clean and safe water for all communities, and (9) protect and restore waterbodies and watersheds.

## Task 3.4 Polk County Vulnerability Assessment Enhancements

**Project Objective:** To identify added vulnerabilities and risks to critical assets and infrastructure from 200 and 500-year rainfall events in Polk County, Florida; in order to reduce those risks through modifying the assets and infrastructure.

**Project Description:** This ongoing task is to model 200 and 500-year rainfall events to determine the flood risks and vulnerabilities and risks to critical assets and infrastructure in Polk County Florida.

**CCMP Elements Implemented:** HR-3, PE-3 and PE-4.

**Partners and Roles:** CHNEP (Funder), Polk County, Central Florida Regional Planning Council

**Outputs/Deliverables/Milestones**

- Model results of 200 and 500-year rainfall events' flooding impact on critical assets and infrastructures.
- Visualizations and rendering of projected impacts to assist in public and policymaker understanding of risks and vulnerabilities to critical assets and infrastructure from severe weather events.

**FY27 Budget**

| | |
|---|---|
| EPA FY23 IIJA Funding | $ 200,000 |
| Total Task Budget | $ 200,000 + Staff Time |

**Outcomes**

- Added information regarding risks and vulnerabilities to Polk County's priority critical assets and infrastructure, which can be used to garner additional state funding.

**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, (7) protecting large aquatic ecosystem, (8) ensure clean and safe water for all communities, and (9) protect and restore waterbodies and watersheds.

## Task 3.5 Highlands County Adaptation Action Planning

**Project Objective:** To identify priority at risk critical assets and infrastructure in Highlands County, Florida from 100-year rainfall events; to develop specific recommended strategies and projects in Adaptation Action Plans for reducing those risks through the modification of those assets and infrastructure.

**Project Description:** This ongoing task is to use state recommended adaptation planning processes to conduct public workshops, data and engineering analysis, and modeling to develop recommended Adaptation Action Areas (AAA's) for Highlands County. The Consultant will utilize the County's vulnerability assessment data including elevation data, updated water and shoreline information, capital project data, and stormwater management data. The contractor will then use these analyses to develop proposed adaptation strategies to reduce vulnerabilities and risks to critical assets and infrastructure. 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.

**CCMP Elements Implemented:** HR-3, PE-3 and PE-4.

**Partners and Roles:** CHNEP (Funder), Highlands County, Central Florida Regional Planning Council

**Outputs/Deliverables/Milestones**

- Adaptation Planning, Modeling, and Analyses.
- Proposed Priority Adaptation Action Area Strategies and Projects.

**FY27 Budget**

| | |
|---|---|
| EPA FY23 IIJA Funding | $ 200,000 |
| Total Task Budget | $ 200,000 + Staff Time |

**Outcomes**

- List of strategies and projects to reduce risks and vulnerabilities to Highlands County's priority critical assets and infrastructure, which can be used to garner additional state funding.

**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, (7) protecting large aquatic ecosystems, (8) ensure clean and safe water for all communities, and (9) protect and restore waterbodies and watersheds.

## Task 3.6 DeSoto County Adaptation Action Planning

**Project Objective:** To identify priority at risk critical assets and infrastructure in DeSoto County, Florida from 100-year rainfall events; to develop specific recommended strategies and projects in Adaptation Action Plans for reducing those risks through the modification of those assets and infrastructure.

**Project Description:** This ongoing task is to use state recommended adaptation planning processes to conduct public workshops, data and engineering analysis, and modeling to develop recommended Adaptation Action Areas (AAA's) for DeSoto County. The Consultant will utilize the County's vulnerability assessment data including elevation data, updated water and shoreline information, capital project data, and stormwater management data. The contractor will then use these analyses to develop proposed adaptation strategies to reduce vulnerabilities and risks to critical assets and infrastructure. 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.

**CCMP Elements Implemented:** HR-3, PE-3 and PE-4.

**Partners and Roles:** CHNEP (Funder), DeSoto County, Central Florida Regional Planning Council

**Outputs/Deliverables/Milestones**

- Adaptation Planning, Modeling, and Analyses.
- Proposed Priority Adaptation Action Area Strategies and Projects.

**FY27 Budget**

| | |
|---|---|
| EPA FY24 IIJA Funding | $ 200,000 |
| Total Task Budget | $ 200,000 + Staff Time |

**Outcomes**

- List of strategies and projects to reduce risks and vulnerabilities to DeSoto County's priority critical assets and infrastructure, which can be used to garner additional state funding.

**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, (7) protecting large aquatic ecosystems, (8) ensure clean and safe water for all communities, and (9) protect and restore waterbodies and watersheds.

## Task 3.7 Hardee County Adaptation Action Planning

**Project Objective:** To identify priority at risk critical assets and infrastructure in Hardee County, Florida from 100-year rainfall events; to develop specific recommended strategies and projects in Adaptation Action Plans for reducing those risks through the modification of those assets and infrastructure.

**Project Description:** This ongoing task is to use state recommended adaptation planning processes to conduct public workshops, data and engineering analysis, and modeling to develop recommended Adaptation Action Areas (AAA's) for Hardee County. The Consultant will utilize the County's vulnerability assessment data including elevation data, updated water and shoreline information, capital project data, and stormwater management data. The contractor will then use these analyses to develop proposed adaptation strategies to reduce vulnerabilities and risks to critical assets and infrastructure. 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 broader 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.

**CCMP Elements Implemented:** HR-3, PE-3 and PE-4.

**Partners and Roles:** CHNEP (Funder), Hardee County, Central Florida Regional Planning Council

**Outputs/Deliverables/Milestones**

- Adaptation Planning, Modeling, and Analyses.
- Proposed Priority Adaptation Action Area Strategies and Projects.

**FY27 Budget**

| | |
|---|---|
| EPA FY24 IIJA Funding | $ 200,000 |
| Total Task Budget | $ 200,000 + Staff Time |

**Outcomes**

- List of strategies and projects to reduce risks and vulnerabilities to Hardee County's priority critical assets and infrastructure, which can be used to garner additional state funding.

**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, (7) protecting large aquatic ecosystems, (8) ensure clean and safe water for all communities, and (9) protect and restore waterbodies and watersheds.

## Task 3.8 Sarasota County Adaptation Action Planning

**Project Objective:** To identify priority at risk critical assets and infrastructure in Sarasota County, Florida from 100-year rainfall events; to develop specific recommended strategies and projects in Adaptation Action Plans for reducing those risks through the modification of those assets and infrastructure.

