

NORTHEAST MICHIGAN INTEGRATED ASSESSMENT:  
DESIGN OF A STAKEHOLDER ENGAGEMENT PROCESS

by

Erica Powell

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Faculty advisors:

Professor Donald Scavia  
Professor Jennifer Read



## **ABSTRACT**

An integrated assessment (IA) brings together policy makers, scientists, and key stakeholders to address a common issue of concern through collaboration and a formal analysis process. The goal of an IA is to link existing natural and social scientific knowledge about a problem with policy options in order to help decision makers evaluate possible actions.

An IA led by Michigan Sea Grant (MSG) was conducted for the three-county region of Presque Isle, Alpena, and Alcona Counties in Northeast Michigan. This coastal area along Lake Huron includes rich natural and cultural resources, but the local communities have recently experienced economic difficulties. Despite the great potential for natural and cultural resources-related tourism, local residents wish to proceed cautiously in order to avoid overdevelopment and the destruction of the area's unique resources. Therefore, the key policy question addressed by this IA is: How can coastal access be designed, in a regional context, for sustainable tourism that stimulates economic development while maintaining the integrity of natural and cultural resources and quality of life?

The objectives of this project, as a part of the larger IA, were 1) to serve as a member of the secretariat team and as such to design the stakeholder engagement process and assist in drafting policy options and 2) to serve as an observer of the process to provide key findings and recommendations for future IAs.

A literature review on collaboration as well as interviews with individuals who had coordinated such processes provided guiding principles and best management practices that were incorporated into the NEMIA process. A qualitative analysis was used to draft policy options that reflect the participant-identified preferred future vision for the region.

The NEMIA process was a pilot project intended to demonstrate the utility of the IA process to issues at the local scale. Recommendations for future MSG integrated assessments are provided based on experiences from the NEMIA process as well as the guiding principles gleaned from the collaboration literature and interviews.

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## INTRODUCTION

### **What is an Integrated Assessment?**

An integrated assessment (IA) brings together policy makers, scientists, and key stakeholders to address a common issue of concern through collaboration and a formal analysis process. An IA is an approach to synthesizing and delivering relevant, independent scientific input to decision making through a comprehensive analysis of existing natural and social scientific information in the context of a policy or management question (MSG 2005). The goal of an IA is to link existing natural and social scientific knowledge about a problem with policy options in order to help decision makers evaluate possible actions.

Integrated assessment is formally defined as an interdisciplinary process of combining, interpreting and communicating knowledge from diverse scientific disciplines, in such a way that the whole set of cause-effect interactions of a problem can be evaluated from a synoptic perspective with two characteristics: (i) it should have added value compared to single disciplinary assessment; and (ii) it should provide useful information to decision makers (Rotmans and Dowlatabadi 1997).

Integrated assessments are useful for ensuring that both economic and environmental interests are represented in management decisions by including representatives of both the natural and social sciences. Additionally, by not recommending one specific option, policy makers can select the best option of many. Independent peer review of scientific information also adds credibility to the process. This process has been used to evaluate long-term and complex issues such as global climate change and hypoxia.

### **Integrated Assessment Examples**

The U.S. National Assessment of the Potential Consequences of Climate Variability and Change, conducted from 1997 to 2000, was based on IA methodology. The goal of the assessment was to analyze and evaluate what was known about the potential consequences of climate variability and change for the United States in the context of other pressures on the public, the environment, and the nation's resources. The assessment was mandated by the *Global Change Research Act of 1990* (P.L. 101-606) and was directed by the Committee on Environment and Natural Resources (CENR) in the National Science and Technology Council (NSTC) of the US Federal government. The process involved a broad spectrum of stakeholders from state, local, tribal, and Federal governments, business, labor, academia, non-profit organizations, and the general public. Analysis of climate variability and change was based on existing scientific literature. These analyses were linked to coping strategies to be implemented by planners, managers, and other decision makers at the local, state, and federal levels. The assessment process was founded on the principles of scientific excellence and openness and was designed to be comprehensive, integrative, and iterative. It culminated in a report delivered to the President and Congress, documenting climate issues of regional and national importance and climate change implications for the nation over the next 25 and 100 years (National Assessment Synthesis Team 2001).

Similarly, an integrated assessment process was used to evaluate the causes and consequences of the dead zone in the Northern Gulf of Mexico in accordance with the *Harmful Algal Bloom and Hypoxia Research and Control Act of 1998* (P.L. 105-383). This IA was also

directed by the CENR and was conducted from 1998 through 2000. The assessment was led by the National Oceanic and Atmospheric Administration (NOAA) and included teams of academic, federal, and state scientists, engineers, and economists that analyzed existing data and documented the state of knowledge of the causes and effects of hypoxia in the Gulf of Mexico. Six interrelated, peer-reviewed reports were produced that examine various natural and social scientific aspects of the hypoxia issue (CENR 2000). The IA drew from the results in these reports and provided the basis for the development of an action plan that identifies management strategies for reducing, mitigating, and controlling the hypoxic zone (Task Force 2001). The final *Integrated Assessment of Hypoxia in the Northern Gulf of Mexico* was released in 2000 and the *Action Plan* was released in 2001.

### **Northeast Michigan Integrated Assessment**

Michigan Sea Grant (MSG), part of the NOAA-National Sea Grant network of 30 university-based programs, uses the IA process to fulfill its mission to enhance sustainable use of the Great Lakes and Michigan's coastal resources. Michigan Sea Grant initiated a pilot IA project in 2005 that began MSG's new research program focusing on improving environmental decision-making through IA.

The assessment process used by MSG follows a series of five steps. After working with stakeholders to identify a policy or management question to be addressed by the IA, a value-independent description of the status and trends of environmental, social, and economic conditions related to the question is documented. Second, the causes and consequences of the environmental, social, and economic conditions are described using model simulations, statistical analyses, or other tools. Next, after a stakeholder process identifies desired future states, forecasts of conditions under various policy options are provided to identify potential scenarios that achieve those future states. Fourth, guidance for implementing each option is given, often through cost-effectiveness or cost-benefit analysis. Finally, an assessment of the level of certainty associated with the information produced is provided (MSG 2005).

The first IA led by MSG was conducted for the three-county region of Presque Isle, Alpena, and Alcona Counties in Northeast Michigan. The local focus and comparatively small scale of the Northeast Michigan Integrated Assessment (NEMIA) make this process unique compared to previous IAs that address environmental issues at the global or national scale.

This coastal area in Northeast Michigan along Lake Huron includes rich natural and cultural resources. Historically, the region has depended on its natural resources and accessibility to the Great Lakes for economic development, including lumbering in the nineteenth century and mining, manufacturing, and some agriculture in the twentieth century. However, lost jobs in mining and manufacturing, an Air Force base closure, and a decline in the agricultural sector have resulted in high unemployment in the area over the past few decades. According to the 2000 census, population increases in the region over the past ten years have been modest as the number of residents ages 45-54 increased while the number of residents ages 20-34 decreased (NEMCOG).

As a result of these changes in the region, community leaders have turned to tourism to boost the economy by promoting the natural and cultural resources unique to the area, especially those associated with the coast. Tourists who visit the rugged beauty of the Lake Huron coastline may enjoy the inland forests and wetland habitats, shoreline ecosystems, and the numerous lighthouses and shipwrecks that dot the coast. In fact, the Thunder Bay National

Marine Sanctuary, the only such sanctuary in the Great Lakes is located just off the coast of Alpena, in the center of the study area. Additionally, there are several state-owned public lands in the area which have remained undeveloped. The coast provides natural resources-related recreation such as fishing, birding, boating, swimming, camping, hiking, and kayaking.

Despite the great potential for economic development, the communities located here wish to proceed cautiously to avoid overdevelopment and destruction of the area's unique resources. There are also several barriers to growth in the region which are addressed in the IA. First, access to the region is limited to the U.S. 23 corridor, a highway that originates in southeast Michigan and runs north-south along Lake Huron in the study area. Improving access to the region is necessary for continued tourism development. Secondly, tourism has traditionally focused on hunting and fishing but health issues in the deer herd and salmon fishery have depleted this base. More diverse, low impact uses of the area such as birding, kayaking, and maritime heritage interests could be developed. Third, tourism opportunities have traditionally been marketed independently without regional planning, coordination, or integration. Finally, the resources of the region represent not only a growth opportunity but also a quality of life for local citizens (NEMIA). Again, a balance must be found between these two interests.

Therefore, the key policy question in this IA is:

How can coastal access be designed, in a regional context for sustainable tourism that stimulates economic development while maintaining the integrity of natural and cultural resources and quality of life?

### **Practicum Objectives**

The objectives of this project, as a part of the larger IA, were 1) to serve as a member of the secretariat team and as such to design the stakeholder engagement process and assist in drafting policy options and 2) to serve as an observer of the process to provide key findings and recommendations for future IAs. The following is a brief discussion of each of these objectives:

1) To serve as a member of the secretariat team

- A key term that describes the IA process is “collaboration”. Information about the value of collaborative processes as well as information about best practices for conducting such processes was gathered through a survey of literature on this topic as well as interviews with stakeholder coordinators for previous IAs and other collaborative processes.
- Policy options that reflect the participant-identified preferred future vision were drafted through a qualitative analysis. These policy options will be documented in the final IA report available for decision-makers.

2) To serve as an observer of the process

- Lessons learned and advice for future similar IAs was derived at the conclusion of the collaborative process.

