

**Approved Meeting Minutes
Charlotte Harbor National Estuary Program
Technical Advisory Committee
February 11, 2009
Bowling Green, FL**

MEMBERS PRESENT

Jim Sampson	CF Industries
Bill Byle	Charlotte County
Kim Cressman	City of Cape Coral
Keith Kibbey	Lee County Environmental Lab
Phil Stevens	Florida Fish and Wildlife Conservation Commission
Greg Tolley	Florida Gulf Coast University
Sam Stone	Peace River Manasota Regional Water Supply Authority
Eric Milbrandt	Sanibel Captiva Conservation Foundation
John Ryan	Sarasota County
Peter Doering	South Florida Water Management District
Thomas Farrell	US Army Corps of Engineers
Leroy Crockett	USDA Natural Resource Conservation Service

ALSO PRESENT

Brett Solomon	Biological Research Associates
Chris Anastasiou	Florida Department of Environmental Protection
Ray Leary	Florida Department of Environmental Protection
Mindy Brown	Florida Department of Environmental Protection
Heather Stafford	Florida Department of Environmental Protection
Mary McMurray	Florida Department of Environmental Protection
Gregg Poulakis	Florida Fish and Wildlife Conservation Commission
Tony Janicki	Janicki Environmental
Mike Wessel	Janicki Environmental
Jaime Boswell	Johnson engineering
Emily Hall	Mote Marine Laboratory
Daphne Macfarlon	NOAA
Marti McGuire	NOAA
Jay Leverone	Sarasota Bay Estuary Program
Dianne Rosenweig	Scheda Ecological
Teresa Coley	South Florida Water Management District
Lisa Beaver	Charlotte Harbor National Estuary Program
Judy Ott	Charlotte Harbor National Estuary Program

1. Call to Order and Introductions

John Ryan called the meeting to order at 1:32 PM.

2. Agenda Additions or Deletions

Daphne Macfarlon requested that an item be added to discuss NOAA economic stimulus funding and grants. The item was added as Agenda Item 7.5.

3. Public Comments on agenda

John Ryan asked for public comments. No public comments were given.

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4. **Approval of Meeting Minutes**

John Ryan asked if there were any changes to the minutes of the October 22, 2008 TAC meeting. No changes were suggested.

KEITH KIBBEY MOVED, SECONDED BY PETER DOERING, TO ACCEPT THE MINUTES OF THE OCTOBER 22, 2008 TAC MEETING. THE MOTION CARRIED UNANIMOUSLY.

5. **“Evaluating the Risks of Pharmaceuticals to Caloosahatchee River Wildlife: Observations of Bull Sharks” (FY07 RRPP) Final Draft Report**

Judy Ott summarized the final draft report, referring to the document provide in the agenda packet, provided by Dr. James Gelsleichter for the “Evaluating the Risks that Pharmaceutical-Related Pollutants Pose to Caloosahatchee River Wildlife: Observations on the Bull Shark, *Carcharhinus leucas*” project. The project was an FY07 Research and Restoration Partners grant and implements the CCMP Priority Actions WQ-B, WQ-E, FW-E and FW-F.

The purpose of the study was to assess the ecological risks of pharmaceutical-related compounds in the Caloosahatchee River by examining the presence and concentrations of 12 widely prescribed drugs in surface waters of the river. The study also examined pharmaceutical compound levels in juvenile bull sharks (*Carcharhinus leucas*) in the river. The compounds examined were active components of human contraceptives, lipid-lowering drugs, anti-inflammatory agents, antidepressants, sexual function aids, and anti-psychotics. Because these compounds are found in WWTP discharges, the study provided data on the ecological impacts of WWTPs in the Caloosahatchee River. Samples were collected from the Fort Myers Wastewater Treatment Plant effluent and reclaimed water basins and Caloosahatchee River water between Fort Myers and Cape Coral from July to October 2007, as well as from blood plasma in neonate bull sharks in the Caloosahatchee and Myakka Rivers from May to September 2007. Pharmaceutical levels in blood plasma from neonate bull sharks from the Caloosahatchee River from 2006 were used for comparison. Results showed low levels of the steroids and 2 of the 6 antidepressants in the WWTP effluent and reclaimed water, with no detection of the other compounds. Low levels of 2 of the antidepressants were found in the river water, with no detection of the other compounds. Very low levels of 7 of the antidepressants were found in the blood plasma of the bull sharks in the Caloosahatchee River, with no detection of the other compounds, and no detection of any of the compounds in the Myakka River bull sharks. There was a relationship between the most commonly prescribed pharmaceuticals and the levels found in the WWTP effluent. It was recommended to continue monitoring pharmaceuticals occasionally in the future with focus on those compounds prescribed at highest levels. The final document was reviewed by the CHNEP program scientist and found to be complete, consistent with the project Scope of Work and useful to support implementation of the CCMP.

