

VILLAGE OF ESTERO, FLORIDA

RESOLUTION NO. 2017 - 06

A RESOLUTION OF THE VILLAGE COUNCIL OF THE VILLAGE OF ESTERO, FLORIDA, APPROVING THE FUNDING AGREEMENT BETWEEN THE VILLAGE OF ESTERO AND THE CITY OF PUNTA GORDA ON BEHALF OF THE CHARLOTTE HARBOR NATIONAL ESTUARY PROGRAM FOR THE FISCAL YEAR 2016-2017; APPOINTING COUNCILMEMBER KATY ERRINGTON AS THE LIAISON; AUTHORIZING THE MAYOR TO EXECUTE THE AGREEMENT; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the Charlotte Harbor National Estuary Program works to educate and engage communities and to monitor and protect water resources, which include the Estero Bay; and

WHEREAS, the Village Council believes it is in the best interests of the citizens of the Village to participate in the Charlotte Harbor National Estuary Program as the terms of the Funding Agreement provide; and

WHEREAS, the Village Council appoints Councilmember Katy Errington to act as a liaison to the Charlotte Harbor National Estuary Program; and

WHEREAS, the Village Council authorizes the Village Mayor to execute the Funding Agreement between the Village of Estero and the City of Punta Gorda on behalf of the Charlotte Harbor National Estuary Program.

NOW, THEREFORE, be it resolved by the Village Council of the Village of Estero, Florida:

Section 1. The above recitals are true and correct.

Section 2. The Funding Agreement between the Village of Estero and the City of Punta Gorda on behalf of the Charlotte Harbor National Estuary Program, attached and incorporated herein as Exhibit A, is hereby approved.

Section 3. The Village Council appoints Councilmember Katy Errington to act as liaison to the Charlotte Harbor National Estuary Program.

Section 4. The Village Council authorizes the Mayor to execute the Funding Agreement between the Village of Estero and the City of Punta Gorda.

46 **Section 5.** This Resolution shall take effect immediately upon adoption.

47

48 **ADOPTED BY THE VILLAGE COUNCIL** of the Village of Estero, Florida this
49 15th day of February, 2017.

50

51 Attest:

VILLAGE OF ESTERO, FLORIDA

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54 By: Kathy Hall
55 Kathy Hall, MMC, Village Clerk

By: Nicholas Batos
Nicholas Batos, Mayor

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58 Reviewed for legal sufficiency:

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60

61 By: Burt H. Saunders
62 Burt Saunders, Esq., Village Attorney

EXHIBIT A

**FUNDING AGREEMENT BETWEEN
VILLAGE OF ESTERO
AND
THE CITY OF PUNTA GORDA
on behalf of
The Charlotte Harbor National Estuary Program
For Fiscal Year 2016-2017**

THIS IS AN AGREEMENT by and between VILLAGE OF ESTERO, an incorporated municipality in Lee County, State of Florida (hereinafter "Village") whose mailing address is 9401 Corkscrew Palms Circle, Estero, FL 33928, and the City of Punta Gorda a Florida municipality, (hereinafter "City") whose mailing address is 326 W. Marion Avenue, Punta Gorda, FL 33950, on behalf of the Charlotte Harbor National Estuary Program (hereinafter "Program"), whose mailing address is 326 W. Marion Avenue, Punta Gorda, FL 33950.

WHEREAS, the Charlotte Harbor National Estuary Program (CHNEP) was designated by U.S. EPA as a National Estuary Program in 1995 under the authority of Section 320 of the Clean Water Act; and

WHEREAS, effective October 1, 2014, the City was chosen by the Program Policy Committee to administer the CHNEP locally, with the authority to enter into agreements on behalf of the CHNEP;

WHEREAS, the membership of the Program is established by the Policy Committee by-laws on February 29, 1996 and amended on August 13, 2015, and consists of the Department of Environmental Protection, the U.S. Environmental Protection Agency, the Southwest Florida Water Management District, the South Florida Water Management District, the Florida Fish and Wildlife Commission, Sarasota County, Manatee County, Polk County, Hardee County, DeSoto County, Charlotte County, Lee County, City of North Port, City of Bartow, City of Arcadia, City of Punta Gorda, City of Fort Myers, City of Sanibel, Town of Fort Myers Beach, City of Cape Coral, City of Venice, and the Village of Estero; and

WHEREAS, the Program is a quasi-public entity, jointly funded through federal, state, regional and local funding sources; 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 24, 2008, and subsequently on March 18, 2013, the CCMP update for Charlotte Harbor was adopted by the Policy Committee,

WHEREAS, actions in the CCMP include TMDL development, Florida Friendly Landscaping Program, wetlands restoration, community outreach and education activities to enhance fisheries and living resources, recreational management, public involvement activities, monitoring and research; and

WHEREAS, on May 12, 2016, the Policy Committee of the Charlotte Harbor National Estuary Program approved a general FY17 Workplan to complete and implement elements of the CCMP;

WHEREAS, the Village Council of the Village of Estero has determined that the programs, goals and activities will create a public benefit for the citizens of the Village of Estero.

NOW, THEREFORE, the parties agree as follows:

1. Payment: The Village shall pay the City the total amount of \$5,000.00 for the Village's fiscal year 2016 through 2017, inclusive. Payment shall be made within forty-five days from the effective date of this Funding Agreement. The Village Council may extend this Agreement for two additional fiscal years, subject to appropriation of \$5,000.00 in each of the last two years.

3. Reports: The City, on behalf of the Program, shall provide the Village with an annual, written report and analysis of the work accomplished pursuant to the FY17 Workplan, attached and incorporated herein, and all subsequent Workplans.

4. Indemnification: To the extent permitted by law, the City shall indemnify, defend, save and hold harmless the Village, its agents, officials and employees from all suits, actions, claims, demands, and liability arising out of, because of or due to the performance of the terms of this Agreement by City and its agents, consultants or employees which results from any negligent act or occurrence, omission or commission of the City, its agents, officers and employees. Provided, however, that the City shall not be liable, pursuant to the provisions of this paragraph, for any claims, liabilities, damages or costs incurred by the Village arising out of any negligent act or occurrence, omission or commission of the Village or any of its agents, officials or employees. It is agreed that this indemnity shall not waive the benefits or provisions of Chapter 768.28, Florida Statutes, as it pertains to the City or Village.

5. Term: The term of this Agreement shall be for the period commencing October 1, 2016 and ending September 30, 2017.

6. Notice: Any notices, invoices, reports, or any other type of documentation required by this Agreement shall be deemed delivered when deposited in the United States mail, with sufficient postage, addressed as follows:

Village's Administrative Agent:

Name: Steven Sarkozy
Title: Village Manager
Address: 9401 Corkscrew Palms Circle, Estero, FL 33928

City's Administrative Agent:

Name: Jennifer Hecker
Title: Executive Director, Charlotte Harbor National Estuary Program
Address: 326 W. Marion Ave., Punta Gorda, FL 33950

7. Records: The City agrees to maintain books, records and documents directly pertaining to or connected with the Program, and such documentation shall be available and accessible to the Village for the purpose of inspection, audit and copying during normal business hours.
8. Failure of performance: In the event the City abandons performance under this Agreement, or the Program otherwise ceases to exist or operate, the Village may withhold, temporarily or permanently, unpaid portions of its funding. The Village may seek a refund of any funds paid to the City for services that were performed in violation of this Agreement.
9. Termination: Either party may at any time terminate this Agreement by giving written notice to the other party. Any funds pertaining to this agreement remaining on the date of termination that have not been spent or encumbered in accordance with the terms of this Agreement shall be returned to the Village within thirty (30) days of termination.
10. Legal remedies: The exercise by either party of any rights or remedies provided herein shall not constitute a waiver of any other rights or remedies available under the Agreement or any applicable law.
11. Severability: If any term, condition or covenant of this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions of this Agreement shall be valid and binding on each party.

THIS SPACE INTENTIONALLY LEFT BLANK

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

VILLAGE OF ESTERO, FLORIDA

By: _____
NICK BATOS, Mayor

Date: _____

ATTEST:

By: _____
KATHY HALL, MMC, Village Clerk

Reviewed for legal sufficiency:

By: _____
BURT SAUNDERS, Esq., Village Attorney

CITY OF PUNTA GORDA

By: _____
RACHEL KEESLING, Mayor

Date: _____

ATTEST: _____
Notary Public

Date: _____

APPROVED AS TO FORM AND CORRECTNESS

City Attorney

FISCAL YEAR 2017 WORKPLAN & Fiscal Year 2016 Workplan Amendments



Credit: www.puntagordadailyphoto.com

FFWCC staff explain the Coral Creek restoration project during the CHNEP's 2015 Performance Evaluation, May 2015.

Charlotte Harbor National Estuary Program Technical Report Final: May 12, 2016



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, and Bonita Springs

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Charlotte Harbor National Estuary Program

Policy Committee

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Water Protection Division

U. S. Environmental Protection Agency, Region 4

Mr. Jon Iglehart, Co-Chair

South District Director

Florida Department of Environmental Protection

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Desoto County

Vacant

Hardee County

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Lee County

Hon. Robin DiSabatino

Manatee County

Mr. Jeff Spence

Polk County

Hon. Charles Hines

Sarasota County

Agencies

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Central Florida Regional Planning Council

Stephanie Burkhardt

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 (TAC Co-chair)

Mr. Mike Kirby (City of Bonita Springs)

Technical Advisory Committee Co-Chairs

Mr. Keith Kibbey

Ms. Elizabeth Staugler

Ms. Shelley Thornton

Citizens Advisory Committee Co-Chairs

Mr. Roger DeBruler

Mr. Kayton Nedza

Debi Osborn

Staff

Lisa B. Beever, PhD, Director

Elizabeth S. Donley, JD, Deputy Director

Maran Brainard Hilgendorf, Communications Manager

Judy Ott, MS, Program Scientist

Jaime G. Boswell, MS, Environmental Scientist

GLOSSARY OF ACRONYMS

ABM	Agency on Bay Management
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
EAR	Evaluation and Appraisal Report
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
PIVOT	Performance Indicators Visualization Outreach Tool
PLRG	Pollutant Load Reduction Goal
PR/MRWSA	Peace River/Manasota Regional Water Supply Authority
R&R	Research and Restoration
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
TBRPC	Tampa Bay Regional Planning Council
TMDL	Total Maximum Daily Load
USACOE	United States Army Corps of Engineers
USF&WS	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

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 FY15 and FY16 Clean Water Act §320 Funding Guidance. According to the guidance, NEP Workplans generally include the following items:

1. CCMP Goals for coming year
2. Budget and Staff Elements
 - a. Budget breakdown including match
 - b. NEP staff and their official responsibilities
 - c. Cost share information
3. 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
4. Areas of Special Interests
 - a. Nutrient management activities.
 - b. Climate resilience
5. Completed Major Projects
6. 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.

Summary Information

CCMP Goals in FY15 and FY16

The Management Conference developed program goals as a guide in the development of the first Comprehensive Conservation and Management Plan (CCMP.) With the adoption of the CCMP in 2000, the goals were incorporated into the quantifiable objectives. The CCMP was most recently updated in 2013. The quantifiable objectives that CHNEP focused on in FY15 and FY16 included:

- **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 worked with Sarasota Bay Estuary Program-SBEP and Tampa Bay Estuary Program-TBEP toward developing numeric nutrient criteria for tidal creeks.
- **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 continues to work with partners to design and attract funding to significant hydrologic restoration projects including Dona Bay Restoration, Coral Creek Hydrologic Restoration, Alligator Creek Hydrologic Restoration, Charlotte Harbor Flatwoods Initiative, C-43 Reservoir and East Lehigh Acres Weir Project. In 2015, CHNEP supported the purchase of Bond Ranch to facilitate the hydrologic restoration of the Charlotte Harbor Flatwoods.
- **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 worked with The Nature Conservancy toward permitting and constructing the Trabue Walk oyster reef restoration project. CHNEP continues to coordinate with partners towards establishing an SAV working group. CHNEP assisted partners in developing SOWs for grant applications. CHNEP conducted work on the *Identifying and Diagnosing Locations of Ongoing and Future Saltwater Wetland Loss* project. CHNEP supported The Nature Conservancy's efforts to have oyster reefs added to the RAMSAR agreement as a wetland type.
- **SG-1:** By 2025, a minimum of 75 percent of all residents will have recalled attending a watershed event, reading watershed material or hearing watershed/estuary information.... A minimum of 10 percent of all residents will be able to claim personal actions that protect the estuaries and watersheds." CHNEP will implement a "Citizens Academy" that will reach a broad cross-section of residents. CHNEP will host events, especially for underrepresented populations. CHNEP developed the Watershed Education Training, Ponds, Lakes and Neighborhoods (WETPLAN) program and conducted workshops with more than 400 total attendees. CHNEP continues to provide peer to peer training through its Environmental Education and Conservation Lands workshops. In FY15 CHNEP sponsored a "Water Words that Work" training and NOAA Coastal Service Center trainings: "Managing Visitor Use" "Fostering Behavior Change" and a follow-up webinar. In FY16 CHNEP sponsored NOAA CSC training "Climate Adaptation" and planning for National Environmental Interpretation training and COMPASS training will be completed.

