



**Charlotte Harbor National Estuary Program
Management Committee
Approved Minutes
November 3, 2006
Arcadia, Florida**

Members Present:

Liz Abbott	SFWMD
Mike Britt	City of Winter Haven
Mike Jones	Sarasota County (alt. for Theresa Connor)
Wesley "Bo" Crum	USEPA, Region 4
Jennette Seachrist	SWFWMD, Resource Management Dept./SWIM (alt. for Lizanne Garcia)
Ken Heatherington	SWFRPC
Sam Stone	Peace River/Manasota Regional Water Supply Authority
Peggy Morgan	FDEP
Misty Nichols	Gasparilla Island Conservation & Improvement Assoc.
Joe Ortolona	City of Fort Myers Public Works Dept.
Judy Ott	FDEP/Charlotte Harbor Aquatic Preserves
Roland Ottolini	Lee County Natural Resources
Heather Stafford	FDEP
Stuart Stauss	Pine Island Sound

Also Present:

Jim Culter	Mote Marine Lab
Tom Allen	FL Fish & Wildlife Conservation Commission
Lisa Beever	CHNEP
Catherine Corbett	CHNEP
Liz Donley	CHNEP
Maran Hilgendorf	CHNEP
Nichole Gwinnett	SWFRPC

Agenda Item #1 - Call to Order and Introductions – Meeting was called to order by Bo Crum, Chairman at 9:32 a.m. Introductions were made.

Agenda Item #2. Agenda Additions or Deletions – Bo Crum, Chairman

It was noted that Mr. Tim Allen will be giving a small presentation on burrowing owls under Agenda Item #6.

Agenda Item #3 – Management Committee August 4, 2006 Minutes

Dr. Beever noted that Ms. Abbott had requested a modification for acclamation be made which Dr. Beever stated was included within the motion.

**MS. ABBOTT MOVED AND MR. HEATHERINGTON SECONDED TO
APPROVE THE MINUTES OF THE AUGUST 4, 2006 MANAGEMENT**



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**COMMITTEE MEETING AS AMENDED. THE MOTION CARRIED
UNANIMOUSLY.**

Agenda Item #4 – CCMP Update – Lisa Beaver

The CAC CCMP Subcommittee, Legislative Subcommittee, and TAC subcommittees have reviewed the Quantifiable Objectives and Priority Actions for the 2006 CCMP Update and have modified them over the past year. They have also developed strategies to implement the Objectives and Actions. A draft of the CCMP Update has been completed. Please review the new Quantifiable Objectives, Priority Actions, and Strategies and inform program staff of suggested modifications.

The Management Conference has already approved that this CCMP update will consist of one volume to include information found in the current volume 1. A draft of all the text found in volume 1 will be considered by the Management Conference. Once the CCMP update is adopted it will be available as a printed document and as a PDF file that will be posted on the program website and made available in other ways. The summary version of the CCMP will be updated and printed once the CCMP is accepted. Volume 2 of the first CCMP will not be published as the information is constantly updated in a database that is available on request and will also be available on the Program website as a searchable database.

A “CCMP Update at a Glance” document highlights some missing pieces and changes. CAC and TAC requested the changes be made and have been incorporated in the attachments:

- 1) Combine SG-3 and SG-4
- 2) Reference vision maps that are currently under contract for development (basin boundary map, recommended regulatory linkage diagram, historic benthic habitat map, and Pre-Development Vegetation Map.
- 3) Add map of 2003 exotic plan infestation augmented with know and recognized exotic nuisance animal infestations.
- 4) Add Priority Action to better support HA-4.
- 5) Placing the MAL action behind the MFL action.
- 6) Consider moving the navigation program action (formerly, new dredging) under FW.
- 7) Changing the reference to low water impact techniques to low impact development techniques.
- 8) Dropping reference to Estero Bay tributaries from HA-2 because OFWs are already cited.

TAC requested the addition of WQ-J as shown in the attachments, greater consistency between MAL and MFL actions, and additional refinement of the vision graphics.

Ms. Abbott suggested adding a title to each graph.