## PROCESS DESIGN

### Guiding Principles from the Literature

The five-step IA methodology used by MSG established a foundation for the assessment process. It was clear that various experts including scientists, economists, and planners would be needed to assess the status, trends, causes, and consequences of the current environmental, social, and economic conditions in Northeast Michigan. It was also clear that these assessments could not be completed without the expertise of local stakeholders familiar with the region who would not only enhance, but also validate the expert assessments. However, the process by which these two groups would collaborate was less clear.

To ensure that interactions between these groups not only led to fulfillment of the five steps of the IA methodology but did so in a collaborative manner, a survey of the collaborative literature was conducted. The survey focused on literature pertaining to the value of collaborative processes and best practices for conducting such processes. The literature review was used to understand the theoretical basis of collaboration and to incorporate best practices into the IA process.

Collaboration can be defined as a process by which individuals or organizations work together to seek solutions to a problem that reach beyond what any one of them could accomplish on their own (NFF and USFS 2005). Collaboration is often the key to environmental and natural resource management disputes that span political boundaries and require extensive technical information and expertise. In many cases, such disputes are not grounded solely in environmental and natural resources issues but are ingrained in other complex social and economic concerns.

Collaboration is most useful in situations where the problem is beyond the ability of any one individual or organization to manage (Daly 2004). The process is valuable when participants are able to agree on a common definition of the problem and believe that solutions can be developed, despite differences of opinion on how an issue should be addressed (Carpenter 1999). Timing is often a key factor in deciding if collaboration is the best process to resolve an issue. A shared threat that forces interdependence or a change in government policies or community leadership may promote the use of collaboration (Daly 2004). However, if a quick resolution is required, collaboration is most likely not the best option. Another factor in determining if collaboration should be used to address an issue is whether or not key participants are willing to come to the table. If key stakeholders are not involved in the process, the solutions generated in the end are unlikely to address all concerns and interests (Carpenter 1999). Finally, resources such as funding, access to information, and expertise must be available to convene a collaborative process (Yaffee and Wondolleck 2001).

Collaboration offers many benefits over traditional management strategies that are typically ineffective in solving complex natural resource-related problems. Individuals or organizations that cooperate to solve a problem, as opposed to carrying out isolated strategies, generate wiser, proactive solutions through shared information and knowledge about the issues (Yaffee 2002). This sharing process not only results in joint gains and multiple potential solutions but also improves working relationships between diverse individuals, groups, and communities (BLM and SI 2000). As relations are built and tensions diffused, trust in both the process and the people increases. Collaborative solutions are therefore more likely to be implemented and become more durable over time (Yaffee and Wondolleck 2000).



Although no two collaborative processes will follow the same path from problem to solutions, there are five general stages that successful processes follow. Stage one is the assessment and planning phase in which the problem and mission are identified, stakeholders are invited, and resource commitments are assessed. The second stage is the organizational phase in which a process and schedule are developed and ground rules for the process are established. During the third stage of education, the collaborative group reviews the history and context of the issue, develops a common understanding of the issue, and establishes a base of information regarding the problem. Options are generated and agreements are negotiated in the fourth phase of resolution. In the final phase, options and agreements are implemented and monitored (Center for Collaborative Policy).

Within each of these stages, there are a number of best practices that should be implemented in order to ensure that the benefits of collaboration are realized. The success of the process is often dependent on key practices that should be employed during the planning and organizational stages of the process.

### Assessment and Planning Phase

One of the most important exercises conducted during a collaborative process is that of identifying stakeholders. Stakeholders are people who care about or will be affected by particular policies or activities stemming from the collaborative process. They have a stake in the outcome (Daly 2004). There are a number of ways by which representation can be determined including seeking out community leaders or those with an interest in the issue, allowing various stakeholder groups to choose representatives amongst themselves, or attracting participants through public workshops that explain the issue and the process (Coughlin et al. 1999). If representatives are invited to the process, invitations should be given by a coordinator who knows the invitees and will be perceived by all involved as legitimate and unbiased (Bertaina et al. 2006).

Regardless of the means by which stakeholders are identified, representation should, if possible, include all affected interests for participants and the public to develop trust in the process. However, the size of the group must remain manageable. Ideally, direction setters and policy makers are included as they have the power to make decisions and take action (Daly 2004). It is inevitable that membership will change as the process unfolds due to changing interests; however, as changes in representation can interrupt the process, it is best to recruit committed and energetic individuals from the start (Yaffee 2003).

Another important aspect of the planning phase is assessing available resources. These may include time, funding, staff, and equipment. Most natural resource-related collaboratives require scientific and technical expertise and many make use of a professional facilitator to manage meetings (Yaffee 2003). The process is more likely to be successful if time is committed in the beginning to identifying necessary resources and ensuring that these are available as needed throughout the process.

### Organizational Phase

A number of organizational best management practices are integral to a successful first meeting as well as subsequent meetings of the collaborative group. At the first meeting, or even at the point when stakeholders are informed of the process, the term collaboration should be defined. Collaboration may not only mean something different to each participant, but as mentioned previously, no two processes are exactly the same. A common definition that fleshes

out stakeholder representation, process transparency, and decision making matters will help individuals understand the specifics of the process in which they are involved (Bertaina et al. 2006).

A vision statement and objectives should also be discussed at the first meeting and all participants should have a part in identifying these statements and expressing their interests in the matter. The vision should consider the appropriate scale at which the collaborative group can work on the problem. This is often determined by the communities involved and their sense of place (BLM and SI 2000).

An organizational or responsibility structure should be developed at the first meeting. It is important for the convener or coordinator of the process to remember that they are participating as an equal partner and to avoid controlling the process (BLM and SI 2000). If leadership roles are to be assumed during the process, the first meeting can be an appropriate time to discuss the types of roles that might be necessary during the process and who best fits these roles based on interest and expertise.

Developing a timeline for the process during the first meeting can be useful; however, flexibility should be built into these targets in order to accommodate the learning process and relationship building that is often necessary to move forward in the process (Daly 2004). Acknowledging that the process takes time, and often more time than anticipated, is important to retaining committed individuals.

All meetings should be conducted at a location and time that considers the needs of stakeholder schedules. While some members may be participating as part of their job responsibilities, others may be devoting time outside of their work schedule to attend meetings. Although the first meeting may last between two and four hours (Daly 2004), subsequent sessions should generally last between one and two and a half hours; this allows for enough time to get started and build energy but concludes before individuals begin to get restless (Doyle and Straus 1976). The way in which the meeting room is arranged affects successful collaboration. The most effective arrangement of seats is a semicircle, in which participants direct their energy toward a common focal point at the front of the room but maintain eye contact with one another (Doyle and Straus 1976). The semicircle promotes interaction without necessarily directing negative energy towards one another, but rather towards the issue being presented at the front of the room. Ground rules that promote open discussion should be posted and participants should be reminded of these at each meeting. A written agenda should be distributed and followed and minutes should be circulated shortly after working sessions to both members who attended the meeting as well as those who were not able to attend (Daly 2004).

Although formal working sessions are very important to achieving a successful collaborative process, informal activities such as group field trips or picnics are integral to relationship building and establishing trust (Bertaina et al. 2006). These types of activities allow members to get to know one another on a personal level rather than as representatives of a particular stakeholder group. Even breaks during formal meetings for refreshments or lunch can promote interaction.

In addition to keeping process participants continually updated and informed of the process through meeting minutes or other communications, it is also important to keep the larger public informed of the process. Often, a lack of awareness or understanding of the collaborative group by the public contributes to a negative attitude toward the group and their purpose (Paulson and Chamberlain 1998).

### Education Phase

The next set of best practices relates to the education stage of the process during which the history of the issue is reviewed and information regarding the problem is gathered and analyzed. For collaboratives dealing with natural resource issues, the information to be gathered and analyzed is often complex, scientific data. Such information may be available from scientific experts within the group. Organizing task forces or subcommittees can be a useful way to use stakeholder knowledge to determine what scientific information is necessary to address the issue (Coughlin et al. 1999). If additional information is required, outside experts should be brought into the group to increase information sharing. Groups often encounter a dilemma when determining how much information is enough to adequately address the issue. Although some participants may feel overwhelmed by the amount of data collected, others may feel that further information gathering is needed. At some point, the group must make the decision to move ahead with the information it has at that time (Daly 2004).

Regardless of where the information originates, all information used should be scientifically credible (Yaffee 2003). As these data can be very complex, the technical experts can ensure that everyone in the group understands the information by providing presentations with graphics and limiting the use of scientific jargon.

### Resolution and Implementation Phases

In the final phases of the collaborative process, options are generated and implemented. A neutral facilitator can help guide the group through the process of developing creative options and making choices amongst these options that meet the interests of the various stakeholders. A plan of action should be developed that indicates what work will be done by whom, how funding will be obtained, and how progress will be evaluated (Yaffee and Wondolleck 2002). To sustain implementation efforts, an implementation committee can be formed at the conclusion of the collaborative process. The relationships and knowledge gleaned from the process should be a useful resource during the implementation phase (Bertaina et al. 2006).

### Guiding Principles from Interviews

The best practices gathered from the collaboration literature provided a foundation for conducting the IA in a collaborative manner. To learn how these best practices had been incorporated into the climate change and hypoxia IAs, interviews with individuals that coordinated these processes were conducted. Interviews were also conducted with individuals who coordinated collaborative processes in the Great Lakes region. Although these processes were not specifically IAs, the local focus and scale of each of the projects was more similar to the NEMIA than the global and national IAs. Qualitative data collected from these interviews was used to guide interactions with work group members in the NEMIA process.

