### Michigan Sea Grant College Program

## RESILIENT COMMUNITIES AND ECONOMIES

Surrounded by four of the five Great Lakes, Michigan is at the heart of the largest surface fresh water system on Earth.

Through research, education and outreach, Michigan Sea Grant is dedicated to protection and sustainable use of the Great Lakes and coastal resources.

Michigan Sea Grant, a cooperative program of Michigan State University and the University of Michigan, is part of the National Sea Grant College Program. The network of 33 university-based Sea Grant programs in coastal states across the country is administered through the **National Oceanic and Atmospheric Administration** (NOAA). Federal funds are matched with funds from state, tribal, business and other nonfederal sources to carry out the programs.

Michigan Sea Grant researchers, Extension educators and other specialists provide information about Michigan's coastal areas to residents, educators and stakeholders through publications, websites, displays, special projects, workshops and presentations.

Learn more at: www.michiganseagrant.org

#### Issue

Michigan is home to more than 80 public marinas and harbors, managed by state, county, or local governments. They are part of a boating culture that draws \$2.4 billion in economic activity to



the state each year. Even so, with increasingly scarce state and federal funding, public facilities face plenty of challenges. Factors such as fluctuating water levels and seismic shifts in the state's economy have left some harbor communities struggling to adjust.

These vulnerable coastal communities need to develop long-term plans that will allow them to adapt to changes and maintain a healthy, thriving, coastal-based economy, but many of these small communities lack the personnel to develop these plans. In addition, a state mandate requires state-funded boating facilities to develop five-year management plans, so the time is ripe for managers to think carefully about the long-term future of their harbors.

### **MICHIGAN SEA GRANT ACTIONS**

Funded by Michigan Sea Grant and a host of partners, the Sustainable Small Harbor project's goal has been to identify the barriers preventing small harbors from becoming economically, socially, and environmentally sustainable, and to equip coastal community leaders with the tools to assess and strengthen their own waterfront assets.

The project, led by Dr. Don Carpenter of Lawrence Technological University, launched in 2014 with an in-depth assessment of the unique challenges facing Michigan's small harbor communities. The project team also



visited six case-study communities around the state and led public design workshops to help community members develop and prioritize meaningful ways to make their waterfronts more environmentally, socially, and financially sustainable.

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## **Leveraging Natural & Human Assets**

Michigan Sea Grant funded a research team to identify and address barriers to the sustainability of small harbors and also obtained additional state funding to assist the research team and expand the scope of the project.

In collaboration with state partners and researchers, Michigan Sea Grant facilitated community visioning sessions, or "charrettes," in several Michigan communities. These collaborative visioning sessions, which involved members of the public and local officials, resulted in development of 20-year plans that focus on the long-term social, economic, and environmental sustainability of each community's harbor. In 2016, a guidebook for helping communities develop more sustainable small harbors was drafted and tested in two coastal communities as proof-of-concept applications.

### **IMPACT**

The communities have used deliverables from the visioning exercises and toolkit (including the newly created guidebook) to help direct municipal investment and identify community development opportunities. Community leaders have now leveraged the charrette designs to seek more than \$3 million in grant funds to support proposed harbor projects:

- In 2015, the city of New Baltimore's charrette designs helped it win a \$2.85 million grant from the Michigan Natural Resources Trust Fund. The funds will be used to purchase the private Schmid Marina on Lake St. Clair, which will be opened for public use. The city will use additional funds from a different grant to upgrade the marina facilities for handicap use.
- Officials in Au Gres plan to use the charrette designs to market the city as a "silent watersport-friendly" destination for paddlers, anglers, and other groups. Au Gres also won a \$30,000 grant from the Saginaw Chippewa Indian Tribe to renovate the formerly state-owned Au Gres Mooring Facility — one of the main ideas that came out of the city's charrette process. Additionally, city officials plan to incorporate some of the charrette designs into their next master plan.
- Rogers City budgeted \$10,000 for a new multi-use structure at the marina based on outcomes from the visioning process. Having identified equipment that would improve services provided at the public harbor, the city also received an \$80,000 Waterways Program Grant from the Michigan Department of Natural Resources with community match to fund these improvements.
- Community visioning events in Ontonagon led to reestablishment of the Downtown Development Authority in March 2016 to mobilize actions suggested through the visioning process. Images rendered in the Ontonagon design charrette stimulated efforts to redevelop a waterfront that focuses on cultural heritage and improved downtown walkability.

### **PARTNERS**

- · City of St. Ignace
- · City of Rogers City
- Lawrence Technological University
- Veritas Economic Consulting
- Environmental Consulting and Technology, Inc.
- Michigan Department of Environmental Quality
- Michigan State Housing Development Authority
- Michigan Department of Natural Resources

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