

MICHIGAN SEA GRANT STRATEGIC PLAN

2024-2027



2024-2027 MICHIGAN SEA GRANT STRATEGIC PLAN

Vision statement

We envision healthy, sustainable, and accessible Great Lakes ecosystems with equitable, inclusive, just, and diverse communities that depend upon them.

Mission statement

Michigan Sea Grant is committed to diverse and inclusive engagement to facilitate research, education, and outreach through partnerships with people and organizations to foster healthy Great Lakes coastal ecosystems, communities, and economies.

Core values

Michigan Sea Grant's core values are essential and enduring tenets that influence the organization and support its mission. The core values support a culture of integrity and scientific neutrality, enabling Michigan Sea Grant to serve as a trusted broker of information.

- **Vision** – Advancing creative, innovative solutions that address emerging and chronic challenges through engagement, science, and stewardship.
- **Collaboration** – Seeking and sustaining partners with whom we leverage each other's strengths, and responsively, respectfully integrating diverse expertise and perspectives to reach shared goals.
- **Sustainability** – Advancing environmental stewardship practices and communicating the value of the services that Great Lakes ecosystems and watersheds provide to Michigan and the broader region.
- **Accountability** – Operating with integrity and transparency while maintaining quality and relevance in all functional areas, including program management.
- **Diversity, Equity, Inclusion, Justice, and Accessibility** – Proactively engaging with the range of identities, cultures, communities, and capacities present throughout our areas of work, with respect and sensitivity to each person's experiences, history, and systemic challenges.
- **Non-Advocacy** - Maintaining a commitment to objective research and programming that avoids bias and advocacy in the development and delivery of information, tools, and services.

Cross-Cutting Principles

These concepts provide a common foundation for the following Focus Areas and the work Michigan Sea Grant conducts. Recognizing these Cross-Cutting Principles enhances Michigan

Sea Grant's capabilities to meet future needs. Under its 2024-2027 Strategic Plan, Michigan Sea Grant will:

- **Cultivate and sustain partnerships** by integrating the expertise and capabilities of partners from tribal nations and international, federal, state, and local communities as well as from academia, nongovernmental organizations, and industry.
- **Enhance diversity, equity, inclusion, justice, and accessibility** by seeking and integrating diverse perspectives to advance cultural understanding and enable us to pursue our vision and mission with, and for, all audiences. We will actively create mechanisms to allow all people to participate in network activities. Bringing a range of perspectives, values, and tools together to find solutions that are more innovative, creative, inclusive, and responsive will help us tackle problems facing Great Lakes coastal communities.
- **Provide trusted information** of value to all audiences interested in coastal and Great Lakes issues. Serve as an academic, neutral party and assist stakeholders in making informed decisions about important, and sometimes controversial, issues in a factual and timely manner without advocating for specific positions or policies.

Cross cutting performance measures

- Number of Sea Grant tools, technologies, and information services that are used by our partners/customers to improve ecosystem-based management.
- Economic and societal impacts derived from Sea Grant activities (market and non-market; jobs and businesses created or sustained; patents).

Cross cutting output metrics

- Sea Grant staffing: Number of individuals and full-time equivalents (FTEs) supported by Sea Grant.
- Core funding proposals: Number and origination of core funding pre- and full proposals
- Number of volunteer hours.
- Number of postsecondary students and degrees financially supported by Sea Grant in higher education programs (undergraduate, graduate).
- Number of P-12 students who participated in Sea-Grant supported formal education programs.
- Number of P-12 students reached through Sea Grant-trained educators.
- Number of educators who participated in Sea-Grant supported professional development programs.
- Number of Sea Grant-sponsored/organized events.
- Number of attendees at Sea Grant-sponsored/organized events.
- Number of public or professional presentations.

- Number of attendees at public or professional presentations.
- Number of marinas certified as “Clean Marina” by the Clean Marina Program as a result of Sea Grant activities.
- Number of individuals certified in Hazard Analysis Critical Control Point (HACCP) due to Sea Grant efforts.
- Number of peer-reviewed publications produced by Sea Grant.
- Visitor attendance: Number of people that visit museums, aquariums, and other informal education institutions hosting NOAA-supported exhibits or programs.
- Environmental actions: Number of people participating in environmental actions through NOAA education programs.

COMMITMENT TO JUSTICE, EQUITY, DIVERSITY, INCLUSION, AND ACCESSIBILITY

Michigan Sea Grant is committed to justice, equity, diversity, inclusion, and accessibility in both our organization and the communities we serve. We believe all people have the right to live and work in a healthy and safe environment, and we seek to eliminate disparities in access to natural resources, opportunities, and decision-making processes. We recognize that issues related to the natural and human-shaped environment affect everyone, though they do not affect everyone equally. At Michigan Sea Grant, we work to create equitable access to resources and opportunities for Michigan’s diverse communities and seek to incorporate their voices and priorities into our work. Our values are informed by environmental justice and are based in a culture of inclusion, respect, long-term engagement, and accountability.

