

PROGRESS REPORT:



BUILDING A FULLY SUSTAINABLE FUTURE

2022-2023



UNIVERSITY OF MINNESOTA

Driven to Discover[®]

Crookston Duluth Morris Rochester Twin Cities

MPact 2025: MNtersections

We serve the state and impact the world.

Inspired by Minnesota to improve people and places at world-class levels.

Over the past year, the University reached significant milestones and built its capacity to realize the MPact 2025 goal to **Build a Fully Sustainable Future**. This report provides highlights of sustainability work, milestones, and accomplishments that are furthering our commitment to this critical issue for Minnesota and the world.

PROGRESS CARD: Sustainability Leadership

We are committed to demonstrating state and worldwide leadership in sustainability and environmental research, teaching, and convening power. We measure our progress on this goal through the following metrics systems.

INCREASE TIMES HIGHER ED SUSTAINABILITY DEVELOPMENT GOAL RANKING



In its inaugural submission, the University of Minnesota received a [Times Higher Education Impact Rankings](#) score of **80.4 out of 100**. The University of Minnesota ranked **#16 in the world** and **#5 in the US** for its work related to combating hunger and ranked **#2 in the US** and **tied for #57 in the world** for its work related to promoting good health and well-being.

[The Sustainable Development Goals](#) (SDG) Initiative brings together partners across the University to achieve MNtersections goals 3.1 (Health), 3.2 (Sustainability), and 3.3 (Natural Resources and Agro-Food Systems). Our work is aligned with SDGs 2 (Zero Hunger), 3 (Good Health and Well Being) and 13 (Climate Action), and demonstrates the University's commitment to climate action, clean water, and land ecosystems.

PURSUE GOLD STARS® RATING



The University of Minnesota Morris and the University of Minnesota Twin Cities have already received Gold ratings on the [Sustainability Tracking, Assessment & Rating System™ \(STARS®\)](#), demonstrating sustainability performance in research, curricular, co-curricular, operations, planning, and administrative categories. Aligning with MPact 2025, **each campus in the system will pursue a Gold rating on the STARS tool by 2025.**

ESTABLISH NEXT GENERATION CLIMATE ACTION PLANS



The **Twin Cities** and **Duluth** campuses are visioning the next 10 years of climate action, campus investment & development, and carbon neutrality goals on their respective campuses with the **completion of new Climate Action Plans this year**. Rochester, Crookston, and Morris Climate Action Plans will be complete by mid-2025. Each campus' Climate Action Plan will identify actions to **eliminate our greenhouse gas emissions, make the University more resilient, and address climate change** through teaching, research, and outreach.

Governance



Sustainability is relevant to every aspect of the institution. Achieving our aspirations requires us to work in new ways, to think in systems, and to integrate work across locations, functions, and units. The **new Chief Sustainability Officer and Sustainability Project Manager positions** were created to provide **strategic leadership across the system** and we have established **sustainability committees at the system and campus levels**. The committees have guided and accelerated our sustainability work, and provided leadership in the development of climate action plans.

Highlights: Climate Change

The Intergovernmental Panel on Climate Change has identified the need for significant, sustained, and urgent emissions reductions by 2030 to avert the worst effects of global warming. Since 2008 the University has been a signatory to the Climate Leadership Commitments, is actively working to reduce emissions from campus to zero, and is integrating climate protection into its research, teaching, and outreach.

Morris Model Recognized Nationally



The Morris Model partnership between UMN Morris, the city of Morris, UMN West Central Research and Outreach Center, Stevens County and other partners, was featured in the New York Times in July 2022. The award-winning Morris Model team has established ambitious goals for reducing energy consumption 30% by 2030, producing 80% of the county's electricity locally by 2030, and eliminating landfill waste by 2025. [Learn more](#)

Impact Goal Grants support collaborative, creative sustainability solutions



The 2022 Impact Goal Grants supported collaborative and creative sustainability solutions. These grants help advance diverse ideas towards our shared vision of a future where people and the planet prosper together- a future of carbon neutrality, sustainable land use, and clean drinking water for all. The Institute on the Environment Impact Goals were designed to drive progress in areas where solutions have been slow to develop or have been prevented. [Learn more](#)

Center for Renewable Energy Storage Technology Launched



UMN Morris and UMN West Central Research and Outreach Center launched the UMN Center for Renewable Energy Storage Technologies, called CREST. Clean energy and energy storage are important now and will grow in importance in the years ahead. Inaugural funding to support the program comes from the UMN 2022 Impact Goals grant program coordinated by the UMN Institute on the Environment. [Learn more](#)

Rochester Students Mentor Ecoliteracy School



UMN Rochester and the Ecoliteracy SCHOOL connect concepts of ecoliteracy to students while forming an environment and health connection. Rochester students can take this class as a directed study that offers a semester-long leadership role to plan and facilitate a field experience for others. This builds skills of collaboration, project-based applied learning, use of evidence based public health processes, and leadership and development. [Learn more](#)

Highlights: Clean Water

Water is one of Minnesota's most precious resources and is sacred to indigenous communities across the state. Unfortunately, many water resources, including those in Minnesota, are imperiled. Through operational improvements in campus facilities, scholarship, and engagement, we are advancing water stewardship across the state and beyond.