- **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.

CCMP Goals Focus in FY17

The Fiscal Year 2017 Workplan and Budget reflects the Management Conference's direction to focus on the following CCMP Goals in FY17. In addition, CHNEP will complete a broad risk-based climate change vulnerability assessment of the CCMP's 15 Quantifiable Objectives.

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 to work with Southwest Florida Oyster Working Group toward designing, permitting and constructing oyster restoration projects in Charlotte Harbor.
- CHNEP will continue supporting the submerged aquatic vegetation (SAV) working group and the development of a restoration plan for the Caloosahatchee River SAV. CHNEP will provide staff support to the Charlotte Harbor Aquatic Preserve's annual seagrass transect survey project.
- The CHNEP Habitat Conservation Subcommittee will be convened to guide development of the restoration targets, the Restoration Needs Plan Update, and Request for Proposal and Scope of Work for hiring the contractor.
- 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 will continue working with project partners to address shoreline erosion and stabilization and to conduct habitat restoration activities. In addition, there may be stewardship opportunities to involve the community in the restoration activities.

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 will continue to work with partners to design and attract funding to significant hydrologic restoration projects including Charlotte Harbor Flatwoods Initiative, the Vital Tidal Creeks, C-43 Reservoir and East Lehigh Acres Weir Project.

WQ-E: Implement projects to improve or protect water quality to offset anthropogenic impacts.

FW-E: Improve canal, pond, lake and river management activities to benefit fish and wildlife.

- CHNEP will continue to provide its Watershed Education Training, Ponds, Lakes and Neighborhoods (WETPLAN) program to assist neighborhood groups with their stormwater pond management and building green infrastructure.

SG-D: Provide people with opportunities to be involved in research, monitoring and restoration activities

- CHNEP will continue its work on the Volunteer Oyster Habitat Monitoring project which includes working with the Charlotte Harbor Aquatic Preserve and partners toward establishing a community of citizen scientist to monitor oyster restoration projects.
- CHNEP will coordinate with DeSoto County, SWFWMD, Mosaic Company and our contractor to develop and provide volunteer opportunities at the Morgan Park Restoration project
- CHNEP will continue to provide staff support to the CHEVWQMN, a 20-year program of citizen scientists conducting monthly water quality monitoring tasks in the estuarine waters.
- CHNEP will continue to provide information about opportunities for Management Conference participants and interested citizens via our Constant Contact notifications.

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

- CHNEP will continue to fund the WaterAtlas and expand its use for recording and storing and analyzing data collected throughout the Study Area.

SG-J: Identify and showcase accomplishments and excellent examples of research findings, restoration, legislative changes and outreach success using a variety of methods.

- In 2017, the CHNEP will host the triennial Watershed Summit showcasing research, restoration and outreach projects conducted by partners that implement the CCMP.

SG-Q: Build capacity for communities and their local leadership to mitigate and adapt to the effects of climate change through joint efforts.

- The CHNEP will complete a broad, risk-based climate change vulnerability assessment to answer questions about how identified climate stressors could affect the CHNEP's ability to achieve its CCMP goals. The CHNEP will also 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.

Budget Breakdown

Table 1: Charlotte Harbor NEP FY16 and FY17 Income

Funding Source	Approved FY15 Funding	FY16 Request	Approved FY16	FY17 Request
Section 320 Funding	\$538,000.00	\$600,000.00	\$600,000.00	\$600,000.00
EPA CCMP Vulnerability Assessment		\$20,527.00	\$20,527.00	
EPA CRE Habitat Resiliency		\$38,350.00	\$38,350.00	
EPA GI/LID Project - WETPLAN	\$24,711.00			
Total Federal Income	\$562,711.00	\$658,877.00	\$658,877.00	\$600,000.00
DEP	\$74,998.40	\$75,000.00	\$75,000.00	\$75,000.00
SFWMD	\$0.00	\$75,000.00	\$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	\$5,000.00	\$3,500.00	\$3,500.00
Subtotal Regional Income	\$208,498.40	\$285,000.00	\$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	\$7,500.00	\$7,500.00	\$2,500.00	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	\$2,500.00	\$2,500.00	\$0.00	5,000.00
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	1,000.00
Hardee County	\$500.00	\$500.00	\$0.00	500.00
Arcadia	\$0.00	\$500.00	\$0.00	\$500.00
Bartow	\$0.00	\$500.00	\$0.00	\$500.00
DeSoto County	\$0.00	\$500.00	\$0.00	\$500.00
Subtotal Local Income	\$107,500.00	\$109,000.00	\$99,500.00	\$106,500.00
Mosaic Company Foundation	\$40,000.00	\$40,000.00	\$40,000.00	\$40,000.00
FDEP CPI Vol Oyster Habitat		\$15,000.00	\$15,000.00	\$0.00
EPA WPDG - Mangrove Heart Attack	\$149,298.00			
Encumbered Funds- prior year FY15, FY16			\$195,840.00	\$204,081.62
Unobligated Carry-over annual FY15, FY16			\$48,985.00	\$24,090.10
Subtotal Grants and Deferred	\$189,298.00	\$55,000.00	\$299,825.00	\$304,171.73
Match In-Kind: SFWMD Initiatives, partners	\$562,711.00	\$658,877.00	\$658,877.00	\$600,000.00
Subtotal In-Kind	\$562,711.00	\$658,877.00	\$658,877.00	\$600,000.00
Grand Totals in the Fiscal Year	\$1,630,718.40	\$1,766,754.00	\$1,070,862.00	\$1,109,090.10
Program Cash	\$1,068,007.40	\$1,029,875.40	\$1,266,702.00	\$1,212,171.73
Projected End of FY17 Reserve				\$104,557.10

FY16 Budget Amendment

An Amended FY16 Budget and Workplan was approved by the Policy Committee on October 15, 2015. The amendment below reflects: 1) increased Personnel costs for a "worst case" payout to the Director's for unused leave on September 30, 2016; 2) increased FRS costs effective July 1, 2016; and 3) inclusion of the Volunteer Oyster Habitat Monitoring grant funds and supplemental EPA funds for CCMP and Climate Change projects.

Table 2: CHNEP Amended FY16 Workplan Budget (5/12/16)

Task #	Task	Personnel	Fringe	Travel	Other	Total
1	Mgmt. Conference	\$152,007	\$56,337	\$15,000	\$108,725	\$332,069
2	Outreach	\$53,844	\$17,677		\$162,850	\$234,370
3	Research	\$69,613	\$25,484		\$115,080	\$210,177
4	Restoration	\$62,629	\$17,830		\$84,449	\$164,909
5	Legislation	\$6,382	\$1,898		\$4,500	\$12,780
Total		\$344,474	\$119,226	\$15,000	\$475,604	\$954,305

**Table 3: Budget Changes between
FY16 Budget (amended 10/15/15) and FY16 Budget Amendment (Table 2 above)**

Task #	Task	Personnel	Fringe	Travel	Other	Total
1	Mgmt. Conference	\$13,636	\$10,605	\$0	(\$2,661)	\$21,580
2	Outreach	\$1,193	(\$315)	\$0	\$0	\$877
3	Research	\$1,525	\$467	\$0	\$0	\$1,992
4	Restoration	\$16,463	\$2,310	\$0	(\$10,551)	\$8,223
5	Legislation	\$141	\$28.10	\$0	\$0	\$169
Total		\$32,957	\$13,095	\$0	(\$13,212)	\$32,841

Table 4: FY16 Amended Budget – October 15, 2015

Task #	Task	Personnel	Fringe	Travel	Other	Total
1	Mgmt. Conference	\$152,007	\$56,337	\$15,000	\$108,725	\$332,069
2	Outreach	\$53,844	\$17,677		\$162,850	\$234,370
3	Research	\$69,613	\$25,484		\$115,080	\$210,177
4	Restoration	\$62,629	\$17,830		\$84,449	\$164,909
5	Legislation	\$6,382	\$1,898		\$4,500	\$12,780
Total		\$344,474	\$119,226	\$15,000	\$475,604	\$954,305

Table 5: FY16 SWFWMD Contract - no change

Task	Project	SWFWMD	Project Total
1	CCHMN (Coastal Charlotte Harbor Monitoring Network)	\$55,080	\$55,080
2	Morgan Park Restoration Project	\$40,000	\$40,000
3	Staff Support	\$34,920	\$69,840
Totals		\$130,000	\$164,920

FY17 Budget

Table 6: FY17 Workplan Budget

Task #	Task	Personnel	Fringe	Travel	Other	Total
1	Mgmt. Conference	\$164,702	\$51,867	\$15,000	\$111,670	\$343,239
2	Outreach	\$52,311	\$17,753		\$178,850	\$248,914
3	Research	\$29,389	\$9,853		\$128,000	\$167,241
4	Restoration	\$97,480	\$23,301		\$80,000	\$200,781
5	Legislation	\$6,525	\$1,834		\$4,500	\$12,859
	Total	\$350,407	\$104,608	\$15,000	\$503,020	\$973,035

Table 7: FY17 EPA Cooperative Agreement

Task #	Task	Personnel	Fringe	Travel	Other	Total
1	Mgmt. Conference	\$151,150	\$46,220	\$15,000	\$111,157	\$323,527
2	Outreach	\$44,384	\$15,149		\$120,850	\$180,383
3	Research	\$17,812	\$6,217		\$63,000	\$87,029
4	Restoration	\$6,861	\$2,200			\$9,061
5	Legislation					
	In-Kind				\$600,000	\$600,000
	Total	\$220,207	\$69,786	\$15,000	\$895,007	\$1,200,000

Table 8: Proposed FY17 SWFWMD Agreement

Task	Project	SWFWMD	Project Total
1	CCHMN (Coastal Charlotte Harbor Monitoring Network) *	\$65,000	\$65,000
2	Restoration Project	\$40,000	\$40,000
3	Staff Support*	\$25,000	\$50,000
	Totals	\$130,000	\$155,000

*Note: this is a one-time only shifting of funds from staff support to CCHMN to pay for increased CCHMN costs.

Table 9, below, presents the individual public education and information projects that will be addressed in FY16 and FY17, as well as projects that were carried forward from FY15.

