

FINAL

FISCAL YEAR 2001
WORKPLAN

JUNE 9, 2000



*Charlotte Harbor
National Estuary Program*

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Section 1. Introduction to Charlotte Harbor NEP

The Charlotte Harbor Estuary is created by the inflow of the Myakka, Peace, and Caloosahatchee rivers into the Gulf of Mexico.

Located on the west coast of peninsular Florida, Charlotte Harbor is the second largest open water estuary in the state created by the inflow of the Myakka, Peace, and Caloosahatchee rivers into the Gulf of Mexico. The estuary is roughly a Y-shaped system 30 miles long and seven miles wide with a total area of 270 square miles. The entire watershed of Charlotte Harbor has a total area of approximately 4,560 square miles. Geographic subdivisions include the watersheds of the Caloosahatchee, Myakka, and Peace Rivers as well as the coastal areas of Venice, Lemon Bay, Charlotte Harbor proper, Gasparilla and Pine Island Sounds, Matlacha Pass, and San Carlos and Estero Bays.

Upstream hydric pine flatwoods are the most diverse plant populations in south Florida. The entire study area is very diverse in plant and animal populations.

The natural habitats of the Charlotte Harbor National Estuary Program Area span the full range from xeric oak scrubs to subtidal soft-bottoms. There are more than 2,100 plant species ranging from diatoms to live oaks in the Charlotte Harbor National Estuary Program Area. The mangrove forests of Charlotte Harbor provide habitat for more than 2,300 species of animals. Upstream, the hydric pine flatwoods are habitat for from 361 to more than 660 species of vascular plants (Beever and Dryden 1992), the highest vascular plant species diversity of any habitat in south Florida. Hardwood hammock, including tropical, is second (306 species) and dry pine flatwood third (303 species) in vascular plant species diversity (Long 1974). The habitats of the Charlotte Harbor National Estuary Program Area provide habitat for 39 mammal, 331 bird, 67 reptile, 27 amphibian and 452 fish (66 freshwater and 386 marine and estuarine) species.

The NEP's Study Area provides critical habitat for Florida black bear, manatee, bald eagle, wood stork, and Florida scrub-jay.

The natural habitats of the Charlotte Harbor National Estuary Program Area provide critical or essential habitat for at least 42 federally-listed and state-listed species including Florida black bear, manatee, bald eagle, wood stork, and Florida scrub-jay. Hayes (1991) determined that habitat

destruction is a major factor which contributes to the status of threatened and endangered mammal species. The process of preserving species diversity through large-scale habitat protection favors the listed species of the Charlotte Harbor National Estuary Program Area.

Phosphate mining, tourism, agriculture, and commercial fishing are important employers in the regional economy.

The Charlotte Harbor estuarine system is both directly and indirectly a vitally important economic asset to the Florida suncoast. The many uses and attributes of the watershed system, including phosphate mining, agriculture, commercial fishing, recreational fishing, benefits to the sanitary and electrical service industries, maritime commerce, waterfront property values, and tourism are significant components of the Florida economy.

The population of the watershed is rapidly growing; counties are projected to grow, on average, by over 50% in the next 25 years.

The area's population is projected to reach 1.7 million by the year 2010, a 337 percent increase over the 1970 census. Using 1994 population information, the counties in the Charlotte Harbor watershed are projected to grow by over 50 percent on average by the year 2020.

This estuary is bordered by two counties and several local governments and the watershed contains at least portions of six additional counties and numerous local governments. The watershed is subdivided by a multitude of federal, state, and regional agencies with regulatory authorities.

Securing drinking water supply, health hazards from red tide, seagrass losses, and wildlife management are significant challenges for this growing region.

Rapid urban development has radically changed the character and ecology of river mouth and coastal waters. Mangroves have been removed or cut back, red tide events cause public health warnings, seagrass areas have declined or have been damaged, and groundwater pumping has reached levels that are major reasons for concern. Although the main body of Charlotte Harbor and its adjacent estuarine systems are in comparatively good condition compared to severely damaged areas, the watershed reflects the pressure of human activities. If the watershed's population continues to grow at

predicted growth rates, these pressures must be addressed to prevent further threats to natural systems and to protect current uses of resources.

Water pollution, wildlife habitat, land use changes, and human-induced changes to river flows must be managed effectively to protect the uses of the estuary.

Management challenges to the local communities include: managing mangrove areas; protecting seagrass areas from boat damage and water pollution; securing new water supply sources for growing populations and businesses; managing waste generated by septic tank systems and sewer outfalls; protecting wetland areas for water retention, groundwater recharge, and wildlife habitat; and improving the efficiency of freshwater usage.

A series of research and management efforts have been conducted in Charlotte Harbor over the past 25 years. Some measurable improvements in the Harbor and its rivers have been accomplished and the efforts have yielded a solid base of local technical expertise and an involved and concerned citizenry. However, the Harbor cannot sustain a continuing trend of development and overuse without effective coordination, integration, and expansion of these management efforts.

The Charlotte Harbor National Estuary Program will take management action on known problems and fill in information gaps on emerging issues.

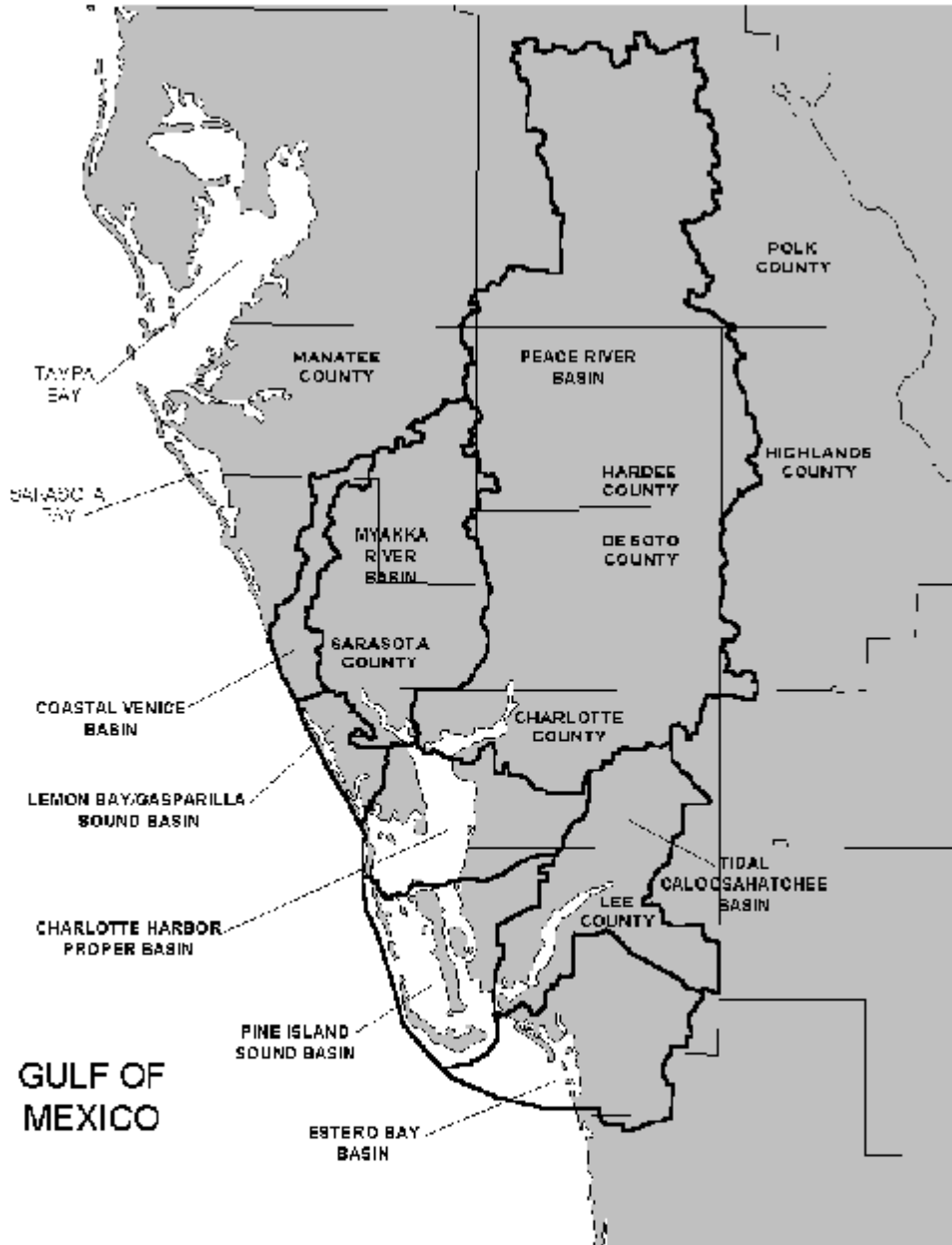
The National Estuary Program (NEP) is building upon and enhancing these efforts to take immediate actions where problems are known, and to fill gaps in addressing emerging problems. Charlotte Harbor NEP is committed to completing its Comprehensive Conservation and Management Plan (CCMP) for the Charlotte Harbor region.

