

**CHARLOTTE HARBOR NATIONAL ESTUARY PROGRAM FUNDING
AGREEMENT FOR FEDERAL FISCAL YEAR 2018
BETWEEN MANATEE COUNTY AND
THE CITY OF PUNTA GORDA
On behalf of
The Charlotte Harbor National Estuary Program**

THIS IS AN AGREEMENT by and between Manatee County, a political subdivision of the State of Florida (hereinafter "County") whose mailing address is Post Office Box 1000, Bradenton, Florida 34206, and the CITY OF PUNTA GORDA, a municipal government of the State of Florida, (hereinafter "City") whose mailing address is 326 W. Marion Avenue, Punta Gorda, FL 33950, on behalf of the CHARLOTTE HARBOR NATIONAL ESTUARY PROGRAM (hereinafter "CHNEP"), whose mailing address is 326 W. Marion Avenue, Punta Gorda, 33950.

WHEREAS, the National Estuary Program was established by 33 U.S.C.A., Section 1320, and Charlotte Harbor was subsequently added to the National Estuary Program in July 1995 by Carol Browner, Administrator of the U.S. Environmental Protection Agency (EPA); and

WHEREAS, the CHNEP is directed by a Policy Committee consisting of a Deputy Director, Water Protection Division of the U.S. EPA Region 4, the South District Director of the Florida Department of Environmental Protection, a member of the Governing Board of the Southwest Florida Water Management District, a member of the Governing Board of the South Florida Water Management District, a member of the Department of Community Affairs, a member of the Florida Fish and Wildlife Conservation Commission, a member of the Central Florida Regional Planning Council, a member of the Southwest Florida Regional Planning Council, a County representative from each of Lee, Charlotte, DeSoto, Hardee, Manatee, Sarasota, and Polk Counties, and representatives of the Cities and Towns of Arcadia, Bartow, Bonita Springs, Cape Coral, Estero, Fort Myers, Fort Myers Beach, North Port, Punta Gorda, Sanibel, Venice, and Winter Have; and

WHEREAS, the CHNEP is a quasi-public entity, jointly funded through units of federal, regional, and local governments; and

WHEREAS, on February 11, 2000, the Comprehensive Conservation and Management Plan (CCMP) for Charlotte Harbor was approved by the Policy Committee; and

WHEREAS, on March 18, 2013, the CCMP Update for Charlotte Harbor was approved by the Policy Committee; and

WHEREAS, the actions in the CCMP include environmental stewardship, wetlands restoration, community outreach and education activities to enhance fisheries and living resources, recreational management, tracking relevant legislation, letters of support as appropriate to legislators and policy makers, presenting the Legislative Agenda to State and

Federal Legislative Delegations throughout the CHNEP study area, public involvement activities, monitoring and research; and

WHEREAS, on May 31, 2018 the CHNEP Policy Committee approved the FY 2019 Annual Workplan to complete and implement elements of the CCMP;

WHEREAS, the Manatee County Board of County Commissioners has determined that the programs, goals and activities will create a public benefit for the citizens of Manatee County.

NOW THEREFORE, the parties agree as follows:

1. **Payment:** The County agrees to pay the City \$5,000 for activities specified in the attached CHNEP FY19 Workplan that will benefit Manatee County, and that are performed solely for public purposes, as required by the County's payment procedures, by July 31, 2019.
2. **Reports:** the Council, on behalf of the CHNEP, shall provide the County with an annual, written report and analysis of work accomplished pursuant to the FY18 Workplan, attached and incorporated herein.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives.

ADOPTED IN OPEN SESSION WITH A QUORUM PRESENT AND VOTING THIS
18th DAY OF December, 2018

ATTEST: _____
Clerk of the Circuit Court

BOARD OF COUNTY COMMISSIONERS
MANATEE COUNTY, FLORIDA



BY: Uebi Seaman

BY: Prilla May

CITY OF PUNTA GORDA, administering agency for CHARLOTTE HARBOR NATIONAL ESTUARY PROGRAM.

BY: Howard Kunick
Howard Kunick, City Manager
Printed Name

Date: 1/16/2019

WITNESS:
BY: Carol Smith

Printed Name

FISCAL YEAR 2019

Workplan and Budget



Alligator Creek Cleanup – Citizen Scientist Project, February 2018

Charlotte Harbor National Estuary Program
May 31, 2018



326 W. Marion Avenue
Punta Gorda, FL 33950
(941) 575-5090
www.CHNEP.org

The Charlotte Harbor National Estuary Program is a partnership of citizens, elected officials, resource managers and commercial and recreational resource users working to improve the water quality and ecological integrity of the greater Charlotte Harbor watershed. A cooperative decision-making process is used within the program to address diverse resource management concerns in the 4,700-square-mile study area. Many of these partners also financially support the Program, which, in turn, affords the Program opportunities to fund projects. The entities that have financially supported the program include the following:

U.S. Environmental Protection Agency
Southwest Florida Water Management District
South Florida Water Management District
Florida Department of Environmental Protection
Peace River/Manasota Regional Water Supply Authority
Polk, Sarasota, Manatee, Lee, Charlotte, and Hardee Counties
Cities and Towns of Sanibel, Cape Coral, Fort Myers, Punta Gorda, North Port, Venice,
Fort Myers Beach, Winter Haven, Bonita Springs, Estero and Arcadia

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Charlotte Harbor National Estuary Program

Policy Committee

Ms. Becky Allenbach, Co-Chair
Water Protection Division
U. S. Environmental Protection Agency, Region 4

Mr. Jon Iglehart, Co-Chair
South District Director
Florida Department of Environmental Protection

Cities

Hon. Robert W. Hein, Jr.
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Vacant
City of Bartow

Hon. Fred Forbes
City of Bonita Springs

Hon. Jessica Cosden
City of Cape Coral

Vacant
City of Fort Myers

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Town of Fort Myers Beach

Hon. Debbie McDowell
City of North Port

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Hon. Mick Denham
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Mr. M J Carnevale
City of Winter Haven

Hon. Katy Errington
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Hon. James Selph
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Vacant
Hardee County

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Lee County

Hon. Stephan Jonsson
Manatee County

Mr. Jeff Spence
Polk County

Hon. Mike Moran
Sarasota County

Agencies

Ms. Patricia M. Steed
Central Florida Regional Planning Council

Dr. Phil Stevens
Florida Fish & Wildlife Conservation Commission

Mr. Phil Flood
South Florida Water Management District

Mr. Don McCormick
Southwest Florida Regional Planning Council

Mr. John Henslick
Southwest Florida Water Management District

Management Committee Co-Chairs

Ms. Shelley Thornton

Mr. Randy Smith

Technical Advisory Committee Co-Chairs

Ms. Lizanne Garcia

Ms. Shelley Thornton

Citizens Advisory Committee Co-Chairs

Mr. Kayton Nedza

Debi Osborn

Staff

Jennifer Hecker, Executive Director

Liz Donley, Deputy Director

Allison Conner, Program Scientist

Suzie Thompson, Administrative Assistant

Sierra Strickland, Research and Outreach Specialist

Purpose and EPA Guidance

This document provides annual financial and task-based information to meet federal workplan requirements. The focus of this workplan continues to be the implementation of the Comprehensive Conservation and Management Plan (CCMP).

The latest Environmental Protection Agency (EPA) guidance for the development of the workplan is the *National Estuary Program FY17 and FY19 Clean Water Act §320 Funding Guidance*. According to the guidance, NEP Workplans include the following required elements:

1. Previous Year's Program Accomplishments
2. CCMP Goals for coming year
3. Budget and Staff Elements
 - a. Budget breakdown including match
 - b. NEP staff and their official responsibilities
 - c. Cost share information
4. New and Ongoing Projects
 - a. Project Name (new or ongoing)
 - b. Project Objective
 - c. Project Description
 - d. Partners and Their Roles
 - e. Outputs/Deliverables
 - f. Milestones
 - g. Budget
 - h. Long term Outcomes
 - i. CWA core program the project supports
5. Areas of Special Interests
 - a. Nutrient management activities.
 - b. Climate resilience
6. Completed Major Projects
7. Section 320 funded travel
 - a. Travel during the fiscal year in which the new workplan is adopted (i.e. the amended year), actual figures for October 1 to the date the workplan is developed and projected figures for the remainder of the FY. Information includes:
 - Number of personnel
 - Travel dates
 - Purpose
 - Location
 - Final and Estimated Cost of trip
 - b. Projected travel during the new fiscal year with the same information listed above.

Previous Year – FY2018 - Program Accomplishments

FW-1: Protect, enhance and restore native habitats where physically feasible and within natural variability, including: Submerged aquatic vegetation (SAV); Submerged and intertidal unvegetated bottoms; oyster; mangrove; salt marsh; freshwater wetland; native upland; and water column.

- CHNEP continued to work with Southwest Florida Oyster Working Group partners on designing, permitting and constructing oyster restoration projects in Charlotte Harbor. Specifically staff collaborated with the Nature Conservancy and the City of Punta Gorda on developing a living shoreline concept for Charlotte Harbor.
- CHNEP completed work on the grant-funded Volunteer Oyster Habitat Monitoring project in December 2016. The project resulted in the recruitment, training and maintaining a cohort of volunteer citizen scientists that conduct monthly water quality data collection, periodic whelk monitoring and 6-month, 1-year, 18-month and 2-year oyster habitat monitoring.
- CHNEP staff worked with partners to develop the grant-funded Citizens Seagrass Gardening project for the tidal Caloosahatchee River. The project was submitted to the Florida Department of Environmental Protection's Coastal Partnership Initiative for funding. The CHNEP was notified that the project funding was awarded. Staff, working with partners, drafted and obtained the required permits for siting the seagrass gardens on submerged lands of Florida.
- The CHNEP Habitat Conservation Subcommittee was convened to guide development of the restoration targets, and the Restoration Needs Plan Update approach. The contractor presented the Management Conference with the "Additive Hybrid Approach" for review and comment.
- In FY15, the CHNEP, in partnership with DeSoto County with funding from Mosaic and the SWFWMD, initiated the process to develop and implement a Peace River shoreline stabilization and habitat restoration project in Morgan Park in Arcadia. Morgan Park is an important conservation area on the Peace River, but river erosion and exotic vegetation are problems within the park. CHNEP continued working with project partners to address shoreline erosion and stabilization and to conduct habitat restoration activities. The Site design was completed and draft permits were developed.

FW-2: By 2020, achieve a 100 percent increase in conservation, preservation, and stewardship lands within the boundaries of the CHNEP study area. The increase will be based upon 1998 acreage.

- Lee County Conservation 2020 program acquired the 3,996 acre property known as Edison Farms. This agriculturally zoned land in southeast Lee County's Density Reduction/Groundwater Recharge area contains significant natural flow-ways and critical species habitat. Future site improvements could provide enhanced water quality, flood attenuation and aquifer recharge. The CHNEP supported the re-authorization of Conservation 2020 in 2016 and the acquisition of Edison Farms.
- CHNEP organized and held the Conservation lands Workshop, with more than 80 attendees. Presentations focused on large-scale, landscape level restoration and included interactive sessions for participants to provide expertise on the CHNEP's revision of the CCMP.

FW-3: By 2020, achieve controllable levels of invasive exotic plants, as defined by the Florida Exotic Pest Plant Council, and exotic nuisance animals, as defined by the Florida Fish and Wildlife Conservation Commission on publicly managed lands. Encourage and support the removal and management of invasive exotic plants and exotic nuisance animals on private lands.

- The CHNEP provided micro-grants to assist engaged citizens in exotic plant removal on public lands.

HA-1: By 2020, identify, establish and maintain a more natural seasonal variation (annual hydrograph) in freshwater flows for Caloosahatchee River, Peace River and its tributaries, Myakka River, and Estero Bay and its tributaries.

- CHNEP held a workshop to provide background information and answer technical questions regarding the proposed MFLs for the Caloosahatchee River.

HA-2: By 2020, restore, enhance and improve where practical historic watershed boundaries and natural hydrology for watersheds within the CHNEP study area, with special attention to Outstanding Florida Waters and Class I water bodies.

- CHNEP worked with partners to design and attract funding to significant hydrologic restoration projects including Charlotte Harbor Flatwoods Initiative, the South Lee County Watershed Initiative, Vital Tidal Creeks, C-43 Reservoir and Lehigh Watershed Initiative.
- CHNEP assumed leadership of the South Lee County Watershed Initiative, at the request of the South Florida Water Management District for a period, and continued to actively participate in the work group.

HA-3: By 2020, enhance and improve to more natural hydrologic conditions water bodies affected by artificially created structures throughout the CHNEP study Area

- CHNEP continues to actively participate in the review of Western Everglades projects review and provides technical comments as appropriate.
- CHNEP participated in the 2018 Everglades Coalition meeting.
- CHNEP worked with Polk County to develop a project design to restore Lake Hancock shoreline.

HA-4: By 2020, for each watershed, identify and recommend additional reforms to improve linkages between local, waters management districts, state and federal government development permitting and capital programs affecting water storage, flood control and water quality.

- CHNEP is working with partners to identify funding g sources to facilitate capital programs that coordinate water storage, flood control, water quality and disaster planning.

WQ-1: Maintain or improve water quality from 2000 levels. By 2018, bring all impaired water bodies into a watershed management program such as reasonable assurance or basin management action plan. By 2015, remove at least two water bodies from the impaired list by improving water quality.

- CHNEP conducted a special TAC meeting devoted to the Impaired Waters rule and TMDLs focusing on Outstanding Florida Waters. Impaired waters workshop
- The SWFWMD initiated the Charlotte Harbor SWIM Plan update and provided an overview of the SWIM Plan development process and preliminary results of water quality data analyses.

WQ-2: By 2020, develop and meet water quality criteria that are protective of living resources for dissolved oxygen, nutrients, chlorophyll a, turbidity, salinity and other constituents.

