

# FISCAL YEAR 2006 WORKPLAN



CAC touring the Winter Haven Chain of Lakes

## **Charlotte Harbor National Estuary Program Technical Report 05-2 May 16, 2005**



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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 4,400 square mile study area. Many of these partners also financially support the Program, which, in turn, affords the Program opportunities to fund projects such as this. 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  
Florida Coastal Zone Management Program  
Peace River/Manasota Regional Water Supply Authority  
Polk, Sarasota, Manatee, Lee, Charlotte, DeSoto, and Hardee Counties  
Cities of Sanibel, Cape Coral, Fort Myers, Punta Gorda, North Port, Venice,  
Fort Myers Beach, and Winter Haven  
and the Southwest Florida Regional Planning Council.

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## Staff

**Dr. Lisa B. Beever**, Director

**Ms. Catherine Corbett**, Senior Scientist

**Ms. Elizabeth S. Donley, Esq.**, Grants and Contracts Manager

**Ms. Maran Brainard Hilgendorf**, Communications Manager

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The cover graphic is from a March 19, 2004 photograph of the Citizens Advisory Committee Tour of the Winter Haven Chain of Lakes, by Lisa B. Beever, PhD, AICP.

# 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).

On March 4, 2002, Suzanne Schwartz, Director for of the Oceans and Coastal Protection Division of the Environmental Protection Agency (EPA) issued guidance for the development of the FY 03 Workplans prepared by the nation's NEPs. For ease of use, new requirements were shown in bold text. New guidance requirements included special grant condition regarding the use of travel funds and Government Performance and Results Act (GPRA) reporting. NEPs are also to have an Implementation Tracking System, Environmental Progress Report and Environmental Indicators in place by the next Implement Review in FY 2004 (FY 05 for Charlotte Harbor NEP). Furthermore, addition information (success stories) is expected for accomplishments of the past year. According to the guidance, NEP Workplans must include the following items:

## Goals and Accomplishments

1. A description of program accomplishments (programmatic, environmental, etc.) and transferable success stories made during the past year;
2. A discussion of which goals were achieved;
3. Discussion of major goals/focus for the coming year and any changes in priorities;

## Ongoing Projects

4. Status of projects that are ongoing from previous year. This shall include a summary of the deliverables and associated milestones or completion delivery dates, project name or CCMP action, the cost, and organization responsible;

## New Projects

5. A description of new projects, activities, or products to be produced in coming year(s) to meet those goals, a discussion of how they are linked to CCMP action plans or seven purposes of section 320, milestones and/or completion/delivery dates for new tasks, cost of the project, activity, or product, and the source of funds to carry it out;
6. Organization responsible for each new project/activity/product and the role of any partners in their development/use;

## Administrative and Financial

7. List of staff and description of their responsibilities/activities;
8. A description of Grants provided from the NEP to local entities. This should include the amount provided, organization conducting the work, purpose, deliverables, and completion dates;
9. Total funds leveraged (section 320 and others) and their source;
10. The non-Federal cost share (match) and its source (specify in-kind or cash from particular entity; if in-kind, indicate type - e.g., office space); if staff, please specify individual, their position and employer, and an estimated dollar value of their contribution to the match; and
11. Travel Documentation.

# Summary of Program Accomplishments

This section corresponds to parts 1 through 3 of the EPA Workplan Guidance.

## Programmatic and Environmental Accomplishments

### Management Conference

The Management Conference is cited as the most important function of the CHNEP. It is composed of Policy, Management, Technical, and Citizen Committees. In support of the Management Conference function, the CHNEP completed the following activities:

- Adopted a task based budget so that CHNEP Management Conference and staff are committed to complete a specified set of deliverables annually, beginning October 2004. A task tracking database system was implemented to evaluate progress.

- Adopted a Long Range Financial Plan in November of 2004.

- The CHNEP program office moved with its host agency, the Southwest Florida Regional Planning Council, to a permanent office at 1926 Victoria Avenue, Fort Myers. The new location is within walking distance of the South Florida Water Management District Lower West Coast service office and the South District office of the Florida Department of Environmental Protection.

### CCMP Update

The CHNEP adopted a procedure to update its Comprehensive Conservation and Management Plan (CCMP) every five years. With the EPA approval of the CCMP, in 2001, the CHNEP expects to complete its CCMP update in 2006. In support of this work, the CHNEP completed the following activities:

- Adopted a CCMP Gaps and Priorities Analysis in November 2004

- Established a new subcommittee of the Citizen Advisory Committee to develop quantifiable objectives and priority actions in support of a new priority problem addressing public outreach, federal consistency review, data management, and governance. This subcommittee will be used in addition to the three existing TAC subcommittees which work on the other three priority problems: Hydrologic Alterations, Water Quality Degradation, and Fish and Wildlife Habitat Loss.

- The Management Conference is developing a list of Quantifiable Objectives and Actions needs and alternatives. From this list, priorities for included in the CCMP.

### Outreach

The CHNEP is continuing the publication of its newsletter, *Harbor Happenings*, and its web site. The newsletter provides information on a wide variety of topics including latest research findings, restoration accomplishments, changes in legislation, upcoming events, and information about CHNEP's partners including the water management districts. CHNEP staff and committee members have provided presentations at a variety of venues and on a variety of topics. The CHNEP has hosted, or otherwise provided funding to support, a variety of workshops and events including:

- National Estuaries Days was postponed due to hurricanes and some programs were cancelled but still 14 programs were offered between October 9 and November 20 to

highlight the importance of estuaries through fun and educational programs such as festivals, guided walks, paddling and boat tours.

An annual environmental educators' workshop. In December 2004, NOAA provided the conflict resolution workshop entitled "Navigating in Rough Seas."

Charlotte Harbor Watershed Summit 2005: Transferring Science to Resource Management on February 14-17, 2005. The Summit included a special day devoted to the Myakka River.

The Fifth Annual Charlotte Harbor Nature Festival on January 29, 2005 with more than 4,000 people in attendance.

Four EcoPartner workshops for hotel staff in Lee County.

Eleven Seagrass Wading Trips offered between October and December, 2004 (36 trips planned during FY05).

## **Data Management**

The website at [www.charlotteharbornep.org](http://www.charlotteharbornep.org) continues to provide news, documents, and information.

The CHNEP provided funding to the Charlotte Harbor Environmental Center to expand the excellent water quality mapping program funded by the SWFWMD to the southern waters of the CHNEP.

The CHNEP posts a quarterly environmental summary reviewing the environmental health of the estuaries during the previous quarter from secondary data sources.

CHNEP staff has drafted a list of environmental indicators and targets for consideration by the Management Conference.

## **Research**

The CHNEP conducts research through partners, contractors, and by staff. The wide variety of research fills gaps in knowledge related to hydrologic alterations, water quality degradation, and habitat loss. Research projects are chosen from a Research Needs Inventory adopted in 2004.

Completed elements of the CHNEP research program include:

Boat Propeller Scar Change Analysis conducted by the Fish and Wildlife Research Institute demonstrated increasing extent and severity of boat propeller scars in seagrasses of the CHNEP study area.

Final Water Budget and Modeling Workshop Summary Document.

Land Change and Land Monitoring Workshop on December 3, 2004.

Water Quality impairments GIS coverage September 2004 revision update.

GES was hired to develop methods to upload difficult water quality data into the central state water quality database known as STORET. This work has been completed, including training of various partners to use these methods.

On-going research projects include:

Avineon was hired to conduct a habitat change analysis. Largely a GIS exercise, terrestrial change analysis can be accomplished with additional work by the technical committee to resolve some problems within the SWFWMD Pre-vegetation map. SWFWMD, SFWMD, and CHNEP will jointly fund development of a historic coastal resources map to fill in this data gap.

Mote Marine Laboratory has been hired to conduct a benthic species richness study. Data have been taken and preliminary analysis will be presented to the technical committee on April 13, 2005

Janicki Environmental, Inc. completed a water quality status and trends study in 2003, including up to 1999 data. The CHNEP advisory committees have recommended that they be hired to conduct an update to include 2005 data.

FDEP will be funded to staff the Charlotte Harbor Estuaries Volunteer Water Quality Monitoring Network (CHEVWQMN). This network provides very valuable data by going out as an arm and sampling many areas of the estuaries at one time on the same date.

A map of historic drainage basin boundaries will be developed to evaluate spatial change of these basins. This is an important element of water budgets to evaluate surface water flow changes. For example, the Peace River basin may have extended to the Green Swamp, prior to construction of I-4.

### **Restoration**

CHNEP has participated in a variety of restoration projects including:

- Reasonable Assurance document for the Shell, Prairie, and Joshua Creeks

- Lower Charlotte Harbor SWIM Plan Reconnaissance Report

- CHEC Restoration Mapping funded by SWFWMD

- Southwest Florida Coastal Conservation Corridor Planning effort coordinated by the Nature Conservancy and Funded by the US Fish and Wildlife Service.

CHNEP is also involved in Everglades Restoration. Director Lisa Beever was appointed by the Governor to the Science Coordination Group who reports to the Everglades Restoration Task Force. Director Beever is also Co-Chair of the Southwest Florida Regional Restoration Coordination Team. It is in this capacity, she wrote the software and methods for the CHEC restoration mapping efforts.

### **Advocacy and Review**

From time to time, CHNEP advocates positions to protect the watershed and estuaries. Toward this end, the following positions have been taken this fiscal year:

- Letter supporting environmental acquisition of FPL site on Gasparilla Island

- Proposal to modify maintenance dredging exemptions within State Statute

- Letter in support of Gypsum Stack Research

- Federal Consistency Review Letter for Public Notice SAJ-2004-9692 Bethel Development in Charlotte County.

- Letter and presentation commenting on FONSI for Lake Okeechobee operational changes

- Presentation to the Governing Board on positions relating to the Southern Water Use Caution Area (SWUCA).

### **Grants**

CHNEP funds 3 grant programs: Research and Restoration Partners Program (RRPP), Public Outreach Grants (POG), and Microgrants. Each has varying funding levels and matching and application requirements. The grants completed this fiscal year include:

- Friends of the Myakka investigated methods to remove cogon grass. Approximately, 3800 acres of cogon grass were removed.

- Mote Marine Lab completed releasing Bay Scallop larvae in Pine Island Sound. Higher density of scallops where larvae was released months earlier.

SCCF investigated spotted seatrout growth rates in Pine Island Sound. High mortality between year class 1 and 2.

FDEP removed 100 acres of melaleuca at Tippicanoe East

CHEC provided "Manatee and Seagrass Education Programs" to students in Lee County

LE/AD completed an environmental resource guide to teachers throughout Polk County

Explorations V Children's Museum developed Water Matters! Interactive panels

Neil Sheehan developed a successful Brazilian Pepper Eradication/Education Project within Tangerine Woods

LE/AD published a 20th anniversary 8-page tabloid on lake protection. More than 100,000 were distributed.

Keep Polk County Beautiful published the 2005 Great American Cleanup Resource Guide, regarding litter prevention, recycling and earth-friendly cleaning agents.

Manatee World, Inc organized removal of 600-700 pounds of underwater debris from Sanibel Causeway

Charlotte County 4-H hosted an Environmental Camp of 6 boys and 14 girls.

Lee County Parks Dept. purchased microscopes/dipnets/test kits for the weekly Afterschool Nature Club & the Summer Camp in Alva

Third Annual Burrowing Owl Festival in Cape Coral Rotary Park had 1800 attendees

"Plant Native Day" at Cedar Park, hosted by FNPS Mangrove Chapter

Peace River Audubon offered a boat trip to familiarize Audubon & CHEC members with Charlotte Harbor and the NEP

Cape Coral Historical Society further developed a Demonstration Native Landscape and Garden

The sixth annual Southwest Gulf Coast Regional Envirothon for high school students in southwest Florida was held December 10, 2004

CHNEP also pursues grants on behalf of partners. This fiscal year so far, we have:

Prepared a Damage Survey Report application to USDA for Hurricane Charley clean-up

Completed deployment of atmospheric deposition monitoring equipment Lover's Key

Helped establish the Babcock Preservation Partnership, Inc. and fund-raising to purchase the Babcock Ranch for environmental protection.

## **Goals Achieved**

Major goals achieved include:

Move of CHNEP with the SWFRPC to permanent facility.

Conducting the third Charlotte Harbor Watershed Summit.

Creation of Babcock Preservation Partnership for acquisition of a 91,000 acre Ranch in the watershed. See the wonderful website for the partnership at: [www.babcockranch.org](http://www.babcockranch.org).

Adoption of Long Range Financial Plan.

Adoption of CCMP Gaps and Priority Analysis to launch CCMP update.

Preparing the Lower West Coast Reconnaissance Report for SFWMD.

## **Major goals/focus for the coming year**

Major goals for the coming year include:

1. Adopting a major CCMP update; and
2. Completing the Triennial Implementation Review.

## **Priority Changes**

No priority changes are expected in the coming year. However, new priorities are expected to be developed pursuant to the major CCMP update.

## FY 04/05 Travel

Table 1 details travel expenditures for FY 04/05. Travel expenditures are expected to exceed the EPA requirements of \$10,000. Travel included attendance of at least two staff members at each ANEP meeting.

<b>Table 1. Training and Conference Travel Fiscal Years 2004-2005</b>				
<b>Date</b>	<b>Reason for Travel</b>	<b>Staff Member</b>	<b>Location</b>	<b>Expense</b>
October 19-22, 2004	Fall ANEP meeting	L Beever, M. Hilgendorf	Corpus Christi, TX	\$1,456
March 6-11, 2005	Spring ANEP Meeting	L Beever, L Donley M. Hilgendorf	Washington, DC	\$1,905
October 1 2004-March 31, 2005	Task 1 Mgmt Conf other in-state travel to various meetings.	L. Beever, C. Corbett, L. Donley, M. Hilgendorf	Within Study-Area	\$134
October 1 2004-March 31, 2005	Task 2 Information Other in-state travel to various meetings.	L. Beever, C. Corbett, M. Hilgendorf	Within Study-Area	\$458
October 1 2004-March 31, 2005	Task 3 Research Other in-state travel to various meetings.	L. Beever, C. Corbett, L. Donley	Within Study-Area	\$167
October 1 2004-March 31, 2005	Task 4 Restoration Other in-state travel to various meetings.	L. Beever, C. Corbett, L. Donley	Within Study-Area	\$966
October 1 2004-March 31, 2005	Task 5 Legislation Other in-state travel to various meetings.	L. Donley	Within Study-Area	\$93
October 1 2004-March 31, 2005	Task 6 Grants Other in-state travel to various meetings.	C. Corbett, L. Donley	Within Study-Area	\$381

### Projected Travel for remainder of FY 05

May, 2005	Triennial Implementation Review	L. Beever	Buzzards Bay, Mass.	\$800
July 12-15, 2005	US EPA Community Involvement Conference	M. Hilgendorf	Denver, CO	\$1,000
Autumn 2005	Tech Transfer	C. Corbett, L. Donley	Florida	\$500
March-September 2005	Other in-state travel to various meetings.	L. Beever, C. Corbett M. Hilgendorf, L. Donley	Within Study-Area	\$2,198

Total:

\$10,057

# Workplan Projects for FY 05/06

## Task 1: Management Conference and Administration

One of the most important services that the CHNEP provides to its partners is providing a venue to share information regarding habitat, hydrologic, and water quality protection. This venue is the CHNEP Management Conference. The Conference is composed of four committees including Policy, Management, Technical Advisory, and Citizens Advisory Committees and their various subcommittees.