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Discussion ensued, including: use of technically sound methods, difficulty of measuring low levels of these hydrophilic compounds, good use of the control group of bull sharks from the Myakka River, types of compounds found in wastewater effluent, water and bull sharks were consistent with most commonly prescribed pharmaceuticals, the need for evaluating additional trophic level organisms and chronic effects of steroid/estrogen compounds, and extrapolation of these limited results for specific compounds to broader statements regarding low risk levels of pharmaceuticals on estuarine biota within the CHNEP. The group requested that the report conclusions be clarified to indicate that the study results apply only to the specific compounds and conditions monitored, and that it is important to continue to investigate chronic effects of commonly used pharmaceuticals, especially the steroid/estrogen compounds in these and other organisms in the future on a routine basis.

KEITH KIBBEY MOVED, SECONDED BY PETER DOERING, TO RECOMMEND POLICY AND MANAGEMENT COMMITTEES ACCEPT THE “EVALUATING THE RISKS OF PHARMACEUTICALS TO CALOOSAHATCHEE RIVER WILDLIFE: OBSERVATIONS OF BULL SHARKS” REPORT WITH THE MODIFICATION TO CLARIFY THAT THE CONCLUSIONS ONLY APPLY TO THE CONDITIONS MONITORED IN THE STUDY AND THAT CONTINUED EVALUATION OF PHARMECEUTICALS IS IMPORTANT. THE MOTION PASSED UNANIMOUSLY.

6. **CHEVWQMN Citizen Summary (FY08 Workplan Project) Final Draft Report**
Judy Ott reviewed the CHEVWQMN Citizen Summary final draft report, referring to the document provided in the agenda packet. Ray Leary, FDEP Charlotte Harbor Aquatic Preserves, provided the final draft document for the “CHEVWQMN Status and Trends: 1998-2005 Citizen Summary” project. The project is an FY08 Workplan project and implements the CCMP Priority Actions WQ-B, WQ-E, WQ-M, SG-B, SG-D and SG-K. The purpose of the project was to provide a visually aesthetic written summary of the Charlotte Harbor Estuaries Volunteer Water Quality Monitoring Network (CHEVWQMN) results in a format easily understood by the public, summarized by watershed. The final document was reviewed by the CHNEP program scientist and found to be complete, consistent with the project Scope of Work and useful to support implementation of the CCMP.

Discussion ensued, including; the importance of conveying scientific information in a format understandable by citizens, the advantage of summarizing material by watershed so citizens could refer to conditions where they live, the concise yet thorough summary of data provided, the use of appropriate tables and figures, and that the document should be reviewed for formatting consistency with other CHNEP documents.

JOHN RYAN MOVED, SECONDED BY CHRIS ANASTASTASIOU, TO RECOMMEND POLICY AND MANAGEMENT COMMITTEES ACCEPT THE FDEP CHARLOTTE HARBOR AQUATIC PRESERVES “CHEVWQMN STATUS AND TRENDS: 1998-2005 CITIZEN SUMMARY” FINAL REPORT. THE MOTION PASSED UNANIMOUSLY.

