

Beacon on the Bay

Traverse City's Freshwater Future

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Traverse City is dropping its anchor on a bold new identity: from the "Cherry Capital" to a global hub for freshwater research and innovation.

With a \$28.9 million state-of-the-art Freshwater Research and Innovation Center (FRIC) planned for the Northwestern Michigan College (NMC) on Discovery Pier's campus, the region is staking its claim as the epicenter of the blue economy.

The FRIC will be a 38,000-square-foot facility dedicated to collaboration, education, research, innovation, and commercialization in freshwater technology. It is designed to accelerate the blue economy—the sustainable use of water resources for both economic growth and ecological health—by being a launchpad for the development and innovation of blue technologies.

It will be a shared space and community "where ideas become solutions, technologies become ventures, and opportunities become careers," as put by Discovery Pier, a nonprofit organization dedicated to connecting people of all needs, ages, and abilities to the Great Lakes.

NMC has been a national leader in freshwater research and education for nearly two decades. It was the first community college in the nation to offer a Freshwater Studies degree, and through its Great Lakes Water Studies Institute (GLWSI), it has trained students for careers in marine technology, ecology, and freshwater management.

FRIC builds on this legacy by expanding beyond education into applied research, technology development, and business incubation. It will give NMC not just a regional footprint, but national recognition in the blue economy.

"This [FRIC] is going to be a great way for NMC to show off how unique we really are in this country as a community college in what we offer," said Amy Shamroe, the Mayor of Traverse City and the Industry Navigator under Extended Education and Training at NMC.

FRIC will not only advance research, but also provide concrete opportunities for NMC students to gain real-world experience in cutting-edge freshwater innovation. John Lutchko, Director of the GLWSI, said, "This project means so much, both for our students, for NMC, and for the community."

Lutchko enthusiastically stated, "With new equipment and space designed for collaboration, we'll be able to integrate applied research into the student experience in a way that hasn't been possible until now."

Students will have direct access to advanced labs, research vessels, internships, and collaborative projects with blue-tech

businesses. Students won't just learn from textbooks, but will practice with the same tools used in the industry.

Shamroe stressed that "the education component is a key piece because we will be educating future leaders and creating cutting-edge and industry-leading professionals."

The FRIC goes further by integrating education with industry partnerships. "Now we're also partnering with businesses that are already in the blue tech industry and are developing the blue tech industry," said Shamroe.

This means that students can transition directly from classroom learning to internships, and from internships into career pathways in the emerging freshwater economy.

Since NMC is positioned at the center of Traverse City's economy, it is uniquely suited to balance ecology, tourism, and year-round jobs. Shamroe said, "We are a community on the water that cares about ecology and the environment... we are a tourist destination, though, and we are a place that wants to have a strong year-round economy—this is how that all comes together, and NMC is at the front of that."

The Great Lakes and Grand Traverse Bay are a big part of Traverse City's economy because tourism, shipping, and various local industries rely on their health.

Lutchko stated, "Healthy water isn't just an environmental issue; it's an economic one. Tourism, recreation, fisheries, and even local businesses depend on a healthy, vibrant freshwater ecosystem. Water is a resource that locals value deeply, not just for these recreational activities or for its importance in the economy, but as the foundation of their way of life."

The FRIC hopes to emphasize this aspect of the Great Lakes and use it to stabilize Traverse City's economy year-round. This will be done through the creation of new jobs through the center, as well as the growth in blue technologies.

The center aims to create high-paying jobs within research, innovation, and technology, as well as create technical and support roles for locals, which NMC can train workers to fill through certifications and degree programs. It will train students in applied freshwater science, environmental monitoring, uncrewed systems, and hands-on research. Lutchko said, "This will give them the technical skills and problem-solving experience employers are looking for."

Lutchko also said, "With the addition of new equipment, applied research, and stronger connections to industry, I expect to see new career pathways open that weren't available in the past."

"There's going to be all kinds of things that trickle out of this new economy that aren't just high academic jobs; they're

going to be jobs at all levels that are needed to support all of the work that's being done here," Shamroe stated.

The center has partnered with Michigan Tech for specialized research experience and technical guidance, as well as Traverse Connect for the local economic development perspective.

Lutchko emphasized, "Demand for these skills is growing rapidly in water resources, environmental consulting, and the broader blue economy, both locally and globally, ensuring graduates are prepared for careers that are in high demand and highly impactful."

Shamroe mentioned that we have already had the opportunity to host international conferences, such as the International Fish Telemetry Conference, which highlight NMC's already existing reputation as a hub for blue technologies and research. FRIC will aim to expand that further and generate similar opportunities, drawing more global talent and recognition to our region.

"I think it's going to open up a whole world of economic possibilities for people from all kinds of backgrounds and [it will] not just bring people here, but cultivate the people we already have here," said Shamroe.

Historically, Traverse City has been known as the "Cherry Capital of the World," so does FRIC mark a rebrand of the region?

"I think we will always have cherries at our heart, but the bay and the water are so much a part of everything that we are, that these will blend together and give us a new facet of our personality," Shamroe commented.

She then added, "I'm really excited to see the blue and green tech movements that are coming to town be integrated into part of our character and who we are."

"The industries and the businesses that are going to come out of the Freshwater Research and Innovation Center are going to help shape the future of this community," Shamroe then referred to it as the "beacon on the hill that's going to attract everybody to us."

What will FRIC look like long-term? Shamroe said, "I hope in 20 years, it's an institution that's part of our community because it's producing so many great jobs and it's a connector for our economy and a connector for our environment."

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Photos by Minnie Bardenhagen



Construction site for the Freshwater Research and Innovation Center



Discovery Pier, one of the partners for the FRIC

Judge's comments: "Great lead — clever and effective. Excellent collection of sources and quotes. You get the NMC students in the first column which is something your readership can connect with. Well-organized and written."