Nutrient and Water Management



Crookston's Northwest Research and Outreach Center has a Nutrient and Water Management program dedicated to finding mutually beneficial solutions for growers and downstream users of ecosystems, aiming to improve agricultural sustainability while maintaining grower profitability and minimizing environmental impacts. This research helps farmers find effective water and nutrient management strategies while building the resiliency of agriculture throughout the region.

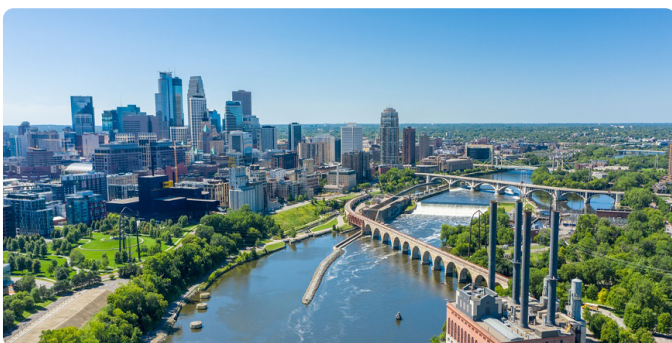
[Learn more](#)

NRRI Receives \$3M for Great Lakes Monitoring



The UMN Natural Resources Research Institute was awarded \$3 million from the EPA to fund monitoring of the bottom of the food chain in the Great Lakes as part of the Great Lakes Restoration Initiative to restore and protect this important freshwater resource and the chemical, physical and biological integrity. [Learn more](#)

UMN Included in National Water Management Partnership



Support of \$360 million over the next five years will allow the University to provide valuable partnership translating water research into operations to improve water management. This partnership creates unique opportunities to collaborate with NOAA to conduct impactful research that will improve the nation's ability to effectively manage water resources given climate variability and change. [Learn more](#)

Students Partner with State Environmental Quality Board



In 2021, UMN Institute on the Environment and UMN Morris partnered with the State of Minnesota Environmental Quality Board (EQB) to amplify youth voices in environmental decision making. The team developed the Minnesota Emerging Environmental Leaders (EELs) program with 12 college students from across the state and co-developed a program including a conversation with state environmental leaders. [Learn more](#)

Highlights: Land Ecosystems

Sustainable use of and relationship with terrestrial ecosystems is critical to our future prosperity. The Earth's biodiversity is declining at an alarming rate, agriculture has significant land use and emissions impacts, and human encroachment on wild areas can be a factor in zoonotic diseases. The University is partnering with businesses and communities to develop and deploy solutions to these challenges.

Global Problem with Local Solutions



Crookston's Sustainability Coordinator, Katy Chapman, and Lindsay Peace (NW Research & Outreach Center) secured a grant from the MN Department of Agriculture on Farming Practices for Improved Soil Health. The scope was to find more sustainable agricultural practices while improving soil health and longevity to make soil more viable and improve the food being harvested. [Learn more](#)

Morris and Stevens County Partner on Composting Program



UMN Morris, the city of Morris, and Stevens County partnered to launch a new county wide composting program. Last year, UMN Morris reached a goal of one million pounds of organic material diverted from the landfill. Now, UMN Morris alum Sydney Bauer, '19, coordinates the program on behalf of Stevens County. UMN Morris' composting program has been a model for other organizations across the state. [Learn more](#)

School of Public Health Recognized for Sustainability in Curriculum



The UMN School of Public Health is recognized for sustainability in the healthcare management curriculum, which focuses on connections between the effects of climate change and human health and how to respond. Creating sustainable policies and practices in healthcare organizations can make a big difference in improving the health of our environments and communities. [Learn more](#)

New Program in Childhood Nature Studies



UMD Professor Julie Ernst's research suggests that nature preschools support children's curiosity, creativity, empathy, and resilience. The Childhood Nature Studies program was created with a unique lens, geared toward creating socially just and ecologically sustainable communities. Supporting children's curiosity, creativity, empathy, and resilience is key for building a healthy future. [Learn more](#)

Highlights: Equity and Partnerships

Sustainability is about more than the environment. The wellbeing of people and communities is central to the work of sustainability, and data shows that people of color and the poor are more likely to be subject to environmental harms. Equity, inclusion, and anti-racism is vital to the University's sustainability work.

