

**Lake St. Clair Coastal Habitat Project Management Team Meeting
April 29, 2003
Ann Arbor, Michigan**

Attendees

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Project Overview

Victoria Pebbles provided an overview of the project. Project goals include developing four distinct products: a GIS resource that compiles a variety of available habitat related data; a web site for information/education purposes and to feature other project products; a draft coastal habitat restoration and conservation plan; and a decision support tool to help resource managers and local officials make informed decisions about conservation planning and related activities. She noted that the project study area will focus on a one-mile buffer around Lake St. Clair, including all islands and the delta structure of the St. Clair River. While a characterization of the entire Lake St. Clair watershed is desirable, the resources available for this project did not support a full watershed scale effort. It is hoped that this initiative will be the first step to characterize and assess habitat throughout the entire watershed.

A question was raised about the project’s relationship to the Lake St. Clair Management Plan Initiative. This Lake St. Clair Coastal habitat project is being designed and conducted consistent with the management plan. This habitat project will develop products that respond to habitat issues identified in the management plan and will build on the management plan by characterizing coastal habitat, stressors and existing and possible responses in much greater detail than will be addressed in the management plan. Canadian provincial and federal PMT members requested that efforts be made to ensure that the products being developed under this habitat project, specifically the draft coastal habitat conservation and restoration plan, be formally approved by the 4-party managers and consistent with the “Four Agency Letter of Commitment” (http://www.ec.gc.ca/press/rap4_n_e.htm).

Member Reports

U.S. Geological Survey: The USGS (<http://www.usgs.gov>) is primarily interested in the Lake St. Clair Habitat project to provide scientific support. The USGS will integrate their efforts under the Aquatic Gap Analysis Project (<http://www.glsc.usgs.gov/GLGAP.htm>) with this effort. The goal of the Great Lakes Aquatic GAP Program is to evaluate the biological diversity of aquatic species and their habitats, and to identify gaps in the distribution and protection of these species and their habitats within the Great Lakes basin. This information will provide managers, planners, scientists, and policy makers with the information they need to when identify priority areas for conservation before a species is threatened or endangered.

U.S. Environmental Protection Agency: U.S. EPA's (<http://www.epa.gov/glnpo/>) primary role in the Lake St. Clair Habitat project, as is their mandate, is the protection of human health and the environment. They have regulatory responsibilities related to air and water quality in the study area. U.S. EPA wants to assure that Lake St. Clair remains a functional ecosystem, there is no net loss of wetlands and water quality standards are being met. U.S. EPA would like to see the project identify system stressors and ways to remediate those stressors that can support enforcement decisions.

Ducks Unlimited: DU (<http://www.ducks.org>) conserves, restores, and manages wetlands and associated habitats for North America's waterfowl. These habitats also benefit other wildlife and people. This is accomplished through direct funding and partnering.

Department of Agriculture, Natural Resource Conservation Service: NRCS's (<http://www.nrcs.usda.gov/>) primary activities are conservation planning, technology transfer and "soft engineering" and the impacts of agriculture on the riparian zone. Stream bank stabilization is a tool NRCS has used to help restore riparian habitat.

Ontario Ministry of Natural Resources: OMNR (<http://www.mnr.gov.on.ca/>) is participating in the PMT for the international dialogue it provides on the management of Lake St. Clair. OMNR wants to stress that any plans or policies that emanate from this project need to be responsive to the existing "Four Agency Letter of Commitment". Organizationally, OMNR is focusing on the littoral drift of sediment in Lake St. Clair, taking an ecosystem approach to restoration and conservation, and describing the "life history" of species and their habitat.

Fisheries and Oceans Canada: DFO's (http://www.dfo-mpo.gc.ca/home-accueil_e.htm) role as it relates to Lake St. Clair is fish habitat management (specifically the science and regulatory aspects of the Fisheries Act), environmental assessments, and proposal review.

Macomb County Prosecutor's Office: Role is prosecution of violators of environmental laws and filing law suits. Mark Richardson is also the current Chair of the Clinton River Public Advisory Committee (<http://www.epa.gov/glnpo/aoc/clintriv.html>). They hope to use the plan and products of this project as a tool/guidance to trigger legal action with respect habitat/ecosystem issues. Macomb County (<http://www.co.macomb.mi.us/>) would also like to see the plan address Beneficial Use Impairments and their impacts on habitat restoration.

Southeast Michigan Council of Governments: SEMCOG (<http://www.semco.org/>) wants to ensure that this work furthers the protection of natural features and speaking for the Macomb/St. Clair Intercounty Watershed Management Advisory Group, making sure this project and the associated tools are of use to the local municipalities and their master planning efforts. It was noted that generally it is perceived that environmental protection is difficult and expensive to undertake at the local level.