- CHNEP continues to support the Coastal Charlotte Harbor Monitoring Network (CCHMN), providing funding and staff support. CCHMN monitoring.

- The CCHMN data is available for review and analyses on the CHNEP Water Atlas.

WQ-3: By 2025, reduce severity, extent, duration and frequency of harmful algal blooms (HABs), including macroalgae, phytoplankton and periphyton, through the identification and reduction of anthropogenic influences.

- Information about harmful algal blooms is provided for review and analysis on the CHNEP Water Atlas.

WQ-4: By 2025, meet shellfish harvesting standards year round for the Myakka River conditionally restricted-area and the conditionally approved areas of Lemon Bay, Gasparilla Sound, Myakka River, Pine Island.

- Charlotte County is continuing its design and planning to conduct septic to sewer conversions in those areas that were determined to be high priority.
- Cape Coral is conducting septic to sewer conversions and installing re-use water lines in its northwest area.
- In FY2018, Watershed Education Training Ponds, Lakes and Neighborhoods (WET PLAN) conducted 1 all day workshop with 90 attendees and 10 service providers. The WET PLAN partners revised the workshop curriculum into 4 modules: Stormwater Pond Purpose, Basic Stormwater Pond Design, Plants and Algae, and Human Impacts. WET PLAN partners continued to present the materials to interested residents and professionals.

SG-1: By 2025, a minimum of 75 percent of the all residents will have recalled attending a watershed event, reading watershed material or hearing watershed/estuary information on radio, or TV. A minimum of 50 percent of all residents in the CHNEP study area can recognize estuaries and watersheds. A minimum of 10 percent of all residents will be able to claim personal actions that protect the estuaries and watersheds

- CHNEP planned and hosted the Charlotte Harbor Nature Festival with over 1,000 attendees ranging in age from infants to seniors. Attendees self-identified their “home” on a map of the CHNEP study area.
- CHNEP published 35,000 copies of the 2018 Calendar which were distributed throughout the study area and to the part-time residents outside the area.
- Four issues of Harbor Happenings were published, with more than 4,000 mailed directly to subscribers and another 4,000 begin distributed through partners.
- CHNEP continued to support projects that engage citizens through micro-grants and Public Outreach Grants.
- CHNEP completed work on the Volunteer Oyster Habitat Monitoring project in December 2016. The project resulted in the recruitment, training and maintaining a cohort of volunteer citizen scientists that conduct monthly water quality data collection, periodic whelk monitoring and 6-month oyster habitat monitoring. CHNEP will continue to support the VOHM citizen scientists through FY2018.
- CHNEP will continue to provide information about opportunities for Management Conference participants and interested citizens via our Constant Contact notifications.

- CHNEP initiated monthly Citizen Science workshops to provide engaged citizens with hand-on opportunities to be involved in research, monitoring and restoration activities

SG-2: By 2020, The CHNEP will expand its role as a recognized resource to elected officials or their agents from local, state and federal government for policy advice.

- The CHNEP completed work on the broad, risk-based climate change vulnerability assessment to identify climate stressors that affect the CHNEP's ability to achieve its CCMP goals.
- The CHNEP contracted for the development of an analysis of habitat resiliency to climate change utilizing existing data sets and coordinating with state, regional and local partners to inform restoration planning.
- The Village of Estero became an active Management Conference member and the City of Arcadia became a contributing member.

SG-3: Through 2020, the CHNEP long-term monitoring strategy and data management strategy will continue and be enhanced. The resulting internet-based Water Atlas will be maintained systematically.

- CHNEP continues to support the Water Atlas, encouraging partners to utilize the resource to make their data available to the public and researchers. CHNEP is working with partners to ensure that data is appropriately analyzed and presented to the public.

SG-4: Through 2020 key geographic and scientific information will be presented in ways that are meaningful to the majority of people.

- CHNEP staff conducted deep review of Water Atlas functionality and data analytical tools; working with University of South Florida, a new introductory page was developed with an interactive map to assist users in identifying and reviewing data.
- CHNEP initiated work on the Watershed Status Report.

CCMP Goals Focus in FY 2019

The Fiscal Year 2019 Workplan and Budget reflects the Management Conference's direction to focus on the following CCMP Goals in FY2019. In addition, CHNEP will complete the revision and update of the CCMP including a broad risk-based climate change vulnerability assessment of the CCMP's 15 Quantifiable Objectives. [Note: At the time of the this Workplan and Budget, the CHNEP Management Conference is revising the 2013 CCMP which may result in further modifications to the Quantifiable Objectives and FY2019 CCMP Goals.]

WQ-1: Maintain or improve water quality from 2000 levels. By 2018, bring all impaired water bodies into a watershed management program such as reasonable assurance or basin management action plan. By 2015, remove at least two water bodies from the impaired list by improving water quality.

- CHNEP will continue working with partners to collect water quality monitoring data and uploading it to the CHNEP Water Atlas for access by interested parties.

WQ-2: By 2020, develop and meet water quality criteria that are protective of living resources for dissolved oxygen, nutrients, chlorophyll a, turbidity, salinity and other constituents.

- CHNEP continues to support the Coastal Charlotte Harbor Monitoring Network (CCHMN), providing funding and staff support. CCHMN monitoring.
- CHNEP will work with partners to conduct an inclusive Caloosahatchee River water quality summit.

FW-1: Protect, enhance and restore native habitats where physically feasible and within natural variability, including: Submerged aquatic vegetation (SAV); Submerged and intertidal unvegetated bottoms; oyster; mangrove; salt marsh; freshwater wetland; native upland; and water column.

- CHNEP will continue participating in the Southwest Florida Oyster Working Group toward designing, permitting and constructing oyster restoration projects in Charlotte Harbor.
- CHNEP will support the submerged aquatic vegetation (SAV) working group and the restoration of the Caloosahatchee River SAV.
- The CHNEP will work with partners to complete and implement restoration projects identified in the Habitat Restoration Needs Plan Update.

HA-1: By 2020, identify, establish and maintain a more natural seasonal variation (annual hydrograph) in freshwater flows.

- CHNEP will continue working with partners to fund integrated ground and surface water models to improve decision-making.

HA-2: By 2020, restore, enhance and improve where practical historic watershed boundaries and natural hydrology for watersheds within the CHNEP study area, with special attention to Outstanding Florida Waters and Class I water bodies.

- CHNEP worked with partners to design and attract funding to significant hydrologic restoration projects including: Charlotte Harbor Flatwoods Initiative, the South Lee County Watershed Initiative, Vital Tidal Creeks, C-43 Reservoir, Alligator Creek Watershed (Sarasota) and Lehigh Watershed Initiative.

HA-3: By 2020, enhance and improve to more natural hydrologic conditions water bodies affected by artificially created structures throughout the CHNEP study Area

- CHNEP will continue working with Polk County to conduct shoreline restoration on Lake Hancock.
- CHNEP will continue participating in Western Everglades restoration through project review, meeting participation and coordination of related planning and restoration efforts.

SG-1: By 2025, a minimum of 75 percent of the all residents will have recalled attending a watershed event, reading watershed material or hearing watershed./estuary information on radio, or TV. A minimum of 50 percent of all residents in the CHNEP study area can recognize estuaries and watersheds. A minimum of 10 percent of all residents will be able to claim personal actions that protect the estuaries and watersheds

- CHNEP will host the Charlotte Harbor Nature Festival at Laishley Park, Punta Gorda.
- CHNEP will publish the 2019 Calendar and four issues of Harbor Happenings are distributed throughout the study area and to the part-time residents outside the area.
- CHNEP will continue to support projects that engage citizens through micro-grants and Public Outreach Grants.
- CHNEP will maintain a presence on social media and its website www.chnep.org
- CHNEP will continue to support Watershed Education Training, Ponds, Lakes and Neighborhoods (WETPLAN) program to assist neighborhood groups with stormwater pond management.
- The Adventures in the Charlotte Harbor Watershed book will be converted into an interactive on-line publication accessible to teachers, students and the public.
- CHNEP will conduct a Florida-friendly fishing workshop in conjunction with the Arcadia All-Florida Championship Rodeo.

SG-2: By 2020, the CHNEP will expand its role as a recognized resource to elected officials or their agents from local, state and federal government for policy advice." CHNEP continued to implement its advocacy and review procedures by reviewing and providing comments on critical projects. CHNEP continued working with local governments to address climate change resiliency.

- The CHNEP will complete the CCMP Revision, incorporating the climate change vulnerability assessment addressing how identified climate stressors may affect achieving CCMP goals.
- The CHNEP will complete an analysis of habitat resiliency to climate change utilizing existing data sets and coordinating with state, regional and local partners to inform restoration planning.

SG-3: Through 2020, the CHNEP long-term monitoring strategy and data management strategy will continue and be enhanced. The resulting internet-based Water Atlas will be maintained systematically.

- CHNEP will fund the WaterAtlas and expand its use for recording, storing and analyzing data collected throughout the study area.
- CHNEP will work with our partners to develop a seagrass information page on the Water Atlas.

Budget Overview

Table 1: Fiscal Year 2018 – 2019 Proposed Budget

Proposed Budget for Fiscal Year 2018-2019		
Charlotte Harbor National Estuary Program (Federal Fiscal Year 2019)		
	2018-2019	2017-2018
Revenue		
Federal (programmatic 320 funds)	600,000.00	600,000.00
Partner Contributions (Non-Federal)	109,500.00	102,500.00
Partner Contributions (Federal)	75,000.00	75,000.00
Grants (Federal)	-	46,270.00
Grants (Non-Federal)	185,000.00	180,000.00
In Kind Services	600,000.00	632,000.00
Other		16,418.00
Total Revenue	\$ 1,569,500.00	\$ 1,652,188.00
Expenditures		
Personnel	411,686.54	409,631.00
Pubs, Subs., Dues	4,500.00	4,500.00
Travel, Conferences	25,000.00	25,000.00
Outreach - printings, grants, events	129,052.00	172,700.00
Research and Restoration Contracts	226,167.00	255,919.00
Office Rental	3,425.00	3,425.00
Computer/IT	15,950.00	14,500.00
Administrative Fee	89,057.00	86,463.00
Communications	2,600.00	1,200.00
Office Supplies and Materials/Postage	2,500.00	4,200.00
Promotional/Meeting Support	2,500.00	4,200.00
Overhead	3,810.00	3,810.00
Total Expenditures	\$ 916,247.54	\$ 985,548.00
Fund Balance		
Beginning of Fiscal Year (unaudited)	142,715.00	95,893.00
Fiscal Year contribution (unaudited)	58,283.00	46,822.00
Total unobligated funds end of Fiscal Year	\$ 200,998.00	\$ 142,715.00

Budget Details

Table 2: FY 2019 Workplan Budget

Task #	Task	Personnel	Fringe	Travel	Other	Total
1	Mgmt. Conference	\$171,304	\$57,985	\$25,000	\$119,842	\$374,131
2	Outreach	\$44,311	\$14,008		\$129,052	\$187,371
3	Research	\$8,475	\$3,353		\$139,117	\$150,944
4	Restoration	\$71,683	\$23,852		\$87,050	\$182,585
5	Legislation	\$12,852	\$3,865		\$4,500	\$21,217
Total		\$308,625	\$103,062	\$25,000	\$479,561	\$916,247

Table 3: FY 2019 Workplan Budget Funding Sources

Sub-Task #	Sub-Task	Federal	FDEP	SWFWMD	Manatee	Grants	Local	Total
1	Mgmt. Conference	\$363,601	\$0	\$8,030	\$0	\$2,500		\$374,131
2	Outreach	\$113,418	\$26,452		\$5,000	\$12,500	\$30,000	\$187,371
3	Research	\$77,038	\$4,029	\$69,878			\$0	\$150,944
4	Restoration	\$45,943	\$44,527	\$52,115		\$40,000	\$0.00	\$182,585
5	Legislation						\$21,217	\$21,217
(rounded)		\$600,000	\$75,000	\$130,000	\$5,000	\$55,000	\$51,217	\$916,247

Table 4: FY 2019 EPA Cooperative Agreement Funding

Task #	Task	Personnel	Fringe	Travel	Other	Total
1	Mgmt. Conference	\$165,339	\$55,920	\$25,000	\$117,342	\$363,601
2	Outreach	\$25,569	\$6,297		\$81,552	\$113,418
3	Research	\$3,540	\$1,331		\$72,167	\$77,038
4	Restoration	\$16,059	\$5,884		\$24,000	\$45,943
5	Local					
	In-Kind				\$600,000	\$600,000
Total		\$210,507	\$69,432	\$25,000	\$895,061	\$1,200,000

