



SUSTAINABLE SMALL HARBOR MANAGEMENT STRATEGY PROJECT

CORE QUESTION

What are the key barriers to small harbor financial, social and environmental sustainability and what tools would help small harbor managers create more stability?

INTEGRATED ASSESSMENT

OVERVIEW

Michigan is home to more than 80 public harbors and marinas, run by the state, county or local government. Each year, Great Lakes boating infuses the Michigan economy with nearly \$2.4 billion through direct and secondary spending. The trend of fluctuating water levels across the Great Lakes, particularly persistent low water levels in the past 10 years, combined with economic downturn have taken their toll on local waterfront communities. In addition, state and federal funding for public harbors is increasingly limited.

PROJECT DESCRIPTION

The research team seeks to develop a sustainable small harbor management strategy for Michigan's coastal communities. The team is hosting charrettes (facilitated community planning sessions) in New Baltimore, Au Gres, Ontonagon and Pentwater. These communities were selected based on several considerations, including broad geographic representation across Michigan and variety in type of harbor, community population size and type of adjacent water body. The harbor communities that have agreed to participate in the project as the central subjects of the study will undergo a six-month engagement process with the research team.

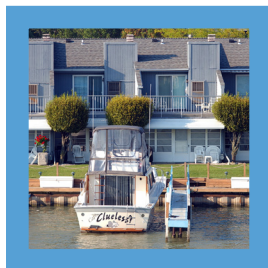
The project team will identify strategies to improve economic, social and environmental

WHAT IS INTEGRATED ASSESSMENT?

Rather than running additional experiments, the research team summarizes what is known and offers an assessment of how existing science could be interpreted and used. The team focuses on a complex environmental issue and then conducts a comprehensive analysis of natural and social scientific data and information.

The IA process is different from traditional research because researchers work closely with stakeholders to examine an issue from many perspectives, identify challenges and evaluate feasible solutions. The aim is to create results that are current, trusted, accessible and useful.

sustainability of Michigan's harbor communities. This includes exploration of opportunities for revenue generation and cost savings, community visioning, and assessment of recreational assets. Also, an economic analysis tool that coastal communities can use to assess the financial viability of their harbors will be developed. Research will help inform both the development and content of plans for harbor communities to build physical and economic resilience and seek sustainable futures.



The research team is led by Don Carpenter at Lawrence Technological University and includes consulting, economic and industry experts plus support from Michigan Sea Grant, Michigan Department of Natural Resources-Waterways Commission, Michigan Department of Environmental Quality-Office of the Great Lakes and Michigan State Housing Development Authority.

The timing of the research is well targeted. In 2015, public harbors will be required to develop five-year master plans in order to receive financial support from the Michigan Department of Natural Resources Waterways Program.

This project will assist communities in identifying a plan for managing and financially sustaining their public harbors, which is a component of the new funding requirements. Furthermore, because traditional planning may not take into account future and waterfront-specific challenges including variable water levels and climate impacts, more information is needed.

EXPECTED OUTCOMES

From the charrettes and additional data collection, the team will develop a financial model that will lead to a toolkit and planning resources to help public harbors pursue financial sustainability. The resources developed will then be applied at two additional harbors to demonstrate transferability and use of the toolkit and accompanying documents.

The toolkit will help bridge the gap amongst various public harbors in their varying ability to develop a realistic long-term vision. Special emphasis will be placed on incorporating concepts from Michigan's "Placemaking" programs (currently led by Michigan State Housing Development Authority) as well as economic development initiatives (such as Michigan Economic Development Corporation's Redevelopment Ready Program) to make the toolkit relevant to today's need.



Outputs

- Identification of the key barriers to the sustainability of small harbors.
- A sustainability toolkit for small harbors including four full case studies on how the model was developed and applied by communities, and additional applications of the model to two other harbors.
- A summary report, presentation, case study fact sheets and a website that will assist communities in their planning efforts.
- A sustainable small harbor management strategy for Michigan's coastal communities, based on their stated needs.

GET INVOLVED

The research team will engage six Michigan communities in charrettes and proof-of-concept applications. The information provided during these community meetings will be used to help develop the toolkit and planning resources to help guide public harbors pursue a more secure future.

If your community is interested in learning more about sustainable small harbor planning, please contact the research team. Also, the final toolkit and resources developed through this project will be available in 2016 to help guide planning.

If you would like to be involved or have questions about the project, contact Donald Carpenter at carpenter@ltu.edu or by calling (248) 204-2549.

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