Essex Region Conservation Authority: The Conservation Authorities report to the local

governments. They work at the watershed level and have regulatory authority to issue permits for structures along the shoreline and in the floodplain. CA's have broad non-regulatory roles working with locals to implement habitat management, land stewardship, and forestry projects and programs. ERCA (<http://www.erca.org/home.htm>) feels the geographic scope of this project should include the open water of Lake St. Clair and "disturbed" habitat. Also, data collection and detail at as fine a scale as possible should also be sought.

Environment Canada: EC has broad authority for implementing a suite of environmental laws and programs, including those under the Great Lakes Water Quality Agreement (e.g., Areas of Concern/Lakewide Management Plan process), the North American Waterfowl Management Plan, migratory birds, and the Species at Risk program (through the Canadian Wildlife Service). EC is also a major land owner in the watershed and has an important role to play in the affairs of Lake St. Clair. EC priority information needs that could be addressed through this project include up-to-date species data, delineation of quality habitat not currently included in the existing natural heritage areas, establishment of protocols and opportunities to demonstrate new technologies in line with the Great Lakes Sustainability Fund (<http://sustainabilityfund.gc.ca/intro-e.html>). EC is a lead agency for coordination on binational initiatives and has a responsibility to engage First Nations in relevant activities.

National Oceanic and Atmospheric Administration, Coastal Services Center: NOAA CSC (<http://www.csc.noaa.gov/lcr/>) is specifically looking to this project to address outstanding management issues, build on the strength of existing and newly formed partnerships, building products and tool that meet management needs, and to develop a decision support tool that addresses the group's habitat/ecosystem needs. In addition, NOAA CSC is acquiring large amounts of land cover data for the study area through the Coastal-Change Analysis Program (C-CAP) (http://www.csc.noaa.gov/crs/lca/ccap_program.html).

The Nature Conservancy: TNC's (<http://nature.org/>) mission is to preserve the plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive. This is done through land acquisition as well as habitat restoration and management projects.

Michigan Department of Environmental Quality, Coastal Management: MDEQ's Coastal Management Program (<http://www.michigan.gov/deq/>) assists local governments and other agencies in protecting and enhancing their coastal areas, funds studies related to coastal management, and helps to increase recreational opportunities in Michigan's Great Lakes coastal area.

U.S. Army Corps of Engineers: USACE's (<http://www.lre.usace.army.mil/>) primary role in Lake St. Clair is maintenance of the navigation channel, ecosystem restoration, water quality/quantity in general, and development of the Lake St. Clair/St. Clair River Comprehensive Management Plan (<http://www.epa.gov/region5/semi/stclair.htm>). The Corps has authority to engage in aquatic habitat restoration as it relates to federal navigation dredging projects.

Michigan Office of the Great Lakes: The Office of the Great Lakes (http://www.michigan.gov/deq/1,1607,7-135-3313_3677---,00.html) current high priority projects include Annex 2001 (<http://www.cglg.org/1pdfs/Annex2001.pdf>) implementation and the correlation between consumptive uses of water and the ecological impacts of that removal as well as aquatic nuisance species. OGL would like the project to help identify needs within Lake St. Clair that could be supported by the Michigan Great Lakes Protection Fund (which is managed by OGL) and hopes that this project can support or be integrated with Michigan's aquatic nuisance species management plan.

U.S. Fish and Wildlife Service: FWS's (<http://www.fws.gov/>) national role is protection of indigenous flora and fauna through management and regulatory oversight, implementation of the Endangered Species Act (<http://endangered.fws.gov/>), and specific to this project integration of the expertise and statutory mandates with coastal efforts.

Michigan Department of Environmental Quality, Water Division: Michigan DEQ represents the state of Michigan in the Four Agency Letter of Commitment. The Water Division (<http://www.michigan.gov/deq/0,1607,7-135-3313---,00.html>) funds and reviews all habitat related proposals, performs permit reviews in the coastal zone, provides grants administration, oversees the habitat components within all Michigan Remedial Action Plans, and take a lead role in restoration of the Beneficial Use Impairments identified for each AOC. The Water Division sees the resulting draft plan for this project as a public document for education and general management and not a scientific endeavor. To this end, they would like the project to showcase successful management/restoration efforts, highlight priority areas for conservation/restoration and include recommendations (*i.e.*, for a specific project) that can be implemented by the U.S. Army Corps of Engineers through existing authorities under the Water Resources Development Act.

