TRAVERSE CITY FRESH WATER RESEARCH & INNOVATION CENTER

ESTABLISHING A GLOBAL HUB FOR APPLIED FRESHWATER INNOVATION

The Traverse City Fresh Water Research & Innovation Center is being developed on the existing Discovery Center & Pier property on West Grand Traverse Bay. This research center will become the hub for the commercialization of freshwater and marine technology applications, and research on technologies and public policy affecting the Great Lakes and similar freshwater systems throughout the world. Unique to this vision are Blue Economy commercialization initiatives such as incubation and accelerator space and requisite lab space to support early start-up businesses. This project will drive economic growth and establish the Grand Traverse Region and Michigan as the global hub for applied freshwater innovation.

FOCUS AREAS: DRIVING RESEARCH & COMMERCIAL ADVANCEMENT FOR MICHIGAN

AUTONOMOUS & REMOTE TECHNOLOGY |

Machine learning and AI | Marine shipping/freight and logistics research and development | Acoustic communications and simulations

FRESHWATER & MARINE TECHNOLOGIES |

Water quality and analysis | Watershed, invasive species, and fisheries management GREAT LAKES MODELING | Observation platforms | Data collection and processing EMERGING TECHNOLOGIES AND INNOVATION | Future technologies | Innovation hub and startup space | Smart Great Lakes initiatives



THE VISION

The research center will comprise approximately 85,000 square feet of highly collaborative, shared space with magnificent views of West Grand Traverse Bay – including:

- High Tech Lab Space & Equipment
- Classroom / Seminar Space & Auditorium
- Research Center Office & Administration
 Space
- Start-up Business Office Incubation & Accelerator Space
- Working Pier Space & Buildings for Watercraft
- Maker / Tinker Space









BENEFITS TO THE GRAND TRAVERSE REGION & THE STATE OF MICHIGAN

The development of the Fresh Water Research & Innovation Center will ensure that the Grand Traverse region is well positioned to be the global epicenter for freshwater research, industry, and innovation.



With a focus on community, education, and innovation around the Great Lakes ecosystems, this research center will become a focus for learning, R&D, and economic development for the Grand Traverse Area for many years to come. Further, it will establish the Grand Traverse region as a global hub for Great Lakes freshwater learning and research – also establishing Michigan's role as a leader in this space. By co-locating research, education and commercialization partners, this new facility will generate tremendous opportunity for small business development.

FINANCIAL SUSTAINABILITY

The co-location of key education and innovation partners working together to protect and improve the Great Lakes ecosystem will generate tremendous economic opportunity. Committed anchor tenants, researchers in residence, visiting university teams, dock slippage, and commercial office leasing provide sustainable long-term funding for ongoing operations, facility management, and building maintenance.

COLLABORATIVE REGIONAL PARTNERS

Spearheading the development of the Traverse City Fresh Water Research & Innovation Center are five regional leaders and partner organizations working together to drive innovation for the state of Michigan. They are:

Michigan Technological University | As established regional leaders in freshwater research and education, Michigan Technological University (MTU) will help develop marine technology and operations plans for the Research Center in Traverse City. Additionally, MTU will collaborate on research projects, workforce development programming and professional development projects that will highlight the freshwater science and technology developed by MTU and other partners. The Research Center in Traverse City is a perfect complement to the world-class work already being done by MTU at its Great Lakes Research Center in Houghton and at the Michigan Tech Research Institute in Ann Arbor.

Northwestern Michigan College | Northwestern Michigan College (NMC) envisions the Research Center as the home for Great Lakes innovation and research focused on the application of freshwater and marine technologies. The Research Center will house the Great Lakes Water Studies Institute providing a state-of-the art facility supporting learning and applied research in freshwater, water environmental technology, and marine technology. Professional development and workforce training focused on remote sensing, autonomous vehicles and other water related technologies will be spearheaded by NMC.

20Fathoms Technology Incubator | 20Fathoms is a tech startup incubator and coworking space in Traverse City, providing resources to help entrepreneurs and tech professionals grow their businesses and careers. The organization will lend their startup incubation expertise to help commercialize the research and innovation produced at the Research Center.

Discovery Center & Pier | The Discovery Center & Pier (DCP) will serve as the conduit between the community and the partners. DCP will develop public facing programs to highlight research underway, new technologies being developed at the Research Center, and academic programs in science, technology and engineering related to fresh water available at NMC and MTU. DCP's goal will be to educate the public and inspire tomorrow's workforce.

<u>Traverse Connect</u> | Traverse Connect is the lead economic development organization for the Grand Traverse region and supports business growth and development by encouraging the growth of our existing assets – healthy partner relationships, the scaling up of our existing companies – and attracting new businesses.