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7. **“Comparison of CHEVWQMN, CCHM and Seagrass Monitoring Programs, with Estuary Specific Optical Models” (FY08 Technical Project) Final Draft Results Presentation**

Ray Leary, FDEP Charlotte Harbor Aquatic Preserves, presented the preliminary results of the “Comparison of CHEVWQMN, CCHMN and Seagrass Monitoring Programs with Estuary Specific Optical Models” project. The project is an FY08 Workplan project and implements the CCMP Priority Actions WQ-B, WQ-G and FW-F. The purpose the project is to provide in-depth comparisons of water quality data from the CHEVWQMN and CCHMN with seagrass data from the FDEP Charlotte Harbor Aquatic Preserves transect monitoring program and develop estuary specific optical models quantifying the relationships.

Discussion ensued, including: results showed that light attenuation improved between 2005-2007 when rainfall was low, importance of comparing rainy vs. dry seasons, statistical use of R^2 and p values with large sample size, use of secchi to compare light attenuation to, high chlorophyll levels along the east side of Charlotte Harbor, methods used to calculate PAR being consistent with Corbett et al but methods used to calculate depth were different, how the word “water quality target” is used in the report, determination of nutrient targets should be based on load vs. concentration, use of maximum seagrass depth vs. mean maximum depth in targets and the need to repeat the analysis every 10 years. The group asked when the final report would be available and Ray indicated that it would be available by the end of February. The group requested that a subcommittee be formed to review the report, with possible members including Chris Anastasiou, Rick Bartleson and Charles Kovach.

KIM CRESSMAN MOVED, SECONDED BY CHRIS ANASTASIOU, TO DIRECT STAFF TO FORM A SUBCOMMITTEE TO REVIEW THE DRAFT REPORT “COMPARISON OF CHEVWQMN, CCHM AND SEAGRASS MONITORING PROGRAMS, WITH ESTUARY SPECIFIC OPTICAL MODELS”. THE MOTION PASSED UNANIMOUSLY.

7.5 **NOAA Economic Stimulus Funding and Grants**

Daphne Macfarlon summarized the NOAA economic stimulus funding and grant opportunities, explaining that a competitive grant would be announced soon. The grant will focus on projects that create jobs and protect habitat, are 12-18 months duration, are ready to begin within 90 days, are “shovel ready” type projects and range from \$1 to \$1.5 million dollars. She will keep the CHNEP and TAC informed as soon as the grant announcement is available.

8. **Water Quality Targets Refinement Segmentation Scheme (FY09 Technical Project) Update Presentation**

Mike Wessel presented the preliminary results of the “Water Quality Targets Refinement” project segmentation scheme assessment. The project is an FY09 Workplan project and implements the CCMP Priority Actions WQ-B, WQ-G and FW-F. The purpose of the project is to provide technically defensible quantitative habitat restoration and protection targets for the CHNEP based on seagrass water clarity needs. This project utilizes seagrass and water quality analysis methodologies which are consistent with those used in Tampa Bay and Sarasota Bay and builds on a previously developed CHNEP optical model.

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The project compliments the FY08 Workplan project "Comparison of CHEVWQMN, CCHMN and Seagrass Monitoring Programs, with Estuary Region Specific Optical and Habitat Suitability Models: 2001-2007" project by FDEP Charlotte Harbor Aquatic Preserves and the FY09 "Spectral and Epiphyte Attenuation Enhancement of Charlotte Harbor Optical Model" project by Mote. Assessing the existing segmentation schemes used in different monitoring programs within the CHNEP is 1 task within the project Scope of Work. A subcommittee meeting was held January 2009 to review the proposed segmentation scheme to use for reporting the water clarity and seagrass targets. The subcommittee agreed that the current CCHMN segmentation scheme is generally acceptable, but that empirical data should be conducted to examine spatial distinctions in water quality patterns in Pine Island Sound, Matlacha Pass, Lemon Bay and Estero Bay. Discussion ensued, including: lumping vs. splitting segments, analyzing data on smaller segments, but reporting it on larger segments, and conducting data analysis on narrow enough scale and time periods to avoid masking results. Janicki Environmental will continue to work with subcommittee as needed and report results regularly to TAC.