**Project Description:** This ongoing task is to use state recommended adaptation planning processes to conduct public workshops, data and engineering analysis, and modeling to develop recommended Adaptation Action Areas (AAA's) for Sarasota County. The Consultant will utilize the County's vulnerability assessment data including elevation data, updated water and shoreline information, capital project data, and stormwater management data. The contractor will then use these analyses to develop proposed adaptation strategies to reduce vulnerabilities and risks to critical assets and infrastructure. 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.

**CCMP Elements Implemented:** HR-3, PE-3 and PE-4.

**Partners and Roles:** CHNEP (Funder), Sarasota County

**Outputs/Deliverables/Milestones**

- Adaptation Planning, Modeling, and Analyses.
- Proposed Priority Adaptation Action Area Strategies and Projects.

**FY27 Budget**

| | |
|---|---|
| EPA FY25 IIJA Funding | $ 200,000 |
| Total Task Budget | $ 200,000 + Staff Time |

**Outcomes**

- List of strategies and projects to reduce risks and vulnerabilities to Sarasota County's priority critical assets and infrastructure, which can be used to garner additional state funding.

**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, (7) protecting large aquatic ecosystems, (8) ensure clean and safe water for all communities, and (9) protect and restore waterbodies and watersheds.

## Task 3.9 Manatee County Resiliency Project

**Project Objective:** To implement a resiliency project in Manatee County, Florida to protect vulnerable coastline.

**Project Description:** This project would comprise conducting the designing and permitting of intertidal oyster reefs in Braden River along the shoreline of Pine Island in Manatee County, Florida. Three potential restoration zones have been identified, of which CHNEP will be contributing funding to the project design and permitting of two of those Zones, Zones 2 and 3. This project will replicate previously permitted and installed oyster restoration methods used in the Robinson Preserve Oyster Restoration Project. It will provide a critical food source for Species of Greatest Conservation Need (SGCN), including the American oystercatcher, reddish egret, willets, and roseate spoonbill. The project will consist of a single-line perimeter of 6-12" limestone rock surrounding interior base of 3-5" limestone rock, topped with a veneer of recycled oyster shell, an ideal substrate for spat recruitment. Each proposed restoration zone will consist of six approx. 0.05-acre reefs, total area <0.3-acres, with a 50ft buffer from any existing oyster bar or mangrove shoreline. These new oyster reefs off vulnerable Manatee County coastal shorelines will help aid resiliency by providing an additional layer of protection from wave energy and storm surge. Additionally, they will create added aquatic habitat to enhance the resiliency of the estuarine biota in Manatee County coastal waters.

**CCMP Elements Implemented:** FW-1, PE-3 and PE-4.

**Partners and Roles:** CHNEP (Funder), Manatee County

**Outputs/Deliverables/Milestones**

- Oyster restoration designs.
- Permits application materials to enable permitting of new oyster reefs.

**FY27 Budget**

| | |
|---|---|
| EPA FY25 IIJA Funding | $ 200,000 |
| Total Task Budget | $ 200,000 + Staff Time |

**Outcomes**

- Designed and permitted oyster restoration projects for identified Zones 2 and 3 in the Braden River.

**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, (7) protecting large aquatic ecosystems, (8) ensure clean and safe water for all communities, and (9) protect and restore waterbodies and watersheds.

## Task 3.10 Glades County Adaptation Action Planning

**Project Objective:** To identify priority at risk critical assets and infrastructure in Glades County, Florida from 100-year rainfall events; to develop specific recommended strategies and projects in Adaptation Action Plans for reducing those risks through the modification of those assets and infrastructure.

**Project Description:** This ongoing task is to use state recommended adaptation planning processes to conduct public workshops, data and engineering analysis, and modeling to develop recommended Adaptation Action Areas (AAA's) for Glades County. The Consultant will utilize the County's vulnerability assessment data including elevation data, updated water and shoreline information, capital project data, and stormwater management data. The contractor will then use these analyses to develop proposed adaptation strategies to reduce vulnerabilities and risks to critical assets and infrastructure. 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.

**CCMP Elements Implemented:** HR-3, PE-3 and PE-4.

**Partners and Roles:** CHNEP (Funder), Glades County

**Outputs/Deliverables/Milestones**

- Adaptation Planning, Modeling, and Analyses.
- Proposed Priority Adaptation Action Area Strategies and Projects.

**FY27 Budget**

| | |
|---|---|
| EPA FY25 IIJA Funding | $ 200,000 |
| Total Task Budget | $ 200,000 + Staff Time |

**Outcomes**

- List of strategies and projects to reduce risks and vulnerabilities to Glades County's priority critical assets and infrastructure, which can be used to garner additional state funding.

**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, (7) protecting large aquatic ecosystems, (8) ensure clean and safe water for all communities, and (9) protect and restore waterbodies and watersheds.

## Task 3.11 Water Quality Trend Assessment and Dashboard Tool

**Work Plan Objective:** To support a comprehensive and coordinated water quality monitoring and assessment strategy by providing additional analysis and information on water quality trends for individual monitoring stations and hydrologic regions throughout CHNEP estuaries where data is collected monthly by agencies, municipalities and community science programs. This data will be shared through the CHNEP Water Atlas to ensure continuing access to technical information from 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:** This ongoing task is to make updates of water quality data to the CHNEP Water Atlas, a web-based, data management and mapping system scientific communication tool that the program also funds and maintains. The Water Atlas can be utilized for research and science communication; it provides historical information, scientific data, water resource maps, and analysis tools. This project would involve data mining and cleaning to create a complete period of record dataset suitable for both traditional and novel trend analysis methods using long-data available through the state assessment database FDEP WIN (Watershed Information Network) and its predecessor STORET. A Trend Analysis for individual stations, strata, and parameters will be conducted and shared via user-friendly maps and graphs using an open science data visualization tool. Code used to run these programs and analyses would be publicly available via the CHNEP Water Atlas website and the analyses could be conducted on an annual basis when new data is made available by sampling agencies.

**CCMP Elements Implemented:** WQ-1, WQ-2, WQ-3, FW-1, FW-2, PE-1, and PE-4.

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

**Outputs/Deliverables/Milestones:**

- Full Period of Record dataset for water quality monitoring stations and strata suitable for trend analyses as well as instructions and other metadata.
- Trend analysis on water quality data for individual stations, strata and parameters provided in user friendly format as well as code used to run trend analyses.

**FY27 Budget**

| | |
|---|---|
| EPA FY24 IIJA Funding | $ 59,117 |
| Total Task Budget | $ 59,117 + 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.