Crookston Launches Transdisciplinary Engagements with Contemporary Indigenous Thinkers



Courtesy of gwenwesterman.com

UMN Crookston launched the "Transdisciplinary Engagements with Contemporary Indigenous Thinkers" program that includes a series of events, activities, and discussions to showcase Indigenous culture and the environment. The insights that come from Indigenous thinking are valuable across a number of disciplines. This program helps to respect and raise awareness of Indigenous cultures and create spaces for Indigenous writers, thinkers, and students. [Learn more](#)

Community Heating Feasibility Study Funded by RSDP and CURA



The Lower Sioux Indian Community Housing Authority partnered with Southwest Regional Sustainable Development Partnership (RSDP), Clean Energy Resource Teams (CERTs), and the Center for Urban and Regional Affairs (CURA) to study community heating options, in order to consider environmentally friendly and economical alternatives. The project clarified the costs, benefits and overall feasibility of equipping homes with air source heat pumps as compared to extending a natural gas line.

Sowing Seeds of Change



Graduate student Tiffany LaShae, along with other colleagues, led a daylong Farmers Against Racism workshop. The workshop educated people on the violent and traumatic history of agriculture in the US and the stark reality that only 2% of farmers in the US are Black. LaShae aims to support the success of BIPOC communities in the agriculture industry. She plans to continue leading antiracism workshops in the predominantly white spaces of agriculture and higher education while uplifting BIPOC farmers and stewards of the land. [Learn more](#)

Diversifying the Conversation on Clean Energy Leadership



In 2022, UMN Morris and University of Minnesota Clean Energy Resource Teams (CERTs) launched a clean energy curriculum for students. Throughout the spring semester, the partnership engaged a student cohort with a range of clean energy professionals. The team also learned about clean energy in the Morris community, including a tour of Morris Public Library which utilizes geothermal energy and a solar rooftop array. [Learn more](#)

Highlights: Student Success

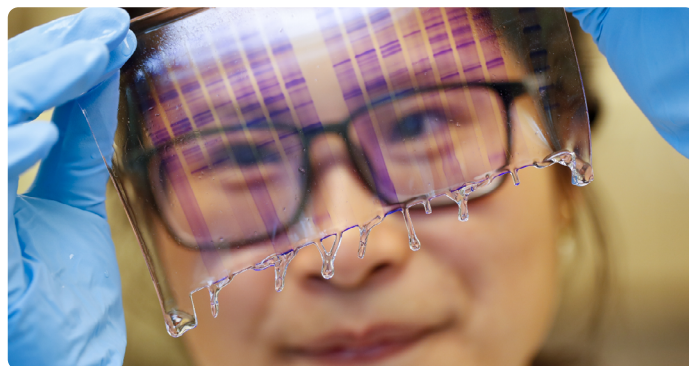
As demonstrated in the examples above, many students are pursuing degrees, conducting research, and participating in projects related to sustainability. They are also deeply passionate about sustainability and are using their collective voice to champion swifter and bolder action on and off campus.

Buckthorn Removal Project Makes Way for Rain Garden and Pollinator Park



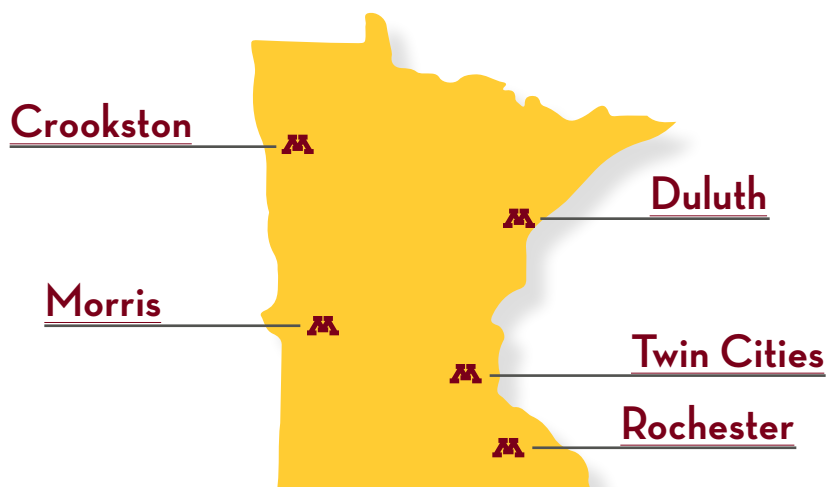
University of Minnesota Duluth students worked to remove the harmful invasive species buckthorn to make room for a rain garden and pollinator park, recognizing how the pollinator park will align with UMD's new Climate Action Plan. Emma Johnson, Environmental Science student, noted the importance of taking the knowledge and skills acquired in the classroom and applying those tools to create a meaningful change in this world. [Learn more](#)

The Next Generation of Plant-Based Ingredients



As our society becomes more health conscious and concerned with the environment, plant proteins are gaining popularity. The UMN Plant Protein Innovation Center (PPIC) focuses on challenges and opportunities identified by the food industry while also addressing global concerns about sustainable food production. The challenge is making plant proteins behave the way consumers are used to with meat products. The students and researchers at PPIC are driving innovation in the field. [Learn more](#)

LEARN MORE ABOUT SUSTAINABILITY



[Institute on the Environment](#)

[Extension/RSDP](#)

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