

Meeting Minutes
Charlotte Harbor National Estuary Program
Technical Advisory Committee
October 25, 2006
Lemon Bay Park, Englewood, Florida

MEMBERS PRESENT

Kristen Kaufman	Southwest Florida Water Management District-SWIM
Jeanette Seachrist	Southwest Florida Water Management District-SWIM
Peter Doering	South Florida Water Management District
Judy Ott	Department of Environmental Protection-CHAP
Renee Duffey	Department of Environmental Protection-CHAP
Mindy Schneider	Department of Environmental Protection-CHAP
Celia Stearns	Department of Environmental Protection-CHAP
Stephanie Erickson	Department of Environmental Protection-EBAP
Steve Boutelle	Lee County
Sue Fite	Lee County
Wayne Daltry	Lee County
John Ryan	Sarasota County
Bill Byle	Charlotte County
Greg Blanchard	Manatee County
Mike Gurr	Central Florida Regional Planning Council
Jim Beever	Southwest Florida Regional Planning Council
Jim Culter	Mote Marine Laboratory
Scott Mears	Mosaic

ALSO PRESENT

Catherine Corbett	Charlotte Harbor National Estuary Program
Jaime Greenawalt	Charlotte Harbor National Estuary Program
Lisa Beever	Charlotte Harbor National Estuary Program
Rick Bartleson	SCCF
David Shonting	Citizen

1. **Call to Order and Introductions**—Judy Ott called the meeting to order at 9:15 A.M.
2. **Agenda Additions or Deletions**—Judy Ott
No additions or deletions were requested.
3. **TAC Minutes**—Judy Ott
MOTION TO APPROVE THE SEPTEMBER 13, 2006 MEETING MINUTES AS AMENDED BY WAYNE DALTRY. MOTION WAS SECONDED BY PETER DOERING. MOTION WAS APPROVED UNANIMOUSLY.
4. **CCMP Update**—Lisa Beever
The CAC CCMP Subcommittee, Legislative Subcommittee, and TAC subcommittees have reviewed the Quantifiable Objectives and Priority Actions

TAC Meeting Minutes
October 25, 2006
Prepared by C. Corbett

Meeting Minutes
Charlotte Harbor National Estuary Program
Technical Advisory Committee
October 25, 2006
Lemon Bay Park, Englewood, Florida

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 text has been updated. 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 that staff will recommend to the conference:

- 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.

**MOTION TO FORMAT DRAFT CCMP UPDATE WITH
RECOMMENDED CHANGES AS A DRAFT CCMP AND TRANSMIT
TO PUBLIC FOR CITIZEN INPUT BY WAYNE DALTRY. MOTION
WAS SECONDED BY KRISTEN KAUFMAN. MOTION WAS
PASSED WITH 1 ABSTENTION.**

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

TAC Meeting Minutes
October 25, 2006
Prepared by C. Corbett



Meeting Minutes
Charlotte Harbor National Estuary Program
Technical Advisory Committee
October 25, 2006
Lemon Bay Park, Englewood, Florida

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. Also, there is other evidence that 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 are 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

Meeting Minutes
Charlotte Harbor National Estuary Program
Technical Advisory Committee
October 25, 2006
Lemon Bay Park, Englewood, Florida

goals and the 2005 biennial Estuarine Research Federation conference. The method has undergone further peer review and was published in the *Florida Scientist* in 2006. The TAC in September recommended approval of the document including its methods on determining the targets with a resource focus, with the understanding that the document be modified to reflect several comments from TAC members to the Management and Policy Committees.

MOTION TO RECOMMEND TO MANAGEMENT AND POLICY COMMITTEES ACCEPTANCE OF THE DOCUMENT AND APPROVE THE APPROACH FOR ESTABLISHING WATER QUALITY TARGETS WITH THE UNDERSTANDING THAT THE TARGETS WITHIN THE DOCUMENT ARE INTERIM TARGETS BY KRISTEN KAUFMAN. MOTION WAS SECONDED BY PETER DOERING. MOTION PASSED UNANIMOUSLY.

6. **Burrowing Owl Habitat Protection Correspondence**—Catherine Corbett

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



Meeting Minutes
Charlotte Harbor National Estuary Program
Technical Advisory Committee
October 25, 2006
Lemon Bay Park, Englewood, Florida

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. Enclosed in the agenda packet was a draft letter for review.

MOTION TO RECOMMEND APPROVAL OF LETTER FOR TRANSMITTAL TO THE CITY OF CAPE CORAL TO MANAGEMENT AND POLICY COMMITTEES BY WAYNE DALTRY. MOTION WAS SECONDED BY JIM BEEVER. MOTION PASSED WITH 2 ABSTENTIONS.

7. FY07 Workplan Amendments—Lisa Beever

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. 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).

The full approved FY07 Workplan is on the CHNEP website at:

www.chnep.org/info/WorkplanFY07.pdf

MOTION TO RECOMMEND APPROVAL OF FY07 WORKPLAN AMENDMENTS TO MANAGEMENT AND POLICY COMMITTEES BY WAYNE DALTRY. MOTION SECONDED BY STEVE BOUTELLE. MOTION PASSED UNANIMOUSLY.

**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

TAC Meeting Minutes
October 25, 2006
Prepared by C. Corbett



Meeting Minutes
Charlotte Harbor National Estuary Program
Technical Advisory Committee
October 25, 2006
Lemon Bay Park, Englewood, Florida

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.

**MOTION TO RECOMMEND APPROVAL OF PROJECT
DELIVERABLES TO MANAGEMENT AND POLICY
COMMITTEES BY WAYNE DALTRY. MOTION WAS SECONDED
BY JOHN RYAN. MOTION PASSED WITH 1 ABSTENTION.**

9. Charlotte Harbor Estuaries Volunteer Water Quality Monitoring Network—Renee Duffey

Renee Duffey from Charlotte Harbor Aquatic Preserves within the Department of Environmental Protection will be presenting water quality status and trends results from the Charlotte Harbor Estuaries Volunteer Water Quality Monitoring Network (CHEVWQMN). The presentation will discuss results from the technical report "Charlotte Harbor & Estero Bay Aquatic Preserves Water Quality Status & Trends for 1998 – 2005 Charlotte Harbor Estuaries Volunteer Water Quality Monitoring Network". The presentation will serve as a means of receiving suggestions and comments regarding analysis methods and results as well as request potential reviewers for the draft technical report. The relative status of each parameter compared to typical Florida estuaries will be discussed in addition to nonparametric, seasonal assessment of trends from 1998 through

Meeting Minutes
Charlotte Harbor National Estuary Program
Technical Advisory Committee
October 25, 2006
Lemon Bay Park, Englewood, Florida

2005. Parameters analyzed include secchi depth, dissolved oxygen, nutrients, chlorophyll *a*, fecal coliform bacteria, turbidity and color. The presentation will provide a brief overview of water quality status and trends in the Charlotte Harbor and Estero Bay estuaries. Detailed results are available in the draft report made available in hard copy at the meeting and as requested

10. **Estero Bay ABM Report**—John Cassani or Church Roberts
11. **Program Report**—Catherine Corbett and Jaime Boswell
12. **Member Comments**—TAC Members
13. **Public Comments**
14. **Next Meeting's Topics and Date**—February 14, 2007
Florida Sunshine Law
15. **Adjourn** —Judy Ott, Co-Chair
The meeting was adjourned at 1:00 P.M.