Mr. Ottolini referred to page 92 and asked what was the reasoning for the requested removal of the last sentence in the first paragraph.



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Ms. Seachrist explained that the reasoning was that it wasn't an accurate statement for the relationship between the level of a water table aquifer and a surficial water body which applied to the entire watershed.

MS. OTT MOVED AND MS. MORGAN SECONDED TO RECOMMEND STAFF BE DIRECTED TO FORMAT THE DRAFT CCMP UPDATE WITH RECOMMENDED CHANGES AND DISTRIBUTED TO PARTNERS AND THE PUBLIC FOR CONSIDERATION AT THE NEXT CONFERENCE CYCLE.

Mr. Stone asked Dr. Beever when staff expected completion of the updated CCMP. Dr. Beever replied that she is looking for adoption after two conference cycles which are scheduled to occur in March and May.

Mr. Britt asked if the CCMP makes the connection with future growth and the estuary. Dr. Beever replied yes, she then referred Mr. Britt to HAM and WQ-J in "At A Glance" legend.

Ms. Abbott suggested listing page numbers in the "At A Glance." Dr. Beever agreed to her suggestion.

THE MOTION CARRIED UNANIMOUSLY.

Agenda Item #5 – Numeric Water Quality Targets for Charlotte Harbor and Lemon and Estero Bays Document – Catherine Corbett

Substantial research and restoration efforts have focused on seagrass meadows as an environmental indicator for coastal environmental conditions, including Tampa and Sarasota Bays and Indian River Lagoon. In Tampa Bay, resource managers have set goals for restoring seagrass coverage to approximately 95% of the coverage present in 1950. Reductions in nitrogen loads since 1982 have led to reduced phytoplankton concentrations and increased water clarity, which has allowed increases in seagrass extent. Increases in seagrass coverage is also a restoration objective for seagrass managers in Sarasota Bay, where recent increases (1988-1996) may be linked to decreased nitrogen loads to the bay by the City of Sarasota and Manatee and Sarasota counties. In both Tampa and Sarasota Bays, water clarity and quantity of light reaching the tops of seagrass blades is related to nitrogen loading and its effects on phytoplankton populations; thus, seagrass restoration strategies in these areas have focused on nitrogen load reductions. Charlotte Harbor confronts different issues, and phytoplankton concentrations do not have as large an influence on light attenuation in Charlotte Harbor as dissolved and suspended matter. Also, analyses of seagrass coverage data demonstrate that seagrass coverage in Upper Charlotte Harbor is stable since 1988 and no trends were detected in Upper or Lower Charlotte Harbor regions since 1982. Seagrass management strategies in the Charlotte Harbor region have not focused on nutrient load reductions, and currently, resource managers have not established *restoration* goals for seagrass coverage nor numeric water quality targets outside of those established by Florida's Impaired Waters Rule. Nonetheless, our analyses of water quality data demonstrated significant increases in total suspended solids in the Lower Charlotte Harbor and Upper Charlotte Harbor regions and increasing turbidity and nutrients in the Lower Charlotte Harbor region (Janicki Environmental Inc., 2003). Also, there is other evidence that



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suggests Charlotte Harbor may be nutrient enriched, including the hypoxia work by Turner et al. (2006), annual seasonal chlorophyll *a* concentrations exceeding 20µg/l in the Peace and Myakka Rivers (Morrison et al., 1997) and exceeding 60-80 µg/l seasonally in the tidal Peace River since 1976 (FDEP 2003) and elevated chlorophyll *a* and depressed DO in the Caloosahatchee River (ERD 2003, DeGrove 1981; DeGrove and Nearhoof 1987; Baker 1990). Seasonal chlorophyll *a* levels of the magnitude found in this region are considered indicative of hypereutrophic conditions in some estuarine classification systems (e.g. NOAA 1996).

