



## CHNEP Technical Advisory Committee

Thursday April 9, 2015

9:30 am – 4:00 pm

Circle B Bar Reserve – Polk Nature Discovery Center  
4399 Winter Lake Road/SR 540, Lakeland, FL 33803

Please RSVP for Meeting, Lunch & Circle B Bar Reserve Tour at: <http://doodle.com/fk9u5fkaay7mc7x4>

You may view & hear the meeting remotely through your PC via WebEx (we hope) at: [Join WebEx meeting](#)

### AGENDA

#### Networking & Coffee 9:15 am – 9:30 am

1. Call to Order and Introductions — Shelley Thornton, Co-Chair
2. Agenda Additions or Deletions — Shelley Thornton, Co-Chair
3. Public Comments on Agenda Items — Shelley Thornton, Co-Chair
4. Consent Agenda — Shelley Thornton, Co-Chair (page 3)
  - a. TAC February 12, 2015 Meeting Minutes  
*Action Item: Approve the minutes of the February 12, 2015 TAC meeting.*
  - b. CHNEP Management Conference Meeting Dates (page 5)  
*Action Item: Approve 2016 TAC meeting dates.*
5. CHNEP Draft FY16 Workplan Discussion — Lisa Beever, CHNEP (page 7)  
*Action Item: Recommend approval of the FY16 Workplan and FY15 Amendments.*
6. CHNEP Director Recruitment — Lisa Beever, CHNEP (page 59)  
*Action Item: Provide three most important characteristics for next director to have.*
7. CHNEP Restoration Needs Plan and Targets Peer Review SOW — Lisa Beever, CHNEP (page 61)  
*Action Item: Recommend approval of Restoration Needs Peer Review SOW & issue RFQ.*
8. CHNEP Research Needs Inventory — Lisa Beever, CHNEP (page 69)  
*Action Item: Recommend adoption of the Research Needs Ranking.*
9. Morgan Park Peace River Shoreline and Habitat Restoration Project SOW — Lisa Beever, CHNEP (page 71)  
*Action Item: Recommend approval of the Morgan Park Peace River Restoration SOW.*
10. Port Charlotte Water Quality Monitoring Plan — Lisa Beever, CHNEP (page 77)  
*Action Item: As determined by the TAC.*

**Lunch 11:35 am – 12:10 pm (provided; \$5 contribution suggested). RSVP <http://doodle.com/fk9u5fkaay7mc7x4>**

**Tram Tour of Circle B Bar Reserve 12:15 pm – 1:15 pm. RSVP <http://doodle.com/fk9u5fkaay7mc7x4>**

11. Water Atlas Water Quality Time Series and Water Clarity Reporting Tools — Shawn Landry, USF (page 79)  
*Action Item: Recommend approval of the Water Atlas Water Enhancements project deliverables.*
12. FY14 Coral Creek Restoration Fishery Monitoring — Phil Stevens, FWC (page 81)  
*Action Item: As determined by the TAC.*
13. Lake Hancock Outfall Projects — Lizanne Garcia, SWFWMD (page 83)
14. Polk County Lake Management Plans & Priorities — Hans Zarbock, Polk County (page 85)
15. Wingate East Mine Permitting Update & Offsite Mitigation Project — Shelley Thornton, Mosaic (page 87)
16. CHNEP Program Report – Staff, CHNEP (page 89)
  - a. Southwest Florida Oyster Working Group Subcommittee
  - b. Program Deliverables
17. Member Comments — Shelley Thornton, Co-Chair
18. Public Comments — Shelley Thornton, Co-Chair
19. Next Meeting's Topics, Location and Date — Thursday July 16, 2015 – Punta Gorda
20. Adjourn — Shelley Thornton, Co-Chair

#### THIS MEETING IS OPEN TO THE PUBLIC

Two or more members of the Everglades West and Caloosahatchee Basin Working Groups may be in attendance and may discuss matters that could come before the respective body.



## CHNEP Technical Advisory Committee

Thursday April 9, 2015

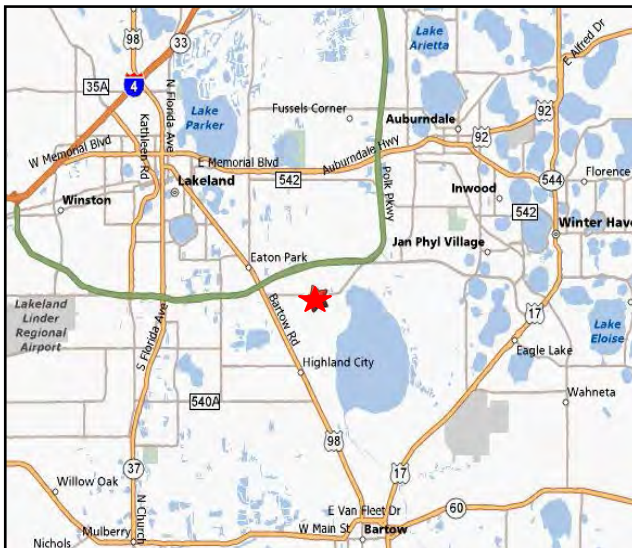
9:30 am – 4:00 pm

Circle B Bar Reserve – Polk Nature Discovery Center  
4399 Winter Lake Road/SR 540, Lakeland, FL 33803

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### DIRECTIONS TO CIRCLE B BAR RESERVE

**Simplified directions:** For more detailed directions, please consult a mapping program.



#### From the North and East via I-75 and I-4:

- Take I-75 south to Exit 261/I-4 East toward Lakeland.
- Take I-4 east 18 miles to Exit 27/Polk Parkway & turn right (southeast) toward Lakeland.
- Take Polk Parkway southeast 10 miles to Exit 10/US-98 & turn right (south) toward Bartow.
- Take US-98 south approximately .2 miles to Winter Lake Road & turn left (east).
- Take SR 540/Winter Lake Drive east 1.8 miles to the Circle B Bar Reserve & Nature Discovery Center.

#### From the East via SR-60:

- Take SR-60 east to SR-37 in Mulberry & turn left (north).
- Take SR-37 north 7 miles to Polk Parkway & turn right (east) toward Lakeland.
- Take Polk Parkway southeast 3 miles to Exit 10/US-98 & turn right (south) toward Bartow.
- Take US-98 south approximately .2 miles to Winter Lake Road & turn left (east).
- Take SR 540/Winter Lake Drive east 1.8 miles to the Circle B Bar Reserve & Nature Discovery Center.

#### From the South via I-75 and US-17:

- Take I-75 north to Exit 164/US-17 north & turn right (north) toward Arcadia.
- Take US-17 north through Bartow to US-98/Van Fleet Drive & turn left (west).
- Take US-98/Van Fleet Dr. west about .8 miles to US-98/Broadway Ave. & turn right (north).
- Take US-98 north 7.3 miles to SR 540/Winter Lake Drive & turn right (east).
- Take SR 540/Winter Lake Drive east 1.8 miles to the Circle B Bar Reserve & Nature Discovery Center.

**4A. MINUTES OF FEBRUARY 12, 2015 TAC MEETING**

The February 12, 2015 TAC draft meeting minutes are will be provided under separate cover.

**Recommendation:** Motion to approve the minutes from February 12, 2015 TAC meeting.

**Attachment:** Draft minutes for the February 12, 2015 TAC meeting will be provided under separate cover.



**4B. CHNEP MANAGEMENT CONFERENCE 2016 MEETING DATES**

As in the past, the Management Conference routinely sets committee meeting dates for the coming year. In order for these dates to be included on the 2016 CHNEP Calendar later this fall, we are asking the TAC to consider the 2016 meeting dates now. Meeting locations will be determined in the near future. Please refer to the attached CHNEP 2016 Management Conference Meeting Dates Draft for TAC Review.

**Recommendation:** Motion to approve the 2016 TAC meeting dates.

**Attachment:** CHNEP Management Conference 2016 Meeting Dates.

**Draft Charlotte Harbor National Estuary Program  
Management Conference 2016 Meeting Dates  
Locations to be determined.  
(as of 4/2/15)**

1/13/2015: Considering meeting locations in Manatee, DeSoto, Charlotte and Lee counties.  
3/10/2015: Policy Committee had been set on third Thursday rather than second, corrected.  
3/10/2015: Moved CAC one week earlier for July cycle, as in 2015.

**Policy Committee**

Thursday, March 10, 2016, 1:30 p.m. to 4:30 p.m.  
Thursday, May 12, 2016, 1:30 p.m. to 4:30 p.m.  
Thursday, August 11, 2016, 1:30 p.m. to 4:30 p.m.  
Thursday, November 10, 2016, 1:30 p.m. to 4:30 p.m.

**Management Committee**

Friday, February 19, 2016, 9:30 a.m. to 12:30 p.m.  
Friday, April 29, 2016, 9:30 a.m. to 12:30 p.m.  
Friday, July 29, 2016, 9:30 a.m. to 12:30 p.m.  
Friday, October 28, 2016, 9:30 a.m. to 12:30 p.m.

**Citizens Advisory Committee**

Wednesday, February 17, 2016 from 10 a.m. to noon  
Wednesday, April 20, 2016 from 10 a.m. to noon  
Wednesday, July 27, 2016 from 10 a.m. to noon  
Wednesday, July 27, 2016 afternoon (to develop calendar)  
Wednesday, October 19, 2016 from 10 a.m. to noon

**Technical Advisory Committee and Science Forum**

Thursday, February 11, 2016 from 9:00 a.m. to ?  
Thursday, April 14, 2016 from 9:00 a.m. to ?  
Thursday, July 21, 2016 from 9:00 a.m. to ?  
Thursday, October 13, 2016 9:00 a.m. to ?

**TAC Packet Information Due Dates**

Thursday, February 4, 2015  
Thursday, April 7, 2015  
Thursday, July 14, 2015  
Thursday, October 6, 2015

**2016 Event Dates**

Saturday, February 20, 2016	Conservation Landscaping Workshop for residents of Hardee, DeSoto and Highlands counties
Saturday, November 19, 2016	Charlotte Harbor Nature Festival

## **5. CHNEP DRAFT FY16 WORKPLAN DISCUSSION**

The FY16 Workplan with FY15 amendments is the first workplan drafted after moving to the City of Punta Gorda as the CHNEP host agency. To facilitate the transition from the Southwest Florida Regional Planning Council to the City of Punta Gorda, all public outreach projects and all but five technical projects were closed out at the end of FY14. The balance of technical projects carried to the City totaled \$182,760. Cash returned by the SWFRPC totaled \$72,424.36 and un-invoiced SWFWMD contracts totaled \$95,080.00, providing a positive balance of \$15,255.64 going forward into FY15.

The draft workplan was presented at the Committee's February meeting. Changes since that presentation include the addition of a Peer Review of the draft Restoration Plan Update targets, and an additional \$24,711 from EPA to support WETPLAN. As a result, staff hours, travel, departmental materials and technical projects were adjusted. The Draft Workplan was entered into the City's Budgeting system, including FY16 and FY15 amendments. CHNEP staff proofed values entered by the City staff and City staff added new project codes to better accommodate CHNEP's needs. In addition, CHNEP staff could easily (and at will) review and evaluate spending to date to verify sufficient funds are available through the fiscal year.

The reserve rolling into FY17 is currently estimated at \$80,650. In order to insure that the reserves are local dollars, a Quality Assurance/Quality Control Plan will need to be submitted and approved by EPA concerning the CCHMN-Lower Charlotte Harbor project.

**Recommendation:** Motion to recommend that the Management Conference approve the FY16 Workplan and FY15 Amendments.

**Attachment:** Draft FY16 Workplan and FY15 Amendments.





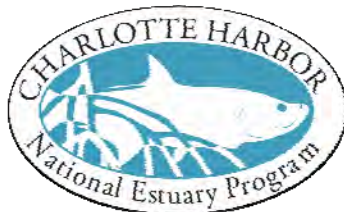
# **FISCAL YEAR 2016 WORKPLAN & Fiscal Year 2015 Workplan Amendments**



Credit: [www.puntagordadailyphoto.com](http://www.puntagordadailyphoto.com)

The City of Punta Gorda became the fiscal host of the Charlotte Harbor National Estuary Program Office will be hosted by City of Punta Gorda beginning October 1, 2014. The CHNEP Office is now at historic City Hall.

## **Charlotte Harbor National Estuary Program Technical Report 15-1 Draft: 3/30/2015**



326 W. Marion Avenue  
Punta Gorda, FL 33950  
(941) 575-6090  
[www.CHNEP.org](http://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

**Mr. Doug Mundrick, Co-Chair**  
Water Protection Division  
U. S. Environmental Protection Agency, Region 4

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

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**Hon. Adrian Jackson**  
City of Bartow

**Hon. Stephen McIntosh**  
City of Bonita Springs

**Ms. Connie Jarvis**  
City of Cape Coral

**Vacant**  
City of Fort Myers

**Hon. Dan Andre**  
Town of Fort Myers Beach

**Hon. Cheryl Cook**  
City of North Port

**Hon. Nancy Prafke**  
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**Hon. Mick Denham**  
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**Hon. Emilio Carlesimo**  
City of Venice

**Mr. Mike Britt**  
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**Vacant**  
Desoto County

**Hon. Grady Johnson**  
Hardee County

**Hon. Larry Kiker**  
Lee County

**Hon. Robin DiSabatino**  
Manatee County

**Mr. Jeff Spence**  
Polk County

**Hon. Charles Hines**  
Sarasota County

### **Agencies**

**Ms. Patricia M. Steed**  
Central Florida Regional Planning Council

**Dr. Philip Stevens**  
Florida Fish & Wildlife Conservation Commission

**Mr. Phil Flood**  
South Florida Water Management District

**Mr. Don McCormick**  
Southwest Florida Regional Planning Council

**Mr. George Mann**  
Southwest Florida Water Management District

## Management Committee Co-Chairs

**Ms. Jennette Seachrist**  
Southwest Florida Water Management District

**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**

## Staff

**Lisa B. Beever, PhD**, Director

**Elizabeth S. Donley, JD**, Deputy Director

**Maran Brainard Hilgendorf**, Communications Manager

**Judy Ott, MS**, Program 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
SFWWMD	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
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 workplans is the National Estuary Program FY 2012 Funding Guidance. According to the guidance, NEP Workplans generally include the following items:

1. Summary information
  - a. CCMP goals to be focused on
  - b. Budget breakdown including match
  - c. NEP staff and their official responsibilities
2. New and Ongoing Projects
  - a. Project Name
  - b. Whether it is New or Ongoing
  - c. Project objective
  - d. Project Description
  - e. CCMP and Workplan priority problem project addresses
  - f. Potential Partners
  - g. Outputs/Deliverables
  - h. Milestones
  - i. Budget
  - j. Anticipated Results
    - Short-term deliverables
    - Intermediate outcomes and long term outcomes
3. Completed Major Projects/Actions (including highly leveraged partner projects implementing CWA core program)
  - a. Highlight success stories and examples of transferable activities, tools, etc.
  - b. Include:
    - Project objective
    - Lead Project Implementer(s)
    - Amount of Sec. 320 funds spent on project (if under budget how reallocated for drawdown)
    - Project deliverables and outcomes
    - External constraints
4. CWA funds used for travel (New fiscal year is not required.)
  - a. Section 320 funded travel taken during the fiscal year in which the new workplan is adopted (i.e. the amended year), October 1 to the date the workplan is approved by the Management Conference and the remainder of the FY. Information includes:
    - Number of personnel
    - Travel dates
    - Purpose
    - Location
    - Final and Estimated Cost of trips

## Summary Information

### CCMP Goals Focused On 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 quantifiable objectives that CHNEP will focus on in FY15 and FY 16 include:

- **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 are working 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 will 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. RESTORE Act funding will be sought.
- **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 work with The Nature Conservancy toward permitting and constructing oyster reefs restoration. CHNEP will prepare a comprehensive Restoration Needs Plan Update.
- **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 will develop its Watershed Education and Training for Ponds, Lawns and Neighborhoods (WET PLAN) program to assist neighborhood groups with their stormwater pond management and building green infrastructure.
- **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 will continue to implement its advocacy and review procedures by reviewing and providing comments on critical projects. CHNEP will continue working with local governments to address climate change resiliency.

## Budget Breakdown

**Table 1: Charlotte Harbor NEP FY15 and FY16 Income**

Funding Source	Approved FY14 Funding	FY15 Request	Approved FY15 Funding	FY16 Request
Section 320 Funding	\$512,000.00	\$538,000.00	\$538,000.00	\$600,000.00
GI/LID Project - WETPLAN			\$24,711.00	
<b>Total Federal Income</b>	<b>\$512,000.00</b>	<b>\$538,000.00</b>	<b>\$562,711.00</b>	<b>\$600,000.00</b>
DEP	\$74,997.85	\$75,000.00	\$74,998.40	\$75,000.00
SFWMD	\$200.00	\$130,000.00	\$0.00	\$130,000.00
SWFWMD	\$130,000.00	\$130,000.00	\$130,000.00	\$130,000.00
Peace Manasota Water Supply Authority	\$3,500.00	\$5,000.00	\$3,500.00	\$5,000.00
<b>Subtotal Regional Income</b>	<b>\$208,697.85</b>	<b>\$340,000.00</b>	<b>\$208,498.40</b>	<b>\$340,000.00</b>
Sarasota County	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00
Charlotte County	\$30,000.00	\$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
Cape Coral	\$7,500.00	\$7,500.00	\$7,500.00	\$7,500.00
Fort Myers	\$7,500.00	\$7,500.00	\$7,500.00	\$7,500.00
Manatee County	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00
Punta Gorda	\$2,500.00	\$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	\$2,500.00	\$2,500.00
Venice		\$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
Hardee County	\$500.00	\$500.00	\$500.00	\$500.00
Arcadia		\$500.00		\$500.00
Bartow		\$500.00		\$500.00
DeSoto County		\$500.00		\$500.00
<b>Subtotal Local Income</b>	<b>\$101,500.00</b>	<b>\$108,500.00</b>	<b>\$107,500.00</b>	<b>\$109,000.00</b>
CF Industries	\$2,000.00			
Mosaic Company Foundation	\$50,000.00	\$40,000.00	\$40,000.00	\$40,000.00
NARC Grant	\$4,000.00			
EPA WPDG - Mangrove			\$150,283.00	
Resources on hand, end of 15			\$72,424.36	
Un-invoiced SWFWMD, end 15			\$95,080.00	
Carry-over, end of FY15				\$31,118.80
<b>Subtotal Grants and Deferred</b>	<b>\$56,000.00</b>	<b>\$40,000.00</b>	<b>\$357,787.36</b>	<b>\$71,118.80</b>
Match In-Kind: SFWMD	\$512,000.00	\$538,000.00	\$562,711.00	\$600,000.00
<b>Subtotal In-Kind</b>	<b>\$512,000.00</b>	<b>\$538,000.00</b>	<b>\$562,711.00</b>	<b>\$600,000.00</b>
<b>Fiscal Year Grand Total</b>	<b>\$1,390,197.85</b>	<b>\$1,565,000.00</b>	<b>\$1,799,207.76</b>	<b>\$1,720,118.80</b>
<b>Program Cash</b>	<b>\$878,197.85</b>	<b>\$1,027,000.00</b>	<b>\$1,236,496.76</b>	<b>\$987,117.20</b>
<b>End of FY16 Reserve</b>				<b>\$80,651.85</b>



## FY15 Budget Amendment

Major changes within the amended FY14 budget included:

- Carry-over amounts from FY13 contracts were added, totaling \$182,760.
- Mosaic Foundation granted CHNEP \$40,000 to begin Morgan Park Restoration.
- Mangrove Heart Attack project required more staff time at the expense of other tasks.
- EPA awarded \$24,711 to support WETPLAN.
- Travel was combined into one expense to simplify fiscal tracking.
- SWFRPC retained \$20,000 of FY14 funds to pay for FY15 Audit, so the expense is no longer shown in the FY15 budget.
- Peer Review of Restoration Targets was added to the FY15 budget.