Our commitment to justice, diversity, equity, inclusion, and accessibility shapes our organization and its investments, practices, interactions, and daily work. Specifically, we strive to:

- Create a welcoming environment, so each person in and around our organization feels accepted, valued, and safe.
- Learn from each other, honoring differences in background, experience, skills, interests, beliefs, and values.
- Nurture an atmosphere that encourages open, honest, and respectful dialogue.
- Expand access to and opportunities of success with our research grants, fellowships, and internships to include underrepresented and non-traditional groups and individuals.
- Ensure our programs, resources, and physical spaces are welcoming and accessible to people of all abilities.

Michigan Sea Grant programs and materials are open to all without regard to race, color, national origin, gender, gender identity, religion, age, height, weight, disability, political beliefs, sexual orientation, marital status, family status, or veteran status. We commit to providing accessible, free or reduced-cost programming to diverse audiences.

As the staff of Michigan Sea Grant, we acknowledge that we occupy the ancestral, traditional, and contemporary lands of the Anishinaabeg — Three Fires Confederacy of Ojibwe, Odawa, and Potawatomi peoples. We live, work, and play on lands obtained, generally through violence and deceit, from Indigenous people. Acknowledging this history does not change the past, but a thorough understanding of its ongoing unjust consequences can empower us to create a future that supports human flourishing and justice for all. We recognize, support, and honor the sovereignty of Michigan's 12 federally recognized tribal nations, Indigenous individuals and communities who live here now, and those who were forcibly removed from their homelands. By offering this land acknowledgement, we affirm Indigenous sovereignty and work to hold ourselves and others accountable to the needs of American Indian and Indigenous peoples.

OUTLINE OF THE PLANNING PROCESS

Michigan Sea Grant held a meeting on December 20, 2021, with our Advisory Committee where we provided an overview of the strategic planning process that would result in the creation of our 2024-2027 strategic plan. This plan is summarized below.

In February 2022, Michigan Sea Grant sought input from its community to ensure that its research and programming are meeting the needs of Michigan residents in protecting our Great Lakes resources. We captured this input through an online stakeholder survey that was sent to all our contacts with the request to share with others who might want to participate. We also shared this survey directly with our Advisory Committee for their input and with a request to share the link broadly. The intention of this effort was to gather input from our stakeholders to help develop a strategic vision for the next four years – from 2024 to 2027 – that builds on previous successes and responds to new challenges and priorities ahead.

More than 400 responses were received. Respondents provided input on the importance of the issues that MISG works on, whether there are additional emerging priorities that we should focus on, and how well MISG's activities and products are meeting the needs of our Michigan communities. In addition, survey takers were able to provide open-ended feedback about our program in general.

The highest ranked topics, based on the percentage of respondents who rated issues as slightly to above average, included: water quality/contaminants (83%); habitat restoration and protection (83%); aquatic invasive species prevention (81%); watershed health (80%); public awareness/community education (76%); fisheries management (75%); Great Lakes literacy (70%); environmental and Great Lakes literacy (70%); and safe and clean ports, harbors, and marinas (69%).

Michigan Sea Grant also invited staff at both universities to provide input through an anonymous staff survey during April 2022. Results of the external and internal surveys were reviewed prior to an all-team meeting in May 2022. At this same meeting, we discussed which of the current 2018-2023 strategic plan goals and outcomes are needed for our 2024-2027 plan. During June and July 2022, we reviewed and discussed NSGO strategic planning guidance and national plan templates, including focus area goals, actions, and outcomes. We reviewed and updated MISG vision, mission, core values, cross-cutting principles, and DEIJA statements.

STRATEGIC FOCUS AREAS, PERFORMANCE MEASURES, GOALS, AND OUTCOMES

Environmental Literacy and Workforce Development

Performance Measures

- Number of Sea Grant products that are used to advance environmental literacy and workforce development.
- Number of people (youth and adults) engaged in Sea Grant-supported nonformal education programs.
- Number of Sea Grant-supported graduates who become employed in a job related to their degree within two years of graduation.

Goal: A diverse, environmentally literate public participates in lifelong formal and nonformal learning opportunities.

ACTION: Create and implement educational resources and opportunities that are diverse, equitable, inclusive, just, and accessible for formal and nonformal learners to explore multiple ways of learning and knowing and to develop their curiosity and learning abilities throughout their lives.