Nine telephone interviews with process coordinators were conducted from June through September of 2006. Each interview consisted of a set of 12 questions that focused on the details of the collaborative process that the individual had coordinated. The interviewees received the questions via email prior to the discussion. Each interview lasted approximately 45 minutes and was recorded with the individual's consent.

Although the collaborative processes that individuals recounted varied widely in terms of topic, scale, and outcome, all of the processes followed the five general stages previously mentioned: assessment and planning, organization, education, resolution, and implementation.

Interviewees shared reflections and suggestions from their experiences pertaining to each of these steps.

### Representation

A key building block for all of the processes was ensuring broad representation of stakeholder interests and engaging committed individuals. As Gail Krantzberg of the Collingwood Harbour, Ontario Remedial Action Plan (RAP) process recalled:

“So the process started with finding stakeholders that represent land use, are a contributor to the problem, are a user of the harbour, or are a decision maker in the community. Our stakeholder group was comprised of about 25 members including planners from the town, municipal staff that dealt with the sewage plant, the deputy mayor, the mayor himself . . ., we sought one industry representative who would represent the three or four major industries in town, we had parks and recreation involved, we had educators predominately from the high school level, we had anglers and hunters, an environmental group, a few members from the community at large, the conservation authority which is responsible for how tributaries are managed, the health unit, and the ship property landowners which are the largest landowners on the harbour” (Krantzberg).

Krantzberg also noted that this diverse group of stakeholders brought with them very different viewpoints regarding the status of and solutions for Collingwood Harbour. The importance of including differing viewpoints at the table was highlighted by John Hall of the Hamilton Harbour, Ontario RAP process:

“For any particular project or program you have to have your greatest advocates and your greatest adversaries at the same table. If you don’t have those people that are strong adversaries of what you’re doing, and you know they’re out there, then you’ll pay the price in the end. It can be very uncomfortable in the beginning but it’s better that you get through the discomfort up front and find out what’s possible” (Hall).

Krantzberg’s strategy for inviting a diverse group of stakeholders was to, “meet with those individuals that we determined to be leaders in the community and ask them as well, ‘Who are the leaders in town that we should talk to?’ So we started with a core and networked out” (Krantzberg). A common concern however, is how many members the stakeholder group should include. The size of the group is clearly situation dependent, however as Hall states: “I feel you need to have a good cross section of stakeholders and not limit the size of that group. I have always said to folks, I don’t care if I have 50 or 60 in a stakeholder group, we’ll find a big enough room with a round enough table, that everybody can get at the table” (Hall). Both Krantzberg and Hall indicated that the individuals at the table should be of senior authority within their groups so that they can speak on behalf of their group, make decisions, and give a level of commitment to the decisions they make.

Larry Gunderson of the Minnesota Pollution Control Agency, who was involved in the Lower Minnesota River Dissolved Oxygen TMDL project noted that engaging individuals who are committed to coming to the scheduled meetings is just as important as inviting a diverse group of stakeholders: “The key to stress to people is that if they’re going to be involved you would like them to keep coming to the meetings because it’s a learning process. You don’t want someone to join the last couple of meetings that is new to the discussion and hasn’t been involved in the learning” (Gunderson). Similarly, John Hall suggested that, “You really need to

define what level of effort the individual that is representing the group will have to make and what your expectations of that person are” (Hall).

In some situations, it was not difficult to recruit and retain committed individuals. As noted in the literature, a shared threat that forces interdependence is often a driving force that brings collaborative groups together. In the case of Collingwood Harbour, Gail Krantzberg describes how maintaining sense of place was a key factor that compelled the process:

“There is a fierce sense of pride of place in the town of Collingwood. It’s a very old community . . . with a small town atmosphere. It’s a tourist haven and a destination spot. Everything that’s done in the town is done to be the best place, the best small town in Ontario. That sense of pride really lead them to say, ‘No way, we’re not having a polluted harbour, not now, not for the future.’ So there was this drive and commitment for excellence” (Krantzberg).

Likewise, in the case of the Barataria-Terrebonne National Estuary Program process, Kerry St. Pé explained that, “The estuary program was viewed as the final attempt to solve wetland loss problems and so people were motivated to stay involved. This is something that affects everything; our fisheries, our communities, our entire way of life” (St. Pé).

### Leadership

The expertise of the stakeholders and the formality and long-term goals of the process can determine whether leadership roles are assumed from within the stakeholder group. According to Krantzberg, in the case of Collingwood Harbour, a formal process was used to elect leaders: “Three or four people were nominated for the [Public Advisory Committee] chair, there was a vote, and it was unanimous. The man elected was very charming, he was very focused, he was very committed to excellence in the community and he just exuded leadership qualities that the stakeholder group rallied around” (Krantzberg). In contrast, Wayne Anderson from the Minnesota Pollution Control Agency, who worked with a group on a plan to restore the Minnesota River, commented that, “We saw people have influence from within the group even though we controlled the designated leadership for the group” (Anderson). Regardless of the formal or informal means by which leaders emerge, it is very important that there is a sense of leadership from within the stakeholder group because these individuals become the spokespeople for the project and can promote it within their communities or to the legislature.

### Informal Interactions

Just as leadership positions can be formal or informal, meeting interactions can be formal or informal. It is often informal interactions between work group members that build trust and compel the group to develop win-win solutions to a problem. According to Anderson, “There were a lot of discussions over breaks, of people not only getting to know each other, but sort of testing where they might be able to make some progress, where the common ground was, where opportunity overlapped” (Anderson). Darrell Brown of the U.S. Environmental Protection Agency, who is currently involved in the review of the Gulf of Mexico Hypoxia Action Plan, notes that, “Over a beer or coffee or during corridor talk, [people] talk about the presentations. And there have been a number of surprises that have come out of some of the papers that have generated a lot of conversation and discussion. This to me is really a healthy part of the process because it encourages dialogue and then we can go back and ask more questions or get clarification” (Brown).

Gail Krantzberg explained that in the Collingwood Harbour process: “The meetings were always a half day. We would start in the morning and end before lunch. But we would always provide lunch for two reasons, first to thank them for all of the volunteer hours that they were giving to the process, but also to help them network. Some of these folks came to the table knowing each other in the community as adversaries and everybody became a team by the end” (Krantzberg).

### Public Communication

Beyond the stakeholder group, good relations must also be maintained with the broader public throughout the process and at the end of the process when their comment on the final product should be sought. Groups used various techniques to ensure that the public was knowledgeable about the collaborative process and updated on its progress. For example, Darrell Brown noted that, “We work with the various state and federal agencies to have them broadcast release of the meetings through email lists and through their public meetings. We also make sure that the key stakeholder groups are notified so that they are aware of the meetings and can get information out [to their members]” (Brown). A group website was suggested by Tim Nolan of the Minnesota Pollution Control Agency, who has been involved in processes focused on sustainable communities: “A website with documents about the process and its goal and timeline is a good place for people to go for background information if they want to know more. It’s also a way for people to track progress when new information like meeting summaries, reports, or draft documents is posted” (Nolan).

Many interviewees considered public open houses a very effective means by which to understand public sentiment about group proposals. Throughout the Collingwood Harbour RAP process, open houses were held to both inform and listen to the public. Gail Krantzberg recalled, “We had open houses, we called them Harbour Day celebrations. They were an opportunity to celebrate the future of the harbour; to have displays, have outreach, have education materials. But also to take comment from people who were disgruntled about anything and invite them to the table” (Krantzberg). Krantzberg’s group also used public silent debates as a way to include those who were not comfortable expressing their views in public. The work group’s ideas about plans for the harbour were written on poster boards and individuals could write their comments on the boards. These comments were synthesized and if a name was attributed to a comment, there was an opportunity to invite that individual to the Public Advisory Committee meetings.

### Technical Expertise

Before the public can be educated about the process, the process participants themselves must be educated about the issues. Interviewees provided a variety of strategies used to help participants develop a common understanding of the issues and to generate options and agreements. Some of the processes involved teams of technical experts that presented information regarding the scientific or economic aspects of issues to the stakeholder group. For example, in the Collingwood Harbour process, Krantzberg lead five teams of technical experts; one for each issue area that had been identified during the process. Each technical team analyzed scientific data, developed possible scenarios for solving each problem within the bounds of government policies, and modeled the costs and consequences of each scenario. These were presented to the stakeholder group for debate. Krantzberg was clear that the roles of the two groups were distinct: “I was very firm with my team of technical experts. I told them, ‘when we go to the meetings and you’re asked your opinion on something, you provide fact and

information and no opinion. That is [the stakeholder group's] job; they're there to discuss solutions'" (Krantzberg).

In natural resource-related collaboratives, scientific data and analyses often form the base of information from which groups explore possible solutions in the context of socio-economic matters. Wayne Anderson stated that this was the case in the Minnesota River restoration plan process: "The first six meetings were all scientific information and presentation by scientific teams. So there was an intensive discussion between the scientists and the citizens before we ever got into any brainstorming . . . as to what to do. We wanted to make sure the science was underlying the effort" (Anderson).

Other interviewees commented that the way in which the technical teams communicated with the participants was just as important as what they communicated. For example, Susanne Moser from the National Center for Atmospheric Research, who was involved in the U.S. climate change integrated assessment, recalled that one of the concerns was the use of jargon by the scientific experts. The participants insisted that the experts, "don't talk down to us, don't talk to us in jargon, talk to us like we're real people" (Moser). Therefore, Moser suggested that an important way of integrating the two groups is to highlight the different expertise that each brings to the table and to, "make [the participants] feel that they are the focal point of interest. Their expertise is appreciated" (Moser). Additionally, Tim Nolan suggested that, "Visuals are important. Get away from the narrative when you talk to people" (Nolan).