Thus, we propose developing voluntary water quality targets using a resource-based approach such as those used in Tampa and Sarasota Bays and Indian River Lagoon. Program and CHEC staff completed a peer-reviewed article for the *Florida Scientist* special issue that presents such an approach—an optical model which can be used to establish water clarity goals to maintain percent-light-at-depth requirements to achieve seagrass maximum depth distribution by region within Charlotte Harbor and Lemon and Estero Bays. The approach proposed in this effort is meant to maintain the present seagrass coverage and depth distribution into the future. Program staff has presented this method at WQQOS meetings along with the Seagrass Working Group; a Lee County, DEP, SFWMD workshop; the 2005 Charlotte Harbor Watershed Summit; a Sarasota County workshop for water quality goals and the 2005 biennial Estuarine Research Federation conference. The TAC recommended approval of the approach for determining the water quality targets and acceptance of the document with the understanding that the targets included in the document are interim targets.

Mr. Britt asked if the plain is going to be the standard that is going to be developed. Ms. Corbett replied that the first step is to set up a working group to determine the key targets. Dr. Beever explained that the State's standards are different than what they should be for different areas. State standards are background levels.

Ms. Ott stated that the State's standards are not protecting Charlotte Harbor because it hasn't reached the turbidity levels of the State's standards, there needs to be basin targets.

Mr. Jones explained that recently at a Sarasota Bay NEP TAC meeting the committee passed a recommendation to create a working group with the other NEPs within the Tampa Bay region to create a water management plan for better water quality and clarity. Dr. Beever stated that she will contact Sarasota Bay NEP to discuss the issue.

Mr. Ottolini gave a brief overview of the seagrass trends. Ms. Corbett stated that there has been some increasing and decreasing of seagrass beds.

MS. STAFFORD MOVED AND MR. STONE SECONDED TO RECOMMEND APPROVAL OF THE METHODS ON DETERMINING WATER QUALITY TARGETS AND ACCEPTANCE OF THE TECHNICAL REPORT WITH THE UNDERSTANDING THAT THE TARGETS IN THE DOCUMENT ARE INTERIM TARGETS. THE MOTION CARRIED UNANIMOUSLY.



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Agenda Item #6 – Burrowing Owl Habitat Protection Correspondence – Catherine Corbett

Mr. Tom Allen presented on-going research efforts and preliminary findings from this study at the September 13, 2006 TAC meeting. The project is to determine the number and distribution of burrowing owl nest sites, productivity of pairs, survival of adult and juvenile owls, and dispersal characteristics of adult and juveniles from 2002-2007 on a 39 sq. km. study area in Cape Coral, Lee County, that was used for earlier studies by banding, radio collaring and assessing mortality and reproduction rates of burrowing owls within the study area. A total of 584 owls were banded since the study began in 2002. The majority of mortality to owls was due to predation or road kill. Most owls were killed or lost during the months of May and June when the young were learning to fly and again in July and August when many of the young birds were dispersing. Dispersal of juvenile owls began as early as May, and increased each month peaking in September. Distances from the natal nest varied, but did not conform to the original thinking that females disperse further than males. The majority of young birds dispersed less than 0.5 miles from the natal burrow; however, the next peak in dispersal was between 1 and 3 miles with females and males about equal in numbers. The greatest distances moved, up to 8 miles from the natal burrow was recorded for males. The unknown owl in that category turned out to be a male, which actually moved in excess of 50 miles before settling down 8 miles from its natal burrow. New burrows were established by young owls from September through the end of the year, peaking during October. The final report from the FY04 R&RP project is available from the program website at www.chnep.org.

At the September 13, 2006 TAC meeting, the committee approved the motion to recommend to the Management and Policy Committees that, recognizing that the loss of habitat for the burrowing owl in Cape Coral may by itself move the species from “special concern” to “threatened”, the Charlotte Harbor NEP write a letter to the City of Cape Coral, requesting and recommending that adequate sites protective of burrowing owl habitat be identified, and then pursue with assistance of other funding agencies, the acquisition or management by other means of these lands for conservation. The TAC recommended approval of the enclosed draft letter for transmittal.

Mr. Allen of the Florida Fish & Wildlife Conservation Commission gave a powerpoint presentation on burrowing owls and the impacts of development on the owls.

Ms. Ott asked if the study compared trends. Mr. Allen replied yes, development trends.

