

**Lake St. Clair Coastal Habitat Project Management Team Meeting
September 15, 2004
Thomas Edison Inn
Port Huron, Michigan**

Attendees

Name	Agency	E-mail
Bob Haas	Michigan DNR	haasrc@michigan.gov
Dave Kenaga	Michigan DEQ	kenagadl@michigan.gov
Ernie Kafcas	Michigan DNR – Wildlife	kafcasc@michigan.gov
Sandra Morrison	U.S. Geological Survey	smorrison@usgs.gov
Jeff Adkins	NOAA Coastal Services Center	jeffery.adkins@noaa.gov
Alyssa Olson Callahan	PSGS/NOAA CSC	alyssa.olson-callahan@noaa.gov
Steve Stewart	Michigan Sea Grant	stewart@msue.msu.edu
Suzan Campbell	Great Lakes Commission	scampbell@glc.org
Roger Eberhardt	Michigan DEQ – Office of the Great Lakes	eberharr@michigan.gov
Mark Richardson	Macomb Co. Prosecutors Office	mark.richardson@macombcountymi.gov
Dave White	Walpole Island First Nation	dave.white@wifn.org
Tom Rayburn	Great Lakes Commission	tray@glc.org
John Paskus	Michigan Natural Features Inventory	paskusj@michigan.gov
Victoria Pebbles	Great Lakes Commission	vpebbles@glc.org
Bill Parkus	SEMCOG	parkus@semcog.org
Burke Greer	U.S. Geological Survey	bgreer@usgs.gov
Al Lewandowski	Port Huron Public Schools	alew@alew.info
Norm Smith	Fisheries and Oceans Canada	smithnw@dfo-mpo.gc.ca
Gerald Santoro	Macomb County Planning	Gerald.santoro@macombcountymi.gov
Lisa Appel	Pine River Nature Center	lapel@scresca.org

Overview of Project Goals and Objectives

Victoria Pebbles, Great Lakes Commission (GLC), reviewed the definition of the project “coastal” area which is delineated by a roughly 10 mile buffer around Lake St. Clair where land cover data has been uniformly gathered under the National Oceanic and Atmospheric Administration (NOAA) Coastal Services Center’s (CSC) Coastal Change Analysis Program (C-CAP).

Defined products coming from this project work include:

- Integrated Coastal Management (ICM) Tool
- Draft Coastal Conservation and Restoration Plan

- Potential Conservation Area (PCA) analysis
- Project web site to display and deliver products

Coastal Habitat Conservation and Restoration Plan

Section I –

No comments from the Project Management Team (PMT)

Section II.A –

Mark Richardson, Macomb County Prosecutors Office, stated that special use groups such as road commissions and school boards are mostly exempt from local planning and zoning ordinances. This should be addressed within this section. Bill Parkus, Southeast Michigan Council of Governments (SEMCOG), noted that there is currently a bill before the Michigan legislature that would subject these groups to review. The “Michigan Planning Act” (actually three individual bills at this time) shows that the legislature understands the specific importance of planning and zoning. Parkus said he would follow-up and distribute an abstracted version of the bills to the PMT.

Parkus also noted that on page 31, in reference to master planning, some local officials may interpret the existing wording as proposing the possibility of regional government, which SEMCOG would not support. GLC said that was not the intent and will make sure that the wording is reviewed and clarified. The PMT recommended that there should be a whole new section within “Responses” on planning. The current discussion on land use planning, master planning, etc. should be moved here. Maybe a matrix could be developed for existing plans and planning efforts and the responsible jurisdictions with a brief discussion on planning gaps following. **Parkus offered to provide the GLC with text for this new section on planning that would discuss regional, county, and local planning as a mechanism to address habitat stressors.**

Jeff Adkins, NOAA CSC, said that the document needs to “**tease out**” the **take home message for the user on the economy and the stressors**. What are the connections? For instance, the impacts to the landscape because to asymmetric population/housing growth because of regional migration. This should be placed at the beginning of the section and also note the dichotomy between the US and Canadian landscapes, growth projections and planning.