LITERATURE CITED

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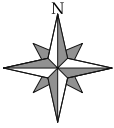
CHARLOTTE HARBOR NEP
Study Area



Scale - 0 to 5 Miles
Date - Nov. 1997



Coastal Environment and Tidal
Zones of Florida - 1997



Section 2. Program Goals

The Program Goals were developed to provide guidance to the Management Conference throughout the life of the Program. It is understood that several of the goals require a long-term commitment in order to be achieved. The goals were developed through the Management Conference, particularly by the Citizens' Advisory Committee and the Technical Advisory Committee.

Table 1
Goals of the Charlotte Harbor NEP

1. Improve the environmental integrity of the Charlotte Harbor study area.
2. Preserve, restore and enhance seagrass beds, coastal wetlands, barrier beaches, and functionally related uplands.
3. Reduce point and non-point sources of pollution to attain desired uses of the estuary.
4. Provide the proper fresh water inflow to the estuary to ensure a balanced and productive ecosystem.
5. Develop and implement a strategy for public participation and education.
6. Develop and implement a formal Charlotte Harbor management plan with a specified structure and process for achieving goals for the estuary.
7. Develop an accessible information management system that integrates data on the Charlotte Harbor study area pertinent to Harbor and watershed management.

Section 3. Summary of Last Year's Activities

A. Timetable and Terms

The Charlotte Harbor NEP conducted a three-year planning process to develop its Comprehensive Conservation and Management Plan (CCMP). The Program began in October 1996 therefore “*Year One*” includes the time period from October 1996 through September 1997. “*Year Two*” began October 1, 1997 and ends on September 30, 1998. “*Year Three*” started in October of 1998 and finished in September of 1999. “*Year Four*” or “*the first year of implementation*” and includes the period from October 1, 1999 to September 30, 2000. Year Five, this year’s workplan, starts on October 1, 2000 and ends on September 30, 2001.

Program Phase	Program Year	Time Frame	Fiscal Year Term
Planning	Year One	October 1996 - September 1997	Fiscal Year (FY) 1997
Planning	Year Two	October 1997 - September 1998	Fiscal Year (FY) 1998
Planning	Year Three	October 1998 - September 1999	Fiscal Year (FY) 1999
Implementation	Year Four	October 1999 - September 2000	Fiscal Year (FY) 2000
Implementation	Year Five	October 2000 – September 2001	Fiscal Year (FY) 2001

B. Summary of Last Year's Technical Activities

For technical development of the Program, year four (October 1999 to September 2000) activities built upon the work initiated in the planning phase of the program. These projects were designed to build a technical basis for the CCMP actions. During its three and one-half year planning process, the Charlotte Harbor NEP completed the following efforts:

- ✧ Developed a long-term monitoring strategy for the region;
- ✧ Provided better data management and access to information by the public and scientific community;
- ✧ Analyzed the existing technical information available on the region's natural resource issues; and
- ✧ Provided a forum to discuss new problems and encourage agencies and local organizations to work together.

Technical activities accomplished in Year Four (October 1999 to September 2000) are listed in Table 2.

Table 2
Technical Accomplishments in Year Four
(October 1999 to September 2000)

1. Completed implementation of the Data Management Strategy through a contract with the library at Florida Gulf Coast University;
2. Funded water quality monitoring efforts;
3. Started a TMDL coordination team;
4. Funded four *Restoration Partner* projects;
5. Created a conservation lands map for the NEP study area;
6. Supported the core Program staff;
7. Traveled to meetings, conferences, and training;
8. Contracted for the production of Geographic Information System (GIS) maps in support of the CCMP implementation;
9. Implemented the atmospheric deposition monitoring site; and
10. Supported the contract employee at FDEP—Fort Myers Service Office.



C. Summary of Last Year's Travel

Travelling both locally and nationally to conferences and training is an important part of an NEP's function. Especially in our large study area, it is important for Program staff to attend meetings and workshops around the region. Additionally, EPA provided \$10,000 in special travel funds to ensure sufficient resources to send staff to out-of-state training and national conferences. The NEP staff are expected to utilize these funds to meet with EPA regions, EPA Headquarters, and conferences where our experiences can benefit other watershed programs.

The travelling conducted during Fiscal Year 99 and the beginning of Fiscal Year 00 are detailed below. This documentation is provided to ensure that we continue to be eligible for these special travel funds. *If the full \$10,000 special travel funding is not utilized each year, we may be obliged to return the remaining funds to U.S. EPA.*

**Table 3
To Date Travel Expenditures
Fiscal Year 2000 (October 1999 to September 2000)**

Date	Reason for Travel	Staff Member	Location
Oct. 99	EPA Region 4/NEP Meeting	T. Lutterman	Atlanta, GA
Oct. 99	National Estuary Program national meeting	T.Lutterman	Portland, OR
Jan. 00	Meet with FDEP Secretary David Struhs	T. Lutterman	Tallahassee, FL
Jan. 00	Local Environmental Management Conference	T.Lutterman	Lakeland, FL
March 00	EPA/ANEP Meeting	T. Lutterman/M. Hilgendorf/E. Higby	Washington, DC
March 00	Special Places Conference	C. Corbett	Gainesville, FL
May 00	Partnering for Clean Water Workshop	C. Corbett	Cocoa Beach, FL
<i>Projected Travel for the Remainder of the Year</i>			
Sept.-Oct 00	ANEP Meeting	Director	Maine
Oct. 99 - Sept. 00	In-state travel to various meetings and conferences, including committee meetings.	Lutterman/Moldal/Upton/Corbett/Hilgendorf/Armbruster	Within Study Area/In-State

Total amount expended on NEP travel in FY 00: *Unknown until the end of the fiscal year.*



D. Early Action Demonstration Projects Funded

During fiscal year 2000, the Charlotte Harbor National Estuary Program was pleased to support 11 projects as a result of the *Requests for Restoration Partner and Mini-Grant Proposals*. All of the projects are receiving additional funding or in-kind services from other partners. Please note these sponsors are vital to the implementation of these projects.

In October 1999, a *Request for Restoration Partners Proposals* was issued. This was the fourth year the Charlotte Harbor NEP has funded restoration projects. Six proposals were received by the November 19, 1999 deadline. Priority was given to proposals that have long-term applicability, and serve as models for addressing habitat improvement and resource management challenges. After careful review and consideration by first a special review committee, the Technical Advisory Committee, the Management Committee, and then the Policy Committee, four projects were approved for funding. A majority of these projects are larger, collaborative efforts funded in small part by the Charlotte Harbor NEP. Consequently, the total value of the project is often much

greater than the portion of NEP funding. Brief descriptions of the Restoration Partner Projects selected are provided on the following pages.

Restoration Partner Projects Funded in Fiscal Year 2000

Project Name: *Frannie's Preserve Invasive Exotic Removal Project*

Project Sponsor: *Sanibel-Captiva Conservation Foundation*

In May of 1999, the Sanibel-Captiva Conservation Foundation purchased the 167-acre Frannie's Preserve. The land is located in the middle of four existing preserves and bordering the Sanibel River. The property contains the largest intact coastal strand habitat as well as a variety of upland and wetland habitats, including rare coastal scrub and *Spartina*-dominated savannah marsh. It is considered to be the "keystone" property of the Sanibel River Corridor Restoration Project. This project will remove Brazilian pepper (*Schinus terebinthifolius*) and Australian pine (*Casuarina* sp.) trees. The removal of these invasive exotic species will greatly improve the quality of rare upland habitats and increase the productivity of critical wetlands. Charlotte Harbor NEP is providing \$20,000 toward this \$170,582 project. Partners in this effort include the Foundation, the City of Sanibel, J.N. "Ding" Darling National Wildlife Refuge, and the U.S. Department of Agriculture Natural Resource Conservation Service.