DESIRED OUTCOMES:

- Individuals consider themselves environmentally literate lifelong learners who utilize knowledge to support, build, and restore healthy natural and human communities.

ACTION: Develop, provide, and assess research, curricula, tools and other resources for educators, students, and lifelong learners to support personal choice, participatory decision-making, and community planning processes.

DESIRED OUTCOMES:

- Educators, students, and lifelong learners have current information and innovative tools that meet or exceed relevant standards and practices.
- People know and can act on issues that impact their lives, communities, and environments.
- Community members use their knowledge to remove barriers and act for personal and social resilience and adaptation to changing economic, environmental, and social conditions.

ACTION: Strengthen the ability of individuals, organizations, and communities so that they have the knowledge, dispositions, skills, and abilities to make informed and responsible decisions regarding coastal and Great Lakes environmental issues.

DESIRED OUTCOMES:

- Individuals, organizations, and communities create innovative opportunities, businesses, and communities that respect diverse ways of knowing and learning, address systemic problems in equitable and just ways, and integrate traditional and novel cultures.
- Coastal and Great Lakes communities are sustainable, healthy, diverse centers of tradition, innovation, and prosperity.

Goal: A diverse, skilled, and environmentally literate workforce that is engaged and able to build prosperous lives and livelihoods in a changing world through traditional and innovative careers.

ACTION: Identify and remove barriers to accessing training and learning opportunities so that the nation's diverse population is connected to and prepared for the range of career paths that support the needs of coastal and Great Lakes communities.

DESIRED OUTCOMES:

- All members of a community are enabled to explore and pursue the variety of occupations that are essential to sustain coastal and Great Lakes communities, economies, and ecosystems.

ACTION: Increase opportunities for students at all levels (P-12, undergraduate, graduate, post-graduate, and technical and vocational) to gain knowledge and experience addressing issues that are important to our ocean, coasts, and Great Lakes and their respective watersheds.

DESIRED OUTCOMES:

- Sea Grant student opportunities provide increased literacy, experience, and preparedness in critical disciplines, skills, and issues.
- Students from all backgrounds and with diverse needs are thoughtfully and intentionally supported in and have access to formal, nonformal, and experiential learning, training, and research experiences.

ACTION: Develop and carry out programs that help people discover, create, and grow within careers that support current and future needs of coastal communities and ecosystems and to adapt and thrive in changing conditions.

DESIRED OUTCOMES:

- Employment in coastal, Great Lakes, and watershed communities expands and diversifies.
- The existing and future workforce can adapt and thrive in changing environmental, social, and economic conditions

Healthy Coastal Ecosystems

Performance Measures

- Number of resource managers who use ecosystem-based approaches in the management of land, water, and living resources as a result of Sea Grant activities.
- Number of acres of coastal habitat protected, enhanced, or restored as a result of Sea Grant activities.

GOAL: Coastal and Great Lakes habitats, ecosystems, and the services they provide are protected, enhanced, and/or restored.

ACTION: Co-develop, improve, and share knowledge, decision-support tools, technologies, and approaches to protect and restore ecosystems.

DESIRED OUTCOMES:

- Communities have greater awareness and understanding of ecosystem functions and the services they provide.
- Coastal and Great Lakes ecosystem science and conservation needs are identified and prioritized through diverse participation by interested parties.
- Evidence-based science, traditional and local knowledge, and innovative solutions inform and improve management and conservation of coastal habitats.
- Coastal and Great Lakes biodiversity, habitats, and ecosystem functions and services are restored and sustained.
- Collaborative and inclusive planning and decision-making lead to enhanced stewardship and community benefits, especially for the most vulnerable.

GOAL: Land, water, and living resources are managed by applying science, tools, and services to sustain resilient coastal and Great Lakes ecosystems.

ACTION: Support a science- and management-driven framework that integrates research, observations, monitoring, and modeling and that includes community engagement and traditional and local knowledge to provide a scientific basis for informed decision-making.

DESIRED OUTCOMES:

- Inclusive collaborations with diverse partners and other interested parties support planning, research, and innovative solutions to address coastal and Great Lakes resource management needs, especially for vulnerable communities.
- Community science initiatives are utilized and contribute to improving our knowledge with respect to stewardship of ecosystems and their contributions to coastal and Great Lakes communities and economies.
- Coastal and Great Lakes communities and resource managers have access to and use science, data, tools, and training to be effective in planning and decision-making processes.
- Resource managers understand the risks, options, tradeoffs, and impacts of their decisions.

ACTION: Identify and advance successful strategies that enhance resilient ecosystems and watersheds in the context of changing conditions, including environmental variability and climate change.