Subtasks include:

- 1.1 Management Conference
- 1.2 General Administration
- 1.3 CCMP Update

Deliverables include:

- Agenda Packets for committees and subcommittees
- Advertising and meeting space
- Adoption of FY 06/07 Workplan
- CCMP and Workplan Tracking System Update
- Evidence of extending CHNEP partnership
- Triennial Report
- Priority Action GPRA Report
- Travel to ANEP
- FY 05 Audit Report
- Final CCMP Update

<b>1.1</b>	<b>Management Conference</b>	
<b>Objective:</b> To provide a committee structure that supports the implementation of the Comprehensive Conservation and Management Plan (CCMP).		
<b>Previous Work:</b> The CHNEP Management Conference was established in 1996 to support the development of the CCMP. Since that date, committee and subcommittee packets have been the staple of the CHNEP process. The FY 04/05 Workplan was adopted in May 2004 and amended May 2005. Progress reports are issued monthly and incorporated in committee packets. In May 2005, the City of Winter Haven joined the Management Conference.		
<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). In addition, each committee has subcommittees. The committees and subcommittees each receive an agenda packet. Policy Committee meetings and subcommittees where two or more elected officials attend are advertised in accordance with state law. Committees meet at various locations within the watershed, necessitating the occasional meeting space cost. For FY 05/06, a triennial evaluation report will be due.		
<b>Deliverables:</b> Agenda Packets for committees and subcommittees Advertising and meeting space  Adoption of FY 06/07 Workplan CCMP and Workplan Tracking System Update Evidence of extending CHNEP partnership Triennial Report Priority Action GPRA Report Travel to ANEP	<b>Target Dates:</b> Mail one week before meeting Advertise in FAW two weeks preceding date June 2005 June 2006 September 2006 February 28, 2006 October 2005 October and March	
<b>Actions:</b> General support of CCMP	<b>Funding Sources:</b> EPA - \$93,822 City/County - \$10,000	

<b>1.2</b>	<b>General Administration and Supplies</b>	
<b>Objective:</b> To support necessary administration of the CHNEP.		
<b>Previous Work:</b> Annually, the SWFRPC conducts a single audit report. For FY 2005, the auditors issued an unqualified opinion (of adhering to generally acceptable accounting principles) letter. In autumn 2004, the host agency (SWFRPC) purchased an office building and moved from leased offices. A significant component of CHNEP staff time was applied to moving to offices.		
<b>Description:</b> General administration includes general staff functions such as staff meetings. Supplies such as postage, rentals, telephone, computer/graphic supplies are included in this task. Finally, unforeseen expenses that are at the Director's discretion such as cellular telephone, special computer equipment or software, training materials, subscriptions, memberships, etc.		
<b>Deliverables:</b> FY 05 Audit Report		<b>Target Dates:</b> January 2006
<b>Actions:</b> General support of CCMP		<b>Funding Sources:</b> EPA - \$21,500

<b>1.3</b>	<b>CCMP Update</b>	
<b>Objective:</b> To update the Comprehensive Conservation and Management Plan (CCMP).		
<b>Previous Work:</b> The CHNEP Management Conference adopted the first CCMP in 2000. EPA approved the CCMP in 2001. A minor amendment procedure was adopted in February 2002. The Policy Committee adopted a major CCMP amendment procedure in March 2004.		
<b>Description:</b> The CCMP will be updated. The process began in March 2004 and is expected to be completed by September 2006. The Management Conference will investigate adding a new priority problem to the CCMP which will address information management and outreach. Funding for design, setup, and printing of the CCMP update is included.		
<b>Deliverables:</b> Final CCMP Update (\$12,000)		<b>Target Dates:</b> July 2006
<b>Actions:</b> General support of CCMP		<b>Funding Sources:</b> EPA - \$51,500

## Task 2: Information Delivery

Delivery of information is a critical component of implementing the CCMP. Required aspects of the CCMP include outreach to various publics and data management. Information can be delivered in a variety of methods. These methods include newsletters, web sites, events, publications, conferences, field trips, workshops, etc.

Subtasks include:

- 2.1 Communications
- 2.2 Special Publications
- 2.3 Events
- 2.4 Outreach Programs
- 2.5 Data Management

Deliverables include:

- Quarterly Newsletter
- Media relations
- Internships
- Collateral, Displays, Reprintings, etc.
- 2006 Calendar
- 2005 CHNEP Proceedings, complemented by Hurricane special issue of *Estuaries*
- National Estuaries Days
- Charlotte Harbor Nature Festival
- Public Information & Educ Prof Development
- Public Workshop
- Partnership workshop support
- Programs that support FY&N
- Seagrass wading trips
- Guides, workshops, etc. to specific target audiences
- CHNEP web site
- Submit new reports for CHIRC to host
- Quarterly Environmental Report
- Continuation of CHEC water quality monitoring site to all of the study area

<b>2.1   Communications</b>	
<b>Objective:</b> To provide essential ongoing communications services so that the CHNEP can implement the Comprehensive Conservation and Management Plan (CCMP).	
<p><b>Previous Work:</b> Four issues of <i>Harbor Happenings</i> have been published each year since 1997. Distribution remained steady at 2,500 copies through the year 2000. Since then the number of copies distributed of each issue has increased with the winter 2003-4 issue distributed to 6,200. The newsletter is also posted on the Program web site in Adobe Acrobat PDF format. (The program web site is included as subtask 2.5.)</p> <p>Videos produced in 2003-4 include a series of two-minute “fillers” on estuaries and watersheds produced and broadcast on WGCU, a local PBS station. These fillers are the property of CHNEP and will be made available to others, including the many government access channels. During the summer of 2004-5 additional fillers will be created as well as a 5-6 minute video on seagrasses and a 15-20 minute video on estuaries for use in classrooms.</p> <p>Work with the media in 2003-4 has been successful in highlighting CHNEP’s events and successes. During the summer of 2004 work with the media will increase.</p> <p>Various displays and posters have been produced and collateral has been printed as required. The book <i>Story of Charlotte Harbor</i> and program posters are expected to be reprinted during the summer of 2004.</p> <p>With an expected office move during the summer of 2004, collateral and other program materials will need to be revised and printed.</p> <p>The CCMP calls for the creation of an internship program. The first intern worked for the program during FY03 for academic credit only. During FY04 several internships will be offered with two already under contract.</p>	
<p><b>Description:</b> Communication techniques vary. Specific techniques are mentioned in the CCMP on pages listed in parenthesis.</p> <p>The quarterly 12-page newsletter <i>Harbor Happenings</i> (page 211) covers coastal issues, events as well as updates on program activities and progress made toward implementing the CCMP. Contributions by program partners and distribution are expected to continue to increase.</p> <p>Videos (pages 176 and 214) are developed as outreach tools to reach specific audiences with specific messages.</p> <p>Working with the broadcast, print and Internet media (pages 132, 154, 212, 214) is a cost effective method of increasing the public’s awareness and understanding of CHNEP and issues of concern.</p> <p>Internships (page 213) serve many purposes, including extending staff and providing students with learning opportunities. Several opportunities will be contracted during the year with each intern doing work that will help implement the CCMP.</p> <p>This task also covers the cost of printing/producing such things as collateral materials (business cards, letterhead, etc.), displays, reprinting of existing resources such as posters and publications as well as postage for mailings.</p>	
<p><b>Deliverables:</b></p> <p>Quarterly Newsletter (\$20,000 publication)</p> <p>Media relations</p> <p>Internships (\$8,000 salaries)</p> <p>Collateral, Displays, Reprintings, etc. (\$5,000)</p>	<p><b>Target Dates:</b></p> <p>March, June, September and December</p> <p>Ongoing</p> <p>Ongoing</p> <p>Ongoing</p>
<p><b>Actions:</b></p> <p>CCMP pages 210-214: Public Education &amp; Outreach.</p>	<p><b>Funding Sources:</b></p> <p>EPA - \$51,700</p>

<b>2.2   Special Publications</b>	
<b>Objective:</b> To provide essential communications best provided as a printed document to address specific requirements and issues associated with the implementation of the Charlotte Harbor NEP Comprehensive Conservation and Management Plan (CCMP).	
<b>Previous Work:</b> During the 2003-4 fiscal year the Charlotte County boaters guide has been updated and reprinted and the Lee County boaters guide has been digitized. <p>During the summer of 2004 four special publications are anticipated to be available for distribution including a book for children in grade 3, a guide/map of environmental places, a citizens guide to help residents be good stewards in an environmentally sensitive region of the country, and a calendar. Artwork for the calendar will be received as part of an art contest. These entries will be posted on the program web site where visitors can then select the images they'd like to have included. The program's first "State of the Harbor" report (also referred to as a CCMP Report Card or Environmental Progress Report) is expected to be available by December 2004. Each of these publications will also be posted on the program web site.</p>	
<b>Description:</b> <p>A new special publication planned in FY05: a second "State of the Harbor" report. The Environmental Indicators Subcommittee of the CAC began drafting the first edition of the State of the Harbor Report.</p> <p>Manuscripts by presenters at the Charlotte Harbor Watershed Summit will be compiled as a <b>proceedings document</b> by Fall 2005 by a contractor and printed in 2006. A special issue of <i>Estuaries</i> will be created to discuss hurricane impacts with many of the articles pertaining to Charlotte Harbor.</p>	
<b>Deliverables:</b> 2006 Calendar (\$15,000) 2005 CHNEP Proceedings, complemented by Hurricane special issue of <i>Estuaries</i> (\$25,000)	<b>Target Dates:</b> November 2005 July 2006
<b>Actions:</b> CCMP pages 210-214: Public Education & Outreach.	<b>Funding Sources:</b> EPA - \$40,785 SWFWMD- \$16,500 City/County \$4,915

<b>2.3 Events</b>	
<b>Objective:</b> To provide essential communications best provided as an event to address specific requirements and issues associated with the implementation of the Charlotte Harbor NEP Comprehensive Conservation and Management Plan (CCMP).	
<b>Previous Work:</b> The 3 <sup>rd</sup> triennial <b>Charlotte Harbor Watershed Summit</b> was held February 15-17, 2005 at Edison College in Punta Gorda. (The first conference was held in 1997 and the second in 2002.) Approximately 75 to 90 people attended each day of the conference. Based on participants' evaluations from the 2002 and 2005 Summit, the summit will be held every three years. A <b>public conference</b> , focused on a specific watershed within the CHNEP study area, will be held each year that the summit is not. In 2003, the focus was the Caloosahatchee and in 2004, it was Lemon Bay. Approximately 80 people heard from experts and participated in small group facilitated discussions on four topics at the Lemon Bay conference. On a 10-point scale, the median score of 44 participants was 9.75 on a 10-point scale with 10 being the highest! A report will be prepared of the Public Conference on Lemon Bay. Drawing on the strength of the program's partners, each year since 2000 the celebration of our local estuaries on <b>National Estuaries Days</b> has become bigger and better. In 2003, 35 activities from festivals to guided walks to boat rides were offered to offer the public hands-on experiences to increase their understanding and concern about the local environment. Since 2001 the program has been the main sponsor of the annual <b>Charlotte Harbor Nature Festival</b> , a regional celebration of the natural environment that is organized by volunteers. More than 4,000 people attended the 2005 festival, which was supported by 33 sponsors providing \$15,650, more than 50 exhibitors, a children's discovery zone, guided walks, musicians, presentations and more. Reports on all of these events are posted on the program web site.	
<b>Description:</b> <b>National Estuary Days</b> will again be celebrated by asking the program's partners to support the program's efforts to increase residents' and visitors' awareness of the estuary, the Charlotte Harbor watershed and program goals and plans by sponsoring an event(s). The <b>Charlotte Harbor Nature Festival</b> is expected to be held Saturday, January 29 again at the Tippicanoe Scrub/Charlotte County Sports Park. Presentations and demonstrations will focus on Florida friendly plants and lawns and another tent will feature the creative arts. There will be no admission, parking or registration fees. The program will support <b>workshops on topics of concern</b> or audiences of concern. An event will be sponsored by Charlotte Harbor NEP to offer public information and education professionals an opportunity for professional development in order to enhance their abilities to implement the CCMP. In FY05 the program office opted to waive registration fees rather than hire someone to provide this support.	
<b>Deliverables:</b> National Estuaries Days (\$5,000) Charlotte Harbor Nature Festival (\$2,500) Public Information & Educ Prof Development (\$1,000) Public Workshop (\$3,000) Partnership workshop support (\$2,000)	<b>Target Dates:</b> September-October 2005 January 29, 2006 December 2005  Spring 2006 As opportunities arise
<b>Actions:</b> CCMP pages 210-214: Public Education & Outreach.	<b>Funding Sources:</b> EPA - \$35,200 City/County \$8,500

<b>2.4 Outreach Program</b>	
<b>Objective:</b> To provide essential communications best provided as outreach program to address specific requirements and issues associated with the implementation of the Charlotte Harbor NEP Comprehensive Conservation and Management Plan (CCMP).	
<p><b>Previous Work:</b> This work has focused on the outreach programs that are specifically mentioned in the CCMP, including the Florida Yards &amp; Neighborhood (FY&amp;N) Program, and work with audiences targeted in the CCMP including teachers, hotels, agriculture industry.</p> <p>In 2001 CHNEP signed a Memorandum of Understanding (MOU) with IFAS Extension Service to support the FY&amp;N program. With this, each of the seven counties in the NEP study offered its residents a FY&amp;N program. CHNEP participated in the annual Citrus Expo in August of 2003 and 2004. Working with Lee County Parks &amp; Recreation and Lee County Convention &amp; Visitors Bureau, CHNEP developed a pilot program to reach the hospitality industry named “EcoEconomy – Benefiting Guests and the Natural Environment.” An interactive DVD for classroom use in being developed.</p> <p>Outreach programs have grown to include programs that were initiated with grant funding but were then deemed so successful as to warrant financial support. Since FY03 funds have been provided to five environmental organizations to offer wading trips on behalf of the CHNEP in five locations. Information about CHNEP is provided to each participant and they are encouraged to subscribe to the program’s free newsletter. During 2004-5, 36 wading trips will be held.</p>	
<p><b>Description: Florida Yards &amp; Neighborhood Program:</b> Continue to support the Florida Yards &amp; Neighborhood Program (FY&amp;N) and similar programs, especially in the three inland counties within the watershed (pages 132, 148-149 and 212).</p> <p><b>Seagrass Wading Trips:</b> This program has been very successful providing the public with hands-on experience while educating them of the value of our estuaries, issues of concern, and actions citizens can take to protect the estuaries. The budget will support 24 wading trips.</p> <p><b>Projects to Reach Specific Audiences:</b> Several audiences are specifically mentioned in the CCMP (page 210), including those who work in education, agriculture, development/real estate, hotel/tourism, marine trades/fisheries, recreation/transportation, government as well as clubs, organizations and associations. This project will allow the NEP to work with people in specific industries to convey information to them about the NEP, issues of concern and actions this industry can take to help protect our estuaries. The funds listed may be spent on diverse projects, including guides, workshops, etc.</p> <p>Exhibits, displays and presentations by staff and CAC members at local functions, such as meetings and workshops held by entities like the Lemon Bay Conservancy, Sanibel Yacht Club and Audubon Society are a portion of the NEP Outreach Program. These presentations range in topics from an overview of the NEP to the importance of seagrass, land acquisition programs and partnerships for watershed restoration, monitoring and research.</p>	
<p><b>Deliverables:</b></p> <ul style="list-style-type: none"> <li>Programs that support FY&amp;N (\$2,000)</li> <li>Seagrass wading trips (\$4,500)</li> <li>Guides, workshops, etc. to specific target audiences (\$5,000)</li> </ul>	<p><b>Target Dates:</b></p> <ul style="list-style-type: none"> <li>Ongoing</li> <li>Ongoing</li> <li>Ongoing</li> </ul>
<p><b>Actions:</b></p> <p>CCMP pages 210-214: Public Education &amp; Outreach.</p>	<p><b>Funding Sources:</b></p> <ul style="list-style-type: none"> <li>EPA - \$11,200</li> <li>City/County \$11,500</li> </ul>

<b>2.5 Data Management</b>	
<p><b>Objective:</b> A data management strategy is a required element of each NEP. It provides information about information that is available, including technical information, facilitates the exchange of information among different organizations, and supports efforts for analysis of scientific information.</p>	
<p><b>Previous Work:</b> The program web site, <a href="http://www.CharlotteHarborNEP.org">www.CharlotteHarborNEP.org</a>, provides a wide array of technical and public outreach information. It has become an important link between the CHNEP and its varied audiences. The web site continues to expand and visitation continues to increase. In December 2003 a quarterly State of the Harbor report was initiated on the program web site.</p> <p>The Charlotte Harbor Information Resources Center (CHIRC) was updated in late 2003 and is hosted at <a href="http://library.fgcu.edu/CHENP/new/homepage.htm">http://library.fgcu.edu/CHENP/new/homepage.htm</a>. The web site has 3 major search engines that allow the user to review government and university held documents, links to scientific journals, links to the Charlotte Harbor NEP main site and government entities working in estuarine resource protection and programs allowing the user to view GIS and text documents, scanned documents and finally numerous, extensive subject and region-based bibliographies. Since 2003, the water quality of the northern part of the study area has been mapped on <a href="http://www.checflorida.org/chec/waterquality.htm">www.checflorida.org/chec/waterquality.htm</a> with SWFWMD funding. In 2005, the site was expanded to include the southern portion of the study area. Also in 2003, the Southwest Florida Regional Planning Council initiated an ArcIMS site to host GIS information at <a href="http://www.swfrpcgis.org">www.swfrpcgis.org</a>.</p> <p>The Environmental Indicators Subcommittee of the CAC began drafting the first Water Quality edition of the State of the Harbor Report (see subtask 2.2 for additional information).</p>	
<p><b>Description:</b> The program web site, <a href="http://www.CharlotteHarborNEP.org">www.CharlotteHarborNEP.org</a> (page 212), provides up-to-date and comprehensive access to events, resources such as publications, and progress made toward implementing the CCMP as well as links to program partners, meeting agendas and minutes.</p> <p>CHNEP will provide Florida Gulf Coast University's Charlotte Harbor Information Resources Center (CHIRC) with new reports as they become available. Although a draft of the State of the Harbor Report: Water Quality Edition is expected to be completed by FY 04, its publication costs will likely occur in FY 05. The CAC Environmental Indicators Subcommittee will begin the preparation of the State of the Harbor Report: Hydrology Edition. The Report on Current Environmental Data will be maintained quarterly. The CHEC water quality monitoring site will continue to cover all of the study area. Additional funding from SFWMD or Lee County will be sought for this project.</p>	
<p><b>Deliverables:</b></p> <ul style="list-style-type: none"> <li>CHNEP web site</li> <li>Submit new reports for CHIRC to host</li> <li>Quarterly Environmental Report</li> <li>Continuation of CHEC water quality monitoring site to all of the study area (\$16,000)</li> </ul>	<p><b>Target Dates:</b></p> <ul style="list-style-type: none"> <li>Ongoing</li> <li>September 2006</li> <li>December, April, July, October</li> <li>September 2006</li> </ul>
<p><b>Actions:</b></p> <ul style="list-style-type: none"> <li>CCMP pages 234-237: Exchanging Information.</li> </ul>	<p><b>Funding Sources:</b></p> <ul style="list-style-type: none"> <li>EPA - \$30,200</li> <li>SFWMD - \$15,000</li> <li>City/County \$1,000</li> </ul>

### **Task 3: Research**

Research and monitoring are critical tasks to address gaps in knowledge that are obstacles to good decision-making and to determine the conditions of the resources within the Charlotte Harbor watershed. One of the more important roles of the NEP is to serve as a central location of information for the Charlotte Harbor watershed. The program consistently compiles and analyzes data on hydrology, water quality and fish and wildlife habitat for the entire study area so that resource managers, scientists, decision makers and citizens can obtain information gathered by our program partners on a watershed basis or by subbasin. Examples of projects include the “Water Quality Data Analysis and Report for the Charlotte Harbor National Estuary Program” by Janicki Environmental, Inc in 2003, “An Analysis of Hydrologic Conditions within the Charlotte Harbor National Estuary Program Study Area” by URS Corporation, “Assessment of Boat Propeller Scar Damage within the Greater Charlotte Harbor Region” by the Florida Marine Research Institute, and “Analysis of Submerged Aquatic Vegetation, Inter-tidal Unvegetated, Saltwater Marsh, Mangrove, Oyster, Freshwater Wetland and Native Upland Habitats within the Greater Charlotte Harbor Watershed” by Avineon, Inc. Another role of the NEP is to ensure that studies and monitoring undertaken in one area of the watershed are duplicated in others as much as practicable to address data gaps.