Project Name: *Cedar Point Coastal Strand Creation*

Project Sponsor: *Charlotte Harbor Environmental Center, Inc. (CHEC)*

Cedar Point Park is located near the community of Englewood in western Charlotte County on the shore of Lemon Bay. The park is the site of many environmental education programs and 6.15 acres of invasive, exotic vegetation, mainly Australian pines and Brazilian peppers. This project will remove the nonnative plants and restore the area as a coastal strand ecosystem. Charlotte Harbor NEP is providing \$16,450 toward this \$39,900 project. Partners in this effort include CHEC, and possibly Charlotte County, and the Southwest Florida Water Management District Peace River Basin Board.

Project Name: *Melaleuca Eradication and Habitat Restoration Project*

Project Sponsor: *Florida Department of Environmental Protection*

The Estero Bay State Buffer Preserve, located in southwestern Lee County, includes 6,736 acres of diverse habitat communities, including wet flatwoods and tidal marsh communities. Nearly 15 percent of the preserve is invaded by *Melaleuca* (*Melaleuca quinquenervia*) and other aggressive exotic plants. This pilot project targets approximately 375 acres of dense, monoculture *Melaleuca* forests. After the invasive exotic trees are removed, this project begins, providing critical follow-up treatments to prevent re-growth of *Melaleuca* from re-sprouting and seeds. Charlotte Harbor NEP is providing \$13,000 toward this \$26,149 project. Partners in this effort include DEP's Estero Bay Aquatic & State Buffer Preserve and Bureau of Invasive Plant Management,

South Florida Water Management District, Keep Florida Beautiful, Inc., and the Department of Corrections.

Project Name: *Deer Prairie Slough Restoration Project*

Project Sponsor: *Sarasota County National Resources*

This project will restore 6.7 miles of channelized Deer Prairie Slough, which will directly restore a natural wetland hydrology to approximately 600 acres of herbaceous marsh and 100 acres of hydric hammock of the T. Mabry Carlton, Jr. Memorial Reserve in Sarasota County. This project will demonstrate ditch backfilling as a cost-effective restoration strategy for natural wetlands. Charlotte Harbor NEP is providing \$20,000 toward this \$120,122 project. Partners in this effort include Sarasota County Natural Resources, the Florida Department of Environmental Protection Watershed Management Program, and potentially the Southwest Florida Water Management District.

Mini-Grant Projects Funded In Fiscal Year 2000

In September 1999, a *Request for Mini-Grant Proposals* was issued. Ten proposals were received by the November 19, 1999 deadline. After careful review and consideration by first the Citizens' Advisory Committee, the Management Committee, and then the Policy Committee, seven projects were approved for funding. Each project will begin once contracts are finalized but must conclude by May 2001. This is the third year mini-grants have been supported. Projects proposed must directly relate to a priority problem identified by the Management Conference. Brief descriptions of the projects are provided below.

Project Name: *Peace River Basin Agricultural Education Initiative*

Project Sponsor: *Central Florida Resource Conservation & Development Council*

A portable, educational display of the natural resources and issues specific to the Peace River Basin will be created. The display will highlight the benefits of conservation practices currently being applied on agriculture lands and will encourage others to utilize these practices. The display will be used at functions such as the Farm Bureau's annual meetings, Farm-City Days, county fairs, and other basin-wide events. The Central Florida Resource Conservation and Development Council is working in conjunction with Polk, Hardee, and DeSoto Soil and Water Conservation Districts to prepare and use this display. Charlotte Harbor NEP is providing \$3,000 for this project, which is being matched with \$7,400.

Project Name: *Calusa Land Trust Junior Ranger Program*

Project Sponsor: *Calusa Land Trust and Nature Preserve of Pine Island, Inc.*

Exotic vegetation is invading Pine Island at a rate faster than it is being eradicated. The Calusa Land Trust and Nature Preserve of Pine Island, Inc. (CLT) has developed a

Stewardship/Ranger program to, among other things, safely and effectively eliminate exotic invasive species from CLT preserves on Pine Island. With support provided by this project, new nature trail signs will identify vegetation and a Junior Ranger program will be created to prepare students and accompanying adults as restorers of fish and wildlife habitats. The Junior Ranger program will include three phases: an instructional learning program; a hands-on program to learn about the natural environment of pine flatwoods, coastal strands, scrubby flatwoods, oak scrub and mahogany hammocks, and a hands-on phase to learn the tools and chemicals used to eradicate invasive exotics. Charlotte Harbor NEP is providing \$2,800 for this project, which is being matched with \$2,050.

Project Name: *Charlotte Harbor User Education Project*

Project Sponsor: *Florida Sea Grant/Charlotte County Cooperative Extension Service*

People who use our water resources, including boaters, anglers, swimmers, and others, often unintentionally have a negative impact on aquatic plants and animals. By providing more and better information at water access points, well-intentioned users' impact to the natural resources may be decreased. This project will purchase, install, and maintain weatherproof outdoor display boards at 15 public launching ramps, fishing piers, and beaches in Charlotte County. The Cooperative Extension Service, Charlotte County Parks and Recreation and Charlotte County Aquatic Preserves will provide the information for the displays and maintain them. Charlotte Harbor NEP is providing \$2,988 for this project, which is being matched with \$2,987.

Project Name: *LE/AD Lakeside Education Display*

Project Sponsor: *Lakes Education/Action Drive*

The Peace River, the major tributary to Charlotte Harbor, has its headwaters in Polk County. This project will help create a Lakeside Education Display that will be placed in a public park on a lake in Polk County. While the people are enjoying the recreational and aesthetic opportunities of the lake, they can become more aware of the interconnection of the lakes in the Upper Peace River watershed to the entire Charlotte Harbor watershed. The display may also include information on lake ecosystems and watersheds, water quality issues, sources of pollution and how to reduce pollution, restoration, and prevention techniques. Charlotte Harbor NEP is providing \$1,500 for this project, which is being matched with \$2,450.

Project Name: *Marine Cleanup aka Monofilament Madness*

Project Sponsor: *Keep Lee County Beautiful*

Fishing line and debris are unsightly, and they harm the environment. For seven years volunteers in Lee County have picked up debris found in waterways and mangroves during an annual marine cleanup. Media coverage has helped raise awareness about this preventable litter problem and the threatening circumstances it poses for marine life. Last year more than 8,500 pounds of debris, mostly fishing line, cigarette butts, cans, glass and plastic bottles, bags, and cups, were collected. Tarpon Point Marina in Cape Coral

and Fish-Tale Marina in Fort Myers Beach are the two staging areas used for this effort. The next cleanup will be held in November 2000. Charlotte Harbor NEP is providing \$2,825 for this project, which is being matched with \$6,680.

Project Name: *Courtland Waterway – Restoration 2000*

Project Sponsor: *Charlotte Harbor Environmental Center, Inc. (CHEC)*

CHEC, along with the Cooperative Extension Service and Environmental Services in Charlotte County, will offer 12 lectures and four demonstration workshops on the devastating effects of hydrological alterations. Participants will learn about hydrologic alterations, water quality, and simple solutions that can be implemented in their own yards and communities. A permanent outdoor educational display and an outdoor lecture site will also be created. The location will be the Courtland Waterway restoration site. Once the restoration is complete, the site will provide acceptable habitat for Florida's native wading bird species in a man-made waterway. Charlotte Harbor NEP is providing \$2,997 for this project, which is being matched with \$4,756.

Project Name: *Treasures of the Sea*

Project Sponsor: *Fort Myers Beach Marine Resources Task Force-Education*

These successful easy-paced beach and mangrove forest walks teach residents and visitors the importance of habitat preservation, conservation, restoration, and environmental stewardship. The *Treasures of the Sea* field trips will be offered, weather permitting, every Tuesday and Thursday from November 2000 to April 2001. The guided field trips and information are free to the public because of this support and in-kind match from the Town of Fort Myers Beach. Charlotte Harbor NEP is providing \$2,536 for this project, which is being matched with \$3,100.

E. Last Year's Public Involvement Activities

Public involvement and education about watershed issues are a priority for the Charlotte Harbor NEP. The relative success of other estuary programs has been dependent on an effective public involvement program. Local support for management, funding, and inter-agency coordination requires that voters, media, and local elected officials understand why action is needed. Moreover, Harbor residents need to appreciate how upper watershed citizens use and value their land and water as much as upstream residents need to understand how their activities impact resources downstream. Our public involvement program will educate the public about the value of the watershed's resources and will enhance support for Program initiatives.

Through the assistance of the Citizens' Advisory Committee (CAC), public involvement goals were developed. The goals listed in Table 4 provide general guidance on the intent of the public involvement component of the program. Additionally, an

implementation public involvement strategy has been developed by the CAC to guide the Program's efforts through the implementation of the CCMP. Specific activities have been identified to tailor the program to specific needs, issues, and audiences.