Ms. Morgan asked Mr. Allen what happens when a property owner wants to develop their land and there are burrowing owls on the land. Mr. Allen explained that they ask the property owner to keep the burrowing owls and provide a portion of their property for the owls.

MR. DALE MOVED AND MS. MORGAN SECONDED TO RECOMMEND APPROVAL OF LETTER FOR TRANSMITTAL REGARDING BURROWING OWLS FOR APPROPRIATE LOCAL GOVERNMENTS WITHIN THE STUDY AREA, BEGINNING WITH THE CITY OF CAPE CORAL.



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Ms. Ott suggested including Mr. Allen's presentation as an attachment to the letter.

Ms. Donley suggested amending the letter to include an executive summary and also give a presentation to the City Council of Cape Coral.

MR. DALE AND MS. MORGAN BOTH AGREED TO THE AMENDMENT TO INCLUDE AN EXECUTIVE SUMMARY WITHIN THE LETTER AND ALSO GIVE AN ORAL PRESENTATION TO THE CITY COUNCIL OF CAPE CORAL.

Ms. Abbott asked if there any conservation areas for the owls. Mr. Allen explained the current issues faced with trying to conserve areas and they generally build on road sides and away from canal lots.

Mr. Britt asked if the owls prefer open areas. Mr. Allen explained that the owls will not place burrows under trees and they are territorial which means that the burrows need to be approximately 100 feet apart.

THE MOTION CARRIED UNANIMOUSLY.

Agenda Item #7 – FY07 Workplan Amendments – Lisa Beaver

The Fiscal Year 2007 Workplan was approved by the Management Conference on May 15, 2006. Due to the award of funding from partners the FY07 Workplan was revised by the Policy Committee on August 21, 2006.

Further revisions to the FY2007 Workplan are now needed due to additional funding from partners and additional in-house staff resources.

Proposed Fiscal Year 2007 Workplan Amendments

Staff proposes that the following revisions to the workplan text and associated budget tables be adopted:

- 1) Task 2 increase by \$15,000 due to award from EPA to fund development of an outreach strategy.
- 2) Task 2, Public Outreach, increase by \$32,255 due to increase in SFWMD partner contribution.
- 3) Task 3.0, revise to reflect that the CHNEP will complete much of the Environmental Indicator work utilizing in-house staff. Also revise the distribution of SFWMD partner contributions among delineated projects (Table 9).



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The full approved FY07 Workplan is on the CHNEP website at:
www.chnep.org/info/WorkplanFY07.pdf

MS. ABBOTT MOVED AND MS. OTT SECONDED TO RECOMMEND APPROVAL OF FY07 WORKPLAN AMENDMENTS TO THE POLICY COMMITTEE. THE MOTION CARRIED UNANIMOUSLY.

Agenda Item #8 – Benthic Macroinvertebrate Community Composition Comparison – Jim Culter

The importance of invertebrates in estuarine systems as an integral part of the food web, as providers of unique habitats, as mediators of water quality, as the major contributor to biodiversity and as the base of sports and commercial fisheries is not well understood by the general public, decision-makers and many scientists in the field outside of ecology and invertebrate biology. There are few current studies relating to invertebrate presence and abundance in the different habitats of the greater Charlotte Harbor system, and there is no central location for the scattered information base. Also, there is limited information transfer to the public, decision makers, and other professionals documenting in generally accessible language to the importance and value of invertebrates in different natural habitats. This absence of knowledge often leads to poor decision-making regarding the protection and use of aquatic resources.

One of the priority goals of the CCMP is for the region to maintain, restore and/or enhance submerged aquatic vegetation, inter-tidal unvegetated, saltwater marsh, mangrove, oyster, freshwater wetland and native upland habitats to a total extent and quality no less than caused by natural variation. This project's goal is to evaluate the usage by invertebrates of various habitats within the coastal Charlotte Harbor region to document their importance to the overall health of the system. The project compiled data from previous efforts and also undertook original analysis to evaluate and compare presence/absence and abundance of invertebrates within the aforementioned habitats across basins of the Charlotte Harbor system. The project compiled this information into a central location that can be provided to the Management Conference and others. The information stemming from this project will be used in subsequent educational efforts to develop posters and presentations that will educate scientists, managers, citizens and policy-makers on the importance of invertebrates and various habitats within the Charlotte Harbor region. The TAC recommended approval of the draft deliverables on October 25, 2006.

