

CHARLOTTE HARBOR NATIONAL ESTUARY PROGRAM

*Working together to protect
the natural environment from
Venice to Bonita Springs to Winter Haven*



CHARLOTTE HARBOR NATIONAL ESTUARY PROGRAM



is a *partnership* that protects the estuaries and their watersheds in southwest Florida from Venice to Bonita Springs to Winter Haven. This partnership gives citizens, elected officials, resource managers, and resource users in the 4,700-square-mile study area a voice to address diverse resource management concerns, including fish and wildlife habitat loss, water quality degradation, water flow and inadequate stewardship. The program addresses these concerns through outreach, research, restoration and legislation. The watershed in the study area includes Lee, Charlotte, Hardee and DeSoto counties and portions of Sarasota, Manatee and Polk counties.

CHARLOTTE HARBOR NATIONAL ESTUARY PROGRAM

1926 Victoria Ave, Fort Myers FL 33901-3414

www.CHNEP.org | 239/338-2556 | Toll-free 866/835-5785

Dr. Lisa B. Beaver, Director | lbeever@swfrpc.org | ext 235

Catherine Corbett, Senior Scientist | ccorbett@swfrpc.org | ext 241

Liz Donley, Deputy Director | ldonley@swfrpc.org | ext 234

Maran B. Hilgendorf, Communications Manager | mhilgendorf@swfrpc.org | ext 240



ABOVE: Artwork *Ospreys Nesting Along the Peace River* by Diane Pierce

COVER ART: Satellite image provided by FWC FMRI. The tarpon photograph was provided by *Boca Beacon*. The photographs of the Roseate spoonbill and mangroves were provided by Lee County Convention and Visitors Bureau.

CHNEP is pleased to provide publications, posters, videos and more.

These resources provide information to help *you* become part of the solution to protect our magnificent estuaries. This brochure lists resources that can be requested from the CHNEP as of March 2008. Items are listed on the website at www.CHNEP.org as they are made available. These items can be ordered by completing this resource brochure, completing an online form (preferred) or stopping by the office. Many items are also available from partners throughout the seven-county watershed. These partners vary so visit the website for the latest lists. Due to staffing, requests are filled approximately four times a year in March, June, September and December. CHNEP has many more resources that are only available as PDF files. These documents can be accessed from the website at www.CHNEP.org and are available on a CD of all documents and PowerPoint presentations posted on the website.

CHNEP continues to make these resources available free (unless otherwise noted) but we ask that you consider making a donation to the program to help defray expenses, especially for postage. It typically costs \$5 to \$10 in postage alone to fill each request! To make a donation, send a check payable to CHNEP, to CHNEP Resources, 1926 Victoria Ave, Fort Myers FL 33901-3414. At this time, we are not able to accept credit cards. The fiscal agent for CHNEP is the Southwest Florida Regional Planning Council, a 170(c)1. As a government entity, donations are tax deductible, as they are exclusively for a public purpose.

NEWSLETTER AND CALENDAR —

Want to receive information on a regular basis? Subscribe to the CHNEP newsletter *Harbor Happenings*. The 12-page newsletter provides current information four times a year on program activities as well as topics and issues of concern in the greater Charlotte Harbor watershed.

Since 2005, CHNEP has produced a calendar that showcases the beauty of the natural environment. Because of the generosity of those who submitted images, the calendar is treasured by many people. Because of those who generously donated, CHNEP anticipates continuing to produce these calendars. The calendar is anticipated to be mailed to all who have subscribed to the newsletter by the end of September. A limited supply of the calendars is anticipated to be available for others to distribute.



Have you captured the beauty of the natural environment, consider submitting images for the next calendar! Details are on the website at www.CHNEP.org.

CCMP AND CCMP SUMMARY —

Comprehensive Conservation and Management Plan (CCMP)

— This 20-year plan represents the participants commitment to the future. The CCMP identifies common environmental issues that affect the health of the environment and actions to solve them. The approval of the first plan in 2000 marked the beginning of action to protect and restore these estuaries and their watersheds. It includes diverse resource concerns of fish and wildlife habitat loss, water quality degradation, hydrologic alterations (changes to water flow) and, new to the update, stewardship gaps. 158 pages. 2008.