### Generating Options and Agreements

In addition to effective interactions between technical experts and participants, the leaders of a collaborative process must have a strategy for encouraging interaction amongst work group members. Larry Gunderson suggested that dividing the group into small groups to debate certain topics avoids placing the participants solely in a judgment role of a presentation and instead promotes idea sharing. Similarly, small groups could be given certain tasks to work through and report back on their findings at the next work group meeting. Such strategies ensure that the expertise of the participants is utilized to the best extent possible. For example, John Hall explained the role of members of the Hamilton Naturalist Club in the RAP process: "They have a few people that are members of that club that have absolutely the most intimate knowledge of our bird life and our plant communities around the harbour. They're better than our scientists. So they'll take on the responsibility of informing everyone else about those aspects" (Hall).

Facilitation can be a valuable method to promote constructive dialogue amongst work group members. According to Gail Krantzberg a good facilitator can help participants when they disagree, to understand what it is they disagree about. She recalled that, "What was always very helpful in the meetings in terms of getting consensus on the policies was going back to first principles . . . [the participants] all needed clean water" (Krantzberg). Larry Gunderson observed that good facilitators present the work group with very specific issues or topics to tackle and he or she makes sure the group remains on task and develops an outcome related to that issue instead of presenting the group with a wide-open question that could elicit a variety of topics unrelated to the true subject. Finally, a facilitator must be fair and objective to obtain the trust of the group. John Hall notes that, "In some cases you need somebody that is completely foreign to everyone and foreign to the area and is just good at bringing groups together" (Hall).

A crucial factor in the transition from communicating information to generating options and agreements is building trust. Kerry St. Pé noted: "Going through this process you bring in

people who don't traditionally meet with each other and there's a period where you have to work on gaining trust. You make every effort possible to maintain that trust, to demonstrate that everybody's say does have meaning, and you discuss things until you reach a point where everyone can agree" (St. Pé).

### Implementation

After the group agrees on the appropriate options, a plan to implement the options should be developed and executed. According to Susanne Moser, "If you only focus on the science and the impacts and you don't give [the stakeholders] anything that helps them figure out what to do with this information, it just goes on the shelf and becomes a dusty report" (Moser). Tim Nolan suggested that an implementation strategy should identify objectives, a timeline, managing and participating parties, and sources for essential resources.

In the case of both RAP processes, an implementation committee was formed to accomplish the goals set forth by the stakeholder group. Krantzberg described why such a committee was created for the Collingwood Harbour RAP: "In that period when we were implementing, the stakeholder group went into transition. Some of them left the stakeholder process; they said, 'we have a clear picture of where you're going, we're satisfied that the plan is being implemented, let's get together in a year from now and tell us what is going on.' A smaller group formed an implementation committee" (Krantzberg).

Similarly, John Hall explained how implementation was conducted for Hamilton Harbour: "[The stakeholder group] established what has been called our Bay Area Implementation Team and it had 15 or 17 members . . . that came from that original stakeholder group. Any of the groups that actually had to carry out works and would be putting money into projects . . . they were on the implementation team. They also formed . . . what's called our Bay Area Restoration Council. They were set up to specifically monitor progress on the remedial action plan and to do appropriate political lobbying" (Hall).

Implementation committees often become incorporated as legal, non-profit entities to leverage funding to fulfill stakeholder agreements. For example, the Collingwood Harbour implementation committee and the Bay Area Restoration Council were incorporated.

### Guiding Principles

In summary, a representative, but not exhaustive list of collaborative process best management practices suggested by interviewees involved in the climate change IA, the hypoxia IA, and processes in the Great Lakes region includes the following:

- Ensure broad representation of stakeholder interests
- Recruit committed individuals
- Foster a sense of leadership from within the stakeholder group
- Provide opportunities for informal interaction between work group members
- Communicate with the broader public throughout the process
- Structure meetings to facilitate valuable discussion between technical teams and participants as well as amongst participants
- Utilize the skills of an objective facilitator
- Develop an implementation strategy before the work group disbands



These recommendations, coupled with the best management practices from the literature provided guiding principles for the NEMIA that were incorporated into the five-step MSG IA methodology, resulting in a general framework for the NEMIA process.

## **NEMIA Process**

### **Background**

The NEMIA project was initiated in the summer of 2005 when MSG met with various local and state-wide partners to discuss the possibility of conducting an IA in Northeast Michigan. These initial discussions included representatives from Michigan State University Extension (MSUE), the Northeast Michigan Council of Governments (NEMCOG), Thunder Bay National Marine Sanctuary (TBNMS), and the Michigan Department of Natural Resources (MDNR). Representatives discussed what the central theme and focus of the IA might include, who should be involved in the process, where funding could be obtained, and the most appropriate scale at which to address the suggested themes.

The overarching goal of MSG's IA program is to improve environmental decision-making. Additionally, as identified in the MSG 2005-2010 strategic plan, one of the statewide areas of work is sustainable coastal communities, focusing on addressing such issues as economic sustainability for coastal businesses, recreational access to the waterfront, coastal infrastructure safety and security, land use impacts on coastal systems, and preserving the historic and traditional uses of waterfronts (MSG 2005). This goal, in addition to the contribution of the Northeast Michigan coast to historical natural resource extraction, current cultural and natural resource-related tourism, and local quality of life, implied that an appropriate theme for the NEMIA would be a focus on coastal access and specifically, sustainable use of this resource to enhance local communities and economies.

Additionally, access to state-owned properties in the area, including Thompson's Harbor State Park, Rockport State Park, and Negwegon State Park has been debated over the years by state natural resource management agencies and local community leaders. The responsibility of the MDNR is to protect natural resources such as threatened species and rare habitats within the parks. Community leaders on the other hand, consider access to the parks integral to generating tourism and economic growth in the region. However, decisions by the management agencies have prevented park development to ensure resource protection. The debate over use of the parks resulted in mistrust between the MDNR and local community leaders.

However, as a result of the NEMIA process, the MDNR Parks and Recreation Department began a process for developing management plans for all three of these properties. Considering the history and importance of the park access issue, the timing of the MDNR process was important for the NEMIA discussions. Similarly, the TBNMS 5-year Management Plan Review, which focused on maritime heritage assets within the sanctuary boundaries, was also occurring parallel to the NEMIA process. The potential for shared resources between all three of these processes was an important consideration.

Furthermore, although a variety of initiatives targeting coastal access had been developed in the past, efforts were not coordinated amongst participating regional organizations. Therefore, a key purpose of the NEMIA was to synthesize and build upon existing coastal access initiatives for the long-term. Existing research and initiatives in Northeast Michigan include the following:

- U.S. 23 Heritage Route Initiative

- Thunder Bay Maritime Festival
- Huron Greenways Initiative
- Great Lakes Lighthouse Festival
- Sweetwater Trails
- Salmon Tournaments
- Maritime Heritage Tourism Destination Initiative
- Birding Tours
- Lake Huron Circle Tour
- Lighthouse Tours

Although the theme of Northeast Michigan coastal access and sustainable development could address the coastal area from Saginaw Bay to the Mackinac Bridge, the scope of the project was narrowed to encompass the three-county region of Alpena, Alcona, and Presque Isle counties. These counties are in the middle of the coastal region and any work completed here could be valuable for nearby coastal communities as well. After settling on a proposed theme and scope for the NEMIA, the secretariat team, composed of representatives from MSG, MSUE, and NEMCOG, drafted a preliminary stakeholder list targeting local, regional, and state officials from an array of organizations.

#### Process Details

Two scoping meetings were held in September of 2005 and February of 2006 to introduce stakeholders to the IA concept, discuss the utility of an IA for Northeast Michigan, broaden stakeholder representation, and draft a policy question that would guide the IA. At the time of this writing, four subsequent meetings were held from 2006-2007. These meetings were used to introduce participants to and promote dialogue among the research teams identified by MSG to conduct various components of the overall assessment, to present analyses of the status, trends, causes and consequences of socio-economic, environmental, and cultural conditions, and to outline a preferred vision for the region as well as policy options for achieving the vision.

Efforts were made to ensure that the most complete representation of stakeholder interests was included in the process. After the secretariat team identified a preliminary stakeholder list, these participants were asked to identify additional community leaders and decision-makers that would drive the process. In total, 32 organizations were represented by 58 individuals at some point during the process, with participation fluctuating over the course of the meetings. Individuals from nine organizations attended at least four of the six meetings held thus far. A majority (68%) of the participants attended one or two meetings.