Table 4
Public Involvement Goals

1. Develop and implement a program that informs that public about the Charlotte Harbor National Estuary Program – its purpose, structure, activities, and benefits.
2. Develop and implement a program that informs the public about watershed issues and problems, and challenges the public to become active participants in watershed management solutions.
3. Create opportunities for citizens to participate in meaningful dialogue with others in the study area so that information may be freely exchanged.

Year Four (October 1999 to September 2000) accomplishments are described in Table 5 below.

Table 5
Last Year's Public Involvement Accomplishments

1. Hosted a full time Public Involvement Specialist on the program staff;
2. Updated the list of materials available from the program office;
3. Funded seven *Mini-Grant* projects;
4. Distributed the draft CCMP document;
5. Held six public hearings to discuss the draft CCMP with the public;
6. Supported the Volunteer Speaker's Bureau;
7. Upgraded the program's website and maintained e-mail capabilities;
8. Planned a Public Conference & Technical Symposium;
9. Hosted a signing ceremony for the CCMP with 2,000 people invited;
10. Continued the program's quarterly newsletter "Harbor Happenings"
11. Purchased a CD-writer to save documents and presentations electronically;
12. Produced an executive summary of the CCMP; and
13. Printed the final version of the CCMP.

Section 4. Overview of the Year 2001 Workplan/ Implementation of the CCMP (October 2000- September 2001)

A. Linking the Workplan to the NEP Purposes

The Program's fifth year (October 2000 to September 2001) activities will focus on implementation of the CCMP. These activities will build upon efforts during the three and one-half years of the Program's planning process.

It is important to recognize that many organizations are conducting programs that affect Charlotte Harbor, but are not included in this workplan. There are significant monitoring programs, scientific research initiatives, public education efforts, and management programs dedicated to the greater Charlotte Harbor watershed. These efforts and their continuation are important for the success of the Charlotte Harbor National Estuary Program. In fact, many of these programs replace in-house scientific and research staff and are therefore a critical component toward understanding both

public perception and the technical status of resources.

This workplan details specific Program-funded projects for Fiscal Year (FY) 2001. These projects fulfill the seven purposes of the National Estuary Program as described in Section 320 of the Clean Water Act. Since the Charlotte Harbor NEP is funded through the federal National Estuary Program, this workplan must address the seven purposes of an NEP as defined by Congress. These seven purposes were developed in order to ensure that the activities conducted through the NEP are focused on developing an action plan and then implementing that plan of action. The Charlotte Harbor NEP workplan addresses all seven of the purposes listed in Table 6.

Table 6
The Seven Purposes of the National Estuary Program

- Purpose 1: Assess trends in the estuary's water quality, natural resources, and uses.*
- Purpose 2: Identify the causes of environmental problems by collecting and analyzing data.*
- Purpose 3: Assess pollutant loadings in the estuary and relate them to observed changes in water quality and natural resources.*
- Purpose 4: Recommend and schedule priority actions to restore and maintain the estuary, and identify means to carry out these actions (develop the Charlotte Harbor Comprehensive Conservation and Management Plan).*
- Purpose 5: Ensure coordination on priority actions among federal, state and local participants in the (management) conference.*
- Purpose 6: Monitor the effectiveness of the actions taken under the plan.*
- Purpose 7: Ensure that federal assistance and development programs are consistent with the goals of the plan.*

Table 7		
Relationship of Workplan Projects to the NEP Purposes		
Purpose #	Description of NEP Purpose	Workplan Projects in Fiscal Year 2000
Purpose 1:	Assess trends in the estuary's water quality, natural resources, and uses.	Implementing Long Term Water Quality Monitoring; Data Management Implementation; Total Maximum Daily Load Assistance & Coordination; Wet/Dry Atmospheric Deposition Monitoring; Compendium of Existing Monitoring Programs Update; Caloosahatchee River Monitoring
Purpose 2:	Identify the causes of environmental problems by collecting and analyzing data.	Data Management Implementation; Total Maximum Daily Load Assistance & Coordination; Wet/Dry Atmospheric Deposition Monitoring; Caloosahatchee River Monitoring
Purpose 3:	Assess pollutant loadings in the estuary and relate them to observed changes in water quality and natural resources.	Implementing Long Term Water Quality Monitoring; Total Maximum Daily Load Assistance & Coordination; Wet/Dry Atmospheric Deposition Monitoring; Caloosahatchee River Monitoring
Purpose 4:	Recommend and schedule priority actions to restore and maintain the estuary, and identify means to carry out these actions (develop the Charlotte Harbor Comprehensive Conservation and Management Plan).	Public Comment on the Draft CCMP; Signing Ceremony/Public Events; Layout & Printing of the Final CCMP Document
Purpose 5:	Ensure coordination on priority actions among federal, state and local partners.	Regular Committee Meetings; Data Management Implementation; Implementation of Long Term Water Quality Monitoring; Total Maximum Daily Load Assistance & Coordination; Regionwide Conservation Lands Map; Restoration Partners Fund; Compendium of Monitoring Programs Update; Mini-Grants; Federal Consistency Review Process
Purpose 6:	Monitor the effectiveness of the actions taken under the plan.	Data Management Implementation; Wet/Dry Atmospheric Deposition Monitoring; Caloosahatchee River Monitoring; Implementing Long Term Water Quality Monitoring
Purpose 7:	Ensure that federal assistance and development programs are consistent with the goals of the plan.	Federal Consistency Review Process

B. Organization & Summary of the FY2001 Workplan

The overall emphases of the Fiscal Year 2001 workplan are to begin implementation of the public involvement strategy and the CCMP itself. The workplan and budget for Fiscal Year 2001 (October 2000 to September 2001) are organized into four categories. Each category has its own budget and projects. The workplan categories are:

1. Public Involvement and Education;
2. Technical Analysis and Management;
3. Mini-Grants & Reserve Funds; and
4. Administration.

A brief description of each workplan category and its purpose for fiscal year 2001 are listed below. A detailed project list and budget for each program is included in the next section "*A Close Up Look at Program Activities.*"

Public Involvement and Education

The Fiscal Year 2001 public education projects support the implementation of the CCMP as well the specifics of the "Public Education Strategy" developed by the Citizens' Advisory Committee. Several of the education projects are on-going as they continue support for educational projects that have proven to be effective. New projects have also been added to reflect the next phase of the program's activities and maturity.

Technical Analysis and Management

The funding dedicated to technical analysis and management is increased substantially compared to previous years to begin actual implementation of the actions in the CCMP. The projects and programs funded in this section of the workplan address the Quantifiable Objectives and actions in the CCMP. Of course, substantial efforts are also needed outside the scope of this workplan to fully implement the CCMP. The projects included here are acting as seed money and coordination for larger, multi-organization efforts.

Mini-Grants & Reserve Funds

During our planning phase, grants were awarded to other organizations for "early action demonstration projects" and for "mini-grants." Funding for early action demonstration projects was supplemented by special funding from U.S. EPA specifically for that purpose. As we enter our implementation phase, we are no longer eligible for that special funding and have therefore substantially decreased that portion of the budget.

The mini-grants program continues to be funded, as recommended in the public education strategy, to encourage local education efforts around the study area. It should be noted that many of the projects included in the "Technical Analysis & Management" section as well as some of the projects in the "Public Education and Outreach" section are based upon the successes of similar projects funded under the "Early Action Demonstration Project" grants awarded in previous years.

Administration

As recommended by the Policy Committee, the Program Office will continue during the implementation phase with the administrative support of the Southwest Florida Regional Planning Council. Core staff will remain in place but some of the tasks performed will be re-directed from CCMP development and workshops to implementation functions. Implementation tasks include tracking progress on implementation, administering grants and contracts, conducting CCMP consistency review, supporting the long term monitoring strategy, implementing the data management program, and continuing support of the four committees' activities.

C.  Calendar

As always, the schedule of events and committee schedule will be busy and challenging. A calendar that describes the schedule for FY 2001 is provided at the end of this document.