Subtasks include:

- 3.1 Research Coordination
- 3.2 Fish and Wildlife Habitat Research
- 3.3 Hydrologic Alterations Research
- 3.4 Water Quality Research

Deliverables include:

- Annual field audit and meeting of 5 CCHMN entities
- Coordinate partners to develop consistent and geographically complete information
- Fl Water Resources Monitoring Council Participation
- Numeric Water Clarity Targets
- Program Quality Management Plan (if needed)
- Coverages hosted on the SWFRPC GIS site(\$50,000 total, \$20,000 RPC Salaries)
- Technical Intern
- Habitat change analysis report and GIS
- Historic coastal benthic habitats map
- Pre-development vegetation map for study area
- Report comparing current to historical hydrologic subbasin boundaries
- Report and GIS updating the 2003 Water Quality Status and Trends
- Continuation of CHEVWQMN (\$35,000)

<b>3.1 Research Coordination</b>	
<b>Objective:</b> To coordinate monitoring approaches so that consistent and reliable information is available throughout the CHNEP study area and to identify research needs for implementation through partnerships.	
<b>Previous Work:</b> The first comprehensive monitoring program for the entire coastal region of Charlotte Harbor began in 1996 with the Charlotte Harbor Estuaries Volunteer Water Quality Monitoring Network (See 3.4). The Coastal Charlotte Harbor Monitoring Network (CCHMN) was created in April 2001 and expanded in 2002. This program allows managers to assess the ambient water quality conditions of the coastal Charlotte Harbor region by subbasin or as a whole over time and seasons. In 2005, CHNEP funded development of methods to upload these randomized data into STORET and train participants. CHNEP staff oversees management and facilitates issue resolution for the Network. In 2003 and 2004, the Fisheries Independent Monitoring Program by the Fish and Wildlife Research Institute (FWRI) expanded into southern Charlotte Harbor through funding by the SFWMD. Beginning with mapping efforts in 2003, the SFWMD and SWFWMD are utilizing the same project scopes and timelines for seagrass mapping efforts to ensure data comparability for seagrass coverage harbor-wide. The first Research Needs Inventory was adopted to prioritize CHNEP research projects for funding, match research needs with grant opportunities, and to encourage partner funding of gaps in knowledge which are obstacles to effective decision-making. The Management Conference approved environmental indicators and targets in 2005.	
<b>Description:</b> Continue implementation of the Coastal Charlotte Harbor Monitoring Network (CCHMN). Identify opportunities for partners to develop consistent and geographically complete information, replicating the benefits obtained by better coordination of seagrass mapping and expansion of the FWRI independent fisheries monitoring. Coordinate research and monitoring efforts and filling of data gaps. CHNEP staff will participate in the development of the Florida Water Resources Monitoring Council. The TAC will refine the environmental indicators and develop numeric water clarity targets based upon light requirements of seagrass by basin. U.S. EPA may require a program Quality Management Plan for environmental data collection projects funded by the CHNEP in addition to individual Quality Assurance Project Plans. A technical intern will be hired to help with data management and accessibility issues and other tasks.	
<b>Deliverables:</b> Annual field audit and meeting of 5 CCHMN entities Coordinate partners to develop consistent and geographically complete information Fl Water Resources Monitoring Council Participation Numeric Water Clarity Targets Program Quality Management Plan (if needed) Coverages hosted on the SWFRPC GIS site(\$50,000 total, \$20,000 RPC Salaries) Technical Intern	<b>Target Dates:</b> September 2006 September 2006  September 2006 September 2006 September 2006 September 2006  Summer 2006
<b>Actions:</b> CCMP pages 227-233: Monitoring HA-B: Identify gaps in flow data based on ecosystem needs and projected needs for water withdrawals... WQ-C/D: Identify gaps in water quality data ... FW-H: Develop and support digital resources map system on the Internet for the public to use.	<b>Funding Sources:</b> EPA - \$2,700 FDEP - \$20,000 SWFWMD - \$38,000 SFWMD - \$25,000 City/County - \$24,000

<b>3.2 Fish and Wildlife Habitat Research</b>	
<b>Objective:</b> To conduct fish and wildlife habitat research necessary for implementation of the Comprehensive Conservation and Management Plan (CCMP).	
<b>Previous Work:</b> Goals of the CCMP include putting into conservation status 25% more land than that held in 1998; to maintain and conserve various habitats, such as submerged aquatic vegetation, mangrove, oyster bar, intertidal unvegetated, freshwater wetlands and native uplands to a quality and extent of natural variation; to reduce impacts from and then restore boat propeller scars and remove invasive exotic species. In order to assess the implementation of these goals, the NEP contracted in 2002 with the Fish and Wildlife Research Institute to analyze changes in boat propeller scarring of the coastal Charlotte Harbor region from Venice to Estero Bay since their 1995 state-wide assessment effort. Also, the program contracted with Avineon, Inc. to compile historical and current spatial data on the various habitats within the CCMP for a change analysis by subbasin. Finally, to address the quality aspects of FW-2 of the CCMP, the program has contracted with Mote Marine Laboratory to compile previously collected benthic invertebrate data and gather original data into an interactive database that will document the usage of various coastal habitats listed within the CCMP by benthic invertebrates.	
<b>Description:</b> Issues relating to fish and wildlife habitat is one of three priority issues in the CCMP. The Habitat Conservation Subcommittee (HCS) was formed in 2001 to help track and coordinate the implementation of the fish and wildlife habitat quantifiable objectives and priority actions of the CCMP. HCS is an essential working group to achieve these quantifiable objectives and priority actions. A survey was sent to HCS members in March 2004, and from this survey, the subcommittee recommended to fill in data gaps for the habitat change analysis project in the FY05 Workplan and to follow the rankings of the survey if program resources allow for further projects to be implemented. The subcommittee will need to finalize the pre-development vegetation maps for the northern portion of the study area for use in the habitat change analysis project. Also, a historic coastal benthic habitats map will be created with support from SFWMD and SWFWMD using 1940s aerial photographs. These coverage data will be used to compare historical habitat extent to the 1999 LULC and seagrass maps for an overall habitat change analysis by basin.	
<b>Deliverables:</b> Habitat change analysis report and GIS Historic Coastal Habitat Map (\$100,000) Pre-development vegetation map for study area	<b>Target Dates:</b> September 2006 September 2006 September 2006
<b>Actions:</b> FW-2: CCMP pages 95-96 FW-H: Develop and support digital resources map system on the Internet for the public to use.	<b>Funding Sources:</b> EPA - \$100 SWFWMD - \$50,000 SFWMD - \$30,000 City/County - \$29,000

<b>3.3</b>	<b>Hydrologic Alterations Research</b>
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**Objective:** To conduct hydrologic alterations research necessary for implementation of the Comprehensive Conservation and Management Plan (CCMP).

**Previous Work:** Goals of the CCMP include that our partners establish and achieve seasonal minimum flows and levels for the Myakka and Peace Rivers; identify and maintain a more natural seasonal variation in freshwater flows in the Caloosahatchee and upper Peace and Myakka Rivers; restore and improve natural hydrology and historic subbasin boundaries and enhance to more natural hydrologic conditions those areas affected by artificial structures. In order to assess the implementation of these goals, the NEP has contracted with URS Corporation to compile groundwater level and freshwater flow data for the entire Charlotte Harbor study area into a central location and analyze changes since historical conditions by subbasin. The project report should serve as a reference document for resource managers, citizens and planners. The program also hosted a Water Budget Workshop to entail a technical discussion on developing a “Water Budget” for the greater Charlotte Harbor estuarine system that will fulfill the following objectives: 1. Quantify the existing water budget—existing monthly inflows and outflows to Charlotte Harbor estuary; 2. Estimate the “predevelopment” or natural system’s water budget—monthly inflows and outflows to Charlotte Harbor estuary and 3. Determine how to best enable the existing water budget to resemble the natural system’s water budget. A one-day workshop to discuss hydrologic, hydrodynamic, water quality and natural systems models followed the Water Budget workshop.

**Description** The Hydrologic Alterations Subcommittee (HAS) was formed in 2002 to help track and coordinate the implementation of the hydrologic alterations quantifiable objectives and priority actions of the CCMP. HAS is an essential working group to achieve these quantifiable objectives and priority actions. A survey was sent to HAS members in March 2004, and from this survey, the following project was recommended for inclusion in the FY05 Workplan:

*HA-F:* Map historic and current hydrologic subbasins and analyze changes. HA-3 of the CCMP requires program and partners to restore, enhance, and improve where practical historic subbasin boundaries and natural hydrology for basins within the Charlotte Harbor NEP study area. To determine if the NEP is meeting goal, historic subbasin boundaries should be mapped and then compared to current conditions.

The subcommittee has developed a project scope that was advertised in 2005. Applications were reviewed and a successful vendor determined by the subcommittee. The project will begin in FY 2006.

<b>Deliverables:</b> Report comparing current to historical hydrologic subbasin boundaries	<b>Target Dates:</b> September 2007
<b>Actions:</b> HA-F: Re-establish, where practical, surface flows from sub-basins that do not currently contribute to their historic hydrologic connections.	<b>Funding Sources:</b> EPA - \$100 FDEP - \$5,000 SWFWMD - \$39,000 SFWMMD - \$3,000 City/County - \$46,000

<b>3.4   Water Quality Research</b>	
<b>Objective:</b> To conduct water quality research necessary for implementation of the Comprehensive Conservation and Management Plan (CCMP).	
<b>Previous Work:</b> Goals of the CCMP include that our partners identify those waterbodies that do not meet their designated water quality standards and develop a plan to meet or exceed those standards, including developing TMDLs; achieve water quality that meets shellfish harvesting standards throughout Class II waters and restore and maintain Lake Hancock to Class III water quality standards and improve the water quality of the water exiting the lake. In order to assess the implementation of these goals, the NEP contracted with Janicki Environmental, Inc to compile all surface and groundwater data into a centralized database and analyze it for status and trends by subbasin. A report was delivered to the program office in 2003. An update and follow-up analysis is expected every three years. The program has also supported its partners in the implementation of its Long Term Monitoring Strategy through the Coastal Charlotte Harbor Monitoring Network by contracting with GES Research Corporation in 2003 to develop a systematic protocol to upload the Network data to STORET. Finally, the NEP will continue its support of the Charlotte Harbor Estuaries Volunteer Water Quality Monitoring Network (CHEVWQMN) to provide quality assurance, data management and data analyses for the data collected from in 2005/06. The Network of volunteers is managed by the FDEP Charlotte Harbor Aquatic Preserves and includes 100 volunteers that take monthly water quality samples at approximately 44 fixed stations.	
<b>Description:</b> The Water Quality Quantifiable Objectives Subcommittee (WQQOS) was formed in 2000 to help develop biological indicators and numeric targets to aid in the implementation of the water quality objectives within the CCMP. WQQOS is an essential working group to achieve these quantifiable objectives and priority actions. A survey was sent to WQQOS members in March 2004, and from this survey, the following project was recommended for inclusion in the FY05 Workplan: WQ-C/D: Assess Water Quality Impacts of Biosolid Landspreading. This project was undertaken through the Research and Restoration Partners Grant process in FY2005. Janicki Environmental, Inc was chosen in 2005 as the contractor for the update to the 2003 Water Quality Status and Trends Report, and a contract executed. The project will commence in earnest in 2006, using data collected through 2005. The subcommittee will provide input to the contractor on types of analyses for the report.	
<b>Deliverables:</b> Report and GIS updating the 2003 Water Quality Status and Trends Continuation of CHEVWQMN (\$35,000)	<b>Target Dates:</b> December 2006
<b>Actions:</b> WQ-C/WQ-D: Identify gaps in water quality data needed to calibrate the appropriate models used to determine Total Maximum Daily Load limits. Coordinate water quality monitoring programs and implement programs to fill data gaps for TMDLs.	<b>Funding Sources:</b> EPA - \$100 FDEP - \$10,000 SWFWMD - \$16,500 SFWMD - \$3,000 City/County - \$14,500

## **Task 4: Restoration**

Restoration is the most physical expression of CCMP implementation. Operating and Capital projects to implement the CCMP are largely the responsibility of local and regional government. Nearly all of the costs are borne by CHNEP partners and through outside grants obtained by the partners and CHNEP. However, the CHNEP program office provides partners services coordinating watershed initiatives, cataloging restoration needs, participating in Everglades restoration activities, assisting in developing and refining Surface Water Improvement and Management (SWIM) plans. Restoration projects identified in the CCMP include:

- Exotics removal
- Enhancing shoreline habitat and restoring wetlands
- Install shallow water resource markers
- Increasing environmental compliance and enforcement
- Protecting environmentally sensitive land
- Implementing fish and shellfish programs
- Restoring oyster bars
- Implementing water conservation and reuse programs
- Re-establishing historic hydrologic connections
- Plugging abandoned wells
- Restoring groundwater levels
- Preventing and reducing hydrologic impacts of transportation projects
- Implementing 3-D circulation models
- Establishing a shellfish monitoring network
- Installing BMPs
- Providing central sewer within 900 feet of all waters
- Expanding Florida Yards and Neighborhoods
- Improving water quality of Lake Hancock
- Reducing non-point source pollutant from stormwater runoff
- Expanding use of reclaimed water
- Reducing contaminants from marina and dock operations.

Subtasks include:

- 2.1 Watershed Coordination
- 2.2 Everglades Restoration
- 2.3 SWIM Plan

Deliverables include:

- CHNEP Restoration Plan
- GPRA Report
- Watershed Management Plans and “Verified Lists” development
- Minimum Flows and Levels
- Water Budget for Charlotte Harbor basins, including through the Lower West Coast Water Supply Plan development
- RRCT Science Plan Update
- RRCT Restoration Plan Update
- Presentation of Priorities
- SCG Participation

Draft of the Lower Charlotte Harbor SWIM Plan.