Mr. Jim Culter of Mote Marine Laboratory gave a presentation on benthic macroinvertebrate Community Composition Comparison.

MR. STONE MOVED AND MS. ABBOTT SECONDED TO RECOMMEND APPROVAL OF DELIVERABLES TO POLICY COMMITTEE. THE MOTION CARRIED UNANIMOUSLY.



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Agenda Item #9 – Approval of Public Outreach Grant Guidance Document for FY08

The guidance document prepared for those who wish to submit a Public Outreach Grant application for funding consideration in fiscal year 2008 is provided for Management Conference review. Members of the CAC Grants Committee provided thoughtful comments and improvements to the Guidance Document.

This guidance document is very similar to the last one approved with the exception of the application deadlines. One of the advantages in changing the time frame was to allow teachers to apply for a grant early in the school year and spend the funds that same year. The State recently passed legislation that schools may not begin any earlier than two weeks before Labor Day. The changes in this guidance document allow more time at the beginning of the school year to prepare the application. Because the FY08 workplan is not yet approved, the budget for public outreach grants as stated in this guidance document is that it is “anticipated to be \$30,000.”

<u>Action Items</u>	<u>FY08 Schedule</u>
Approve grant guidance document	October-November 2006
Post guidance and promote grants and announce in <i>Florida Administrative Weekly</i>	December 2006
Deadline for 1 copy of draft application for staff review	September 5, 2007
Deadline for final application to committee members’ review	September 17, 2007
Grant Committee meeting	by October 2, 2007
CAC meeting	October 17, 2007

With the change in the procedure as of FY06, applications are considered by the CAC Grants Committee then by the CAC then by the Program Director. Projects may begin once a contract is signed and notarized by both the applicant and SWFRPC, the NEP’s host agency.

MR. STAUSS MOVED AND MS. ABBOTT SECONDED TO RECOMMEND APPROVAL OF THE FY08 PUBLIC OUTREACH GRANT GUIDANCE DOCUMENT. THE MOTION CARRIED UNANIMOUSLY.

Agenda Item #10 – Workshop on Colored Dissolved Organic Matter – Catherine Corbett

On September 13, 2006, the TAC recommended approval of a workshop on colored dissolved organic matter as a first step in implementation of the numeric water quality targets. Studies in Charlotte Harbor suggest that color can account for over 60% of light attenuation in the water column. It is a key component of the NEP water quality targets; however, it is not well understood. Recent research has shown that dissolved organic matter in aquatic systems is the largest reservoir for organic carbon in the aquatic environment, and it may feed the processes that lead to nutrient enrichment by absorbing light, fueling bacterial respiration, and carrying large quantities of carbon, nitrogen, and phosphorous to estuaries. Thus, a better understanding of color dynamics is important for aquatic resource management. In a recent article in *Estuaries*



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and Coasts, a study found that in one Danish estuary, land use was found to have significant impacts on the quality and quantity of dissolved organic matter loadings to receiving waters. Forested subbasins of the watershed contributed significant dissolved organic matter throughout the year, but especially during the rainy season. Areas characterized by agricultural land use contributed a smaller, more constant flow of dissolved organic matter to the estuary throughout the year. The study found also that while forested lands provide more dissolved organic matter than agriculture, the nutrients bound in this material may be less bio-available than those from agricultural lands. Results of the study suggest that reducing the agricultural area of the watershed to about 50% of the watershed's total area could lead to a substantial decrease in eutrophication risk to the receiving waterbodies.

Recent analyses by PBS&J for FDEP on the Peace River Cumulative Impact Assessment found that land use changes and different mining practices in the Peace River have changed colored dissolved organic matter concentrations in the Peace River since water quality monitoring began. Also, analyses by SFWMD staff have found significant trends in color concentrations in the Caloosahatchee River in recent years. Thus, it is apparent that land use changes as well as other factors may be changing color concentrations within the Charlotte Harbor watershed.