**Table 2: Budget Changes between  
FY15 Budget (amended 8/25/14) and FY15 Budget Amendment (page 5)**

Task #	Task	Personnel	Fringe	Travel	Other	Total
1	Management & Admin.	(\$17,818)	(\$3,995)	\$9,500	(\$15,421)	(\$27,734)
2	Public Outreach	(\$5,983)	(\$842)	(\$3,000)	\$3,000	(\$6,825)
3	Research	\$33,152	\$13,367	(\$2,000)	\$202,340	\$246,859
4	Restoration	(\$9,260)	(\$2,111)	(\$4,000)	\$40,000	\$24,628
5	Advocacy & Leg Action	\$1,060	\$215	\$0	\$0	\$1,275
	<b>Total</b>	\$1,151	\$6,633	\$500	\$234,119	\$238,203

**Table 3: Ongoing Technical Projects (as of 10/1/14)**

Fiscal Year	Project/Contractor	Due Date	Contract	Outlay	Balance
2013	CHNEP FY13 Water Atlas Enhancements - USF	9/30/2015	\$61,112.00	\$45,132.00	\$15,980.00
2013	CHNEP FY13 Numeric Nutrient Criteria for Tidal Creeks - SBEP	9/30/2015	\$31,000.00	\$9,300.00	\$21,700.00
2014	CHNEP FY14 Coastal Charlotte Harbor Monitoring Network Upper - FWC & Charlotte County	9/30/2015	\$55,080.00	\$0.00	\$55,080.00
2014	CHNEP FY14 Coral Cr Restoration Fish Monitoring - FWC	9/30/2015	\$40,000.00	\$0.00	\$40,000.00
2014	CHNEP FY14 Coral Cr Restoration Juvenile Fish Monitoring - BTT	9/30/2015	\$50,000.00	\$0.00	\$50,000.00
	<b>Subtotal =</b>		<b>\$248,712.00</b>	<b>\$99,383.05</b>	<b>\$149,328.95</b>
	<b>TOTAL</b>		<b>\$237,192.00</b>	<b>\$54,432.00</b>	<b>\$182,760.00</b>

**Table 4: Ongoing Public Outreach Projects**

Fiscal Year	Project/Contractor	Due Date	Balance
2014	All Public Outreach Projects closed out at the end of the fiscal year.	N/A	\$0.00
	<b>Total=</b>		<b>\$0.00</b>

**Outlay=Amount expended on project as of September 30, 2013.**

**Contract= Contracted amount.**

**Balance=Unexpended amount left on contract.**

**Table 5: FY15 Workplan Budget Amendment**

<b>Task #</b>	<b>Task</b>	<b>Personnel</b>	<b>Fringe</b>	<b>Travel</b>	<b>Other</b>	<b>Total</b>
1	Mgmt. Conference	\$123,382	\$41,205	\$15,500	\$117,704	\$297,791
2	Outreach	\$51,117	\$17,458		\$165,850	\$234,425
3	Research	\$67,352	\$24,267		\$456,340	\$547,959
4	Restoration	\$54,540	\$18,289		\$40,000	\$112,828
5	Legislation	\$6,060	\$1,815		\$4,500	\$12,375
<b>Total</b>		<b>\$302,451</b>	<b>\$103,033</b>	<b>\$15,500</b>	<b>\$784,394</b>	<b>\$1,205,378</b>

**Table 6: FY15 EPA Cooperative Agreement**

<b>Task #</b>	<b>Task</b>	<b>Personnel</b>	<b>Fringe</b>	<b>Travel</b>	<b>Other</b>	<b>Total</b>
1	Mgmt. Conference	\$141,200	\$45,200	\$15,000	\$109,730	\$311,130
2	Outreach	\$57,100	\$18,300		\$134,315	\$209,715
3	Research					
4	Restoration	\$18,665	\$5,653	\$500	\$17,048	\$41,866
5	Legislation					
	In-Kind				\$562,711	\$562,711
<b>Total</b>		<b>\$211,335</b>	<b>\$67,620</b>	<b>\$15,000</b>	<b>\$782,045</b>	<b>\$1,125,422</b>

**Table 7: FY15 SWFWMD Contract**

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

**Table 8: FY16 Workplan Budget**

<b>Task #</b>	<b>Task</b>	<b>Personnel</b>	<b>Fringe</b>	<b>Travel</b>	<b>Other</b>	<b>Total</b>
1	Mgmt. Conference	\$143,011	\$46,996	\$15,000	\$111,386	\$316,393
2	Outreach	\$52,651	\$17,992		\$162,850	\$233,493
3	Research	\$63,449	\$23,754		\$115,080	\$202,283
4	Restoration	\$46,166	\$15,520		\$80,000	\$141,686
5	Legislation	\$6,241	\$1,870		\$4,500	\$12,611
<b>Total</b>		<b>\$311,518</b>	<b>\$106,132</b>	<b>\$15,000</b>	<b>\$473,816</b>	<b>\$906,465</b>

**Table 9: FY16 EPA Cooperative Agreement**

<b>Task #</b>	<b>Task</b>	<b>Personnel</b>	<b>Fringe</b>	<b>Travel</b>	<b>Other</b>	<b>Total</b>
1	Mgmt. Conference	\$143,011	\$46,996	\$15,000	\$111,386	\$316,393
2	Outreach	\$41,655	\$14,160		\$157,184	\$212,999
3	Research	\$7,709	\$2,899		\$60,000	\$70,609
4	Restoration					
5	Legislation					
	In-Kind				\$600,000	\$600,000
		<b>\$192,375</b>	<b>\$64,055</b>	<b>\$15,000</b>	<b>\$928,570</b>	<b>\$1,200,000</b>

**Table 10: FY16 Proposed SWFWMD Contract**

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

Table 11 represents the individual public education and information projects that will be addressed, in FY15 and FY16. No earlier projects were completed by September 30, 2014.

**Table 11: Summary Public Education and Information Projects List  
(for FY15 and FY16)**

<b>FY</b>	<b>Code</b>	<b>Title</b>	<b>Amount</b>
2015	CH2ADV	CHNEP Adventures in the Charlotte Harbor Watershed	\$9,428.00
2015	CH2AST	CHNEP Outreach assistance	\$5,000.00
2015	CH2CA	CHNEP Citizens Academy	\$35,000.00
2015	CH2CAL	CHNEP Calendar	\$21,572.00
2015	CH2COL	CHNEP collateral, etc.	\$2,500.00
2015	CH2HH	CHNEP <i>Harbor Happenings</i>	\$26,000.00
2015	CH2MIC	CHNEP Micro-grants	\$12,000.00
2015	CH2POG	CHNEP Public Outreach Grants	\$13,583.00
2015	CH2TAR	CHNEP Target audience programs	\$37,767.00
2015	CH2TNF	CHNEP Charlotte Harbor Nature Festival	\$2,500.00
2015	CH2TRA	CHNEP professional development/training workshops	\$500.00
<b>Subtotal =</b>			<b>\$165,850.00</b>
2016	CH2ADV	CHNEP Adventures in the Charlotte Harbor Watershed	\$9,500.00
2016	CH2AST	CHNEP Outreach assistance	\$5,000.00
2016	CH2CA	CHNEP Citizens Academy	\$22,350.00
2016	CH2CAL	CHNEP Calendar	\$23,000.00
2016	CH2COL	CHNEP collateral, etc.	\$5,000.00
2016	CH2HH	CHNEP <i>Harbor Happenings</i>	\$28,000.00
2016	CH2MIC	CHNEP Micro-grants	\$12,000.00
2016	CH2POG	CHNEP Public Outreach Grants	\$30,000.00
2016	CH2TAR	CHNEP Target audience programs	\$25,000.00
2016	CH2TNF	CHNEP Charlotte Harbor Nature Festival	\$2,500.00
2016	CH2TRA	CHNEP professional development/training workshops	\$500.00
<b>Subtotal =</b>			<b>\$162,850.00</b>
<b>Total=</b>			<b>\$328,700.00</b>

Table 12 represents the individual technical projects that will be addressed in FY14 (totaling \$204,260), plus carry-over projects as of October 1, 2013 (\$206,598) and FY15 (totaling \$179,000). Projects in the two fiscal years total \$589,849.

**Table 12: Summary Technical Projects List  
(for FY14 and FY15)**

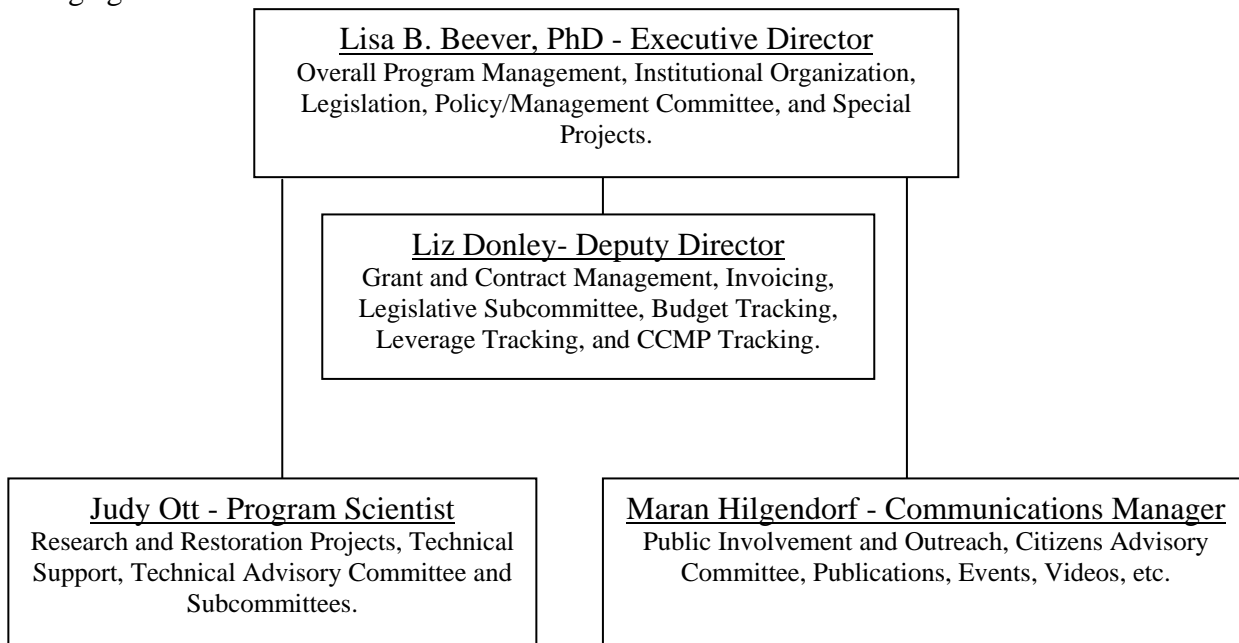
	<b>FY</b>	<b>Project Title</b>	<b>Amount</b>
2014	CH14BT	CHNEP FY2014 BTT Juvenile fish monitoring	\$50,000.00
2014	CH14CC	CHNEP FY2014 Coral Creek Monitoring	\$40,000.00
2013	CH14TC	CHNEP FY2014 Tidal Creeks project	\$21,700.00
2014	CH14UP	CHNEP FY2014 CCHMN – Upper Charlotte Harbor	\$55,080.00
2013	CH14WA	CHNEP FY2014 Water Atlas Enhancements	\$15,980.00
<b>Subtotal =</b>			<b>\$182,760</b>
2015	CH3CDP	CHNEP SWFWMD Restoration Project	\$40,000.00
2015	CH3CMN	CHNEP CCHMN-Upper Charlotte Harbor	\$55,080.00
2015	CH3LCH	CHNEP CCHMN-Lower Charlotte Harbor	\$10,000.00
2015	CH3MJB	CHNEP Mangrove Heart Attack-Jim Beever	\$60,000.00
2015	CH3MOR	CHNEP Morgan Park	\$40,000.00
2015	CH3MRL	CHNEP Mangrove Heart Attack-Robin Lewis	\$10,000.00
2015	CH3MTT	CHNEP Mangrove Heart Attack-Terry Tattar	\$5,000.00
2015	CH3WA	CHNEP Water Atlas Maintenance	\$50,000.00
2015	CH3WSP	CHNEP Watershed Summit Proceedings	\$19,000.00
2015	CH3WSP	CHNEP Restoration Target Peer Review	\$10,000.00
2015	CH3GI	CHNEP WETPLAN Green Infrastructure	\$14,500.00
<b>Subtotal =</b>			<b>\$313,580</b>
2016	CH3CMN	CHNEP CCHMN-Upper Charlotte Harbor	\$55,080.00
2016	CH3LCH	CHNEP CCHMN-Lower Charlotte Harbor	\$10,000.00
2016	CH3WA	CHNEP Water Atlas Maintenance	\$50,000.00
2016	CH4MO	CHNEP Morgan Park	\$40,000.00
2016	CH4SWD	CHNEP SWFWMD Restoration Project	\$40,000.00
<b>Subtotal =</b>			<b>\$195,080</b>
<b>Total =</b>			<b>\$691,420</b>

**Table 13: Summary Overhead Estimates**

<b>FY</b>	<b>Code</b>	<b>Project Title</b>	<b>Amount</b>
2015	CH1COM	CHNEP Communications	\$600.00
2015	CH1MAT	CHNEP Department Materials and Supplies	\$6,748.00
2015	CH1OAD	CHNEP Overhead Administrative Charges	\$81,500.00
2015	CH1OCP	CHNEP Overhead Computer	\$14,000.00
2015	CH1ORN	CHNEP Overhead Office Rent	\$3,425.00
2015	CH1PRO	CHNEP Promotional Activities-Meeting Support	\$5,000.00
2015	CH1REG	CHNEP Meeting Registration	\$2,031.00
2015	CH1SER	CHNEP Services-Unanticipated Costs	\$2,760.00
2015	CH1SOF	CHNEP Computer Software	\$1,640.00
2015	CH5ANP	CHNEP ANEP Dues	\$4,500.00
<b>Subtotal =</b>			<b>\$122,204</b>
2016	CH1COM	CHNEP Communications	\$600.00
2016	CH1MAT	CHNEP Department Materials and Supplies	\$3,000.00
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	\$4,500.00
2016	CH1REG	CHNEP Meeting Registration, under travel	\$2,661.00
2016	CH1SER	CHNEP Services-Unanticipated Costs	\$1,000.00
2016	CH5ANP	CHNEP ANEP Dues	\$4,500.00
<b>Subtotal =</b>			<b>\$115,186</b>
<b>Total =</b>			<b>\$233,142</b>

## 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 14: Expected Staff Time Allocations by Task for FY15**

ProjCode	Title	Lisa	Liz	Maran	Judy	Hours
CHEPA1	Management Conference	526	794	250	330	1900
CHEPA1	Leave	354	354	354	354	1416
CHEPA2	Outreach	30	0	1182	0	1212
CHDEP2	Outreach-DEP	50	0	250	0	300
CHDEP3	Research-DEP	200	0	0	325	525
CHSWF3	Research-SWF	231	250	0	212	693
CHDEP4	Restoration-DEP	221	310	0	175	706
CHEPA4	Restoration-EPA	210	260	0	300	770
CHLOC5	Advocacy & Legislative Action	32	120	0	0	152
CHWP15	Mangrove Heart Attack	235	0	52	392	678
Total		2088	2088	2088	2088	8352

**Table 15: Expected Staff Time Allocations by Task for FY16**

ProjCode	Title	Lisa	Liz	Maran	Judy	Hours
CHEPA1	Management Conference	582	1154	250	300	2286
CHEPA1	Leave	354	354	354	354	1416
CHEPA2	Outreach	30	0	1182	0	1212
CHDEP2	Outreach-DEP	50	0	250	0	300
CHDEP3	Research-DEP	170	0	0	325	495
CHEPA3	Research-EPA	100	0	0	102	202
CHDEP4	Restoration-DEP	160	260	0	160	580
CHSWF4	Restoration-SWF	219	200	0	195	614
CHLOC5	Advocacy & Legislative Action	32	120	0	0	152
CHWP15	Mangrove Heart Attack	391	0	52	652	1095
Total		2088	2088	2088	2088	8352

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.

With the expected budget modification, hours under “Mangrove Heart Attack” may be carried to the early part of FY17.