Summary of the CCMP — This 20-page publication provides an overview of the CHNEP, including its partnerships throughout the watershed and the 20-year plan to protect the environment. It is a summary of the 158-page CCMP described above. March 2008.

OTHER POPULAR DOCUMENTS —

***The Story of the Greater Charlotte Harbor Watershed* —**

Written for the general public, this book characterizes the state of the natural systems and major resource management issues throughout the area and provides an overview of the physical, biological, historical and economic aspects of the greater Charlotte Harbor watershed. 92 pages. 1998; revised 2008.

***Adventures in the Charlotte Harbor Watershed: A Story of Four Animals and their Neighborhoods* —**

This children's book tells the story of the environment of southwest Florida through the adventures of four animals: a yellow-crowned night-heron on the Caloosahatchee River, an alligator in the Peace River, an otter on the Myakka River and a mullet in the estuaries. The book is being distributed free to students throughout the seven counties that participate in the CHNEP. Single copies are available for sale for \$8.95. Please visit the website for additional details. 60 pages. March 2008.

***Curious Kids Nature Club* —**

Children are curious about the world around them – and that's why WGPU Public Media and CHNEP created a fun way to explain and illustrate southwest Florida's unique environment. The multimedia environmental education website enlightens and dazzles young and old alike with its habitat descriptions, videos, photos, brain teasers, songs and digital postcards. Go to www.WGPU.org to access the website, which is also available on a CD from CHNEP. 2007.

***Estuaries Live 2002 and 2003* —**

Visit Pine Island Sound in 2002 and Charlotte Harbor in 2003 during these 60-minute field trips. CHNEP hosted the program with local experts exploring the value and beauty of estuaries, including what makes estuaries in a tropical environment different, the value of estuaries to native Americans, the role of mangroves, seagrasses and other native plants in an estuary, and see some of the creatures — large and small — that can be found in a Florida estuary. Available only as VHS. Curriculum for grades 5-9 is posted on the website.

Speakers Bureau: *Your* participation is crucial to protect the estuaries and watersheds so the CHNEP would like to offer a free program to interested groups and organizations. Contact Maran Hilgendorf for more details.

The Charlotte Harbor National Estuary Program is pleased to offer several resources to help you better understand and protect the natural environment of southwest Florida. As technology has changed and partnerships developed, the CHNEP has changed how many of these resources are made available. All the administrative, technical, popular, event and grant reports are available as PDF files on the website at www.CHNEP.org. They are also available on a CD of all documents posted on the website. PowerPoint presentations made during events are also available on the website.

Many of the scientific reports include several support documents that can be requested on a CD or DVD. Only reports that include supplemental materials, such as GIS files, are listed in this brochure. because these complete reports are only available on a CD or DVD; however, the final report of each of this is on the website.

TECHNICAL DOCUMENTS —

Water quality data analysis and report

This report updates the 2003 water quality status and trends analyses, including trends analysis reporting trends in water quality by region, by station and by surface/bottom depth for each water quality analyte for two different time periods. It also evaluates the data for trends in rainfall and hydrologic changes and analyses data collected by the Coastal Charlotte Harbor Monitoring Network, an interagency monitoring program that collects monthly water quality data for the 270 square mile coastal Charlotte Harbor region. This Network uses a probabilistic sampling design to monitor such a large area. The CD includes a database of all surface and groundwater quality, precipitation and streamflow data used in the report, GIS files and results of the thousands of analyses, as well as a report validating the optical model used in the CHNEP water quality targets. July 2007.

Mapping the characteristics and condition of the Charlotte Harbor coastal shoreline

This project developed a shoreline condition map for the coastal areas within the CHNEP boundary. A two-fold program was developed to address both large- and small-scale shoreline conditions: a volunteer boater survey and photointerpretation mapping. Volunteers attended a luncheon November 17, 2007, where they heard presentations and received a draft report. The draft report and presentations are available from the website. Completion of this project is planned for summer of 2008 and will include GIS files.