**Table 9: Summary Public Education and Information Projects List
(FY15 carry forward, FY16 and FY17)**

FY	Code	Project Title	Total
FY15	CH2TAR	Create activity sheet, curriculum, etc. Angela McStravic	\$3,550.00
FY15	CH2POG	Public Outreach Grant FNPS Coccoloba Chapter	\$3,000.00
FY15	CH2CA	Citizens Academy MYCA Multimedia & Training	\$28,600.00
		Subtotal =	\$35,150.00
FY16	CH2CAL	2016 Calendar	\$23,000.00
FY16	CH2ADV	<i>Adventures</i> children's book, reprinting and distribution	\$9,200.00
FY16	CH2COL	Collateral, Displays, Reprintings, etc	\$1,000.00
FY16	CH2TRA	Public Information & Education Professional Development/ Training	\$500.00
FY16	CH2HH	Harbor Happenings quarterly magazine	\$18,000.00
FY16	CH2CA	Strategic Communication Plan/Citizens Academy	\$15,000.00
FY16	CH2CAL	2017 Calendar	\$21,650.00
FY16	CH2NF	Charlotte Harbor Nature Festival	\$2,500.00
FY16	CH2TAR	Target: Guides, workshops, websites, etc. to target audiences, including Florida-friendly programming	\$25,000.00
FY16	CH2MIC	Micro-Grants	\$12,000.00
FY16	CH2POG	Public Outreach Grants	\$30,000.00
FY16	CH2AST	Outreach assistance	\$5,000.00
		Subtotal =	\$162,850.00
FY17	CH2CAL	2018 Calendar	\$24,000.00
FY17	CH2ADV	<i>Adventures</i> children's book, reprinting and distribution	\$9,500.00
FY17	CH2COL	Collateral, Displays, Reprintings, etc	\$5,000.00
FY17	CH2TRA	Public Information & Education Professional Development/ Training	\$1,000.00
FY17	CH2HH	Harbor Happenings quarterly magazine	\$20,000.00
FY17	CH2CA	Strategic Communication Plan Implementation/ Citizens Academy	\$23,000.00
FY17	not yet assigned	Charlotte Harbor Watershed Summit	\$6,000.00
FY17	CH2NF	Charlotte Harbor Nature Festival	\$2,500.00
FY17	CH2TAR	Target: Guides, workshops, websites, etc. to target audiences, including Florida-friendly programming	\$30,850.00
FY17	CH2MIC	Micro-Grants	\$12,000.00
FY17	CH2POG	Public Outreach Grants	\$30,000.00
FY17	CH2AST	Outreach assistance	\$5,000.00
FY17	not yet assigned	Habitat resiliency poster and eLearning module	\$10,000.00
		Subtotal =	\$178,850.00
		Total =	\$376,850.00

Table 10, below, depicts the individual technical projects that will be addressed in FY16 and FY17, as well as projects that were carried forward from FY14 and FY15. Carry over from FY14 and FY15 totals \$195,840 and FY16 and FY17 projects total \$234,260.

**Table 10: Summary of Technical Projects List
(FY15 carry forward, FY16 and FY17)**

FY	Code	Project Title	Amount
2014	CH14CC	Coral Creek Restoration Fisheries Monitoring - FWC	\$10,000.00
2014	CH14BT	Coral Creek Juvenile Fishery Monitoring - BTT	\$0.00
2014	CH14TC	Tidal Creek Numeric Nutrient Criteria - SBEP	\$3,200.00
2014	CH3WSP	Watershed Summit Proceedings - FAS	\$19,000.00
		Subtotal =	\$32,200.00
2015	CH3CMN	FY15 CCHMN in 6 Upper Charlotte Harbor Strata - FWC	\$13,770.00
2015	CH3LCH	FY15 CCHMN in Lower Charlotte Harbor Strata - FWC	\$2,295.00
2015	CH3MJB	Mangrove Heart Attack - SWFRPC	\$31,250.00
2015	CH3MRL	Mangrove Heart Attack - Coast Resources Group	\$7,700.00
2015	CH3MTT	Mangrove Heart Attack - Terry Tattar	\$4,125.00
2015	CH3CDP	Morgan Park Peace River Restoration Phase 1 (SWFWMD Support) - AMEC	\$40,000.00
2015	CH3MOR	Morgan Park Peace River Restoration Phase 1 (Mosaic Grant) - AMEC	\$40,000.00
2015	CH3PR	Restoration Targets Peer Review - Coastal Resources Group	\$10,000.00
2015	CH3GI	WET PLAN Assistance in Polk County – LE/AD	\$14,500.00
		Subtotal =	\$163,640.00
2016	CH3CMN	FY16 CCHMN in 6 Upper Charlotte Harbor Strata - FWC	\$55,080.00
2016	CH3LCH	FY16 CCHMN in Lower Charlotte Harbor Strata - FWC	\$10,000.00
2016	CH3WA	FY16 Water Atlas Maintenance	\$50,000.00
2016	CH4MO	Morgan Park Peace River Restoration Phase II (SWFWMD Support) - TBD	\$40,000.00
2016	CH4SWD	Morgan Park Peace River Restoration Phase II (Mosaic Grant) - TBD	\$40,000.00
2016	CHVOHM	Volunteer Oyster Habitat Monitoring supplies	\$4,449.00
		Subtotal =	\$199,529.00
2017	CH3CMN	FY17 CCHMN in 6 Upper Charlotte Harbor Strata - FWC	\$65,000.00
2017	CH3LCH	FY17 CCHMN in Lower Charlotte Harbor Strata - FWC	\$11,000.00
2017	CH3WA	FY17 Water Atlas Maintenance	\$52,000.00
2017	CH4MO	FY17 Restoration Project TBD (SWFWMD Support) - TBD	\$40,000.00
2017	CH4SWD	FY17 Restoration Project TBD (Mosaic Grant) - TBD	\$40,000.00
		Subtotal =	\$208,000.00
		Total =	\$603,369.00

Table 11: Summary Overhead Estimates

FY	Code	Project Title	Amount
2016	CH1COM	CHNEP Communications	\$600.00
2016	CH1MAT	CHNEP Department Materials and Supplies	\$4,200.00
2016	CH1OAD	CHNEP Overhead Administrative Charges	\$81,500.00
2016	CH1OCP	CHNEP Overhead Computer	\$14,000.00
2016	CH1ORN	CHNEP Overhead Office Rent	\$3,425.00
2016	CH1PRO	CHNEP Promotional Activities-Meeting Support	\$5,000.00
2016	CH5ANP	CHNEP ANEP Dues	\$4,500.00

Subtotal = \$113,225.00

2017	CH1COM	CHNEP Communications	\$600.00
2017	CH1MAT	CHNEP Department Materials and Supplies	\$4,200.00
2017	CH1OAD	CHNEP Overhead Administrative Charges	\$83,945.00
2017	CH1OCP	CHNEP Overhead Computer	\$14,500.00
2017	CH1ORN	CHNEP Overhead Office Rent	\$3,425.00
2017	CH1PRO	CHNEP Promotional Activities-Meeting Support	\$5,000.00
2017	CH5ANP	CHNEP ANEP Dues	\$4,500.00

Subtotal= \$116,170.00**Total= \$226,295.00****Table 12: FY17 Funding Sources**

Task #	Sub-Task	Federal FY17	FY16 Carryover	FDEP	SWFWMD	Manatee	Grants	Local and Cash	Total
1	Mgmt. Conference	\$323,527	\$16,490					\$3,222	\$343,239
2	Outreach	\$180,383	\$10,000	\$10,532		\$5,000		\$43,000	\$248,914
3	Research	\$87,029		\$15,213	\$65,000			\$0	\$167,241
4	Restoration	\$9,061	\$28,511	\$49,271	\$65,000		\$40,000	\$8,938	\$200,781
5	Legislation							\$12,859	\$12,859
	Unobligated							\$31,482	\$31,482
Total		\$600,000	\$55,002	\$75,016	\$130,000	\$5,000	\$40,000	\$99,500	\$1,004,517

The CHNEP enjoys the support of the Friends of Charlotte Harbor Estuary, Inc., a 501(c)3 that accepts sponsor support, registration fees and donations to further outreach projects.

Staff and their Official Responsibilities

The CHNEP staff includes four professional positions. As shown in the sub-task descriptions, many deliverables are prepared in-house. Several grants have been submitted to a variety of funding agencies.

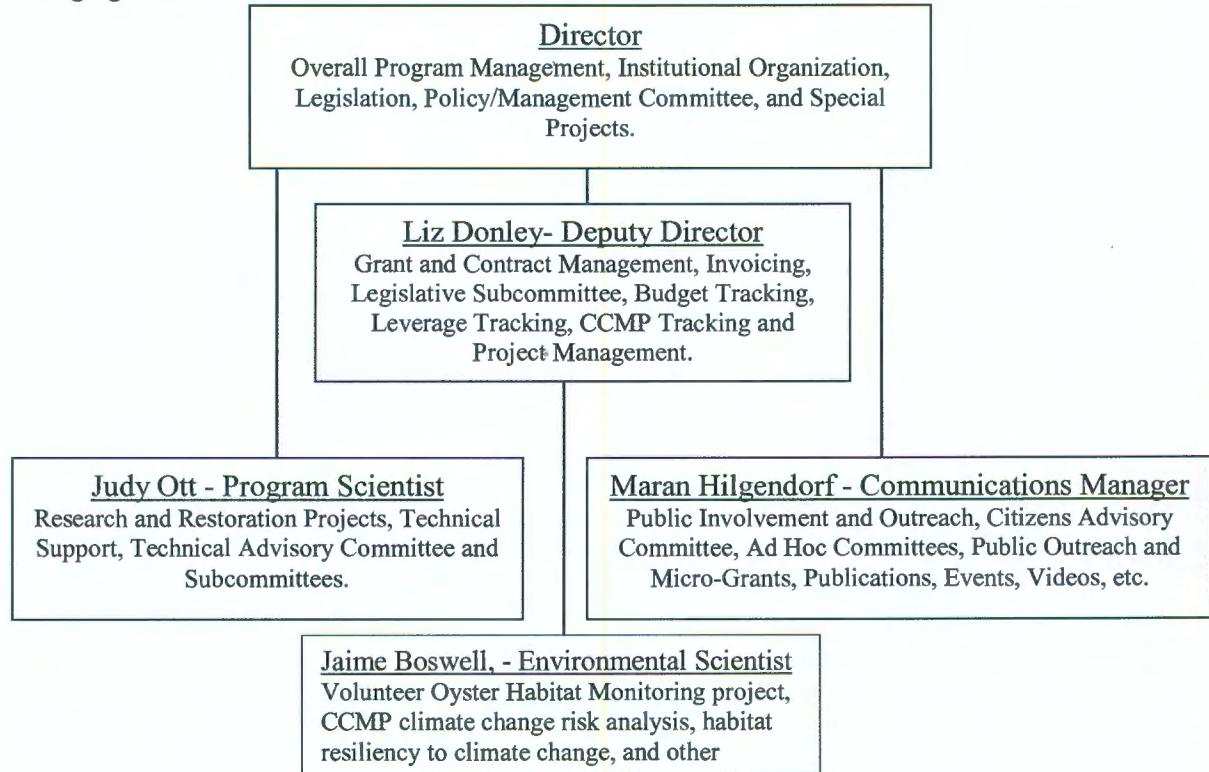


Table 13: Staff Time Allocations by Task for FY16

ProjCode	Title	Lisa	Liz	Maran	Judy	Jaime	Hours
CHEPA1	Management Conference	582	922	250	300	150	2204
CHEPA1	L Beever vacation payout	218.75	0	0	0	0	218.75
CHEPA1	Leave	354	354	354	354	0	1416
CHEPA2	Outreach	30	0	1182	0	0	1212
CHDEP2	Outreach-DEP	50	0	250	0	0	300
CHDEP3	Research-DEP	170	0	0	325	0	495
CHEPA3	Research-EPA	141	0	0	714	0	855
CHDEP4	Restoration-DEP	160	372	0	160	0	692
CHSWF4	Restoration-SWF	219	200	0	195	0	614
CHEPA4	Restoration					200	200
CHLOC5	Advocacy & Legislative Action	32	120	0	0	0	152
CHWP15	Mangrove Heart Attack	350	120	52	40	0	562
CHVO16	VOHM	0	0	0	0	300	300
	Total	2307	2088	2088	2088	650	9220.75

Table 14: Staff Time Allocations by Task for FY17

ProjCode	Title	Director	Liz	Maran	Judy	Jaime	Hours
CHEPA1	Management Conference	714	1115	332	374	220	2755
CHEPA1	Leave	352	352	352	352	0	1408
CHEPA2	Outreach	80	0	1126	0	0	1206
CHDEP2	Outreach-DEP	50	0	150	0	0	200
CHDEP3	Research-DEP	170	0	0	103	0	273
CHEPA3	Research-EPA	130	0	0	400	0	530
CHEPA4	Restoration - EPA	0	100	120	100	620	940
CHDEP4	Restoration-DEP	350	328	0	235	0	913
CHSWF4	Restoration-SWF	40	65	0	492	0	597
CHLOC4	Local Restoration	162	0	0	24	0	186
CHLOC5	Advocacy & Legislative Action	32	120	0	0	0	152
CHVOHM	VOHM	0	0	0	0	200	200
	Total	2080	2080	2080	2080	1040	9360

Cells in **orange** must be spent in the fiscal year. Cells in **yellow** may be carried into the next fiscal year. White cells have flexibility.