DESIRED OUTCOMES:

- Communities share, access, understand, and use information regarding projected changes and related impacts within ecosystems.
- Communities can apply knowledge from case studies, training, and tools to improve their ability to plan, prepare, and adapt to environmental variability and climate change.

Sustainable Fisheries and Aquaculture

- Number of fishers, seafood processors, aquaculture industry personnel or seafood consumers who modify their practices using knowledge gained in fisheries sustainability and seafood safety as a result of Sea Grant activities.

Goal: Domestic fisheries, aquaculture and other coastal and freshwater living resources supply food, jobs, and economic and cultural benefits.

ACTION: Promote and support harvesting, culturing, and processing techniques that lead to safe, sustainable, high-quality food as well as economic, social, and ecosystem benefits.

DESIRED OUTCOMES:

- Coastal and Great Lakes residents and U.S. seafood consumers understand the benefits of domestically produced seafood, both wild and farmed, for individual and environmental health.
- Coastal and Great Lakes resource industries employ technologies and reinforce strategies to ensure safe and sustainable seafood and products.
- Coastal and Great Lakes resource industries employ strategies that balance economic, community, cultural and conservation goals.

ACTION: Support development of a trained and diverse workforce and enhance technology transfer in a manner that recognizes a variety of methodologies and approaches, including those based on traditional and local knowledge

DESIRED OUTCOMES:

- Increased understanding and technological solutions aid management and production.

- Engagement with interested parties and partnerships enable industry to acquire innovative technologies and adapt to changing conditions.

Goal: Natural resources are sustainably managed to support coastal communities and working waterfronts, including commercial, recreational, subsistence fisheries, and aquaculture.

ACTION: Ensure best available science, services, and tools are available to and trusted by resource managers, fishing and aquaculture communities, and consumers.

DESIRED OUTCOMES:

- Commercial and recreational fishers and aquaculturists are knowledgeable about efficient, sustainable, and responsible tools, techniques, and uses of coastal and freshwater resources.
- Resource managers and fishing and aquaculture communities have access to and share diverse knowledge and tools to increase their capability to adapt to changing resource management needs, including those driven by climate change.
- Consumers understand the health and sustainability benefits of domestically produced seafood and use that knowledge to inform their seafood purchasing decisions.

Resilient Communities and Economies

Performance Measures

- Number of communities that adopt/implement sustainable economic and environmental development practices and policies as a result of Sea Grant activities.
- Annual number of communities that adopt and/or implement hazard resilience practices to prepare for, respond to/minimize coastal hazardous events.

Goal: Coastal and Great Lakes communities have the capability and resources to prepare for and adapt to extreme and chronic weather and coastal hazards, climate change, economic disruptions, and other threats to community health and well-being.

ACTION: Improve and expand exchanges of knowledge to better identify the diverse needs of communities and to increase the public's understanding of changing conditions and related impacts.

DESIRED OUTCOMES:

- Scientific understanding, including traditional and local knowledge, provides foundational information, and all community members understand the impacts of changing conditions and coastal hazards and have the capability to prepare, respond, and adapt.
- Community leaders improve their understanding of changing conditions and coastal hazards and expand their capability to implement mitigation and adaptive strategies.

ACTION: Work with communities to advance collaborative comprehensive planning, actionable science, and adaptive management strategies.

DESIRED OUTCOMES:

- Inclusive collaborations with diverse, interested parties and partners support mitigation and adaptation efforts built on knowledge from and responsive to the needs of all, especially the most vulnerable.

ACTION: Work with communities to explore and support diversification, strengthening, sustainability, and social equity within coastal economic sectors and the blue economy.

DESIRED OUTCOMES:

- Coastal and Great Lakes communities have access to and share knowledge, tools, services, and technologies to adapt and grow resilient economies.
- Leaders in coastal and Great Lakes economic sectors understand how they can become more resilient through diversification including expanded renewable, regenerative, and clean practices.

Goal: Water resources are enhanced, sustained, and protected to meet existing and emerging needs of the communities and economies that depend on them.

ACTION: Use engagement and information exchange to advance the understanding of how actions impact water quality, quantity, and availability.

DESIRED OUTCOMES:

- Community members understand watershed and coastal functions and the ecosystem services they provide, understand how their actions will impact water resources, and are able to make informed decisions.

ACTION: Collaborate with diverse partners and interested parties, especially the most vulnerable, to advance plans and management practices for protecting and managing water resources.

DESIRED OUTCOMES:

- Communities work with knowledge networks to share and access science, data, tools, and services to anticipate changes in water resources, to protect and sustain water resources, and to make informed decisions.
- Communities have diverse, sustainable economies, and industries that support existing and emerging water resource needs.