## New and Ongoing Projects

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

- Task 1: Management Conference
  - 1.1 Management Conference
  - 1.2 General Administration and Overhead
  - 1.3 Grants and Contracts Administration
- Task 2: Outreach
  - 2.1 Communications/Publications
  - 2.2 Events/Outreach
  - 2.3 Public Outreach Grants
  - 2.4 Micro-Grants
- Task 3: Research
  - 3.1 Research Coordination
  - 3.2 Targeted Research
- Task 4: Restoration
  - 4.1 Watershed Coordination
  - 4.2 Targeted Restoration
- Task 5: Legislative Action
  - 5.1 Legislative Agenda
  - 5.2 Advocacy and Review Procedures
  - 5.3 Leveraged Grants

<b>1.1</b>	<b>Management Conference</b>	
<b>Objective:</b> To provide a committee structure that supports the implementation of the <i>Comprehensive Conservation and Management Plan (CCMP)</i> .		
<b>Project Objective:</b> 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).		
<b>Description:</b> The primary committees of the CHNEP include the Policy Committee, the Management Committee, the Technical Advisory Committee (TAC), and the Citizens Advisory Committee (CAC).		
<b>CCMP Priority Problem Addressed:</b> All		
<b>Potential Partners:</b> Organizations and committee members represented in the Management Conference.		
<b>FY15 Deliverables:</b> <ul style="list-style-type: none"> <li>▪ Agenda Packets for committees and subcommittees</li> <li>▪ Advertising and meeting space</li> <li>▪ Adoption of FY15 Workplan</li> <li>▪ Workplan Tracking System Update</li> <li>▪ Evidence of extending CHNEP partnership</li> <li>▪ Priority Action GPRA Report</li> <li>▪ Travel to EPA/ANEP meetings</li> <li>▪ Close –out of MOU with SWFRPC</li> <li>▪ Triennial Performance Evaluation</li> <li>▪</li> </ul>	<b>Target Dates:</b> <ul style="list-style-type: none"> <li>▪ Transmit and post one week before meeting</li> <li>▪ Advertise on-line minimum of one week preceding date</li> <li>▪ May 2015</li> <li>▪ September 30, 2015</li> <li>▪ September 2015</li> <li>▪ September 2015</li> <li>▪ November 2014 &amp; Feb. 2015</li> <li>▪ February 2015</li> <li>▪ January through April 2015</li> </ul>	
<b>FY15 Deliverables:</b> <ul style="list-style-type: none"> <li>▪ Agenda Packets for committees and subcommittees</li> <li>▪ Advertising and meeting space</li> <li>▪ Adoption of FY16 Workplan</li> <li>▪ Evidence of extending CHNEP partnership</li> <li>▪ Priority Action GPRA Report</li> <li>▪ Workplan Tracking System Update</li> <li>▪ Travel to EPA/ANEP meetings</li> </ul>	<b>Target Dates:</b> <ul style="list-style-type: none"> <li>▪ Transmit and post one week before meeting</li> <li>▪ Advertise on-line minimum of one week preceding date</li> <li>▪ September 2016</li> <li>▪ September 2016</li> <li>▪ September 2016</li> <li>▪ December 2015 and February 2016</li> </ul>	
<b>Budget:</b> \$100,000, staff and travel		
<b>Intermediate Outcomes:</b> 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.		
<b>Long Term Outcomes:</b> 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.		

<b>1.2</b>	<b>General Administration and Overhead</b>	
<b>Objective:</b> To support necessary administration of the CHNEP.		
<b>Project Objective:</b> National Estuary Program Management Conferences may choose to be hosted by another agency. This task provides the necessary funding for CHNEP to implement those policies and processes.		
<b>Description:</b> General administration includes general staff functions such as staff meetings. Activities required by the CHNEP Host Agency – City of Punta Gorda. Office space, utilities, IT support and financial/procurement/HR services. Supplies such as postage, rentals, telephone, computer/graphic supplies are included in this task. Unforeseen expenses that are at the Director’s discretion such as special computer equipment or software, training materials, subscriptions, memberships, etc. are included. The CHNEP was chosen in FY13 for in-depth audit of grants compliance. The CHNEP was deemed in compliance by the auditors.		
<b>CCMP Priority Problem Addressed:</b> All		
<b>Potential Partners:</b> City of Punta Gorda		
<b>FY15 Deliverables:</b>		<b>Target Dates:</b>
<ul style="list-style-type: none"> <li>▪ FY14 Audit Report</li> <li>▪ Agenda items for City Council, draft resolutions</li> </ul>		<ul style="list-style-type: none"> <li>▪ February 2015</li> <li>▪ Biweekly</li> </ul>
<b>FY16 Deliverables:</b>		<b>Target Dates:</b>
<ul style="list-style-type: none"> <li>▪ FY15 Audit Report</li> <li>▪ Agenda items for City Council, draft resolutions</li> </ul>		<ul style="list-style-type: none"> <li>▪ March 2016</li> <li>▪ Weekly</li> </ul>
<b>Budget:</b> \$12,000 staff, \$121,925 overhead and \$4,200 supplies		
<b>Intermediate Outcomes:</b> Ensure compliance with applicable, Federal, state and City of Punta Gorda policies.		
<b>Long Term Outcomes:</b> Successful implementation of CHNEP personnel, purchasing and administrative policies.		

<b>1.3   Grants and Contracts Administration</b>	
<b>Objective:</b> To implement the CCMP by seeking grants and ensuring compliance with awarded grant requirements, including reporting and invoicing.	
<b>Project Objective:</b> 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 proposal partnerships, and administer grants to implement the CCMP.	
<b>Description:</b> Ensure compliance with conditions of awarded grants, and cooperative assistance from Federal, state, local agencies and private sources. Develop and submit quarterly progress reports and final project reports as required. Invoice funding sources as required; ensure successful project progress and completion. Develop contracts, PO's and agreements with funding partners and for sub-awards and sub-contracts. Identify potential sources of funding for projects that support the CCMP. This task also supports staff time for the management of grants that do not include administrative support in the award, such as the FDEP annual assistance grant. In FY 2014, the CHNEP submitted 10 major grant proposals in addition to the annual EPA programmatic application, FDEP funding agreement and SWFWMD annual funding agreement.	
<b>CCMP Priority Problem Addressed:</b> All	
<b>Potential Partners:</b> 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.	
<b>FY14 Deliverables:</b> <ul style="list-style-type: none"> <li>▪ Quarterly Progress Reports as required</li> <li>▪ EPA semi-annual Progress and MBE/WBE Reports</li> <li>▪ Final Reports (financial close out, work products)</li> <li>▪ Invoices for payment</li> <li>▪ Sub-contracts, sub-awards</li> </ul>	<b>Target Dates:</b> <ul style="list-style-type: none"> <li>▪ January, April, July, October</li> <li>▪ April and October</li> <li>▪ As Required</li> <li>▪ As Required</li> <li>▪ As Required</li> </ul>
<b>FY15 Deliverables:</b> <ul style="list-style-type: none"> <li>▪ Quarterly Progress Reports as required</li> <li>▪ EPA semi-annual Progress and MBE/WBE Reports</li> <li>▪ Final Reports (financial close out, work products)</li> <li>▪ Invoices for payment</li> <li>▪ Grant summaries and Draft City of Punta Gorda Resolutions for all grant submittals,</li> <li>▪ Summaries of funding agreements and Draft City of Punta Gorda Resolutions for all partner funding agreements</li> <li>▪ Grant Applications</li> <li>▪ Formal requisitions and sub-contracts, sub-awards</li> <li>▪ Request for payments to ASAP for Federal grants</li> </ul>	<b>Target Dates:</b> <ul style="list-style-type: none"> <li>▪ January, April, July, October</li> <li>▪ April, October</li> <li>▪ As Required</li> <li>▪ As Required</li> <li>▪ As Required</li> <li>▪ As Required</li> <li>▪ As Required</li> <li>▪ As Required</li> <li>▪ As Required</li> <li>▪ As Required</li> <li>▪ Monthly or bi-monthly</li> </ul>
<b>Budget:</b> \$30,000, staff	
<b>Intermediate Outcomes:</b> Maintain compliance with awarded contracts and grants requirements; ensure full reimbursement of contract and grant funded activities, deliverables.	
<b>Long Term Outcomes:</b> Secure funding for CHNEP CCMP implementation.	

<b>2.1</b>	<b>Communications/Special Publications</b>	
<b>Objective:</b> To provide essential ongoing communications so that the CHNEP can address specific requirements and issues associated with the <i>Comprehensive Conservation and Management Plan (CCMP)</i> .		
<b>Project Objective:</b> To provide people with information that will assist them in making daily choices that protect and improve estuaries and watersheds.		
<b>Description:</b> SG-1 requires communication with the public. Key methods are through the website, quarterly magazines and special publications. 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 within the study area's public school system. Videos reach the broad television and Internet viewing public.		
<b>CCMP Priority Problem Addressed:</b> Stewardship Gaps		
<b>Potential Partners:</b> Printers, School Districts, Artists, Environmental Educators		
<b>FY15 Funded Deliverables:</b>		<b>Target Dates:</b>
<ul style="list-style-type: none"> <li>▪ Quarterly Magazine</li> <li>▪ Website</li> <li>▪ 2015 Calendar</li> <li>▪ <i>Adventures</i> Book for Children</li> <li>▪ Collateral, Displays, Reprintings, etc.</li> <li>▪ Outreach Assistance</li> <li>▪ Strategic Communication Plan Initiatives</li> </ul>		<ul style="list-style-type: none"> <li>▪ January, April, July, October</li> <li>▪ Ongoing</li> <li>▪ October 2014</li> <li>▪ February 2015</li> <li>▪ Ongoing</li> <li>▪ Ongoing</li> <li>▪ September 2015</li> </ul>
<b>FY16 Funded Deliverables:</b>		<b>Target Dates:</b>
<ul style="list-style-type: none"> <li>▪ Quarterly Magazine</li> <li>▪ Website</li> <li>▪ 2016 Calendar</li> <li>▪ <i>Adventures</i> Book for Children</li> <li>▪ Collateral, Displays, Reprintings, etc.</li> <li>▪ Strategic Communication Plan Initiatives</li> </ul>		<ul style="list-style-type: none"> <li>▪ January, April, July, September</li> <li>▪ Ongoing</li> <li>▪ October 2015</li> <li>▪ by February 2016</li> <li>▪ Ongoing</li> <li>▪ September 2016</li> </ul>
<b>Budget:</b> \$97,850 for communications and special publications projects, plus \$17,500 staff		
<b>Intermediate Outcomes:</b> The CHNEP will provide information about itself, including the CCMP and success of its partners, through a multi-channel multi-media approach appropriate for each particular audience.		
<b>Long-Term Outcomes:</b> Increase number of people engaged in the CHNEP who are aware of the program and issues, who change their behavior and who become a partner helping CHNEP fulfill its plan to protect the natural environment of southwest Florida in order to protect the estuaries from Venice to Bonita Springs.		

<b>2.2</b>	<b>Events/Outreach</b>
<b>Objective:</b> To provide events and outreach programs to address specific requirements associated with implementation of the <i>Comprehensive Conservation &amp; Management Plan (CCMP)</i> .	
<b>Project Objective:</b> Events involve people in the stewardship of their local natural resources. All events are developed in a collaborative way and typically receive funding from a broad partnership. They are developed to fill gaps in opportunities that are provided within the watershed.	
<b>Description:</b> The annual Charlotte Harbor Nature Festival has been held since 2002. It 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 to area public outreach and environmental education specialists. Twice a year an environmental education program 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. A Watershed Summit is held every three years with the next one scheduled for 2017. Since 2003, when the Watershed Summit is not held, 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.	
<b>CCMP Priority Problem Addressed:</b> Stewardship Gaps	
<b>Potential Partners:</b> Environmental Educators	
<b>FY15 Deliverables:</b> <ul style="list-style-type: none"> <li>▪ Charlotte Harbor Nature Festival</li> <li>▪ Professional Development Workshops</li> <li>▪ CHNEP Environmental Education Program</li> <li>▪ Conservation Landscaping Programs</li> <li>▪ Guides, workshops, etc. to target audiences</li> <li>▪ National Estuaries Days/Estuaries Day, Every Day</li> </ul>	<b>Target Dates:</b> <ul style="list-style-type: none"> <li>▪ November 22, 2014</li> <li>▪ Dec. 3-4, 2014; Dec. 9-10, 2014, TBD</li> <li>▪ June 5, 2015 and Sept. 2015</li> <li>▪ September 10, 2015</li> <li>▪ Ongoing</li> <li>▪ Ongoing</li> </ul>
<b>FY16 Deliverables:</b> <ul style="list-style-type: none"> <li>▪ Charlotte Harbor Nature Festival</li> <li>▪ Professional Development Workshop</li> <li>▪ CHNEP Environmental Education Program</li> <li>▪ Conservation Landscaping Programs</li> <li>▪ Guides, workshops, etc. to target audiences</li> <li>▪ National Estuaries Days/ Estuaries Day, Every Day</li> </ul>	<b>Target Dates:</b> <ul style="list-style-type: none"> <li>▪ November 21, 2015</li> <li>▪ TBD</li> <li>▪ May 2016 and Sept. 2016</li> <li>▪ Feb. 2016</li> <li>▪ Ongoing</li> <li>▪ Ongoing</li> </ul>
<b>Budget:</b> \$28,000 for events, plus \$17,500 staff	
<b>Intermediate Outcomes:</b> The CHNEP will provide information through a variety of face-to-face meetings, workshops and events that engage various audiences.	
<b>Long-Term Outcomes:</b> Increase number of people engaged in the CHNEP who are aware of the program and issues, who change their behavior and who become a partner helping CHNEP fulfill its plan to protect the natural environment of southwest Florida in order to protect the estuaries from Venice to Bonita Springs.	

<b>2.3 Public Outreach Grants</b>	
<b>Objective:</b> To support CHNEP partners public outreach initiatives to further the <i>Comprehensive Conservation and Management Plan (CCMP)</i> .	
<b>Project Objective:</b> 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.	
<b>Description:</b> 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. Information on all the projects funded with a grant is posted on the website at <a href="http://www.chnep.org/Grants.html">www.chnep.org/Grants.html</a> .	
<b>CCMP Priority Problem Addressed:</b> Stewardship Gaps	
<b>Potential Partners:</b> Grant Applicants	
<b>FY15 Deliverables:</b> <ul style="list-style-type: none"> <li>▪ Public Outreach Grants (POG) FY15 Guidance Document</li> <li>▪ Six public outreach grant projects</li> </ul>	<b>Target Dates:</b> <ul style="list-style-type: none"> <li>▪ December 2014</li> <li>▪ Selected October 2014</li> <li>▪ Completed September 2015</li> </ul>
<b>FY16 Deliverables:</b> <ul style="list-style-type: none"> <li>▪ Public Outreach Grants (POG) FY16 Guidance Document</li> <li>▪ Approximately 10 public outreach projects</li> </ul>	<b>Target Dates:</b> <ul style="list-style-type: none"> <li>▪ April 2015 (postponed from Dec. due to office move)</li> <li>▪ Selected October 2015</li> <li>▪ Completed by September 2016</li> </ul>
<b>Budget:</b> \$25,000 in grants, plus \$17,500 staff	
<b>Intermediate Outcomes:</b> To further the partnership to protect and restore the greater Charlotte Harbor estuarine system and watershed, the CHNEP offers Public Outreach Grants to citizens, organizations, businesses, government agencies, schools, colleges and universities. The CHNEP has supported many types of initiatives with Grants but all have furthered the CCMP.	
<b>Long-Term Outcomes:</b> Increase number of partners who are conducting projects that help fulfill the CCMP.	

### Public Outreach Grants

Public Outreach Grants applicants are now requested to complete the project in the fiscal year in which the award was made. The results of these projects are posted at [www.chnep.org/Grants/POGAwarded.html](http://www.chnep.org/Grants/POGAwarded.html). FY15 Public Outreach Grants include:

#### Taylor Ranch Elementary and Venice High School Reach into the Community with Conservation

Kay Thorpe Bannon

Third grade students at Taylor Ranch 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 \$1,534 toward this \$4,201 project. This project helps implement the CCMP by fulfilling SG-H, SG-F and WQ-K.

### **EcoCamp 2015**

Charlotte Harbor Environmental Center

Two five-half day summer camps will be offered to up 20 children ages 8 to 14 at Alligator Creek in Punta Gorda and Cedar Point Park in Englewood. The campers will have intensive, hand-on studies of water resource issues and concepts, including guest speakers, field trips and outdoor experiences. The children will learn and understand the interconnectedness of life within the estuary and how their action may affect the balance of this ecosystem. They will learn to embrace new experiences, to get out in nature and explore our beautiful and important estuaries and natural resources. The CHNEP is providing \$2,000 toward this \$3,800 project. This project helps implement the CCMP by fulfilling SG-F and SG-H.

### **Reduce, Recycle, Replenish, Restore: Community Rain Barrels**

City of North Port Utilities

A year-round Water Stewardship Outreach Program involves, informs and inspires the community to adopt water conservation and protection practices in their daily lives. The rain barrel design contest for students in grades 6 to 12 will help raise awareness about water efficiency and the most common causes of storm water runoff pollution and what steps individuals can take to reduce this kind of pollution in local waterways, such as the Myakkahatchee Creek, which is North Port's main source of drinking water and home to many fish and wildlife. The contest will raise awareness on global pollution issues and help the entire community realize the importance of keeping waterways clean. The CHNEP is providing \$492 toward this \$492 project. This project helps implement the CCMP by fulfilling SG-1 and HA-P.

### **Natural Resource Education Station**

City of Winter Haven

The City is committed to increasing environmental literacy in the community. This project will reach those who visit the City's busiest public facility, the library. The station will provide a variety of educational opportunities for patrons of all ages, including a digital touch screen program that allows participants to explore different components of the water cycle as it relates to the city, the Peace River and Charlotte Harbor. The CHNEP is providing \$2,600 toward this \$8,303 project. This project helps implement the CCMP by fulfilling SG-A, SG-D, SG-G and SG-K.

### **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.

### **Peace River Watershed Educational Program: Lake Somerset Planting Project**

Lakes Education/Action Drive



An ecological restoration of Lake Somerset shoreline will aid in stabilizing the bank to reduce erosion by planting appropriate vegetation and removing exotic plants. The plants will help improve water quality as well as enhance wildlife. Local student volunteers will help in the restoration and will create a short documentary to present to their schools and elsewhere. The CHNEP is providing \$3,957 toward this \$12,700 project. This project helps implement the CCMP by fulfilling SG-A, SG-C, SG-D, SG-H, SG-K, WQ-l, WQ-M, HA-P, FW-N and FW-P.