An end result of a workshop on colored dissolved organic material will be to determine if we need to be collecting additional information to better understand color, whether land use models can better estimate or include color event mean concentrations (EMCs) and if we can add color to our management activities such as NPDES permitting. It is program staff opinion that TBEP and potentially SBEP staff and conference members would take interest in the workshop and wish to participate. Staff expects to organize the workshop with a steering committee of interested TAC members and others. The costs of the workshop will include staff time, travel for invited speakers and staff, venue and food. Staff estimates costs of approximately \$25,000, depending on the workshop proceedings, if support from sponsors can be found. Environmental Indicator Research funding in the FY07 Workplan could support this effort. The CAC recommended approval of this workshop on October 18, 2006.

Chairman Crum asked if the colors are controlled. Ms. Corbett explained that the concentrations are changing all the time, which in turn changes the colors.

Ms. Abbott asked what the target attendance numbers are. Ms. Corbett replied not at this time, but she believes that the first step is to developing a working group to help develop an agenda. Dr. Beever stated that she believes that the workshop would be very well attended.

**MR. STONE MOVED AND MS. OTT SECONDED TO RECOMMEND
APPROVAL OF WORKSHOP ON COLORED DISSOLVED ORGANIC
MATERIAL. THE MOTION CARRIED UNANIMOUSLY.**

Agenda Item #11 –TAC report

Judy Ott gave the TAC report.



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Agenda Item #12 – CAC Report

Stuart Stauss gave the CAC Report.

Agenda Item #13 – ABM Report

Lisa Beever gave the ABM report.

Agenda Item #14 – NEP Program Report

Dr. Beever reviewed the list of deliverables, including the approved Public Outreach Grant applications.

Ms. Hilgendorf provided a report on the success of National Estuaries Days activities that included the Charlotte Harbor Regional Nature Festival (more than 2,500 attended) and the conference Keeping the Peace: Translating Management Plans into Action (summary report will be provided at the next meeting). She provided members with an update on the progress of the 2007 calendar and reported that 14 of 22 public outreach grant applications received will be supported, encouraged participation in the Project Design and Evaluation Course that will be held December 12-14, and provided reports on upcoming activities, including public conference focused on Estero Bay and Florida Friendly workshops to be held at SFCC in Hardee and DeSoto counties.

Ms. Corbett announced that there is going to be a hurricane special issue within the Estuaries and Coasts publication has an article on Charlotte Harbor and should be published at the end of the year. She also announced that there were nine Research and Restoration Partners grant applications.

Ms. Donley had no comments at this time.

Ms. Boswell had no comments at this time.

Dr. Beever explained a grant application in which Mote Marine Laboratory will be pursuing.

Agenda Item #15 – Member Comments

Mr. Dale explained the current budget crisis that NOAA is facing.

Mr. Stauss stated that as a result of the 2004-2005 Hurricane Seasons there was a lot disturbance within both the Kissimmee and Caloosahatchee River basins and WGPU has done two documentaries: Lake "O" Big Water/Big Trouble and the Caloosahatchee – A River in Trouble. He then said that one of the results from both documentaries is that the residents within the basins need to look at themselves and see what they are doing to promote the problems (i.e. fertilizers, etc.) He feels that it is a great opportunity for the stewardship program.



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Mr. Allen announced that a workshop is being created to educate homeowners on how they can use native plants and landscapes.

Ms. Stafford announced the upcoming New Orleans Conference and also the 40th Anniversary of Estero Bay celebration on December 8th at the Hyatt of Coconut Point.

Chairman Crum asked stated that something needs to be done to discourage cypress kneads being processed for mulch.

Agenda Item #16 – Public Comments

There were no public comments.

Agenda Item #17 – Next Meeting’s Topics, Location and Date – Friday, March 2, 2007

Dr. Beever stated that the location is to be determined at a later date.

Agenda Item #18 – Adjourn

Meeting adjourned at 12:30 am.

Minutes were prepared by [Nichole L. Gwinnett](#).