Historic coastal benthic habitat map

This joint CHNEP, Southwest and South Florida water management districts project mapped historic seagrass, oyster bar and intertidal unvegetated areal extent in the coastal Charlotte Harbor region. Photo Science Inc. located 1948 photos of Sarasota County, 1951–1952 images of Charlotte County and 1953 images of Lee County from the National Archives. These black and white images were scanned, orthorectified, aeriotriangulated and mosaiked into a GIS-based product. The images were then interpreted using Florida FLUCCS codes. The CD includes the geodatabase of historic coastal benthic habitats, including metadata describing the methods used and a bay-by-bay segment data table listing habitat acreages by FLUCCS code. November 2007.

Assessment of boat propeller scar damage within the greater Charlotte Harbor region

This cooperative effort between the Florida Fish and Wildlife Research Institute and the CHNEP updates the 1995 statewide effort to assess the extent, location and severity of boat propeller scars for the coastal Charlotte Harbor area, including parts of Sarasota County (Sargent et al 1995). This CD/DVD contains the final report, the report *Scarring of Florida's Seagrasses: Assessment and Management Options* by Sargent, F.J., W.B. Sargent, T.J. Leary, D.W. Crewz, and C.R. Kruer written in 1995 for the Florida Marine Research Institute, scanned, georeferenced and mosaiked aerial photos used for the 1999 seagrass maps by South and Southwest Florida water management districts, GIS files, overflight photography and the seagrass toolkit created by the Florida Keys National Marine Sanctuary.

Analysis of hydrologic conditions within the CHNEP study area

This report describes existing information on hydrologic conditions and spatial and temporal analyses of groundwater levels within the CHNEP study area and implications to surface flows. The CD includes the report and appendices, GIS data for locations of monitoring sites, a database of compiled groundwater level and surface flow and stage data as well as the results of thousands of analyses of these data. December 2005.

Benthic invertebrate species richness and diversity at different habitats in the greater Charlotte Harbor system

This project, conducted by Mote Marine Laboratory on behalf of CHNEP, includes the 232-page *Benthic Invertebrate Species Richness and Diversity at Different Habitats in the Greater Charlotte Harbor System*, a 28-page supplement, *Common Macrobenthic Invertebrates of Charlotte Harbor* that illustrates some of the common species. Both documents include hyperlinks to Internet sources for additional information. The CD contains these two reports, raw data, data from similar studies, images, maps and geographic information system (GIS) files.

The results of the project illustrate that, in general, the upper estuary, lower salinity regions exhibit the greatest abundance of organisms but have a lower overall species diversity. This relationship is a paradigm of estuarine ecology. Fresh water brings nutrients and organic matter into the sea via the mixing zone known as the estuary.

POSTERS — CHNEP has four posters that celebrate the beauty of the natural environment. Due to the cost of mailing, we ask that you make a donation when you order these posters.

Ospreys Nesting Along the Peace River — Artist Diane Pierce features a captivating, real-life osprey river scene in this 24 x 34 inch poster. (Shown on page with contact information)

Educational Ecosystem — Artist Shelly Castle depicts the biodiversity of plants and animals in the greater Charlotte Harbor watershed in this 26 x 39 inch poster. It also includes a drawing of the study area that depicts the major basin boundaries. (Shown top right)

Myakka Canopy Trail #2 by Clyde Butcher — This poster of a hydric hammock is 22 inches wide by 19.5 inches. (Shown bottom left)

Lake Hancock, Where the Peace

River Begins by Clyde Butcher — This poster is 17 inches wide by 24 inches. (Shown bottom right)



VIDEOS — CHNEP has created several videos that help viewers better understand issues that affect the natural environment of southwest Florida. These videos are available on one DVD.

Neighbor-to-Neighbor Florida-Friendly Landscaping — Seventeen neighbors in southwest Florida show how they transformed their diverse properties into beautiful oasis for people and wildlife that conserve precious water resources and reduce pollution but also save time and money. 27-minutes and ten 1-minute videos on right plant-right place, water efficiency, fertilizers, mulch, wildlife, pesticides, recycle, storm water runoff, waterfront property and benefits. 2007.