New and Ongoing Projects

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

Task 1: Management Conference

- Management Conference
- General Administration and Overhead
- Grants and Contracts Administration

Task 2: Outreach

- Communications/Publications
- Events/Outreach
- Public Outreach Grants
- Micro-Grants

Task 3: Research

- Research Coordination
- Targeted Research

Task 4: Restoration

- Restoration Coordination
- Targeted Research

Task 5: Advocacy and Legislation

- Legislative Agenda
- Advocacy and Review Procedures

1	Management Conference
Objective: To provide a CHNEP Management Conference to implement the Comprehensive Conservation and Management Plan (CCMP) and seek and administer funds to support the implementation of the CCMP.	
Project Objective: This task is an Ongoing project per US EPA Workplan Guidance	
<p>Description: Under Section 320 of the Clean Water Act, the CHNEP is required to convene a Management Conference for the seven purposes delineated at §320(b). This task supports the Management Conference; including seeking additional funding to conduct the work of the CHNEP Management Conference, maintain a support office and the associated financial, operational and administrative responsibilities. In 2014, the Policy Committee chose the City of Punta Gorda as the host agency for the CHNEP Management Conference. This task includes funding to support implementation of host-specific policies as agreed in the MOU. As the host agency, the City of Punta Gorda has policies with which CHNEP staff complies and require a minimal amount of time or funds. The primary committees of the CHNEP are:</p> <ul style="list-style-type: none"> • Policy Committee, • Management Committee, • Technical Advisory Committee (TAC), and • Citizens Advisory Committee (CAC). <p>In general, each committee meets quarterly, with both the TAC and CAC hosting subcommittees and working groups and their associated meetings. CHNEP staff provide support for all meetings, including agenda packet development, facilities arrangements, AV and remote access, and minutes. Staff performs tasks as directed by the Policy Committee in fulfillment of its Workplan. The annual EPA Assistance Grant, and the grants, contracts and purchase orders through which CHNEP partners fund the program contain reporting and invoicing requirements that must be fulfilled. This task supports both the compliance with these requirements and efforts to seek and develop proposals and partnerships, administer grants, and conduct projects to implement the CCMP through in-house and partner efforts.</p>	
CCMP Priority Problem Addressed: Stewardship Gaps	
Partners and Their roles: City of Punta Gorda, other local and county governments, organizations and committee members represented in the Management Conference; organizations that implement the CCMP through projects and activities	
<p>FY16 Outputs:</p> <ul style="list-style-type: none"> ▪ Agenda Packets for committees and subcommittees ▪ Advertising and meeting space ▪ Adoption of FY17 Workplan ▪ Process to hire CHNEP Director completed ▪ Workplan Tracking System Update ▪ Evidence of extending CHNEP partnership ▪ Priority Action GPRA Report ▪ Travel to EPA/ANEP meetings ▪ Quarterly Progress Reports as required ▪ EPA semi-annual Progress ▪ MBE/WBE Annual Report ▪ Final Reports (financial close out, work products) 	<p>Milestones:</p> <ul style="list-style-type: none"> ▪ Transmit and post one week before meeting ▪ Post on website 1 week prior to date ▪ May 2016 ▪ September 2016 ▪ September 30, 2016 ▪ Ongoing ▪ September 2016 ▪ December 2015 & Feb. 2016 ▪ January, April, July, October ▪ April and October <ul style="list-style-type: none"> ▪ October ▪ As Required

<ul style="list-style-type: none"> ▪ Invoices for payment ▪ Grant summaries and City of Punta Gorda Resolutions for all grant submittals, ▪ Summaries of funding agreements and City of Punta Gorda Resolutions for all partner funding agreements ▪ Audit assistance ▪ Requisitions and sub-contracts, sub-awards ▪ Request for payments to ASAP for Federal grants ▪ City finance documentation 	<ul style="list-style-type: none"> ▪ As Required ▪ As Required ▪ As Required ▪ As Required ▪ As Required ▪ As Required ▪ As Required
<p>FY17 Outputs:</p> <ul style="list-style-type: none"> ▪ Agenda Packets for committees and subcommittees ▪ Advertising and meeting space ▪ Adoption of FY18 Workplan ▪ Evidence of extending CHNEP partnership ▪ Priority Action GPRA Report ▪ Workplan Tracking System Update ▪ Travel to EPA/ANEP meetings ▪ Quarterly Progress Reports as required ▪ EPA semi-annual Progress Reports ▪ Federal Annual MBE/WBE Report ▪ Final Reports (financial close out, work products) ▪ Invoices for payment ▪ Grant summaries and City of Punta Gorda Resolutions for all grant submittals, ▪ Summaries of funding agreements and City of Punta Gorda Resolutions for all partner funding agreements ▪ Grant Applications ▪ Requisitions and sub-contracts, sub-awards ▪ ASAP request for Federal grant payments ▪ CCMP Vulnerability Assessment ▪ Initiate CCMP revision and update 	<p>Milestones:</p> <ul style="list-style-type: none"> ▪ Transmit and post one week before meeting ▪ Post on website 1 week prior to date ▪ May 2017 ▪ Ongoing ▪ September 2017 ▪ September 2017 ▪ Dec. 2016 and Feb. 2017 ▪ January, April, July, October ▪ April, October ▪ October ▪ As Required ▪ As Required ▪ As Required ▪ As Required ▪ As Required ▪ Bi-monthly ▪ 4th Q, FY17 ▪ Initiate in 2nd Q FY17
<p>Estimated Budget: \$164, 702 staff, \$51,867 fringe, \$15,000 travel , and \$111,670 overhead/indirect and supplies</p>	
<p>Long term Outcomes: Management Conference members and 4 primary committees are actively engaged in CHNEP's CCMP implementation. Access to citizens, scientific expertise and elected officials has been identified as the most valuable outcome of participating. Management Conference convenes on a regular basis and meets the seven purposes delineated in CWA section 320(b). A broad-based working relationship among various groups toward implementation of the CCMP. Compliance with applicable, Federal, state and City of Punta Gorda policies. Implementation of CHNEP personnel, purchasing and administrative policies. Secure funding for implementation of CCMP by staff and CHNEP Management Conference.</p>	

2	Outreach, including Communications, Publications, Events and Grants
	<p>Objective: To provide essential ongoing communications to further the CHNEP and to address specific requirements and issues associated with the <i>Comprehensive Conservation and Management Plan</i> (CCMP). This is accomplished through publications, events, grants, websites, social media and other ways.</p>
	<p>Project Objective: To provide people with information and ways to be involved in the stewardship of their local natural resources and assist them in making daily choices that protect and improve estuaries and watersheds. Most projects are developed in a collaborative way and typically receive funding from a broad partnership. Many of the events are developed to fill gaps in opportunities that are provided within the watershed. Public Outreach Grants broaden participation of individuals and groups for implementation of the CCMP. Often, the best public outreach grant ideas are replicated elsewhere in the watershed, at no cost to CHNEP. Micro-grants are a way to harness the creativity of people and test ideas. Often a good idea just needs a little bit of funding to make it a reality.</p>
	<p>Description: SG-1 requires communication with the public. Key methods are through the website, quarterly magazines, special publications, events and grants. Special publications that reach new audiences, capture the imagination of citizens and broaden our partnerships are tested and improved upon. The annual calendar is very popular, routinely brings in the most number of donations to the program and expands the knowledge of citizens who do not normally participate in our programs. <i>Adventures in the Charlotte Harbor Watershed</i>, the children's book, reaches every child in a certain age class (18,000 students) within the study area's public school system. Videos reach the broad television and Internet viewing public. The annual Charlotte Harbor Nature Festival, held since 2002, is a regional day-long opportunity for the public to meet with area environmental organizations and others. The CHNEP works with NOAA and others to bring at least one professional development opportunity/training to area public outreach and environmental education specialists. Since 2011, once a year an environmental education workshop is held to provide an opportunity to share knowledge, collaborate and network. Since 2012, an annual conservation lands workshop is held to provide an opportunity to share knowledge, collaborate and network. Since 2012, presentations are converted into videos and posted on YouTube as CHNEP Talks. A Watershed Summit is held every three years with the next one scheduled for 2017. Since 2003, the CHNEP works with area partners to bring public workshops, tailored to a particular community's needs. National Estuaries Days is celebrated with our partners as Estuaries Day, Every Day and are often supported with micro-grants. Opportunities to supplement Conservation Landscaping efforts with partners will continue. Opportunities to target audiences as identified in the CCMP will continue. Public Outreach Grant projects occur in the CHNEP study area and facilitate public education of environmental issues identified in the CCMP. Projects are now typically completed in the fiscal year in which the award was made. No matching funds are required and the maximum funding per project is \$5,000. One of the four initial Public Education Goals is "to establish and maintain environmental educational efforts with organizations, educational centers, and government agencies." This project is also known as "micro-grants" which usually provide up to \$250 to support immediate public outreach opportunities. These funds allow the Program Office to respond to requests as they arise. The applicants provide audiences with information about CHNEP. Awards are granted under the Director's authority to implement the CCMP. Information on all the projects funded with a grant is posted on the website at www.chnep.org/Grants.html.</p>
	<p>CCMP Priority Problem Addressed: Stewardship Gaps</p>

Potential Partners: Individuals, Public, Agencies, Organizations, Businesses, School Districts, Artists, Environmental Education Entities	
FY16 Funded Deliverables: <ul style="list-style-type: none"> ▪ Harbor Happenings Quarterly Magazine ▪ Website, Constant Contact, Social Media ▪ 2016 Calendar ▪ <i>Adventures</i> Book for Children ▪ Collateral, Displays, Reprintings, etc. ▪ Citizens Academy ▪ Charlotte Harbor Nature Festival ▪ Professional Development Workshops ▪ Target audiences with guides, workshops, including <ul style="list-style-type: none"> ✓ Environmental Education Workshop ✓ Conservation Landscaping Workshop ✓ Conservation Landscaping Hardee-Desoto ✓ National Estuaries Days/Estuaries Day, Every Day ▪ FY16 Public Outreach Grants (11 awards) ▪ FY16 Micro-grants (about 50 projects and events) ▪ Outreach Assistance ▪ 2017 Calendar 	Target Dates: <ul style="list-style-type: none"> ▪ Jan., April, July, Nov. ▪ Ongoing ▪ Oct. 2015 ▪ Dec. 2015 ▪ Ongoing ▪ Ongoing ▪ Nov. 21, 2015 ▪ Feb. 23-25, Aug. 23-26, 2016 ▪ Ongoing ▪ Oct. 23, 2015 ▪ Sept. 10, 2015 ▪ Feb. 20, 2016 ▪ Ongoing ▪ Oct. 2015 to Aug. 2016 ▪ By Sept. 2016 ▪ Sept. 2016 ▪ Oct. 2016
FY17 Funded Deliverables: <ul style="list-style-type: none"> ▪ <i>Harbor Happenings</i> Quarterly Magazine ▪ Website, Constant Contact, Social Media ▪ 2018 Calendar ▪ <i>Adventures</i> Book for Children ▪ Collateral, Displays, Reprintings, etc. ▪ Citizens Academy ▪ Charlotte Harbor Nature Festival ▪ Professional Development Workshops ▪ Target audiences with guides, workshops, including <ul style="list-style-type: none"> ✓ Environmental Education Workshop ✓ Charlotte Harbor Watershed Summit ✓ Conservation Landscaping Workshop ✓ Conservation Landscaping Hardee-Desoto ✓ National Estuaries Days/Estuaries Day, Every Day ▪ Public Outreach Grants (5-12 awards) ▪ Approximately 50 projects and events ▪ Climate Change poster and Citizen Academy module ▪ Outreach Assistance 	Target Dates: <ul style="list-style-type: none"> ▪ Jan., April, July, Nov. ▪ Ongoing ▪ Oct. 2017 ▪ Nov. 2017 ▪ Ongoing ▪ Sept. 2018 ▪ November 19, 2016 ▪ May 2017 ▪ Ongoing ▪ TBD ▪ March 38-30, 2017 ▪ Sept. 2017 ▪ Feb. 18, 2017 ▪ Ongoing ▪ Oct. 2016 to Aug. 2017 ▪ Oct. 2016 to Sept. 2017 ▪ September 2017 ▪ Ongoing
Budget: \$52,311 staff, \$17,753 fringe, \$178,850 for communications and special events, Watershed Summit, public outreach grants, micro-grants, and publications.	
Intermediate Outcomes: Providing information about CHNEP, including the CCMP and success of its partners, through a multi-channel multi-media approach (events, social media, grants, publications, etc.) appropriate for each particular audience, increases awareness of the program, the issues and solutions, supporting changes in policies, practices and decisions. The number and strength of partnerships will increase.	
Long-Term Outcomes: Changes in behavior by individuals, organizations, businesses and governments incorporated into changes in policies, practices and decisions leading to the successful fulfillment of the CHNEP CCMP, thereby protecting the natural environment of southwest Florida.	