<b>4.1 Watershed Coordination</b>	
<b>Objective:</b> To develop and update a CHNEP Restoration Plan and participate in activities which will implement those plans.	
<b>Previous Work:</b> The CHNEP program office designed a database which houses proposed restoration ideas. Restoration includes improvements to water quality, habitat, and hydrology. The Estero Bay Agency on Bay Management began mapping restoration proposals for the Lee County Mitigation Plan in March 2003. The Charlotte Harbor-Caloosahatchee Restoration Coordination Team (of Everglades Restoration) replicated the methodology in those basins. The CHNEP completed the mapping for the Lee County Mitigation Plan and Restoration Plan under its auspices in the City of Fort Myers Beach and the City of Sanibel. In 2003, the Charlotte Harbor Environmental Center Watershed Center accepted the responsibility of replicating the methodology in the northern basins of the CHNEP study area with Southwest Florida Water Management District funding. The work is due to be completed in 2005. CHNEP also manages the Estero Bay Nutrient Management Partnership funding from EPA to the Southwest Florida Watershed Council. CHNEP participated in and is a signatory member of the Shell and Prairie Creeks Watershed Management (Reasonable Assurance) Plan.	
<b>Description:</b> Provide staff support for restoration mapping efforts. Staff support includes hosting the master restoration database and shapefiles. Funding is allocated to support SWFRPC graphic services and GIS equipment costs. Tracking of restoration plan implementation is performed annually through the development of the Government Performance and Review Act (GPRA) report developed annually. Participation in watershed initiatives such as the Southern Water Use Caution Area (SWUCA), Minimum Flows and Levels, Reasonable Assurance Plans, development of basin water budgets etc. are included in this subtask.	
<b>Deliverables:</b> CHNEP Restoration Plan GPRA Report Watershed Management Plans and “Verified Lists” development Minimum Flows and Levels Water Budget for Charlotte Harbor basins, including through the Lower West Coast Water Supply Plan development	<b>Target Dates:</b> September 2005 October 2004 Based on Impaired Waters Rules dates Based on MFL Schedules As opportunities arise.
<b>Actions:</b> FW-H: Develop and support digital resources map system on the Internet for the public to use.	<b>Funding Sources:</b> EPA - \$1,600 FDEP - \$25,000 SFWMD - \$4,000 City/County - \$22,000

<b>4.2   Everglades Restoration</b>	
<b>Objective:</b> To support development and implementation of Everglades Restoration.	
<b>Previous Work:</b> CHNEP staff have participated in the development of the Southwest Florida Feasibility Study (SWFFS), co-chaired the Southwest Florida Regional Restoration Coordination Team (SWF RRCT), and served on the Science Coordination Group (SCG).	
<b>Description:</b> The CHNEP will provide staff support to develop and implement Everglades Restoration. This includes serving on the SWFFS Study Group and its subcommittees, co-chairing the SWF RRCT, and participating on the SCG on behalf of Southwest Florida. Deliverables of the SWF RRCT include a Science Plan update and a Restoration Plan. Although the CHNEP will not provide primary support of restoration mapping outside the study areas, the CHNEP will host the database and shape files in support of the entire SWF RRCT area.	
<b>Deliverables:</b> RRCT Science Plan Update RRCT Restoration Plan Update Presentation of Priorities SCG Participation	<b>Target Dates:</b> September 2005 September 2005 September 2005 On-going
<b>Actions:</b> HA-N: Ensure Charlotte Harbor NEP's continued representation and involvement in the reconnaissance and feasibility phases of the USACOE comprehensive restudy of the Central and South Florida Flood Control Project. FW-C: Restore freshwater and estuarine wetland areas, especially those adversely impacted by ditching, using the following methods: the backfilling of ditches, the removal of spoil piles, the elimination of invasive exotic vegetation, and other restoration techniques.	<b>Funding Sources:</b> EPA - \$600 FDEP - \$10,000 SFWMD - \$20,000 City/County - \$11,000

<b>4.3   SWIM Plan Development</b>	
<b>Objective:</b> To support the development and updates of Surface Water Improvement and Management (SWIM) plans toward implementation of the CCMP.	
<b>Previous Work:</b> On February 13, 2003, the SFWMD Governing Board approved designating Lower Charlotte Harbor a SWIM waterbody. This designation augments the Charlotte Harbor SWIM designation made by SFWMD in 1989. The Charlotte Harbor SWIM Plan was updated in 2000 and expanded its boundaries to include the northern extents of the CHNEP study area. In addition, SFWMD maintains a Winter Haven Chain of Lakes SWIM Plan. The SFWMD SWIM program has been responsible for much of the excellent work that SFWMD does on behalf of Charlotte Harbor and Lemon Bay. In Summer 2004, SFWMD contracted with CHNEP to prepare the Reconnaissance Report. The Report is expected to be complete by Summer 2005.	
<b>Description:</b> CHNEP will provide staff support to the development of the Lower Charlotte Harbor SWIM.	
<b>Deliverables:</b> Assist with drafting the Lower Charlotte Harbor SWIM Plan.	<b>Target Dates:</b> September 2006
<b>Actions:</b> HA-L: Implement the recommendations of the South Lee County Plan.	<b>Funding Sources:</b> EPA - \$200 City/County - \$11,000

## **Task 5: Advocacy and Legislative Action**

The CHNEP Policy Committee is comprised of elected officials and agency heads of federal, state, regional, county, and city agencies. These are the very agencies that will be the likely recipients of CHNEP advocacy and legislative action. The advocacy position represents a great commitment to partnership and trust between the CHNEP partners.

The goals of the CHNEP's advocacy and legislative action stance are:

- To implement the quantitative objectives and priority actions of the adopted *Comprehensive Conservation and Management Plan (CCMP)*,
- To provide policy-makers with a source of review and comment from an organization which represents the considered opinions of diverse interests, and
- To provide a voice for natural systems within the study area watersheds based on the best scientific information available.

Subtasks include:

- 5.1 Legislative Agenda
- 5.2 Advocacy and Review Procedures
- 5.3 Federal Consistency Review

Deliverables include:

- Revised FY2006 Legislative Agenda by mid-autumn
- Present agenda to State and Federal Legislative Delegations throughout the CHNEP study area
- Tracking of relevant legislation
- Electronic updates to Subcommittee members
- Letters of support as appropriate to legislators and policy makers
- ANEP membership
- Review, Comment, Support and Inquiry Letters
- Public Testimony
- Review of at least 4 Comprehensive Plans
- Early coordination with parties prior to Clearinghouse submission
- Comments to State Clearinghouse

<b>5.1 Legislative Agenda</b>	
<b>Objective:</b> To provide a structure for pursuing legislative action to support the implementation of the Comprehensive Conservation and Management Plan (CCMP).	
<b>Previous Work:</b> The CHNEP Legislative Subcommittee facilitated the development of the Legislative Agenda in 2003. This Agenda was approved by the Management Conference and was presented to both the State and Federal legislative delegations for the 2005 legislative sessions.	
<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 annually 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 throughout 2005 and 2006, it is anticipated that the Legislative Agenda will likewise undergo review and revision by the Management Conference. Additionally, 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. However, a portion of the \$4,500 dues is not eligible for EPA funding. Finally, this task also supports the Legislative Subcommittee. Legislative Priorities include:	
<b>State</b>	
Oppose Water Markets	
Support Reservations for Caloosahatchee, Peace River, and Estero Bay	
Support Funding of:	
land acquisition	
law enforcement	
restoration	
Lake Hancock	
SFWMD Initiatives	
Modify Maintenance Dredging Exemptions	
<b>Federal</b>	
Support EIS of Peace River Basin, with DEP/WMD support	
Support Funding of:	
land acquisition	
restoration	
Lake Hancock Restoration	
<b>Deliverables:</b>	<b>Target Dates:</b>
Revised FY2006 Legislative Agenda by mid-autumn	Early November 2005
Present agenda to State and Federal Legislative Delegations throughout the CHNEP study area	November 2005 - March 2006
Tracking of relevant legislation	As Appropriate
Electronic updates to Subcommittee members	As Appropriate
Letters of support as appropriate to legislators and policy makers	As Opportunities Arise
ANEP membership	January 2006
<b>Actions:</b>	<b>Funding Sources:</b>
General Support of the CCMP	Cities/Counties - \$22,800
	Manatee County - \$5,000

<b>5.2   Advocacy and Review Procedures</b>	
<b>Objective:</b> To implement the Advocacy and Review Procedures adopted in February 2003.	
<p><b>Previous Work:</b> On February 21, 2003, the Policy Committee adopted the Advocacy and Review Procedures that were developed by the Management Conference. Since adoption of the Advocacy and Review Procedures, CHNEP has submitted 7 letters of either support or comment to other agencies. The topics of the letters: Corp and South Florida Water Management District Lake Okeechobee Protocols, Corps Phosphate Mine Inquiry, Caloosahatchee Coordination, Charlotte Harbor Total Maximum Daily Loads (TMDL) and Pollutant Load Reduction Goals (PLRG), SWANCC Request, Funding Request, and Babcock Acquisition.</p> <p>In FY 05, letters were sent to EPA (Gypsum Research), SFWMD (WSE Regs), SWFWMD (SWUCA), and ACOE (404 permit).</p>	
<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-2.</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> </ul> <p>For FY '06, additional advocacy will include:</p> <ul style="list-style-type: none"> <li>Participation in the Lower West Coast Supply Plan development</li> <li>Review of local comprehensive plans by the CHNEP partnership for implementation of the CCMP.</li> </ul>	
<p><b>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 4 Comprehensive Plans</li> </ul>	<p><b>Target Dates:</b></p> <ul style="list-style-type: none"> <li>As required</li> <li>As Appropriate</li> <li>September '06</li> </ul>
<p><b>Actions:</b></p> <ul style="list-style-type: none"> <li>General support of CCMP</li> </ul>	<p><b>Funding Sources:</b></p> <ul style="list-style-type: none"> <li>Cities/Counties: \$11,050</li> </ul>

<b>5.3 Federal Consistency Review</b>	
<b>Objective:</b> 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>Previous Work:</b> The CHNEP developed a Federal Consistency Review Report in 1999 which sets forth a procedure for ensuring compliance with the USEPA requirements. In 2000 and 2003, the Management Conference approved the submission of a letter to the U.S. Corps of Engineers requesting a Programmatic EIS regarding the permitting and funding activities within the Peace and Myakka River Basins of the Greater Charlotte Harbor watershed.	
<b>Description:</b> CHNEP staff will continue to implement the two step strategy described in the 1999 Federal Consistency Report: early coordination and State Clearinghouse consistency review as directed by the Management Conference. The 2003, Advocacy and Review Procedures Technical Report 03-1 sets forth Federal actions that the CHNEP will review for consistency with the CCMP. Federal Consistency Review may include: Direct federal activities, including federal licenses, or permits to federal applicants, and federal financial assistance to private applicants Federal licenses and permits to non-federal applicants Outer Continental Shelf (OCS) exploration, development, and production activities Federal financial assistance to state or local governments	
<b>Deliverables:</b> Early coordination with parties prior to Clearinghouse submission  Comments to State Clearinghouse	<b>Target Dates:</b> As appropriate, but prior to submission of project to Clearinghouse As required, within 30 days of receiving notification from the State Clearinghouse
<b>Actions:</b> CCMP pages 219: Federal Consistency Review.	<b>Funding Sources:</b> Cities/Counties: \$6,050

## **Task 6: Grants**

From its first workplan adopted in 1996, the CHNEP has funded grants to its partners at a level over \$100,000 annually. In 1996, these projects, called “Early Action Projects,” were originally conceived to “address a specific issue, to test a new management technique, or to manage a known problem within the watershed. These projects will be identified through the Technical Advisory Committee and with the assistance of the rest of the Committees.” Within the fiscal year, the 3 projects to address each of the priority problem issues were transformed into a grants program and resulted in 7 projects that year. Two years later, a mini-grant program was established to broaden public outreach. This year that grant program was retitled “Public Outreach Grant.” This is the first year that grant support from CHNEP has been reduced and the first year that that total funding support to partners has been less than \$100,000. However, CHNEP support of partners to apply for outside grants on behalf of partners has expanded.

Subtasks include:

- 6.1 Research and Restoration Partners
- 6.2 Public Outreach Grants (formerly known as Mini-Grants)
- 6.3 Micro Grants
- 6.4 Leveraged Grants
- 6.5 Grants and Contracts Administration

Deliverables include:

- Approve guidance document
- Commit to partnership funding of 4 RRPP projects
- Final reports from RRPP projects
- Guidance Document
- Approximately 13 Education programs, Restoration, and Research
- Approximately 72 small, innovative projects
- Database of Grant Opportunities
- Email notification of available grants
- Support letters for inclusion with grant applications
- Draft and Final Grant applications
- Quarterly Progress Reports as required
- Final Reports (financial close out, work products)
- Invoices for payment

<b>6.1 Research and Restoration Partners</b>	
<b>Objective:</b> To promote innovative techniques in research and restoration	
<p><b>Previous Work:</b> These projects started in 1997 with the funding of Early Action Demonstration Projects with six projects costing a total of \$85,000. This grew to 12 projects in 1998 at a cost over \$140,000. In 1999, the projects were split into Mini-Grants and Restoration Partners grants with 4 projects at approximately \$70,000 going to water quality monitoring, restoration of habitat or baseline benthic invertebrate data collection. In 2000, four habitat restoration projects were funded for a little over \$60,000. In 2001, the grants changed again to allow the funding of applied research. Six projects at a cost of \$73,000 to the program were funded for restoration of habitat on Sanibel, coastal Venice and the Charlotte Harbor Buffer Preserve as well as research into Old Mined Lands and the content of metals and pesticides in oysters in the Caloosahatchee River. In 2002-2004, the program has budgeted approximately \$100,000 annually for the Research and Restoration Partners grants.</p>	
<p><b>Description:</b> This grant process provides incentives and seed money for applied research on local issues and restoration within the greater Charlotte Harbor watershed. Applicants are permitted to request \$20,000 per supporting partner up to the cap allocated to this fund. This grant could be used for small equipment, labor and plants as a contribution or incentive for public and private organizations to improve the environmental quality of their lands. It can also be used for analysis costs, travel and labor for researchers to study issues important to preserving the Charlotte Harbor ecosystem. A proposal would be submitted from an applicant and through a selection process involving the Technical Advisory, Management and Policy Committees, the top projects would be funded.</p>	
<p><b>Deliverables:</b>          Approve guidance document          Commit to partnership funding of 4 RRPP projects          Final reports from RRPP projects</p>	<p><b>Target Dates:</b>          August 2004          June 2005          September 2006</p>
<p><b>Actions:</b>          General Support of the CCMP</p>	<p><b>Funding Sources:</b>          EPA - \$43,628          Cities/Counties - \$24,000</p>

<b>6.2 Public Outreach Grants (previously known as Mini-Grants)</b>	
<b>Objective:</b> To support CHNEP partners public outreach initiatives to further the Comprehensive Conservation and Management Plan.	
<b>Previous Work:</b> In 1999 CHNEP began awarding what are known as Research & Restoration Partners Grants (6.1) and Public Outreach Grants (6.2). FY 04/05 funding level was at \$35,000 for Public Outreach Grants to award funds to the following 13 projects:	
<p><b>"Curious Kids" Virtual Estuaries Class:</b> WGPU Public Media · <b>Sailing Through the Environment of Charlotte Harbor:</b> LA Ainger Middle School (Rotonda West, Charlotte) · <b>Pick Preserve Nature Trail Boardwalk:</b> Sanibel-Captiva Conservation Foundation · <b>EnviroTEENS Camp 2005: Working to Make Life-Long Connections to our Environment:</b> Volunteer Services of Manatee County, Inc. · <b>FYN Highlights at Model Homes:</b> Lee County Overall Extension Advisory Board · <b>Nature Resource Guide:</b> Crowley Museum &amp; Nature Center · <b>Incorporating Public Input on Sea Turtle Sightings in Charlotte Harbor:</b> Mote Marine Laboratory · <b>The Myakka Wild and Scenic Trails Map:</b> Friends of Myakka River, Inc. · <b>Life in and Around Lemon Bay:</b> Port Charlotte Middle School (Charlotte) · <b>Portable Fisherman's Educational Kiosk/Display:</b> Florida Sea Grant Program · <b>FYN Water Conservation Workshops:</b> Polk County Extension Service · <b>Interpretive Displays at Southern Landing:</b> Lakes Education/Action Drive · <b>South Lake Howard Nature Park:</b> Lakes Education/Action Drive</p>	
<p>FY 03/04 funding level was at \$27,000 for Public Outreach Grants but increased to \$44,438 for 16 projects contracted in 2004. (One of the 16 projects was withdrawn by the applicant.) FY 02/03 funding level was at \$25,000 for 9 projects contracted in 2003. FY 01/02 funding level was at \$18,000 but increased to \$32,000 for 12 projects contracted in 2002. In both FY 99/00 and FY 00/01 funding levels were at \$18,000 for 7 projects contracted in each year. From 1996 to 1999, which were the first three years of the CHNEP, 34 grants were awarded as Early Action Demonstration projects.</p>	
<b>Description:</b> Public Outreach Grant projects occur in the Charlotte Harbor NEP study area and facilitate public education of environmental issues identified in the CCMP. Projects are typically completed in one year. No matching funds are required and the maximum funding per project is \$3,000. For Public Outreach Grants, the guidance document is approved in August and disseminated by the end of August. Applications are reviewed by staff and the CAC Grants Committee between October and December. The Grants Committee makes recommendations as to which applications should be funded to the CAC who make recommendations to the Management and Policy Committees for final action by February. Projects may begin once a contract is signed and notarized, which is as early as March.	
<b>Deliverables:</b> Guidance Document Approximately 13 Education programs, Restoration, and Research	<b>Target Dates:</b> August 2004 September 2006
<b>Actions:</b> CCMP pages 209-214: Public Education and Outreach.	<b>Funding Sources:</b> EPA - \$46,050