**CWA Core Program Goals/Objectives Addressed:** (2) identifying polluted waters and developing restoration plans, (4) addressing diffuse, nonpoint sources of pollution, (5) protecting wetlands, (6) protecting coastal waters, (7) protecting large aquatic ecosystems, (8) ensure clean and safe water for all communities, and (9) protect and restore waterbodies and watersheds.

## Task 3.12 Peace River Basin Water Pollution Hotspot Assessment

**Project Objective:** To utilize best available data and approaches to determine different pollution "hot spots" in the Peace River Basin.

**Project Description:** There have been numerous pollutant loading models completed for the Peace River; including for the gauged portions of the Peace River for the South Florida Water Management District's (SFWMD) most recent Charlotte Harbor SWIM Plan. Historically, there was a 1995 model done by Coastal Environmental, Inc. and in more recent years, SWFWMD funded such work through the Charlotte Harbor Environmental Center (CHEC) to create basin-wide estimates. The more recent models have been based on water flows and pollutant concentrations, with earlier ones like the 1995 model being spreadsheet models. The estimates from the older 1995 model are substantially higher than the estimates from either the CHEC reports or the SWFWMD Charlotte Harbor SWIM Plan. The CHEC developed estimates that were area-normalized in that they had output in terms of kg Total Nitrogen (TN) / ha / yr, which can be converted to lbs. TN / acre / yr in the 1995 loading model. Using that CHEC-type approach, the SWFWMD determined that the "hot spot" of nitrogen loading back in the late 1990s was outflows from Lake Hancock. That sub-basin did not show up as a hot spot in the more traditional and GIS-based 1995 model. That in turn led to the Pollutant Load Reduction Goal (PLRG) that was identified in the second SWIM Plan, which has resulted in significant investments to raise the lake level and treat lake discharges.

The more recent CHEC-type approaches have used real data and been less reliant on model assumptions. They also find "hot spots" in terms of dissolved inorganic nitrogen (DIN) loads, as opposed to solely TN loads. DIN loads can be important because they represent the form of nitrogen loads most likely to create algal blooms and give a more complete picture. For example, while discharges from Lake Hancock had the highest TN load (kg / ha/ yr) in 1999, Joshua Creek at Nocatee was the largest hot spot for DIN loads (kg/ha/yr) in 1999. Therefore, it is helpful to do a current hot spot assessment using best available data and approaches to determine different "hot spots" for both DIN vs. TN. Different types of hot spots can give rise to different types of projects - and point out different loading sources. For example, the high DIN loads in 1999 for Joshua Creek in 1999 likely represent the dominant loading source from citrus groves in that landscape (at that time) while the high TN loads from Hancock in 1998 represent masses of N-fixing cyanobacteria being discharged during that El Nino year. This project is to conduct such a water pollution hotspot assessment in the Peace River Basin.

**CCMP Elements Implemented:** WQ-1, WQ-2, WQ-3, FW-1, FW-2, PE-1, and PE-4.

**Partners and Roles:** CHNEP (Funder), and all entities creating publicly accessible water quality data

**Outputs/Deliverables/Milestones**

- Hotspot analysis on water pollution to improve pollution control and water quality in the Peace River.

**FY27 Budget**

| | |
|---|---|
| EPA FY26 IIJA Funding | $ 119,000 |
| Total Task Budget | $ 119,000 + Staff Time |

**Outcomes**

- Data publicly provided to public and resource managers to assess effectiveness of protection and restoration efforts.

**CWA Core Program Goals/Objectives Addressed:** (2) identifying polluted waters and developing restoration plans, (4) addressing diffuse, nonpoint sources of pollution, (5) protecting wetlands, (6) protecting coastal waters, and (7) protecting large aquatic ecosystems,

## Task 4 Watershed Coordination

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

**Description:** This ongoing task involves coordinating 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 small-tooth 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, Big Waters Land Trust, 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, Tampa Bay Estuary Program, University of Florida and others.

**Outputs/Deliverables/Milestones**

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

**FY27 Budget**

| | |
|---|---|
| EPA FY27 Programmatic 320 Funding | Staff Time |
| FDEP FY27 Funding | Staff Time |
| SWFWMD FY27 Funding | 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.

**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, (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 4.1 Pine Island Flatwoods Preserve Wetland Habitat Enhancement

**Project Objective:** This project will increase the area of restored wetland habitat through hydrological restoration. Wetlands naturally filter out pollutants and provide freshwater base flow to maintain healthy salinity levels in tidal creeks and estuaries. As a result of increasing wetlands on-site, cleaner, and more appropriate flows of freshwater will be flowing across and off-site — supporting healthier and more abundant aquatic life downstream

**Project Description:** This ongoing task involves restoring the Pine Island Flatwoods Preserve (part of the Lee County Conservation 20/20 Program), a 919-acre passive area which supports 134 wildlife species. This project is identified in the Pine Island Flatwoods Preserve Land Stewardship Plan, to control exotic plant species, provide freshwater to wildlife outside of the wet season, and restore hydrology of the site. The proposed 1.27-acre project area presently includes four abandoned shrimp farm ponds surrounded by multiple earthen spoil berms. The planned construction activities include the removal of these berms, construction of 100 feet of new berm to ensure wetland water retention, and re-contouring of the current shrimp pond area to create two distinctive water management areas for habitat enhancement purposes. Following construction, the enhanced freshwater marsh will be approximately 2 to 2.5 feet deeper and will connect to the Pine Island Sound estuary through an estuarine pond and outfall. Restoration of these old shrimp ponds will provide wetland habitat and a freshwater source to wildlife year-round. The project will also improve water quality and flows downstream.

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

**Partners and Roles:** Lee County is the site owner manager as well as permit applicant, Florida Fish and Wildlife Conservation Commission (FWC) will serve as a project consultant, and CHNEP is the restoration project funder and manager.

**Outputs/Deliverables/Milestones**

- CEI (construction engineering and inspection) support services for construction.
- Site construction plans, mobilization, earthwork, and demobilization tech memo.
- Native planting and maintenance technical memo.

**FY27 Budget**

| | |
|---|---|
| EPA FY22 IIJA Funding | $113,450 |
| EPA FY24 IIJA Funding | $ 11,550 |
| Total Task Budget | $125,000 + Staff Time |

**Outcomes**

- Increased protection and restoration of natural systems and habitats.
- 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 Habitat Restoration Needs plan activities for the area will be addressed.

**CWA Core Program Goals/Objectives Addressed:** (5) protecting wetlands, (6) protecting coastal waters, and (9) protect and restore waterbodies and watersheds.