Richardson said that text boxes in the margin of the document could be added for clarity (*i.e.*, discussing the link between the amounts of impervious surface in a watershed to water quality). Text boxes could be developed to enhance the information display to the reader for:

- Key findings and highlights
- Data, information and planning gaps
- Examples and case studies
- Fun facts
- Photos, charts and tables

Section II.B –

Ernie Kafcas, Michigan Department of Natural Resources (MDNR), requested that average annual precipitation be included with the discussion on climate. Richardson asked that a discussion on river hydrology be developed. Kafcas noted that either the U.S. Army Corps of Engineers or NOAA had produced a document on the altered hydrology of Lake St. Clair. Information gleaned from it may add value and he will forward either the reference or specific document to the GLC. General discussion moved into the development and inclusion of case studies to augment the draft document. Dave White, Walpole Island Heritage Center, suggested one on drinking water withdrawals by the City of London from both Lakes Huron and Erie with wastewater discharges to the Thames River and into Lake St. Clair. Dave Kenega, Michigan Department of Environmental Quality (MDEQ), noted that the Clinton River has both severely altered hydrology (the cut off) and that Huron River water is brought into the Clinton River watershed for drinking and discharged as wastewater. Someone noted that Guy Meadows with the University of Michigan should be contacted for more information on his spills model he developed for Lake St. Clair.

Section II.C –

Bob Haas, MDNR, stated that within the larger sub-section on aquatics it should be noted that the plant communities are an indicator and driver of environmental change. There is strong anecdotal evidence that links water clarity to higher plant productivity (*i.e.*, zebra mussels filtering). White noted that Walpole Island is beginning to collect data on just this. In regards to invasives, they make up less than 1 percent of the biomass but with emergents they are a real concern. The PMT thought that **a text box noting that anecdotal information is sometime passing as actual data would be helpful and appropriate.**

Georeferenced data that is available and may be beneficial to this section and others includes:

- Fish surveys, especially sturgeon
- *Hexagenia* (mayfly) burrowing
- Mercury in sediments
- Overall pollution maps

In addition, Parkus noted that SEMCOG might be able to provide relative costs on infrastructure upgrade to accompany remediation costs for contaminated sediment removal.

Section III –

On page 7 within the discussion on agriculture, funding from the U.S. Farm Bill and other sources for agricultural conversion should be presented. Also, data on buffer strips and zones, grasslands and other information on how existing agricultural practices benefit water quality should be included. Norm Smith, Fisheries and Oceans Canada (DFO), said there are Canadian programs for conservation similar to Farm Bill. Information is available from:

- Agriculture and Agri-food Canada
- Ontario Ministry of Agriculture
- Stewardship Councils
- Conservation Authorities

Kenega said that response to stressors should be highlighted for public information within the document. Also, private efforts on wetland mitigation and banking should be presented. Richardson said that there should be mention of MDEQ's wetlands permitting activities within the project area. For instance, a recent study found that over 80 percent of all permitted mitigations failed. Even with laws and programs in place wetlands are still being lost. In Macomb County there are no local governments with wetland statutes within the study area. Within the study area only the state and Corps have the authority to regulate/permit wetlands. **Richardson agreed to prepare a case study on wetland laws and their implementation challenges to include in the document.**

The Clinton River Public Advisory Council (PAC) is currently developing delisting criteria that may address this at the regional level.

Potential Conservation Areas: Modeling Effort and Outcome

John Paskus, Michigan Natural Features Inventory (MNFI), presented an update on the final PCA analysis. Steve Stewart, Michigan Sea Grant, noted that a "median" size should be included in the quantitative analysis to describe PCA size, eliminating/minimizing the excessive weight of the 11,000+ acres on Walpole Island alone. Paskus thought that in comparing PCA locations to existing public lands there should be some collective thought on protection status, especially in regards to Walpole Island where the vast high quality lands have no official protected status. Similar discussion on jurisdictional coordination between federal and state authorities on the U.S. side in the St. Clair Flats area should be addressed.

Integrated Coastal Management Tool

Alyssa Olson-Callahan, Perot Systems Government Services, provided a condensed overview of the Beta version of the ICM Tool and its help tool component. An extended, in-depth review is planned for Ann Arbor on September 16 and Walpole Island on September 17.

The tool calculates habitat statistics that are used to examine how habitats function within a landscape. These statistics allow users to identify and rank components of the landscape and perform land use scenario testing along with optional aquatic habitat calculations and data overlays. Results can be displayed as reports or in an ArcGIS map format. Applications of the ICM Tool include:

- Identification and ranking of potential restoration and conservation areas
- Habitat inventory
- Land use planning

The tool will calculate the connectivity of habitat patches based on the distance to the "nearest neighbors" and the number of "neighbors" nearby. Assessments of habitat quality are based on patch size, core area, distance to streams, distance to shoreline hardening, the presence of exotic species, and designations by MNFI of rare, high quality and element occurrences. An overall inventory can be generated that shows the total area within all landscape classes and the

percentage of the landscape represented by each class. The proportion of the landscape covered by impervious surfaces will also be determined. Optional aquatic calculations will include water quality, substrate, depth, current direction and velocity, light, and water temperature.