Presentation: USGS Great Lakes Aquatic GAP Analysis

Dora Passino Reader and Sandra Morrision of the USGS Great Lakes Science Center provided an overview of the USGS GAP analysis program. The presentation focused on the Great Lakes Regional GAP initiative and the Great Lakes Coastal GAP initiative, which focuses on ordinary species and their habitats. The USGS also has a Terrestrial GAP initiative, but this effort was not presented. The Great Lakes Regional GAP initiative is developing a landscape scale riverine classification scheme based on three key natural data elements: enduring features (*e.g.*, physical and hydrological), biological, and habitat affinity (*e.g.*, temperature, soil types, life cycle, etc). These three elements are considered collectively and areas with similar attributes are designated as distinct "valley segment types." The Coastal GAP analysis program focuses on nearshore aquatic habitats which extend from the shoreline to approximately 10 meters of depth. Two pilot studies are underway looking at western Lake Erie and eastern Lake Ontario. The goal is to develop and apply a hierarchical coastal habitat classification framework. Similar to the Regional GAP initiative, the Coastal GAP initiative will aim to develop "coastal segment types"

and a coastal habitat index. Both initiatives began in 2001 and will continue through 2009.

Several PMT members suggested integrating this Lake St. Clair coastal habitat project with the USGS Coastal GAP effort. However, the USGS Coastal GAP has not yet developed a working classification scheme, only a process for developing such a scheme and a timeline, which is well beyond the timeline for this project (ends in 2004). Conversely, the USGS GAP may end up building on a classification scheme developed for the Lake St. Clair coastal habitat project.

Presentation: MNFI Tools

John Paskus of the Michigan Natural Features Inventory provided an overview of MNFI, which focuses on gathering and consolidating data and information on threatened and endangered species and rare and high quality natural communities. John presented a product MNFI had developed for Oakland County, Michigan which digitized natural features, and other habitats overlaid with other socio-economic data to identify and rank areas for potential conservation. He discussed the project aim to prepare a similar product for the project study area, noting the ability to include all habitat types in such an analysis, not just high quality and rare species/communities.

Perspectives on Lake St. Clair Conservation and Restoration Priorities

Mark Richardson of the McComb County Prosecutor's Office highlighted the need for user-friendly data sets that can be incorporated into zoning and planning decisions. He emphasized the importance of describing rare and unique species and community types in the context of all types of habitat—natural as well as altered/degraded. He also noted interest in a decision support tool that could support legal action such as enforcement and natural resource damages.

Dave Brakhage described the mission, organization and activities of Ducks Unlimited. Their unique organization facilitates partnerships to engage in conservation and restoration activities on the ground. He pointed out that more than 3 million waterfowl migrate through the Great Lakes region each year, and that Lake St. Clair was a key geographic location for migrating waterfowl. DU is partnering with the Michigan DNR on several conservation and restoration projects with funding under the North America Wetlands Conservation Act (NAWCA) (<http://northamerican.fws.gov/NAWCA/grants.htm>). NAWCA was passed, in part, to support activities under the North American Waterfowl Management Plan, an international agreement that provides a strategy for the long-term protection of wetlands and associated uplands needed by waterfowl and other migratory birds in North America. <http://northamerican.fws.gov/NAWMP/nawmphp.htm>

Coastal Habitat: Project Focus

There was considerable discussion about how “coastal habitat” is being defined for purposes of

this project and what areas are being covered by the project.

Project boundaries. The **landward boundary of the project was clarified as being one mile landward of the shoreline reference datum** (a shoreline boundary established by the Great Lakes Commission based on data from a variety of state, federal and provincial sources). The one mile buffer was established due to the availability of land cover data on both sides of the lake (U.S. and Canadian). NOAA already had data for the U.S. side; funding was available only to collect land cover data for the one mile buffer on the Canadian side. There was discussion on the extent of the lakeward project boundary. Some suggested it include emergent vegetation only, but there was concern that this would not include “unconsolidated shoreline” such as beaches and flats which are clearly coastal, but do not support vegetation. Another suggestion was to include all submerged vegetation, and the point was raised that this would include nearly all of Lake St. Clair. Further, it was suggested that the project be consistent with the USGS Coastal GAP Analysis program, which is proposing that shoreline include all submerged lands to a depth of 10 meters. Developers of this program were thinking about larger and deeper lakes: again, this would result in including all of Lake St. Clair. A final perspective was to include an aquatic component of the coastal area to the extent that there is data that can be included in the project. No decision was made as to the lakeward boundary of the project.