Table 5: Charlotte Harbor NEP FY2019 Income

Funding Source	Approved FY 17 Funding	FY 18 Request	Approved FY18	FY19 Request
Section 320 Funding	\$600,000.00	\$600,000.00	\$600,000.00	\$600,000.00
EPA CCMP Vulnerability Assessment	\$20,527.00			
EPA CRE Habitat Resiliency	\$38,350.00			
EPA CCMP Revision Support		\$32,000.00	\$32,000.00	
Total Federal Income	\$658,877.00	\$632,000.00	\$632,000.00	\$600,000.00
DEP	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00
SFWMD	\$0.00	\$130,000.00	\$0.00	\$130,000.00
SWFWMD	\$130,000.00	\$130,000.00	\$130,000.00	\$130,000.00
Peace Manasota Water Supply Authority	\$3,500.00	\$3,500.00	\$3,500.00	\$3,500.00
Subtotal Regional Income	\$208,500.00	\$338,500.00	\$208,500.00	\$338,500.00
Sarasota County	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00
Charlotte County	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00
Lee County	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00
Polk County	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00
Cape Coral	\$7,500.00	\$7,500.00	\$7,500.00	\$7,500.00
Fort Myers	\$0.00	\$2,500.00	\$5,000.00	\$2,500.00
Manatee County	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00
Punta Gorda	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00
Sanibel	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00
Bonita Springs	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00
Fort Myers Beach	\$0.00	\$5,000.00	\$2,500.00	\$2,500.00
Venice	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00
North Port	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00
Winter Haven	\$1,000.00	\$1,000.00	\$1,000.00	\$1,500.00
Village of Estero	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00
Hardee County	\$0.00	\$500.00	\$0.00	\$500.00
Arcadia	\$500.00	\$500.00	\$500.00	\$500.00
Bartow	\$0.00	\$500.00	\$0.00	\$500.00
DeSoto County	\$0.00	\$500.00	\$0.00	\$500.00
Subtotal Local Income	\$102,500.00	\$111,500.00	\$110,000.00	\$109,500.00
Mosaic Company Foundation	\$50,000.00	\$40,000.00	\$50,000.00	\$50,000.00
FDEP CPI Seagrass Gardening		\$14,270.00	\$14,270.00	
Encumbered Funds: FY15 to FY17			\$190,000.00	
Char. Co. MAC Grant				\$5,000.00
Subtotal Grants and Deferred	\$50,000.00	\$54,270.00	\$254,270.00	\$50,000.00
Match In-Kind: SFWMD Initiatives	\$658,877.00	\$632,000.00	\$632,000.00	\$600,000.00
Subtotal In-Kind	\$658,877.00	\$632,000.00	\$632,000.00	\$600,000.00
Grand Totals in the Fiscal Year	\$1,019,877.00	\$1,131,270.00	\$1,204,770.00	\$1,153,000.00
Program Cash				\$973,000.00
Projected FY18 Unobligated Funds				\$58,283.00

Table 6: Projected and Completed FY2018 Travel

Date	Purpose	# Staff	Location	Length of Stay	Travel Mode	Reg. Fee	Estimated Travel Cost
Nov. 2017	EPA Tech Transfer	2	Boston, MA	3	Air	\$160	\$2,154
Nov. 2017	CERF	1	Providence RI	5	Air	\$585	\$1,231
January 11 - 14, 2018	Everglades Coalition	1	Florida	3	Auto	\$355	\$1,031
Feb. 2018	AWRA	1	Fort Myers, FL	1	Auto	\$75	\$25
Feb-18	NEP/EPA Spring Mtg.	2	Washington, DC	4	Air	\$100	\$3,034
April	AWRA GIS Conference	1	Florida	2	Auto	\$425	\$312
Jun-18	GOMA	3	St. Petersburg, FL	4 days	Auto	\$100	\$2,385
Spring 2018	Meet with Region 4 Staff	3	Atlanta, GA	3 days	Air	\$0	\$2,586
FY 18	Local Travel/Meetings	4	Various	<1 day	Auto	\$1,000	\$9,442
			Subtotal			\$2,800	\$22,200
			Total				\$25,000

Table 7: Projected FY2019 Travel

Date	Purpose	# Staff	Location	Length of Stay	Travel Mode	Reg. Fee	Estimated Travel Cost
Oct. 2018	EPA Tech Transfer	2	San Fran., CA	4	Air	\$400	\$4,528
Dec. 2018	RAE/Coastal States Organization	1	Long Beach, CA	6	Air	\$585	\$2,886
Spring 2019	PFLCC/estuarine	1	Florida	3	Auto	\$0	\$752
January, 2019	Everglades Coalition	1	Florida	3	Auto	\$355	\$1,031
Feb. 2018	AWRA	1	Fort Myers, FL	1	Auto	\$75	\$25
Spring 2019	NEP/EPA Spring Mtg.	2	Washington, DC	4	Air	\$300	\$3,224
late Spring 2019	GOMA	1	Miss/Ala.	4 days	Air	\$100	\$1,845
Spring 2018	Meet with Region 4 Staff	1	Atlanta, GA	3 days	Air	\$0	\$1,112
FY 18	Local Travel/Meetings	4	Various	<1 day	Auto	\$300	\$7,482
			Subtotal			\$2,115	\$22,885
			Total				\$25,000

Table 8: Public Engagement Projects

FY	Code	Title	Amount
2018	CH2MIC	CHNEP Micro-grants + calendar assistance	\$20,000
2018	CH2POG	CHNEP Public Outreach Grants	\$20,000
2018	CH2ADV	CHNEP Adventures in the Charlotte Harbor Watershed	\$5,000
2018	CH2CAL	CHNEP Calendar	\$24,000
2018	CH2COL	CHNEP collateral, etc. + posters	\$9,000
2018	CH2HH	CHNEP Harbor Happenings	\$15,000
2018	CH2TAR	CHNEP Target audience programs	\$12,500
2018	CH2NF	CHNEP Charlotte Harbor Nature Festival	\$7,500
2018	CH2SPO	CHNEP Sponsorships	\$6,000
2018	CH2CMP	CCMP Revision Project	\$52,000
2018	CH2EVE	CHNEP Events – Cons Lands	\$2,500
2018	CH2WSR	CHNEP Watershed Status Report (FY2017 funds)	\$57,700
Total FY2018			\$231,200

FY	Code	Title	Amount
2019	CH2AST	CHNEP Special Projects	\$4,552
2019	CH2MIC	CHNEP Micro-grants	\$10,000
2019	CH2POG	CHNEP Public Outreach Grants	\$20,000
2019	CH2ADV	CHNEP Adventures in the Charlotte Harbor Watershed (Manatee)	\$5,000
2016	CH2MAC	CHNEP Adventures in the Charlotte Harbor Watershed	\$5,000
2019	CH2CAL	CHNEP Calendar	\$25,000
2019	CH2CAS	CHNEP Calendar support	\$5,000
2019	CH2COL	CHNEP collateral, etc. + posters	\$6,000
2019	CH2HH	CHNEP Harbor Happenings	\$18,000
2019	CH2TAR	CHNEP Target audience programs	\$16,500
2019	CH2NF	CHNEP Charlotte Harbor Nature Festival	\$7,500
2019	CH2SPO	CHNEP Sponsorships	\$6,500
Total FY2019			\$129,052

Table 9: Technical Projects

FY	Code	Project Title	Amount
2016	CH4MO	CHNEP Mosaic Restoration Project (FY2018)	\$40,000
2016	CH4SWD	CHNEP SWFWMD - Habitat Restoration Needs	\$40,000
Total FY2016=			\$80,000
2017	CH4HRN	CHNEP Mosaic - Habitat Restoration Needs	\$40,000.00
2017	CH4HRN	CHNEP SWFWMD - Habitat Restoration Needs	\$40,000.00
2017	CH4HRN	CHNEP EPA Habitat Rest. (FY16 & FY17 funds)	\$30,000.00
2017	CH4HRC	CHNEP Habitat Resiliency Project	\$33,850.00
Total FY2017 =			\$143,850

2018	CH3CMN	CHNEP CCHMN-Upper Charlotte Harbor	\$65,000
2018	CH3LCH	CHNEP CCHMN-Lower Charlotte Harbor	\$11,000
2018	CH3LCH	CHNEP CCHMN assistance (indep. contractor)	\$3,240
2018	CH3WA	CHNEP Water Atlas Maintenance	\$54,000
2018	CH3SGG	CHNEP Citizen Seagrass Gardening	\$14,270
2018	CH4XX	CHNEP SWFWMD Restoration project	\$25,000
2018	CH4XX	CHNEP Mosaic Restoration project	\$40,000
2018	CH4XX	CHNEP EPA funded project	\$44,387
Total FY2018 =			\$256,897

2019	CH3CMN	CHNEP CCHMN-Upper Charlotte Harbor	\$66,950
2019	CH3LCH	CHNEP CCHMN-Lower Charlotte Harbor	\$11,330
2019	CH3LCH	CHNEP CCHMN assistance (indep. contractor)	\$3,337
2019	CH3WA	CHNEP Water Atlas Maintenance	\$57,500
2019	CH4TBD	CHNEP SWFWMD Restoration project	\$23,050
2019	CH4TBD	CHNEP Mosaic Restoration project	\$40,000
2019	CH4TBD	CHNEP EPA funded project	\$24,000
Total FY2019 =			\$226,167

Table 10: FY2019 SWFWMD Funding by Task

Task	Project	SWFWMD	Project Total
1 (Workplan Task 3.1)	Coastal Charlotte Harbor Monitoring Network	\$66,950	\$66,950
2 (Workplan Task 4.4)	Restoration Project	\$23,050	\$46,100
3 (Workplan Tasks 1, 3 and 4)	Staff Support	\$40,000	\$40,000
Totals:		\$130,000.00	\$153,050.00

Table 11: FY2018 Administrative Costs

2018	CHEPA1	CHNEP Pre-employment expenses	\$310.00
2018	CH1COM	CHNEP Communications	\$1,200.00
2018	CH1MAT	CHNEP Materials and Supplies (CHFOOD)	\$4,200.00
2018	CH1OAD	CHNEP Overhead Administrative Charges	\$86,463.00
2018	CH1OCP	CHNEP Overhead Computer	\$14,500.00
2018	CH1ORN	CHNEP Overhead Office Rent	\$3,425.00
2018	CH1PRO	CHNEP Promotional Activities-Meeting Support	\$1,700.00
2018	CH1MAT	CHNEP Unexpected expenses	\$3,500.00
2018	CHFOOD	CHNEP Meeting Support	\$2,500.00
2018	CH5ANP	CHNEP ANEP Dues	\$4,500.00
Subtotal =			\$122,298.00

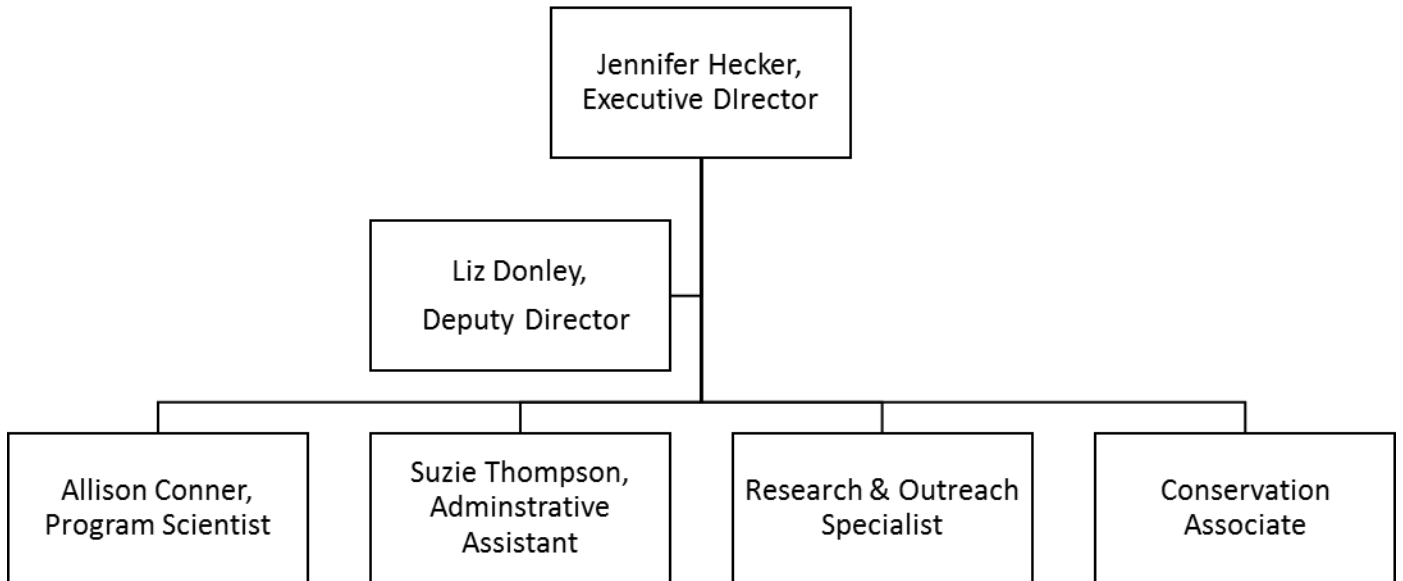
Table 12: FY2019 Administrative Costs

Pursuant to City of Punta Gorda guidance, there is a 3% increase in Administrative charges and 10% increase in computer/IT support

2019	CHEPA11	CHNEP Pre-employment costs	\$310.00
2019	CH1COM	CHNEP Communications	\$2,600.00
2019	CH1MAT	CHNEP Department Materials and Supplies	\$2,500.00
2019	CH1OAD	CHNEP Overhead Administrative Charges	\$89,057.00
2019	CH1OCP	CHNEP Overhead Computer	\$15,950.00
2019	CH1ORN	CHNEP Overhead Office Rent	\$3,425.00
2019	CHFOOD	CHNEP Promotional Activities-Meeting Support	\$2,500.00
2019	CH1SER	CHNEP Unanticipated Expenses	\$3,500.00
2019	CH5ANP	CHNEP ANEP Dues	\$4,500.00
			\$124,342.00

Staff and their Official Responsibilities

The CHNEP staff includes four fulltime professional positions and two less than fulltime positions.



Executive Director: Overall Program Management, Policy Committee, institutional organization, legislation, and special projects, public engagement, events and publications.

Deputy Director: Finance and Operations, grants and contracts administration, Management Committee, Public Outreach Grants and Micro-grants, leverage tracking, project management.

Program Scientist: Research and restoration projects, technical support, Technical Advisory Committee, Citizens Advisory Committee, and subcommittees.

Administrative Assistant: Office support, time tracking, procurement assistance, public engagement, events and publications, meeting support, correspondence, social media.

Research and Outreach Specialist: - Assist in implementing the communications program that involves citizen science activities, public engagement, planning events, internal information, social media and community relations

Conservation Associate: Special projects, public engagement and events.