## Task 4.2 Tiki Point Harborwalk Living Shoreline Pilot Project

**Project Objective:** To create the Tiki Point Harborwalk living shoreline project, working with the City of Punta Gorda. The project will increase resilience and mitigate the risks of flooding, protecting infrastructure using a hybrid nature-based solution to improve habitat and water quality, reduce erosion, and buffer storm effects. It will include data collection, final design and permitting, and construction. CHNEP will also assist in raising public awareness and engage and educate local partners and citizens on the benefits of living shorelines, using this project as an example.

**Project Description:** This ongoing task involves developing solutions to mitigate/adapt to the risks of flooding along the Charlotte Harbor shoreline by implementing nature-based features. Application of these nature-based solutions will decrease wave energy along the shorefront and assist in providing a buffer to flooding for the historic downtown district of Punta Gorda and US 41, a primary evacuation route for the region which is susceptible to flooding. CHNEP will work alongside the City of Punta Gorda, who will be procuring both CEI (construction engineering and inspection) support services for construction and the construction contractor, to educate and hold public workshops for the citizens of Punta Gorda. This will allow education as to why living shorelines are so important in the region. The Vulnerability Assessment (VA), included in the 2019 City of Punta Gorda Adaptation Plan, implemented a GIS-based analysis of the City's public infrastructure using tropical storm surge elevations. The project site is within the VA's Historic Downtown Focus Area and is identified as a low-lying flood prone area. This shoreline includes a waterfront promenade connecting two City parks. The project will be partially funded by CHNEP along with FDEP and the City of Punta Gorda.

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

**Partners and Roles:** City of Punta Gorda is the site owner manager as well as permit applicant, CHNEP will assist with funding design and permitting of project as well as with public outreach.

**Outputs/Deliverables/Milestones**

- Construction Plans.
- Pictures/Videos of before and after construction.
- Fact Sheet on benefits of nature-based solutions such as a hybrid living shoreline.

**FY27 Budget**

| | |
|---|---|
| EPA FY22 IIJA Funding | $320,000 |
| Total Task Budget: | $320,000 + Staff Time |

**Outcomes**

- Mitigated flooding, erosion, and sea level rise along a portion of the Charlotte Harbor waterfront.
- Collection of data needed for final design and permitting of a nature-based solution, such as a hybrid living shoreline outlined.
- Creation of a more resilient public park space with flood protection, habitat, and eco-tourism benefits.

**CWA Core Program Goals/Objectives Addressed:** (5) protecting wetlands, (6) protecting coastal waters, and (9) protect and restore waterbodies and watersheds.

## Task 4.3 Yucca Pens Hydrological Restoration Project Phase I

**Project Objective:** To conduct monitoring and modeling as well as create final design and permitting for a large-scale hydrologic restoration project in the Yucca Pens Unit State Wildlife Management Area (located in the Charlotte Harbor Flatwoods area in Charlotte and Lee Counties).

**Project Description:** This ongoing task is to plan, engineer and design water management features on the Yucca Pens Wildlife Management Area (WMA) to restore more natural freshwater retention and sheet flow across the property. Using the existing Plan modeling and recommendations, additional hydraulic and hydrologic local-scale modeling will inform the final design, which will include 1) earthen ditch blocks in smaller ditches that will increase storage and surface water hydrology (a green solution), 2) the re-establishment of connections to several tidal creeks to the west of Yucca Pens Unit will be designed with concrete low water fords installed through existing off-road vehicle ruts and ditches in Yucca Pens (a green-gray solution providing additional stability as well as access for management vehicles and recreational users) and, 3) a groundwater seepage barrier is planned at the southern boundary of Yucca Pens Unit along the Gator Slough Canal (to address the significant effects the canal has on the local water table). The intent is for the project to be 'shovel-ready'. The CHNEP has already created a Lower Charlotte Harbor Flatwoods Strategic Hydrologic Restoration Plan, as well as a preliminary conceptual surface and groundwater hydrologic model that simulates appropriate timing and quantity of water flows required to improve wetland habitat conditions, minimize erosion and offsite flooding, improve groundwater recharge, and reduce the risk of wildfires. This task is implementing one of the recommendations of that Plan.

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

**Partners and Roles:** FWC (site owner, permit applicant), CHNEP is the planning and design project funder and manager. The United States Fish and Wildlife Service (USFWS) as well as the SWFWMD and SFWMD will serve as project consultants.

**Outputs/Deliverables/Milestones**

- Construction Plans.
- Cost Estimates and Implementation Phasing Plan.
- State, Local and Federal Permits.

**FY27 Budget**

| | |
|---|---|
| EPA FY22 IIJA Funding | $76,350 |
| EPA FY23 IIJA Funding | $346,170 |
| EPA FY24 IIJA Funding | $327,480 |
| Total Task Budget | $750,000 + Staff Time |

**Outcomes**

- Data collected and modeling conducted for design and permitting for large-scale hydrological restoration.
- Flood reduction as well as water quality and habitat improved resilience and ecosystem functions of important wetlands and tidal creeks enhanced, as well as aquifer recharge.
- Improved hydrologic flow to approximately 8,000 acres of wetlands, which will increase fresh surface water and groundwater availability and substantially improve hydrology.

**CWA Core Program Goals/Objectives Addressed:** (5) protecting wetlands, (6) protecting coastal waters, and (9) protect and restore waterbodies and watersheds.

## Task 4.4 Submerged Aquatic Vegetation and Water Quality Restoration

**Project Objective:** To ensure development of technically sound Submerged Aquatic Vegetation (SAV) restoration initiatives and projects which restore and protect SAV throughout the CHNEP estuaries and tidal rivers. This project is to undertake seagrass restoration and research that will provide the comprehensive data needed to inform nature-based solutions for stormwater water quality management. This supports the goals of improving water quality naturally without compromising flood control.

**Project Description:** This new IIJA-funded task is to conduct research and restoration using Submerged Aquatic Vegetation (*Vallisneria americana)* in a canal in the Charlotte Harbor and Caloosahatchee basins. Once approval(s) are obtained and the planting of the *Vallisneria* occurs, water quality monitoring as well as vegetation, biological and benthic surveys will be conducted to determine the nutrient removal efficiency of *Vallisneria americana*. Research findings and restoration documentation will be included in a final project report, outlining the efficacy of using *Vallisneria americana* as a nature-based solution for nutrient removal in stormwater systems based on data collected as a part of the project. The results are intended to demonstrate the return on investment for the potential adoption of such strategies as a best management practice.