Series of Short Videos — Six short videos help viewers better understand local estuaries, watersheds, animals, mangroves and seagrasses. Local experts tell the story of these valuable natural resources in five 2-minute videos and a 7.5 minute video that helps beaters understand the importance of seagrasses, how to spot them while boating and how to minimize damage to these valuable plants. 2006.



What's an Estuary? Now you Know — The National Estuary Programs teamed up to create this fun, fact-filled short video that will leave you knowing smiling and knowing the definition and value of an estuary! 2003.

The Network of an Estuary: Charlotte Harbor National Estuary Program — Clyde Butcher introduces the program to the viewer and 17 members of the CHNEP Management Conference tell the value of our local estuaries, the importance of the NEP, issues of concern and actions undertaken by the CHNEP partners during this 27-minute broadcast quality video. A seven-minute version is also available. 2002.

Keep it Picture Perfect — Clyde Butcher teamed up with Live Oak Productions and the CHNEP to produce a 30-second public service announcement (PSA) to discourage littering. 2002.

GRANTS — Many of the CHNEP grant-supported projects have produced reports. The reports are posted on the website at www.CHNEP.org and are available when you request the CD of documents posted on the website.

Do you have an idea to protect our estuaries and their watersheds? CHNEP offers three types of grants to help implement the *Comprehensive Conservation and Management Plan (CCMP)* and to further partnerships with Florida residents, organizations, businesses, government agencies, schools, colleges and universities. **Research and Restoration Partner** projects (up to \$20,000 per participating partner) and **Public Outreach** projects (up to \$3,000) are available once a year. **Micro-grants** (up to \$250) are available year round to help establish and maintain environmental education efforts with organizations, educational centers, government agencies and others. Guidance to apply for these grants are also available on the website.

CHNEP ORDER FORM 3/08

To ORDER, please order from the website at www.CHNEP.org (preferred) *or* complete this form. You may also be able to pick up some of these items from the CHNEP office or one of our partners. A list of these locations is posted on the website. If you use this form, clearly write your name and complete mailing address, check off the items you wish to receive, separate the form from the rest of the brochure, place the form in an envelope, affix a stamp and mail. Requests are filled approximately four times a year in January, April, July and October. Please check the website often for the newest resources available from CHNEP as items are listed as they are made available. **Many of the publications are only available as PDF files on the website.** 3/08

Name: _____ Organization: _____

Street Address: _____ City, State ZIP: _____

Phone Number: _____ Fax Number: _____ Email Address: _____

To ORDER A SUPPLY, indicate how many copies of each item you'd like on the line before the name of the item, when they are needed and how they will be distributed.

PUBLICATIONS

- Harbor Happenings Newsletter: [Want to receive information on a regular basis? Subscribe!](#)
- CHNEP calendar (mailed free to newsletter subscribers)
- Comprehensive Conservation and Management Plan (CCMP)*
- Summary of the CCMP*
- The Story of the Greater Charlotte Harbor Watershed (distributed free at CHNEP talks, price not yet determined)*
- Adventures in the Charlotte Harbor Watershed (\$8.95 + tax and shipping)*

POSTERS

- Poster: Osprey by Diane Pierce
- Poster: Educational Ecosystem Poster by Shelly Castle
- Poster: Myakka Canopy Trail #2 by Clyde Butcher
- Poster: Lake Hancock by Clyde Butcher

CD, DVD AND VHS

- Curious Kids Nature Club CD*
- Estuaries Live 2002 (VHS),* *Estuaries Live 2003 (VHS)*
- DVD of resources on website at www.CHNEP.org, includes administrative, technical, event and grant reports as well as PowerPoint presentations from events.*
- Water quality data analysis and report*
- Mapping the characteristics and condition of the Charlotte Harbor coastal shoreline*
- Historic coastal benthic habitat map*
- Assessment of boat propeller scar damage within the greater Charlotte Harbor region*
- Analysis of hydrologic conditions within the CHNEP study area*
- Benthic invertebrate species richness and diversity at different habitats in the greater Charlotte Harbor system*