Please see **FY2014 Completed Major Projects and Actions, Communities of Practice**, for additional project information

<b>2.4</b>	<b>Micro-Grants</b>
<b>Objective:</b> To provide year-round support of CHNEP partners public outreach initiatives that furthers the <i>Comprehensive Conservation and Management Plan (CCMP)</i> .	
<b>Project Objective:</b> Micro-grants are a wonderful way for individuals or groups with a good idea that needs just a little bit of funding to implement that idea. It is a way to harness the creativity of people and test ideas.	
<b>Description:</b> 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 <a href="http://www.chnep.org/Grants.html">www.chnep.org/Grants.html</a> .	
<b>CCMP Priority Problem Addressed:</b> Stewardship Gaps	
<b>Potential Partners:</b> Grant Applicants	
<b>FY14 Deliverables:</b>	<b>Target Dates:</b>
▪ Approximately 50 projects and events	▪ Available year round
<b>FY15 Deliverables:</b>	<b>Target Dates:</b>
▪ Approximately 50 projects and events	▪ Available year round
<b>Budget:</b> \$12,000 in grants plus \$17,500 staff	
<b>Intermediate Outcomes:</b> To further the partnership to protect and restore the greater Charlotte Harbor estuarine system and watershed, the CHNEP offers micro-grants to citizens, organizations, businesses, government agencies, schools, colleges and universities. The CHNEP has supported many types of initiatives with Grants but all have furthered the CCMP.	
<b>Long-Term Outcomes:</b> Increase number of partners who are conducting projects that help fulfill the CCMP.	

### Fiscal Year 2014 Micro-Grants

With the move to the City of Punta Gorda, micro-grant requests in FY15 weren’t considered until January 8, 2015.

Contractor	MicroGrant Support
AWRA Florida Section: Karen Bickford	Southwest Florida Water Resources Conference: January 23, 2014, 23nd 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

<b>Contractor</b>	<b>MicroGrant Support</b>
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, 2013
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
Happehatchee 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. 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

Contractor	MicroGrant Support
	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

<b>3.1</b>	<b>Research Coordination</b>
<b>Objective:</b> To coordinate resource monitoring to assure availability of consistent, reliable, technically sound estuarine, freshwater, wetland and upland data throughout the CHNEP study area and identify research needs that can be implemented through partnerships.	
<b>Project Objective:</b> To protect and restore natural systems, sufficient region-wide water quality, biological and physical data and analyses are needed to understand the status, trends and complex interactions of the systems. Activities focus on coordinating partner organizations to collect, analyze and communicate scientific information from throughout the CHNEP study area. Funding under this program supports staff coordination of data collection and monitoring efforts.	
<b>Description:</b> CHNEP coordinates and assists partners with water quality, seagrass and shellfish monitoring including: 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, and FWC/Sea Grant shellfish monitoring. Participate in the Southwest Florida Tidal Creek, Seagrass, and Shellfish Working Groups. Identify opportunities to fill gaps and enhance consistency in water quality, vegetation and shellfish data. Provide partners with natural resource data and analyses throughout the CHNEP for studies including: Shellfish Restoration Plans, Southwest Florida Feasibility Study, Caloosahatchee River Watershed Protection Plan, Impaired Waters determinations, Minimum Flows and Levels and Water Supply Plans.	
<b>CCMP Priority Problem Addressed:</b> Water Quality Degradation and Fish and Wildlife Habitat loss	
<b>Potential Partners:</b> FDEP, SWFWMD, SFWMD, Counties, Cities, Conference Members	
<b>FY15 Deliverables:</b>	<b>Target Dates:</b>
<ul style="list-style-type: none"> <li>▪ Monthly CCHMN water quality monitoring.</li> <li>▪ Monthly CHEVWQMN water quality monitoring.</li> <li>▪ Quarterly RAMP meeting of partners.</li> <li>▪ Annual CCHMN field audits, reporting and meeting.</li> <li>▪ Annual FDEP seagrass transect monitoring.</li> <li>▪ Bi-annual FL Water Resource Monitoring Council</li> <li>▪ Research Needs Inventory</li> </ul>	<ul style="list-style-type: none"> <li>▪ Monthly</li> <li>▪ Monthly</li> <li>▪ Quarterly</li> <li>▪ May 2015</li> <li>▪ September 2015</li> <li>▪ Spring and Fall 2015</li> <li>▪ May 2015</li> </ul>
<b>FY16 Deliverables:</b>	<b>Target Dates:</b>
<ul style="list-style-type: none"> <li>▪ Monthly CCHMN water quality monitoring.</li> <li>▪ Monthly CHEVWQMN water quality monitoring.</li> <li>▪ Quarterly RAMP meeting of partners.</li> <li>▪ Bi-annual SWFWMD and SFWMD seagrass aerals.</li> <li>▪ Annual CCHMN field audits, reporting and meeting.</li> <li>▪ Annual FDEP seagrass transect monitoring.</li> <li>▪ Triennial Watershed Summit Proceedings</li> <li>▪ Bi-annual FL Water Resources Monitoring Council</li> </ul>	<ul style="list-style-type: none"> <li>▪ Monthly</li> <li>▪ Monthly</li> <li>▪ Quarterly</li> <li>▪ January 2016</li> <li>▪ May 2016</li> <li>▪ September 2016</li> <li>▪ Fall 2016</li> <li>▪ Spring and Fall 2016</li> </ul>
<b>Budget:</b> \$12,000 in staff	
<b>Intermediate Outcomes:</b> CHNEP will coordinate monthly water quality sampling throughout the estuaries and assist with field sampling in Lower Charlotte Harbor. CHNEP will assist partners with seagrass transect monitoring and aerial photography. CHNEP will ensure availability of water quality and seagrass data to partners through the CHNEP Watershed Summit Proceedings and Water Atlas.	
<b>Long Term outcomes:</b> Increase in water quality and seagrass data available for status and trends analyses, resource management, implementation of regulatory programs and education of the public and elected officials throughout the watershed.	

<b>3.2</b>	<b>Targeted Research</b>
<b>Objective:</b> To conduct research targeted to implement the <i>Comprehensive Conservation and Management Plan</i> (CCMP) Priority Actions and fill Environmental Indicators gaps through partnerships.	
<b>Project Objective:</b> To continue to effectively restore water quality, hydrology and habitat conditions throughout the CHNEP study area in the future, targeted research is conducted to fill critical gaps in knowledge needed to support resource management and decision-making. Research focuses on topics identified by the TAC and implemented through partnerships with assistance from the CHNEP scientific community.	
<b>Description:</b> CHNEP contracted with three partners to conduct juvenile fishery monitoring: Mote Marine Laboratory in Alligator Creek, Bonefish and Tarpon Trust in Coral Creek and FWC in Coral Creek. CHNEP is working with Sarasota Bay Estuary Program (SBEP), Tampa Bay Estuary Program (TBEP), Florida Fish and Wildlife Conservation Commission (FWC) and local counties to develop rational numeric nutrient criteria for tidal creeks based on water quality, fishery and benthic macroalgae relationships. CHNEP hosted the Caloosahatchee River Submerged Aquatic Vegetation (SAV) Targets Science Forum to guide partners with compiling SAV data, identifying data gaps and initiating needed monitoring and analyses.	
<b>CCMP Priority Problem Addressed:</b> All	
<b>Potential Partners:</b> Mote, SBEP, TBEP, FWC, SWFWMD, USF, Conference Members	
<b>FY15 Deliverables:</b> <ul style="list-style-type: none"> <li>▪ Alligator Creek Restoration Fishery Monitoring</li> <li>▪ Caloosahatchee River Submerged Aquatic Vegetation Targets Science Forums</li> <li>▪ CHNEP Water Atlas Enhancements</li> <li>▪ Coral Creek Restoration Fishery Community Monitoring</li> <li>▪ Numeric Nutrient Criteria for Tidal Creek Wetlands field sampling for water quality, fishery and benthic macroalgae</li> <li>▪ CHNEP Water Atlas Maintenance</li> </ul>	<b>Target Dates:</b> <ul style="list-style-type: none"> <li>▪ October 2014</li> <li>▪ December 2014 and March 2015</li> <li>▪ May 2015</li> <li>▪ September 2015</li> <li>▪ December 2015</li>   <li>▪ Ongoing</li> </ul>
<b>FY16 Deliverables:</b> <ul style="list-style-type: none"> <li>▪ Coral Creek Restoration Juvenile Tarpon Fishery Monitoring</li> <li>▪ Mangrove Heart Attack Project</li> <li>▪ CHNEP Water Atlas Maintenance</li> </ul>	<b>Target Dates:</b> <ul style="list-style-type: none"> <li>▪ June 2016</li>   <li>▪ December 2016</li> <li>▪ Ongoing</li> </ul>
<b>Budget:</b> \$179,000 in projects, \$20,700 in staff	
<b>Intermediate Outcomes:</b> CHNEP will assist partners in conducting field sampling, analyzing and reviewing data and developing estuarine water quality-water clarity models and tidal creek numeric nutrient criteria throughout the study area and southwest Florida. CHNEP will ensure availability of water clarity models, water quality and fishery data and suggested tidal creek numeric nutrient criteria to partners through the CHNEP Watershed Summit Proceedings, Water Atlas, partners' websites and Management Conference meetings.	
<b>Long Term Outcomes:</b> Increase in water quality-water clarity analytical tools and numeric nutrient criteria available for resource management, implementation of regulatory programs and education of the public and elected officials throughout the study area.	

## **Targeted Research**

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 FY15 and FY16 are described briefly below.

### *Targeted Research Projects to be Completed in Fiscal Year FY15 and FY16*

#### **CHNEP Water Atlas Enhancements**

University of South Florida, FY13 funding, \$15,980, due May 2015

To continue and improve public access to the wealth of natural resource data available on the CHNEP Water Atlas, University of South Florida-Florida Center for Community Design is adding tools to allow users to create fecal coliform contour maps and water quality status and trend analyses, as well as learn about Volunteer Water Monitoring, Shoreline Survey and the Charlotte Harbor Flatwoods Initiative. Improved access to water quality and shoreline condition data and analysis tools allows resource managers; elected officials and the public make better informed decisions. The Water Atlas Enhancement and Maintenance Projects implement many CCMP Priority Actions, including: WQ-C, SG-D, SG-K, SG-R and SG-S.

#### **Coral Creek Restoration Fishery Community Monitoring**

FWC, FY14 funding, \$40,000, due September 2015

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, due December 2015

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 and CHNEP staff support, \$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.



<b>4.1</b>	<b>Watershed Coordination</b>
<b>Objective:</b> To develop and update a CHNEP Restoration Plan and participate in activities which implement the plan and CCMP objectives and actions relating to restoration.	
<b>Project Objective:</b> To most effectively restore water quality, hydrology and habitat, CHNEP participates in a variety of partnership resource management and planning activities. Funding under this program supports CHNEP staff review of watershed assessments and plans and provision of maps and data to partners which guide restoration priorities and track implementation of projects.	
<b>Description:</b> CHNEP provides staff support for restoration mapping efforts, including hosting master restoration database and Shapefiles. CHNEP annually tracks restoration plan implementation through Government Performance and Review Act (GPRA) reporting. This subtask includes staff participation in watershed initiatives such as: Southern Water Use Caution Area (SWUCA) Recovery Strategy, Minimum Flows and Levels, Reasonable Assurance Plans, Basin Management Action Plans, SFWMD Water Supply Plan, Caloosahatchee River Visioning process, and development of basin water budgets and management plans. CHNEP participates in state and federal processes to develop landscape scale conservation strategies with public and private partnerships to provide habitat and species migration and climate change adaptation. Finally, partners, such as EPA and NOAA, frequently request data and supporting information about restoration and conservation efforts within CHNEP. CHNEP assists partners in restoration activities including: Water Planning Alliance, Estero Bay ABM, Lemon Bay League, Forked Creek and Hendry Creek “Walk the Watershed”, Charlotte Harbor Flatwoods Initiative meetings..	
<b>CCMP Priority Problem Addressed:</b> All	
<b>Potential Partners:</b> EPA, ACOE, FDEP, Water Management Districts, Conference Members	
<b>FY15 Deliverables:</b> <ul style="list-style-type: none"> <li>▪ GPRA Report</li> <li>▪ Public/Private Conservation Cooperative Support</li> <li>▪ Staff support for regional watershed efforts including: CERP/SWFFS, SWIM, TMDLs, BMAPs, SWUCA, Caloosahatchee Visioning, Charlotte Harbor Flatwoods Initiative and Water Supply Plans</li> <li>▪ Restoration Needs Plan + Peer Review</li> <li>▪ Morgan Park Restoration Conceptual Plan, design and permits</li> <li>▪ WET PLAN workshops and revised materials</li> </ul>	<b>Target Dates:</b> <ul style="list-style-type: none"> <li>▪ September 2015</li> <li>▪ Ongoing</li> <li>▪ Ongoing</li>   <li>▪ August 2015</li> <li>▪ September 2015</li>   <li>▪ September 2015</li> </ul>
<b>FY16 Deliverables:</b> <ul style="list-style-type: none"> <li>▪ GPRA Report</li> <li>▪ Public/Private Conservation Cooperative Support</li> <li>▪ Staff support for regional watershed efforts including: CERP/SWFFS, SWIM, TMDLs, BMAPs, SWUCA, Caloosahatchee Visioning, Charlotte Harbor Flatwoods Initiative and Water Supply Plans</li> <li>▪ Morgan Park construction</li> <li>▪ WET PLAN workshops, ongoing materials review</li> </ul>	<b>Target Dates:</b> <ul style="list-style-type: none"> <li>▪ September 2016</li> <li>▪ Ongoing</li> <li>▪ Ongoing</li>   <li>▪ September 2016</li> <li>▪ September 2016</li> </ul>
<b>Budget:</b> \$50,000 in staff	
<b>Intermediate Outcomes:</b> CHNEP will provide annual summaries of partners’ restoration activities through the GPRA report and will assist partners with compiling and analyzing data to develop and implement technically sound, consensus-based resource management plans.	
<b>Long Term Outcomes:</b> Increase in the number and effectiveness of implemented water quality and resource management Best Management Practices (BMPs), plans and restoration activities.	

<b>4.2</b>	<b>Targeted Restoration</b>
<b>Objective:</b> To conduct restoration targeted to address the <i>Comprehensive Conservation and Management Plan (CCMP) Priority Problems</i> through partnerships.	
<b>Project Objective:</b> To restore priority water quality, hydrology and fish and wildlife habitat conditions identified by the TAC and resource managers, site-specific restoration projects are designed and implemented through partnerships with CHNEP support. Projects are designed to be technically sound and include monitoring to assess effectiveness.	
<b>Description:</b> CHNEP provides technical review of partners' oyster habitat restoration pilot project development and implementation, including monitoring to assess effectiveness. CHNEP provides funding, technical review and staff support for priority restoration projects identified by the TAC and scientific community, with a current focus on Alligator and Coral Creek hydrologic restoration and monitoring to assess the restoration effectiveness on fishery and vegetation communities. CHNEP also provides data and technical assistance to FDEP Estero Bay Aquatic Preserves and University of Florida Estero Bay Seagrass Restoration planning efforts.	
<b>CCMP Priority Problem Addressed:</b> All	
<b>Potential Partners:</b> FDEP, TNC, Mote, FWC, Bonefish and Tarpon Trust, Conference Members	
<b>FY15 Deliverables:</b> <ul style="list-style-type: none"> <li>▪ Punta Gorda Oyster Restoration Pilot Project</li> <li>▪ Estero Bay Seagrass Restoration Plan</li> <li>▪ Southwest Florida Oyster Working Group</li> <li>▪ Identification of Priority Oyster Restoration Sites</li> </ul>	<b>Target Dates:</b> <ul style="list-style-type: none"> <li>▪ March 2015</li> <li>▪ September 2016</li> <li>▪ Ongoing</li> </ul>
<b>FY16 Deliverables:</b> <ul style="list-style-type: none"> <li>▪ Southwest Florida Oyster Working Group</li> <li>▪ Implementation of Priority Oyster Restoration Sites</li> </ul>	<b>Target Dates:</b> <ul style="list-style-type: none"> <li>▪ Ongoing</li> </ul>
<b>Budget:</b> \$11,000 in staff	
<b>Intermediate Outcomes:</b> CHNEP will provide technical review of oyster restoration project and monitoring design and Alligator and Coral Creek hydrologic restoration fishery monitoring design. CHNEP will make restoration designs and results available through the CHNEP Water Atlas and Management Conference.	
<b>Long Term Outcomes:</b> Increase in healthy oyster and fishery habitats within the CHNEP estuaries and tidal creeks.	

## Targeted Restoration

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 FY14 and FY15 are described briefly below.

### *Targeted Restoration Projects to be Completed in Fiscal Year FY14 and FY15*

#### **Punta Gorda Oyster Restoration Pilot Project**

TNC, FY13 Mosaic funding and CHNEP staff support, due March 2015

To partially implement the CHNEP Oyster Habitat Restoration Plan (2012), The Nature Conservancy (TNC) successfully acquired funding support from Mosaic to implement a pilot oyster habitat restoration project in Punta Gorda in the near-shore waters of the Peace River. The site has habitat conditions likely to support successful oyster habitat re-establishment, including appropriate salinity and water depths, existing oysters, adjacent mangroves and a high suitability rating in the Habitat Suitability Index from the Plan. The project area will be  $\leq 0.25$  acres, include 9-12 patch reefs, three methods and inter- and sub-tidal locations. Monitoring will be conducted to evaluate the effectiveness of the different methodologies. Volunteers will assist with substrate deployment and monitoring. The project is located within federally endangered Smalltooth Sawfish critical habitat, which is a consideration in project design and permitting. Permits are currently obtained and deployment is expected to begin in the spring of 2014. The oyster habitat restoration project implements many CCMP Priority Actions including: FW-A, HA-1 and SG-B.