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

**Partners and Roles:** Counties that manage stormwater canals will be the restoration site owners, CHNEP will fund the restoration, university and non-profits will assist with monitoring and results analyses. CHNEP coordinates the Technical Advisory Committee subcommittee and other SAV working groups such as SWERT. Other partners in the TAC or working groups include: FDEP Charlotte Harbor and Aquatic Preserves, Florida Sea Grant, FWC, SWFWMD, SFWMD, Lee County, Charlotte County, Sarasota County, Sanibel Captiva Conservation Foundation, and Florida Gulf Coast University (FGCU).

**Outputs/Deliverables/Milestones**

- Technical report and exchange of information related to SAV restoration and use as a nutrient reduction best management practice (BMP).
- Reporting and showcasing success of SAV restoration projects.
- Restoration of SAV in a man-made canal will create critically important habitat for fish and wildlife and will improve water quality by reducing erosion and removing nutrients from the water column.

**FY27 Budget**

| | |
|---|---|
| EPA FY26 IIJA Funding | $260,000 |
| Total Task Budget | $260,000+ Staff Time |

**Outcomes**

- Increased protection and restoration of natural systems.
- More region-wide water quality, biological and physical data.
- Advancement of SAV restoration and monitoring techniques.
- Adaptation of SAV restoration projects based on lessons learned.

**CWA Core Program Goals/Objectives Addressed:** (2) identifying polluted waters and developing restoration plans, (4) addressing diffuse, nonpoint sources of pollution, (6) protecting coastal waters, (7) protecting large aquatic ecosystems, and (9) protect and restore waterbodies and watersheds.

## Task 4.5 Lee County SEASCAPES Project

**Project Objective:** Construct multi-habitat artificial islands in saltwater lakes within the tidal Cape Coral canal system as a nature-based strategy to mitigate human impact on water quality and habitat. Benefits include improved water quality, water quality resilience, and habitat enhancement for fish and other organisms. The project will also include educational outreach and community engagement.

**Project Description:** This project will implement nature-based solutions that will improve water quality, storm resilience, habitats, and recreation within the tidal canal system that drains into the lower impaired Caloosahatchee estuary. The project will build upon conceptual designs inspired by similar projects and prior site assessments and bathymetric surveys. City staff has conducted an extensive literature search, site visits to other similar projects in Southwest Florida, and interviewed multiple researchers, non-profit organizations, and governmental organizations. City staff have been performing water quality, water levels and flows, habitat, and bathymetric surveys in the identified project areas. Seascapes Islands will include dynamic habitat for fish and invertebrates, seeded oyster reefs, halophytic grasses, and red mangroves. Benefits of these features include natural water filtration, reduced excess nutrients, improved wildlife habitat, and storm resilience. Throughout the project, in collaboration with CHNEP, the City Environmental Resources Division will lead public outreach on nature-based solutions and develop opportunities for community engagement, such as citizen-science water-quality sampling near the islands. Using CHNEP funding, the City of Cape Coral will hire an engineering firm to produce final designs and construction plans for at least eight lake sites by the August 2027 deadline. Subsequently, the city will apply for and obtain the applicable state and federal permits. Throughout this project, the City of Cape Coral will fund city staff time, site assessment, survey, monitoring, public outreach after August 2027, and future construction costs.

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

**Partners and Roles:** Cape Coral is the site owner, permit applicant, contract author, construction, and outreach lead. CHNEP will provide funding towards designs and permit submittal deliverables and become a partner for outreach efforts.

**Outputs/Deliverables/Milestones:**

- Detailed design and construction plan for each island, for permit submittals.
- Photos/drone footage before, during, and after construction of the pilot island.
- Outreach materials about nature-based solutions and photos/report of citizen engagement/science.

**FY27 Budget:**

| | |
|---|---|
| EPA FY22-25 Programmatic 320 Funding | $100,000 |
| Total Task Budget | $100,000+ Staff Time |

**Outcomes**

- Improvement of "impaired" tidal canals in Cape Coral before they drain into the Caloosahatchee.
- Extensive habitat enhancement to support diverse communities of fish, invertebrates, wading birds, and halophytic plants that will add recreational fishing and aesthetic value.
- Increased environmental mindfulness, engagement, and connection in Cape Coral by utilizing this project as a potent example of how nature and natural solutions can be integrated into urbanized areas through education outreach to both citizens and city government leaders.
- Data, design plans, and construction of a relatively novel nature-based solution that could be implemented by other governments or organizations in the future.

**CWA Core Program Goals/Objectives Addressed:** 2) identifying polluted waters and developing restoration plans, 4) addressing diffuse, nonpoint sources of pollution, 5) protecting wetlands, 6) protecting coastal waters, 8) ensure clean and safe water for all communities, 9) protect and restore waterbodies and watersheds.

## Task 4.6 Sarasota County Warm Mineral Springs Habitat Restoration Initiative

**Project Objective:** The objective of this project is to enhance the ecological integrity of the area surrounding Warm Mineral Springs by removing invasive plant species, planting native trees, and installing educational signage. These efforts will improve water quality by reducing nutrient loading, restore hydrology by supporting native vegetation, and protect fish, wildlife, and their habitats. Additionally, the educational elements will foster environmental stewardship and awareness of the ecological significance of Warm Mineral Springs.

**Project Description:** The project will begin with the removal of invasive plant species in the vicinity of the spring run. Invasive vegetation contributes to habitat degradation, alters hydrology, and can negatively impact water quality. Removal efforts will be conducted using best management practices to minimize disturbance and ensure long-term effectiveness. Following invasive removal, native tree and understory planting will be implemented to restore natural habitat structure, stabilize soils, and improve stormwater filtration. Native trees will be selected for their ecological value, resilience, and ability to support local wildlife. Planting will occur within six months of invasive removal, with irrigation, monitoring and maintenance scheduled to ensure survival and establishment. The final component will include the installation of interpretive signage and educational elements around Warm Mineral Springs. These will highlight the ecological importance of native vegetation, the impacts of invasive species, and the connection between healthy habitats and water quality.

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

**Partners and Roles:** City of North Port Natural Resources Division (Project lead, coordination, oversight, and monitoring), CHNEP (Funder), Southwest Florida Water Management District (SWFWMD, Technical support and permitting guidance) and Local environmental organizations and volunteers (assistance with planting, rewilding, and educational outreach).

**Outputs/Deliverables/Milestones:**

- Completion of invasive species removal (within 6 months).
- Planting of native trees and other vegetation along the spring run (within 9 months).
- Planting of native oak trees along the spring head.
- Installation of 5 educational signs (within 12 months).
- Proper irrigation to ensure establishment.
- Monitoring report on vegetation survival.