Table 13: Staff Time Allocations by Task for FY 2018

Project Code	Title	Jennifer	Liz	Allison	Suzie	Sierra	Conservation Associate	Hours
CHEPA1	Management Conference - EPA	968	951	201	812	0	152	3084
CHEPA1	Leave - EPA	352	352	352	352	0	0	1408
CHSWF1	Programs Administration	0	235	0	122	0	0	357
CHEPA2	Outreach - EPA	120	0	0	322	1015	0	1457
CHDEP2	Outreach-DEP	120	110	24	432	0	0	686
CHDEP3	Research-DEP	0	20	80	0	0	0	100
CHEPA3	Research-EPA	30	0	76	0	0	0	106
CHEPA4	Restoration - EPA	80	80	250	0	0	0	410
CHDEP4	Restoration-DEP	170	212	537	40	0	240	1199
CHSWF3	Research SWF	0	0	80	0	0	0	80
CHSWF4	Restoration-SWF	0	120	480	0	0	1176	1776
CHLOC5	Advocacy & Legislative Action	240	0	0	0	0	0	240
	Total	2080	2080	2080	2080	1015	1568	10903

Table 14: Staff Time Allocations by Task for FY 2019

Project Code	Title	Jennifer	Liz	Allison	Suzie	Sierra	Conservation Associate	Hours
CHEPA1	Management Conference - EPA	968	1022	201	854		40	3085
CHEPA1	Leave - EPA	352	352	352	352			1408
CHSWF1	Programs Administration	0	106	0	80		0	186
CHEPA2	Outreach - EPA	130	80	0	322	638		1170
CHDEP2	Outreach-DEP	110	110	24	432		0	676
CHDEP3	Research-DEP	0	20	80	0		0	100
CHEPA3	Research-EPA	30	0	76	0			106
CHEPA4	Restoration - EPA	80	80	327	0			487
CHDEP4	Restoration-DEP	170	210	490	40		240	1150
CHSWF3	Research SWF	0	0	80	0		0	80
CHSWF4	Restoration-SWF	0	100	450	0		812	1362
CHLOC5	Advocacy & Legislative Action	240	0	0	0			240
	Total	2080	2080	2080	2080	638	1092	10050

Hours in cells in orange must be used within FY 2018. Hours in cells in yellow may be carried into the next fiscal year. Hours in blue indicate new position. Hours in white cells have flexibility.

Ongoing Projects

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

Task 1: Management Conference

- 1.1 CCMP Revision
- 1.2 Habitat Resiliency to Climate Change
- 1.3 Micro Grants
- 1.4 Public Outreach Grants
- 1.5 Sponsorships
- 1.6 Program Office Collateral / Reprints

Task 2: Public Engagement

- 2.1 2020 Calendar and four issues of Harbor Happenings
- 2.2 Children's Book
- 2.3 Public Engagement – Targeted Projects and Events

Task 3: Research Coordination

- 3.1 Charlotte Harbor Water Quality and Seagrass Monitoring and Mapping Programs
- 3.2 CHNEP WaterAtlas Maintenance

Task 4: Watershed Coordination

- 4.1 Habitat Restoration Needs
- 4.2 Oyster Restoration in Charlotte Harbor
- 4.3 Submerged Aquatic Vegetation Restoration
- 4.4 Restoration Project Grant(s)

Task 5: Legislative Action

Task 1: Management Conference, Program Planning, Administration, Finance, Operations

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

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

CCMP Elements Implemented: All

Outputs/Deliverables, Milestones

- Management Conference committee meetings
- Management Conference adoption of Annual Workplan, no later than June 1, 2019
- Evidence of extending CHNEP partnership, by September 30, 2019
- GPRA Reporting through EPA's NEPORT app, by September 14, 2019
- Administration of Program Office operations and finances, ongoing
- Collaborate with partners on CCMP implementation, ongoing
- Comply with Host Agency finance and procurement requirements, ongoing
- Initiate compilation of materials for Performance Evaluation
- Funding opportunities posted to CHNEP website, ongoing

320 Budget: \$221,259

FY 18-19 Budget:

Staff:

320 Funds: \$221,259
SWFWMD: \$8,030

Staff: \$229,289
Travel: \$25,000
Admin Costs: \$119,842

Estimated Total Budget: \$374,131

Outcomes

- Fully informed and engaged CHNEP Management Conference with members participating in Committee, subcommittee and work group meetings.
- CCMP Implemented
- Funding obtained to sustain the CHNEP Program Office and accomplish annual workplan
- CHNEP remains eligible for Federal, State and non-profit grants and funding
- Compliance with Florida Government in the Sunshine laws
- Increased understanding of CHNEP program office and NEP mission by partners
- Commitment from partners to fund CHNEP
- Funding opportunities and assistance provided to partners

CWA Core Program addressed: (5) protecting wetlands, and (6) protecting coastal waters through the National Estuary Program.

Task 1.1 Ongoing Project: CCMP Revision

Project Objective: To complete the CCMP revision, including initiation of updating the strategic plans.

Project Description: The CHNEP is encouraged by U.S. EPA to revise its CCMP at least once every ten years. The CHNEP has adopted a five year cycle for assessing the CCMP and amending the document. In addition, the CHNEP has developed two amendment processes: one for minor amendments and one for major updates.

The CCMP is undergoing major revision beginning in FY2018. In FY 2019, program staff will continue working with the Management Conference to revise the four required Strategic Plans and begin implementing the revised CCMP. The funding for the contractor was included in the FY2018 budget.

CCMP Elements Implemented: All

Outputs/Deliverables

- Approved Final Revised CCMP
- Monitoring Approach, revision
- Finance Strategy, revision initiated
- Habitat Protection/Restoration Strategy, completed
- Communication/Outreach Strategy, initiated

Estimated Milestones:

- CCMP revision reviewed and approved by Management Conference by May 2019
- Habitat Protection/Restoration Strategy by September 2019
- Monitoring Approach, revision initiated
- Finance Strategy, revision initiated
- Communication/Outreach Strategy, initiated

320 Budget: staff time.

FY 18-19 Budget:

- **320 Funds:** – staff time
- **SWFWMD** – staff time

Estimated Total Budget: \$52,000 (obligated in FY2018) + Staff time

Outcomes

- CCMP consistent with EPA Guidelines
- Identification of Management Conference contributions towards CCMP implementation.
- CCMP relevant to partner needs including: budget, Comprehensive Plans and capital improvement plans.
- Increased collaboration among Management Conference partners.
- Review and revision of Strategic Plans initiated

CWA Core Program addressed: (2) identifying polluted waters and developing restoration, (4) addressing diffuse, nonpoint sources of pollution, (5) protecting wetlands, and (6) protecting coastal waters through the National Estuary Program.

Task 1.2 Ongoing Project: Habitat Resiliency to Climate Change

Project Objective: complete a GIS-based analysis of climate change impacts to habitat quality and connectivity and provide resiliency solutions.

Project Description: This project was initiated in FY 2018, with funds obligated for the project contract. CHNEP will use mapping tools (30 m x 30 m grid) to establish habitat resiliency and migration pathways in the CHNEP Study Area in response to climate change. Specifically, we will look at habitat quality to: 1) establish habitat connectivity and barriers to migration, and 2) identify habitat types and locations for restoration and/or acquisition to increase climate change adaptation and resiliency. This is an area of special interest – climate resiliency. The funding for the contractor was included in the FY2018 budget.

CCMP Elements Implemented: SG-2, SG-D, SG-Q, SG-K

Outputs/Deliverables/Estimated Milestones

- GIS library
- Bibliography of research
- Draft Model
- TAC Comments
- Revised Model
- Draft Final Report
- Presentation of Draft Final Report and Model
- Report and Model results in user friendly print and online format
- eLearning Module
- Final Poster published in Harbor Happenings and available digitally
- Written and electronic reports to EPA

320 Budget: staff time

FY 18-19 Budget:

320 Funds: staff time

Habitat Restoration Update project -

Estimated Total Budget: \$78,350 (obligated in FY 2018) + staff time

Outcomes

- Integration of results into the Habitat Restoration Needs Update (Task 4.1) CHNP
- No later than FY2019, the CHNEP's CCMP visions will be informed by this focused approach to identifying factors to increase habitat resiliency and connectivity to ensure habitat areas for potential retreat, as well as identify critical barriers and essential conservation parcels needed to enable effective habitat migration
- The Final Report will present decisions-makers with opportunities for integrating appropriate responses to climate change impacts to habitat into long range planning efforts.

CWA Core Program addressed: (5) protecting wetlands, and (6) protecting coastal waters through the National Estuary Program.

Task 1.3 Ongoing Project: Micro Grants

Project Objective: Implementation of CCMP through award of “seed” funding for small, sometimes pilot, projects

Project Description: The CHNEP offers micro-grants, usually up to \$1,000, to assist others in their efforts to help implement the CCMP. Citizens, organizations, businesses, government agencies, schools, colleges and universities may apply for grants to support projects that occur within the CHNEP study area. Applicants are reimbursed funds once a final report and an invoice for work accomplished are accepted.

CCMP Elements Implemented: All

Outputs/Deliverables

- Outputs vary with project, but all projects submit a final project report as a deliverable.

Estimated Milestones:

- All funds awarded, obligated and payments processed by September 30, 2019.

320 Budget: \$0

FY 18-19 Budget:

Local funds: \$10,000

Estimated Total Budget: \$10,000

Outcomes:

- Further partnerships to protect and restore the greater Charlotte Harbor estuarine system and watershed.
- Engage citizens in opportunities to be involved in research, monitoring, and restoration activities.
- Expand CHNEP outreach and education through citizen actions.
- Protect the environment.
- Solve local, small scale issues of concern identified in the CCMP

CWA Core Program addressed: (4) addressing diffuse, nonpoint sources of pollution, (5) protecting wetlands, and (6) protecting coastal waters through the National Estuary Program.

Task 1.4 Ongoing Project: Public Outreach Grants

Project Objective: Implementation of CCMP through award of funding for small projects.

Project Description: The CHNEP offers Public Outreach Grants (POGs) once a year. The maximum grant award is capped at \$5,000 but most applications are funded in the \$2,500 to \$3,000 range. Any citizen, organization, business, government agency, school, college or university may apply for a Public Outreach Grant but the project must occur within the greater Charlotte Harbor watershed. In this document, the word Applicant is used to refer to the individual, organization, business, government agency, school, college or university that is submitting the Public Outreach Grant application. An Applicant may submit more than one application but each must be independent and complete on its own.

CCMP Elements Implemented: All

Outputs/Deliverables

- Outputs vary with project, but all projects submit a final project report as a deliverable.

Estimated Milestones:

- All proposals reviewed and recommendations for funding completed by November 30, 2018.
- All project awards determined by December 30, 2018.
- All funds obligated by January 31, 2019.
- All payments processed by December 30, 2019.
- FY2020 request for proposal approved by Policy Committee by May 31, 2019.

320 Budget: \$0

FY 18-19 Budget:

Local funds: \$20,000

Estimated Total Budget: \$20,000

Outcomes:

- Further partnerships to protect and restore the greater Charlotte Harbor estuarine system and watershed.
- Engage citizens in opportunities to be involved in research, monitoring, and restoration activities.
- Expand CHNEP outreach and education through citizen actions.
- Protect the environment.
- Solve local, small scale issues of concern identified in the CCMP

CWA Core Program addressed: (4) addressing diffuse, nonpoint sources of pollution, (5) protecting wetlands, and (6) protecting coastal waters through the National Estuary Program.

Task 1.5 Ongoing Project: Sponsorships

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

Project Description: The CHNEP receives requests to sponsor conference, workshops, symposia, etc., that implement the CCMP. In prior budgets these sponsorships were supported through micro-grant funds.

CCMP Elements Implemented: All

Outputs/Deliverables

- CHNEP acknowledged as event sponsor, with logo on event materials.

Estimated Milestones:

- All funds awarded, obligated and payments processed by September 30, 2019.

320 Budget: \$6,500

FY 18-19 Budget:

320 Funds: \$6,500

Estimated Total Budget: \$6,500

Outcomes:

- Further partnerships to protect and restore the greater Charlotte Harbor estuarine system and watershed.
- Engage scientists, researchers, stakeholders and decisions makers in events that educate and inform about research, monitoring, and restoration activities relevant to the CHNEP.
- Inform general public, potential partners, targeted audience about CHNEP's mission.

CWA Core Program addressed: (5) protecting wetlands, (6) protecting coastal waters through the National Estuary Program, and (7) protecting Large Aquatic Ecosystems.

Task 1.6 Ongoing Project: Program Office Collateral/Reprints

Project Objective: To provide outward looking Program Office information, materials to partners, decision makers and interested public.

Project Description: The CHNEP Program office utilizes letterhead, labels, and other support materials on a day to day basis. In addition, the CHNEP participates in conferences, festivals, and events as an exhibitor. This task supports the development and purchase of the needed materials and supplies.

CCMP Elements Implemented: All

Outputs/Deliverables

- Uniform branding of CHNEP products and materials, ongoing
- Reprints of CHNEP posters published in Harbor Happenings

Estimated Milestones:

- CHNEP branded materials available to staff and partners as needed.

320 Budget : \$6,000

FY 18-19 Budget:

320 Funds: \$6,000

Estimated Total Budget: \$6,000

Outcomes:

- Expand CHNEP partnerships.
- Engage decision-makers and citizens in CHNEP activities.
- Protect the environment.

CWA Core Program addressed: (4) addressing diffuse, nonpoint sources of pollution, (5) protecting wetlands, and (6) protecting coastal waters through the National Estuary Program.

Task 2: Public Engagement

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

Description: Tools used to provide continuous support of the overall program include website, social media and media. They range from events (workshops, festivals and trainings), to publications (magazines, calendars and books), to videos and target audience initiatives.

The website, www.CHNEP.org, provides information to the general public, technical community and Management Conference including technical and public engagement information produced or sponsored/supported by the Program.