<b>6.3   Micro-Grants</b>	
<b>Objective:</b> To provide year-round support CHNEP partners public outreach initiatives that further the Comprehensive Conservation and Management Plan.	
<b>Previous Work:</b> The first \$250 micro-grant was awarded in March 2002. Since then 138 applications have been awarded. From October 2004 to March 2005, the following 26 applications have been approved. <b>Winter Haven Chain of Lakes Sunset Celebration-Environmental Education Exhibits-April 16, 2005:</b> Lakes Education/Action Drive · <b>Seeing green in our future developments, a low impact development workshop on creative development design as a conservation tool - May 24, 2005:</b> Lakes Education/Action Drive · <b>Annual Tree Festival in North Port - April 16, 2005:</b> People for Trees, Inc. · <b>Peace River Environmental Education Network (PREEN) meeting reimbursement:</b> Charlotte Harbor Environmental Center · <b>The Butterfly Patch:</b> Peace River Butterfly Society · <b>Native Plant Day - March 19, 2005:</b> FNPS Mangrove Chapter · <b>Boca Grande Pass Enhancement:</b> Florida Sea Grant Extension · <b>2005 River of Words Environmental Poetry Contest in Charlotte County:</b> Peace River Center for Writers · <b>Underwater debris removal from Sanibel causeway:</b> Manatee World, Inc. · <b>2005 CREW Wildflower Celebration - March 18-19, 2005:</b> CREW Land & Water Trust · <b>Measuring accurate marine turtle nest and non-nesting distances:</b> Turtle Time, Inc. · <b>2005 River of Words Poetry Contest in DeSoto County:</b> DeSoto County Library Association · <b>Mariner Earth Watch Native Butterfly Garden Project:</b> Mariner High School/Mariner Earth Watch · <b>LE/AD's 20th Anniversary Environmental Education Publication:</b> Lakes Education/Action Drive · <b>Environmental Day Camp:</b> Charlotte County 4-H Program · <b>The Tangerine Woods Brazilian Peppers Eradication/Education Project:</b> Neil Sheehan · <b>2005 Great American Cleanup Environmental Resource Guide:</b> Keep Polk County Beautiful · <b>Florida Yards and Neighborhood Demonstration Native Landscape and Garden:</b> Cape Coral Historical Society · <b>Demonstration Cul-De-Sac Landscaping:</b> Marjorie Seegmuller · <b>Burrowing Owl Festival: Third annual on February 12, 2005:</b> Cape Coral Friends of Wildlife · <b>Polk County Utilities for Conservation Corner:</b> Polk County Utilities · <b>Afterschool Nature Club:</b> Lee County Parks & Recreation · <b>WindWords: Hurricane Stories in DeSoto County:</b> DeSoto County Library Association · <b>Rebuilding Butterfly Garden at Beach School:</b> Fort Myers Beach Pilot Club · <b>Sixth Annual Southwest Gulf Coast Regional Envirothon - December 10, 2004:</b> NRCS Lee Soil and Water Conservation District · <b>Coastal Clean-Up on Ft. Myers Beach:</b> Fort Myers Beach Pilot Club	
<b>Description:</b> One of the four 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 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.	
<b>Deliverables:</b> Approximately 72 small, innovative projects	<b>Target Dates:</b> Available year round
<b>Actions:</b> CCMP pages 209-214: Public Education and Outreach.	<b>Funding Sources:</b> EPA - \$22,050

<b>6.4 Leveraged Grants</b>	
<b>Objective:</b> To supplement implementation of the Comprehensive Conservation and Management Plan (CCMP) through funding of projects from sources other than the EPA Cooperative Agreement.	
<b>Previous Work:</b> The CHNEP Management Conference adopted the first CCMP in 2000. The EPA approved the CCMP in 2001. During the 2003-2004 Workplan year, CHNEP assisted partners in applying for and winning grants from federal agencies for restoration projects that directly implement the CCMP. In 2004-2005, CHNEP provided staffing for the Babcock Preservation Partnership, Inc., Coordinator position. Staff assisted partners in identifying potential sources of funding for the full acquisition of the Babcock Ranch. This also included outreach and education efforts to potential funders and supporters. Staff assisted in formulating funding requests through the Federal appropriations process via earmarks to three programs totaling \$8 million. Staff was key to the raising of over \$42,400,000 in public and private commitments and contributions to the Babcock Ranch project. At the time of the Workplan development, CHNEP staff is organizing a partnership to submit a proposal to National Science Foundation for funding of Informal Science Education projects, possibly to include video media.	
<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 2004 Research Needs Inventory in conjunction with the CCMP guide CHNEP staff when reviewing grant opportunities. CHNEP staff assist partners in identifying, applying for and administering grants from various sources, including Federal and State agencies and private foundations. Staff also search 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 in order to form teams and develop projects in advance of the Request for Application announcements.	
<b>Deliverables:</b> Database of Grant Opportunities Email notification of available grants Support letters for inclusion with grant applications Draft and Final Grant applications	<b>Target Dates:</b> On going Ongoing, usually bi-monthly As Requested As Appropriate
<b>Actions:</b> General Support of the CCMP	<b>Funding Sources:</b> EPA - \$39,500

<b>6.5   Grants and Contracts Administration</b>	
<b>Objective:</b> To implement the CCMP by ensuring compliance with awarded grant requirements, including reporting and invoicing.	
<b>Previous Work:</b> The CHNEP program staff has been administering the EPA Cooperative Agreement since the inception of the NEP. In the past, CHNEP has either sought or been awarded additional grants from EPA and other agencies, such as the U.S Army Corps of Engineers. Each of these grants has compliance requirements, including specific reporting needs and invoicing processes. Additionally, CHNEP has been awarded grant funds for projects that are contracted out to third parties, such as the Regional Coastal funds awarded by USEPA Region 4. Program staff are responsible for administering the contracts and ensuring all reporting requirements are met.	
<b>Description:</b> As part of the Long Range Funding Strategy it was recommended that CHNEP aggressively pursue Federal and State funding assistance and new funding sources. Ensure compliance with awarded grants, and cooperative assistance agreements from Federal, state, local agencies and private sources. Develop and submit quarterly progress reports and final project reports as required. Invoice funding source as required, ensure successful project progress and completion. This task also supports staff time for the management of grants that do not include administrative support in the award, such as the Alligator Creek Addition Restoration Project with the U.S. Army Corps of Engineers and the atmospheric deposition monitoring station with US EPA.	
<b>Deliverables:</b> Quarterly Progress Reports as required  Final Reports (financial close out, work products) Invoices for payment	<b>Target Dates:</b> Quarterly, December, March. June, September As Required As Required
<b>Actions:</b> General Support of the CCMP	<b>Funding Sources:</b> Cities/Counties - \$35,050

## Task 7: Earlier Contractual Commitments

According to the March 4, 2002 EPA Workplan guidance, the status of projects that are ongoing from the previous year need to be summarized. Because CHNEP maintains one annual budget with carry-over as a component, on-going projects become Task 7: Earlier Contractual Commitments. All on-going projects are under some contractual obligation. The only exceptions are on-going projects that are conducted through the Southwest Florida Regional Planning Council. As the host agency, the SWFRPC enters into contract on behalf of CHNEP and the SWFRPC cannot enter into a contract with itself. Those projects are also included in Task 7. In order to ensure that Earlier Contractual Commitments are maintained in the Workplan, all projects that are open as of May 2005 are included, whether they are expected to be closed by September 1, 2005 or not.

**Table 2: On-Going Projects**

Project	Contractor/ Organization	Action	Deliverables	Date Let	Due Date	Project Total	Contract Amount	Contract Balance as of 3/16/05
<b>Research and Restoration Contracts</b>								
Hydrologic Conditions Analysis	URS	HA-H	Report, GIS	7/1/2003	12/1/2004	\$79,961	\$79,961	\$28,079
(Upland and Wetland) Habitat Change Analysis	Avineon	FW-2	Report, GIS	7/1/2003	12/1/2006	\$79,326	\$79,326	\$54,849
Benthic Invertebrate Species Richness	Mote Marine Lab	FW-2	Report, Database	4/30/2004	7/30/2005	\$80,000	\$79,949	\$59,626
Esterio Bay Nutrient Management	EBNMP	WQ-N	Report	10/1/2003	3/31/2005	\$40,000	\$40,000	\$8,322
Oyster Restoration	FGCU	FW-V	Report	1/13/2004	5/1/2006	\$57,000	\$57,000	\$41,979
Best Management Practices	Lee County	WQ-E/M	Manual	4/6/2004	4/1/2007	\$250,000	\$250,000	\$250,000
Water Quality Consortium	SCCF	WQ-C/D	Web site	3/18/2004	3/31/2005	\$40,000	\$40,000	\$20,182
CHEVWQMN	FDEP	WQ-B	Report	not let	10/1/2005	\$35,000	\$35,000	\$20,182
Matanzas Pass Restoration	Friends of Matanzas Pass	FW-A	Report, Video	1/31/2005	10/1/2005	\$40,500	\$20,250	\$20,250
Effects of Sediments on Shellfish	FGCU	FW-R/V	Report	7/1/2003	10/1/2004	\$25,018	\$25,018	\$23,869
Lemon Bay Preserve Restoration	Sarasota County	FW-A	Report	7/1/2004	10/1/2005	\$20,000	\$20,000	\$20,000
Impact of Marsh Grass in Myakka	University of Florida	FW-A	Report	7/1/2004	10/1/2005	\$10,775	\$10,775	\$10,775
Optical Brighteners for Septics	CHEC	WQ-B	Report	7/1/2004	10/1/2005	\$19,854	\$19,854	\$14,142
Myakka Park Restoration	FDEP	FW-A	Report	7/1/2004	10/1/2005	\$16,328	\$16,328	\$16,328
Assess Estrogenic Activity	Mote Marine Lab	WQ-C/D	Report	7/1/2004	10/1/2005	\$19,957	\$19,957	\$19,957
N from Sludge Spreading	CHEC	WQ-C/D	Report	6/1/2005	10/1/2006	\$10,126	\$10,126	\$10,126
Burrowing Owl	CC Friends of	FW-	Report	6/1/2005	10/2/200	\$3,575	\$3,575	\$3,575

Project	Contractor/ Organization	Action	Deliverables	Date Let	Due Date	Project Total	Contract Amount	Contract Balance as of 3/16/05
Survey	Wildlife	2(G)			6			
Expand Scallop Restn in PIS	Mote Marine Lab	FW-R	Report	6/1/2005	10/3/2006	\$11,923	\$11,923	\$11,923
Vallisneria Restn in CR	Mote Marine Lab	FW-R	Report	6/1/2005	10/4/2006	\$12,169	\$12,169	\$12,169
Nonnative Fish Assessment	Mote Marine Lab	FW-R	Report	6/1/2005	10/5/2006	\$17,333	\$17,333	\$17,333
Water Quality Analysis Update	Janicki Environmental	WQ-C/D	Report, Database	6/1/2005	12/31/2006	\$69,840	\$69,840	\$69,840
CHEC WQ website expansion	CHEC	pg 214	Website	1/1/2005	1/31/2006	\$17,000	\$17,000	\$17,000
Total Research and Restoration:						\$935,435	\$935,384	\$770,324
<b>Public Outreach Contracts</b>								
Television fillers & 5-7 minute seagrass video	WGCU Public Media	FW-E, pg 214	Video	10/10/2003	9/1/2006	\$16,000	\$16,000	\$12,120
Video on estuaries for classroom use	Live Oak Production	HA-I/J/K	Video	6/4/2004	9/1/2006	\$25,000	\$25,000	\$18,750
Video on estuaries for classroom use	Carol Newcomb-Jones	HA-I/J/K	Video	8/9/2004	9/1/2006	\$9,999	\$9,999	\$9,999
Video on estuaries for classroom use	undetermined	HA-I/J/K	Video	not let	not let	\$20,000	\$20,000	\$20,000
Reprint "Story of Charlotte Harbor"	Pride Enterprises	pg 209	Publication	not let	9/30/2004	\$16,000	\$16,000	\$16,000
Reprint osprey poster	undetermined	pg 209	Publication	not let	9/1/2005	\$4,000	\$4,000	\$4,000
Reprint educational poster	undetermined	pg 209	Publication	not let	9/1/2005	\$4,000	\$4,000	\$4,000
Publication brochure	undetermined	pg 209	Publication	not let	9/1/2005	\$3,000	\$3,000	\$3,000
State of the Harbor Publication	undetermined	EPA	Publication	not let	9/30/2004	\$20,000	\$20,000	\$20,000
Materials for boaters	Florida Sea Grant	FW-G & D	Publication	not let	9/1/2005	undetermined	\$5,000	\$5,000
Children's Book	undetermined	pg 210	Publication	not let	9/1/2006	\$20,000	\$20,000	\$20,000
Guide of Environmental Places	undetermined	pg 210	Publication	not let	9/1/2006	\$20,000	\$20,000	\$20,000
Citizens Guide	undetermined	pgs 210	Publication	not let	9/1/2006	\$18,000	\$18,000	\$18,000
Florida Yards & Neighborhood - developers	Sarasota County Extension	WQ-I, pg 212	Programs	not let	9/1/2006	\$2,562	\$2,562	\$2,562
FYN	WGCU/FGCU	WQ-1, pg 212	Programs	8/9/2004	9/1/2006	\$3,500	\$3,500	\$3,500
FYN	Friends of Extension Foundation -	WQ-1, pg 212	Programs	6/5/2004	9/1/2006	\$1,500	\$1,500	\$1,500

Project	Contractor/ Organization	Action	Deliverables	Date Let	Due Date	Project Total	Contract Amount	Contract Balance as of 3/16/05
	Charlotte.							
Wading trips	CHEC		Programs			\$2,970	\$2,970	\$2,970
Wading trips	SCCF, Buddies, Friends and CNC&P		Programs			\$2,970	\$2,970	\$2,970
Umbrella: PREEN	Keep Polk Beautiful and LEAD	pg 209	Meetings and EcoFest	not let	9/1/2006	\$3,400	\$3,400	\$3,400
Communications	miscellaneous					\$47,000		\$26,000
Special Publications	miscellaneous					\$25,000		\$20,000
Events	miscellaneous					\$35,000		\$15,000
Outreach	miscellaneous					\$37,000		\$30,600
<b>Public Outreach Grants</b>								
Manatee Park Education Signage	FNPS Coccoloba Chapter	FW- I/T	Report	3/31/2004	3/30/2006	\$4,000	\$3,000	\$1,333
Turtle Talk Books	Turtle Talks	FW- I/T	Report	4/12/2004	4/11/2006	\$1,100	\$1,100	\$1,100
Friends of Jacaranda Library	Native Plant Project	FW/I- T	Report	4/12/2004	4/11/2006	\$11,859	\$3,000	\$3,000
Estero Bay Field Map & Interpretive Guidebook	Ft Myers Beach Mound House	WQ-B	Report	6/16/2004	8/31/2005	\$4,900	\$2,900	\$2,900
Outdoor Study along the Peace River	Fort Meade M/S HS	WQ-B	Report	5/18/2004	5/14/2006	\$3,000	\$3,000	\$3,000
Field modules for K-12	FGCU	FW- I/T	Report	5/4/2004	5/3/2006	\$3,978	\$2,978	\$2,978
EnviroTEENS Camp 2005	Volunteer Services of Manatee County	FW/I- T	Report	3/22/2005	3/21/2006	\$23,756	\$3,000	\$3,000
"Curious Kids" Virtual Estuaries Class	WGPU/FGCU		Video /web site	3/22/2005	3/21/2006	\$7,368	\$3,000	\$3,000
Incorporating Public Input on Sea Turtle Sightings	Mote Marine Laboratory		Report	3/22/2005	3/21/2006	\$25,000	\$3,000	\$3,000
Pick Preserve Nature Trail Boardwalk	Sanibel- Captiva Conservation Foundation		Report	3/28/2005	3/27/2006	\$45,932.00	\$3,000.00	\$3,000.00
FYN Highlights at Model Homes	Lee County Overall Extension Advisory Board		Report	3/28/2005	3/27/2006	\$5,002	\$2,947	\$2,947
Displays at two lakes in Polk County	Lakes Education/Act ive Drive		Report	3/28/2005	3/27/2006	\$12,334	\$4,318	\$4,318
Nature Resource Guide	Crowley Museum & Nature Center		Report	not let	not let	\$2,995	\$2,995	\$2,995

Project	Contractor/ Organizatio n	Actio n	Deliver- ables	Date Let	Due Date	Project Total	Contract Amount	Contract Balance as of 3/16/05
Sailing through the Environment	LA Ainger MS	WQ-B	Report	not let	not let	\$3,190	\$2,700	\$2,700
Myakka Wild and Scenic Trails Map	Friends of Myakka River		Report	not let	not let	\$8,000	\$3,000	\$3,000
Life in and Around Lemon Bay	Port Charlotte MS		Report	not let	not let	\$2,540	\$2,540	\$2,540
Portable Fisherman's Kiosk	Florida Sea Grant		Report	not let	not let	\$2,000	\$1,500	\$1,500
FYN Water Conservation Workshops	Polk County Extension Service		Report	not let	not let	\$3,642	\$3,000	\$3,000
Public Outreach Total:						\$507,497	\$248,879	\$328,682
Total Contacts:						\$1,442,932	\$1,184,263	\$1,099,006

# Administrative and Financial

## Description of Grants

Although Task 7 provided the list of grants from the NEP to local entities within its table, here are the grant descriptions, with amount provided, organization conducting the work, purpose, deliverables, and completion dates.

### Research and Restoration Partners Grants

*Fiscal Year 2005*

**1. Project Name:** Expanding Bay Scallop Restoration in Pine Island Sound Using Competent Larvae

**Project Partners:** Mote Marine Laboratory and Charlotte Harbor NEP

**Total Cost:** \$27,001

**NEP Funding:** \$11,923

**Completion Date:** September 30, 2006

This project will expand on efforts to reestablish bay scallop (*Argopecten irradians*) populations in the Pine Island Sound area through the use of an innovative stock enhancement strategy that proved successful in a project conducted in 2003. In compliance with this strategy, adult bay scallops will be transported from the study area to Bay Shellfish Company, a commercial shellfish aquaculture facility. At this facility, they will be conditioned and induced to spawn. Once they have initiated the process of metamorphosis, they will be transported to SCCF Marine Laboratory where they will be acclimated for release to three strategic locations in the Pine Island Sound area: North Pine Island Sound, J.N. "Ding" Darling National Wildlife Refuge, and South Pine Island Sound. Immediately, they will be assessed for larval settlement and recruitment. Juvenile abundance will then be evaluated during the winter, and adult abundance will be assessed the following summer (2006). Lastly, the densities of scallops at each site will be compared to the densities recorded before the restoration effort. Addresses FW-R of CCMP.