MSG assembled five assessment teams to conduct the analyses of area socio-economic, environmental, and cultural conditions as well as conduct two additional studies concerned with regional planning and zoning and sustainability. As per IA methodology, all analyses were based on existing data; no new data were collected. The teams were represented by individuals from the following organizations:

- *Socio-economic assessment*: National Marine Sanctuary Program of the National Oceanic and Atmospheric Administration
- *Ecological assessment*: Master's students from the University of Michigan, School of Natural Resources and Environment
- *Cultural assessment*: Michigan Department of History, Arts, and Libraries, TBNMS, and students from Alpena Community College

- *Planning and Zoning assessment*: Doctoral students from the University of Michigan, College of Architecture and Urban Planning
- *Sustainable Design Assessment Team (SDAT)*: American Institute of Architects (AIA)

The purpose of each assessment was as follows:

- *Socio-economic assessment*: Use demographic, economic, recreation, and travel data to create Geographic Information System (GIS) layers, a traffic flow model, and a tourism economic input model that estimates total visitor spending in the area and associated economic effects.
- *Ecological assessment*: Use GIS layers to highlight the ecologically valuable lands throughout the region to illustrate how policy options can take advantage of natural features while also preserving and protecting their ecological function and value.
- *Cultural assessment*: Use data from existing documents, databases, and initiatives to compile and classify a list of coastal cultural assets of the region, both on coastal lands and in Lake Huron waters.
- *Planning and Zoning assessment*: Conduct content analyses of local comprehensive plans and zoning ordinances, followed by interviews of local elected officials and decision-makers to help evaluate the extent to which plans and codes are designed to effectively manage growth and advance community goals.
- *SDAT*: Provide planning and design tools and support to the NEMIA work group during the regional visioning process and during the drafting of policy options and strategies for implementation. The SDAT program brings multidisciplinary teams of professionals together with community decision-makers and stakeholders to help them develop a vision and framework for a sustainable future. The program focuses on the importance of developing sustainable communities through design (AIA 2006).

All meetings were held at the TBNMS Great Lakes Maritime Heritage Center in Alpena, which is located in the center of the three-county region. Consideration was given for meeting dates that avoided vacation and hunting seasons during which many participants were unavailable. Meetings generally ranged from two to four hours in length, with refreshment breaks to encourage informal discussion. All meetings were facilitated by a representative from MSG or MSUE. Each meeting began with a welcome and introductions led by NEMCOG, a well-known and trusted organization within the region.

Throughout the process, the secretariat team and the technical assessment teams remained distinct from the participant group in terms of decision-making. The secretariat team coordinated meeting logistics and developed draft documents for review by the work group, but did not participate in the decision-making process. In addition to the meetings, the secretariat team communicated with participants through email updates and a project website. Feedback on posted draft documents was encouraged. Fact sheets about NEMIA were available on the website for participants to download and distribute to their constituents. Communication with the larger public was made through local newspaper articles outlining the project and its progress.

### Meeting Specifics

NEMCOG invited individuals on the preliminary stakeholder list to a scoping meeting in September of 2005. Meeting attendees included 14 representatives from NEMCOG, MSG,

TBNMS, MSUE county directors and tourism and economic development team members, MDNR Fisheries and Parks and Recreation, Michigan Sunrise Side Tourism Association, Alpena Area Convention and Visitors Bureau, Presque Isle and Alpena Counties, and Alcona County Economic Development Corporation (NEMIA).

September 23, 2005

Meeting Objectives:

- Review Great Lakes and natural resource assets of Northeast Michigan
- Review the status of existing coastal access tourism and economic development initiatives
- Discuss IA as a tool for sustainable natural resource planning
- Revise the policy question proposed by the secretariat team that would guide the IA

Meeting Outcomes:

- Agreed that the IA process would be a valuable tool as the region considers its future
- Identified additional stakeholders who could contribute to the process
- Revised policy question: How can coastal access and connectivity be designed for sustainable tourism and economic development?
- MSG charged with developing a draft work plan that included identification of individuals responsible for conducting the various components of the assessment

A second scoping meeting was held in February of 2006 at the Sanctuary with the goal of exposing a broader group of stakeholders to the proposed NEMIA project. Individuals representing 29 different organizations were invited to the meeting. A total of 27 stakeholders from 19 organizations attended.

February 9, 2006

Meeting Objectives:

- Review Northeast Michigan Great Lakes coastal access needs and opportunities related to tourism and economic development (IA concept and policy question)
- Describe IA plan and process (i.e., future meetings)
- Introduce new assessment team partners and related progress/resources/opportunities
- Identify potential Task Force members that would offer feedback and advice to the assessment teams, provide communication between the assessment teams and the larger stakeholder group, and receive the final IA report

Meeting Outcomes:

- Revised policy question: How can coastal access be designed, in a regional context, for sustainable tourism that stimulates economic development while maintaining the integrity of natural and cultural resources, and quality of life?
- Received support from the AIA Center for Communities by Design SDAT to help the work group develop a future vision for the region and identify issues to be addressed in order to achieve a sustainable future; Northeast Michigan was one of eight communities nationally to receive this award

- Determined not to select a smaller Task Force from the larger stakeholder group due to the high level of interest in the process by all participants and the potential community connections and expertise that each could offer

The NEMIA process was formally initiated in June of 2006 with a kick-off meeting that began dialogue between the technical assessment teams and the work group participants. The meeting ran for six hours and lunch was provided. All five assessment teams gave presentations explaining the contributions they could make to the final IA product and requested feedback from the participants as to which issues should be addressed by the analyses and which existing data sources were applicable. Consistent with the previous meeting, 27 stakeholders representing 18 organizations attended.

#### June 8, 2006

##### Meeting Objectives:

- Introduce new assessment team partners and review NEMIA concept and policy question
- Establish NEMIA project expectations
- Initiate dialogue with assessment team partners

##### Meeting Outcomes:

- Assessment teams charged with developing preliminary analyses of existing data for the subsequent meeting

Following the kick-off meeting, a series of three meetings was conducted to present analyses conducted by the assessment teams, receive feedback on these assessments, and to prioritize policy options drafted in response to the assessments. Additionally, the AIA SDAT team visited Northeast Michigan for three days in early August to meet with local government officials in the three counties and fly over the region to familiarize themselves with the area.

#### August 24, 2006

##### Meeting Objectives:

- Present preliminary analyses conducted by the socio-economic, ecological, cultural, and planning and zoning assessment teams
- Identify most important issues to be addressed in subsequent analyses

##### Meeting Outcomes:

- Assessment teams charged with refining analyses based on participant comments

The AIA SDAT scheduled a meeting in early October of 2006 to present their preliminary analyses. Before presenting to the work group, the team spent a day meeting with the NEMIA technical teams and with regional, state, and federal partners in order to become acquainted with the analyses conducted at that point for NEMIA as well as other area initiatives. Additionally, the SDAT traveled to each of the three counties for public discussions with community leaders and stakeholders in each county regarding the NEMIA topic.

The team spent one day analyzing the information they had received and presented their recommendations to the work group on October 5. Lower stakeholder attendance (14 individuals) at the October meeting compared to attendance at the previous meeting (23

individuals) was most likely due to participation in SDAT public discussions earlier in the week. The SDAT presentation was used to launch discussion regarding the development of policy options.

October 5, 2006

Meeting Objectives:

- Present preliminary analyses and recommendations by the AIA SDAT
- Define key terms in the policy question to aid in developing a vision for the region

Meeting Outcomes:

- SDAT team charged with delivering a final written report of their analyses to the work group
- Key terms defined by work group: coastal access, regional context, sustainable tourism, economic development, integrity of natural and cultural resources, and quality of life
- Secretariat team charged with classifying the key term definitions into policy theme areas and drafting policy options for each theme

The secretariat team postponed additional work group meetings until January of 2007. In the interim, secretariat team members drafted a policy option document that reflected work group comments expressed at NEMIA meetings and distributed this document to participants for review and comment through December of 2006. Policy theme areas and policy options were finalized and prioritized by attendees at the January meeting using OptionFinder® technology. Twenty-five stakeholders participated in this exercise.

January 23, 2007

Meeting Objectives:

- Prioritize policy options based on importance and achievability
- Discuss results of OptionFinder® exercise

Meeting Outcomes:

- Secretariat team charged with determining which of the policy options would be further analyzed for forecasting and implementation considerations
- Assessment teams charged with developing forecasts and guidance for the selected policy options

Presentation of the policy option forecasts and guidance is scheduled to occur in early May of 2007. As per IA methodology, a draft of the final IA document will be submitted for peer review in order to ensure that the technical assessments are sound. The peer-reviewed document will then be available for public comment. These comments will be provided in an appendix to the peer-reviewed document as additional information for the work group to consider as it transitions into an implementation phase. In anticipation of the public comment period, a newspaper series describing the process and results will be released and public open houses in each of the three counties will be conducted.

## POLICY THEME AREAS AND POTENTIAL ACTIONS

The primary objective of the NEMIA is to use the analyses conducted by the assessment teams to draft and evaluate policy options related to sustainable tourism and economic development that can be implemented by the appropriate decision-makers in the region. These policy options were referred to in the NEMIA process as “potential actions”. In preparation for generating effective potential actions, the NEMIA participants used the ecological, socio-economic, cultural and land-use status and trends assessments, as well as the AIA SDAT evaluation to define key terms in the guiding question. At the October 2006 meeting, the following terms, drawn from the guiding policy question, were defined and reviewed by all members of the work group: coastal access, regional context, sustainable tourism, economic development, integrity of natural and cultural resources, and quality of life.

Subsequently, the secretariat team qualitatively prioritized and classified these definitions into policy theme areas. The team used work group meeting summaries and related documents, produced through other Northeast Michigan area initiatives that have influenced the NEMIA process, to record the number of times the definitions of the terms in the guiding policy question appeared in the targeted documents. The following documents were used:

- NEMIA Meeting Summaries from September 23, 2005, February 9, 2006, June 8, 2006, and August 24, 2006,
- *Huron Greenways: A System of Land and Water Trails*,
- US-23 Sunrise Side Coastal Highway Management Plan 2003,
- AIA SDAT Strengths, Weaknesses, Opportunities, Threats (SWOT) Analysis October 5, 2006, and
- AIA SDAT Recommendations October 5, 2006.