Social media tools currently used include:

- YouTube. More than 400 videos and talks (PDF files with linked with audio) are posted.
- EventBrite. CHNEP events requiring registration are promoted on this site.
- Tumblr blog. Weekly online posts since 2013 spread awareness on the importance of the estuary system and its inhabitants.
- FaceBook. Weekly posts promote CHNEP projects.
- Constant Contact. Notices of Management Conference meetings and events and requests for document review and comment are sent to subscribers.
- CHNEP website. The CHNEP program office utilizes its website to provide current information about projects, meetings, grant opportunities, and volunteer activities.
- Water Atlas. The water Atlas publishes a calendar that lists events open to the public.

This task also includes assistance required to accomplish diverse outreach tasks.

CCMP Elements Implemented: All but those that specially call for an outreach component include SG-A to SG-S, WQ-K, WQ-L, WQ-M, HA-P, FW-H, FW-I, FW-J, FW-K, FW-N, FW-O and FW-P.

Partners and their roles

The CHNEP conducts all projects in cooperation with and in support of its partners:

Outputs

- Continuously update website for Management Conference meetings and activities, promote projects and serve as a repository of all materials produced by the CHNEP.
- Weekly posts on social media, including Facebook and Tumblr.
- Use EventBrite to promote and handle registrations for events.
- Post videos and talks (PDF with audio) on YouTube as completed.
- Prepare and distribute email messages via Constant Contact to announce Management Conference meetings and promote CHNEP projects.
- Work with local media to promote one story a month.
- Citizen science workshops and events.

Estimated Milestones

- 2020 Calendar will be mailed by November 17, 2019
- CHNEP staff will assist with a regional Nature Festival
- CHNEP will update the website weekly
- CHNEP will coordinate with local media regularly

320 Budget: \$31,866

FY 18-19 Budget:

Staff:

320 Funds: \$31,866

FDEP Funds: \$26,452

Estimated Total Budget: \$58,318

Outcomes

- Educated and engaged people about the CHNEP and the natural environment of southwest Florida. Many of the items help people become engaged by enjoying the environment through outdoor experiences, by asking them to be citizen scientists and by engaging in events, such as the Watershed Summits and the Charlotte Harbor Nature Festival, and CHNEP and our partners' programs that help implement the CCMP. Many people have volunteered that they have changed their behavior as a result in learning more about an issue.
- Continuously introduce the CHNEP to new populations and new residents through events, publications and social media.
- Establish new partnerships and strengthen existing partnerships through funding opportunities for projects that implement the CCMP.
- Residents and seasonal visitors within CHNEP study area develop a sense of stewardship for the natural environment within the CHNEP study area.
- Increase the number of partners who conduct projects that help fulfill the CCMP.

CWA Core Program addressed: (5) protecting wetlands, (6) protecting coastal waters through the National Estuary Program, and (7) protecting Large Aquatic Ecosystems.

Task 2.1 Ongoing Project: 2020 Calendar and four issues of Harbor Happenings

Project Objective: Educate, motivate and engage the public and partners through contributing articles and by donating up to three images that show the beauty and diversity of the native, natural environment.

Project Description: The CHNEP designs, publishes and distributes an annual calendar that showcases images donated by citizens that depict the beauty and diversity of the native, natural environment. The calendar encourages people to learn about and become involved in the CHNEP. With permission, the images are used in other ways by CHNEP, including weekly Tumblr posts, in *Harbor Happenings* and on the www.CHNEP.org website.

The CHNEP publishes the quarterly magazine *Harbor Happenings* to report on environmental “happenings,” including watershed issues, events and updates on Program activities and progress towards implementing the CCMP. One issue is now incorporated into the calendar.

CCMP Elements Implemented: SG-D, SG-B, SG-C, SG-I, SG-J, HA-P, FW-P, WQ-K, WQ-L, WQ-M, HA-P, FW-J, FW-N, and FW-P

Partners and their roles: Articles and images are donated by interested citizens and Management Conference partners. The images are reviewed and selected for publication by the CAC. 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: Four issues of *Harbor Happenings* (one of which is included in the calendar) and annual calendar featuring donated images that depict the beauty and diversity of the native, natural environment and highlighting the CHNEP and its programs.

Estimated Milestones:

- *Harbor Happenings* printed and distributed 4 times a year: January, April, July, and November.
- Receive calendar entries by July 15. Images reviewed by CAC in August.
- The calendar is written, designed and reviewed by October.
- Requests for calendars are due by Sept. 15.
- The calendar published and distributed by November.

320 Budget: \$43,000

FY 18-19 Budget:

320 Funds:	\$43,000
Grant Funds:	\$5,000

Estimated Total Budget: \$48,000

Outcomes: The interested public and CHNEP partners all become more knowledgeable and engaged in the stewardship of the natural environment in which they live. CHNEP projects are featured.

CWA Core Program addressed: (5) protecting wetlands, (6) protecting coastal waters through the National Estuary Program, and (7) protecting Large Aquatic Ecosystems.

Task 2.2 Ongoing Project: Children's Book

Project Objective: Help students better understand the natural environment of southwest Florida so they can become better stewards of it.

Project Description: The CHNEP published a 64-page book *Adventures in the Charlotte Harbor Watershed: A Story of Four Animals and Their Neighborhoods*. In this 64-page book readers learn about the environment of southwest Florida through the adventures of a yellow-crowned night-heron on the Caloosahatchee River, an alligator on the Peace River, an otter on the Myakka River and a mullet in the estuaries. CHNEP has received a grant to assist with development of an interactive online version of the book with input from educators. From 2008 to 2017, the book has been given to the school districts in the counties that participate in the CHNEP for distribution to students.

CCMP Elements Implemented: SG-H, SG-D, SG-C

Partners and their roles: The project included Carol Mahler, author; Rachel Renne, illustrator; and 12 people who wrote sidebars and reviewed drafts, All seven school districts in the counties that participate in the CHNEP distribute the books to their students at a single grade level (third to fifth, their choice). Books have also been distributed to private schools, home school associations and summer camps. Educators have created resources and curriculum, and Lee County School District created read-a-long videos.

Outputs/Deliverables: An interactive, on-line version of *Adventures in the Charlotte Harbor Watershed*.

Estimated Milestones:

- Create interactive, online version by Sept. 30, 2019.

320 Budget: \$0

FY 18-19 Budget:

Charlotte Co. Marine Advisory Committee grant: \$5,000

Manatee County: \$5,000

Estimated Total Budget: \$10,000

Outcomes: School districts, teachers and staff and students all become more knowledgeable and engaged in the stewardship of the natural environment in which they live.

CWA Core Program addressed: (5) protecting wetlands, (6) protecting coastal waters through the National Estuary Program, and (7) protecting Large Aquatic Ecosystems.

Task 2.3 Ongoing Project: Public Engagement - Targeted Projects and Events

Project Objective: Support projects, initiatives, and workshops that educate and engage people about the issues that affect the natural environment of southwest Florida so they become better stewards.

Project Description: Target projects “fill in the gaps” by educating and providing resources to reach specific audiences such as the Watershed Education Training Ponds Lakes and Neighborhoods initiative (www.wetplan.org), and the monthly citizen scientist events initiated in 2018.

Events provide information and activities for various audiences, ranging from citizens to environmental professionals to decisions makers. Events also provide opportunities for partners to network, collaborate and learn about projects and solutions to issues in southwest Florida.

The Charlotte Harbor Nature Festival showcases local environmental agencies, nonprofit organizations and businesses that focus on the natural environment of southwest Florida. Approximately 60 exhibitors participate.

CCMP Elements Implemented: All, and specially: SG-A to SG-S, WQ-K, WQ-L, WQ-M, HA-P, FW-H, FW-I, FW-J, FW-K, FW-N, FW-O and FW-P. .

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

Outputs/Deliverables

- WET PLAN workshop
- Charlotte Harbor Nature Festival
- Workshops
- Targeted projects

Estimated Milestones:

- Plan, promote and participate in a regional Nature Festival.
- By April 1, 2019, hold at least one WET PLAN workshop.
- By Sept. 30, 2019 support projects that are identified after the workplan is approved which help fulfill the CCMP.

320 Budget: \$21,500

FY 18-19 Budget:

320 Funds	\$21,500
Grant:	\$2,500
Estimated Total Budget:	\$24,000

Outcomes

- Increase understanding of how personal actions affect the environment.
- Citizens develop a sense of stewardship for the natural environment in the CHNEP study area.
- Increase numbers of partners conducting projects that help fulfill the CCMP.

CWA Core Program addressed: (4) addressing diffuse, nonpoint sources of pollution, (5) protecting wetlands, and (6) protecting coastal waters through the National Estuary Program.

Task 3: Research Coordination

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

Description: CHNEP coordinates the Coastal Charlotte Harbor Monitoring Network (CCHMN) and supports the FDEP Charlotte Harbor Estuaries Volunteer Water Quality Monitoring Network (CHEVWQMN) and the Water Management Districts' seagrass aerial mapping projects. CHNEP works with partners to identify and resolve gaps in water quality and biological data, specifically through refinements to the Research Needs Inventory and environmental indicators. An identified data gap in understanding nutrient dynamics in tidal creeks will be addressed by a partnership research project of the three NEPs in southwest FL, with technical and field contributions from CHNEP staff. 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, determine TMDLs and Minimum Flows and Levels, and be incorporated into resource management plans such as the Southwest Florida Feasibility Study and the SWFWMD Charlotte Harbor and SFWMD Lower Charlotte Harbor SWIM plans.

CHNEP staff work with USF to revise and update the WaterAtlas as needed, and to ensure WQ data is uploaded. In FY2019 CHNEP plans to work with the Aquatic Preserves to design a Water Atlas page that presents the seagrass transect data to the public.

CCMP Elements Implemented: WQ-1, WQ-2, WQ-3, WQ-B, WQ-M, FW-1, FW-A, FW-C, FW-D, FW-P, SG-1, SG-2, SG-3, SG-4, SG-B, SG-D, SG-F, SG-J, SG-K, SG-R, and SG-S.

Partners and Roles:

- U.S. Environmental Protection Agency – Support CCHMN.
- Southwest Florida Water Management District – Support CCHMN and seagrass aerial mapping.
- South Florida Water Management District – Support seagrass aerial mapping.
- Florida Department of Environmental Protection – Support CCHMN, CHEVWQMN, seagrass and rookery monitoring.
- Friends of Charlotte Harbor Aquatic Preserves and Estero Bay Buddies – Support CHEVWQMN, oyster restoration, seagrass transect and rookery monitoring.
- Charlotte County – Support CCHMN.
- Lee County – Support CCHMN.
- Florida Fish and Wildlife Conservation Commission – Support CCHMN.
- Cape Coral – Support CCHMN.
- Sarasota County – Support CCHMN, and oyster monitoring.

Outputs/Deliverables, Milestones:

- **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.
- **Seagrass Monitoring:** Annual seagrass data.
- **Seagrass Aerial Mapping:** Biennial and 5 year seagrass aerial mapping.
- **Data Management:** Biannual up-dates of water quality data.
- **Data Access:** On-going access to water quality data, graphing and analyses and response to data requests.

- **Data Analysis and Use:** Annual up-dates of water quality contour maps and, and periodic refinement of Research Needs Inventory and environmental indicators.

320 Budget: \$4,871

FY 18-19 Budget:

Staff:

320 Funds:	\$4,871
FDEP Funds:	\$4,029
SWFWMD Funds:	\$2,928

Estimated Total Budget: \$11,828

Outcomes

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

CWA Core Program addressed: (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 through the National Estuary Program, and (7) protecting Large Aquatic Ecosystems.

Task 3.1 Ongoing Project: Charlotte Harbor Water Quality and Seagrass Monitoring Mapping Programs

Project Objective: To ensure collection, reporting and mapping of consistent, technically sound long-term water quality and seagrass data throughout the Charlotte Harbor 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: CHNEP participates 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 provides 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 and the Tidal Myakka, Peace and Caloosahatchee Rivers. Water quality parameters include: depth, clarity, temperature, salinity, dissolved oxygen, pH, conductivity, photosynthetically active radiation (PAR), chlorophyll, color, nitrogen components, phosphorus components, turbidity, suspended solids, and organic Carbon. CHNEP coordination activities for the CCHMN include: developing and updating Standard Operating Procedures and field Quality Assurance plans, conducting annual field audits, hosting annual meetings, participating in quarterly Regional Ambient Monitoring Program (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.

CHNEP support activities for the Aquatic Preserves seagrass monitoring include providing access to the data through the CHNEP Water Atlas and assisting with monitoring as needed.

CHNEP support activities for the seagrass aerial mapping including: reviewing draft results and providing maps of the seagrass results for each of the 13 CHNEP estuary sub-basins (strata).

CCMP Elements Implemented: *CCHMN and CHEVWQMN:* Implement Quantifiable Objectives and Priority Actions WQ-1, WQ-2, WQ-3, WQ-B, and WQ-M and support Environmental Indicators WQ-b, WQ-E, and WQ-G; *Seagrass monitoring and mapping:* Implement Quantifiable Objectives and Priority Actions FW-1, FW-A, FW-C, FW-D, and FW-P, and support Environmental Indicators FW-a and FW-d.

Partners and Roles:

CCHMN:

Water Quality monitoring support:	\$66,950	SWFWMD
	\$14,667	EPA 320 funds
	In-kind	Charlotte County, Lee County, Cape Coral, FDEP
	In-house	CHNEP Staff (Primary)
RAMP WQ quality assurance:	In-kind	Charlotte County, Lee County, Cape Coral, FDEP, FWRI
	In-house	CHNEP Staff (Primary)

CHEVWQMN:

Water Quality monitoring support:	In-kind	FDEP CHAP, EBAP
	In-kind	Friends of CHAP and EBAP
	In-kind	Charlotte Harbor Environmental Center
<i>Seagrass Transects:</i>	In-kind	FDEP CHAP, EBAP, South District
<i>Seagrass Aerial Mapping:</i>	In-kind	SWFWMD, SFWMD
	In-house	CHNEP Staff

Outputs/Deliverables:

- **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 5 years.
- **RAMP:** participation in meetings.