**FY27 Budget**

| | |
|---|---|
| EPA FY22-25 Programmatic 320 Funding | $230,000 |
| Total Task Budget | $230,000 + Staff Time |

**Outcomes**

- Significant reduction of invasive plant coverage in targeted areas.
- Establishment of native tree canopy to improve habitat and stormwater filtration.
- Increased public awareness of ecological and water quality issues through signage and outreach.
- Improved water quality through reduced nutrient loading and enhanced hydrology.

**CWA Core Program Goals/Objectives Addressed:** 4) addressing diffuse, nonpoint sources of pollution, 5) protecting wetlands, 7) protecting large aquatic ecosystems, 8) ensure clean and safe water for all communities, 9) protect and restore waterbodies and watersheds

## Task 4.7 Polk County Lake Idyl Sediment Inactivation Project

**Project Objective:** Lake Idyl is a 20 acre public waterbody that has been designated as impaired for nutrients (total phosphorus & total nitrogen) in the Florida Department of Environmental Protection's (FDEP) 2023 assessment period. In response to this designation, the City of Winter Haven submitted a Pollutant Reduction Plan (4e Plan), which outlines several projects designed to address one or more pollutant sources to Lake Idyl. This plan was accepted and approved by the FDEP in 2024. One of the projects presented in the 4e Plan focuses on addressing the internal nutrient loading impacts to Lake Idyl's water quality. The project involves utilizing EutroSORB G, a granular lanthanum-based agent that binds to available phosphorus in the sediments, thereby reducing nutrient flux from Lake Idyl's highly organic sediments.

**Project Description:** The project involves two applications of approximately 28,000 lbs. of EutroSORB G. For maximum effectiveness, it is recommended that each of the two EutroSORB G applications be spaced between 9 and 12 months apart. Pre and post treatment monitoring efforts will also be included to evaluate treatment effectiveness. City staff will monitor sediment phosphorus concentrations before and after each application as well as ambient water quality via monthly surface water sampling. The project requires the approval of a FDEP Environmental Resource Permit before treatments may begin. If the first application can be initiated by Spring of 2026, the second application and post-treatment monitoring can be completed by Summer of 2027.

**CCMP Elements Implemented:** WQ-3 and WQ-5.

**Partners and Roles:** City of Winter Haven (Project manager), CHNEP (funder), FDEP (Permitting agency) & Polk County (Ongoing water quality monitoring).

**Outputs/Deliverables/Milestones:**

- Completion of EutroSORB G applications.
- Final report evaluating the effectiveness of the applications and any impact to Lake Idyl's water quality.

**FY27 Budget**

| | |
|---|---|
| EPA FY26 320 Funding | $230,000 |
| Total Task Budget | $230,000 + Staff Time |

**Outcomes**

- Completion of the project listed on an FDEP approved 4e Pollutant Reduction Plan.
- Improvements to the water quality of an impaired waterbody.
- Reduced downstream impacts to other local waterbodies.
- Collection of data on the effectiveness of lanthanum-based products in shallow, eutrophic lakes in Florida.

**CWA Core Program Goals/Objectives Addressed:** 4) addressing diffuse, nonpoint source of pollution, and 9) protect and restore waterbodies and watersheds

## Task 4.8 Charlotte County Exceptional Ponds Initiative

**Project Objective:** Address pollutant inflow into county stormwater ponds by establishing native landscaping in the littoral zone and along the shoreline. To inform the public about the County's efforts to help improve water quality and encourage behaviors that will support improved water quality, educational signage will be installed at strategic locations illustrating the benefits of naturalized shorelines. In addition, the design parameters will be such that similar efforts can be implemented in private stormwater systems throughout Charlotte County. In essence, this project will serve as a region-scale pollutant loading reduction effort and an instructional tool for our Homeowners Associations (HOAs) and other private property managers.

**Project Description:** Phase 1 will be identifying County ponds that are suitable for planting and ranking them for impact to the watershed and public. The prioritization schema for pond rehabilitation will be based on current status of shoreline and aquatic habitat/water quality; size and land use of watershed served; long-term maintenance needs; extent of construction and rehabilitation activity required: and public visibility. Phase 2 will consist of a comprehensive site assessment, creation of a landscape plan, and construction of any site preparation activities as needed (slope and littoral shelf grading, nuisance/exotic species removal, etc.). With input and guidance from those departments responsible for management of the selected ponds, the shoreline and littoral zone will be cleared of invasives and graded (if necessary) to assure revegetation efforts are successful. Landscape designs will be implemented based on the guidelines in the Healthy Ponds Guide of Southwest Florida and recommendations by the University of Florida Institute of Food and Agricultural Sciences (UF-IFAS). Phase 3 will be plant installation, with follow-up assessments/replantings conducted at two weeks and two months post-installation. In addition, educational programming will be finalized during this phase.

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

**Partners and Roles:** Charlotte County (Site Owner and Project Manager), CHNEP (Funder), UF/IFAS (Advisor on vegetation removal and plant species selection).

**Outputs/Deliverables/Milestones:**

- Final list of ponds for enhancement with shoreline areas to be enhanced.
- Photos and videos of before and after enhancement.
- Fact sheets, signage and other outreach items available at selected sites.

**FY27 Budget**

| | |
|---|---|
| EPA FY26 320 Funding | $230,000 |
| Total Task Budget | $230,000 + Staff Time |

**Outcomes**

- Enhance the aesthetics and ecosystem services in urban areas that lack green space.
- Provide important wildlife connectivity to adjacent upland habitat.
- Serve as refugia for migratory species.

**CWA Core Program Goals/Objectives Addressed:** 4) addressing diffuse, nonpoint source of pollution, and 9) protect and restore waterbodies and watersheds

## Task 4.9 Hardee Lakes Habitat Enhancement & Conservation Initiative

**Project Objective:** This project is to enhance ecological health, habitat quality, and public engagement within the Hardee Lakes Park focusing on the native areas. This is to be accomplished through a combination of habitat restoration and installation of educational signage. The habitat restoration nuisance and exotic vegetation removal, and supplemental planting of native species, and the installation of educational signage around the park. This project will reduce invasive plant species, restore natural hydrologic and ecological function, and provide residents and visitors with high-quality interpretive information on native habitats, wildlife, and the importance of floodplains.