**Deliverables:** Final Report

**2. Project Name:** Does Nitrogen from Sludge Farm Runoff Persist in the Charlotte Harbor Study Area?

**Project Partners:** Charlotte Harbor Environmental Center and Charlotte Harbor NEP

**Total Cost:** \$25,234

**NEP Funding:** \$10,126

**Completion Date:** September 30, 2006

Residual sludge produced by domestic waste water treatment is often disposed of by land application. The contributions of nitrogen from this source should be monitored to avert coastal nutrient enrichment. This project will measure the presence and extent of sludge nitrogen through the use of stable nitrogen isotope analysis, based on the degree of difference between the sludge and background nitrogen isotope ratios. The methods for this project include seasonal sampling of both nitrogen and the stable nitrogen isotope ratio in filtered water, phytoplankton, and macrophytes from stations along the Peace River, Horse Creek, and selected tributaries which may be impacted by sludge spreading. This project will produce maps of the area affected by sludge nitrogen, and the amount of sludge nitrogen assimilated by different components of the ecosystem. This study may also be of further use as stable nitrogen isotope ratios can be combined with stable carbon and sulfur

ratios to assess the effects of sludge spreading in trophic interactions and larger questions of Charlotte Harbor study area ecology. Addresses WQ-C/D of CCMP.

**Deliverables:** Final Report

**3. Project Name:** *Vallisneria americana* Restoration within the Caloosahatchee River

**Project Partners:** Mote Marine Laboratory and Charlotte Harbor NEP

**Total Cost:** \$24,515

**NEP Funding:** \$12,169

**Completion Date:** September 30, 2006

The drought of 2000 severely reduced the extent of the submerged aquatic vegetation, *Vallisneria Americana* (tape grass or wild celery), in the tidal Caloosahatchee River. Although *Vallisneria* has since returned to the river, its biomass is greatly reduced. This study seeks to assess the efficacy of restoring the once dominant species using captive-raised plants. Specifically, the strategy will use mature rosettes, immature rosettes, seedlings, and seeds to establish a viable population of *Vallisneria* and ultimately enhance fish and wildlife habitat. Addresses FW-R of CCMP.

**Deliverables:** Final Report

**4. Project Name:** Burrowing Owl Survival and Dispersal Study

**Project Partners:** Cape Coral Friends of Wildlife and Charlotte Harbor NEP

**Total Cost:** \$7,550

**NEP Funding:** \$3,575

**Completion Date:** September 30, 2006

Burrowing owls in Cape Coral are being studied by Florida Fish and Wildlife Conservation Commission biologists as part of a five-year (5) telemetry project. In the spring of 2004 Fish and Wildlife personnel placed 56 radio transmitters on young owls in Cape Coral. These owls are being monitored weekly through the nesting and dispersal periods, and will continue to be monitored into late winter. Radio tracking data are being collected on juvenile owl survival, dispersal, and their ability to adapt to rapidly changing habitat conditions due to development. These data will hopefully provide information to assist biologists and city planners to better manage burrowing owl populations in this region. This project will help provide funds to purchase 50 additional radio transmitters to be placed on young owls in the spring of 2005, allowing sufficient sampling to provide for sound statistical analyses. The results of the study will provide much needed information about owl survival and dispersal during and following the nesting season, and into the winter months. Addresses FW-2(g) of CCMP.

**Deliverables:** Final Report

**5. Project Name:** Do Altered Coastal Habitats Promote Non-Native Fish Invasions?

**Project Partners:** Mote Marine Laboratory and Charlotte Harbor NEP

**Total Cost:** \$37,409

**NEP Funding:** \$17,333

**Completion Date:** September 30, 2006

This project seeks to determine the extent that habitat alterations (conversion of upland habitats to impervious surface, which alters freshwater flow; construction of containment ponds; habitat loss) support populations of non-native fishes that then act as sources for invasions into estuarine habitats, and by so doing help formulate strategies for controlling the spread of these species. To analyze this relationship sub-dermal PIT tags will be placed on random *Cichlasoma urophthalmus* residing in the study creeks and altered upland habitats adjacent to the study creeks. A constant-reading antenna system will be placed between altered and estuarine habitats to monitor passage of tagged individuals. Routine sampling with seines will also be conducted in each study creek. Together, the antenna and seine capture data will allow the determination of the extent to which *C. urophthalmus*

favor creeks associated with altered habitat as opposed to those associated with unaltered habitat. Addresses FW-4 and FW-R of CCMP.

**Deliverables:** Final Report

### *Fiscal Year 2004*

**1. Project Name:** Lemon Bay Preserve Ecosystem Restoration Project

**Project Partners:** Sarasota County, Southwest Florida Water Management District, FishAmerica Foundation, Inc. and Charlotte Harbor NEP

**Total Cost:** \$694,016

**NEP Funding:** \$ 20,000

**Completion Date:** September 30, 2005

The water quality of Lemon Bay, an Outstanding Florida Waterway, is increasingly threatened by urban runoff. Lemon Bay Preserve shares 4,480 feet of waterfront property with Lemon Bay and contains highly disturbed mangrove/estuarine wetlands that receive little freshwater inputs from upstream residential areas. These wetlands have suffered hydrological alterations since the early 1920's due to the ditching of mangroves for mosquito control. In the 1940's and 1950's, the hydrology of the surface waters were altered, adversely impacting the amount, location and timing of freshwater flows to the estuarine wetlands on the Preserve and out to Lemon Bay. This project proposes to restore and enhance 50 acres of mangrove, freshwater and estuarine ecosystems on Lemon Bay Preserve. The installation of a pre-treatment settling pond, re-establishment of surface water flows, removal of spoil berms and regrading of ditches are primary components of this project. Others include invasive exotic vegetation control and native plant installation. Addresses FW-4, FW-A, FW-C and FW-I/FW-T of CCMP.

**Deliverables:** Final Report

**2. Project Name:** Community Level Impact of West Indian Marsh Grass on the Myakka River Watershed and Evaluation of a Potential Management Strategy

**Project Partners:** University of Florida, Florida Department of Environmental Protection—Myakka River State Park and Charlotte Harbor NEP

**Total Cost:** \$ 21,948

**NEP Funding:** \$ 10,775

**Completion Date:** September 30, 2005

The South American grass, *Hymenachne amplexicaulis*, is invading wetlands of the Charlotte Harbor watershed. The marsh grass invades river banks, marshes and other areas which seasonally flood and grows from stolons, which can be fragmented by flowing water and transported great distances downstream. Therefore, the seasonal flooding associated with summer rainfall in Florida facilitates the spread of this aggressively invasive plant. The results of this invasion include the simplification of native plant communities leading to a reduction of biodiversity and altered hydrology. With this project, researchers at the University of Florida hope to: a) quantify the impact of *Hymenachne* on plant and arthropod communities, b) assess the invasiveness of *Hymenachne* in different seasons and c) determine the effectiveness of herbicides and burning as a mean of controlling *Hymenachne*. The researchers will use monthly ground sampling in plots infested and uninfested with *Hymenachne* to assess changes in arthropod and plant communities. Aerial photography will be employed to assess the temporal invasiveness of *Hymenachne*. The end result will be a better understanding of the marsh grass and its health during different times of the year and environmental conditions so that better control and eradication methods can be developed.

Addresses FW-4, FW-A, FW-C and FW-I/FW-T of CCMP.

**Deliverables:** Final Report

**3. Project Name:** Measuring Septic System Impacts to Receiving Waters using Optical Brighteners in Charlotte County, Florida

**Project Partners:** Charlotte Harbor Environmental Center, Mote Marine Laboratory and Charlotte Harbor NEP

**Total Cost:** \$ 43,836

**NEP Funding:** \$ 19,954

**Completion Date:** September 30, 2005

Septic tank systems, also referred to as “on-site sewage treatment and disposal systems” or OSTDS are a frequently used method of wastewater treatment and disposal in the Charlotte Harbor watershed. When properly designed, installed and maintained, OSTDS can be effective in removing organic matter, bacteria and nutrients. However, conditions that can interfere or prevent the proper functioning of OSTDS include unsuitable soils, high water tables, system under-design and improper maintenance or use. When these conditions exist, the level of treatment may be insufficient to protect the water quality of receiving water bodies. The Charlotte Harbor Environmental Center will undertake a follow-up project to a 2002 Research and Restoration Partners project completed by the Center that identified septic densities in the Peace and Myakka watersheds, estimated loadings of selected nutrients from existing septic tanks, identified hot spots and designed a cost-effective monitoring program that could be used to quantify and track water quality impacts of nutrient and pathogen loadings from septic tanks. The 2002 project estimated that between 25,000 and 50,000 septic systems are located in Charlotte County, Florida (CHEC, 2003) and most of these septic tanks are located in the Port Charlotte area. Total nitrogen (TN) loadings from Charlotte County septic systems range from 75,534-151,262 pounds per year, and total phosphorus loads are estimated to range from 6,192-12,398 pounds per year (CHEC, 2003). These loadings reflect the high number of septic systems located in the County, particularly around Port Charlotte. This 2004 project will assess the efficacy of the monitoring program designed in the 2002 CHEC project in Charlotte County waters. Researchers will try to identify canal areas where failing septic systems are evident and regions within the county that would most benefit from sewer expansion by detecting optical brighteners in the water column, a cost effective screening tool successfully employed for tracing human sewage in other areas of the nation. Addresses WQ-B, WQ-F and WQ-N of the CCMP.

**Deliverables:** Final Report

**4. Project Name:** Myakka River State Park Hydrologic Restoration

**Project Partners:** Florida Department of Environmental Protection—Myakka River State Park and Charlotte Harbor NEP

**Total Cost:** \$ 69,298.88

**NEP Funding:** \$ 16,328

**Completion Date:** September 30, 2005

In 1933 the Civilian Conservation Corps (CCC) began operation in Florida, and the Myakka River State Park was one of 8 parks constructed by the CCC. The park currently manages over 27,000 acres of upland habitat, including globally imperiled Florida dry prairie, and nearly 10,000 acres of wetland/submerged habitat. There are many ditches connecting wetlands and historic fire plow lines running through the park, and these hydrologic alterations have adverse effect on the volume, locations, duration and timing of freshwater flows. They impact landscape structure, plant community compositions and wildlife habitat. Through this project, Myakka River State Park staff proposes to restore approximately 6 miles of hydrologic alterations caused by historic fire plow-lines and ditching of wetlands and sloughs in the northeast section of Myakka River State Park.

Addresses FW-4, FW-A, FW-C and FW-I/FW-T of CCMP.

**Deliverables:** Final Report

**5. Project Name:** Quantitative Assessment of Estrogenic Activity in the Charlotte Harbor estuary

**Project Partners:** Mote Marine Laboratory, National Science Foundation and Charlotte Harbor NEP

**Total Cost:** \$ 58,541

**NEP Funding:** \$ 19,957

**Completion Date:** September 30, 2005

Due to their ability to impair hormone-regulated processes such as development, reproduction and immune function, environmental pollutants that mimic the female sex hormone estrogen (i.e. xenoestrogens) pose significant health risks to both terrestrial and aquatic organisms. Because of these risks, it is important to determine the sources and concentrations of these contaminants in the natural environment so that policies to reduce their release and effects can be developed. Building upon research that has demonstrated accumulation of estrogenic pesticides in Charlotte Harbor sharks, this project proposes to examine xenoestrogen contamination in the estuary by measuring total estrogenic activity present in extracts from water samples collected from sites throughout Charlotte Harbor and its 3 major tributaries. Xenoestrogenic activity in water extracts will be quantitatively assessed using the E-SCREEN bioassay, an inexpensive procedure that detects the presence of estrogenic compounds by their ability to stimulate proliferation of estrogen-dependent cancer cells. Results of this study will provide a map of the distribution and concentrations of xenoestrogens in the estuary and provide information on the location of probable sources.

Addresses WQ-C/D and WQ-N of the CCMP.

**Deliverables:** Final Report

### *Fiscal Year 2003*

**1. Project Name:** Biological Effects of Suspended Sediments on Shellfish in the Charlotte Harbor watershed-implications for water releases and dredging activities

**Project Partners:** Florida Gulf Coast University, Florida Department of Environmental Protection and Charlotte Harbor NEP

**Total Cost:** \$57,401

**NEP Funding:** \$ 25,018

**Completion Date:** September 30, 2005

Oysters and other bivalves are critical components of estuaries due to their filtration ability and role in providing habitat. This project will examine the impact of sedimentation on oysters and clams within the Caloosahatchee estuary. Researchers at FGCU will determine threshold levels of oysters and clams for clean and contaminated (by heavy metals, pesticides and PCBs) sediments as well as duration of exposure to such sediments through a series of laboratory and field experiments. The results will provide baseline data for the determination of water quality conditions that impair organismal function as well as information pertaining to land use management that may lead to the improvement of ecosystem conditions. The results can be utilized in a "Habitat Suitability Index" model that will help predict responses due to environmental disturbances such as dredging activities. Addresses FW-2(f), FW-R and FW-V of CCMP.

**Deliverables:** Final Report

**2. Project Name:** Evaluating the effects of Restoration of Subtropical Oligohaline Marshes on Abundance and Habitat use by juvenile Snook and associated Fish Communities

**Project Partners:** Mote Marine Laboratory, Florida Department of Environmental Protection-Charlotte Harbor Buffer Preserve and Charlotte Harbor NEP

**Total Cost:** \$90,773

**NEP Funding:** \$ 19,360

**Completion Date:** December, 2004

Historically, during the rainy season the upland saltwater ponds and small creeks connected to the estuary that served as essential habitats for many young marine and estuarine species would be inundated. However, significant areas of the Charlotte Harbor coastline have been altered for development, water management or mosquito control, causing substantial fish habitat loss. The Southwest Florida Water Management District—SWIM Program and the Florida Department of Environmental Protection—Charlotte Harbor Buffer Preserve are currently restoring many of the ditches within the Charlotte Harbor Buffer Preserve. Researchers at Mote Marine Laboratory will monitor the change in fish community structure and abundance of target fish species prior to and after the restoration of several mosquito ditches on the Preserve. Researchers hope to quantify the benefits of this type of habitat and hydrologic restoration and contribute to the creation of management strategies for restoration and development projects in the future. Addresses FW-B/FW-P, FW-C, FW-R and FW-I/FW-T of CCMP.

**Deliverables:** Final Report

**3. Project Name:** Eradication of Introduced Carnivorous Lizards from the Cape Coral area

**Project Partners:** University of Tampa, City of Cape Coral, University of Florida, Florida Fish and Wildlife Conservation Commission and Charlotte Harbor NEP

**Total Cost:** \$51,664

**NEP Funding:** \$ 19,920

**Completion Date:** December, 2004

Recently a large African lizard, the Nile monitor (*Varanus niloticus*), was established in Cape Coral of Lee County, Florida. The lizards are intelligent, carnivorous and able to attain total lengths of over 2 meters and consume relatively large prey. This introduced species has the potential to devastate native amphibians, reptiles, wading birds, mammals and others within southwest Florida. This project will attempt to eradicate the Nile monitor lizard from the City of Cape Coral before the species spreads to outside areas. If it is not feasible to eradicate the species from the area, researchers will at a minimum develop a management plan to maintain the species at controllable levels. Addresses FW-4, FW-A, FW-C and FW-I/FW-T of CCMP.

**Deliverables:** Final Report

### *Fiscal Year 2002*

**Project Name:** A Survey of the Effects of Invasive Exotic Vegetation on Wetland Functions: Aquatic Fauna, Wildlife & Native Plant Community Structures

**Project Partners:** The Conservancy of Southwest Florida, The Sanibel-Captiva Conservation Foundation, Lee County 2020 Conservation Program and Charlotte Harbor NEP

**Total Cost:** \$ 73,523

**NEP Funding:** \$ 24,641

**Completion Date:** December, 2004

It is routinely argued that the presence of invasive species in wetlands severely reduces their functionality; however, there is relatively little scientific evidence to support this argument. This project will attempt to quantitatively evaluate the effects of Brazilian pepper and melaleuca on wetland faunal groups, plant community structure and wildlife utilization. Specifically, the study will compare macro invertebrate, fish, amphibian and native plant communities, along with wildlife utilization, between wetlands that are free of exotic plants (<1%) and adjacent areas that are moderately infested (10-50%) and completely dominated (>90%) by invasive exotics. Addresses FW-2 and FW-C of CCMP.

**Deliverables:** Final Report

## Public Outreach Grants (Previously Known as Mini-Grants)

Public Outreach Grants, which were previously known as mini-grants, typically take one year to complete. Projects begin as soon as the contract is signed and notarized by both parties, which is as early as mid-March.

### *Public Outreach Grants Initiated in Fiscal Year 2005*

#### **1. “Curious Kids” Virtual Estuaries Class**

WGPU Public Media/ Florida Gulf Coast University

**Total Cost:** \$7,368

**NEP Funding:** \$3,000

An estuaries video will be developed by WGPU to serve as a central component in the Virtual Estuaries segment of the Virtual Classroom Series. The video will bring real wildlife footage into the classroom illustrating the interconnections between species living in our watershed and actions that may protect them.

#### **2. Nature Resource Guide**

Crowley Museum and Nature Center

**Total Cost:** \$2,995

**NEP Funding:** \$2,995

A project will be undertaken by the Crowley Museum and Nature Center to create educational material to supplement guided nature tours and to serve as an online resource for those interested in southwest Florida flora and fauna. The educational material will consist of 75 laminated cards attached by a binding grommet. Each card will have a photo of one plant or animal accompanied by “fun facts” describing that plant/animal.