Public Outreach Grants

Once a year since 2000, the CHNEP has awarded Public Outreach Grants. A CAC Grants Committee reviews the applications, makes funding recommendations and monitors progress. In FY06 the review schedule and process were modified, allowing the CAC and the Program Director to consider the recommendations of Grants Committee. Members of the other committees are given an opportunity to review and comment on the applications prior to the CAC meeting. Until FY14, once approved for funding by the CAC and the Program Director, a contract was signed between the applicant and the CHNEP's host agency, the SWFRPC. Since FY15, a purchase order is issued by the CHNEP's host agency, the City of Punta Gorda, to the applicant. Projects may begin as soon as the purchase order is issued. Public Outreach Grants typically take one year to complete. The results of these projects are posted at www.CHNEP.org/grants.html.

FY15 Public Outreach Grants

Six Public Outreach Grant applications were approved. All but one was successfully completed by Sept. 2015.

Harlem Heights Elementary Schools' Outdoor Classroom

Florida Native Plant Society Coccoloba Chapter

An outdoor classroom at Lee County's largest elementary school will provide hands-on learning to the 1,100 children by creating an outdoor learning environment in a wetland where fresh and salt waters mix in a mangrove forest. The CHNEP is providing \$3,000 toward this \$100,000 project. This project helps implement the CCMP by fulfilling SG-A, SG-D, WQ-M, HA-P, FW-P.

FY16 Public Outreach Grants

Eleven Public Outreach Grant applications were approved.

Science at CREW's Cypress Dome Trails

CREW Land & Water Trust

Last year, more than 5,400 people were educated on the CREW Marsh Trails and the Bird Rookery Swamp Trails. Environmental education programs at CREW's Cypress Dome Trails can be expanded with the development of an outdoor classroom. The CHNEP is providing \$1,000 toward this \$39,036 project. This project helps implement the CCMP by fulfilling SG-1, SG-H, SG-F and WQ-K.

Venice Gardens Lake Floating Island

Deena Lonzo

Venice Gardens Lake is a highly-eutrophic waterbody owned and maintained by the Sarasota County Stormwater Environmental Utility. Water flows from the lake into Alligator Creek then into Lemon Bay. This project will allow a floating island to be installed to improve water quality and provide habitat for wildlife. The floating island and educational signage can be viewed from Shamrock Blvd to enhance the public's environmental awareness regarding the issues and possible solutions. The CHNEP is providing \$1,508 toward this \$1,824 project. This project helps implement the CCMP by fulfilling SG-B and WQ-M.

Water, Wings and Wild Things Kids Festival 2016

Polk's Nature Discovery Center

Approximately 2,000 second grade students from Polk County schools (with 50 teachers and 300 chaperones) will learn about natural resources in the upper Peace River watershed through marsh tours of the head waters, presentations, hands-on exhibits and activates during this day-long program at Circle B Bar Reserve. The CHNEP is providing \$5,000 toward this \$7,262 project. This project helps implement the CCMP by fulfilling SG-H and SG-F.

Water Quality Education and Coordination Program

Charlotte Harbor Environmental Center

CHEC staff coordinates volunteers that sample estuarine waters at 16 sites in Lemon Bay and Gasparilla Sound on a monthly basis as part of the FDEP Charlotte Harbor Volunteer Water Quality Monitoring Network. Data is entered in STORET then used to evaluate waterways. This project supports CHEC and allows for the development of literature concerning water quality and water monitoring. The CHNEP is providing \$2,300 toward this \$6,180 project. This project helps implement the CCMP by fulfilling WQ-1, SG-F and SG-K.

Venice Elementary and Venice High Schools Reach into the Community with Conservation

Kay Thorpe Bannon

The 92 third grade students at Venice Elementary will reach into their home communities with native plant gardening, combined with wildlife conservation information, storytelling and presentations. Student and family awareness of habitat loss will increase and a sense of stewardship for our Florida environment will be encouraged. This project is an extension of grants completed with Venice, Taylor Ranch and Garden Elementary Schools, during which students worked with the Venice High School and community groups to address wildlife conservation issues as well as to install native plant gardens on the grounds of each elementary school. Their work will be chronicled in school newspapers and featured in local papers. The CHNEP is providing \$904 toward this \$3,211 project. This project helps implement the CCMP by fulfilling SG-H, SG-F and WQ-K.

Upper Peace River Watershed Education/Appreciation Program

Lakes Education/Action Drive

Upper Peace River watershed tours will be coordinated to allow the public to get to know their watershed. The education/appreciation tours will be guided by trained professionals and biologists who understand the issues and connection to the estuary. The CHNEP is providing \$5,000 toward this \$15,000 project. This project helps implement the CCMP by fulfilling SG-H, HA-P, SG-F and WQ-K.

Venice Native Wildlife Corridor

State College of Florida, Manatee-Sarasota

This project allows students, faculty, and staff to plant native vegetation on campus to provide wildlife habitat, help conserve water, reduce the potential for nutrient runoff, and provide education opportunities for students who will then help educate the general public. The CHNEP is providing \$2,583 toward this \$5,630 project. This project helps implement the CCMP by fulfilling SG-H, SG-F and WQ-M.

San Carlos Park/Mulloch Creek Habitat Restoration Initiative

Florida Gulf Coast University

A half-mile stretch of a drainage canal recently had the invasive exotic plants cut. It provides us an opportunity to expand our goals to restore the East Mulloch Drainage District in this 2 square-mile community. The homeowners will receive a voucher to receive one native plant for every native plant purchased and personalized landscape plans for place-appropriate plants. They will also receive information and discounts for septic maintenance and shoreline erosion services. A survey they complete will help us understand the behavior, awareness, knowledge and willingness to change. The CHNEP is providing \$2,000 toward this \$5,761 project. This project helps implement the CCMP by fulfilling SG-A, SG-G, and WQ-K WQ-L.

Happe Teen River Lab and Eco-Camp

Happehatchee Center, Inc.

Five local teens will chemically and biologically test parts of the Estero River during a six-month environmental science course at the Happehatchee Center. Students will learn paddling techniques and develop a teaching display for the Happe Summer Eco-Camp in June 2016 for 20 students from farm worker families. The CHNEP is providing \$4,000 toward this \$13,776 project. This project helps implement the CCMP by fulfilling SG-H, SG-C, SG-F and WQ-L.

Punta Gorda Pathways: Trails that Teach

TEAM Punta Gorda

Education is an important variable in protecting Charlotte Harbor. This collaborative initiative will provide resources to educate the public about the importance of the estuary and what is needed to protect it. Two interpretive signs along Punta Gorda Harborwalk will explain the ecology of the estuary. Free monthly public programs will be offered. The CHNEP is providing \$3,300 toward this \$15,485 project. This project helps implement the CCMP by fulfilling SG-D.

Native Plants Outreach Campaign

FNPS Coccoloba Chapter

This project helps bridge the gap between when outreach participants “see the native plant light” and are able to purchase and install native plants in their yards. With only three retail native plant businesses in Lee County, the short-term fix is to drive up the demand and ultimately the supply of native plants. The CHNEP is providing \$2,405 toward this \$60,580 project. This project helps implement the CCMP by fulfilling SG-F and WQ-K.

FY15 Micro-Grants

Contractor	MicroGrant Support
AWRA Florida Section: Karen Bickford	Southwest Florida Water Resources Conference: January 23, 2014, 23rd annual Sea Level Rise Flight or Fight
Big Brothers Big Sisters of the Sun Coast: Natalie Anderson	Cedar Point Wading Trip
Calusa Group of the Sierra Club: Connie Langmann	Bag It
Calusa Nature Center and Planetarium: Solveig Poynter	Life in the Micros
Calusa Nature Center and Planetarium: Solveig Poynter	Fire in Florida's Ecosystems – Interacting Training Workshop: May 28, 2014
Cape Coral Friends of Wildlife	Burrowing Owl Festival: February 22, 2014 -- 12th annual
Cape Coral Friends of Wildlife: Pascha Donaldson	Burrowing Owl Burrow Stakes
Cape Coral Historical Society: Richard Roux	Cape Coral Historical Museum Florida Native Plant Signs and Stakes
Charlotte Harbor Preserve State Park: Ryan S. Brown	Bonneted Bat Housing Project
City of Bowling Green: Jerry Conerly	Jones Street Landscaping
City of Cape Coral: Honey Archey	Little Free Libraries in the City of Cape Coral (with focus on environmental literature)
City of North Port	Summer Camp Vegetable Garden, Composting and Worm Farm
East County Water Control District: Carla Ulakovic	Harns Marsh Wings Over Water Festival: Feb. 28-March 1, 2014
East Lee County High School: Lee Moody	Biodiversity at Harns Marsh
Englewood Sailing Club: Hugh Moore	Three Summer Sailing Camps for Youngsters 9 to 15: 2014
Estero Bay Buddies: Reggie McNeill	Paddling the Estero River: November 2, 2014
Explorations V Children's Museum: Sue Schluender	Children's Festival: April 12, 2014
FDEP South District: Terry Cerullo	FDEP South District Veterans Memorial Native Florida Plant Garden
FNPS Mangrove Chapter: Jane Wallace	Plant Native Day: February 22, 2014
Friends for Extension: Betty Staugler	Great Bay and Sound Scallop Search in Lemon Bay and Gasparilla Sound: July 26, 2014
Green Horizon Land Trust: Rachelle Selser	Green Horizon Land Trust Annual Meeting: March 2, 2014
Gregg Klowden	Distributional changes of non-native geckos in southwest Florida – A 10 year study
Happahatchee Center: Genelle Grant	Mangrove Gathering Eco Café: March 22, June 21, Sept. 20 and Dec. 20, 2014
Hardee Outdoor Classroom: Kayton Nedza	Ecocamp Cayo Costa Boat Trip 2014
Keep Lee County Beautiful: Tricia Francher	Monofilament Madness - Marine Cleanup: October 26, 2013
L.A. Ainger Middle School: Natalia Shea	Florida Native Beautification Landscape Projects at L.A.