Estimated Milestones:

- **CCHMN and CHEVWQMN:** Water quality samples collected monthly, analyzed within holding periods, reported quarterly and uploaded to state water quality data base within 6 months.
- **Seagrass Monitoring:** Seagrass data collected annually and reported within 18 months.
- **Seagrass Aerial Mapping:** Seagrass aerial mapping conducted every 2 years by SWFWMD and every 5 years by SFWMD and reported and maps provided within 18 months.

320 Budget: \$14,667 + staff time.

FY 18-19 Budget:

320 Funds:	\$14,667
SWFWMD Funds:	\$66,950

Estimated Total Budget: \$81,617 + staff time
~\$253,000 in kind from partners for CCHMN

Outcomes:

- Coordinate monthly water quality sampling and assist with seagrass monitoring each year and seagrass aerial mapping every 2-5 years.
- Provide consistent region-wide, technically sound water quality and seagrass data needed to assess resource status, trends and complex interactions.
- Provide consistent region-wide, technically sound water quality and seagrass data for resource management, regulatory programs, including TMDLs and water quality standards, and education of the public and elected officials throughout the CHNEP.
- Provide access to water quality and seagrass data to partners via CHNEP Water Atlas.
- Provide data needed to assess effectiveness of protection and restoration efforts.
- Increase collaboration on monitoring and mapping between SWFWMD and SFWMD.

CWA Core Program 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 through the National Estuary Program, and (7) protecting Large Aquatic Ecosystems.

Task 3.2 Ongoing Project: CHNEP Water Atlas Maintenance

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

Project Description: CHNEP contracts on an annual basis with the University of South Florida (USF) to maintain and enhance the *CHNEP Water Atlas*. The Water Atlas is 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 Study Area. Tools are available to map, analyze and graph data related to specific locations and topics to assists partners with identifying, prioritizing and implementing projects that address CCMP water quality, habitat, hydrology and stewardship goals. CHNEP support includes maintenance, improvements and enhancements of all the Water Atlas components, including home page design and data base updates.

CCMP Elements Implemented: SG-1, SG-2, SG-3, SG-4, SG-B, SG-D, SG-F, SG-J, SG-K, SG-R, and SG-S.

Outputs/Deliverables Milestones:

- Management of all data sources, web-site hosting, maintenance, up-dates and enhancements, and quarterly and annual reports.
- Water quality data uploaded from the state water quality data base every 6 months
- Water quality contour maps up-dated annually,
- Water Clarity Report Card updated annually,
- Events up-date as appropriate, and
- Technical documents posted as they are provided.

320 Budget: \$57,500

FY 18-19 Budget:

320 Funds: \$57,500 + staff time

Estimated Total Budget: \$57,500

Outcomes

- Post and provide access to water quality data up-dates every 6 months.
- Post and provide access to water quality contour map up-dates annually.
- Post and provide access to Water Clarity Report Card up-dates annually.
- Post and provide access to data analyses, maps and graphs as requested.
- Provide data entry access to volunteer oyster monitors weekly, bi-monthly and every 6 months.
- Provide data needed to assess effectiveness of protection and restoration efforts as requested.
- Increase collaboration among resource managers and agencies from throughout the CHNEP Study Area.

CWA Core Program addressed: (2) identifying polluted waters and developing restoration plans, (4) addressing diffuse, nonpoint sources of pollution, (5) protecting wetlands, (6) protecting coastal waters through the National Estuary Program, and (7) protecting Large Aquatic Ecosystems.

Task 4 Watershed Coordination

Workplan Objective: To develop and update a CHNEP Restoration Plan and participate in activities which will implement this plan and CCMP objectives and actions relating to restoration. To support development and implementation of Everglades Restoration.

Description: Provide staff support for restoration mapping efforts. Tracking of restoration plan implementation is performed annually through the annual development of the Government Performance and Review Act (GPRA) report. This task also includes staff participation 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. 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. As opportunities arise, CHNEP assists partners in conducting restoration activities.

The 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.

CCMP Elements Implemented: All

Partners and their roles:

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

Outputs/Deliverables Milestones

- Habitat Restoration Needs Update and Habitat Resiliency to Climate Change Project
- GPRA Report
- Public/Private Conservation Cooperative Support
- Watershed Management Plans, Verified List review
- Minimum Flows and Levels review
- Charlotte Harbor Flatwoods Initiative, Lehigh Watershed Initiative, South Lee County Watershed Initiative
- CHIMMP and OIMMP
- Marine Debris, micro-plastics project participation
- Science Coordination Group

320 Budget: \$21,943

FY 18-19 Budget:

Staff:

320 Funds:	\$21,943
FDEP Funds:	\$44,527
SWFWMD Funds:	\$29,065

Estimated Total Budget: \$95,535

Outcomes

- To most effectively restore water quality, hydrology and habitat, CHNEP participates in a variety of partnership resource management and planning activities. Funding under this program supports CHNEP staff review of watershed assessments and plans and provision of maps and data to partners which guide restoration priorities and track implementation of projects
- CHNEP will provide annual summaries of partners' restoration activities through the GPRA report and will assist partners with compiling and analyzing data to develop and implement technically sound, consensus-based resource management plans.
- Increase in the number and effectiveness of implemented water quality and resource management Best Management Practices (BMPs), plans and restoration activities

CWA Core Program addressed: (2) identifying polluted waters and developing restoration plans to restore them, (4) addressing diffuse, nonpoint sources of pollution, (5) protecting wetlands, (6) protecting coastal waters through the National Estuary Program, and (7) protecting Large Aquatic Ecosystems.

Task 4.1 Ongoing Project: Habitat Restoration Needs

Project Objective: To develop CHNEP habitat restoration needs vision, goal, and plan project through the next 50 years and to make the information easily accessible to resource managers. The resulting information will be used by partners to identify, prioritize and implement effective habitat restoration and conservation projects, including land acquisition.

Project Description: CHNEP hired a contractor to work with partners to develop the CHNEP habitat restoration vision and goals and prepare a CHNEP Habitat Restoration Needs Plan.

CCMP Elements Implemented: FW-1, FW-F, SG-N.

Partners and Roles: The selected contractor is working with the CHNEP Management Conference, local and regional resource managers and other partners to develop the habitat restoration vision and goals.

Outputs/Deliverables:

- Databases, maps and tables of past and current habitats and restoration projects.
- Databases, maps and tables of habitat status and trends.
- List and evaluation of alternative approaches for calculating habitat restoration vision and goals.
- CHNEP habitat restoration vision and goals, including databases, tables and maps.
- List of priority habitat restoration and land acquisition projects.
- CHNEP Habitat Restoration Needs Plan.

Estimated Milestones:

- Habitat data and projects compiled and analyzed for status and trends within 7 month.
- Access to habitat restoration information via Water Atlas implemented within 7 months.
- Approach for calculating habitat restoration goals developed within 8 months.
- CHNEP habitat restoration vision and goals developed within 13 months.
- List of priority future restoration and acquisition projects developed within 13 months.
- CHNEP Habitat Restoration Needs Plan completed within 18 months.

320 Budget: staff time

FY 18-19 Budget: (these funds were all appropriated in FY17)

320 Funds:	\$30,000
SWFWMD:	\$80,000
Grant:	\$40,000

Estimated Total Budget: staff time + \$150,000 appropriated in FY17

Outcomes

- Provide up-to-date region-wide habitat data, status, trends, vision and goals to be used to focus cost-effective and efficient restoration and acquisition activities.
- Provide habitat data to assess the effectiveness of restoration and protection efforts.
- Provide.
- Increased collaboration across boundaries between the SFWMD and SWFWMD.

CWA Core Program addressed: (5) protecting wetlands, (6) protecting coastal waters through the National Estuary Program, and (7) protecting Large Aquatic Ecosystems.

Task 4.2 Ongoing Project: Oyster Restoration in Charlotte Harbor

Project Objective: To facilitate the restoration of oyster habitats and related ecosystem functions throughout the CHNEP estuaries and tidal rivers.

Project Description: CHNEP collaborates with three partnership approaches to oyster restoration throughout the Study Area: 1) The Southwest Florida Oyster Working Group (SWFOWG) facilitates region-wide oyster restoration that addresses endangered Smalltooth Sawfish critical habitat. 2) In partnership with The Nature Conservancy (TNC), the Charlotte Harbor Aquatic Preserves, the Trabue Harborwalk Volunteer Oyster Habitat Monitoring program was developed and continues data collection to assess the success of the project. 3) CHNEP works with partners to identify technical and funding sources for new oyster restoration projects. Efforts continue to identify a technically sound, consistent cost-effective method for mapping oyster acreage and locations throughout the Study Area estuaries.

CCMP Elements Implemented: WQ-E, WQ-4, FW-1, FW-F, HA-A, and SG-B.

Partners and their roles: TNC, FDEP Charlotte Harbor and Estero Bay Aquatic Preserves, FWC, Lee County, Charlotte County, Sarasota County, SCCF, NOAA National Marine Fisheries (NMFS), WCIND, SWFWMD and SFWMD.

Outputs/Deliverables Milestones:

- Utilization of the CHNEP Oyster Habitat Restoration Plan, methods and priority sites to seek partnership grant funding for restoration projects.
- Exchange of technical information to improve oyster restoration success and monitoring.
- Transfer of the Volunteer Oyster Habitat Monitoring manual and methods to guide volunteer monitoring at oyster restoration sites throughout the CHNEP study area as opportunities arise.
- Education of volunteers and the public of the ecological value of oyster habitats via the VOHMN daily, biweekly and biannually.
- Reporting and showcasing the success of the Trabue Harborwalk and SCCF oyster restoration sites through CHNEP publications.

320 Budget: staff time.

FY 18-19 Budget

320 Funds: staff time

Estimated Total Budget: Staff time

Outcomes

- Restore natural systems, obtain sufficient region-wide water quality, biological and physical data and analyses that are needed to understand the status, trends and complex interactions of the systems.
- Coordinate implementation of Oyster Restoration Plan, sharing of lessons learned and subsequent adaptation of oyster restoration projects.
- Increase collaboration across boundaries between the SFWMD and SWFWMD.
- Restoration of oyster population to state where it assists with improving water quality the CHNEP estuaries and tidal rivers.

CWA Core Program addressed: (4) addressing diffuse, nonpoint sources of pollution, (5) protecting wetlands, (6) protecting coastal waters through the National Estuary Program, and (7) protecting Large Aquatic Ecosystems.

Task 4.3 Ongoing Project: CHNEP Submerged Aquatic Vegetation Restoration

Project Objective: To ensure development of technically sound Submerged Aquatic Vegetation (SAV) restoration targets; implement restoration initiatives and projects which restore and protect SAV throughout the CHNEP estuaries and tidal rivers.

Project Description: CHNEP coordinates and participates in collaborations to develop technically sound SAV restoration targets and implement restoration projects throughout the Study Area. The CHNEP Management Conference adopted SAV targets in 2005 and refined targets in 2009, with the understanding that additional field assessment is needed to capture full extent of SAV distribution in the tidal rivers due to naturally highly colored river water. CHNEP convened the Caloosahatchee River SAV Targets Working Group (CRSAVTWG) in 2013 to begin developing sound SAV targets for the tidal and some oligohaline reaches of the Caloosahatchee River. CHNEP also participates in the Southwest FL Seagrass Working Group and FWC Seagrass Integrated Monitoring and Mapping (SIMM) technical team.

In fy2018 the CHNEP was awarded funding to conduct the Citizen Seagrass Gardening project to provide seed source in the Caloosahatchee River, this project will continue in FY2019.

CCMP Elements Implemented: FW-1, FW-A, FW-C, FW-D and FW-P.

Partners and Roles: CHNEP coordinates the TAC subcommittees and CRSAVTWG. Together these collaborative groups include: FDEP Charlotte Harbor and Aquatic Preserves, FWC, SWFWMD, SFWMD, Lee County, Charlotte County, Sarasota County, SCCF, FGCU and Johnson Engineering.

Outputs/Deliverables:

- Exchange technical information, monitoring and mapping methods, and emerging SAV issues.
- Reporting and showcasing success of SAV restoration projects.

Estimated Milestones:

- SAV restoration grant applied for by September 2019
- Exchange of SAV information on-going.

320 Budget: staff time.

FY 18-19 Budget

320 Funds: CHNEP staff time

FDEP Funds: staff time

Estimated Total Budget: \$14,720 (obligated in fy2018) + Staff time

Outcomes

- Protect and restore natural systems, obtain sufficient region-wide water quality, biological and physical data and analyses that are needed to understand the status, trends and complex interactions of the systems.
- Development of SAV Targets for Caloosahatchee River.
- Adaptation of SAV restoration projects based on lessons learned.
- Increase SAV seed source in the Caloosahatchee River.

CWA Core Program addressed: (5) protecting wetlands and (6) protecting coastal waters through the National Estuary Program.

Task 4.4 New Project(s): Restoration Project Grant(s)

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

Project Description: CHNEP will fund a restoration project that implements CCMP Priority Actions, has long-term applicability, and serves as a model for addressing habitat restoration and resource management challenges. Assurances of long term conservation use of the area after restoration 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 methods. Proposed projects should address at least one Priority Problems and implement one Priority Action, be transferable, demonstrate value to the community, and include monitoring and educational components.

CCMP Elements Implemented: Will be determined upon award.

Partners and Roles: Will be determined upon award.

Outputs/Deliverables Milestones:

- Habitats will be restored and protected within 2 years of project selection and remain in conservation use long term.
- Restoration 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.

320 Budget: \$24,000

FY 18-19 Budget:

SWFWMD Funds:	\$23,050
Grant:	\$40,000

Estimated Total Budget: \$87,050

Outcomes

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

CWA Core Program addressed: (4) addressing diffuse, nonpoint sources of pollution, (5) protecting wetlands, (6) protecting coastal waters through the National Estuary Program, and (7) protecting Large Aquatic Ecosystems.