The tool presents the user with several options for querying and evaluating the data. The user will have multiple options for reviewing the habitat statistics, such as high score, low score, and percentile reporting. The user can identify habitat that is within a forecasted growth corridor, historic land cover, the percentage of natural habitat that is nearby and the soil type. The user is able to change the land cover and land use designations and evaluate the associated effects on habitat. Also, the impervious surface portion of the tool can be used to assess the impacts of physical processes, such as nonpoint source runoff pollution.

The tool requires land cover data in a raster format. Data showing political and watershed boundaries, streams, elemental occurrences, shoreline hardening, and exotic species can also be used with this tool. Some of these additional data are required for the advance query functions described above. The tool requires ArcView 8.3 with Spatial Analyst.

Additional information about the ICM Tool and the help component is available online at: http://www3.csc.noaa.gov/icm_help.

Lake St. Clair Coastal Habitat Web Site

Pebbles provided an overview of how content was being added to the web site as draft sections of the plan were being developed. The web pages provide excerpts of more detailed text provided in the document, and will eventually link directly to the relevant detailed sections. She pointed out that the stressors had been regrouped and there is a new spatial data page that features GIS data and metadata relevant to the project. Much of this GIS data is static at this time, but the GLC intends to make the GIS online element interactive in the near future and the web page has been designed with this in mind. She invited the PMT to review and comment on all aspects of the web site.

Bringing it All Together: Key Findings

Paskus said that in his opinion five major points will need to be taken home by the users of the project products:

- Stressors are linked to socio-economic and cultural trends
- Land development has major impacts on natural communities
- What are the contaminant pathways and their effects
- Asymmetrical population growth and household migration pressure the landscape
- Correcting or eliminating negative impact will result in positive effects

Lisa Appel, Pine River Nature Center, said we need to identify who has responsibility for specific actions of implementation. Perhaps this could best be done as recommendations by developing a “Who Can Implement” matrix.

We need to define upfront in the document what it is all about, who it is for and the individual user can most effectively implement recommendations. (Note: This will be done through the executive summary and through incorporating key findings throughout as suggested by J. Adkins earlier.)

Richardson said that the document has to make specific recommendations and minimally must address:

- How is the data to be used?
- Define a target of saving all the PCAs
- What is the impact of implementing aspects of the recommendations?

The PMT added that the document and web site specifically define:

- What was originally in the study area?
- What is currently there?
- What caused the shift?
- What is now possible?

Where possible, the PMT agreed that the document should attach specific quantities to the recommendations and goals. For instance, saving all the PCAs is the goal and incorporating their protection into local ordinances is the action. The next goal/recommendation would be to physically link the PCAs together.

The PMT strongly suggested that the document is not really a plan in the sense that it is a prescriptive document designed for a specific set of implementers, but is actually an assessment with recommendations. (Note: the core group developed the following new name for the document: “Lake St. Clair Coastal Habitat Assessment: with Recommendations for Conservation and Restoration Planning.”)

Conservation and Restoration Objectives: Presentation of Primary Guidance

Paskus asked, “What happens if we do nothing?” He believes this needs to be addressed within the document. Adkins noted that just to keep the area as it now is, we would have to preserve everything as it is now. What institutional changes are required to maximize ecological benefits? Green space management? Water quality enhancement? What other goals and recommendation are needed? How do we address the maintenance of the PCAs if they are indeed acquired?

Next Steps/Project Completion

1. The ICM Tool Beta will be presented to interested parties in Ann Arbor and on Walpole Island on September 16 and 17, respectively.
2. The project secretariat, GLC, will finalize Sections I and II, with the addition of comments received here, by October 31.

3. Mark Richardson will provide the GLC with a case study on wetland protection issues by October 31.
4. Bill Parkus will provide the GLC with a case study on planning by October 31.
5. The document outline will be amended in accordance with recommendations made by the PMT.
6. The new Sections III, IV and IV will be revised by October 15.
7. MNFI will redraft the new Sections VI and VII (as a single section) and submit to GLC by October 31.
8. NOAA CSC will finalize the CD version of the ICM Tool by December and working with the GLC, have the web version available on-line by January 15.
9. The title of the draft document will be changed to: “Lake St. Clair Coastal Habitat Assessment: with Recommendations for Restoration and Conservation Planning.”
10. The revised draft document will be placed on-line by November 15 for PMT review and comment.
11. The document will be finalized and placed on-line on the project web site by January 15.
12. USGS will provide a detailed write-up on sediment data for the document by October 15 to GLC.