Contractor	MicroGrant Support
	Ainger Middle School
Lakes Education Action Drive: Corrine Burgess	Lakes Appreciation Month
Lakes Education/Action Drive: Corine Burgess	Project E.A.G.L.E.
Laurel Rhodes	Sarasota County Legacy Trail Butterfly Interpretive Materials Installation
Lee BCC: Nancy Kilmartin	Industrial thermometer for Manatee Park
Lee County BOCC Parks and Recreation: Theresa Farrell	Florida Native Plant Landscaping at Karl J Drews Community Center in Fort Myers
Lemon Bay Conservation: Jane Wallace	Native Milkweed Plantings for the Butterfly Habitat at Wildflower Preserve
Manatee County Friends of Extension: Samantha Kennedy	Manatee County Water School 2014
Meagan Shivers	CHNEP Student Ambassador Outreach Program messaging bracelets
Myakka River Management Coordinating Council	Myakka River Management Coordinating Council website 10/1/2014 to 9/30/2015
Nature Connections: Mary Lundeberg, Betty Baust	Coastal Native Plants Brochure for Stump Pass State Park
Nora Demers	Sign replacement for Mulloch Creek Demonstration Florida Yards
Pete Quasius and Don Eslick	EcoVoice: Environmental Voice of Southwest Florida: 2009 sponsorship
Polk County Extension: Shannon A. Carnevale	Polk County Extension Water School
Polk County Utilities: Jacqueline Hollisters	7 Rivers Water Festival: May 3, 2014
Rotary Park: Vanessa Hazelton	Rotary Park Native Plant Label Markers
School District of Lee County: Rick Tully	Six-Mile Cypress Inspirational Plaque
Southwest Florida Gulf Coast Regional Envirothon	Southwest Florida Gulf Coast Regional Envirothon: December 13, 2013
Special Equestrians/FGCU Service Learning: Emily Perez	Special Equestrians Native Plants
Team Parkside Lakes and Waterways Committee: Kathryn Preston	Parkside Lakes and Waterways Environmental Education Information and Resource Brochure
UF/IFAS/Lee County Extension: Joy Hazell	Great Bay and Sound Scallop Search in Pine Island Sound: August 23, 2014
Venice Area Audubon Society: Alena Capek	Venice Area Audubon Bird Study Awards: Alena Capek
Venice Area Audubon Society: Brenda Bossman	Venice Area Audubon Bird Study Field Trip

3	Research, including Coordination and Targeted Research Projects		
	Objective: To provide essential, consistent, technically sound estuarine, freshwater, wetland and upland habitat data throughout the CHNEP study area and to identify research needs and fill gaps in Environmental Indicators data through implementation of partnership projects which address the <i>Comprehensive Conservation and Management Plan (CCMP)</i> Priority Actions.		
	Project Objective: To protect and restore natural systems throughout the CHNEP study area by enhancing understanding of current conditions, trends, and complex interactions, as well as identifying critical conditions and locations where restoration efforts can most effectively be directed. Activities focus on coordinating partner organizations and contracted entities to collect, analyze and communicate water quality, hydrologic and biological data to fill gaps in essential data needed to support sound resource management and decision-making. Research topics focus on those identified by the TAC. Funding supports staff coordination of monitoring, data collection and analysis and reporting efforts.		
	Description: CHNEP coordinates and assists partners with water quality, seagrass, mangrove, fishery, oyster and scallop monitoring through ongoing programs including: the Coastal Charlotte Harbor Monitoring Network (CCHMN), Charlotte Harbor Estuaries Volunteer Water Quality Monitoring Network (CHEVWQMN), Regional Ambient Monitoring Program (RAMP), FDEP seagrass transect monitoring, Water Management District seagrass aerial mapping, CHNEP mangrove mapping, FWC fishery monitoring, TNC oyster monitoring and FWC and FL Sea Grant scallop monitoring. CHNEP contracted with FWC and Bonefish and Tarpon Trust to conduct juvenile fishery monitoring in Coral Creek and with SBEP to develop rational numeric nutrient criteria for tidal creeks based on water quality, fishery and benthic macroalgae relationships. Research results are transferable and made available to agencies, educational institutions, research organizations and the public through the CHNEP Water Atlas, Watershed Summit and Watershed Summit Proceedings. Technical information exchange also occurs through participation of staff and partners in the Southwest Florida Tidal Creek, Seagrass, and Shellfish Working Groups. Data and analyses are used to develop and implement resource management and planning efforts throughout the CHNEP study area including: Shellfish Restoration Plans, Southwest Florida Feasibility Study, Caloosahatchee River Watershed Protection Plan, Impaired Waters determinations, Minimum Flows and Levels and Water Supply Plans.		
	CCMP Priority Problems Addressed: Water Quality Degradation, Hydrologic Alterations, Fish and Wildlife Habitat Loss and Stewardship Gaps.		
	Potential Partners: FDEP, FWC, SWFWMD, SFWMD, SBEP, TBEP, USF, FGCU, FL Sea Grant, LCEL, BTT, SCCF, Mote, Private Contractors, Counties, Cities, Conference Members.		
	<table border="1"> <tr> <td data-bbox="191 1461 967 1871"> FY16 Deliverables: <ul style="list-style-type: none"> FWC Coral Creek Restoration Fishery Monitoring. SBEP Numeric Nutrient Criteria for Tidal Creek Wetlands. BTT Coral Creek Restoration Juvenile Tarpon Monitoring. CCHMN monthly water quality monitoring. CHEVWQMN monthly water quality monitoring. RAMP quarterly quality assurance meetings. CCHMN annual field audits, reporting and meeting. Bi-annual SWFWMD and SFWMD seagrass aerals. FDEP annual seagrass transect monitoring. </td><td data-bbox="967 1461 1446 1871"> Target Dates: <ul style="list-style-type: none"> March 2016 March 2016 June 2016 Monthly Monthly Quarterly May 2016 – June 2016 December 2015 – January 2016 August - September 2016 </td></tr> </table>	FY16 Deliverables: <ul style="list-style-type: none"> FWC Coral Creek Restoration Fishery Monitoring. SBEP Numeric Nutrient Criteria for Tidal Creek Wetlands. BTT Coral Creek Restoration Juvenile Tarpon Monitoring. CCHMN monthly water quality monitoring. CHEVWQMN monthly water quality monitoring. RAMP quarterly quality assurance meetings. CCHMN annual field audits, reporting and meeting. Bi-annual SWFWMD and SFWMD seagrass aerals. FDEP annual seagrass transect monitoring. 	Target Dates: <ul style="list-style-type: none"> March 2016 March 2016 June 2016 Monthly Monthly Quarterly May 2016 – June 2016 December 2015 – January 2016 August - September 2016
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<ul style="list-style-type: none"> ▪ TNC volunteer oyster habitat monitoring. ▪ Estero Bay oyster mapping. ▪ FWC and FL Sea Grant scallop monitoring. ▪ CHNEP Water Atlas maintenance. ▪ Special topic science forums and meetings (Port Charlotte volunteer water quality monitoring). ▪ FL Coastal Water Resource Monitoring Council. ▪ Annual Technical Conference (AWRA). 	<ul style="list-style-type: none"> ▪ Quarterly ▪ Ongoing ▪ Summer 2016 ▪ As requested 2016 ▪ December 2015 ▪ Fall 2015 and Spring 2016 ▪ January 2016
FY17 Deliverables: <ul style="list-style-type: none"> ▪ CHNEP Mangrove Heart Attack project. ▪ CCHMN monthly water quality monitoring. ▪ CHEVWQMN monthly water quality monitoring. ▪ RAMP quarterly quality assurance meetings. ▪ CCHMN annual field audits, reporting and meeting. ▪ FDEP annual seagrass transect monitoring. ▪ FWC tidal creek fishery monitoring. ▪ TNC quarterly volunteer oyster habitat monitoring. ▪ Charlotte and Lee Counties oyster mapping. ▪ FWC and FL Sea Grant annual scallop monitoring. ▪ CHNEP Water Atlas Maintenance. ▪ Special topic science forums and meetings. ▪ FL Coastal Water Resource Monitoring Council. ▪ Annual Technical Conference (AWRA) 	Target Dates: <ul style="list-style-type: none"> ▪ December 2016 ▪ Monthly ▪ Monthly ▪ Quarterly ▪ May 2017 – June 2017 ▪ August - September 2017 ▪ As requested 2017 ▪ Quarterly ▪ TBD ▪ Summer 2017 ▪ As requested 2017 ▪ As requested 2017 ▪ Fall 2016 and Spring 2017 ▪ November 2016
Budget: \$29,389 for staff, \$9,853 for fringe, \$128,000 for projects.	
Intermediate Outcomes: Providing technically sound water quality, seagrass, mangrove, fishery and shellfish data increases understanding of the current habitat conditions throughout the CHNEP study area, fills gaps in Environmental Indicators, and identifies research and restoration needs. In the intermediate term, CHNEP will continue to coordinate monthly water quality sampling through the CCHMN and CHEVWQMN, and to assist partners with seagrass monitoring and mapping, mangrove mapping, and fishery and shellfish monitoring to ensure adequate data is available to meet resource management needs. The resulting data, analyses and models will be made available through the CHNEP Water Atlas, Watershed Summit Proceedings, partners' websites and Management Conference meetings to be incorporated into resource planning efforts and improve protection and restoration of natural habitats throughout the watershed.	
Long Term outcomes: Increased scientific research and technically sound data will improve protection and restoration of water quality and habitats throughout the CHNEP study area by supporting implementation of resource management actions, regulatory programs and education of the public and elected officials throughout the watershed.	

Research Projects

Targeted Research Projects are initiated to fill in Environmental Indicators gaps, provide topic-specific data and answer questions raised by the TAC to improve resource management throughout the CHNEP and fulfill the CCMP. The complex technical projects are implemented with CHNEP support to one or multiple partners and generally take more than one year to complete to allow for adequate data collection and analysis and review by the TAC. Results of the Targeted Research Projects are available on the CHNEP website and Water Atlas. Targeted Research Projects to be completed in FY16 and FY17 are described briefly below.

Research Projects to be completed in Fiscal Years FY16 and FY17

Coral Creek Restoration Fishery Community Monitoring

FWC, FY14 funding, \$40,000, Completed 2016

To assist the SWFWMD, FDEP and partners with assessing the functional effects of hydrologic and restoration activities adjacent to Coral Creek, CHNEP contracted with FWC Fisheries Independent Monitoring to conduct fishery community monitoring in the creek prior to initiation of restoration activities. The fish community information will augment other fish, water quality, seagrass and wetland vegetation monitoring to evaluate the response of the habitats and biological community to the restoration. The project includes monthly sampling within the creek utilizing FWC tidal creek juvenile fishery methods from February 2014 – January 2015.

Deliverables include data, analyses, GIS shapefiles and reports. The fishery monitoring project addresses several CHNEP CCMP Priority Actions and Environmental Indicators including: FW-F, WQ-E, HA-N and FW-d.

Numeric Nutrient Criteria for Tidal Creek Wetlands

Sarasota Bay Estuary Program, FY13 funding, \$21,700, Completed 2016

To fill geographic and data gaps between recently adopted quantitative nutrient criteria for fresh and estuarine waters, CHNEP is working with SBEP, TBEP, and local partners to develop suggested numeric nutrient criteria for tidal creeks throughout southwest Florida. The project is evaluating the relationships between key water quality parameters (dissolved oxygen, temperature, salinity, nitrogen and phosphorus), fishery communities and benthic algae (chlorophyll) in a wide range of tidal creek conditions between TBEP and CHNEP. The project includes developing the field and data analyses methods, field sampling and analysis and reporting of data and results. The results will be available on the CHNEP Water Atlas and enhance resource managers and regulators ability to determine water quality conditions and impairments in tidal creeks in southwest Florida. The Numeric Nutrient Criteria for Tidal Creek Wetlands project implements many CCMP Priority Actions, including: WQ-B and WQ-G.

Coral Creek Restoration Juvenile Tarpon Fishery Community Monitoring

Bonefish and Tarpon Trust, FY14 Mosaic funding, CHNEP staff, \$50,000, due June 2016

To assist the SWFWMD, FWC and Bonefish and Tarpon Trust (BTT) with better understanding how restoration project design can enhance juvenile tarpon habitat, CHNEP will implement a research project to compare fishery response to different hydrologic restoration designs in six finger canals along Coral Creek. CHNEP, FWC and BTT scientists will assist SWFWMD resource managers with designing a series of configurations of ponds and wetlands in the finger

canals that will be incorporated into the SWFWMD restoration activities along Coral Creek. CHNEP will contract with BTT, who will provide match, to conduct before and after, control and response juvenile tarpon fishery monitoring to assess fishery response to the different restoration techniques. Deliverables, including data, analyses, GIS shapefiles and reports, will be reviewed by the TAC and approved by the Management Conference. The project addresses CHNEP CCMP Actions and Indicators including: FW-F, WQ-E, HA-N and FW-d.