Task 5: Legislative Action

Workplan Objective: Provide a structure for pursuing legislative action to support the implementation of the CCMP; implement the Advocacy and Review Procedures; and provide federal consistency review as required by EPA.

Description: The Legislative Agenda is a formal document that presents projects identified by the Management Conference, that implement the CCMP and which require additional support, either fiscal or policy, in order to be successfully completed. Membership dues (\$4,500) in the Association of National Estuary Programs (ANEP) are included in this task as they are not eligible for EPA funding. Finally, this task supports the Legislative Subcommittee.

CCMP Elements Implemented: SG-2, SG-L

Outputs/Deliverables, Milestones

- CHNEP Legislative Agenda, presented to state and Federal legislators as appropriate
- Letters of support for legislation as directed.
- Letters of support as appropriate to legislators and policy makers.
- ANEP membership, by March 2018.
- Review, Comment, Support and Inquiry Letters as requested.
- Legislative updates to Management Conference as appropriate.
- Issues meetings with elected officials as needed.

320 Budget: \$0

FY 18-19 Budget:

Local partners:	\$21,217
Staff:	\$16,717
ANEP:	\$4,500

Estimated Total Budget: \$21,217

Outcomes

- To provide a structure for pursuing legislative action to support the implementation of the *Comprehensive Conservation and Management Plan* (CCMP).
- CHNEP and the CCMP recognized and utilized as a resource by legislators (local, state and Federal) and their staff.
- New, revised and re-authorized Federal and state Statutes, and rules, local ordinances, and Federal, state and local policies that assist in implementing the CCMP.
- Incorporation of CHNEP Management Conference proposed revisions into adopted rules and legislation.

CWA Core Program addressed: (1) establishing water quality standards, (2) identifying polluted waters and developing restoration plans, (4) addressing diffuse, nonpoint sources of pollution, (5) protecting wetlands, and (6) protecting coastal waters through the National Estuary Program.

Completed Major Projects and Actions

FY18 Public Outreach Grant Awards

Project Title	Applicant	Grant Request	Project Total	Grant Award
Charlotte County Public School 2 nd grade busing for CHEC wading Trips	Charlotte Harbor Environmental Center	\$5,000	\$11,750	\$5,000
Cutting Horse Eco-Center	Coccoloba Chapter, FNPS	\$5,000	\$23,382	\$3,000
Happe Summer Eco-Camp River Lab	Happehatchee	\$4,150	\$22,758	\$4,150
Community and Habitat Resiliency Communications	Mote Marine Lab	\$3,927	\$3,927	\$3,927
Southwest Regional Elementary Science Olympiad Tournament	North Fort Myers High School	\$3,000	\$3,000	\$3,000
	Total		\$89,750	\$19,077

FY17 Micro-Grants

Awardee	Project
Mangrove Ch. Florida Native Plant Society	Fire Wise Planting for Your Home
FGCU	The Language of the Earth
CCFW	Burrowing Owl Festival Art Contest
Riverwatch	Eagles for Clean Water: Billy's Creek Cleanup: Nov. 4, 2016 To CRCA Riverwatch
Southwest Florida Gulf Coast Regional Envirothon	Southwest Florida Gulf Coast Regional Envirothon 2016
Estero Bay Buddies	National Estuaries Day Paddling Festival: Oct. 1, 2016
All Native Garden Center	Native Landscaping, Landscaping for Butterflies & Birds, Attracting Bees to Your Landscape
TEAM Punta Gorda	Paddle Punta Gorda, November 12, 2016
Polk County BOCC	UF/IFAS Extension Polk County Micro-plastics Lab
Alliance for the Arts	If Fish Could Talk – A Fish out of Water: Nov. 12, 2016
Agency on Bay Management/FGCU	Conference on Resilience and Adaptation in the Estero Bay Region: December 12 and 13, 2016
UF/IFAS Lee County Extension	for Birding Seminar: February 10-11, 2017
AWRA	26th Annual Southwest Florida Water Resources Conference – 13 January 2017
Cape Coral	Coastal Birds of Southwest Florida Brochure
Englewood Sailing Assoc.	Sailing Camp estuary education
Englewood Sailing Assoc.	Sailing Camp estuary education
Englewood Sailing Assoc.	Sailing Camp estuary education
Charlotte County School	Wading trip/CHEC
Lehigh Acres MSID	Wings Over Water Festival
Children's Fishing Tournament	"Reel in the Fun" Kids' Pier Fishing Tournament
Venice Lakes	nonpoint source littoral plantings
Mulloch Creek Plastics	Plastics clean-up and assessment
Hardee Outdoor School	Microplastics sampling on Cayo Costa
HappeHatchee	Summer Camp
Microplastics	partner kits
Keep Charlotte Beautiful	Coastal Clean-up

FY16/17 Research Project

Identifying and Diagnosing Locations of Ongoing and Future Saltwater Wetland Loss:

Mangrove Heart Attack Wetland Program Development Grant, (CD-00D23814)

Florida Department of Environmental Protection also supported the work by providing boat access to mangrove sites and funding a portion of the mapping analysis (SO908).

Southwest Florida Regional Planning Council, Coastal Resources Group, Terry Tattar, CHNEP staff support, completed December 2016

Since the 1970s, mangrove forests have been characterized by six geomorphic types: Overwash Island, Fringe, Riverine, Basin, Hammock and Scrub. Southwest Florida includes four mangrove species: red mangrove, black mangrove, white mangrove and buttonwood. Classic mangrove zonation suggests that mangrove species are found with red mangrove most waterward, followed by black mangrove, then white mangrove with buttonwood most landward. Mangrove forest data were collected at 56 sites. Mangrove species mixes were far more common than classic mangrove zonation would suggest. Buttonwoods were found on the mangrove shoreline and red mangroves were found in the high scrub. Conceptual diagrams were prepared representing actual Charlotte Harbor mangrove forests by geomorphic type.

CHNEP staff mapped mangroves by geomorphology and species/species mixes for Charlotte Harbor proper (including the tidal Peace and Myakka Rivers). Mapped information and site data were used in combination with Landsat multispectral data to develop mangrove geomorphic and species interpretations for the entire CHNEP area. The results offer an astonishingly sensitive and detailed interpretation suggesting underlying hydrology, difficult to map from aerial photography and LiDAR digital elevation models alone.

The highlight of the project is the use of the “Green Normalized Difference Vegetation Index.” Pastor-Guzman *et al* (2015) found this index describes mangrove canopy chlorophyll at the landscape scale received by Landsat sensors. Known areas of poor mangrove condition and excellent mangrove condition corresponded to the results of the index using 2015 Landsat data. The 2015 index was coupled with 1985 Landsat data to develop a mangrove condition trend.

The project team assembled to identify restoration opportunities included four mangrove biologists and a regional planner, all with on-site experience in the Charlotte Harbor area. The 2015 mangrove condition and 1985 to 2015 mangrove condition change maps were used to identify 90 potential restoration opportunities throughout the study area. In addition, sites with poor or declining condition due to natural causes, where there was no remedy or where restoration was in progress were identified.

The mangrove condition and change tool has many potential uses. Mangrove quality can now be measured and targets set, pursuant to CHNEP policy. Changes of mangrove vigor as a result of restoration can be measured, even after the restoration has taken place. This tool needs no pre-restoration monitoring because of the ongoing collection and archiving of Landsat data. Restoration opportunities can be identified easily in other areas now that the tool has been vetted.

FY17 Restoration Projects

Morgan Park Peace River Shoreline and Habitat Restoration Project

Funded by SWFWMD and a grant from Mosaic Co., work to be completed by Dec. 2017

Due in part to natural and man-made processes, the Peace River shoreline is eroding in two locations in Morgan Park, which is causing loss of access to public recreation lands and an increase in sediment reaching the river. One of the eroding sites is located near the park entrance and is estimated to be 250 linear feet of river bank. The second site is near the “South Trail” and is estimated to be 600 feet linear feet of river bank. Stabilization of the eroding sites may be required both above and below ordinary high water line to assure long term control of the erosion. (See attached figure.)

The erosion of the banks of the Peace River is causing serious habitat, water quality and recreational use problems at these two locations within the park. The eroding river bank has cut through a portion of the major trail section which makes the trail impassible to users. If erosion continues, it will impact the safety of users and reduce park access substantially. These erosion areas of the river have been identified as a potential hazard mitigation initiative project by the DeSoto County Local (Hazard) Mitigation Strategy Working Group. In addition there are other opportunities to enhance resource restoration at the park, including exotic plant removal, native vegetation planting and water quality treatment. The successful completion of the project shall not be used for mitigation for wetland impacts.

The CHNEP solicited professional engineering and environmental services to develop a phased comprehensive shoreline stabilization and ecosystem restoration plan for the Peace River in Morgan Park and implementation of Phase 1 of the plan. Phase 1 of the plan will include completing the design, permitting and bid specification documentation for shoreline stabilization and habitat restoration for at least 1, preferably 2, of the critical erosion sites identified in the comprehensive plan. Tasks will be completed in accordance with all applicable regulations and statutory requirements. The project deliverables will be approved the CHNEP Management Conference before reimbursement is made to the selected Contractor. Morgan Park is located on public-owned lands in DeSoto County, Florida, within the CHNEP Study Area.

The CHNEP consulted with DeSoto County and sought solutions that were not highly engineered and did not require hardened structural elements. It is anticipated that detailed survey work and design engineering will be required. Permitting is expected to require FDEP and USACE approval. The 100% Design was approved by the Management Conference and the contractor is completing the draft permit applications review.

Habitat Resiliency to Climate Change in the CHNEP Study Area

CHNEP staff, Contractor: ESA, project “let” in 2018

The identification of projected effects of climate change on the habitat quality and connectivity and assessing opportunities for habitat retreat will assist the CHNEP and its partners with short and long term climate change resiliency planning. CHNEP is proposing to evaluate landscape scale connectivity within the Charlotte Harbor watershed utilizing pre-existing tools or creating new tools. CHNEP staff will conduct ecological forecasting focused on projecting changes in land use and climate to anticipate climate change impacts to wetland conditions, to identify opportunities for habitat retreat, restoration and enhancement to facilitate wetland migration and guide project planning in the Charlotte Harbor NEP Study Area.

Contractor will use the already developed GIS-shape files and a functional metrics landscape model created using tools in ArcGIS Spatial Analyst to examine landscape scale patterns within our watershed to

aid in decision making about future development, priority restoration, wildlife movement, climate change impacts and sea level rise related habitat shifts along protected corridors.

The results of this project will be integrated in to the CHEP Restoration Plan Update and will be available to Management Conference members and the public for current and future comprehensive planning. No later than FY19 the CHNEP's CCMP visions will be informed by this focused approach to identifying factors to increase habitat resiliency and connectivity to ensure habitat areas for potential retreat, as well as identify critical barriers and essential conservation parcels needed to enable effective habitat migration. The information will present decisions-makers with opportunities for integrating appropriate responses to climate change impacts to habitat in their long range planning efforts. The project implements the following CCMP Priority Actions: FW-1, FW-J, SG-N, and SG-Q.

Florida Department of Environmental Protection RESTORE Act Database update

In July 2012, the Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act (RESTORE Act) established the Gulf Coast Ecosystem Restoration Council (Council), which is comprised of governors from the five affected Gulf States, the Secretaries from the U.S. Departments of the Interior, Commerce, Agriculture, and Homeland Security as well as the Secretary of the Army and the Administrator of the U.S. Environmental Protection Agency. The Gulf States recommended and President Obama appointed the Secretary of Commerce as the Council's Chair.

In anticipation of the 2019-2020 funding cycle, CHNEP updated all the project proposals originally submitted as a part of the Southwest Florida Regional Ecosystem Restoration Plan. The updated projects were then submitted to Florida Department of Environmental Protection for uploading into the FDEP Submitted Projects Summary List for consideration for RESTORE Act funding. CHNEP Program Staff contacted project partners regarding 129 projects, 18 projects were determined to "discontinued and completed" and 65 projects were amended with additional information.

Clean Water Act Core Program Support

The 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 2015.

Water Quality Monitoring

CHNEP staff continues participating in the **Coastal Charlotte Harbor Monitoring Network (CCHMN)** monthly probabilistic sampling in the estuarine and tidal waters of the Study Area. Annual field monitoring audits of the field sampling partners are conducted by CHNEP. Results of the field audits and potential corrections are discussed at an annual meeting of field and laboratory partners. The CCHMN data are entered into the state and federal STORET water quality data base. The CHNEP completed a Quality Assurance Project Plan for the Lower Charlotte Harbor Monitoring Network in 2015. CHNEP is supporting Charlotte County with water quality data collection matters.

The CHNEP participates 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.

The CHNEP provides on-going support to **Charlotte Harbor Estuary Volunteer Water Quality Monitoring Network (CHEVWQMN)**. CHNEP staff serves as a volunteer coordinator, assisting with annual quality control training, quality control compliance and monthly water quality monitoring. The data are uploaded into the Florida STORET database.

Controlling Non-Point Sources

WET PLAN: Watershed Education Training - Ponds, Lakes and Neighborhoods is an education program and resource for anyone interested in improving and caring for their neighborhood lakes and ponds. The program provides workshops several times a year with a panel of experts and assistance for home/condo owners associations and individuals upon request. WET PLAN is a partnership of water quality and lake management experts including members from the Charlotte Harbor National Estuary Program, the City of Bonita Springs, Lee County Natural Resources, Lee County Hyacinth Control District, Florida Gulf Coast University, Lee County Extension Services, the Florida Native Plant Society, and private partners including GHD, Conestoga-Rovers & Associates and Kimley-Horn. WETPLAN partners developed and held 6 workshops in Lee County in Fiscal Year 2015 with more than 200 attendees. WET PLAN continues to conduct workshops in FY2018. In addition, the WET PLAN website continued to be enhanced with content. www.wetplan.org CHNEP established a partnership with LE/AD to adapt WETPLAN to the northern portion of the Study Area.