Decision Point: Project staff will evaluate views regarding lakeward boundary, explore available aquatic data and make a definitive recommendation to the PMT regarding the lakeward boundary of the project. Consensus on the proposed lakeward boundary will be sought by the PMT during a conference call.

Decision Point: Given that time and resources do not permit a characterization of the entire Lake St. Clair watershed for this project, all project products will clarify and define the extent of the study area up front while emphasizing the importance of watershed planning to coastal habitat management.

Habitat Definition. There was discussion about whether the project should include only natural habitats or also address degraded or human modified habitats. Most PMT members supported the project scope to go beyond natural habitats to include degraded or modified habitats. However, there was no clear decision about where to “draw the line” on degraded or anthropogenic habitat.

Decision Point: The project will include natural as well as non-natural habitats, but will not attempt to include an extensive coverage and analysis of anthropogenic habitats. However, should data and information on anthropogenic habitats become available during the course of the project, that information will be incorporated, as relevant, into project products.

Coastal Habitat Classification

While there are a number of initiatives underway to develop ecological or habitat classification schemes, there is no established and accepted classification scheme for coastal habitat that includes both an aquatic and terrestrial component at the scale of the study area. Under such circumstances, project staff will establish a working group to develop a proposed scheme that reflects and builds on existing initiatives and is responsive to the needs this project. In particular, the classification scheme for this project will be used to organize information that is presented on the web and in the draft habitat plan. Existing classifications being considered include:

- Land Cover Class Categories under NOAA's Coastal Change Analysis (C-CAP) Program. http://www.csc.noaa.gov/crs/lca/tech_cls.html This program is providing geospatial data on land cover from satellite imagery and aerial photography for the one-mile buffer study area around the entire perimeter of Lake St. Clair. Its top-level classification includes: upland, wetland, and water and submerged land. C-CAP land cover classification was adapted and designed to be compatible with other nationally standardized classification systems, particularly the USGS *Land Use and Land Cover Classification System*, the USFWS *Classification of Wetlands and Deepwater Habitats* and the U.S. EPA *Environmental Monitoring and Assessment Program (EMAP)* classification system.
- Lake Erie Habitat Zones identified as part of the Lake Erie Millennium Habitat Workshop Series. The five habitat zones identified are: (1) natural and semi natural terrestrial habitats such as forests and grasslands, (2) tributary streams and rivers, (3) coastal wetlands, (4) natural and semi natural nearshore and coastal areas, and (5) open water. This scheme is somewhat broader than the project study area, but can be integrated with C-CAP classifications to reflect the coastal focus, yet provide consistency with the larger lakewide effort.
- Great Lakes Coastal Wetlands Consortium Classifications (<http://www.glc.org/wetlands/docs/wetlands-class-scheme.doc>)—a hydrogeomorphic classification scheme, the top level of which includes: (1) lacustrine (2) riverine and (3) barrier-protected systems. There is no terrestrial component to this classification and it does not include non-coastal (inland) wetlands.

Decision Point: Project staff will establish a working group (subset of PMT) to develop a proposed habitat classification scheme that reflects and builds on the existing initiatives and is responsive to the needs this project.

Project Web Site

Victoria Pebbles offered a preliminary draft home page and a “child” page that would describe a particular habitat or community type in the study area for PMT review and comment. Formatting suggestions were made to better highlight the study area. Several PMT members emphasized the importance of linking to other resources, references (*e.g.*, management plans) and reports from either a single page or multiple pages. PMT members requested a mission statement of purpose up front on the home page that defines the scope of the project as a subset of the entire watershed.

Decision Support Tool

Allyssa Olson-Callahan of NOAA’s Coastal Services Center (CSC) reported out on the Decision Support Workgroup’s meeting the day prior and the desired features identified to date of the project’s decision support tool. The desired features included the ability to make habitat management decisions based on a series of ecological and socio-economic factors. It was noted that the tool could be designed so that the weight of those factors could be modified by the user to reflect local circumstances. It was also noted that the tool could be designed so that users could update the data that the tool relies on. CSC is developing the decision support tool based on input from the working group. Some PMT members expressed interest in having more involvement with this workgroup and the DSS product.

Decision Point: CSC will send out a new announcement to PMT members to solicit additional interest in participating on the DSS workgroup.

Summary of Action Items and Next Steps

- Establish working group to develop proposed habitat classification scheme
- Seek consensus on lakeward boundary of project study area
- Develop draft content for web site homepage for PMT review and incorporate suggested format changes

- Solicit additional PMT members to participate on DSS work group