**Project Description:** The County will create a habitat management plan that identifies nuisance/exotic plant species, treatment methodology, and create planting lists for the habitat types found on site. The plan will also identify the most ecologically sensitive areas and break the park up into management blocks. Once the plan is created a qualified environmental restoration firm will be selected to implement the habitat management plan in the native areas within Hardee Lakes Park. Following nuisance and exotic treatment activities, areas will be identified to benefit from supplemental planting of appropriate native vegetation to restore ecological function, improve habitat quality, and improve hydrology in the native areas. Hardee Lakes Park currently lacks educational signage. CHNEP funding will enable the design, fabrication, and installation of high-quality informational signs focusing on habitat types, native plant species, local wildlife, and the importance of prescribed fire and ecological conservation and maintenance. The interpretive signage will significantly enhance public engagement and environmental literacy.

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

**Partners and Roles:** Hardee County Board of County Commissioners is the permit applicant and will lead and manage the project with CHNEP assistance with funding the project.

**Outputs/Deliverables/Milestones:**

- Create a habitat management plan.
- Exotic/nuisance plant treatment.
- Installation of native vegetation.
- Design and installation of educational signage.
- Before/after documentation (i.e. photos, GIS mapping, etc.)

**FY27 Budget**

| | |
|---|---|
| EPA FY26 320 Funding | $240,000 |
| Total Task Budget | $240,000+ Staff Time |

**Outcomes**

- Reduction of invasive species and enhancement of native plant communities which will improve wildlife habitat quality and augment the eco-tourism of the park.
- Increased public literacy of conservation areas, wildlife, and ecosystem management.
- Assist in the long-term protection of a portion of the Payne Creek watershed.

**CWA Core Program Goals/Objectives Addressed:** 5) protecting wetlands, and 9) protect and restore waterbodies and watersheds

## Task 4.10 Lee County Adaptation Plan Focus Areas 15 & 16 Stormwater Planning

**Project Objective:** Enhance drainage along Indian Bayou Drive and Ibis Street to reduce frequent flooding during high-tide and low-intensity rainfall events. These areas also outfall directly to a Mangrove Swamp as identified by the Florida Fish and Wildlife Conservation Commission and to coastal waters. Design changes to the stormwater network present a valuable opportunity to analyze nutrient removal efficiency and explore additional options to mitigate the transport of pollutants from roadways into coastal waters.

**Project Description:** The Town of Fort Myers Beach's 2025 Vulnerability Assessment (VA) and Adaptation Plan identified focus areas for stormwater management improvements. Specifically, this initiative addresses Indian Bayou Drive within Focus Area 15 and along Ibis Street within Focus Area 16. These were designated as focus areas because high-level GIS analysis from the VA indicated frequent flooding under the current condition 100-year, 24-hour storm event. The Town's Stormwater Master Plan, adopted in 2014, identified a flood-prone area located immediately west of Indian Bayou. Focus area 15 has recently undergone enhancements to its stormwater infrastructure through the Tier 1 Side Street Water and Stormwater Improvements Project. However, Indian Bayou encompasses a separate stormwater network segment that has not benefitted from the nearby improvements. Focus area 16 was not identified as a problem area within the Town's Stormwater Master Plan, adopted in 2014. However, recent small-scale stormwater projects installed duckbills at the two outfalls along Ibis Street in an effort to mitigate frequent flooding from backflow. Town Staff noted that the area nevertheless experiences flooding and further evaluation and design is needed. The current project aims to conduct hydrologic and hydraulic modeling to evaluate the performance of the stormwater system under various conditions, and to develop recommendations for additional improvements to mitigate flooding and minimize pollutant transport into coastal waters.

**CCMP Elements Implemented:** WQ-3, FW-2, and PE-4.

**Partners and Roles:** Town of Fort Myers Beach is the stormwater network owner and operator and will be the permit applicant. CHNEP will assist with funding engineering design and permitting of the project.

**Outputs/Deliverables/Milestones:**

- Hydraulic & Hydrologic (H&H) Modeling Report and results (prior to August 2027).
- Detailed exhibits showing the extent and duration of flooding (prior to August 2027).
- Recommendations for increased nutrient removal prior to discharge (prior to August 2027).
- Design Plans of stormwater improvements (prior to August 2027).

**FY27 Budget:**

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|---|---|
| EPA FY22 IIJA Funding | $200,000 |
| Total Task Budget | $200,000 + Staff Time |

**Outcomes:**

- Current condition data collection to maintain Town GIS Atlas and an updated local H&H model for future integration with existing modeling efforts and a future revised Stormwater Master Plan.
- Reduced flooding duration and extent within Focus Area 15 and Focus Area 16.
- Increased water quality of discharge to coastal waters and wetlands.
- Increased resilience for the Downtown Area of Fort Myers Beach, in accordance with the Town's Comprehensive Plan and its Vulnerability Assessment and Adaptation Plan.
- Increased visibility of Town efforts to enhance water quality and protect environmentally sensitive lands to support Action E-4 of CCMP through future State Appropriation Requests, in collaboration with County.

**CWA Core Program Goals/Objectives Addressed:** 6) protecting coastal waters, 7) protecting large aquatic ecosystems, and 9) protect and restore waterbodies and watersheds

## Task 4.11 Hendry County Pollywog Creek Stabilization Project

**Project Objective:** Located in Hendry County near the neighborhoods of North LaBelle and the Caloosahatchee River, the Pollywog Creek Stabilization Project will address the bank stabilization of Pollywog Creek which suffered severe erosion caused by Hurricane Irma. The project aims to increase resilience by reducing sediment runoff, enhancing water quality and preventing further erosion into the Caloosahatchee River by implementing bioengineering techniques and structural supports, such as riprap and vegetative plantings, to secure the soil along the creek banks. This reduction in sedimentation will improve water clarity, enhance light penetration and support the health of aquatic plants and overall ecosystem integrity. Phase one includes the design and permitting needed for the project.

**Project Description:** Phase one will lay the foundation for subsequent implementation of stabilization measures. This phase includes engineering and design services, which involve contracting professional engineering services to develop detailed plans for stabilizing the creek banks. It will include site assessments, hydrological studies, soil analysis, and the creation of detailed engineering drawings and specifications, ensuring that the stabilization measures are effective and sustainable. The project will also secure all necessary permits required for the implementation of the stabilization measures, including permits from local, state, and federal agencies such as the Florida Department of Environmental Protection (FDEP) and the U.S. Army Corps of Engineers (USACOE). The permitting process will involve preparing and submitting detailed applications, attending regulatory meetings, and addressing any conditions or requirements stipulated by the permitting authorities. In addition, activities aimed at engaging the local community and stakeholders throughout the design and permitting process will be implemented. This includes public meetings, informational sessions, and ongoing communication with residents, landowners, and relevant agencies. CHNEP will assist with public outreach.