9. Reservoir Workshop Update

Judy Ott summarized the status of the pending CHNEP reservoir workshop, referring to the materials provided in the agenda packet. CHNEP is hosting a 2-3 day technical workshop to discuss and gain a better understanding of the benefits and impacts of reservoirs within the greater Charlotte Harbor Watershed. The workshop will be held April 13-15 in Punta Gorda at the Charlotte Harbor Event and Conference Center. There will be no registration fee, but participants are asked to register by March 13, 2009. The purpose of the Reservoir Workshop is to provide a forum for the exchange of technical information between scientists and citizens about the location, design, benefits and impacts of existing and proposed reservoirs on freshwater, estuarine and groundwater water quality, hydrology and habitats in the CHNEP watershed. The workshop implements the CHNEP CCMP 2008 Update Priority Action HA-K. Workshop Format includes: background materials, a pre-workshop survey, technical presentations and posters, and facilitated activities. A report of the workshop will be prepared, including the background materials, presentations and discussion results.

Discussion ensued including: shortening the workshop to 2 days, refining the agenda, soliciting speakers and abstracts, and hiring facilitators. The group agreed with the conceptual agenda and requested that staff continue to work with the planning subcommittee to develop the workshop.

JIM SAMPSON MOVED, SECONDED BY LEROY CROCKETT, TO DIRECT STAFF TO CONTINUE WORKING WITH THE SUBCOMMITTEE TO REFINE THE WORKSHOP AGENDA AND MATERIALS, SOLICIT SPEAKERS AND ABSTRACTS AND DEVELOP THE FINAL WORKSHOP. MOTION CARRIED UNANIMOUSLY.

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10. Advocacy Tracking and Update

Lisa Beever summarized the status of the CHNEP advocacy and review activities since 2003, referring to the table of advocacy activities provided in the agenda packet.

11. FY10 Workplan Discussion

Lisa Beever reviewed the draft FY10 Workplan, referring the document provided in the agenda packet. There has been a decrease in funding, as carry over funding has been expended by \$100,000 for technical funds and \$150,000 for public outreach. Discussion ensued, including: review of Table 25: Summary Technical Projects List. The final draft of the FY10 Workplan will be presented to the TAC at their next meeting April 8, 2009.

12. Science Forum Summary

Judy Ott summarized the presentations given at the Science Forum in the morning preceding the TAC, referring to the Science Forum agenda packet provided in the agenda packet.

13. Estero Bay ABM Report

Lisa Beever summarized recent activities of the Estero Bay ABM, referring to the summary provided in the agenda packet.

14. NEP Program Report

Lisa Beever summarized program activities, referring to the table of program deliverables from October 1 to December 31, 2008 provided in the agenda packet. Discussion ensued regarding the desire to provide comments to NOAA regarding small tooth sawfish critical habitat. NOAA staff stated that they are primarily interested in receiving new data. It was concluded not to be necessary to provide CHNEP comments at this time.

15. Member Emerging Issues and Comments

John Ryan asked for member comments. Bill Byle suggested that the group should be informed about the process and status of the North Spreader Ecosystem Management Agreement. It was agreed to add the topic to a future TAC agenda. Leroy Crocket explained that NRCS has grants available for wetland reserves on private property. The grant deadline is March 15, 2009. John Ryan initiated a discussion regarding pending state nutrient criteria that were announced in January 2009. Discussion ensued including: current use of narrative criteria and site specific alternative criteria. It was agreed to add nutrient criteria to a future TAC agenda.

16. Public Comments

John Ryan asked for public comments. No public comments were offered.

17. Next Meeting's Topics and Date

Date: Wednesday, April 8, 2009

Location: Port Charlotte at the Cultural Center of Port Charlotte.

Topics: FY10 Workplan, North Spreader Ecosystem Management Agreement Update.

18. Adjourn –John Ryan

John Ryan adjourned the meeting at 4:30 PM.

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