

An Integrated Assessment Approach to Research



CONNECTING SCIENCE, POLICY AND PEOPLE

Decisions about tough, environmental issues are made every day. Often, research that could help inform those actions doesn't make it to decision makers in a useable way. An Integrated Assessment approach to research seeks to connect the two, building a bridge between science and people. That is the kind of research Michigan Sea Grant supports. Projects are designed to develop new information, ideas and partnerships that help stakeholders – such as resource managers, community leaders and members, business owners, land owners and others – better address concerns in their environment.

TACKLING COMPLEX ISSUES

Michigan Sea Grant-supported research specifically concentrates on issues facing the Great Lakes and coastal areas. For example: wind energy, stormwater runoff, river restoration, fish consumption advisories and brownfield redevelopment.

The goals of each integrated research project are to:

- Clarify a complicated environmental issue, including the history, causes and consequences;
- Bring different groups to the table to build consensus;
- Identify and evaluate options for solving the problem; and
- Develop usable and accessible information and tools that help guide decision-making.

A COLLABORATIVE RESEARCH PROCESS

A diverse team of researchers leads each of the Integrated Assessment projects. The team focuses on a complex environmental issue and then conducts a comprehensive analysis of natural and social scientific data and information. Rather than performing additional experiments, experts summarize what is known, go a step beyond the facts, and offer evaluations.

The research team works closely with a group of policy makers, natural resource professionals and community leaders to examine all sides of the issue and to ensure that the results are relevant. Sea Grant outreach professionals promote participation in each project, publicize the research results, and support the implementation of new ideas after the project ends.

USEFUL RESULTS

Stakeholder meetings and technical results are intended to help decision-makers identify, compare and ultimately implement solutions, such as a new ordinance, regulatory change, business initiatives, or a coordinated approach to resource management. Past projects have developed a variety of tools, including:

- Summaries of existing studies to identify information gaps, such as contaminant levels in sport fish.
- A detailed comparison of potential solutions, such as different stormwater management techniques.
- Maps and inventories that can guide land use planning, such as maps of potential ecotourism sites.
- Communication tools for raising awareness, such as compelling messages and graphics.

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TANGIBLE AND INTANGIBLE BENEFITS

We asked: What did you get out of the research process?

Participants in recent Integrated Assessments responded to the question. Their answers demonstrated that the process provides both tangible and intangible benefits, both equally valuable for addressing the issues at hand. Their answers illustrate how Integrated Assessment helped create a framework to share knowledge and new perspectives.

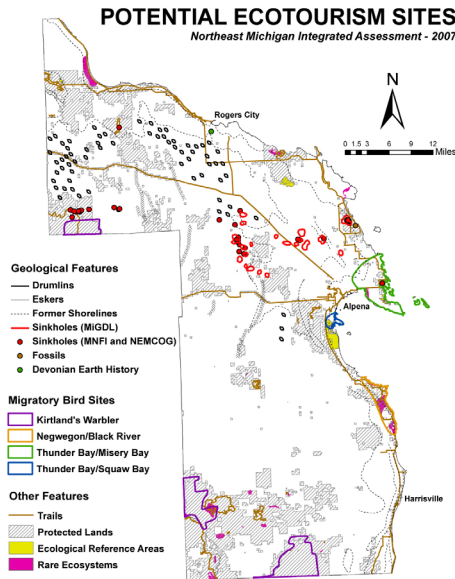
CATALYZING NEW PARTNERSHIPS

"The IA project came along at the perfect time. It was the glue that brought many organizations and efforts together. Through the project we recognized we have similar goals in mind, and many groups started working together. The process fostered communication and interdepartmental cooperation, trust and public participation. Efforts just took off!"

Dan Mullen, Michigan Department of Natural Resources and Environment

"Anytime you can get multiple people together from different jurisdictions is a positive thing. Those meetings brought together a lot of people who I hadn't had contact with before. It got people talking. The people were great to work with, and we were all working toward the same goal."

Bob Burns, Friends of the Detroit River



SUPPORTING DECISIONS

"Final datasets show potential environmental impacts of current zoning. As I have updated zoning ordinances for communities along the coast, I have kept in mind where these environmentally sensitive areas are and then critically assessed the zoning scenario in those areas."

Denise Cline, Northeast Michigan Council of Governments

"For me and my work as an environmental regulator, the final report, data sets and wetland and shoreline assessments provide tangible outcomes and products that I plan on using in my work... I plan on using these tools to inform our regulatory decisions and to serve as an indicator of overall ecosystem health in the watershed."

Derek Haroldson, Michigan Department of Natural Resources and Environment Resource Manager

NEW OPPORTUNITIES AND RESOURCES

Integrated Assessments generate momentum, new collaborations, innovative ideas and greater consensus about next steps. As a result, project participants are often able to leverage additional time, money and resources to implement solutions.

"We worked with the Department of Community Health to prepare a proposal titled 'Enhanced Michigan Fish Contaminant Monitoring and Advisories.' The proposal was recently selected to receive \$350,000 from the Great Lakes Restoration Initiative! This partnership is another direct outcome of the Sea Grant-funded project."

Donna Kashian, Wayne State University Researcher

"We do a lot of grant writing and the grantors always want backup info. Now we have loads of it, which will make a significant difference in our ability to get grants because now we have topic expertise to back up our ideas."

John Nash, Spring Lake Township Supervisor



Michigan Sea Grant helps foster economic growth and protect Michigan's coastal Great Lakes resources through education, research and outreach. A collaborative effort of the University of Michigan and Michigan State University, Michigan Sea Grant is part of the National Oceanic and Atmospheric Administration-National Sea Grant network of more than 30 university-based programs.

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