D.  Management Conference Participation

Program activities are coordinated through the Program Office and the Management Conference. In particular, the Management and Policy Committee members serve to ensure that activities undertaken by the Charlotte Harbor NEP are coordinated with other federal, state, regional, and local organizations. The Committees themselves have wide agency representation to ensure that the appropriate agencies are involved and that actions recommended in the CCMP are implemented. The following organizations have been invited to participate on the Management and Policy Committees:

State/Regional Organizations:

- Central Florida Regional Planning Council
- Charlotte Soil and Water Conservation District
- Department of Environmental Protection
- Florida Department of Community Affairs
- Florida Fish and Wildlife Conservation Commission
- Peace River/Manasota Regional Water Supply Authority
- South Florida Water Management District
- Southwest Florida Regional Planning Council
- Southwest Florida Water Management District
- West Coast Inland Navigation District

Local Organizations:

Charlotte County	City of Venice
City of Arcadia	DeSoto County
City of Bartow	Hardee County
City of Cape Coral	Lee County
City of Fort Myers	Manatee County
City of North Port	Polk County
City of Punta Gorda	Sarasota County
City of Sanibel	Town of Fort Myers Beach

Federal Organizations:

NOAA/National Marine Fisheries Service	U.S. Geological Survey
U.S. Environmental Protection Agency	U.S. Fish and Wildlife Service
U.S. Army Corps of Engineers	Natural Resources Conservation Service

The participation of so many organizations on the Management and Policy Committees will ensure that the Charlotte Harbor NEP meets the following NEP purpose:

Purpose 5: Ensure coordination on priority actions among federal, state and local participants in the (management) conference.

Many additional organizations and agencies are represented on the Citizens' Advisory Committee and the Technical Advisory Committee. Representation on these committees includes, but is not limited to, individuals from the following organizations:

Cargill Fertilizer
CF Industries, Inc.
Charlotte Harbor Environmental Center
Charlotte Harbor Reef Association
DeSoto Citizens Against Pollution
Gasparilla Island Conservation and Improvement Association
Hardee County Outdoor Classroom
IMC-Agrico, Inc.
J.N. "Ding" Darling Wildlife Society
Mote Marine Laboratory--Charlotte Harbor Advisory Committee
Ostego Bay Foundation
Peace River Audubon Society
Peace River Citrus Growers Association
Peace River/Manasota Regional Water Supply Authority

Sanibel-Captiva Conservation Foundation
Shellfish Farmers Board of Directors
South Gulf Cove Homeowners Association
U.S. Agri-Chemicals Corporation
U.S. Farm Bureau

All four committees are recommended to continue meeting and advising the Charlotte Harbor NEP during implementation. The committees periodically review their membership and have encouraged under-represented groups to participate in the Management Conference. Continued analysis of the committee membership will be conducted to ensure that the watershed's interest groups are adequately represented.

E. Projected Income for FY01

Agencies	Org. Approved FY99 Funding	FY00 Request	Org. Approved FY00 Funding	FY01 Request	Comments
<i>EPA</i>					
Travel	\$10,000	\$10,000	\$10,000	\$10,000	
APDP	\$75,000	\$-	\$-	\$-	
Public Health	\$36,000	\$-	\$-	\$-	
Section 320 Funding	\$440,500	\$300,000	\$330,000	\$320,000	
Total EPA	\$561,500	\$310,000	\$340,000	\$330,000	
SFWMD	\$-	\$75,000	\$-	\$75,000	Not approved in FY00
SFWMD	\$110,000	\$110,000	\$110,000	\$110,000	State (SWIM)&Basin Bds Funds
DEP	\$80,000	\$100,000	\$100,000	\$100,000	
FLA. Coastal Mgt. Program (CZM)	\$14,000	\$14,000	\$14,000	\$14,000	
FLA. Fish & Wildlife Cons. Comm.	\$-	\$10,000	\$-	\$10,000	Not approved in FY00
PR/MRWSA	\$5,000	\$5,000	\$5,000	\$5,000	
Subtotal Agency Income	\$209,000	\$624,000	\$569,000	\$654,000	
<i>Counties</i>					
Polk County	\$15,000	\$15,000	\$15,000	\$15,000	
Sarasota County	\$15,000	\$15,000	\$15,000	\$15,000	
Charlotte County	\$15,000	\$15,000	\$15,000	\$15,000	
Lee County	\$15,000	\$15,000	\$15,000	\$15,000	
Hardee County	\$5,000	\$5,000	\$5,000	\$5,000	
DeSoto County	\$-	\$5,000	\$-	\$5,000	Not approved in FY00
Manatee County	\$5,000	\$5,000	\$5,000	\$5,000	
Subtotal County Income	\$70,000	\$75,000	\$70,000	\$75,000	
<i>Cities and Towns</i>					
Sanibel	\$10,000	\$10,000	\$10,000	\$10,000	
Cape Coral	\$10,000	\$7,500	\$7,500	\$7,500	
North Port	\$-	\$7,500	\$-	\$7,500	Not approved in FY00
Fort Myers	\$-	\$7,500	\$7,500	\$7,500	
Punta Gorda	\$5,000	\$5,000	\$5,000	\$5,000	
Bartow	\$-	\$5,000	\$5,000	\$5,000	
Arcadia	\$-	\$2,500	\$-	\$2,500	Not approved in FY00
Venice	\$2,500	\$2,500	\$2,500	\$2,500	
Fort Myers Beach	\$2,500	\$2,500	\$2,500	\$2,500	
Wauchula	\$-	\$1,000	\$-	\$1,000	Not approved in FY00
Subtotal Cities & Towns	\$30,000	\$51,000	\$40,000	\$51,000	
Grand Totals	\$870,500	\$750,000	\$679,000	\$780,000	
<i>Estimated Return</i>		<i>\$644,000</i>		<i>\$669,000</i>	
Non-workplan Grants & Funding					
Atmosp. Deposn. Study/EPA Grant	\$100,000	\$100,000			Project-specific grant



Section 5. A Close-Up Look at Program Activities

	FY01
	Amount
I. Public Involvement & Education	
A. General Materials (Development and Printing)	\$ 23,000
B. Implementing CAC Projects~	
B1. Newsletter Production & Printing (\$14,000 CZM Grant)	\$ 20,000
B2. Web Site/E-Mail Connection	\$ 1,500
B3. Earth Day Event	\$ 1,000
B4. Technical Proceedings	\$ 10,000
B5. Conservation Options for Landowners/Education Workshop	\$ 5,000
B6. Video Production	\$ 40,000
B7. State of the Harbor Tracking/Report Card	\$ 7,500
Public Involvement & Education Subtotal	\$ 108,000
II. Technical Analysis and Management	
A. Data Management Implementation	\$ 5,000
B. Implementing Long Term Water Quality Monitoring for the Study Area	\$ 55,000
C. Total Maximum Daily Load (TMDL) Assistance & Coordination	\$ -
D. Regionwide Conservation Lands Map	\$ 5,000
E. Restoration Partners Fund	\$ 80,000
F. Caloosahatchee River Monitoring (DEP Contract Employee)	\$ 25,000
G. Biennial Review Assessment Tool and Database	\$ 15,000
Technical Analysis & Management Subtotal	\$ 185,000
III. Mini-Grants & Reserve Funds	
A. Mini Grants (match not required, \$3000 maximum grant)	\$ 18,000
B. Additional CCMP Implementation on Reserve	\$ 10,000
Mini-Grants & Reserve Funds Subtotal	\$ 28,000
IV. Program Administration	
A. Salaries	\$ 144,690
B. Fringe	\$ 68,838
C. Indirect Charges (Overhead)	\$ 109,143
D. Special Training & Travel	\$ 10,000
E. Local Travel	\$ 4,000
F. Other Needs	\$ 5,000
G. Geographic Information Systems (GIS) & Graphics Assistance	\$ 3,000
H. Meeting Space and Advertising	\$ 1,500
I. Memberships & Dues	\$ 2,000
Program Administration Subtotal	\$ 348,171
Total Budget	\$ 669,171

I. Public Involvement and Education Projects

A. General Materials (Development and Printing)



1. Cost: \$23,000; **Type:** Supplies, Equipment, and Other/Federal or Non-Federal.

- a. General Information Materials \$5,000 (Equipment)
- c. Postage \$3,000 (Supplies)
- d. Reprinting Existing Reports & Materials \$14,500 (Other)
- e. Film and Processing \$500 (Supplies)

2. Description: Materials will be written and produced for public involvement activities. The following products will be produced:

- a. General Information Materials: This category includes reprinting NEP-related materials, Program-specific brochures, issue-specific brochures, public service announcements, and materials for special events.
- b. Postage: Funds for bulk mail and package delivery.
- c. Reprinting Reports & Materials: As existing materials are used this account will be used to re-print books, documents, and brochures as needed. Reprint 5,000 copies of the osprey poster with artwork done by Diane Pierce. The initial printing during 1998 is now distributed and there remains considerable public demand for this poster. Reprint the Shelly Castle poster also, if the office runs short of copies.
- d. Film and Processing: This funding sponsors film, processing, duplication, and digitization of photographic and graphic materials.