The definitions that appeared most frequently and were therefore of greatest interest to the NEMIA work group were further grouped into overarching policy theme areas. The following five themes resulted:

- Government Coordination and Communication,
- Growing an Entrepreneurial Community and Attracting Business Interests,
- Incorporation of Modern Technologies,
- Natural, Cultural, and Maritime Heritage Resources Tourism, and
- Preserving Sense of Place and Community Character.

Potential actions that could be undertaken by various regional entities to achieve the vision of sustainable tourism and economic development were then drafted for each policy theme area. These actions reflect work group comments and concerns expressed at the NEMIA meetings. The actions in bold on the following pages were considered most important and achievable by work group members.

*Theme 1: Government Coordination and Communication*

Improved coordination efforts among various units of government are needed to efficiently and effectively carry out regional and local initiatives. Such coordination brings together the best resources, prevents duplication of efforts, and provides buy-in from various levels of government.

Potential Actions:

- Enhance vertical governmental partnerships (e.g., township to county to state to federal) regionally by coordinating local advisory councils in order to share resources
- Enhance horizontal governmental partnerships regionally by developing a regional Master Plan
- Enhance horizontal governmental partnerships regionally by coordinating existing and future economic development and tourism initiatives across counties (e.g., Sunrise Side Tourism, US 23 Heritage Route, NEMCOG)
- Fully implement community Master Plans and coordinate ordinances with neighboring jurisdictions
- Develop a regionally coordinated strategy to identify governmental, corporate, and foundation funding opportunities

*Theme 2: Growing an Entrepreneurial Community and Attracting Business Interests*

Fostering both homegrown and external businesses that are loyal to local communities is needed to develop a sustainable regional economy. Pursuing economic diversity by utilizing *all* local resources will ensure a balanced economy.

Potential Actions:

- Enhance cooperation between the public and private sectors to promote business location in NE MI (i.e., the Chamber of Commerce draws new businesses)
- Educate local government officials about how their actions can encourage or inhibit growth and opportunities
- Recruit coastal businesses such as diving outfitters, marinas, restaurants, and equipment rental and guide services by providing education on how to launch and/or expand a business
- Partner with Alpena Community College to develop marketing strategies
- Support service industry needs by assisting with business management plans for coastal businesses
- Develop restaurants and shops around the commercial fishery
- Develop entrepreneurial lessons in middle school curriculums
- Establish a regional inventor and entrepreneur club for networking and educational purposes
- Establish funding and resources to carry out additional research for future economic decision-making including a study on where users are coming from, regional transportation trends, and a continued cultural assessment



*Theme 3: Incorporation of Modern Technologies*

Increased use of modern technologies is needed in order to effectively promote the region to non-residents. The use of modern technologies decreases marketing costs over time, ensures that the correct audiences are targeted, and ensures that the most current information is available in a timely manner.

Potential Actions:

- **Increase visibility of the area’s resources to non-residents by marketing regional tourism opportunities via the web, providing itineraries for various types of tourism (drive-thru, vacation destination, second or retirement home)**
- Market entrepreneurial opportunities via the web
- Utilize GIS technology to visualize economic and tourism-related trends

*Theme 4: Natural, Cultural, and Maritime Heritage Resources Tourism*

Establishing diverse tourism opportunities is needed in order to sustain the tourism segment of the economy. Sustainable tourism opportunities that are appropriate to the landscape will protect and enhance resources.

Potential Actions:

- Diversify the tourism portfolio by increasing non-traditional tourism opportunities with viable options for tourism throughout the year
- **Balance the tourism portfolio by maintaining traditional tourism opportunities and connecting natural resources, cultural resources, and maritime heritage**
- Develop coastal access points such as camping, boating, and picnicking facilities in order to increase harbor usage
- Enhance marina access by working with the State Waterways Commission to change seasonal and transient boat slip policies
- Provide interpretive opportunities for greenways and blueways including increased signage and self-guided tours
- Offer guided educational access on the coast
- Coordinate cross-marketing partnerships between natural, cultural, and maritime heritage sites (e.g., TBNMS interprets cultural and maritime heritage resources at state park lands)
- **Market NE MI as a maritime heritage and nature-based tourism destination**
- **Capitalize on the presence of the Marine Sanctuary to build complimentary enterprises**
- **Utilize TBNMS as a gateway visitor center for regional opportunities**
- Develop advisory groups for state and federal planning processes that affect local natural, cultural, and maritime heritage resources (e.g., an advisory council for state parks on the model of the Marine Sanctuary advisory council)
- Network state lands through the state parks planning process

*Theme 5: Preserving Sense of Place and Community Character*

Protecting and enhancing the distinguished physical and social quality of the region reinforces a sense of place and community character. Such qualities are attractive to residents and non-residents alike.

Potential Actions:

- **Increase public awareness of regional resources through education and outreach campaigns**
- Develop place-based education curriculums for K-12 students
- Provide view-sheds along coastal highways
- Protect and enhance the unique and diverse character of regional city and village centers through distinct shops, restaurants, and festivals
- Protect quality of life by balancing local resources with economic development needs
- Protect historic architectural resources through local ordinances
- Enhance community and regional recreational and social opportunities by providing spaces for community interaction
- Preserve working landscapes through tools such as conservation easements and purchase of development rights

**Ranking Potential Actions**

Considering the large number of proposed potential actions and the limited resources available to develop forecasts and implementation guidance for each action, it was necessary to narrow the list to those deemed most valuable by the NEMIA participants. The policy theme areas and potential actions were prioritized at the January 2007 work group meeting using OptionFinder® technology. OptionFinder® is an interactive tool that provides audience polling and results in-real time. Participants can rate lists on a scale or prioritize lists through forced-choice comparisons and results can be displayed immediately on-screen. Such a tool ensures that all participants have an equal voice in decision-making. Twenty-five stakeholders participated in this exercise.

Policy theme areas were ranked using forced-choice comparisons in response to the question: “Which is more critical?” The percentage of time a theme area was selected as “most critical” is as follows:

- 1 - Preserving a Sense of Place and Community Character: 65%
- 2 - Natural/Cultural/Maritime Heritage and Resources Tourism: 55%
- 2 - Growing an Entrepreneurial Community and Attracting Business Interests: 55%
- 3 - Government Coordination and Communication: 35%
- 4 - Incorporating Modern Technologies: 25%

Potential actions within these theme areas were ranked on an eight-point scale in response to the questions: “How important is this action?” and “How achievable is this action?” On the scale, zero referred to “not important” and “not achievable” while eight referred to “most important” and “most achievable”. Six potential actions scored six or above on both the importance and achievability scale. These six actions are bolded in the above list. Assessment teams focused forecasting and guidance efforts on these six selected policy options and presentation of implementation considerations is scheduled to occur in early May of 2007.

## FINDINGS AND RECOMMENDATIONS

The NEMIA process was a pilot project intended to demonstrate the utility of the IA process to issues at the local scale. In 2006, MSG issued a request for proposals from university researchers and policy practitioners for proposals that focused specifically on IA projects. Therefore, in addition to the guiding principles gleaned from the collaboration literature and interviews, recommendations for future MSG-sponsored IAs were developed based on experiences from the NEMIA process.

### ***1. Partner with a locally known and trusted organization that will serve as the convener for the integrated assessment process and that can introduce the research team to the local social, political, and cultural environment.***

The literature suggests that the organization convening a collaborative process should be perceived by all involved to be legitimate and unbiased. Such a strategy assures stakeholders that the process itself is also trustworthy. Additionally, a trusted convening organization can serve as the intermediary between the stakeholder group and the research teams that may otherwise be considered “outsiders” to the area and the process. Therefore, the most appropriate convener is a locally known organization that is well-established within the study area.

The convening organization can also introduce the research team to the local social, political, and cultural environment. Although the natural resource issue to be addressed by the IA may appear obvious, the social and political underpinnings may be less obvious. Understanding the constraints or opportunities posed by these social characteristics is integral to all aspects of an effective IA process; from how stakeholders are engaged to the types of policy options and guidance that are developed.

As “outsiders” to a study area, research team members may never fully understand all aspects of local issues pertinent to the IA. However, by demonstrating that the team has established relationships with representatives from the local partner organization and taken local concerns into consideration, stakeholders are more likely to develop trust in the team and the process.

In the NEMIA process, members of both the secretariat team and assessment teams were associated with universities or state or national government agencies located far from the study area. NEMCOG, a well-known and trusted organization in the region, served as the convener of the NEMIA process and was able to bridge the gap between local stakeholders and the various teams. Additionally, by gathering feedback from the stakeholders throughout the process and incorporating this feedback into the assessment, the secretariat and technical teams demonstrated that local concerns were of primary importance to the assessment.

### ***2. Ensure broad representation of stakeholder interests, including both supporters and opponents, by networking with local contacts. Recruit individuals who are of senior authority within their organization or are local decision-makers. Invitations to participate should be offered by a well-known organization perceived by all involved to be legitimate and unbiased.***

A best management practice that is well-documented in the literature is ensuring broad representation of stakeholder interests. Stakeholders are people who care about or will be affected by the policy options drafted through the IA process. The views of individuals involved

in the process should represent the range of opinions related to IA policy question. It is important that participating stakeholders have the power to make decisions and take action on behalf of their organization and constituents. Stakeholders should be invited to the process by the locally known and trusted convening organization that can network with local contacts to ensure that all affected interests are represented at the table.

Representatives in the NEMIA process included national and local elected officials, federal and state government agencies, local government departments, individuals from the area community college, local businesses, and non-governmental organizations. One group that was not involved in the process was a citizen-at-large who could have represented area residents from a perspective other than that provided by an elected official or appointed official.