**CCMP Elements Implemented:** HR-2 and HR-3.

**Partners and Roles:** Hendry County (Site Owner, Permit applicant, Project Manager)**,** CHNEP (Funder), USACOE and FDEP (Permitting agencies).

**Outputs/Deliverables/Milestones**

- Final design and permitting necessary for creek bank stabilization.

**FY27 Budget**

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|---|---|
| EPA FY24 IIJA Funding | $20,200 |
| EPA FY25 IIJA Funding | $179,800 |
| Total Task Budget | $200,000 + Staff Time |

**Outcomes**

- Creation of a more resilient ecosystem by reducing sediment runoff and enhancing water quality.
- Mitigation of erosion by securing soil along the creek banks, which will benefit the prevention of further erosion into the Caloosahatchee River as well as promote sustainability of wildlife by providing vegetative plantings for their habitat.

**CWA Core Program Goals/Objectives Addressed:** 2) identifying polluted waters and developing restoration plans, 6) protecting coastal waters, 7) protecting large aquatic ecosystems, 8) ensure clean and safe water for all communities, 9) protect and restore waterbodies and watersheds

## Task 4.12 Clean Water Research & Restoration TBD Project(s)

**Project Objective:** To solicit and award funding for a restoration/research project that addresses the CCMP Water Quality and Hydrology Priority Actions has long-term applicability and serves as a model for addressing watershed restoration.

**Project Description:** This new task is to fund restoration/research project(s) that implements CCMP Priority Water Quality and Hydrology Actions, has long-term applicability, and serves as a model for addressing watershed restoration. 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 Water Quality or Hydrology 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**

- Protect will further water quality improvement and/or more natural hydrological conditions.
- 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.

**FY27 Budget**

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|---|---|---|
| EPA FY22-25 Programmatic 320 Funding | $ | 368 |
| EPA FY26 320 Funding | $ | 3,000 |
| EPA FY26 IIJA Funding | $ | 530,800 |
| EPA FY22-25 IIJA Carryover | $ | 3,869 |
| Local FY27 Funding | $ | 20,000 for Project Contingency |
| Total Task Budget | $ | 558,037 + Staff Time |

**Outcomes**

- Restoration and success monitoring methods available for design of future restoration projects.
- Enhanced collaboration and technical information exchange between partners.
- Identified CHNEP Water Quality and Hydrology research and/or restoration needs filled.

**CWA Core Program Goals/Objectives Addressed:** (4) addressing diffuse, nonpoint sources of pollution, (5) protecting wetlands, (6) protecting coastal waters, (7) protecting large aquatic ecosystems, and (9) protect and restore waterbodies and watersheds.

## Task 5 Policymaker Education

**Work Plan Objective:** Support policymaker education and legislative activities to support the implementation of the CCMP; as well as through implementing the Policy Review Procedures.

**Description:** This project is to support staff time to conduct policymaker education that implements the CCMP. Additionally, membership dues ($4,500) in the Association of National Estuary Programs (ANEP).

**CCMP Elements Implemented:** PE-4.

**Outputs/Deliverables/Milestones**

- Letters of support for legislation as directed.
- Meetings with policymakers to educate them about CHNEP and its CCMP, as well as funding and support needed for its implementation.
- Continue ANEP membership.
- Provide input on CCMP topics as requested by policymakers on the Management Conference.
- Legislative updates to Management Conference as appropriate.
- Hire a contractor to assist with policy maker education.

**FY27 Budget**

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|---|---|
| Local FY27 Funding: | $9,500 |
| Total Task Budget: | $9,500 (Local $ only) + Staff Time |

**Outcomes**

- Informed policymakers such that the CHNEP and the CCMP are recognized and utilized as a resource by legislators (local, state, and federal) and their staff.
- Improved policies and funding that assist in implementing the CCMP.

**CWA Core Program Goals/Objectives Addressed:** (1) establishing water quality standards, (2) identifying polluted waters and developing restoration plans, (4) addressing diffuse, nonpoint sources of pollution, (5) protecting wetlands, (6) protecting coastal waters, (8) ensure clean and safe water for all communities, and (9) protect and restore waterbodies and watersheds of the EPA Strategic Plan.

**List of Acronyms**

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|---|---|
| AAA | Adaptation Action Areas |
| ANEP | Association of National Estuary Programs |
| BMP | Best Management Practice |
| CCHMN | Coastal Charlotte Harbor Monitoring Network |
| CEI | Construction Engineering and Inspection |
| CHAP | Charlotte Harbor Aquatic Preserve |
| CHEC | Charlotte Harbor Environmental Center |
| CHEVWQMN | Charlotte Harbor Estuary Volunteer Water Quality Monitoring Network |
| CHNEP TAC | Coastal & Heartland National Estuary Partnership |
| DIN | Dissolved Inorganic Nitrogen |
| EBAP | Estero Bay Aquatic Preserve |
| EPA | Environmental Protection Agency |
| FDEP | Florida Department of Environmental Protection |
| FDER | Florida Department of Environmental Regulation |
| FGCU | Florida Gulf Coast University |
| FWC | Florida Fish & Wildlife Conservation Commission |
| FWRI | Fish & Wildlife Research Institute |
| GPRA | Government Performance and Review Act |
| H&H | Hydraulic & Hydrological |
| HOA | Homeowner Association |
| MRMCC | Myakka River Management Coordinating Council |
| NEP | National Estuary Partnership |
| NEPORT | National Estuary Program Online Reporting Tool |
| PLRG | Pollutant Load Reduction Goal |
| QAPP | Quality Assurance Project Plan |
| RAMP | Regional Ambient Monitoring Program |
| SAV | Submerged Aquatic Vegetation |
| SOP | Standard Operating Procedure |
| SFWMD | South Florida Water Management District |
| SGCN | Species of Greatest Conservation Need |
| SWERT | Southwest Ecosystem Restoration Team |
| SWFWMD | Southwest Florida Water Management District |
| SWIM | Surface Water Improvement and Management |
| SWUCA | Southern Water Use Caution Area |
| TMDL | Total Maximum Daily Loads |
| TN | Total Nitrogen |
| UF IFAS | University of Florida Institute of Food and Agricultural Sciences |
| USFWS | United States Fish and Wildlife Service |
| USACE | United States Army Corps of Engineers |
| VA | Vulnerability Assessment |
| WIN | Watershed Information Network |
| WMA | Wildlife Management Area |