<b>5.1</b>	<b>Legislative Agenda</b>
<b>Objective:</b> To provide a structure for pursuing legislative action to support the implementation of the <i>Comprehensive Conservation and Management Plan (CCMP)</i> .	
<b>Project Objective:</b> 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.	
<b>Description:</b> 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.	
<b>CCMP Priority Problem Addressed:</b> All	
<b>Potential Partners:</b> Management Conference Members, elected officials, state and federal agencies.	
<b>FY15 Deliverables:</b> <ul style="list-style-type: none"> <li>▪ Present agenda to State and Federal Legislative Officials throughout the CHNEP study area</li> <li>▪ Tracking of relevant legislation</li> <li>▪ Electronic updates to Subcommittee members</li> <li>▪ Letters of support as appropriate to legislators and policy makers</li> <li>▪ ANEP membership</li> <li>▪ Revised Legislative Agenda</li> </ul>	<b>Target Dates:</b> <ul style="list-style-type: none"> <li>▪ Nov. 2014 – Sept. 2015</li> <li>▪ As Appropriate</li> <li>▪ As Appropriate</li> <li>▪ As appropriate</li> <li>▪ As Opportunities Arise</li> <li>▪ January 2015</li> <li>▪ Spring 2015</li> </ul>
<b>FY15 Deliverables:</b> <ul style="list-style-type: none"> <li>▪ Present agenda to State and Federal Legislative Officials throughout the CHNEP study area</li> <li>▪ Tracking of relevant legislation</li> <li>▪ Electronic updates to Subcommittee members</li> <li>▪ Letters of support as appropriate to legislators and policy makers</li> <li>▪ ANEP membership</li> <li>▪ Revised Legislative Agenda</li> </ul>	<b>Target Dates:</b> <ul style="list-style-type: none"> <li>▪ November 2015 – Sept. 2016</li> <li>▪ Year-round; and March through July for Florida</li> <li>▪ As Appropriate</li> <li>▪ February 2016</li> <li>▪ Spring 2016</li> </ul>
<b>Budget:</b> \$2000 in staff plus \$4500 ANEP Dues	
<b>Intermediate Outcomes:</b> CHNEP and the CCMP is recognized and utilized as a resource by legislators (local, state and Federal) and their staff.	
<b>Long Term Outcomes:</b> 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.	

<b>5.2   Advocacy and Review Procedures</b>	
<b>Objective:</b> To implement the Advocacy and Review Procedures adopted in February 2003. To provide federal consistency review as required by EPA and incorporate the existing federal consistency review process of the State Clearinghouse as set forth in the CCMP on page 219.	
<b>Project Objective:</b> 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.	
<p><b>Description:</b> 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:</p> <ul style="list-style-type: none"> <li>▪ Environmental Land Acquisition and Conservation</li> <li>▪ Water Quality rules</li> <li>▪ Hydrology rules</li> <li>▪ Changes in structures specified in HA-4</li> <li>▪ Projects which improve water quality of Lake Hancock and the water exiting the lake</li> <li>▪ Projects which significantly affect at least one of the habitats listed in FW-1</li> <li>▪ Projects which significantly affect hydrology in sub-basins</li> <li>▪ Rules which reduce propeller damage to seagrass beds</li> <li>▪ Projects that remove invasive exotic species</li> <li>▪ Legislation that restricts citizen participation on environmental issues</li> <li>▪ General permits affecting waterways</li> <li>▪ Review of local comprehensive plans by the CHNEP partnership for implementation of the CCMP</li> <li>▪ Participation in development of the Management Plan for the Babcock Ranch Preserve.</li> </ul> <p>In FY14, the CHNEP submitted a clarification letter to the editor of the Sun-Herald, in the 1<sup>st</sup> quarter of FY15, the CHNEP has submitted letters supporting Ramsar designation of oyster reefs as wetlands, supporting the EPA's proposal for GULF NEP RESTORE act funding, and supporting Charlotte County's proposal for RESTORE Act funding.</p>	
<b>CCMP Priority Problem Addressed:</b> All	
<b>Potential Partners:</b> Management Conference Members, elected officials, state and federal agencies	
<p><b>FY14 Deliverables:</b></p> <ul style="list-style-type: none"> <li>▪ Review, Comment, Support and Inquiry Letters</li> <li>▪ Public Testimony</li> <li>• Review of at least 2 Comprehensive Plan Updates</li> </ul>	<p><b>Target Dates:</b></p> <ul style="list-style-type: none"> <li>▪ As required</li> <li>▪ As appropriate</li> <li>▪ By end of FY14</li> </ul>
<p><b>FY15 Deliverables:</b></p> <ul style="list-style-type: none"> <li>▪ Review, Comment, Support and Inquiry Letters</li> <li>▪ Public Testimony</li> </ul>	<ul style="list-style-type: none"> <li>▪ As required</li> <li>▪ As appropriate</li> </ul>
<b>Budget:</b> \$2000 in staff	
<b>Intermediate Outcomes:</b> Submission of Management Conference comments, remarks and suggested language in response to proposed rules and legislation.	
<b>Long Term Outcomes:</b> Incorporation of CHNEP Management Conference comments, revisions into adopted rules and legislation.	

<b>5.3</b>	<b>Leveraged Grants</b>
<b>Objective:</b> To supplement implementation of the <i>Comprehensive Conservation and Management Plan</i> (CCMP) through funding of projects from sources other than the EPA Cooperative Agreement.	
<b>Project Objective:</b> Leveraging grants for partners to implement the CCMP is a key component of the Long Range Funding Strategy. Funding under this program goes toward staff support to grant objectives and to match them with partner needs toward CCMP implementation.	
<b>Description:</b> CHNEP staff are actively applying for and winning funding through grants from Federal, State and private organizations for our partner organizations to support the implementation of the CCMP. The Research Needs Inventory, in conjunction with the CCMP, guides CHNEP staff when reviewing grant opportunities. In FY13 CHNEP staff were successful in assisting partners in capturing grant funding from government and private sources for unfunded projects and programs. CHNEP staff assists partners in identifying, applying for and administering grants from various sources, including Federal and State agencies and private foundations. Staff also searches for funding for specific projects that are being conducted by partners, notify partners of grant opportunities and work with partners to form teams and partnerships for proposal submissions. Staff is maintaining a grants database to track annual grant opportunities to facilitate developing teams and projects in advance of the Request for Application announcements. In addition, CHNEP provides project specific letters of support to granting agencies on behalf of partners. In FY 2014, the CHNEP drafted 18 letters of support for partners and provided assistance to the SWFRAPC staff with proposal writing and grant submission. During the 1 <sup>st</sup> quarter of FY2015, the CHNEP has drafted 3 letters of support for partner projects.	
<b>CCMP Priority Problem Addressed:</b> All	
<b>Potential Partners:</b> Management Conference Members, elected officials	
<b>FY15 Deliverables:</b>	<b>Target Dates:</b>
<ul style="list-style-type: none"> <li>▪ Proposal Templates for Grant Opportunities</li> <li>▪ Email notification of available grants</li> <li>▪ Support letters for inclusion with grant applications</li> <li>▪ Draft and Final Grant applications</li> </ul>	<ul style="list-style-type: none"> <li>▪ Ongoing</li> <li>▪ Ongoing, usually bi-monthly</li> <li>▪ As Requested</li> <li>▪ As Appropriate</li> </ul>
<b>FY16 Deliverables:</b>	<b>Target Dates:</b>
<ul style="list-style-type: none"> <li>▪ Proposal Templates for Grant Opportunities</li> <li>▪ Email notification of available grants</li> <li>▪ Support letters for inclusion with grant applications</li> <li>▪ Draft and Final Grant applications</li> </ul>	<ul style="list-style-type: none"> <li>▪ Ongoing</li> <li>▪ Ongoing, usually bi-monthly</li> <li>▪ As Requested</li> <li>▪ As Appropriate</li> </ul>
<b>Budget:</b> \$3,400 in staff	
<b>Intermediate Outcomes:</b> Provide partners with assistance in identifying and capturing funding for projects that implement the CCMP.	
<b>Long Term Outcomes:</b> Maintain and nurture the culture of granstmanship among CHNEP partners in order to facilitate CCMP implementation throughout the CHNEP Study Area.	

## **FY2014 Completed Major Projects and Actions**

### **Alligator Creek Restoration Fishery Community Monitoring**

Completion of this project is assisting the SWFWMD, FDEP and other partners with assessing the functional effects of hydrologic restoration activities adjacent to Alligator Creek, CHNEP contracted with Mote to conduct juvenile fishery monitoring in the creek utilizing methods consistent with previous juvenile fishery monitoring in the same location prior to habitat restoration. Implementation of the project is allowing the monitoring results to be used to compare pre and post, control and response fishery conditions. Field monitoring was be conducted bi-monthly in two creeks at from April to October 2013. The results, including a data base and analyses and GIS shapefiles, were approved by the Management Conference in summer 2014. The fishery monitoring project implements several CCMP Priority Actions including: WQ-E, FW-C and HA-N.

### **Punta Gorda Oyster Restoration Pilot Project**

To partially implement the CHNEP Oyster Habitat Restoration Plan (2012), The Nature Conservancy (TNC) successfully acquired funding support from Mosaic to implement a pilot oyster habitat restoration project in Punta Gorda in the near-shore waters of the Peace River. The site has habitat conditions likely to support successful oyster habitat re-establishment, including appropriate salinity and water depths, existing oysters, adjacent mangroves and a high suitability rating in the Habitat Suitability Index from the Plan. The project area will be <0.25 acres, include 9-12 patch reefs, three methods and inter- and sub-tidal locations. Monitoring will be conducted to evaluate the effectiveness of the different methodologies. Volunteers will assist with substrate deployment and monitoring. The project is located within federally endangered Smalltooth Sawfish critical habitat, which is a consideration in project design and permitting. Permits are currently obtained and deployment is expected to begin in the winter of 2015. The oyster habitat restoration project implements many CCMP Priority Actions including: FW-A, HA-1 and SG-B.

### **Long Range Financial Strategy**

With financial difficulties on the horizon, the CHNEP Management Conference chose to update its Long Range Financial Strategy, starting in August 2013. Through the year, the Management Conference elected to change its host agency to reduce overhead costs, work with member agencies to increase their contributions and retain more grants to support the CHNEP Program Office. Reduction of staff or CHNEP work products were rejected options.

Overall, implementation of these options have increased financial resources by \$140,000 and decreased them by \$15,000 for Fiscal Year 2015. This is a net increase by \$125,000. In addition, another \$130,000 has been requested from a member agency. Total improvement of CHNEP long range financial health may be \$255,000 or a 23% increase annually as a result of actions taken during Fiscal Year 2014.

After implementation of the above actions, the next option is to Pursue State Designation as an Independent Entity. Currently, Tampa Bay Estuary Program (TBEP) and Sarasota Bay Estuary Program (SBEP) are designated as independent entities under Florida Statutes. This requires an action by the State Legislature. In April 2014, the Governor called for independent entity designation for the Indian River Lagoon (IRL) NEP. The IRL advisory board approved the

concept of a separate, stand-alone entity for the IRL NEP and to reconvene as soon as they get feedback from state and federal agencies involved. They will hold a workshop to discuss pros and cons. CHNEP has taken no action to pursue state designation as an independent entity. However, there is an opportunity to work jointly with IRL to pursue designation for all Florida NEPs. Staff requests discussion by the committee.

Management Committee discussed state designation as the next highest option after the numerous actions that are being implemented. Although the Management Committee did not offer a motion, the general consensus was to allow the CHNEP program office to settle in with the City of Punta Gorda and to track IRL's experience.

### **Change of CHNEP Host**

At their March 13, 2014 meeting, the CHNEP Policy Committee voted to establish a subcommittee charged to develop a Request for Interest to seek interested program hosts. The subcommittee met on April 3, 2014.

The subcommittee included 3 Policy Committee members and 2 each from the Technical Advisory Committee, Citizens Advisory Committee and Management Committee. Three members participated remotely. The committee made two motions: (1) to issue an Invitation to Negotiate and (2) to direct staff to incorporate their modifications to the draft, provide it to the Policy Committee and subcommittee for consent for issuance the next week.

CHNEP's office received inquiries from the City of Punta Gorda, Wildlands Conservation, Friends of the Charlotte Harbor Estuary, Inc., Southwest Florida Regional Planning Council, Calusa Nature Center and the Charlotte Harbor Environmental Center. One response packet was submitted by the May 19 deadline. It was from the City of Punta Gorda.

The key components of the City of Punta Gorda Response (modified by May 22, 2014 clarifications) include:

- Quoted overhead costs of \$102,500 plus \$5,500 for office space which is significantly lower than the SWFRPC at \$184,000. The quote is based on the entire budget. OMB circular A-87 states that: "The indirect cost rate calculation should exclude pass-through funds (funds provided to the prime for specific secondary recipients), sub award expenditures exceeding \$25,000 and food purchases." A portion of the SWFWMD annual agreement (\$70,000) is pass-through to CHNEP sub-contractors. CHNEP staff has asked for a recalculation.
- Offices offered at City Hall, where the Chamber of Commerce was once housed. This will still need approval by the City Council.
- Warehouse storage facilities to accept and distribute materials, associated with the Public Works Department.
- Flexibility concerning City policies so that existing CHNEP practices may continue, including Florida Retirement System enrollment.
- More depth in human resource, purchasing and IT capabilities.

On May 29, 2014 the Policy Committee directed CHNEP staff to enter into negotiations with the City of Punta Gorda to host the CHNEP. These negotiations were successfully completed, resulting in a Memorandum of Agreement between the CHNEP Policy Committee and City of



Punta Gorda. The CHNEP Program office relocated to the City effective October 1, 2014. To facilitate the transition, the CHNEP Policy Committee also entered into a Memorandum of Understanding with the Southwest Florida Regional Planning Council (the CHNEP's host from inception to September 30, 2014)

### **Use of Trees and Woody Shrubs in Green Infrastructure Stormwater Treatment**

The CHNEP was awarded a \$4,000 grant from the National Association of Regional Councils and USDA Forest Service through its Regional Centers of Excellence program to conduct a project exploring the potential benefits for nutrient uptake by trees and woody shrubs in stormwater conveyances. This project is a follow-on to previous green-infrastructure projects conducted by CHNEP in conjunction with EPA.

The U.S. Forest Service and the EPA are promoting the use of natural processes and Green Infrastructure to help manage urban stormwater. In Florida, swales, filter marshes, and stormwater ponds utilize plants to assist in the uptake of nutrients in stormwater runoff. More cities and counties are considering using their natural resources for stormwater mitigating strategies to assist in managing water quantity and improving water quality. The CHNEP's TAC, comprised, in part of, government technical staff, is interested in the efficacy of increasing the use of woody shrubs and trees to increase nutrient uptake in stormwater conveyances.

Preliminary literature reviews and discussions with subject matter experts (EPA staff in Non-point Source, Green Infrastructure, LID staff, and Watershed Academy, Florida county and municipal staff, and consultants) revealed that there is little information regarding nutrient uptake by woody shrubs and trees utilized in stormwater runoff conveyances (i.e., the attenuation of nutrients such as nitrogen and phosphorous). Scientific studies and peer-reviewed models (SWMM, iTree, and National Stormwater Calculator) address interception of rainwater by tree canopies and roots (decreasing downstream volume of runoff), the frequency of rain events, the decrease in erosion (sediment capture and stabilization by roots) and the sequestration of carbon (greenhouse gas decrease).

Southwest Florida local governments strongly support the implementation of best management practices for the treatment of stormwater; green infrastructure is recognized in county-wide plans as the preferred means by which to treat stormwater. The TAC identified at its July 25, 2013, meeting a desire to establish green infrastructure BMPs to assist with removing nutrients from stormwater prior to it entering the estuary waters. The CHNEP TAC has identified an opportunity to partner with FDOT and county DOTs to utilize beautification efforts to treat stormwater.

Information concerning the nutrient uptake by trees and woody shrubbery planted within stormwater conveyance systems will assist counties and municipalities in deciding what types of vegetation to plant in medians, swales, rain gardens, stormwater pond littoral zones. The outcome is informing a broad diversity of Charlotte Harbor Estuary stakeholders as they adaptively manage stormwater runoff in urbanizing watersheds.

### Outcomes

The CHNEP successfully completed all the project tasks on time and within budget.

The project Scope of Work called for a one-day forum: “Technical Advisory Committee Open Forum to discuss findings, data gaps and potential resolutions to data gaps, and overall efficacy of pursuing tree and woody shrub nutrient uptake as a stormwater BMPs.” Upon consultation with partners, the workshop was expanded to include a second day that focused on the presentation of successful neighborhood waterway restoration projects and the development of a conceptual neighborhood waterway restoration project to use to seek funding support. The two-day workshop was held June 4 and 5, 2014, in Punta Gorda, Florida. The workshop presentations were uploaded to the CHNEP website prior to the end of the second day.

Task 6 called for two subcommittee meetings, which the CHNEP conducted on August 26, 2014. In addition, the CHNEP utilized an existing partnership - CALOOSAHATCHEE WATERSHED INITIATIVE “ECWCD” - to assist in identifying an appropriate project for demonstrating the technical ability to quantify the effect of trees and woody plants on nutrient loading of stormwater to be utilized in the State-required permitting process. This ability will result in an incentive to protect mature trees and plan new trees on development sites.

Finally, the TAC Water Quality Quantifiable Objectives Subcommittee (WQQOS) and workshop participants are in agreement that additional research on the actual nutrient uptake of trees and woody plants in stormwater conveyances would yield useful data and assist in further integration of plantings into green infrastructure stormwater treatment Best Management Practices (BMP)s.

In addition, the TAC, WQQOS and CHNEP Management Conference are honored to have been part of the i-Tree Hydro module beta testing.

The WQQOS members identified a few specific next steps that the CHNEP will be pursuing in the upcoming fiscal year:

- CHNEP staff will more fully review i-Tree Hydro Manual, Appendix C, Calculating Pollution Load, page 44 and report back to WQQOS.
- WQQOS recommends that ECWCD submit the i-Tree Hydro results for the West Marsh project to the permitting agency (U.S. Army Corps of Engineers) since the project permit does not currently consider the effect of trees on-site. The ECWCD intends to retain a number of the trees that are currently on the site which is not a permit requirements nor has been considered in the load calculations. If the i-Tree Hydro data is submitted and the permitting agency will not accept the revised loads information it will not have an impact on the project timeline. The load reduction calculated by i-Tree Hydro is an enhancement to the overall project.
- iTree workshop participants will continue to familiarize themselves with the iTree software, and the
- CHNEP will seek out additional training options to offer partners.
- WQQOS would like to "run" the subwatershed of the Orange River (location of the West Marsh project) through i-Tree Hydro to better gauge the impact of retaining mature trees and planting new trees on the landscape.