#### **3. Lakeside Display Signs in South Lake Howard Nature Park and Lake Hollingsworth**

Lakes Education/Action Drive

**Total Cost:** \$12,334

**NEP Funding:** \$4,318

Lakeside educational displays will be placed near Lake Howard (Winter Haven) and Lake Hollingsworth (Lakeland) to provide the public with important environmental information. The lakeside displays will address all three priority problems within Charlotte Harbor watershed: hydrologic alteration, habitat loss, and water quality degradation.

#### **4. FYN Highlights at Model Homes**

Lee County Overall Extension Advisory Board

**Total Cost:** \$5,002

**NEP Funding:** \$2,947

To promote responsible landscaping techniques, Florida Yards and Neighborhoods of Lee County plans to persuade local builders and developers to equip model homes with Florida friendly yards exhibiting native plants.

#### **5. Incorporating Public Input on Sea Turtle Sightings in Charlotte Harbor**

Mote Marine Laboratory

**Total Cost:** \$25,000

**NEP Funding:** \$3,000

In 2002, the Sea Turtle Conservation and Research Program was initiated by Mote Marine Laboratory to define critical habitats for three species of endangered sea turtles. To ensure public

involvement and sufficient data acquisition, 10,000 double-sided business cards will be distributed to local marinas bearing the message “Wanted: Turtle Sightings”.

## **6. The Myakka Wild and Scenic Trails Map**

Friends of the Myakka River, Inc.

**Total Cost:** \$8,000

**NEP Funding:** \$3,000

A much needed educational trail map of the Myakka River and associated conservation lands will be developed by Friends of the Myakka River. The map will aim to inspire stewardship amongst local citizens through the distribution of information on natural systems and the advocacy of a watershed approach to land management.

## **7. Florida Yards and Neighborhoods Water Conservation Workshops**

Polk County Extension Service

**Total Cost:** \$3,642

**NEP Funding:** \$3,000

The Florida Yards and Neighborhoods program of Polk County is planning to offer the public an educational workshop stressing the importance of water conservation, the negative effects of stormwater runoff, and the need to preserve water quality. Each participant will learn to construct and use rain barrels as a tool to reduce runoff pollution and conserve water.

## **8. Pick Preserve Nature Trail Boardwalk**

Sanibel-Captiva Conservation Foundation

**Total Cost:** \$45,932

**NEP Funding:** \$3,000

SCCF Pick Preserve acts as an outdoor laboratory for students attending Sanibel School. During wet months, however, the trail becomes too dangerous to tread. To remedy this predicament, the Sanibel-Captiva Conservation Foundation intends to build a 700 ft boardwalk through the preserve to help schoolchildren navigate the area during the rainy season.

## **9. Portable Fisherman’s Educational Kiosk/Display**

Florida Sea Grant Program

**Total Cost:** \$2,000

**NEP Funding:** \$1,500

An educational kiosk will be provided by the Florida Sea Grant program for local fishermen participating in catch and release fishing tournaments. The kiosk will contain information on 18 different subjects ranging from the importance of sea grass protection to circle hook technology.

## **10. Life In and Around Lemon Bay**

Port Charlotte Middle School

**Total Cost:** \$2,540

**NEP Funding:** \$2,540

An educational field trip is being planned by Port Charlotte Middle School to facilitate a deeper understanding amongst its students of the Charlotte Harbor region. To ensure the success of this effort, students will also complete supplemental bookwork focusing on conservation issues, local flora, and the importance of wetlands.

## **11. Enviro Camp 2005**

Volunteer Services of Manatee County, Inc.

**Total Cost:** \$23,756

**NEP Funding:** \$3,000

EnviroTEENS Camp 2005 is a mini-camp designed by the ManaTEEN club to encourage teen environmental stewardship. Similar projects in the past have engaged participants in such activities as water quality testing and animal surveys. EnviroTEENS camp 2005 will continue in the same tradition exposing 150 to 200 teens to a one of a kind environmental experience.

## **12. Sailing through the Environment of Charlotte Harbor**

LA Ainger Middle School, Rotonda West in Charlotte County

**Total Cost:** \$3,190

**NEP Funding:** \$2,700

Seventh grade students will participate in one of six environmental field trips that highlight the importance of estuaries as coastal resources. The 240 students, including special needs children, will be able to enjoy being out on the water of Charlotte Harbor and Lemon Bay -- some for the first time -- while they collect and analyze data. This is the fourth year of support from the NEP. Addresses WQ-B, FW/I-T and HA-I/J/K.

### *Public Outreach Grants Initiated in Fiscal Year 2004*

Seventeen applications were approved but one was later withdrawn by the applicant. Of the remaining 16, six are still in progress.

#### **1. Project Name:** Manatee Park Outdoor Classroom Project: Freshwater Wetlands and Oak/Palm Hammock

**Applicant:** Florida Native Plant Society Coccoloba Chapter

**Total Cost:** \$4,000

**NEP Funding:** \$3,000

A state-of-the art outdoor classroom of native habitats has been developed at Manatee Park. It is used in guided and self-guided tours to the 100,000 annual visitors, as part of environmental education curriculum for fifth grade students throughout Lee County and students at Florida Gulf Coast University as well as for workshops that teach homeowners and landscapers how to use and maintain native plants. This grant will add two educational interpretive habitat panels of freshwater wetlands and oak/pine hammock. This is the second year of support from the NEP. Addresses FW-I/T.

#### **2. Project Name:** Turtle Talks Book

**Applicant:** Turtle Talks – Zander Srodes

**Total Cost:** \$1,100

**NEP Funding:** \$1,100

Working with authors, artists and educators, this teenager will produce a booklet that features the Charlotte Harbor estuary and the marine lives that depend on its health. The booklet will be given to students who participate in a Turtle Talk, an educational program designed to inform students and adults of the fragile nature of the local environment. Addresses FW-I/T.

#### **3. Project Name:** Jacaranda Library Native Plant Project

**Applicant:** Friends of Jacaranda Library

**Total Cost:** \$11,859

**NEP Funding:** \$3,000

The site of this Sarasota County library already includes a large natural area with native plants. The Friends will develop a “Native Walk” in perfect harmony to increase the awareness of the library’s 238,000 annual patrons about the value of using native plant landscaping. The project includes plant identification and plant care signage, benches and tables, programming for adults and children as well as an expansion of the library’s collection on native plants. Addresses FW-I/T.

#### **4. Project Name:** Estero Bay Field Map and Interpretive Guidebook

**Applicant:** Fort Myers Beach The Mound House

**Total Cost:** \$4,900

**NEP Funding:** \$2,900

The illustrated laminated field map will provide a backdrop of Estero Bay and Matanzas Pass highlighting the diversity of life in the estuary, its operation and the interaction between humans and this unique environment for the last 6,000 years. The guidebook will integrate the human history of this area with habitat use. The documents will be available to kayakers using The Mound House while on the Great Calusa Blueway Paddling Trail. Addresses WQ-B.

**5. Project Name:** Instructional Field Modules for K-12 Environmental Education

**Applicant:** Florida Gulf Coast University

**Total Cost:** \$3,978

**NEP Funding:** \$2,978

Teachers will have access to ready-made field modules for each of three preserved areas in Lee County: Estero Bay Buffer Preserve Estero River Scrub, Four Mile Cove EcoPark in Cape Coral and Randell Research Center at Pineland. The teacher guides will include introductory material, photographs, history and preserve issues as well as classroom and field activities. Addresses FW-I/T.

**6. Project Name:** An Outdoor Study along the Peace River

**Applicant:** Fort Meade Middle-Senior High School

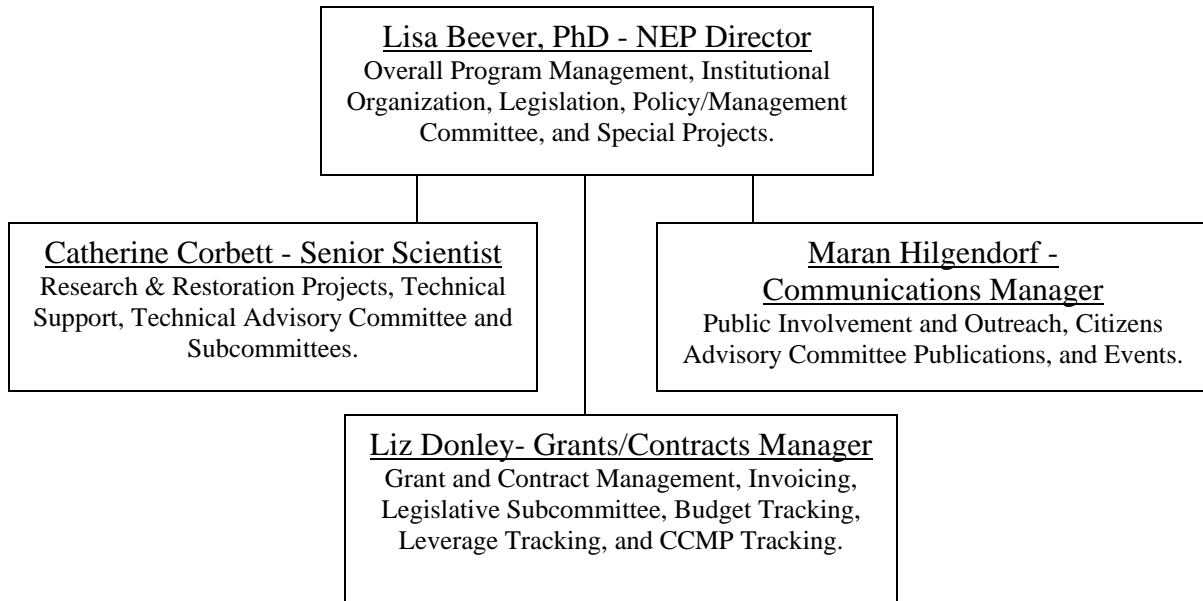
**Total Cost:** \$3,000

**NEP Funding:** \$3,000

An outdoor study area along the Peace River in Fort Meade will provide environmental science students at the school access to the river, a spring-fed pond, cypress swamp, hardwood forest and other ecosystems. Approximately 50 students in grades six through 12 will construct a wetlands survey, conduct various water tests on both the pond and river, prepare a report of their findings as well as introduce approximately 120 students in elementary grades to the life along the Peace River during field trips. This is the fourth year of support from the NEP. Addresses WQ-B.

## List Staff and Descriptions

The CHNEP staff includes 4 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. If the consolidated watershed grant for watershed coordination is approved, another staff position will be considered by the CHNEP Management Conference for a Watershed Coordinator, which will be supervised by the Senior Scientist.



To prepare cost estimate targets, staff estimates of time were developed. Table 3 identifies time estimates by staff member by subtask.

**Table 3: Expected Staff Time Allocations by Sub-task**

Task	Sub-task	Title	Lisa Beever		Catherine Corbett		Liz Donley		Maran Hilgendorf	
1.0		Management Conf./ Admin.	29%		25%		18%		24%	
	1.1	Management Conference		15%		19%		12%		12%
	1.2	General Administration		4%		2%		5%		2%
	1.3	CCMP Update		10%		4%		1%		10%
2.0		Information Delivery	14%		16%		4%		50%	
	2.1	Communications		4%		1%				13%
	2.2	Special Publications		2%		10%				4%
	2.3	Events		2%		1%		4%		15%
	2.4	Outreach Programs		2%						6%
	2.5	Data Management		4%		4%				12%
3.0		Research	8%		26%		1%		0%	
	3.1	Research Coordination		5%		11%		1%		
	3.2	Fish/ Wildlife Habitat		1%		5%				
	3.3	Hydrologic Alterations		1%		5%				
	3.4	Water Quality Research		1%		5%				
4.0		Restoration	40%		16%		3%		0%	
	4.1	Watershed Coordination		15%		13%		2%		
	4.2	Everglades Restoration		20%		1%		1%		
	4.3	SWIM Plan		5%		2%				
5.0		Advocacy/Legislative Action	8%		7%		15%		3%	
	5.1	Legislative Agenda		3%				12%		1%
	5.2	Advocacy/Review Procs		3%		5%		1%		1%
	5.3	Federal Consistency Review		2%		2%		2%		1%
6.0		Grants	1%		10%		59%		23%	
	6.1	Research/Restoration Partners				9%		1%		1%
	6.2	Public Outreach Grants						1%		12%
	6.3	Micro Grants						1%		10%
	6.4	Leveraged Grants		1%		1%		28%		
	6.5	Admin. of Grants/Contracts						28%		

**Table 4: Total Leveraged (October 1, 2004-September 30, 2005)**

PROJECT Name	Role	Total Leverage	Leveraged Federal		Leveraged State		Leveraged Local		Leveraged Private	
			Cash	In-kind	Cash	In-kind	Cash	In-kind	Cash	In-kind
320 Match	Primary	\$972,171			\$290,000	\$560,000	\$106,250		\$15,921	
CHNEP Program Committee Support	Primary	\$49,449		\$1,684		\$13,101		\$14,635		\$20,029
Lower Charlotte Harbor SWIM Designation	Primary	\$32,000			\$32,000					
Alligator Creek Restoration Project	Primary	\$1,311,079	\$400,000		\$911,079					
Estero Bay Agency on Bay Management	Primary	\$5,400					\$5,400			
Deer Prairie Slough Restoration	Primary	\$1,599			\$1,599					
Lee County School District Environmental	Primary	\$100,000					\$100,000			
Babcock Ranch Acquisition and Preservation	Primary	\$424,500				\$100,000		\$120,000	\$177,000	\$27,500
N from Sludge Spreading	Primary	\$15,108							\$15,108	
Expand Scallop Restn. In PIS	Primary	\$15,078							\$15,078	
Vallisneria Restn. In CR	Primary	\$12,346							\$12,346	
Burrowing Owl Survey	Primary	\$3,975							\$3,975	
Non-native Fish Assessment	Primary	\$20,076							\$20,076	
Impaired Waters Rule (TMDL) Implementation	Significant	\$50,000			\$50,000					
Friends of Jacaranda Library	Significant	\$8,859					\$8,859			
Estero Bay Field Map & Interpretive Guidebook	Significant	\$2,000							\$2,000	
Field modules for K-12	Significant	\$1,000					\$1,000			
EnviroTEENS Camp 2005	Significant	\$20,750							\$20,750	
"Curious Kids" Virtual Estuaries Class	Significant	\$4,368							\$4,368	
Lee County Water Basin Feasibility Study	Significant	\$15,000					\$15,000			
Post Hurricane Restoration – Peace River/Charlotte Harbor	Significant	\$4,150,000	\$2,000,000		\$2,150,000					

PROJECT Name	Role	Total Leverage	Leveraged Federal		Leveraged State		Leveraged Local		Leveraged Private	
			Cash	In-kind	Cash	In-kind	Cash	In-kind	Cash	In-kind
Post Hurricane Restoration Cape Coral	Significant	\$3,400,000	\$2,550,000				\$850,000			
Cape Coral Alternative Water Resource Development	Support	\$500,000					\$500,000			
Peace River (Howze, Laurent, Stokes)	Support	\$200,000			\$100,000		\$100,000			
Circle Bar B Reserve	Support	\$140,000					\$140,000			
Lee County Conservation Land Acquisition	Support	\$31,269,651					\$31,269,651			
Lee County Smart Growth 4 Corners Study	Support	\$15,000					\$15,000	\$134,635.00		
<b>Totals</b>		<b>\$42,739,409</b>	<b>\$4,950,000</b>	<b>\$1,684</b>	<b>\$3,534,678</b>	<b>\$673,101</b>	<b>\$33,111,160</b>	<b>\$134,635</b>	<b>\$286,622</b>	<b>\$47,529</b>

## Travel Documentation

A total of \$10,000 travel funds are provided specifically for the purposes of travel. Travel funds will be 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. \$6,500 has been programmed to support additional special travel and local travel. \$400 has been programmed from non-local sources for travel that is ineligible for federal reimbursement. Minor parking, toll expenses, and boat rental fees will also be funded from this account.

**Table 5: Projected Travel in FY 06**

Date	Purpose	# Travelers	Location	Length of Stay	Travel Mode/Est. Cost	Reg. Fee per Staff	Estimated Cost
October 2005	ANEP Annual Meeting	2	Newport, R.I.	6 days	Air /\$700	\$300	\$2,000
October 2005	Estuarine Research Federation	1	Norfolk, VA	5 days	Air/\$300	\$250	\$1,000
March 2006	NEP/EPA Spring Mtg.	3	Washington, DC	5 days	Air /\$900	\$300	\$2,500
Spring 2006	Statewide mtg. With Gulf of Mexico Program	1	Tallahassee, FL	4 days	Auto	\$0	\$500
Spring 2006	Technical Transfer	2	Various	3 days	Air/\$500	\$250	\$2,000
May 2006	Meet with Region 4 Staff	4	Atlanta, GA	3 days	Air/\$1,000	\$0	\$2,000
Summer 2006	US EPA Community Involvement Conference	1	Unknown	5 days	Air/\$500	\$250	\$1,500
Fall 2006	ANEP Annual Meeting	2	San Francisco	6 days	Air/\$1,000	\$300	\$5,000
FY 05/06	Local Travel	4	Various	<1 day	Auto	\$100	\$10,000
			Total				\$26,500

# Workplan Budget

## Income

The CHNEP and its partners have requested a total of new FY 06 cash contributions of \$1,117,385. New cash includes uncommitted funds from FY 05 totaling \$130,000. Of the \$1,117,385, an estimated \$1,083,000 has some level of certainty. The CHNEP anticipates \$70,000 from SFWMD rather than the requested \$100,000. This is offset by a project to map historic coastal resources with special funding from the SFWMD at \$30,000 and \$50,000 from SWFWMD.