3. Deliverables: Brochures, fact sheets, posters, documents and other materials as described.

B. Implementing CAC Projects



B1. Newsletter Production & Printing (on-going)

1. Cost: \$20,000; **Type:** A. Salaries, Fringe, Indirect, and Other/Federal (NOAA);
B. Other/Federal (EPA) or Non-Federal.

A. *Florida Coastal Management Program grant:* \$14,000 (4 newsletters at \$3,500 each)

Salary, Fringe and Indirect	\$2,416 (applies to Public Involvement Specialist)
Printing and Distribution	<u>\$11,584</u>
Total	\$14,000

**Note: The newsletter and its production are sponsored through a grant from the Florida Coastal Management Program.*

B. Additional Funds to Print Sufficient Copies of the Newsletter: \$6,000.

2. Description: A quarterly program newsletter will be produced for general distribution. This newsletter will provide general information on coastal issues, events, and information as well as updates on program activities. The newsletter will be coordinated with other similar publications to include a calendar of events held by other organizations throughout the watershed. A mailing list of management conference members, public and private organizations, and interested persons will be maintained for distribution of the newsletter. The newsletter is also posted on the Program's web site by the program's webmaster in Adobe Acrobat format.

3. Deliverables: Four issues of the quarterly newsletter.



B2. Web Site/E-Mail Connection (on-going)

1. Cost: \$1,500; **Type:** Other/Federal.

Cost Breakdown

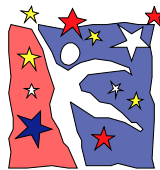
Hosting of Site: \$1,500.

Data Support: Salary and Fringe with existing staff.

Equipment: T-1 Line provided through Council's indirect charges.

2. Description: Maintain and update Program home page on the World Wide Web with public and technical information, including information about the Volunteer Speakers' Bureau. The World Wide Web is globally accessible to anyone with the necessary equipment and Internet access. Link the Home Page to the Regional Planning Council's home page, Florida Gulf Coast University Library, Florida Coastal Management Program, EPA's NEP home page, and others as appropriate. Update information frequently so that meeting times and dates and other details are current.

3. Deliverables: Web site with documents, newsletters, and contact information available.



B3. Earth Day Event

1. Cost: \$1,000; **Type:** Supplies/Non-Federal.

2. Description: Event or activity for Earth Day in April 2001. In 1998, with assistance from the Florida Coastal Management Program, we hosted state legislators and citizens for a guided, educational trip on the Peace River on Estuaries Day. Invitations, media releases, guide costs, room rental, etc. are usual costs associated with hosting an event.

3. Deliverables: Invitations, media releases, and events.

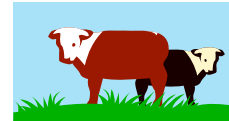


B4. Technical Proceedings

1. Cost: \$10,000; **Type:** Contract/Federal or Non-Federal.

2. Description: Layout and print the proceedings from the technical and public conference.

3. Deliverables: Conference and its associated materials, as described above.



B5. Conservation Options for Landowners/Education Workshop

1. Cost: \$5,000; **Type:** Contract; Federal or Non-Federal.

2. Description: Host two additional workshops to inform landowners about tax issues and conservation options available to them. Results from the "*Myakka Connectivity Project*" and comments from the Technical Advisory Committee (TAC) indicate that landowners are interested in good information about their options to avoid estate taxes and keep their families' land in ranching/agriculture in future generations. Workshops should be facilitated by experts on this topic and utilize some of the existing materials that have been developed for landowner education.

3. Deliverables: Two workshops.



B6. Video Production

1. Cost: \$40,000; **Type:** Contract and Equipment/Federal or Non-Federal.

2. Description: A 12-minute video documenting the environmental issues in the Charlotte Harbor watershed and its special characteristics worth protecting. The segment will identify what individuals can do to prevent damage and improve environmental quality. The video will also contain a brief description of the Charlotte Harbor National Estuary Program and how individuals can be involved. Shorter 30- and 60-second PSAs will be created from the same video footage. 100 copies of the video will be produced and 50 copies of the PSAs. An integrated television with VCR will be acquired by the program office to play the materials at appropriate locations with the display.

3. Deliverables: 12-minute video, 30- and 60-second public service announcements (PSAs). A small, portable television/VCR set-up will be acquired for the program office to use with the video.



B7. Report Card on the State of the Harbor

1. Cost: \$7,500; **Type:** Supplies or Contract/Federal or Non-Federal.

2. Description: Prepare a short summary on the “State of the Harbor” during 2000. Present the information in a format that is easy-to-read and comprehensible to a non-scientific person. The report card should have graphics that present the information simply. Adequate copies of the report card should be made for the general public, media, and environmental organizations. The possibility of making the information into a newspaper insert should be pursued.

3. Deliverables: Copy of the report card.

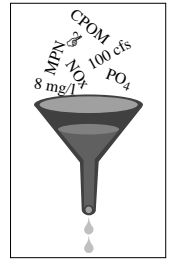
II. Technical Analysis and Management Projects

A. Data Management Implementation: Supporting Web Site Infrastructure, Gathering Information, and Making Information Accessible as Prescribed by the Data Management Strategy

1. **Cost:** \$5,000; **Type:** Contract/Federal or Non-Federal.

2. **Description:** This funding supports the implementation of the data management strategy at Florida Gulf Coast University and the inter-library network. These activities include expansion of a web site where data and information are available, documenting metadata for important datasets, acquiring copies of maps, aerial photos, and other spatial information needed for management decisions, and other management needs identified in the Data Management Strategy.

This work will be conducted by FGCU through a contract. It is estimated that the project will take the full year (12 months) from the issuance of the contract/agreement.



B. Implementation of Long Term Monitoring for the Study Area

1. **Cost:** \$55,000; **Type:** Contract/Federal or Non-Federal.

2. **Description:** A monitoring strategy was completed by identifying who should conduct the various monitoring programs and a plan for how the monitoring can be funded. It offers specific recommendations for expanding or re-directing existing efforts so that the study area is effectively monitored.

Implementation of this strategy will include the following components:

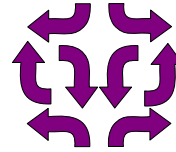
1. Local water quality monitoring support;
2. Implementing an Environmental Monitoring and Assessment Program (EMAP) ambient monitoring program; and
3. Building a TMDL dataset by monitoring water quality in the Peace and Myakka Rivers.

These efforts will be contracted out to local partners and organizations. The results will help us measure our progress towards our Quantifiable Objectives and our CCMP.

3. **Deliverables:** Series of contracts and meetings to implement the monitoring network, and written report describing these findings. The workshops and documentation will be conducted through a contractor selected on a competitive basis. It is estimated that the process will take a full year after the issuance of the contract.



C. Total Maximum Daily Load (TMDL) Assistance & Coordination



1. Cost: \$0 (In-kind services only).

2. Description:

Through the Technical Advisory Committee (TAC), an inter-agency group will be created to address the TMDL *Quantifiable Objectives* by:

1. Determine what indicators/constituents for which TMDLs should be determined, by stream segment.
2. Determine if there are sufficient water quality monitoring programs in place to provide information on those constituents to establish TMDLs.
3. Get the key players talking to one another about what they are going to do in the TMDL effort (DEP-Tallahassee; DEP-Ecosystem Management, Tampa; DEP-Ecosystem Management, Fort Myers; SWIM-SFWMD; SWIM-SFWMD; and the Charlotte Harbor NEP).

3. Deliverables: Details of TMDL efforts and each agency's role in those efforts.



D. Regionwide Conservation Lands Map Update

1. Cost: \$5,000; **Type:** Salaries/Fringe/Indirect/Federal or Non-Federal.

2. Description: One of our quantifiable objectives is to acquire currently recognized conservation lands, that is, those lands identified by various habitat management and land acquisition programs. The map prepared in Fiscal Year 2000 should be updated with lands acquired and prioritized. This work can be contracted out or produced through a cooperative agreement with another agency, such as the Regional Planning Councils.