- WQQOS identified the need for additional research on actual nutrient uptake as a data gap that requires resolution. The i-Tree Hydro module is an excellent beginning point but more specific data about nutrient loading removal would be very useful.
- The CHNEP Policy Committee is curious as to the impact of i-Tree Hydro results usage: could a single tree result provide credit for both carbon sequestration and reduction in nutrient loadings?

### **Optical Model Spectral Validation and Water Clarity Reporting Tool Refinement Project**

In 2012, the CHNEP contracted with Mote Marine Laboratory and Janicki Environmental Inc. to create a spectral optical model in order to compute water clarity from water quality measurements (color, chlorophyll a and turbidity) and to estimate annual water clarity conditions for each of the estuary segments. The Water Clarity Reporting Tool was then used to generate annual scores for each of the estuary segments based on the percentage of water clarity measurements better or worse than reference values and to monitor the progress of water clarity over the years. The validated optical model output is available on the CHNEP Water Atlas ([www.chnep.wateratlas.usf.edu/](http://www.chnep.wateratlas.usf.edu/)).

Relative to a reference period, stable water clarity was needed to support seagrass “protection” and improving water clarity to support seagrass “restoration.” There was, however, a lack of statistically rigorous relationships between water clarity estimates from field measurements of light attenuation and non-spectral model results.

More recent research indicated that spectrally-explicit optical models more consistently represented water clarity conditions than actual field measurements of light attenuation. In addition, a validated spectral optical model could be applied to past water quality data available prior to when light attenuation measurements were collected, allowing water clarity estimates to be made from historical data.

Mote Marine Laboratory developed an empirical, spectrally-explicit optical model for the estuary segments and applied the model to existing water quality data (color, chlorophyll a and turbidity) to estimate annual water clarity conditions for each of the estuary segments. Janicki Environmental then applied the Water Clarity Reporting Tool (first developed for observed clarity data in 2009) to the modeled clarity data. Annual distributions of modeled water clarity were compared to that of the reference period of 2003–2007, and “scores” computed based on statistical comparisons. Scores were assigned a color coding to draw attention to stable or worsening water clarity in segments needing “restoration” or improvement, and to worsening water clarity in areas needing “protection.”

The color coding of the Water Clarity Reporting Tool allows progress toward meeting the water clarity targets to be quickly conveyed to both scientists and the public.

Additional information, including published reports, is available at [www.CHNEP.org](http://www.CHNEP.org).

Seagrasses are submerged flowering plants found in shallow marine waters, such as bays and lagoons, and along the continental shelf in the Gulf of Mexico. A vital part of the marine

ecosystem due to their productivity level, seagrasses provide food, habitat and nursery areas for numerous vertebrate and invertebrate species. Seagrasses:

- Stabilize the sea bottom
- Provide food and habitat for other marine organisms
- Maintain water quality
- Support local economies

The vast biodiversity and sensitivity to changes in water quality inherent in seagrass communities makes seagrasses an important species to help determine the overall health of coastal ecosystems.

### **Watershed Summit**

Charlotte Harbor Watershed Summit 2014 "Our Vision in Action" was held March 25-27, 2014 in Punta Gorda, Florida. The Watershed Summit is an essential part of the CHNEP process to bring public and private stakeholders together to discuss current studies and environmental issues facing our watershed. It is an important opportunity to review accomplishments completed since our last Watershed Summit in 2011 and discuss emerging topics affecting the Charlotte Harbor watershed in the future. The theme of the 2014 Summit is Our Vision in Action and the three key topics are research, restoration and stewardship.

The summit was held over 3 days with more than 40 presentations, 20 poster presentations, and more than 120 attendees. There were more than 15 sponsors whose diversity reflected the over CHNEP Management Conference both in geography and discipline. The Proceedings for the Charlotte Harbor Watershed Summit will be published in the peer reviewed Florida Scientist in fall of 2016.

### **Statewide General Permit for Oyster Restoration**

The Nature Conservancy (TNC) lead a working group to facilitate discussions between regional, state and federal resource managers and regulators to develop a general permit for oyster habitat restoration which partially implemented the CHNEP Oyster Habitat Restoration Plan (2012). Restoring oyster habitat under previous regulations was challenging because the ecological values of oysters were not considered. When Florida initiated modifications to the Environmental Resource Permit (ERP) rule in 2012, it provided an opportunity to review the regulatory process relating to oyster restoration. The working group drafted a General Permit (GP) to provide criteria for small scale oyster restoration projects (low profile and less than 0.25 acres). The GP was included in the ERP adopted in October 2013 as 62-330.632, F.A.C General Permit for the Restoration, Establishment and Enhancement of Low Profile Oyster Habitat. The GP facilitates permitting of oyster restoration in a timely manner to meet grant funding constraints, thereby facilitating oyster restoration throughout the CHNEP and other Florida estuaries. The GP does not preclude the need for ACOE, NOAA or other state authorizations for permits that don't meet the specified criteria. Adoption of the GP implements several CCMP Priority Actions including: FW-A, FW-F and FW-G.

## **Communities of Practice: Environmental Educators, Conservation Land Resource Managers, Scientists and Engaged Citizens**

Project Objectives: Network | Collaborate | Brainstorm | Learn

The CHNEP held a number of workshops and training opportunities for a wide variety of target audiences including: the public, citizen-scientists, educators, students, resource managers, researchers and decision-makers.

### Public Outreach Grants

Public Outreach Grants typically take one year to complete. Fiscal Year14 Public Outreach Grants include:

- **Garden Elementary and Venice High School Reach into the Community with Conservation**

Third grade students at Garden Elementary reached into their home communities with native plant gardening, combined with wildlife conservation information, storytelling and presentations. Student and family awareness of habitat loss and increased their sense of stewardship for our Florida environment. 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 provided \$1,534 toward this \$3,774 project. This project helps implement the CCMP by fulfilling SG-H, SG-F and WQ-K.

- **Strolling Science Seminars**

Six half-day strolling science seminars for adults were developed. Subject experts lead each walk that will also provide hands-on activities. These programs provided citizens with information about wildlife and watersheds and skills to enable them to conduct citizen science projects. The CHNEP provided \$600 toward this \$1,200 project. This project helps implement the CCMP by fulfilling SG-B.

- **Student Stewards**

Because of this project, twice as many fourth-grade students had authentic field experiences in Lee County's estuarine grass flats. Students investigated the food webs of an estuarine environment. A total of 150 classrooms of 3,300 students, approximately 50 percent of the fourth grade student population, were able to have this field experience. The CHNEP provided \$4,992 toward this \$9,984 project. This project helps implement the CCMP by fulfilling SG-H.

- **Teach a Man About Fish (and he'll eat for a lifetime)**

Students and adults worked together in a variety of outreach venues to educate the public in ecological relationships between people, animals and their charged resources within the Charlotte Harbor watershed. Students learned about their interrelationships between themselves and the creatures of the watershed then presented lessons regarding the watershed and its inhabitants at two free school science nights and three community environmental festivals. Students learned about the watershed and estuarine environment then presented their knowledge in creative performances. The CHNEP provided \$1,300 toward this \$2,891 project. This project helps implement the CCMP by fulfilling SG-F and SG-H.

- **Environmental Education Center Field Studies Program at Circle B Bar Reserve for Fourth Grade Schools**

Approximately 4,000 fourth grade students participated in this pilot project to increase the students' awareness of the Peace River watershed, where water and pollution comes from and goes. Three curriculums aligned with 4th grade standards were developed, providing options so teachers could select the curriculum and program that best suits the needs of their students. The program was held at the 1,267-acre Circle B Bar Reserve located on the headwaters of the Peace River. The CHNEP provided \$4,996 toward this \$39,996 project. This project helps implement the CCMP by fulfilling SG-D and SG-H.

- **Student Naturalist Program at Circle B Bar Reserve**

Almost 30 junior and senior high school students participated in an extra-curriculum program focused on environmental experiences. Students involved in the pilot year were those interested in pursuing a college degree in natural sciences. The program provided practical experience in water and natural resource management and environmental education. The students worked with researchers and were required to give back by volunteering and creating environmental education products. The CHNEP provided \$3,000 toward this project. This project helps implement the CCMP by fulfilling SG-B, SG-4 and SG-H.

- **EcoCamp 2014**

Two five-half day summer camps were conducted for 20 children ages 8 to 14 at Alligator Creek in Punta Gorda and Cedar Point Park in Englewood. The campers had intensive, hand-on studies of water resource issues and concepts, including guest speakers, field trips and outdoor experiences. By the end of Eco-Camp, the campers had learned and understood the interconnectedness of life within the estuary and how their action may affect the balance of this ecosystem. They learned to embrace new experiences, to get out in nature and explore our beautiful and important estuaries and natural resources. The CHNEP provided \$2,000 toward this \$3,800 project. This project helps implement the CCMP by fulfilling SG-F and SG-H.

- **Environmental Safaris at Wildflower Preserve**

An 80-acre overgrown and abandoned golf course on the Cape Haze peninsula in Charlotte County is being transformed into a nature preserve. This project with nearby L.A. Ainger Middle School developed three "environmental safari" programs at Wildflower Preserve. Visitors will "hunt" for target plants and animals in three different areas of the preserve: freshwater wetlands, creek/estuarine and terrestrial. Samples will be collected for observation. As species are found, the trail guides will link their finds into broader discussions of environmental topics. The CHNEP provided \$1,562 toward this \$6,838 project. This project helps implement the CCMP by fulfilling SG-B, SG-D and SG-F.

- **Citizen's Stormwater Academy**

As part of the county's water quality improvement projects, a public education program for neighborhood groups was developed. The goal is to raise awareness of local water pollution issues and how that pollution affects them and to change behavior to reduce pollution. Initially the academy will focus on residents in the Caloosahatchee and Hendry Creeks watersheds through workshops, trainings, printed materials and storm drain stenciling. The CHNEP provided

\$2,200 toward this \$6,425 project. This project helps implement the CCMP by fulfilling WQ-1, WQ-E, SG-1, SG-F and SG-G.

- **Nature Parks Wetlands Project**

The city and the nonprofit volunteer organization developed a wetland garden within the city's 24-acre nature park located in the center of a large residential community. This project provides an educational system to teach about the conservation of our watershed, the benefits of using native plants and the sustainability of the natural environment through programs that include classes and lectures on conservation landscaping plants, wading birds, native plant species and habitat protection. The CHNEP provided \$2,816 toward this \$6,759 project. This project helps implement the CCMP by fulfilling SG-A, SG-B and SG-C.

## **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 2014.

### **Water Quality Monitoring**

CHNEP staff continue 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 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 serve 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 3 workshops in Lee County in Fiscal Year 2014 with more than 100 attendees. In addition, the WETPLAN website went "live" [www.wetplan.org](http://www.wetplan.org)

## Applicable EPA-approved State Strategies and Program Plans

Listed below are the EPA-approved State Strategies and Program Plans that CHEP 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) 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

### 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))
- 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) DRAFT - The State of Florida Wetland Program Plan, 2013-2016, 3rd Edition February, 2013 – this has been published on the US EPA Region 4 website but remains “draft.”

***The CHNEP Management Conference certifies that the proposed work program contained in this FY2016 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 are also programmed to support additional special travel and local travel, tolls and parking expenses; including travel that is ineligible for federal reimbursement. See Table 18 for details.

**Table 18: Completed and Projected Travel in FY15 (FY15 EPA Budget Sheet)**

Date	Purpose	# Travelers	Location	Length of Stay	Travel Mode	Reg. Fee	Estimated Cost
Nov-14	ANEP Directors meeting	1	Fort Washington MD	5	Air	\$150	\$1,453
Nov. 2014	Florida Association of Bethologists	1	Tampa, FL	3	Auto	\$70	\$449
Mar-15	Learning Solutions	1	Orlando	2	Auto	\$816	\$1,718
Feb-15	NEP/EPA Spring Mtg.	2	Washington, DC	5	Air /\$800	\$400	\$2,300
Feb. 2015	AWRA	1	Fort Myers	1	Auto	\$70	\$100
March 11-12, 2015	Florida Oceans Day	1	Tallahassee	2	Auto	\$0	\$400
May 19- 21, 2015	GOM Climate Community of Practice	1	Tampa FL	4 days	Air	\$100	\$900
June 16 - 18 , 2015	GOMA, All Hands	1	Biloxi, MS	4 days	Air	\$75	\$1,600
Spring 2015	Meet with Region 4 Staff	1	Atlanta, GA	3 days	Air	\$0	\$675
June 17 - 19, 2015	Florida Stormwater Association	1	Sanibel	3 days	Auto	\$250	\$250
FY 15	Local Travel	4	Various	<1 day	Auto	\$100	\$5,155
			Total				\$15,000



## **6. CHNEP DIRECTOR RECRUITMENT**

At the Policy Committee's March 12, 2015 meeting, the Committee members enlisted the help of Management Conference members to assist in developing a vision of characteristics that the next CHNEP Director should possess. Soon after the Policy Committee meeting, as a homework assignment, staff asked Management Conference members to identify what they each thought were the three most important characteristics for the next Director to have. TAC members were asked to bring their list of desirable characteristics to the TAC meeting in writing. For TAC members who have not yet written down their list of characteristics, index cards will be provide at the meeting.

**Recommendation:** Provide individual responses regarding the three most important characteristics for the next CHNEP Director to possess.

**Attachment:** None.



## **7. CHNEP RESTORATION NEEDS PLAN AND TARGETS PEER REVIEW SCOPE OF WORK**

At their February/March meetings, the Management Conference reviewed the draft Restoration Needs Plan Update with special attention to the Restoration Targets methodology. The result was the Policy Committee directed CHNEP staff to develop and issue a Scope of Work for a Peer Review of the Restoration Targets within the FY15 fiscal year.

CHNEP staff has refined the Restoration Targets methodology in response to weaknesses identified in the Management Conference meetings. Such refinements include:

- Normalizing the raw difference to a balanced difference so that negative values are no longer used in the final equation.
- Once CCMP Habitat Categories targets are established, these values are indexed based on balanced difference multiplied by pre-development acreages by basin and then by specific habitat. This insures that long term targets are always equal to or greater than short term targets.

After consultation with City Finance staff, the scope would be issued as a Request for Qualifications (RFQ). In order to accommodate a July review of draft deliverables and a November final approval of deliverables, the project kick-off would need to be in May. Therefore, staff recommends that the RFQ be issued following the TAC meeting. The CAC and Management Committee would review and approve the draft Scope of Work during the procurement process. Consultant selection and scope of work could be approved by the Policy Committee at their May 14, 2015 meeting.

**Recommendation:** Motion to recommend that the Management Conference approve the Restoration Needs Plan and Targets Peer Review Scope of Work for the purposes of issuing a Request for Qualifications for Policy Committee approval of the final Scope of Work and consultant selection.

**Attachment:** Restoration Needs Plan and Targets Peer Review Scope of Work.



**DRAFT -- SCOPE OF WORK (MARCH 24, 2014)****Peer Review of the CHNEP “Restoring the Balance” Restoration Targets**

**Purpose:** The purpose of the “Peer Review of the CHNEP ‘Restoring the Balance’ Restoration Targets project” (Project) is to provide expert peer review of the draft restoration targets developed for habitat types identified in the Charlotte Harbor National Estuary Program (CHNEP) Comprehensive Conservation and Management Plan (CCMP). The CCMP habitats for this project include Mangrove, Salt Marsh, Freshwater Wetlands, Uplands and Water. The peer review will focus on the CHNEP “Restoring the Balance” algorithm, use of indexing associated watershed basin distribution and specific Florida Land Use and Cover Classification Systems (FLUCCS) vegetative communities to CCMP habitat targets, execution of the Excel Workbook calculations, and supporting documentation.

**Need:** This project directly implements the Charlotte Harbor National Estuary Program’s (CHNEP) Comprehensive Conservation and Management Plan (CCMP) Quantitative Objectives and Priority Actions. Specifically:

**FW-1:** Protect, enhance and restore native habitats ... including ... mangrove, salt marsh, freshwater wetland, native upland and water column;

**FW-F:** Restore and protect a balance of native plant and animal communities, and

**SG-N:** Update comprehensive inventories of research, restoration, legislative and outreach needs.

**Background:** The first CHNEP comprehensive restoration needs inventory was completed in 2006, to help implement CHNEP’s first CCMP adopted in 2000. CHNEP staff developed the methodology for the restoration needs inventory to be completed through various partnerships. These partnerships resulted in geographic information systems (GIS) files with a detailed table describing each restoration proposal. These proposals included both conservation land acquisition, and restoration concepts on existing and proposed conservation lands.

Though the plan was adopted into the in the 2008 (and later 2013) update of the CCMP, its most useful form was a GIS shapefile that could be adopted quickly into other planning efforts. The most notable is the Southwest Florida Feasibility Study (SWFFS), authorized under the Water Resources Development Act (WRDA) 2000. The CHNEP Restoration Needs (expanded by the Big Cypress Restoration Team using the CHNEP methodology) was used as the base to the SWFFS and consequently incorporated in the *Southwest Florida Comprehensive Watershed Plan* (SWFCWP.) It is estimated that the CHNEP plan reduced the SWFFS effort by one year. The SWFCWP was approved by the US Corps of Engineers and submitted to Congress. It has been also utilized as the base of the Lee County Master Mitigation Plan, one criteria for Lee County’s Conservation 2020 Program, Conservation Charlotte acquisitions, Peace River corridor planning, Mosaic’s off-site mitigation proposals and the CHNEP study area portion of the *Southwest Florida Regional Restoration Plan*, adopted by the three Florida Gulf NEPs.