Table 5 shows total income approved for FY 04, requested in FY 05, approved in FY 05, and requested for FY 06. Estimated carry-over amounts are listed as separate line items.

Additional carry-over associated with FY 06 funding is addressed entirely through Task 7.

**Table 6: Charlotte Harbor NEP FY 06 Income**

<b>Funding Source</b>	<b>Approved FY 04 Funding</b>	<b>FY 05 Request</b>	<b>Approved FY 05 Funding</b>	<b>FY 06 Request</b>
<b>EPA</b>				
Section 320 Funding	\$300,000.00	\$300,000.00	\$300,000.00	\$300,000.00
Earmarked Funding	\$196,685.00	\$196,685.00	\$196,685.00	\$196,685.00
Travel	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00
Regional Coastal Funds (20201b)	\$651,000.00			
<b>Total EPA</b>	<b>\$1,157,685.00</b>	<b>\$506,685.00</b>	<b>\$506,685.00</b>	<b>\$506,685.00</b>
<b>State of Florida</b>				
DEP	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00
<b>Subtotal Florida Agency Income</b>	<b>\$75,000.00</b>	<b>\$75,000.00</b>	<b>\$75,000.00</b>	<b>\$75,000.00</b>
<b>Regional</b>				
SFWMD	\$12,500.00	\$100,000.00	\$105,000.00	\$100,000.00
SFWMD Historic Coastal Habitat Map	\$0.00	\$0.00	\$0.00	\$30,000.00
SWFWMD	\$110,000.00	\$110,000.00	\$110,000.00	\$110,000.00
SWFWMD Historic Coastal Habitat Map	\$0.00	\$0.00	\$0.00	\$50,000.00
Peace Manasota Water Supply Authority	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00
<b>Subtotal Regional Income</b>	<b>\$127,500.00</b>	<b>\$215,000.00</b>	<b>\$220,000.00</b>	<b>\$295,000.00</b>
<b>Local</b>				
Sarasota County	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00
Polk County	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00
Charlotte County	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00
Lee County	\$15,000.00	\$50,000.00	\$15,000.00	\$15,000.00
Manatee County	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00
Hardee County		\$1,000.00		\$1,000.00
DeSoto County		\$1,000.00	\$250.00	\$1,000.00
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
Sanibel	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00
Punta Gorda	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00
Winter Haven			\$1,000.00	\$1,000.00
Venice	\$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
Bartow		\$1,000.00		\$1,000.00
North Port	\$1,000.00	\$1,000.00		\$1,000.00
<b>Subtotal Local Income</b>	<b>\$106,000.00</b>	<b>\$144,000.00</b>	<b>\$106,250.00</b>	<b>\$110,000.00</b>
<b>Private/Other Grants/Misc.</b>				
Watershed Summit Sponsorships		\$10,000.00	\$11,250.00	
NOAA Workshop Registrations			\$760.00	\$700.00
NEP Workshop Registrations			\$2,750.00	
Nature Festival Sponsorship			\$100.00	
Workshop Sponsorships				
Travel Reimbursement			\$560.76	
Blair Foundation				
Sea Grant			\$500.00	
IMS, Basin Mapping, and Gaps Carry-over				\$150,000.00
<b>Subtotal Grant/Private Income</b>	<b>\$0.00</b>	<b>\$10,000.00</b>	<b>\$15,920.76</b>	<b>\$150,700.00</b>
<b>In-Kind</b>				
Match In-Kind: Charlotte Harbor Initiative	\$1,157,685.00	\$506,685.00	\$506,685.00	\$506,685.00
<b>Subtotal In-Kind</b>	<b>\$1,157,685.00</b>	<b>\$506,685.00</b>	<b>\$506,685.00</b>	<b>\$506,685.00</b>
<b>Grand Totals in the Fiscal Year</b>	<b>\$2,623,870.00</b>	<b>\$1,457,370.00</b>	<b>\$1,430,540.76</b>	<b>\$1,644,070.00</b>
<b>Program Cash</b>	<b>\$1,466,185.00</b>	<b>\$950,685.00</b>	<b>\$923,855.76</b>	<b>\$1,137,385.00</b>
<b>Program Cash (for programming)</b>				<b>\$1,103,385.00</b>

## **FY 05/06 Budget**

The FY 06 budget is a task-based budget, similar to FY 05. The change in structure had anticipated as well as surprising benefits. The primary anticipated benefit is better communication with partners. We expect that the structure will yield more financial support from partners and allow for faster development of contracts with EPA, FDEP, SWFWMD, SFWMD and Manatee County. The most surprising benefit is how often the CCMP had to be used to write the Workplan subtask descriptions. As in the previous two years, the Technical Advisory Committee (TAC) subcommittees recommended specific research projects for funding and Citizens Advisory Committee (CAC) subcommittees recommended public outreach projects for funding. All of the first 6 tasks are new, programmed funding. Carry-over FY 05 projects are shown in the budget as Task 7.

Fiscal tracking will be accomplished at the subtask level (1.1, 1.2, etc.) Fiscal controls will be placed at the task level. Therefore, Table 6 is the CHNEP Budget. Additional fiscal controls occur through the contracts with partners. In previous years, line item fiscal controls, host agency budget fiscal controls, SWFWMD contract fiscal controls, and EPA Cooperative Agreement fiscal controls resulted in a high level of complexity for staff and some lost funding from SWFWMD. The contractual fiscal controls will remain in place. However, the broader CHNEP task-based controls allows for funding to be directed at a policy level.

Table 7 is the EPA Cooperative Agreement amounts. Note that the total for Table 6: CHNEP Budget and Table 7 are slightly different. The CHNEP Budget does not include the required EPA match which will be accomplished through in-kind services. For FY 06, it is anticipated that the in-kind match will be restoration projects which are funded through the Charlotte Harbor Initiative. Currently, it is anticipated that the State of Florida will fund this program. However, last year when the State failed to do so, SFWMD provided funding which were used as in-link match. The EPA Cooperative Agreement budget does not include cash which supports the CHNEP from other partners.

**Table 7: FY 05/06 Workplan Budget**

Task #	Task	Personnel	Fringe	Travel	Supplies	Contract	Other	Indirect	Total
1	Management & Admin.	\$59,200	\$26,622	\$17,500	\$6,000	\$0	\$17,000	\$49,500	\$175,822.
2	Information Delivery	\$52,000	\$23,000	\$2,500	\$0	\$16,000	\$90,000	\$44,000	\$227,500
3	Research	\$53,000	\$24,000	\$3,000	\$0	\$215,000	\$0	\$44,000	\$339,000
4	Restoration	\$45,000	\$20,000	\$2,400	\$0	\$0	\$0	\$38,000	\$105,400
5	Advocacy & Legislative Action	\$17,700	\$7,300	\$400	\$0	\$0	\$4,500	\$15,000	\$44,900
6	Grants	\$51,000	\$24,000	\$700	\$0	\$83,000	\$0	\$43,000	\$201,700
7	Contract Obligations: Carry-over	\$0	\$0	\$0	\$0	\$1,099,000	\$0	\$0	\$1,099,000
<b>Total</b>		<b>\$281,700</b>	<b>\$126,300</b>	<b>\$26,500</b>	<b>\$6,000</b>	<b>\$1,413,000</b>	<b>\$111,500</b>	<b>\$237,000</b>	<b>\$2,202,000</b>

**Table 8: FY 05/06 EPA Cooperative Agreement**

Task #	Task	Personnel	Fringe	Travel	Supplies	Contract	Other	Indirect	Total
1	Management & Admin.	\$59,200	\$26,622	\$7,500	\$6,000	0	\$17,000	\$49,500	\$165,822.
2	Information Delivery	\$52,000	\$23,000	\$2,500			\$52,866	\$44,000	\$174,366
3	Research			\$3,000					\$3,000
4	Restoration			\$2,400					\$2,400
5	Advocacy & Legislative Action								\$0
6	Grants	\$51,000	\$24,000	\$700		\$67,578		\$43,000	\$186,278
7	Contract Obligations: Carry-over					N/A			0
	In-Kind							\$511,966	\$511,966
<b>Total</b>		<b>\$166,000</b>	<b>\$75,000</b>	<b>\$16,100</b>	<b>\$6,000</b>	<b>\$38,000</b>	<b>\$70,866</b>	<b>\$651,966</b>	<b>\$1,023,932</b>

**Table 9: FY 05/06 Proposed SWFWMD Contract**

Task	Project	SWFWMD	CHNEP	Project Total	SWFWMD %
2.2	2005 CHNEP Proceedings, complemented by Hurricane special issue of Estuaries	\$12,500	\$12,500	\$25,000	50%
2.2	Special Publications, Staff Time	\$4,000	\$4,000	\$8,000	50%
3.1	Integrated GIS: IMS Project	\$25,000	\$25,000	\$50,000	50%
3.1	Research Coordination, Staff Time	\$13,000	\$13,000	\$26,000	50%
3.3	Map of Subbasin Boundaries	\$35,000	\$35,000	\$70,000	50%
3.3	Hydrologic Research, Staff Time	\$4,000	\$4,000	\$8,000	50%
3.4	CHEVWQMN	\$16,500	\$17,500	\$33,000	50%
<b>Totals</b>		<b>\$110,000</b>	<b>\$110,000</b>	<b>\$220,000</b>	

Task	Project	SWFWMD	CHNEP	Project Total	SWFWMD %
3.2	Historic Coastal Habitat Map	\$50,000	\$50,000	\$100,000	50%

**Table 10: FY 05/06 Funding Sources**

<b>Su b- Tas k #</b>	<b>Sub-Task</b>	<b>Federal</b>	<b>FDEP</b>	<b>SWF WMD</b>	<b>SF WMD</b>	<b>Manatee</b>	<b>Existing Contracts</b>	<b>City/ County</b>	<b>Total</b>
1.1	Management Conference	\$93,822						\$10,000	\$103,322
1.2	General Administration	\$21,500						\$0	\$21,500
1.3	CCMP Update	\$51,500						\$0	\$51,500
2.1	Communications	\$51,700						\$0	\$51,700
2.2	Special Publications	\$45,785		\$16,500				\$4,915	\$63,200
2.3	Events	\$35,200						\$8,500	\$43,700
2.4	Outreach Programs	\$11,200						\$11,500	\$22,700
2.5	Data Management	\$30,200			\$15,000			\$1,000	\$46,200
3.1	Research Coordination	\$2,700	\$25,000	\$38,000	\$25,000			\$19,000	\$96,700
3.2	Fish & Wildlife Research	\$100		\$50,000	\$30,000			\$29,000	\$109,100
3.3	Hydrologic Research	\$100	\$5,000	\$39,000	\$3,000			\$46,000	\$89,100
3.4	Water Quality Research	\$100	\$10,000	\$16,500	\$3,000			\$14,500	\$44,100
4.1	Watershed Coordination	\$1,600	\$25,000		\$4,000			\$22,000	\$52,600
4.2	Everglades Restoration	\$600	\$10,000		\$20,000			\$11,000	\$41,600
4.3	SWIM Plan	\$200						\$11,000	\$11,200
5.1	Legislative Agenda					\$5,000		\$22,800	\$27,800
5.2	Advocacy/Review							\$11,050	\$11,050
5.3	Federal Consistency							\$6,050	\$6,050
6.1	Research & Rest. Partners	\$43,628						\$24,000	\$67,628
6.2	Public Outreach Grants	\$46,050						\$0	\$46,050
6.3	Micro Grants	\$22,050						\$0	\$22,050
6.4	Leveraged Grants	\$39,500						\$0	\$39,500
6.5	Grants & Contracts Admin	\$35,050						\$0	\$35,050
7.1	Contract Obligations						\$1,099,000	\$0	\$1,099,000
		<b>\$510,685</b>	<b>\$75,000</b>	<b>\$160,000</b>	<b>\$100,000</b>	<b>\$5,000</b>	<b>\$1,099,000</b>	<b>\$252,315</b>	<b>\$2,202,000</b>

## GLOSSARY OF ACRONYMS

BMP	Best Management Practice
CAC	Citizens Advisory Committee
CAMA	Coastal and Aquatic Managed Areas
CCHMN	Coastal Charlotte Harbor Monitoring Network
CCMP	Comprehensive Conservation and Management Plan
CFRPC	Central Florida Regional Planning Council
CHEC	Charlotte Harbor Environmental Center
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
FFWCC	Florida Fish & Wildlife Conservation Commission
FMRI	Florida Marine Resources Institute
FW	Fish & Wildlife
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
NOAA	National Oceanic and Atmospheric Administration
NWR	National Wildlife Refuge
PIVOT	Performance Indicators Visualization Outreach Tool
PLRG	Pollutant Load Reduction Goal
PR/MRWSA	Peace River/Manasota Regional Water Supply Authority
R&R	Research and Restoration
RPC	Regional Planning Council
SFWMD	South Florida Water Management District
SRPP	Strategic Regional Policy Plan
SWFWMD	Southwest Florida Water Management District
SWFRPC	Southwest Florida Regional Planning Council
SWIM	Surface Water Improvement Management
SWUCA	Southern Water Use Caution Area
TAC	Technical Advisory Committee
TBRPC	Tampa Bay Regional Planning Council
TMDL	Total Maximum Daily Load
USACOE	United States Army Corps of Engineers
USF&WS	United States Fish and Wildlife Service
USGS	United States Geological Service
WCIND	West Coast Inland Navigation District
WMD	Water Management District
WQ	Water Quality
WQQOS	Water Quality Quantifiable Objectives Subcommittee

**Table 11: Budget Targets by SWFRPC Codes**

	EPA Translation	Personnel	Fringe	Indirect	Travel	Equip ment	Supplies	Supplies	Suppl ies	Contractu al	Other	Other	Other	Other	Other	
Sub- Task #	Sub-Task	Personnel	Fringe	Indirect	Travel	Capital Outlay	Supplies	Comput er/ Graphic	Posta ge	Consulting	Advert ising	Printing/ Reproduct ion	Meetings	Profess ional Dev	Other Misc	Total
1.1	Management Conference	\$33,200	\$14,622	\$27,500	\$17,000		\$2,000		\$4,000		\$1,000		\$2,500		\$1,000	\$102822
1.2	General Administration	\$9,000	\$4,000	\$8,000										\$500		\$21,500
1.3	CCMP Update	\$17,000	\$8,000	\$14,000	\$500							\$12,000				\$51,500
2.1	Communications	\$11,000	\$5,000	\$9,000	\$1,700							\$25,000				\$51,700
2.2	Special Publications	\$10,000	\$4,000	\$9,000	\$200							\$40,000				\$63,200
2.3	Events	\$13,000	\$6,000	\$11,000	\$200								\$13,500			\$43,700
2.4	Outreach Programs	\$5,000	\$2,000	\$4,000	\$200								\$11,500			\$22,700
2.5	Data Management	\$13,000	\$6,000	\$11,000	\$200					\$16,000						\$46,200
3.1	Research Coordination	\$41,000	\$18,000	\$35,000	\$2,700											\$96,700
3.2	Fish and Wildlife Habitat	\$4,000	\$2,000	\$3,000	\$100					\$100,000						\$109,100
3.3	Hydrologic Alterations	\$4,000	\$2,000	\$3,000	\$100					\$80,000						\$89,100
3.4	Water Quality Research	\$4,000	\$2,000	\$3,000	\$100					\$35,000						\$44,100
4.1	Watershed Coordination	\$22,000	\$10,000	\$19,000	\$1,600											\$52,600
4.2	Everglades Restoration	\$18,000	\$8,000	\$15,000	\$600											\$41,600
4.3	SWIM Plan	\$5,000	\$2,000	\$4,000	\$200											\$11,200
5.1	Legislative Agenda	\$10,000	\$4,000	\$9,000	\$300									\$4,500		\$27,800
5.2	Advocacy and Review Procedures	\$4,500	\$1,900	\$3,900	\$50											\$10,350
5.3	Federal Consistency Review	\$3,200	\$1,400	\$2,100	\$50											\$6,750
6.1	Research and Restoration Partners	\$6,000	\$3,000	\$5,000	\$50					\$53,578						\$67,628
6.2	Public Outreach Grants	\$7,000	\$3,000	\$6,000	\$50					\$30,000						\$46,050
6.3	Micro Grants	\$6,000	\$3,000	\$5,000	\$50					\$8,000						\$22,050
6.4	Leveraged Grants	\$17,000	\$8,000	\$14,000	\$500											\$39,500
6.5	Grants and Contracts Admin	\$15,000	\$7,000	\$13,000	\$50											\$35,050
7.1	Contractual Obligations	\$0	\$0	\$0						\$1,099,000						\$1,099,000
	<b>Total</b>	<b>\$286,000</b>	<b>\$128,000</b>	<b>\$241,000</b>	<b>\$26,500</b>	<b>\$0</b>	<b>\$2,000</b>	<b>\$0</b>	<b>\$4,000</b>	<b>\$1,413,000</b>	<b>\$1,000</b>	<b>\$77,000</b>	<b>\$27,500</b>	<b>\$5,000</b>	<b>\$1,000</b>	<b>\$2,202,000</b>