The convening organization, NEMCOG, offered invitations to participate to individuals on a preliminary stakeholder list and subsequently networked with these individuals to identify a broader group of stakeholders that were also invited to the process.

***3. Establish a timeline at the outset of the assessment that defines the process by which the assessment will be conducted, identifies the individuals who will complete the various components of the assessment, and specifies likely products resulting from the assessment.***

Although some participants may be familiar with collaborative processes, it is unlikely that individuals have been exposed to the IA methodology. As evidenced in the NEMIA process, simply reiterating the five steps will not help participants clearly understand the process. The stakeholder group in Northeast Michigan struggled to understand how the various components of the assessment fit together due to the lack of a clear explanation of the process at the outset. Participants can engage more fully when they understand where they are in the process and why that step is important.

Therefore, a timeline should be presented to the stakeholder group at the beginning of the process that links each step in the IA methodology to specific tasks that will be completed during the process. Individuals or technical teams who will complete each of these tasks should be introduced and should explain the methodology and data sources they plan to use to complete their respective assessment component as well as likely products resulting from their analysis. The timeline should set target dates for completion of each IA component but it should be acknowledged that the process may take more time than anticipated and as a result, the target dates are flexible. The timeline should be referenced at the beginning of each stakeholder meeting to remind participants where they are in the process and to highlight accomplishments made with each successive meeting.

***4. Select the type of leadership or responsibility structure for the process that best reflects the level of involvement desired by participating stakeholders, the degree of trust stakeholders have for one another, and the types of expertise stakeholders bring to the process.***

Many of the individuals that were interviewed about collaborative processes highlighted the importance of encouraging a sense of leadership from within the stakeholder group because these leaders eventually become spokespeople during the implementation phase of the project. The type of leadership structure to be used in the assessment should be determined at the outset of the process through discussions with the stakeholder group.

Although some individuals may desire to take a “hands-off” approach to the process, primarily offering feedback to technical team assessments or proposed policy options, other individuals may wish to be more directly involved in process aspects such as data collection, development of policy options, or writing portions of the final report. These differences amongst stakeholders in desired levels of involvement in the process may suggest a potential stakeholder or leadership structure.

Additionally, identifying the types of expertise stakeholders bring to the process can lead to the formation of a stakeholder structure. For example, one or two individuals with expertise in the topic of a certain technical assessment could work directly with the technical team and act as a liaison between the team and the larger stakeholder group. Those individuals selected to work with each team could then comprise a task force that not only works with the technical teams and communicates with the larger stakeholder group but also assists in the drafting of reports and related documents and receives the final IA document. The larger stakeholder network could review draft documents and offer additional feedback.

The use of task force or similar leadership structure can be useful when the stakeholder group is very large and difficult to manage. However, in situations where it is unlikely that the selected task force would properly represent all affected interests within the broader stakeholder group or when there are issues of distrust amongst stakeholders, this leadership structure would not be appropriate.

If the task force structure is deemed appropriate by the entire stakeholder group, additional decisions must be made. Stakeholders must decide how members will be selected in order to ensure proper representation, what the specific role of the group will be, how often the task force will communicate and meet with the larger stakeholder group, and if necessary, how a vacated position will be filled.

A task force or other leadership positions were not used in the NEMIA process because there was a concern that a small group of individuals would not be representative of the interests of the larger stakeholder group. Instead, all affected stakeholders were invited to attend each meeting to offer feedback on the various components of the IA and the resulting documents. This strategy was effective in bringing groups to the table that might not have interacted otherwise and in building trust between participants.

***5. Organize meetings that effectively utilize stakeholder time and effort and encourage continued participation by a) adequately preparing for each meeting, b) utilizing the skills of an experienced and objective facilitator to manage all or specific aspects of the process, and c) providing opportunities for informal interaction to encourage relationship building and to establish trust between participants of opposing viewpoints.***

As noted in the literature, certain elements of meeting organization are important for utilizing stakeholder time and effort to the fullest extent possible. Best management practices related to meeting preparation include conducting meetings at a time and location that considers all stakeholder needs, distributing an agenda at the beginning of each meeting, and distributing meeting notes following each meeting.

All meetings for the NEMIA process were conducted at the Thunder Bay National Marine Sanctuary which is located in the middle of the study area. This venue provided excellent meeting facilities and a reliable and consistent location. However, holding meetings at alternating locations within the three counties in the study area would have reinforced the

concept of the IA project as a regional endeavor and provided opportunities for communities to showcase the uniqueness of their area, another key aspect of the NEMIA project. Meetings were held at various times of the day to accommodate stakeholder schedules. While some stakeholders may participate in an IA process as part of their job responsibilities, others may need to devote time outside of their work schedule to attend meetings. As a result, meetings held during the work day may not be optimal for all involved.

Another aspect of meeting organization includes involving an experienced facilitator or moderator to manage all or specific aspects of the IA process if the research team or local partner organization does not have the necessary experience to effectively manage the process. As noted in the collaboration literature, a facilitator who will encourage active participation, who can handle different communication styles and abilities, and who will experiment with group learning in different ways can be asset to the process. For example, a facilitator may suggest dividing a large stakeholder group into smaller groups to discuss various topics related to the policy question. Such a strategy can be useful when a few members of the group dominate discussions or when it is clear that some members are uncomfortable expressing their views in the larger group setting.

A professional facilitator is most likely not necessary during an IA process because the group does not seek consensus on specific policy options or implementation strategies. Instead, groups could seek an experienced facilitator from within the convening organization or from another stakeholder organization as long as the individual is perceived by the entire group as unbiased.

Depending on the resources available, a facilitator could be involved for the entire process or for specific meetings as needed. For example, it may be more important to involve a facilitator during the policy development phase of the project when conflicts may arise over value judgments, than during presentations of technical team assessments that are based on fact.

In addition to organizing meetings that utilize stakeholder time and effort, a facilitator may provide creative strategies for encouraging continued participation in the IA process. For example, interviewees noted that informal activities such as group field trips and picnics not only provide valuable opportunities for stakeholders to network with one another, build relationships, and foster trust, but such activities are also an opportunity to show appreciation to stakeholders for the time and effort they have dedicated to the process.

Opportunities for informal interaction in the NEMIA process included discussions over lunch or during refreshment breaks at the meetings and were effective in building trust amongst participants. Additional opportunities to celebrate group accomplishments such as the completion of the technical assessments or the drafting of policy options might have fostered a sense of achievement and teamwork that could be carried through the remainder of the process as well as the implementation phase.

***6. Communicate with the broader public throughout the IA process to ensure that they are aware of the assessment, understand the purpose of the assessment, and are regularly updated on the progress of the assessment.***

A lack of awareness or understanding of the IA process by the public can contribute to a negative attitude toward the stakeholder group and their purpose. Strategies to communicate with the broader public, as suggested by interviewees, include using a group website to post information about the progress of the assessment, obtaining media coverage through newspaper

press releases or radio or television shows, and hosting public open houses or similar events to gather public sentiment about the project.

Press releases in local newspapers were the primary means of communication with the broader public in the NEMIA process. A project website included general information about the IA methodology, detailed information about the NEMIA policy question and process, and documents including meeting agendas and summaries. Although process participants were aware of the website, it was unclear whether the general public knew about the site.

This lack of communication between participants in the NEMIA process and their constituents, led to a misunderstanding in the general public about the purpose of the assessment. Unfortunately, this misunderstanding convinced NEMIA participants not to host a public open house or similar event before the project was completed in its entirety. Public open houses will be held at the completion of the process. However, such an event during the process would have been a valuable opportunity to inform the public about the process, resolve any misunderstandings, and obtain their feedback.

To ensure that participants communicate the progress of the IA process to their constituents, guidelines for such communication should be set at the beginning of the process. For example, participants should be required to provide their constituents with fact sheets about the IA process and purpose as well as meeting summaries, either electronically, through the project website, or in print form. Participants should then convey constituent concerns and comments at the next meeting. Such a strategy would ensure that the public was continually involved in the process through their stakeholder representative.

***7. Develop an implementation strategy before the stakeholder group disbands that incorporates the technical guidance provided by the assessment teams and also identifies the parties responsible for implementation and how progress will be evaluated. Additionally, the final integrated assessment report should be considered a working document that will evolve as new information becomes available and as actions are executed.***

Although the technical guidance for policy option implementation supplied by the IA technical teams identifies necessary actions, a timeline for completing these actions, and potential funding sources, the stakeholder group must identify who will be responsible for implementation and how progress will be evaluated. Many of the individuals interviewed suggested that a common strategy for ensuring implementation is to form an implementation committee from the larger stakeholder group before this group disbands. Additionally, many committees eventually become incorporated as legal, non-profit entities to leverage resources for implementation activities.

Finally, it is important to stress to participants that the identified opportunities within the final IA report are not mandatory actions that must be implemented but rather a set of reasonable options for achieving their future vision. As such, the report should be considered a working document that will evolve as new information becomes available and actions are executed. Continuing research and implementing adaptive management techniques will contribute to achieving the group vision despite any future unknowns.