In addition to the SG-N priority action calling for a restoration needs update, emerging tools needs and opportunities necessitate a comprehensive restoration plan update including:

- Adoption of the Resources and Ecosystems Sustainability, Tourism Opportunities and Revived Economy of the Gulf Coast Act of 2011 (RESTORE Act)
- Update of partner’s plans, including SWFWMD SWIM plan and requests for restoration targets.
- Availability of Critical Lands and Waters Identification Project (CLIP) version 3, completed February 2014
- Adoption of freshwater wetland restoration goals, by the Tampa Bay Estuary Program in September 2013, with plans to add restoration targets for coastal uplands, oyster bars and hard-bottom habitats. The freshwater wetland targets adds to the “Restoring the Balance” approach which had set targets for seagrass, salt marsh and salt barren habitats in 2010.
- Investment in restoration planning by partners, many of which are through broad partnerships including the CHNEP.

The Project is focused on the newest component of the CHNEP Restoration Needs Plan, restoration target development.

**DRAFT -- SCOPE OF WORK (MARCH 24, 2014)****Peer Review of the CHNEP “Restoring the Balance” Restoration Targets**

**Location:** The Project is located throughout CHNEP’s 4700-square mile watershed which includes all or significant portions of seven counties.

**Expected Qualifications:** The Contractor should demonstrate the following:

- Experience with peer review of methodologies and findings,
- Experience with “Restoring the Balance” algorithms, especially in Florida,
- Experience with restoration planning projects,
- Experience with restoration planning and analysis projects, especially in the CHNEP area,
- Experience with the Florida Land Use and Cover Classification System (FLUCCS) and
- Knowledge of geographic information systems (GIS) geo-processing principles.

**Expected Outputs. Outcomes and Results:**

Project outputs will include review, recommendations, analysis and justifications to improve the CHNEP “Restoring the Balance” restoration target algorithm, presentation of its application, and the reasonableness of the resulting targets. The first key feature of the review is the Excel Workbook which presents the mathematical processes and provides the target calculations. The second key feature includes review of the applicable chapters of the draft plan.

The Excel workbook consists of the following spreadsheets:

- *PDVM-4*. A geoproccessed run of acreages by FLUCCS code (to the fourth level) by watershed basin for the best Pre-Development Vegetation Map (PDVM) available to CHNEP. This is an input file not subject to this peer review project.
- *FLMA-4*. A geoproccessed run of acreages by FLUCCS code (to the fourth level) by watershed basin for the most recent consistently derived water management district FLUCCS map (2008-2009) within the September 2014 Florida Natural Areas Inventory (FNAI) Florida Managed Areas (FLMA) map, augmented by SFWMD conservation easements and other known acquisitions. This is an input file not subject to this peer review project.
- *Crosswalk*. Because FLUCCS classification were derived from different sources, the crosswalk helps to develop categories for analysis, entitled “Integrated Categories.”
- *PDVM-Integrated*. Utilizes the Crosswalk to total acreages for each integrated category by basin for *PDVM-4*. The sheet further combines the integrated categories to CCMP categories.
- *FLMA-Integrated*. Utilizes the Crosswalk to total acreages for each integrated category by basin for *FLMA-4*. The sheet further combines the integrated categories to CCMP categories.
- *Major Habitat Targets*. Implements the CHNEP “Restoring the Balance” algorithm using *PDVM-Integrated* and *FLMA-Integrated*.
- *Basin Mangrove Targets*. Utilizes *Major Habitat Targets*, *PDVM-Integrated* and *FLMA-Integrated* to index short and long term mangrove targets by basin.
- *Basin Salt Marsh Targets*. Utilizes *Major Habitat Targets*, *PDVM-Integrated* and *FLMA-Integrated* to index short and long term salt marsh targets by basin.
- *Saltmarsh Community Target*. Utilizes *2011 Salt Marsh Data* to index salt marsh targets by salt marsh communities, include low marsh, algal/saltern, marsh meadow and shrub mangrove/buttonwood.
- *Basin FW Wetland Targets*. Utilizes *Major Habitat Targets*, *PDVM-Integrated* and *FLMA-Integrated* to index short and long term freshwater wetland targets by basin.
- *FW Wetland Community Targets*. Utilizes *Major Habitat Targets*, *PDVM-Integrated* and *FLMA-Integrated* to index short and long term freshwater wetland community targets by basin. The two steps between the basin targets and community targets allows for allows the indexing by basin and then by community to be completed in an order manner.



**DRAFT -- SCOPE OF WORK (MARCH 24, 2014)****Peer Review of the CHNEP “Restoring the Balance” Restoration Targets**

- *Basin Upland Targets.* Utilizes *Major Habitat Targets, PDVM-Integrated* and *FLMA-Integrated* to index short and long term upland targets by basin.
- *Upland Community Targets.* Utilizes *Major Habitat Targets, PDVM-Integrated* and *FLMA-Integrated* to index short and long term upland community targets by basin. The two steps between the basin targets and community targets allows for allows the indexing by basin and then by community to be completed in an order manner.
- *2009-4 LU.* This is an input file representing the 2008-2009 land use for the entire CHNEP study area, using only for the *TBEP Restoring Balance* calculations.
- *2013 Vision-Integrated.* This is an unused input file representing 2008-2009 land use within the vision area for land protection.
- *TBEP Restoring Balance.* Calculations which demonstrate the impracticality of direct application of the TBEP Restoring the Balance algorithm directly to the CHNEP study area.

Cells which are recommended for change will be highlighted in yellow, along with changes that occur through the workbook. The recommended changes will be described and justified in a separate project document..

The chapters of the draft “Restoration Needs Plan Update” for review include “Restoring the Balance Algorithm” and Restoration Targets. Seagrass and Oyster Reef restoration targets were derived from separate planning efforts and included in the report for completeness. The entire draft report completed to date will be supplied and any recommendations on chapters not included explicitly in the review will be welcome. The expected product will be return of the chapters using track changes for recommended changes. The primary objective of the chapter review will be to communicate the methods to the general public as effectively as possible. It will also be to incorporate any recommended methodological changes recommended by the contractor. See Table 1, below.

**Table 1: Overall Project Tasks, Schedule, Expected Outcomes and Deliverables**

<b>Project Task</b>	<b>Period of Performance</b>	<b>Outcomes/Results</b>	<b>Deliverable (output)</b>
1	May 2015	Project Kick-off	Communicate current algorithm and methodology to Contractor
2	May-June 2015	Contractor reviews algorithm, flow of data through the Excel workbook and presentation of the information in the Draft Restoration Needs Plan Update chapters. Identifies recommendations to improve the algorithm, methodology and presentation of the approach.	Draft Project Report identifying areas for improvement, recommendations and justification for modifications as recommended.
3	May-June 2015	Explore and recommend areas for improvement within the Excel Workbook.	Modified Excel Workbook, with modified cells and resulting calculations highlighted in yellow.
4	May-June 2015	Modify draft Restoration Needs Plan update, using track changes. Comments are restricted to justifications or explanations.	Track changes version of two chapters “Restoring the Balance Algorithm” and “Restoration Targets.” Additional chapters are welcome but not required.
5	July2015- August 2015	The Draft deliverable is presented to the Management Conference committees where comments will be assembled for submittal to the vendor. The vendor will provide a response for each comment. The vendor will provide responses for TAC comments for the Management and Policy Committee packets.	Draft Deliverables
6	October 2015- November 2015	The final draft deliverable will be approved by the Management Conference. If no substantial issues remain, the approval may be completed via CHNEP consent agenda.	Final Draft Deliverables

**DRAFT -- SCOPE OF WORK (MARCH 24, 2014)****Peer Review of the CHNEP “Restoring the Balance” Restoration Targets**

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**Project Tasks****Task 1: Participate in Project Kick-off Meeting**

CHNEP staff will meet with the Contractor to walk through the methodology and presentation of the information. Staff will be available to answer questions.

Deliverables:

- Participate in Project Kick-off meeting.
- Review meeting summary and provide comments.

Period of Performance: May 2015

**Task 2: Project Report**

Project report will outline strengths and weaknesses of the CHNEP “Restoring the Balance” algorithm and methodology. The report may include critique of aspects that cannot be addressed currently but provides recommendations for the future. The report will provide recommended improvements with justifications of the recommended changes.

Deliverables:

- Identification of the strengths and weaknesses of the CHNEP “Restoring the Balance” algorithm, including the three step approach to defining 1) short and long term CCMP major habitat restoration targets, 2) short and long term restoration targets by watershed basin and major CCMP habitat categories, and 3 ) short and long term restoration targets for specific vegetative communities by watershed basin.
- Recommended modifications to the algorithm, resulting in a simpler presentation or improved results.
- Justification for recommended changes.

Period of Performance: May – June 2015

**Task 3: Excel Workbook**

Recommendations affecting the algorithm, methodology, calculations will be incorporated in a revised Excel Workbook. Such changes and resulting calculations through the workbook will be highlighted in yellow. Errors found within the workbook will be corrected and identified in orange.

Deliverables:

- Revised Excel Workbook demonstrating the peer review recommendations

Period of Performance: May – June 2015

**Task 4: Revised Restoration Plan**

Recommendations will be incorporated into two chapters of the draft Restoration Needs Plan Update, supplied in Word format and using Track Changes function of Word. The two chapters are the Restoring the Balance Algorithm chapter and Restoration Targets Chapter (Seagrass and Oyster Reef sections are excluded.) In addition, changes which improve the presentation of the information for clarity will be incorporated.

Deliverables:

- Implementation of the recommendations through the Restoring the Balance Algorithm chapter and Restoration Targets Chapter (Seagrass and Oyster Reef sections are excluded.)
- Additions which clarify the algorithm, methodological applications and presentation of the targets..

Period of Performance: May – June 2015

**Task 5: Draft Final Project Report**

Deliverables:

- Review comments submitted by CHNEP Management Conference, assist in resolution
- Review revisions, provide comment.
- Participate in presenting Draft Final Report to Policy Committee.

**DRAFT -- SCOPE OF WORK (MARCH 24, 2014)**

**Peer Review of the CHNEP “Restoring the Balance” Restoration Targets**

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- Draft Final Project Report, Excel Workbook, and two Restoration Needs Plan chapters.

Period of Performance: May – June 2015

**Task 6: Final Project Report**

Deliverables:

- Review comments submitted by CHNEP Management Conference, assist in resolution
- Review revisions, provide comment.
- Participate in presenting Draft Final Report to Policy Committee.
- Final Project Report, Excel Workbook, and two Restoration Needs Plan chapters.

Period of Performance: May – June 2015



## **8. CHNEP RESEARCH NEEDS INVENTORY**

The CHNEP Comprehensive Conservation Management Plan (CCMP) Priority Action SG-N calls to “Update comprehensive inventories of research, restoration, legislative, and outreach needs.” In 2007, the research needs inventory was developed in concert with the 2008 CCMP Update. The Management Conference was surveyed and a comprehensive list of research and monitoring priorities was developed. The list has served CHNEP well to identify projects for Workplan and outside grant funding.

At their March meeting, the Policy Committee directed staff to issue the research needs survey posted at <https://www.surveymonkey.com/s/CHNEPresearch> for the Management Conference members to complete by April 6. Prior to the TAC meeting, staff will analyze the results for presentation at the TAC meeting.

**Recommendation:** As discussed.

**Attachment:** None.



**9. MORGAN PARK PEACE RIVER SHORELINE AND HABITAT RESTORATION PROJECT SOW**

The CHNEP has identified Morgan Park as an important conservation area on the Peace River. Erosion on the banks of the Peace River is serious at two locations in the park. These areas have been identified as a mitigation initiative by the DeSoto County Local Mitigation Strategy Working Group. In addition, there are other opportunities for exotic plant removal, native vegetation planting and water quality treatment in the park. CHNEP assembled \$80,000 to prepare a phasing plan to address erosion and involve the community in restoration activities. Design and permitting of a first phase erosion mitigation may be included. CHNEP, in collaboration with the County, will continue to seek additional funding to support the project.

At this time, the CHNEP, through its host agency the City of Punta Gorda, desires to procure a qualified professional engineering and environmental services firm to assist with the development of a phased comprehensive plan for shoreline stabilization and ecosystem restoration along the Peace River in Morgan Park, and to implement phase 1 of the plan. Phase 1 of the comprehensive plan includes completion of design, permitting and bid specification documents, in accordance with all applicable regulations and statutory requirements. The project deliverables will be approved the CHNEP Management Conference before reimbursement is made to the selected Contractor.

**Recommendation:** Motion to recommend that the Management Conference approve the Morgan Park Peace River Shoreline and Habitat Restoration Project Scope of Work.

**Attachment:** Morgan Park Peace River Shoreline and Habitat Restoration Project Scope of Work.





## MORGAN PARK PEACE RIVER SHORELINE AND HABITAT RESTORATION PROJECT

### Supporting Information and Scope of Work for Requisition #???- Draft Final April 1, 2015

#### CRITICAL DEADLINES:

In a time period not to exceed ?20? months of contract initiation, the Contractor will complete the tasks described below at a cost not to exceed \$80,000.

#### INTENT/GOAL:

The City/Charlotte Harbor National Estuary Program (CHNEP) desire to contract with a qualified professional engineering and environmental services firm to assist with the development of a phased comprehensive plan for shoreline stabilization and ecosystem restoration along the Peace River in Morgan Park, and to implement phase 1 of the plan. Morgan Park is located on public-owned lands in DeSoto County, Florida, within the CHNEP Study Area. Phase 1 of the comprehensive plan includes completion of design, permitting and bid specification documents, in accordance with all applicable regulations and statutory requirements. The project deliverables will be approved the CHNEP Management Conference before reimbursement is made to the selected Contractor.

#### BACKGROUND INFORMATION:

1) **CHNEP:** CHNEP is a *partnership* that protects the Charlotte Harbor estuaries from Venice to Estero Bay by maintaining and improving the ecological integrity of the watershed. This partnership gives citizens, elected officials, resource managers, and commercial and recreational resource users in the 4,400-square-mile study area a voice to address diverse resource management concerns including fish and wildlife habitat loss, water quality and water flow. The watershed in the study area includes all or parts of Lee, Charlotte, Sarasota, Manatee, Polk, Hardee and DeSoto Counties.

CHNEP is guided by the *Charlotte Harbor Comprehensive Conservation and Management Plan* (CCMP), which was originally developed in 1995 when Charlotte Harbor was accepted into the National Estuary Program. When the CCMP was completed and accepted by the Management Conference, the State of Florida and the U.S. Environmental Protection Agency in 2001, it marked the beginning of action to restore and protect the estuary and its watershed. The CCMP was revised and updated by the CHNEP Management Conference in 2008 and again in 2013.

The CCMP includes identified priority resource management problems. This proposed project addresses these CHNEP priority problems:

**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.”

**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.

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

**2) Site Description:** Morgan Park (1100 W Hickory St Arcadia, FL 34266) is a 240 +/- acre public park owned and operated by DeSoto County (26-37-24-0000-0040-0000, 26-37-24-0000-0030-0000, 26-37-24-0000-0160-0000, 26-37-24-0000, 26-37-24-0000-0150-0000, 25-37-24-0A00-0760-0000, 26-37-24-0000-0152-0000). The Peace River forms the Morgan Park boundary on the north and west sides of the park.

On November 22, 2014, the Louie R. and Gertrude Morgan Foundation, Inc., conveyed by fee simple deed to DeSoto County the property known as Morgan Park. The land was conveyed to be used by DeSoto County as a natural, basically unimproved area accessible to and for the benefit of the people of DeSoto County, Florida with the following deed restrictions: relevant to this SOW:

- The property shall remain as close to its natural state as possible, commensurate with the reasonable use by the public,
- At least ninety percent (90%) of the land must be retained in its natural state as to tree cover, being those plants more than twenty (20) feet above ground level;
- Natural drainage patterns shall be maintained to the maximum extent possible

CHNEP identified DeSoto County's Morgan Park as an important conservation area on the Peace River. Morgan Park is heavily used park with trails through natural areas, scenic views and amenities for the general public.

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

The erosion of the banks of the Peace River is causing serious habitat, water quality and recreational use problems at these two locations within the park. The eroding river bank has cut through a portion of the major trail section which makes the trail impassible to users. If erosion continues, it will impact the safety of users and reduce park access substantially. These erosion areas of the river have been identified as a mitigation initiative by the DeSoto County Local Mitigation Strategy Working Group. In addition there are other opportunities enhanced resource restoration at the park, including exotic plant removal, native vegetation planting and water quality treatment.

#### **SCOPE OF WORK:**

**1) Project Summary:** The City/CHNEP seeks professional engineering and environmental services to develop a phased comprehensive shoreline stabilization and ecosystem restoration plan for the Peace River in Morgan Park and implementation of phase 1 of the plan. Phase 1 of the plan will include completing the design, permitting and bid specification documentation for shoreline stabilization and habitat restoration for at least 1, preferable 2, of the .critical erosion

sites identified in the comprehensive plan. Morgan Park is located on public-owned lands in DeSoto County, Florida, within the CHNEP Study Area.

The CHNEP has consulted with DeSoto County and is seeking solutions that are not highly engineered and does not require hardened structural elements. It is anticipated that detailed survey work and design engineering will be required. Permitting is expected to require FDEP and USACE approval.

The project deliverables will be approved by the CHNEP Management Conference before reimbursement is made to the Contractor.

**3) Project Tasks:** Contractor will:

**Task 1:** Develop a Comprehensive Project Plan for a multi-phase project to stabilize the Peace River shoreline and restore shoreline habitats within Morgan Park. The plan will clearly delineated the phases of the restoration project, along with associated milestones and timelines. Successful completion of Task 1 will constitute 30% of the total project deliverables.

**Task 2:** Develop draft project design(s) for shoreline stabilization and habitat restoration for at least 1, preferably 2 of the critical erosion sites identified in the comprehensive plan. Successful completion of Task 2 will constitute 30% of the total project deliverables.

**Task 3:** Address comments on the draft project design(s) received from the CHNEP Management Conference and staff and submit a draft Final Project Design for review by the Management Conference. Successful completion of Task 3 will constitute 30% of the total project deliverables.

**Task 4:** Complete permitting application(s) for at least 1, preferably 2, of the shoreline erosion stabilization and habitat restoration projects, assist with permit application submittal, and prepare bid specifications and construction management recommendations. Successful completion of Task 4 will constitute 10% of the total project deliverables.

**CERTIFICATION/LICENSE REQUIREMENTS:**

- 1) Certified Professional Engineer.