Applicable EPA-approved State Strategies and Program Plans

Listed below are the EPA-approved State Strategies and Program Plans that CHNEP was able to identify.

1) **State Nonpoint Source Management Program** - Section 319 of CWA funds used on SWIM water bodies

- Florida began full implementation of its revised NPS Program in May of 1989 following submission, review, and approval of the State's NPS Management Program and Assessment Report to the United States Environmental Protection Agency (EPA).
- Coastal Nonpoint Source Management Program – Section 6217 of Federal Coastal Zone Act
- Clean Lakes Program – Section 314 of CWA
- NNC: On November 30, 2012, June 27, 2013, and September 26, 2013, EPA approved numeric nutrient standards adopted by the state of Florida for certain waters in the state.
- TMDLs:
 - Group 3 Basin – Caloosahatchee Peace River Basin
 - Group 2 Basin – Charlotte Harbor
 - Group 1 Basin – Hendry Creek and Hendry Creek Marine, Imperial River

2) **National Pollutant Discharge Elimination System (NPDES)**

In October 2000, EPA authorized the Florida Department of Environmental Protection (DEP) to implement the NPDES stormwater permitting program in the State of Florida (in all areas except Indian Country lands). DEP's authority to administer the NPDES program is set forth in Section 403.0885, Florida Statutes (F.S.). The NPDES stormwater program regulates point source discharges of stormwater into surface waters of the State of Florida from certain municipal, industrial and construction activities. As the NPDES stormwater permitting authority, DEP is responsible for promulgating rules and issuing permits, managing and reviewing permit applications, and performing compliance and enforcement activities

Municipal Separate Storm Sewer System (MS4)

Section 402(p), adopted in 1987 amendments to the FCWA, and established the NPDES Stormwater Program which regulates stormwater discharges from three potential sources: municipal separate storm sewer systems (MS4s), construction activities, and industrial activities. These stormwater discharges are considered point sources under Federal law, and operators of these sources may be required to receive an NPDES permit before they can discharge. This permitting mechanism is designed to reduce the impact of stormwater runoff in washing harmful pollutants into local surface waters such as streams, rivers, lakes or coastal waters.

A municipal separate storm sewer system (MS4) is defined as a conveyance or system of conveyances (like roads with stormwater systems, municipal streets, catch basins, curbs, gutters, ditches, constructed channels, or storm drains) that is designed or used for collecting or conveying stormwater, that discharges to waters of the United States, and is:

- (a) Owned or operated by a State, city, town, county, special district, association, or other public body (created by or pursuant to State Law) having jurisdiction over management and discharge of stormwater and which discharges to surface waters of the state;
- (b) Designed or used for collecting or conveying stormwater;
- (c) Which is not a combined sewer; and
- (d) Which is not part of a Publicly Owned Treatment Works (POTW). POTW means any device or system used in the treatment of municipal sewage or industrial wastes of a liquid nature which is owned by a "State" or "municipality." This definition includes sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing treatment. An MS4 can be operated by municipalities, counties, drainage districts, colleges, military bases, or prisons, to name a few examples. By definition, the

components of an MS4 system do not include waters of the United States. Instead, the MS4 ultimately discharges into such waters.

The FCWA establishes two types of MS4 permits - Phase 1 and Phase 2. Phase I rules were adopted by EPA in 1990 and address discharges of stormwater runoff from "medium" and "large" MS4s. All Phase I large and medium MS4s were previously designated by EPA, based on the total population within the geo-political boundaries of the municipalities: a large MS4 is any MS4 that is located in an incorporated place or county with a population of 250,000 or greater. A medium MS4 is any MS4 that is located in an incorporated place or county with a population between 100,000 and 249,999. In addition, other MS4s located in areas with populations below 100,000 can also be designated and brought into the program as Phase I MS4s by EPA. In Florida, this was done extensively at the beginning of the program since most municipal stormwater systems within Florida are interconnected resulting in a large number of co-permittees for most of the Phase 1 MS4 permits. Chapter 62-624, F.A.C. establishes the permitting requirements for MS4s within Florida. There are 14 primary components of a Phase 1 MS4 permit. In addition, all permittees must address legal authorities and financial and other resources needed to implement the program.

DEP was required to develop a set of designation criteria to use for the evaluation of all Phase II MS4s that are located outside of urbanized areas (UAs). These have been adopted in Chapter 62- 624.800, F.A.C. The public also may petition the Department to designate a Phase II MS4 as a regulated MS4 using the designation criteria.

3) Performance Partnership Agreement

DEP entered into a Performance Partnership Agreement (PPA) to further increase the efficiency and flexibility needed to accomplish Florida and federal environmental goals. The PPA serves as the workplan for EPA grants awarded to the state. The following federal programs are covered by the PPA:

- Water Pollution Control (CWA Section 106, surface and ground water)
- Public Water System Supervision (SDWA Sections 1443(a) and 1451(a)(3))
- Underground Water Source Protection (UIC) (SDWA Section 1443(b))
- Resource Conservation & Recovery (RCRA) (SWDA Section 3011(a))
- Clean Air Act Grant (CAA Section 105)

4) Comprehensive Everglades Restoration Plan

During 2012, EPA and the state of Florida reached consensus on new water quality restoration strategies for improving water quality in the Everglades. Discharge permits and consent orders issued by the Florida Department of Environmental Protection require:

- a science-based stringent discharge limit for phosphorus that will result in meeting the water quality standard,
- an additional 6500 acres added to one of the wetlands dedicated to phosphorus treatment (called Stormwater Treatment Areas, or STAs),
- dedication of about 110,000 acre-feet of water storage areas (flow equalization basins) that will slowly release water to the STAs in order to maximize their performance, and
- an enforceable compliance schedule for \$880 million of projects with completion dates of 2018 to 2025.
- a robust monitoring and research plan to confirm that the performance of all five STAs is optimized and restoration is moving forward

To assure that progress is being made and milestones are being met, the Regional Administrator for EPA Region 4 will meet twice annually with the Secretary of the Florida Department of Environmental Protection until each STA meets the phosphorus discharge limit. Technical representatives from state and federal agencies also meet at least twice annually to:

- review research,
- evaluate operation of the STAs, and
- assess water quality and progress in achieving the deadlines.

5) RESTORE

The the Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act (RESTORE Act) was passed by Congress on June 29, 2012 and signed into law on July 6, 2012 by the President. The RESTORE Act established the Gulf Coast Ecosystem Restoration Council (Council), which is comprised of governors from the five affected Gulf States, the Secretaries from the U.S. Departments of the Interior, Commerce, Agriculture, and Homeland Security as well as the Secretary of the Army and the Administrator of the U.S. Environmental Protection Agency. The Gulf States recommended and President Obama appointed the Secretary of Commerce as the Council's Chair.

Florida's 23 Gulf Coast Counties formed the Consortium to meet requirements of the RESTORE Act to develop a State Expenditure Plan for economic and environmental recovery of the Gulf coast in Florida following the Deepwater Horizon oil spill. The Gulf Consortium is a public entity created in October 2012 by Inter-local Agreement among Florida's 23 Gulf Coast counties, from Escambia County in the western panhandle of Florida to Monroe County on the southern tip of Florida and the United States.

The Consortium Board of Directors consists of one representative from each county government. As a public entity, the Consortium must meet all government transparency requirements in Florida, including open public records and meetings, ethics and state auditing obligations. Since its inception, the Consortium has met seven times and held several committee meetings to begin developing Florida's State Expenditure Plan.

To avoid duplication and to effectively utilize available resources, Florida's local governments are working in partnership with the State of Florida: to fully recover the Gulf of Mexico following the Deepwater Horizon disaster. The Florida Department of Environmental Protection (FDEP) has established an on-line project submittal form to allow the public to submit projects for consideration by the RESTORE Council. The CHNEP works with its partners to update projects that have been submitted. FDEP coordinates with the Florida Fish and Wildlife Conservation Commission to review and select projects to be submitted by the Governor for inclusion on the Funded Priorities List.

6) **The State of Florida Wetland Program Plan, 2013-2016, 3rd Edition February, 2013** – has been published on the US EPA Region 4 website but remains “draft.” The plan is referenced by the CHNEP and partners when applying for Federal funding.

Florida’s Wetland Program Plan addresses all 4 elements recommended by US EPA:

- Monitoring & Assessment
- Regulation
- Voluntary Restoration & Protection
- Water Quality Standards for Wetlands

The CHNEP Management Conference certifies that the proposed work program contained in this FY19 Workplan is consistent with the above elements. (Pursuant to 40 CFR 35.9094)

GLOSSARY OF ACRONYMS

BMAP	Basin Management Action Plan
BMP	Best Management Practice
CAC	Citizens Advisory Committee
CAMA	Coastal and Aquatic Managed Areas
CCHMN	Coastal Charlotte Harbor Monitoring Network
CCMP	<i>Comprehensive Conservation and Management Plan</i>
CFRPC	Central Florida Regional Planning Council
CHEC	Charlotte Harbor Environmental Center
CHEVWQMN	Charlotte Harbor Estuaries Volunteer Water Quality Monitoring Network
CHNEP	Charlotte Harbor National Estuary Program
CH-RAMP	Charlotte Harbor-Regional Ambient Monitoring Program
CWPRA	Coastal Wetlands Planning, Protection and Restoration Act
CZM	Coastal Zone Management
EPA	Environmental Protection Agency
FDEP	Florida Department of Environmental Protection
FDOT	Florida Department of Transportation
FWC	Florida Fish & Wildlife Conservation Commission
FWRI	Fish and Wildlife Research Institute
GIS	Geographical Information System
GPRA	Government Performance and Results Act
HAS	Hydrological Alterations Subcommittee
HCS	Habitat Conservation Subcommittee
LID	Low Impact Development
MFL	Minimum Flows and Levels
NRCS	Natural Resources Conservation Service
NEP	National Estuary Program
NNC	Numeric Nutrient Criteria
NOAA	National Oceanic and Atmospheric Administration
NWR	National Wildlife Refuge
PR/MRWSA	Peace River/Manasota Regional Water Supply Authority
RPC	Regional Planning Council
SFWMD	South Florida Water Management District
SRPP	Strategic Regional Policy Plan
SWFWMD	Southwest Florida Water Management District
SWFRPC	Southwest Florida Regional Planning Council
SWIM	Surface Water Improvement Management
SWUCA	Southern Water Use Caution Area
TAC	Technical Advisory Committee
TMDL	Total Maximum Daily Load
USACOE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Service
VOHM	Volunteer Oyster Habitat Monitoring
WCIND	West Coast Inland Navigation District
WMD	Water Management District
WQ	Water Quality
WQQOS	Water Quality Quantifiable Objectives Subcommittee

APPROVED in Open Session

Manatee County Board of County
Commissioners

Manatee County Government Administrative Center
Patricia M. Glass Commission Chambers, First Floor
9:00 a.m. - December 18, 2018

12/18/18

December 18, 2018 - Regular Meeting
Agenda Item #30

Subject

FY 2019 Charlotte Harbor National Estuary Funding Agreement

Briefings

None

Contact and/or Presenter Information

Charlie Hunsicker, Director
X6001

Action Requested

Authorization for the Chairman to execute the Charlotte Harbor National Estuary Program Funding Agreement for FY 2018 between Manatee County and the City of Punta Gorda for County share of funding in the amount of \$5,000.

Enabling/Regulating Authority

FS 125

Background Discussion

On January 15, 1995, Manatee County joined with the U.S. Environmental Protection Agency Region IV, the Southwest Florida Water Management District, the Florida Department of Environmental Protection, the South Florida Water Management District, the Department of Community Affairs, the Florida Game and Freshwater Fish Commission, the Central Florida Regional Planning Council, the Southwest Florida Regional Planning Council, Peace Manasota Water Supply Authority, Lee County, Charlotte County, Sarasota County, Hardee County, Polk County, Desoto County, and the cities and towns of Bartow, Bonita Springs, Ft. Myers, Sanibel, Punta Gorda, Venice, North Port, Cape Coral, Winter Haven, Ft Myers Beach, and Arcadia to financially participate as non-federal sponsors of the Charlotte Harbor National Estuary Program (CHNEP) to prepare products and schedules under a work plan to develop a comprehensive Conservation and Management Plan for the Charlotte Harbor Estuary and Watershed. The Southwest Florida Regional Planning Council administered the personnel and contract management compliance requirements of the program until October 1, 2014, when the host agency was changed to the City of Punta Gorda.

Manatee County's annual financial share to the program is \$5,000 based on portioned share between the members. The \$5,000 is budgeted each year in the Parks & Natural Resources budget and released under the annual funding agreement with the CHNEP through the City of Punta Gorda.

The FY 2019 agreement and scope of work directly benefit Manatee County by environmental stewardship, wetland protection and restoration, community outreach and education activities to enhance fisheries and living resources, recreational management, tracking relevant legislation, letters of support as appropriate to legislators and policy makers, presenting the legislative agenda to State and Federal Legislative Delegations through the CHNEP study area, and public involvement activities.

County Attorney Review

Not Reviewed (Utilizes exact document or procedure approved within the last 18 months)

Explanation of Other

Reviewing Attorney

N/A

Instructions to Board Records

Return two executed originals of the agreement to Jayne Roberts, Parks & Natural Resources Department, for transmittal to the Charlotte Harbor National Estuary Program.

IO ORIGINAL TO J ROBERTS

Cost and Funds Source Account Number and Name

\$5,000 = \$1,666 - 401.0009500 (Watershed Fund) & \$3,334 - 460.0009501 (Stormwater Fund)

12/20/19

Amount and Frequency of Recurring Costs

One-time annually

Attachment: [CHNEP Funding Agreement.pdf](#)

Attachment: [Final FY19 CHNEP Workplan.pdf](#)