## REFERENCES

- [AIA] American Institute of Architects. 2006. Sustainable Design Assessment Team. Fact Sheet.
- Anderson, Wayne. Telephone interview. 5 July 2006.
- Bertaina, Stephanie, Alden Boetsh, Emily Kelly, Eirin Krane, Jessica Mitchell, Lisa Spalding, Matt Stout, and Drew Vankat. 2006. Collaborative Planning on State Trust Lands. A Master's Project completed for the School of Natural Resources and Environment, University of Michigan. 26 February 2007  
<<http://www.snre.umich.edu/ecomgt/trustlands/index.htm>>.
- Brown, Darrell. Telephone interview. 27 June 2006.
- [BLM and SI] Bureau of Land Management and the Sonoran Institute. 2000. A Desktop Reference Guide to Collaborative, Community-Based Planning. 26 February 2007  
<[http://nps.sonoran.org/library/desktop\\_reference.pdf](http://nps.sonoran.org/library/desktop_reference.pdf)>.
- Carpenter, Susan. 1999. Choosing Appropriate Consensus Building Techniques and Strategies. In: L. Susskind et al. (eds.) *The Consensus Building Handbook: A Comprehensive Guide to Reaching Agreement*. Sage Publications, Thousand Oaks. pp. 61-97.
- [CENR] Committee on Environment and Natural Resources. 2000. Integrated Assessment of Hypoxia in the Northern Gulf of Mexico. National Science and Technology Council. Washington, DC.
- Center for Collaborative Policy. Five Stages of Collaborative Decision Making on Public Issues. California State University, Sacramento. 26 February 2007  
<<http://www.csus.edu/ccp/collaborative/fivestages.pdf>>.
- Coughlin, Chrissy, Merrick Hoben, Dirk Manskopf, and Shannon Quesada. 1999. A Systematic Assessment of Collaborative Resource Management Partnerships. A Master's Project completed for the School of Natural Resources and Environment, University of Michigan. 26 February 2007  
<<http://www.snre.umich.edu/ecomgt/pubs/crmp.htm>>.
- Daly, Carol. 2004. The Collaboration Handbook. Red Lodge Clearinghouse. Helena. 26 February 2007 <<http://www.redlodgeclearinghouse.org/resources/handbook.html>>.
- Doyle, Michael and David Straus. 1976. *How to Make Meetings Work*. Berkley Publishing Group, New York.
- Gunderson, Larry. Telephone interview. 5 July 2006.
- Hall, John. Telephone interview. 8 Sept. 2006.



Krantzberg, Gail. Telephone interview. 10 Aug. 2006.

[MSG] Michigan Sea Grant. 2005. Causes and Consequences of Environmental Change. Integrated Assessments. Fact Sheet. Ann Arbor. 26 February 2007  
< <http://www.miseagrant.umich.edu/downloads/about/IA-factsheet-2005.pdf>>.

[MSG] Michigan Sea Grant. 2005. Michigan Sea Grant College Program Strategic Plan 2005-2010. 26 February 2007  
<<http://www.miseagrant.umich.edu/about/sp.html>>.

Moser, Susanne. Telephone interview. 6 June 2006.

National Assessment Synthesis Team. US Global Change Research Program, 2001. Climate Change Impacts on the United States: The Potential Consequences of Climate Variability and Change. Cambridge University Press, Cambridge. 26 February 2007  
< <http://www.usgcrp.gov/usgcrp/Library/nationalassessment/foundation.htm>>.

Nolan, Tim. Telephone interview. 5 July 2006.

[NEMCOG] Northeast Michigan Council of Governments. Community Profile Reports of Member Counties. 13 April 2007 < <http://www.nemcog.org/>>.

[NEMIA] Northeast Michigan Integrated Assessment. Meeting Summary September 23, 2005. 13 April 2007.  
<[http://www.miseagrant.umich.edu/downloads/coastal/NEMIA/Sept\\_23\\_2005\\_Meeting\\_Summary.pdf](http://www.miseagrant.umich.edu/downloads/coastal/NEMIA/Sept_23_2005_Meeting_Summary.pdf)>.

Paulson, D.D. and K.M. Chamberlain. 1998. Guidelines and Issues to Consider in Planning a Collaborative Process. Final Report to the Institute for Environment and Natural Resources, University of Wyoming.

Rotmans, J. and H. Dowlatabadi. 1997. Integrated Assessment Modeling. In: S. Rayner and E.L. Malone (eds.), *Human Choice and Climate Change. Vol. 3. The Tools for Policy Analysis*. Battle Press, Columbus. pp. 291-377.

[NFF and USFS] National Forest Foundation and USDA Forest Service. 2005. Partnership Guide. The Power of People Working Together. A Living Document. Partnership Resource Center. 26 February 2007  
<<http://www.partnershipresourcecenter.org/resources/partnership-guide/>>.

St. Pé, Kerry. Telephone interview. 19 July 2006.

[Task Force] Mississippi River/Gulf of Mexico Watershed Nutrient Task Force. 2001. Action Plan for Reducing, Mitigating, and Controlling Hypoxia in the Northern Gulf of Mexico. Washington, DC.

- Yaffee, Steven L. 2002. Benefits of Collaboration. Ecosystem Management Initiative, School of Natural Resources and Environment, University of Michigan, Ann Arbor.
- Yaffee, Steven L. 2003. What Promotes Successful Collaborative Processes? MORALE. Ecosystem Management Initiative, School of Natural Resources and Environment, University of Michigan, Ann Arbor.
- Yaffee, Steven L. and Julia M. Wondolleck. 2000. Making Collaboration Work. Lessons from a comprehensive assessment of over 200 wide-ranging cases of collaboration in environmental management. *Conservation Biology in Practice*. 17-22.
- Yaffee, Steven L. and Julia M. Wondolleck. 2001. Assessing Whether to Participate in a Collaborative Process. Presented at: Collaboration Skills and Strategies: A Workshop for Environmental Leaders, Denver, CO, May 31-June 1.
- Yaffee, Steven L. and Julia M. Wondolleck. 2002. Designing and Managing a Collaborative Process. Ecosystem Management Initiative, School of Natural Resources and Environment, University of Michigan, Ann Arbor.

Appendix I. List of Interviewees.

Wayne Anderson, P.E  
Agriculture Liaison  
Commissioner's Office  
Minnesota Pollution Control Agency

Darrell Brown  
Branch Chief  
Office of Wetlands, Oceans and Watersheds  
Coastal Management Branch  
US Environmental Protection Agency  
Washington, D.C.

Doug Daigle  
Hypoxia Program Director  
Mississippi River Basin Alliance  
New Orleans, LA

Rick Findlay  
Director of Water Programs  
Pollution Probe  
Toronto, Ontario

Larry Gunderson  
Southwest Region  
Regional Unit  
Minnesota Pollution Control Agency

John Hall, MCIP  
RAP Coordinator  
Hamilton Harbour Remedial Action Plan  
Hamilton, Ontario

Gail Krantzberg, Ph.D.  
Director  
Dofasco Centre for Engineering and Public Policy  
McMaster University  
Hamilton, Ontario

Susanne Moser, Ph.D.  
Research Scientist  
National Center for Atmospheric Research  
Institute for the Study of Society and Environment  
Boulder, CO

Tim Nolan  
Sustainable Development Unit  
Prevention and Assistance Unit  
Environmental Community Development Section  
Minnesota Pollution Control Agency

Dugan Sabins  
Senior Environmental Scientist  
Office of Environmental Assessment  
Louisiana Department of Environmental Quality  
Baton Rouge, LA

Kerry St. Pé  
Executive Director  
Barataria-Terrebonne National Estuary Program  
Thibodaux, LA

## Appendix II. Interview Questions.

- 1) How many stakeholders were involved? Was there a set number or did it fluctuate? If new stakeholders came into the process, how did you bring them up to speed on the IA?
- 2) How many times did you meet with the stakeholders?
- 3) What was the purpose of each of these meetings?
- 4) How did the assessment teams and the stakeholders interact?
- 5) How were policy options generated and how were stakeholders involved?
- 6) How long were your meetings generally?
- 7) How did you interact with the stakeholder group? Did you serve as a facilitator or did the stakeholders run their own meetings?
- 8) How did the stakeholders interact with one another?
- 9) Did any stakeholders have a leadership position within the stakeholder group? How did they come into that position? If leadership positions were used, how well did that work?
- 10) Which groups of stakeholders were most influenced by the information provided by the assessment teams? Why do you think certain groups changed more than others?
- 11) Currently, in implementing the action plan, which stakeholders are coordinating with one another the best? Why?
- 12) How would you organize the stakeholder process and structure differently for future IAs?

### Appendix III. Participating Groups.

#### Stakeholder Organizations

Alcona County Conservation District  
Alcona County Board of Commissioners  
Alcona County Economic Development Corporation  
Alcona Township  
Alpena Area Convention & Visitors Bureau  
Alpena Community College  
Alpena County  
Alpena Economic Development – TARGET  
Alpena Township  
City of Alpena  
Congressman Stupak’s Office  
Michigan Department of Environmental Quality  
Michigan Department of Natural Resources  
Michigan Department of Transportation  
Michigan’s Sunrise Side Travel Association  
Michigan United Conservation Clubs-for-Habitat Committee  
Northeastern Michigan Association of Horse Clubs  
Presque Isle County Development Commission / Economic Development Corporation  
Presque Isle City  
Presque Isle County Tourism Council  
Presque Isle District Library  
Presque Isle Township  
Presque Isle Yacht Club  
Rogers City  
Rogers City Marina  
Rogers City Parks and Recreation Committee  
Sanborn Township  
Sea Cadets  
Thunder Bay Scuba  
Thunder Bay Underwater Preserve Council  
U.S. Senator Carl Levin’s Office  
Wade Trim

#### Secretariat and Assessment Team Organizations

American Institute of Architects  
Michigan District of History, Arts and Libraries  
Michigan Sea Grant College Program  
Michigan State University Extension  
National Oceanic and Atmospheric Administration  
Northeast Michigan Council of Governments  
University of Michigan