**FUNDING SOURCES:**

CHNEP will fund the Morgan Park Peace River Shoreline and Habitat Restoration Project up to a maximum of \$80,000, through support from partners including the Southwest Florida Water Management District and the Mosaic Company. Funding is included in the CHNEP FY15 Workplan Budget. A Notice to Proceed will be issued to the selected engineering or environmental services firm by **July or Aug?**, 2015.

**MAJOR (IMPORTANT) DISCIPLINES FOR THE PROJECT FOR QUALIFYING:**

The Bidder will have a minimum of 5 years of experience in successfully planning, designing and permitting of shoreline erosion and habitat restoration projects in southwest Florida. Demonstration of expertise in the following technical disciplines is preferred:

- 1) Freshwater and freshwater wetland ecology of southwest Florida.
- 2) Riverine shoreline erosion and habitat restoration planning in southwest Florida, including knowledge of restoration techniques, living shoreline techniques, Best Management Practices (BMPs) and conceptual design.

- 3) Riverine shoreline erosion and habitat restoration project design and implementation in southwest Florida, including knowledge of project engineering, permitting and bid specification development.

**PROPOSAL EVALUATION CRITERIA:** Proposals submitted for the Morgan Park Peace River Shoreline Stabilization and Habitat Restoration Project will be evaluated based on the following criteria:

<b>Criteria</b>	<b>Maximum Score</b>
Project Team and Organization Structure, Rationale and Qualifications	15
Project Experience	20
Project Approach	15
Project timeline and Budget	20
Specialized Experience – native vegetation restoration	15
Specialized Experience – “soft” shoreline stabilization/restoration	15
<b>Total Score</b>	<b>100</b>

**SUGGESTED CONSULTANTS:**

<b>Firm</b>	<b>Website</b>	<b>Contact Name</b>	<b>Phone/Fax</b>	<b>Email</b>
Ecosphere Restoration Institute	<a href="http://www.ecosphere-restorationinstitute.org">www.ecosphere-restorationinstitute.org</a>	Tom Ries	(813) 376-9076	<a href="mailto:tries@ecosphere-restoration.org">tries@ecosphere-restoration.org</a>
Scheda Ecological Associates	<a href="http://www.scheda.com">www.scheda.com</a>	Dianne Rosensweig	(941) 373-1547	Dianne@scheda.com
Passarella & Associates	<a href="http://www.passarella.net">www.passarella.net</a>	Ken Passarella	(239) 274-0067	<a href="mailto:ken@passarella.net">ken@passarella.net</a>
Johnson Engineering	<a href="http://www.johnsonengineering.com">www.johnsonengineering.com</a>	Michael Lohr	(239) 334-0046	<a href="mailto:mlohr@johnsoneng.com">mlohr@johnsoneng.com</a>
Kevin Erwin Consulting Ecologist, Inc.	<a href="http://www.environment.com">www.environment.com</a>	Kevin Erwin	(239) 337-1505	

## **10. PORT CHARLOTTE WATER QUALITY MONITORING PLAN**

Of urbanized areas within the CHNEP study area, Port Charlotte includes the least long term water quality data stations. Lee County, Sarasota County, Polk County, City of Cape Coral, LakeWatch and PondWatch provide water quality monitoring programs within CHNEP's other urbanized areas. The lack of such water quality monitoring programs within Port Charlotte is an obstacle for the management decisions which must be made.

Based on a request from Port Charlotte citizen Keith Waltz, CHNEP staff proposes approaching Charlotte County Utilities to fund preparation of a water quality monitoring plan using volunteer citizens. Staff estimates that such an effort would cost approximately \$10,000. The plan would outline alternatives and costs for Charlotte County consideration. The City of Cape Coral's CanalWatch program would be used as a model. CanalWatch Harry Phillips has offered his assistance.

More information concerning the Cape Coral CanalWatch Program can be found at:

<http://www.chnep.wateratlas.usf.edu/canalwatch/>.

**Recommendation:** As determined by the Committee.

**Attachments:** None



## **11. CHNEP WATER ATLAS WATER QUALITY TIME SERIES AND WATER CLARITY REPORTING TOOLS**

The purpose of the Water Atlas Enhancements 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, PondWatch and Charlotte Harbor Flatwoods Initiative) and assisting in improving metadata and shapefiles. A CHNEP subcommittee was met 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.

**Recommendation:** Motion to recommend that the Management Conference approve the CHNEP Water Atlas Enhancements project deliverables, including the Water Quality Time Series and Water Clarity Reporting Tools.

**Attachments:** None.





## **12. FY14 CORAL CREEK RESTORATION FISHERY MONITORING**

The purpose of the "Coral Creek Restoration Fish Monitoring" project is to provide resource managers with fishery community information associated with ongoing hydrologic and habitat restoration activities. Coral Creek restoration is a SWFWMD project. To help evaluate the response of the habitats and biological community to restoration, FWC's renowned fisheries-independent monitoring program, which has been present in the Charlotte Harbor estuary since 1989, was expanded into Coral Creek. Specific methodology follows brand new, tidal tributary sampling that is occurring in northern Charlotte Harbor as part of a larger Statewide effort. Extension of this project to Coral Creek helps to leverage additional reference tributaries for which to draw comparisons and broaden the scale of the study to one that is regional in scope. Ultimately, the results will include an assessment of the Coral Creek fish community as a whole. The tributaries of interest are known to be critical habitat for several economically-valuable fisheries that are important to tourism and the economy of Southwest Florida. Preliminary results, based on the first six months of sampling, are available for common snook and will be discussed. Comparisons between Coral Creek and tidal tributaries of northern Charlotte Harbor will be made. The fisheries monitoring implements the following Charlotte Harbor National Estuary Program *Comprehensive Conservation Management Plan Up-Date 2013* Priority Actions and Environmental Indicators:

- FW-F: Restore and protect a balance of native animal communities.
- FW-D: Fish community composition by Strata.

In addition to preliminary results, the status of the project will be discussed. Currently, funding is available through the end of June, 2015 (only two more months). Efforts are underway to propose the continuation of this work. In the meantime, a data gap is expected. Ideas regarding alternatives and partnerships are welcome.

**Recommendation:** As determined by the Committee.

**Attachments:** None.



### **13. LAKE HANCOCK OUTFALL PROJECTS**

To address problems with low flows in the Upper Peace River, the Southwest Florida Water Management District (SWFWMD) developed minimum flows and levels (MFLs) for the Peace River in 2002. An MFL is the limit where reduced flows or withdrawals will cause significant harm to the water resources of the area and the related natural systems. Currently, the Upper Peace River from Bartow to Zolfo Springs does not often achieve the minimum flows.

The Lake Hancock projects are two initiatives that are critical to the SWFWMD recovery strategy for meeting the minimum flows in the Upper Peace River. The Outfall Treatment Project will improve water quality discharges from Lake Hancock. Water will be pumped from the lake into a 1,000 acre constructed treatment wetland where nutrients and other pollutants will be removed before it discharges into the Peace River. The presentation will cover a brief history, project goals, current status and completion schedule for the projects.

**Recommendation:** No motion requested; for information and discussion only.

**Attachments:** None.



#### **14. POLK COUNTY LAKE MANAGEMENT PLANS AND PRIORITIES**

The purpose of this presentation is to summarize recent and current activities undertaken by Polk County to prioritize public access lakes for future resource management activities and to develop water quality management plans for the lakes. Also, similarities and differences in the approach to managing freshwater lakes will be contrasted to coastal and estuarine resource management.

Polk County contains the headwaters of five rivers (Withlacoochee, Hillsborough, Alafia, Peace, and Oklawaha). In addition, the Kissimmee River marks the County's eastern boundary. Although significant areas of the Peace River watershed in the County have been mined in the past, the County is active in protecting and improving remaining surface water resources.

In 2013 the Polk County Board of County Commissioners approved a Municipal Service Taxing Unit (MSTU) for stormwater management. The BOCC also created and appointed members to a Technical Advisory Committee to provide oversight for the use of this funding sources. Based on a suggestion from the TAC, a process was developed to rank all public access lakes within the County to provide direction for future resource management activities. Using the ranking methodology 12 lakes were determined to have top priority. Six consultant teams were brought under contract to develop water quality management plans for the lakes. The final plans are scheduled to be completed later in 2015.

The CHNEP, as all Estuary Programs, participates in resource management activities both for the coastal estuary, and the inland watershed. This presentation will compare and contrast the similarities and differences in physical and societal features to be considered in developing resource management approaches for tidal water bodies and inland freshwater bodies.

**Recommendation:** No motion requested; for information and discussion only.

**Attachments:** None.



**15. WINGATE EAST MINE PERMITTING UPDATE AND OFFSITE MITIGATION PROJECT**

A permitting update will be provided on the proposed Mosaic Wingate East Mine, an extension for the Wingate Creek Mine located in Manatee County. In addition to the onsite mitigation required by the permitting agencies, Mosaic will also provide an offsite mitigation project – the Myakka River Headwaters Project. The project is located within the Myakka River watershed and is of high ecological value. The project will implement priority actions identified in the Charlotte Harbor National Estuary Program’s Comprehensive Conservation and Management Plan (CCMP).

**Recommendation:** No motion requested; for information and discussion only.

**Attachments:** None.





## **16. CHNEP PROGRAM REPORT**

CHNEP activities for the past quarter will be presented, including:

- a. SW FL Oyster Working Group Subcommittee
- b. Program Deliverables

**Recommendation:** No action required; for information and discussion only.

**Attachment:** CHNEP Deliverables for February 1, 2015 – March 29, 2015.

## **17. MEMBER COMMENTS**

## **18. PUBLIC COMMENTS**

## **19. NEXT MEETING TOPICS, DATE AND LOCATION**

Thursday July 16, 2015 in Punta Gorda.

## **20. ADJOURN**

<b>CHNEP Deliverables for February 1, 2015 – March 29, 2015</b>			
<b>Date</b>	<b>Task</b>	<b>Task</b>	<b>Deliverable</b>
2/12/2015	1.1	Management Conference	Presentation on status of RESTORE Act funds and DWH litigation
2/18/2015	1.1	Management Conference	CAC met at Morgan Community Center in North Port to discuss several issues being considered by the entire Management Conference.
2/20/2015	1.1	Management Conference	Management Committee.
3/2/2015	1.1	Management Conference	EPA Program Evaluation completed and submitted for FY2010 through FY2014.
3/12/2015	1.1	Management Conference	Policy Committee meeting.
3/17/2015	1.1	Management Conference	As part of its 20th anniversary celebration, CHNEP created a program to recognize individuals who have made difference in the CHNEP's effort to fulfill the management plan.
2/11/2015	1.2	RPC-related Admin	SWFRPC audit materials gathered and delivered.
2/17/2015	1.2	RPC-related Admin	1 of 2 TAC p-card charges processed.
2/3/2015	1.3	Grants & Contracts	NFWF 5 Star grant proposal submitted.
2/17/2015	1.3	Grants & Contracts	Revised Attachment A transmitted.
3/4/2015	1.3	Grants & Contracts	transmitted 501c3 application to IRS for the Aquatic Preserve Society Inc.
3/23/2015	2.1	Communications/ Publications	Created postcard to send to subscribers who received renewal notices in 2013 and 2014. Created mailing list.
2/21/2015	2.2	Events/Outreach	Since 2005, the CHNEP has held conservation landscaping (Florida-friendly) workshops for residents who live in Hardee, DeSoto and Highlands counties. The 2015 workshop was held at the Turner Center in Arcadia on Saturday, Feb. 21 with approximately 70 people attending. Topics covered include basic information about native plants, green gardening, Ask-the-Expert, exhibitors, plant sale and more. This workshop was possible because of the involvement of many others.
2/27/2015	2.2	Events/Outreach	Attended Myakka River Management Coordinating Council meeting.
3/9/2015	2.2	Events/Outreach	Participated in Englewood Beach Water Festival planning meeting. This festival will be held at the same time as the Charlotte Harbor Nature Festival.
3/10/2015	2.2	Events/Outreach	Met individually with Hardee County Library, CCA, Polk County and LE/AD to discuss CHNEP projects and distribute materials.
3/10/2015	2.2	Events/Outreach	Attended LE/AD Living at the Lake workshop sponsored in part by CHNEP with a micro-grant.
3/16/2015	2.2	Events/Outreach	The CHNEP selected Antonia Mogensen, a senior at Sarasota High School for her project "Nutrient Content Fluctuation due to Mangrove Position Displayed in Carbon Cores in the Florida Everglades" presented at the 2015 Sarasota County Regional Science, Engineering and Technology Fair. The recognition includes a certificate, \$100 and mention in the newsletter Harbor Happenings. They were invited to

<b>CHNEP Deliverables for February 1, 2015 – March 29, 2015</b>			
<b>Date</b>	<b>Task</b>	<b>Task</b>	<b>Deliverable</b>
			submit an article for posting on the website.
3/16/2015	2.2	Events/Outreach	The CHNEP selected Breahna Claytor, a junior at Riverdale High School, for her project "Facilitating Rapid Recovery through Bioremediation on Oil contaminated Aquatic Plants Obtained from the Caloosahatchee River: The Survival Rate of Pistia stratiotes, Hydrocotyle umbellata, and eichhornia crassipes when Oil spills are Treated with Oil-Eating Microbes" presented at the Thomas Alva Edison Kiwanis Science and Engineering Fair in 2015. The recognition includes a certificate, \$100 and mention in the newsletter Harbor Happenings. She was invited to submit an article for posting on the website.
3/16/2015	2.2	Events/Outreach	The CHNEP selected Sophia Ackerman, a freshman at Canterbury High, for her project "The Effect of Pollution of filamentous and Phytoplankton Green Algae" presented at the Thomas Alva Edison Kiwanis Science and Engineering Fair in 2015. The recognition includes a certificate, \$100 and mention in the newsletter Harbor Happenings. She was invited to submit an article for posting on the website.
3/16/2015	2.2	Events/Outreach	The CHNEP selected Alison Ecker, a sophomore at Manatee High School, to recognize for her project "Ocean Acidification: The effects of different pH levels on the mass two different kinds of shells" presented at The Martin Manatee Regional Science and Engineering Fair in 2015. The recognition includes a certificate, \$100 and mention in the newsletter Harbor Happenings. She was invited to submit an article for posting on the website.
3/16/2015	2.2	Events/Outreach	The CHNEP selected Rayna Parks, a student at Hardee Senior High School, for her project "The Effects of Urbanization on Nutrient Levels in the Peace River" presented at the Heartland Regional Science and Engineering Fair in 2015. The recognition includes a certificate, \$100 and mention in the newsletter Harbor Happenings. She was invited to submit an article for posting on the website.
3/17/2015	2.2	Events/Outreach	Attended TEDx event in Sarasota. May explore possibilities of expanding CHNEP programs by cooperating with TED.
3/23/2015	2.2	Events/Outreach	Met with Regional Coordinator of Gulf of Mexico Coastal Training Program Initiative to discuss their work and possible ways to cooperate.
3/24/2015	2.2	Events/Outreach	Reviewed proposals submitted to EPA Community Involvement Conference that'll be held August 2015 in Atlanta, Georgia.
3/25/2015	2.2	Events/Outreach	Attended the Learning Solutions Conference.
3/9/2015	2.4	Micro Grants	A Myakka River Watershed Workshop was held on Feb. 28 at the Old Myakka United Methodist Church in Sarasota. Invitations were mailed to approximately 500 households in the upper Myakka watershed. Information on watershed issues and potential opportunities for improvements were shared with the 44 people in attendance by NRCS, Sarasota County Water Resources, IFAS, Myakka River State Park and others. They learned about the watershed and the Myakka Wild and Science River as well as ways they can promote the health of the environment.

<b>CHNEP Deliverables for February 1, 2015 – March 29, 2015</b>			
<b>Date</b>	<b>Task</b>	<b>Task</b>	<b>Deliverable</b>
3/16/2015	2.4	Micro Grants	The North Port EcoFest was held Feb. 7. The CHNEP supported a guided bus tour for 50 people to the Myakka River State Forest and Warm Mineral Springs.
3/23/2015	2.4	Micro Grants	The Lakes Education Action Drive with Polk Extension hosted three Living at the Lakes workshops at Circle B Bar Reserve. Lakeshore residents learned about how their actions impact the quality fo the water, about aquatic plants and proper planting techniques and location, as well as wildlife.
3/23/2015	2.4	Micro Grants	Green Horizon Land Trust held their annual meeting on March 15 with 92 guests. They left with a better understanding of the delicate balance in the Lake Wales Ridge Ecosystem, increased support of conservation lands and preservation programs and enjoyed a guided tour of Bok Tower Gardens.
3/23/2015	2.4	Micro Grants	North Port Friends of Wildlife (NPFOWL) was created to assimilate urban development with North Port's wildlife. This grant supported start up activities, including a banner, maps, social media and more.
2/2/2015	3.1	Research Coordination	CHNEP field visit of potential oyster restoration sites in Lower Lemon Bay.
2/6/2015	3.1	Research Coordination	CHNEP participation in AWRA conference.
2/19/2015	3.1	Research Coordination	CHNEP hosts SW FL Oyster Working Group Subcommittee to rank potential oyster restoration sites.
2/2/2015	3.2	Targeted Research	CHNEP participation in CHEVWQMN monthly water quality sampling.
2/12/2015	3.2	Targeted Research	TAC meeting.
3/2/2015	3.2	Targeted Research	CHNEP participation in CHEVWQMN monthly water quality sampling.
2/9/2015	4.1	Watershed Coordination	Attended Estero Bay ABM meeting.
2/17/2015	4.1	Watershed Coordination	CCHMN monthly water quality monitoring in Lower Charlotte Harbor conducted.
2/18/2015	4.1	Watershed Coordination	Lee County RESTORE Act advisory Committee meeting.
2/20/2015	4.1	Watershed Coordination	WET PLAN Workshop, Fort Myers, 30 attendees.
3/12/2015	4.1	Watershed Coordination	Approved letter related to the Florida Water and Land Conservation Initiative Amendment 1 to be sent to study area state legislators.
3/18/2015	4.1	Watershed Coordination	CCHMN monthly water quality monitoring in Lower Charlotte Harbor conducted.
3/11/2015	5.1	Legislative Agenda	Completed training, lobbying rules, and talking points
3/12/2015	5.1	Legislative Agenda	Visit with legislators to discuss aquatic preserve funding and amendment 1 implementation.
2/17/2015	5.4	Leveraged Grants	List of potential funding sources.