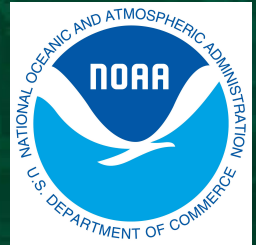


HYDROGRAPHIC SERVICES REVIEW PANEL



Northwestern
Michigan
College

Underserved Communities Mapping and Charting Needs in the Great Lakes Region



September 24, 2024



LAKEBED 2030 CONFERENCE



200+ participants

4 keynotes speakers

17 technical sessions

Equipment demos

19 industry sponsors

Student-Employer
roundtable

Regional chapter event
(MTS/THSOA)

Objectives:

- ❑ **Detail the scientific, economic, and environmental value associated with the high-resolution mapping of the Great Lakes**
- ❑ **Raise awareness of the economic and environmental significance of the Great Lakes**
- ❑ **Showcase the mapping work being done in the ecosystem**
- ❑ **Demonstrate the latest technologies used in the Great Lakes**



LAKEBED 2030 CONFERENCE



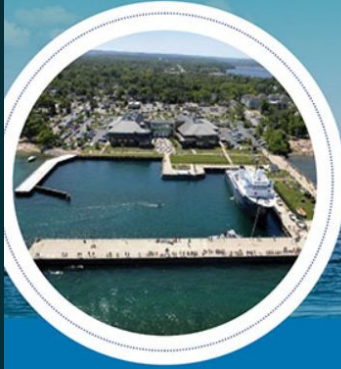
BUILDING THE
GREAT MAP
Lakebed 2030

Key Outcomes, Messages, **Gaps**:

- ❑ NOAA's renewed focus on the Great Lakes
- ❑ **No regional strategy to facilitate mapping the Great Lakes**
- ❑ **Lack of focus on underserved populations and communities**
- ❑ Missed opportunities for technology development (tech innovation)
- ❑ Lack of understanding of the economics and environmental significance of the Great Lakes (messaging)
- ❑ **OCEANS 25 Great Lakes Focus (next opportunity)**



Who we are



GREAT LAKES WATER STUDIES INSTITUTE



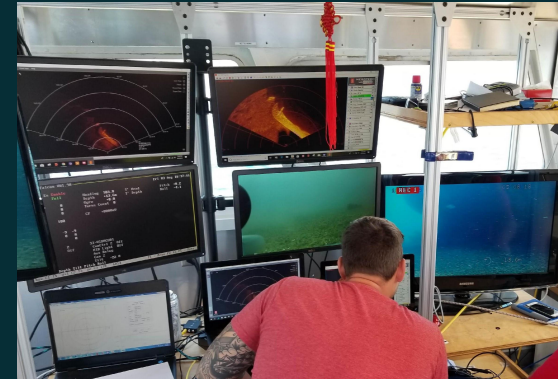
Academic Programs

Located at the Great Lakes Campus on Lake Michigan, the Great Lakes Water Studies Institute at Northwestern Michigan College is strategically positioned to engage individuals and organizations in advancing their technical skills and understanding of the world's dynamic water resources.

Professional Development

Applied Research

Innovation





GREAT LAKES WATER STUDIES INSTITUTE



ACADEMIC PROGRAMS

Marine Technology

Bachelor of Science
Associates degree

Freshwater Studies

Associates degree

Water Quality

Environmental Technician

Associates degree



PROFESSIONAL DEVELOPMENT

Technical training

CEUs/PDUs

Micro-credentials

Webinars

Conferences & events



APPLIED RESEARCH

NOAA

DOI - NPS

USCG

ONI

Law Enforcement

Thunder Bay Marine

National Sanctuary

US Army Corps of

Engineers

GL Fisheries Trust

Consumers Energy



INNOVATION

AquaHacking Challenge

- Focused on Great Lakes issues
- 200+ participants from the US and Canada
- \$50,000 in seed funding for the top 3 teams

Freshwater Research & Innovation Center

- 38,000 sq ft facility
- Open spring 2027
- Focused on blue tech

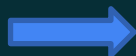


Blue Tech Workforce

Education and Training

Problems, Concerns, **Gaps**:

- Shortage of new talent entering the field – shortage of employees
- Lack of understanding regarding what a blue tech career entails**
- Poor correlation between academic programs and jobs**
- Lack of awareness on career pathways and training to support these
- Lack of focus on underserved populations or how to effectively reach these groups to understand their respective needs**
- Lack of diversity in the workforce



I would be glad to support and/or serve in a role to change this



Northwestern
Michigan
College

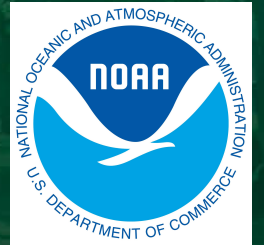
HYDROGRAPHIC SERVICES REVIEW PANEL



THANK
YOU!

Underserved Communities Mapping and Charting Needs in the Great Lakes Region

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September 24, 2024