Mangrove Heart Attack Project

Southwest Florida Regional Planning Council, Coastal Resources Group, Terry Tattar, FY15 EPA Wetland Program Development Funding and CHNEP staff support, \$75,000, due December 2016

To assist EPA, SWFRPC and partners with better understanding saltwater wetland loss, CHNEP will implement a research project to define the distribution, abundance, and composition of saltwater wetlands, including mangrove ecosystems throughout the CHNEP study area. The project will also assess the fate of these ecosystems as they respond to human caused hydrologic and climate change stressors; identify locations of mangrove forest die-offs and location of potential future loss; document changes in the position, composition and health of the landward and waterward edges of fringing mangrove ecosystems, and document changes in the relative proportions of mangrove ecosystem types in Southwest Florida. The project will focus on large mortality areas with adjacent areas showing stress and long term trends indicating little or no natural recovery, and expansion of the die-off to potentially thousands of acres. The project implements many CHNEP Priority Actions including: FW-1, FW-C, and SG-S and helps fulfill Research Needs relating to mangrove species composition monitoring.

4	Restoration, including Coordination and Targeted Restoration Projects
Objective: To develop a CHNEP Restoration Plan and Targets and participate in planning and implementation of restoration projects which address the <i>Comprehensive Conservation and Management Plan</i> (CCMP) Priority Actions.	
Project Objective: To restore natural systems throughout the CHNEP study area by identifying critical water quality, hydrologic and habitat needs and working with partners to design, fund and implement effective restoration projects in a technically sound manner. Activities focus on participating in regional resource management and planning initiatives, reviewing watershed assessments and plans, providing data and maps, and tracking project implementation. Funding supports implementation of priority restoration projects identified by the Management Conference and staff participation in restoration planning, design and implementation activities. Projects are designed to be technically sound and include monitoring to assess effectiveness.	
Description: CHNEP implements priority restoration projects as funding allows, including the Morgan Park Peace River Habitat Restoration project, and ensures that project effectiveness is evaluated through monitoring. CHNEP hosts the Southwest Florida Oyster Working Group and Caloosahatchee River Submerged Aquatic Vegetation Targets Science Forums. Staff participates in a number of restoration initiatives including: Charlotte Harbor Flatwoods and Lehigh Headwaters Initiatives, FDEP TMDL and BMAP planning, Water Management District SWIM, MFL and Water Supply efforts, Comprehensive Everglades Planning, and regional conservation corridor efforts to provide habitat migration for climate change adaptation. CHNEP provides data, maps and technical review to ensure technically sound, cost effective projects are implemented. Restoration plan and project implementation are tracked annually by providing the Government Performance and Review Act (GPRA) report of land acquisition and habitat restoration projects.	
CCMP Priority Problems Addressed: Water Quality Degradation, Hydrologic Alterations, Fish and Wildlife Habitat Loss and Stewardship Gaps.	
Potential Partners: EPA, ACOE, FDEP, FWC, SWFWMD, SFWMD, Counties, Cities, Conference Members.	
FY16 Deliverables: <ul style="list-style-type: none"> ▪ SW FL Oyster Working Group ▪ San Carlos and Tarpon Bay Oyster Restoration ▪ Identification of Priority Oyster Restoration Sites. ▪ Morgan Park Peace River Preliminary Design ▪ Tidal Caloosahatchee SAV Restoration Forum ▪ CHNEP Restoration Targets Peer Review ▪ WET PLAN Workshops (LEAD and others) ▪ Charlotte Harbor Flatwoods Initiative ▪ Lehigh Headwaters Initiative ▪ Estero Bay Agency on Bay Management ▪ Regional Restoration Planning (CERP/SWFFS, SWIM, TMDLs, BMAPs, MFL, SWUCA, Water Supply Plans) ▪ GPRA Habitat Acquisition and Restoration Report 	Target Dates: <ul style="list-style-type: none"> ▪ Quarterly ▪ December 2015 ▪ December 2016 ▪ June 2016 ▪ March 2016 ▪ November 2015 ▪ September 2016 ▪ Quarterly ▪ Quarterly ▪ Monthly ▪ September 2016 ▪ September 2016
FY17 Deliverables: <ul style="list-style-type: none"> ▪ SW FL Oyster Working Group ▪ Regional oyster restoration permit ▪ Morgan Park Peace River Final Design 	Target Dates: <ul style="list-style-type: none"> ▪ Quarterly ▪ June 2017 ▪ September 2017

<ul style="list-style-type: none"> ▪ WET PLAN workshops (LEAD and others) ▪ CHNEP Restoration Needs Plan, Update ▪ Charlotte Harbor Flatwoods Initiative ▪ Lehigh Headwaters Initiative ▪ Estero Bay Agency on Bay Management ▪ Volunteer Oyster Habitat Monitoring project ▪ Habitat Resiliency to Climate Change Project ▪ Regional Restoration Planning (CERP/SWFFS, SWIM, TMDLs, BMAPs, MFL, SWUCA, Water Supply Plans) ▪ GPRA Habitat Acquisition and Restoration Report 	<ul style="list-style-type: none"> ▪ September 2017 ▪ September 2017 ▪ Quarterly ▪ Quarterly ▪ Monthly ▪ December 2016 ▪ September 2017 ▪ Table 12 (incorporating September 2017) ▪ September 2017
Budget: \$97,480 for staff, \$23,301 for fringe, and \$80,000 for projects.	
Intermediate Outcomes: Identifying priority restoration needs and providing data, maps and technical review contributes to the implementation of a greater number of technically sound, consensus-based resource management plans and restoration projects. The annual GPRA report assists with tracking restoration accomplishments and needs.	
Long Term Outcomes: Increased implementation of effective restoration projects, Best Management Practices (BMPs) and plans will restore water quality, hydrologic and habitat restoration throughout the CHNEP study area.	

Restoration Projects

Targeted Restoration Projects are implemented to focus restoration efforts into priority habitat, hydrology and water quality conditions and locations identified by the TAC and CHNEP resource management community. Targeted Restoration Projects address the CCMP Priority Problems. The multi-faceted restoration projects are implemented by partners with CHNEP staff and funding support for technical design, including monitoring to assess effectiveness. Targeted Restoration Projects generally take more than one year to complete to allow for adequate design and implementation, data collection and analysis and review by the TAC. Results of the Targeted Restoration Projects are available on the CHNEP website and Water Atlas. Targeted Restoration Projects to be completed in FY16 and FY17 are described briefly below.

Restoration Projects to be completed in Fiscal Years FY16 and FY17

Morgan Park Peace River Shoreline and Habitat Restoration Project

AMEC, FY15 Mosaic and SWFWMD funding and staff support, due Fall 2016

The Peace River shoreline is severely eroding in two locations in Morgan Park in Arcadia, causing serious habitat, water quality and sedimentation problems in the river and loss of access to public recreational lands in the park. The river bank is eroding at two sites within the park: one near the park entrance, estimated to be 250 feet long, and one near the "South Trail", estimated to be 600 feet long. The bank may be required to be stabilized both above and below the ordinary high water line to assure long term control. The eroding bank cut through a portion of the major trail in the park, making it impassable to users. In addition to restoring the habitat along the shoreline, other habitat restoration need in the park include exotic plant removal, native vegetation planting and water quality treatment. CHNEP received funding support from Mosaic and SWFWMD to initiate a multi-phase project to stabilize the Peace River shoreline and restore shoreline habitats within Morgan Park. CHNEP contracted with AMEC Foster Wheeler to complete Phase I of the restoration which includes developing a Comprehensive Project Plan, draft project design and obtaining permits. The project implements many CCMP Priority Actions including: FW-1, WQ-2 and WA-1. Phase II of the project will be developed based on the results of the Phase I plan and project design.

CHNEP Restoration Targets Peer Review

Coastal Resources Group, completed October 2015

CHNEP is updating the Restoration Needs Plan and created a "Restoring the Balance" algorithm to evaluate past and current distributions of habitats to be used to develop restoration targets. The habitat types that the algorithm is applied to include mangroves, salt marshes, freshwater wetlands, uplands and water. CHNEP contracted with the Coastal Resources Group, Inc. to provide expert peer review of the draft restoration targets developed for habitat types identified in the *Comprehensive Conservation and Management Plan* (CCMP). The project will include review of the algorithm, flow of data through the Excel workbook and presentation of the information in the draft report. Recommendations to improve the draft report were provided in a Word document with Track Changes. The Restoration Targets Peer Review implements several Priority actions including: FW-1, FW-F and SG-N.

Habitat Resiliency to Climate Change in the CHNEP Study Area

CHNEP staff, to be completed by September 2017

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.

CHNEP 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.

5.0 Advocacy and Legislation

Objective: To provide a structure for pursuing legislative action to support the implementation of the *Comprehensive Conservation and Management Plan* (CCMP). To implement the Advocacy and Review Procedures adopted in February 2003. To provide federal consistency review as required by EPA and comply with existing federal consistency review process of the State Clearinghouse.

Project Objective: Several priority actions of the CCMP necessitate legislative changes. Funding under this task goes toward staff support to identify needed legislation, to track legislation at the state and federal levels, and draft support letters and comments to rulemakings for review by the Management Conference. Review and commenting on proposed legislation and rules has been identified as a key function of the CHNEP Management Conference. Since adoption of the Advocacy and Review Procedures on February 21, 2003, CHNEP has submitted over 60 letters of either support or comment to other agencies. Funding under this task goes toward staff support to review proposed rules and draft letters requesting modification.

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. The Legislative Agenda is updated and revised to reflect the current and anticipated legislative opportunities for CHNEP to ensure that the CCMP is considered by elected officials when policy and funding decisions are being made. Moreover, with the updating of the CCMP in 2013, the Legislative Agenda is more dynamic. The Legislative Agenda is presented to policy-makers and decision-makers annually. Membership with the Association of National Estuary Programs (ANEP) and attendance at its meetings is encouraged by EPA. A portion of the \$4,500 dues is not eligible for EPA funding. Finally, this task also supports the Legislative Subcommittee.

The Management Conference developed a list of major categories of actions that may require CHNEP review, comment or letters of support. Staff will continue to develop letters of review, comment, support and inquiry as directed by the Management Conference. Based on the Advocacy and Review Procedures, eleven categories of actions include:

- Environmental Land Acquisition and Conservation
- Water Quality rules
- Hydrology rules
- Changes in structures specified in HA-4
- Projects which improve water quality of Lake Hancock and the water exiting the lake
- Projects which significantly affect at least one of the habitats listed in FW-1
- Projects which significantly affect hydrology in sub-basins
- Rules which reduce propeller damage to seagrass beds
- Projects that remove invasive exotic species
- Legislation that restricts citizen participation on environmental issues
- General permits affecting waterways
- Review of local comprehensive plans for implementation of the CCMP
- Participation in development of the Management Plan for the Babcock Ranch Preserve.

In FY15, the CHNEP submitted a letter to 17 state legislators requesting consideration of the voters' intent when enacting enabling legislation for Amendment 1. Also in FY15, the CHNEP submitted letters supporting partner requests for funding to Federal and State agencies, and supported acquisition of lands that enhance restoration projects.

CCMP Priority Problem Addressed: All	
Potential Partners: Management Conference Members, elected officials, state and federal agencies.	
FY16 Deliverables: <ul style="list-style-type: none"> ▪ Present agenda to State and Federal Legislative Officials throughout the CHNEP study area ▪ Tracking of relevant legislation ▪ Florida Estuaries Alliance initiative ▪ Letters of support as appropriate to legislators and policy makers ▪ ANEP membership ▪ Revised Legislative Agenda ▪ Review, Comment, Support and Inquiry Letters ▪ Public Testimony ▪ Review of at least 2 Comprehensive Plan Updates 	Target Dates: <ul style="list-style-type: none"> ▪ Nov. 2015 – Sept. 2016 ▪ As Appropriate ▪ As Appropriate, reports to Conference ▪ As appropriate ▪ As Opportunities Arise ▪ January 2016 ▪ Spring 2016 ▪ As required ▪ As appropriate ▪ By end of FY16
FY17 Deliverables: <ul style="list-style-type: none"> ▪ Present agenda to State and Federal Legislative Officials throughout the CHNEP study area ▪ Tracking of relevant legislation ▪ Florida Estuaries Alliance ▪ Letters of support to legislators and policy makers ▪ ANEP membership ▪ Revised Legislative Agenda ▪ Review, Comment, Support and Inquiry Letters ▪ Public Testimony 	Target Dates: <ul style="list-style-type: none"> ▪ November 2016 – Sept. 2017 ▪ Year-round; and March through July for Florida ▪ As Appropriate, reports to Conference ▪ As appropriate ▪ February 2017 ▪ Spring 2017 ▪ As required ▪ As appropriate
Budget: \$6,525 for staff, \$1,834 for fringe, and \$4,500 ANEP Dues	
Intermediate Outcomes: CHNEP and the CCMP is recognized and utilized as a resource by legislators (local, state and Federal) and their staff. Submission of Management Conference comments, remarks and suggested language in response to proposed rules and legislation	
Long Term Outcomes: 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 comments, revisions into adopted rules and legislation.	