3. Deliverables: Series of updated maps that detail the conservation lands and their status for the entire study area.



E. Restoration Partners Fund

1. Cost: \$80,000; **Type:** Contract/Federal or Non-Federal.

2. Description: To provide incentives and seed money for restoration and management on public lands (such as those we previously funded through the early action demonstration project funding), we can set up an annual fund for up to four (4) new projects who would be eligible for funding of up to \$20,000 per project. This money 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. A short application would be submitted and through a selection process, the top four (4)

projects would be funded. Since land conservation and management is an important Quantifiable Objective, it is important to encourage our agencies, private landholders, and conservation organizations to manage lands and to be a real partner with them.

3. Deliverables: Several habitat restoration projects contracted and completed.



F. Caloosahatchee River Monitoring (DEP Contract Employee)

1. Cost: \$25,000; **Type:** Contract/Non-cash transaction/Federal.

2. Description: If approved by the State Legislature, a portion of our funding from Florida Department of Environmental Protection (FDEP) is dedicated to sponsoring an FDEP staff position to perform water quality sampling in Estero Bay and the tidal Caloosahatchee River and to conduct public education activities. These efforts should be continued in FY01.

3. Deliverables: A full-time staff person located at the DEP-Fort Myers District office.



G. Biennial Review Assessment Tool and Database

1. Cost: \$15,000; **Type:** Contract/Federal Funds.

2. Description: Develop a tracking method, including the selection of criteria and a way to collect the information, for each quantifiable objective and priority action in the CCMP. Determine the best way to organize, collect, and store the information so that the information can be updated from year to year. This information can then be used for annual “State of the Harbor” report cards and for the biennial reviews required by U.S. EPA.

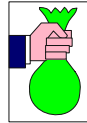
3. Deliverables: Tracking system for CCMP implementation.

III. Mini-Grants & Reserve Funds



A. Mini-Grants

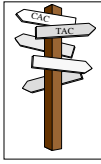
- 1. Cost:** \$18,000; **Type:** Contract/Non-Federal Preferred.
- 2. Description:** Mini-grant project proposals will be solicited starting in July 2000 and will be due in October 2000. These projects must directly relate to the Charlotte Harbor NEP's study area. Each project will address at least one of the three priority problems or facilitate public education of environmental issues. The projects will address a specific technical question, a new management technique, or manage a known problem within the watershed. These projects will be selected through the Citizens' Advisory Committees and with the assistance of the rest of the Committees. Projects must be ready to begin at the time of the proposal and can be completed within one year's time. No matching funds are required and the maximum funding per project is \$3,000.
- 3. Deliverables:** Several mini-grant projects will be implemented through contracts and cooperative agreements. A description and the benefits of each project will be provided.



B. Additional CCMP Implementation

- 1. Cost:** \$20,000; **Type:** Salaries/Federal.
- 2. Description:** Special projects that may be funded in the future include production and printing of materials, contract staff, equipment, additional early action projects, or extending the time frame on budgeted projects.
- 3. Deliverables:** Reports and descriptions of characterization activities, technical investigations, interagency coordination, and demonstration projects conducted.

IV. Program Administration



A. Salaries

1. Cost: \$144,690; **Type:** Salaries/Federal.

2. Description: The project director has chief responsibilities for coordinating and managing the Program. These duties include: Staff support for the policy and management committees; coordination, management and quality control for contractor work; development and oversight of a data management system; oversight of public participation and education initiatives; analysis and evaluation of technical and scientific reports; preparation of reports and documents; coordination of contractual, budgetary, audit, and personnel aspects of the Program; coordinating this Program with other relevant State, Federal, regional and local projects; and liaison with the media, public, academic and other interested parties. The Director reports to the Policy Committee. Indirect costs cover office and administrative expenses such as secretarial support, supplies, telephone, equipment, office space and bookkeeping.

Public Information Specialist has the following responsibilities: Write text for newsletters, brochures, and fact sheets; Perform lay-out for printed materials; Write press releases; Develop and make slide shows and presentations; Serve as information coordinator for public education network, speaker's bureau, etc.; Clip news articles; Respond to questions about the Program; Work with local media to answer questions and receive coverage of Program events; Support the Citizen's Advisory Committee; Assist the Management Conference and Committee administration; Other duties as assigned. (**Note: An additional \$946 of this position's salary is paid for through a grant from the Florida Coastal Management Program.)

The Environmental Projects Manager's responsibilities include the following: Coordinate technical projects contracted to outside firms for development of the Comprehensive Conservation and Management Plan (CCMP); Track status of workplan projects and budget and prepare timely reports; Collect and analyze information from outside sources regarding estuary status and trends; Compose correspondence, memos, and committee reports; Assist in the planning and execution of conferences and workshops; Review status of contractual projects; Prepare grants and technical reports; Prepare committee agenda packages, quarterly reports, grant status reports, annual workplans, contracts, and requests for proposal.

3. Deliverable: Filled positions.



B. Fringe

- 1. Cost:** \$68,838 (*Note: An additional \$513 is paid though the Florida Coastal Management Program grant to sponsor the newsletter.*); **Type:** Fringe/Federal.
- 2. Description:** Fringe is approximately 48% of salary for three full-time staff members. It covers the cost of the State of Florida health plan and other standard fringe benefits.
- 3. Deliverable:** Three filled positions with benefits.



C. Indirect Charges (Overhead)

- 1. Cost:** \$109,143 (*Note: An additional \$812 is paid though the Florida Coastal Management Program grant to sponsor the newsletter.*); **Type:** Indirect/Federal.

Indirect charges cover office and administrative expenses such as secretarial support, postage, supplies, telephone, equipment, office space and bookkeeping. The indirect rate is based upon a rate of 75.432% of salaries. Indirect charges are paid to the Southwest Florida Regional Planning Council.



D. Special Training & Travel

- 1. Cost:** \$10,000** (No cost to primary grant funds--see description below)
Type: Travel/Federal.
- 2. Description:** These funds are provided by EPA over and above the grant amount for national travel and training. Travel funds will be used for purposes such as travel to NEP Director's Meetings, National Conferences, meetings with EPA staff in Atlanta and Washington D.C., and other occasions as needed.



E. Local Travel

- 1. Cost:** \$4,000; **Type:** Travel/Federal.
- 2. Description:** These funds are budgeted to cover mileage reimbursement, per diem, and occasional hotel expenses for in-state travel for the staff and invited guests.



F. Other Needs

1. **Cost:** \$5,000; **Type:** Supplies/Federal or Non-Federal.
2. **Description:** These funds are budgeted for unforeseen Program expenses. They are expended at the Director's discretion. Purchases may include expenses for the use of a cellular telephone, special computer equipment or software, training materials, subscriptions, memberships, etc.
3. **Deliverable:** General materials and equipment.



G. Geographic Information Systems (GIS) and Graphics Assistance

1. **Cost:** \$3,000; **Type:** Salaries, Fringe, and Indirect/Federal or Non.
2. **Description:** Funding to acquire assistance with generating maps, graphics, and other materials that the Project Office lacks the capability to produce.
4. **Deliverables:** Products such as maps and graphic materials.



H. Meeting Space and Advertising

1. **Cost:** \$1,500; **Type:** Other/Federal or Non-Federal.
2. **Description:** Monies to rent meeting space, when necessary. Also, funds to advertise public notices and position announcements in local media as required by state and federal regulations.
4. **Deliverables:** Meeting space, public notices, and advertisements.



I. Memberships & Dues

1. **Cost:** \$2,000;
Type: Other/Non-Federal.
2. **Description:** Membership fees and dues for associations, particularly the Association of National Estuary Programs.
3. **Deliverables:** Membership in key associations.

Other Implementation Projects

In addition to the projects listed above coordinated by the Charlotte Harbor National Estuary Program, the following projects are in need of funding and coordination from other organizations.

1. **Project Name:** *Restoration of Oyster Resources in the Coastal Venice, Myakka River, and Lemon Bay Basins.*

Contact Name/Organization: Karen Burnett, Sarasota County.

Description: Delineate current oyster areas with a global positioning system; determine which areas are suitable for planning using salinity, temperature, dissolved oxygen, and substrate measurements; use culch or oyster seed on the selected areas; have long-term monitoring of results by density analyses.

Source: Vol. II, draft CCMP, page 280.

Costs: Undetermined

2. **Project Name:** *Sanibel Oyster Reef Restoration Project*

Contact Name/Organization: Robert Loflin, City of Sanibel.

Description: This environmental restoration project seeks to augment the historically diminished oyster reef component of San Carlos Bay and Pine Island Sound in the waters surrounding Sanibel Island. The first step is the completion of a survey of all existing oyster reefs in the area and their overall health and biological condition. This will be followed by an analysis of what conditions are preferred by the natural reefs and the identification of similar appropriate sites for restoration. Design, permitting and funding work for experimental artificially created reefs at these sites will then proceed towards installation and monitoring of the trial reefs. If successful, full analysis will be followed by a scaling up of the project.