FY15 Completed Major Projects and Actions

Fiscal Year 2015 was a year of endings, we completed a number of long standing projects, and beginnings - settling in to new office space, new processes and new field work and began two major projects: "Mangrove Heart Attack," and Morgan Park Shoreline and Habitat Shoreline Restoration. Depicted below are five major projects and actions CHNEP accomplished in FY15.

1) The CHNEP submitted its **Performance Evaluation (PE)** package to US EPA for the periodic in-depth review of program performance and accomplishments. In May, the CHNEP hosted the US EPA for 2-days of site visits, showcasing some of our Conference's outstanding projects which implement the CCMP. The US EPA representatives presented its findings to the Policy Committee on May 15, 2015. The CHNEP passed its PE and was provided with guidance for new and supplemental programmatic opportunities: enhanced leadership role in water quality and enhanced environmental justice efforts. The US EPA identified a single program challenge for the CHNEP to address: website enhancements.

2) The CHNEP Management Conference completed the **Research Needs Inventory** revisions and update. The CHNEP Comprehensive Conservation Management Plan (CCMP) Priority Action SG-N calls to "Update comprehensive inventories of research, restoration, legislative, and outreach needs."

At the March meeting, the Policy Committee directed staff to issue the research needs survey for the Management Conference members to complete by April 6. The 2007 consideration of research and monitoring priorities had 25 survey respondents and 159 project choices. The 2015 survey had 43 respondents and 276 project choices.

The purpose of a Research Needs Inventory, past CHNEP research funding and the 2015 research and monitoring priorities was documented. The top choices for consideration include:

- **HA-A:** Study the effects of freshwater releases on key estuarine components (e.g. SAV, oysters, and fish).
- **SG-K:** Present scientific information so that is easily understood by people.
- **WQ-B:** Assess accuracy and sufficiency of water quality data in Charlotte, Hardee, DeSoto, and Polk Counties.
- **FW-J:** Cost benefit analysis comparing land acquisition and easements keeping lands in low impact agriculture versus creation of new infrastructure for developments in rural areas, include single-family ranchettes.
- **SG-C:** Inventory and evaluate outreach efforts in underserved (rural, poor, minority) communities.
- **WQ-B:** Continued monthly water quality monitoring through the CCHMN.
- **HA-A:** Determine the natural variation of flow in the Caloosahatchee, Peace, Myakka, and Estero Rivers and analyze the amount of time the flows are outside the range.
- **FW-A:** Coordinating the Biennial Seagrass Mapping for total study area consistency.

3) At the request of the Management Conference, the CHNEP hosted a one-day retreat in September 2015. The overall meeting objective was: Participants at the 20-year Retreat will exchange ideas and develop consensus regarding leadership roles the Management Conference and staff may assume to most effectively implement the Comprehensive Conservation and Management Plan (CCMP). The retreat outcomes were:

- Reflection on the accomplishments of the Charlotte Harbor National Estuary Program (CHNEP) Management Conference since 1995 and CHNEP's role in those accomplishments.
- Understanding of the CHNEP's place within the broader context of the Clean Water Act and the National Estuary Program, including the varied leadership roles of NEPs across the Country.
- Listing of the areas where the CHNEP Management Conference and staff have taken leadership in the past and areas where CHNEP could take leadership in the future.
- Identification of the top priority leadership roles the CHNEP Management Conference and staff should assume in the future.

The top 5 priority leadership roles identified at the Retreat:

- Climate Change - Climate change adaptation planning throughout watershed
- Outreach - Outreach in general
- Advocacy - Change CHNEP footprint to include Caloosahatchee and Lake Okeechobee
- Research - Connecting science to business results to demonstrate why this is important
- Advocacy - Advocacy in general

The results were presented to the CHNEP Management Conference during the October/November 2015 meeting cycle.

4) The CHNEP **Water Atlas Enhancements Project** is a FY13 Workplan technical project. The purpose of the project is to enhance the CHNEP Water Atlas by adding a fecal coliform contour mapping tool, conducting trend analyses of three water quality parameters (chlorophyll *a*, total nitrogen and dissolved oxygen), four interactive program pages (Water Clarity Reporting Tool, CHNEP Volunteer Shoreline Survey, Pond Watch and Charlotte Harbor Flatwoods Initiative) and assisting in improving metadata and shapefiles. The tasks relating to three of the interactive program pages and metadata were previously completed. The interactive program pages are available on the CHNEP Water Atlas at:

- Volunteer Shoreline Survey- <http://www.chnep.wateratlas.usf.edu/shoreline-survey/>
- PondWatch - <http://www.chnep.wateratlas.usf.edu/pond-watch-program/>
- Charlotte Harbor Flatwoods Initiative - <http://chnep.wateratlas.usf.edu/charlotte-harbor-flatwoods-initiative/>

A CHNEP subcommittee was held March 30, 2015 to review the Time Series Analysis of Water Quality Variables and Water Clarity Reporting Tool. The tools were accepted by the subcommittee with suggestions for minor changes, which were incorporated into the products. Application of the final project deliverables will be demonstrated. An updated status of the project deliverables was presented at the TAC April 9, 2015 meeting for review and comment.

At the meeting, the TAC requested that the final deliverables be presented at the TAC July meeting for review and approval.

Since the July 9, 2015 TAC meeting, USF staff have completed all project deliverables related to the Water Atlas Enhancements project. The two remaining tasks were for the Water Clarity Report Card and the Water Quality Trend Analysis web pages. Both tasks have highly technical processes which are presented to the public via easy to understand web pages with clear indicators of health and trends.

Water Clarity Report Card - <http://www.chnep.wateratlas.usf.edu/water-clarity/>

An optical model was developed by Mote Marine Laboratory, in conjunction with Janicki Environmental, for 15 CHNEP bay and river segments. Using this model, the original report presented restoration and protection targets for each segment with data through 2011. USF has created an implementation of the model, tested it, collected recent data, and used its implementation of the model to update each segment's scores through 2013. 2014 data will be available once all bay segments have sufficient data.

Water Quality Trends - <http://www.chnep.wateratlas.usf.edu/trend-analysis/>

Building on the work by Janicki Environmental in calculating whether significant trends exist for fixed locations throughout the CHNEP study area, USF has finalized development of a webpage which presents the trend results using a dynamic map and gives users the ability to download the raw data. The webpage presents Total Nitrogen, Dissolved Oxygen, and Chlorophyll a (corrected) for both period of record and the most recent 10 years of data. Additionally, the page contains reference documents detailing how the analyses were performed and what methods were used. The trend analysis model utilizes a seasonal Kendall Tau trend test to determine whether a significant trend exists for each sampling location. USF's model implements the test using the EnvStats R package. Documentation and metadata for EnvStats is available on the web at: <http://cran.r-project.org/web/packages/EnvStats/index.html>

5) A FY12 EPA Wetland Program Development Grant provided funding support to the Southwest Florida Regional Planning Council (SWFRPC) to develop a functional assessment method to evaluate the water quality benefits of wetland restoration and designed freshwater ecosystems used for water quality treatment. The **Water Quality Functional Assessment Method (WQFAM)** is intended to be utilized to assess potential water quality improvement credits in Basin Management Action Plans (BMAPs) to address non-attainment of Total Maximum Daily Loads (TMDLs). The methodology was developed in coordination with an interagency technical review team ("A-Team"), which included representatives of the Florida Department of Environmental Protection, the South Florida and Southwest Florida Water Management Districts, local governments, and private sector water quality experts.

The main WQFAM project tasks included:

- Develop the technical review team.
- Technical team development of baseline background knowledge such as functional assessment methodology generally, and UMAM and HGM models appropriate to herbaceous depressional and flats wetlands.
- Agreement on the functions to be evaluated with the new methodology, the formal ways these functions are currently evaluated, and surrogates for these.

- Evaluations of model development sites using existing methods.
- Individual or agency sub-team site evaluations testing developed methodology.
- Team evaluation of results and model adjustment.
- Testing of updated model with EPA staff and outside practitioners.
- Visits to other restored/constructed systems in the study area to test methodology.
- Review of the final WQFAM method and project report by subject matter experts and acceptance of the deliverables by the CHNEP.

WQFAM team members developed an agreed-upon common baseline of knowledge about functional assessment methods. The new method was developed, focusing on biological and physical surrogates for water quality measurements, and then multiply tested. After calibration, the new method was retested to assure that the surrogates are applicable. EPA and state, local and private sector practitioners were invited to and participated in testing the new method. The FDEP basins included in the study area include Everglades West Coast, Charlotte Harbor, Sarasota Bay/Peace River/Myakka River Basin, Caloosahatchee, and Fisheating Creek.

The link to the WQFAM project information and deliverables is:

<http://www.swflregionalvision.com/wqfam.html>

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

WETPLAN: 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. WETPLAN 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 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. In addition, the WETPLAN 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, 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

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.

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.

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 RESTORE Act was passed by the Congress on June 29, 2012 and signed into law on July 6, 2012 by the President.

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. To foster the development of the State Expenditure Plan, enhance coordination and to also ensure consistency with the goals and objectives of the Gulf Coast Ecosystem Restoration Council's Draft Initial Comprehensive Plan: Restoring the Gulf Coast's Ecosystem and Economy, the Consortium has entered into a Memorandum of Understanding with Florida Governor Rick Scott.

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.”

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 FY17 Workplan is consistent with the above elements. (Pursuant to 40 CFR 35.9094)

Clean Water Act Funds Used for Travel

Travel funds are used for purposes such as travel to NEP Directors Meetings, National and state conferences, meetings with EPA staff in Atlanta and Washington D.C., and other overnight travel as needed. Funds support additional special travel and local travel, tolls and parking expenses; including travel that is ineligible for federal reimbursement.

Table 14: Completed and Projected Travel in FY16 (FY16 EPA Budget Sheet)

Date	Purpose	# Travelers	Location	Length of Stay	Travel Mode	Reg. Fee	Estimated Cost
Dec. 2015	ANEP Tech Transfer Meeting	1	Puerto Rico	4	Air	\$150	926.83
FY16	Learning Solutions Workshop	1	Orlando, FL	2	Auto	\$816	\$2,726
Jan-16	AWRA	1	Fort Myers, FL	1	Auto	\$75	\$75
Feb. 2016	NEP/EPA Spring Mtg.	2	Washington, DC	5	Air	\$300	\$1,744
Apr-16	NCER	1	Coral Springs, FL	4 days	Auto	\$595	\$1,262
May-16	NOAA Marine Debris	1	Baton Rouge, LA	3 days	Air	\$0	\$450
Jun-16	GOMA All Hands Meeting	1	Baton Rouge, LA	5 days	Air	\$0	\$1,350
FY16	Local Travel	4	Various	<1 day	Auto	\$100	\$6,466
	Total						\$15,000

Table 15: Projected Travel in FY17

Date	Purpose	# Travelers	Location	Length of Stay	Travel Mode	Reg. Fee	Estimated Cost
12/10-15/2016	ANEP Directors Meeting/RAE/TCS	2	New Orleans	6	Air	\$900	\$3,200
Nov. 2016	AWRA	1	Orlando, FL	4	Auto	\$900	\$1,400
FY17	Learning Solutions Workshop	1	Orlando, FL	2	Auto	\$816	\$2,700
Feb. 2017	AWRA	1	Fort Myers, FL	1	Auto	\$75	\$75
Feb-17	NEP/EPA Spring Mtg.	2	Washington, DC	4	Air	\$300	\$1,750
Spring 2017	GOMA	1	MS	4 days	Air	\$100	\$900
Spring 2017	Meet with Region 4 Staff	1	Atlanta, GA	3 days	Air	\$0	\$675
FY17	Local Travel	4	Various	<1 day	Auto	\$100	\$4,300
	Total						\$15,000