Source: City Staff

Cost: Undetermined

3. **Project Name:** *Aerial Mapping of Seagrass Beds*

Contact Name/Organization: David Tomasko, Southwest Florida Water Management District and Chip Merriam, South Florida Water Management District.

Description: At present, the SWFWMD has coordinated and carried out a Harbor-wide seagrass mapping effort to determine the status and trends in seagrass coverage in Charlotte Harbor. Seagrass distribution has been quantified for the years 1982, 1988, 1992 ad 1996. Efforts are underway to map seagrass distribution in 1999 as well. This project should be continued on a roughly biannual basis, to detect changes, if any, in the health and vigor of these important fisheries habitats.

Source: Draft CCMP, Volume I and SWIM Plan.

Cost: \$41,000

4. Project Name: *Valued Ecosystem Component GIS Mapping*

Contact/Organization: Tomma Barnes, South Florida Water Management District.

Description: This contract will provide scientists and managers with information on the spatial and temporal variations in biotic communities needed to detemine biotic status and trends. It will also provide information on the effect of management actions on ecosystem communities for researchers and managers assessing the success of future water management policies designed to protect and enhance submerged aquatic vegetation.

Source: Southwest Florida Study, Minimum Flows and Levels

Cost: Undetermined

5. Project Name: *Caloosahatchee River Water Salinity and Circulation Model*

Contact/Organization: Tomma Barnes, South Florida Water Management District

Description: The objective is to develop a coupled circulation/water quality model of the Charlotte Harbor estuarine system. The model will be able to synthesize field data collected from various locations and different times to provide understanding of the entire estuarine system and predict the potential impact of various management practices (e.g. nutrient load reduction and flow alteration) on the entire estuarine system with greatest resolution in the southern portion of the Harbor.

Source: Southwest Florida Study, Minimum Flows and Levels

Cost: Undetermined

6. **Project Name:** *Estero Bay Nutrient Loading.*

Contact/Organization: Tomma Barnes, U.S. Geological Survey and South Florida Water Management District.

Description: The objective of this project is to measure external inputs of nutrients and other materials and the resultant estuarine water quality. This project will provide a data set that can be used to quantify the degree to which nutrient concentrations in the Estero Bay depend on loading from external sources.

Source: U.S. Geological Survey.

Cost: Undetermined

7. **Project Name:** *Rainfall and Runoff Patterns in Estero Bay.*

Contact/Organization: Tomma Barnes, South Florida Water Management District and U.S. Geological Survey.

Description: This study is designed to include a compilation of historical rainfall and discharge information along the watersheds of tributaries flowing into Estero Bay, and the analysis of effects that stormwater runoff has had on the flow characteristics of these tributaries over time.

Source: U.S. Geological Survey, draft CCMP Volume II, page 130.

Cost: Undetermined

8. **Project Name:** *Water Quality Monitoring S79-Shell Point (Caloosahatchee Estuary)*

Contact/Organization: Tomma Barnes, South Florida Water Management District

Description: To provide both current and baseline information on water quality in the Caloosahatchee River and Estuary for long term trend analysis as well as assessment of resource management strategies.

Source: Southwest Florida Study

Cost: Undetermined

9. **Project Name:** *Caloosahatchee River/Estuary Nutrient Loading*

Contact/Organization: Tomma Barnes, South Florida Water Management District

Description: The objective of the project is to measure external inputs of nutrients and other materials and the resultant estuarine water quality. This project will provide a data set that can be used to quantify the degree to which nutrient concentrations in the estuary depend on loading from external sources.

Source: Southwest Florida Study

Cost: Undetermined

10. **Project Name:** *Caloosahatchee Oxbow Study*

Contact/Organization: Tomma Barnes, South Florida Water Management District

Description: To assess which oxbows within the Caloosahatchee River are suited for restoration, in order to enhance their quality as recreational habitat, water quality filters, and off-channel water storage areas, as well as improving/restoring their natural habitat quality for aquatic resources.

Source: South Florida Water Management District

Cost: Undetermined

11. **Project Name:** *Assessment of Hydrologic Restoration of Cow Pen Slough*

Contact Name/Organization: David Tomasko, Southwest Florida Water Management District

Description: One of the most significant environmental problems associated with Dona and Roberts Bays is the alteration of the timing and quantities of freshwater inflows into this system from the enlargement and modification (in the 1960's) of the watershed of Cow Pen Slough and its conversion into a drainage feature of agricultural lands. This project would focus on investigating the impacts of hydrologic alterations on the health of associated estuarine habitats in Dona and Roberts Bays and investigation of potential projects that could alleviate these problems. Additionally, potential remedies involving the use of excessive wet season flows to provide for potable and/or non-potable water supplies will be examined.

Source: SWIM Plan.

Cost: \$110,000

Final

12. Project Name: *Implementation of the Restoration Plan for the Alligator Creek Addition of the Charlotte Harbor Buffer Preserve*

Contact Name/Organization: David Tomasko, Southwest Florida Water Management District.

Description: The Alligator Creek Addition of the Charlotte Harbor Buffer Preserve is an approximately 1,600 acre site located south of the City of Punta Gorda, directly on Charlotte Harbor. As part of the implementation of the 1993 Charlotte Harbor SWIM Plan, a restoration master plan is being developed for the entire site. In addition, two restoration projects with a combined acreage of approximately 20 acres have been designed and permitted, with one project already completed. These restoration projects have been or will be constructed using staff and equipment of the FDEP's Charlotte Harbor Buffer Preserve. However, additional projects have been identified, and full implementation of the restoration master plan would require funds beyond those that have already been committed.

Source: SWIM Plan.

Cost: \$550,000

13. Project Name: *Development of a Linked Nutrient Budget and Water Quality Model for Lemon Bay*

Contact Name/Organization: David Tomasko, Southwest Florida Water Management District

Description: Preliminary results from an ongoing assessment of seagrass health and water quality in Lemon Bay suggest that Lemon Bay is likely to experience losses in seagrass coverage as the watershed continues to be developed. Chlorophyll a concentrations in Lemon Bay can be substantially higher than in nearby Sarasota Bay. In addition, chlorophyll a concentrations are significantly correlated with water column light attenuation values. An expanded coverage of the Charlotte Harbor SWIM Plan boundaries to include Lemon Bay would allow for additional efforts to be spent on Lemon Bay, such as the refinement of a pollutant loading model for the watershed, and the development of a water quality model capable of estimating future changes in water clarity associated with increased non-point pollution loads.

Source: SWIM Plan.

Cost: \$115,000

14. Project Name: *Lake Hancock Restoration/Land Acquisition*

Contact Name/Organization: Jeff Spence, Polk County.

Description: Lake Hancock is a 4,519 acre meandered lake, located in central Polk County, just north of the City of Bartow. The lake has been extensively impacted in the past by man's activities including: domestic and industrial wastewater treatment plant discharges, urban development, agricultural activities, destruction of wetlands and phosphate mining. As a result of these activities, the lake exhibits extremely degraded water quality and an imbalanced fish population. A grant application was submitted to the Governor's Water Advisory Panel requesting \$750,000 in funding for fiscal year 2000 in order to initiate the restoration efforts. Five goals were established for this project: Improve the quality of the water discharged from Lake Hancock by reducing Total Maximum Daily Loads (TMDL'S); preserve and, where feasible, enhance the natural greenway/ wildlife corridor (Peace River/ Green Swamp) through Polk County; maintain the exceptional wildlife values on Lake Hancock; enhance the diversity of the fishery; and provide habitat compatible public access for nature-based recreational activities and commercial fishing. Implementation of the project involves a four-phased approach which addresses: Land Acquisition; Wetland Restoration and Monitoring; In-Lake Restoration; and Management.

Source: Lake Hancock Restoration Plan.

Cost: \$3,000,000 for Phase I (land acquisition)

15. Project Name: *Charlotte Harbor Volunteer Water Quality Monitoring Program*

Contact Name/Organization: Judy Ott, Florida Department of Environmental Protection, Aquatic and State Buffer Preserves

Description: Monthly water quality samples are taken by volunteers at 41 stations from Lemon Bay to Estero Bay. At present there is a total of 106 volunteers are trained and coordinated through this Aquatic Preserve staff project. Data analysts and presentation is done by DEP staff.

Source: FDEP, Charlotte Harbor Aquatic and State Buffer Preserves Office

Costs: \$40,000