GREAT LAKES-ST. LAWRENCE RIVER BASIN WATER RESOURCES COMPACT
WATER CONSERVATION AND EFFICIENCY PROGRAM ANNUAL ASSESSMENT

State of Michigan
November 23, 2026

This Water Conservation and Efficiency Program Annual Assessment fulfills Michigan's obligation under Section 4.2.2 of the Great Lakes-St. Lawrence River Basin Water Resources Compact (Compact).

LEAD AGENCY AND OFFICE CONTACTS

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) Water Use Program is the lead agency responsible for Michigan's water conservation and efficiency program.

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STATUS OF MICHIGAN'S WATER CONSERVATION AND EFFICIENCY 2026 GOALS AND OBJECTIVES

Michigan adopted water conservation and efficiency goals and objectives that are consistent with the Basin-wide goals and objectives. These goals and objectives were developed by the former Water Resources Conservation Advisory Council, a stakeholder forum of executive and legislative appointees that was established for collaborative study, evaluation, and advisement for Michigan's water management and water conservation and efficiency programs. Michigan's water conservation and efficiency goals and objectives continue to be met through the water conservation and efficiency program that was initiated with the adoption of the Compact.

The Water Use Advisory Council (WUAC), established under Part 328, Aquifer Protection, of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, continues to play an integral part in Michigan's water management and water conservation and efficiency program. It provides a platform for raising water withdrawal related issues and establishes an integrated framework of roles and responsibilities for all stakeholders in managing Michigan's water resources. The

WUAC collaboratively studies, evaluates, and provides advice regarding Michigan's water management, conservation, and efficiency programs. It also assists on technical issues, implementation, and monitoring overall progress of Michigan's water use program. The WUAC creates opportunities for the public, university researchers, industry professionals, advocacy groups, and other interested parties to be involved and to work directly with state agencies to set policy and shape the program's direction. This promotes better understanding and cooperation to the benefit of the program and results in shared investment in the management and sustainability of Michigan's streams, lakes, wetlands, and groundwater.

The WUAC is charged to report biennially to the Michigan Legislature, EGLE, the Michigan Department of Natural Resources (DNR), and the Michigan Department of Agriculture and Rural Development (MDARD). The WUAC will release its next report to the legislature in December 2026. The Council's recommendations have the potential to advance and improve data collection, modeling, research, and refine administration of the water withdrawal assessment process and Michigan's water conservation and efficiency program. They will also benefit many other state water management issues.

In addition to the WUAC's work, Michigan is focused on the impacts of climate change, including building resilience, reducing Michigan's carbon footprint, and addressing ageing water infrastructure. Many of the initiatives undertaken for water conservation also have the potential to reduce energy consumption and therefore have an impact on achieving the goals set forth by the MI Healthy Climate Plan.

The Clean Water State Revolving Fund continues to provide a revolving financing source for statewide wastewater and stormwater infrastructure as well as nonpoint source pollution control needs while protecting the environmental health of surface and ground water across the State. The Drinking Water State Revolving Fund continues to assist public water systems in financing the costs of replacement and repair of drinking water infrastructure to protect public health and achieve or maintain compliance with regulatory requirements. The state of Michigan invested over $815 million in local communities through these programs in fiscal year 2026.

Michigan also continues to implement the Michigan Water Strategy, an all-inclusive vision and blueprint to ensure Michigan's water resources continue to support healthy ecosystems, communities, and economies for current and future generations.

WATER CONSERVATION AND EFFICIENCY PROGRAM OVERVIEW

Michigan's water conservation and efficiency program is founded on the water withdrawal assessment requirement that applies to all new or increased large quantity withdrawals (LQW). The assessment process evaluates proposed water withdrawals relative to the environmental impact standards set for conserving and protecting the water resources of the Great Lakes Basin.[1] The likely resource impacts of a proposed withdrawal must meet the environmental impact standard and be authorized by EGLE before the withdrawal can begin.[2] If the withdrawal is likely to exceed the environmental impact standards, the applicant must reduce their withdrawal or show by site-specific data and analysis that their withdrawal's impact won't exceed the standard. LQW are cumulatively tracked and accounted for against the environmental standard at a sub-watershed scale, ensuring that the water resources of the basin are conserved even at a small scale.[3]

Michigan's water conservation and efficiency program goes beyond the assessment process to include a comprehensive program of water use management. This program establishes an integrated framework of roles and responsibilities for private and public water users and governmental agencies in managing Michigan's water resources. Further, this framework creates opportunities for involvement by the public (e.g., local committees and volunteer efforts such as stream monitoring); universities (e.g., research and technical assistance); and other interested parties resulting in a latticework of shared investment in the sustainability of Michigan's lakes, streams, and groundwater.

In conjunction with annual water use reporting that is required for LQW, owners are required to review water conservation measures applicable to their water use sector. Implementation of conservation measures is voluntary.[4] In sub-watersheds that are approaching the environmental impact standard, to have a withdrawal approved, an applicant must implement the water conservation measures they deem to be reasonable.[5] For applications greater than two million gallons per day capacity, it is required that all sector or withdrawal-based conservation measures are complied with as a condition of approval.

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[1] Michigan Compiled Laws (MCL) 324.32705
[2] MCL 324.32706b, 324.32706c, 324.32723
[3] MCL 324.32706e
[4] MCL 324.32707, 324.32708
[5] MCL 324.32706c, 325.1004

WATER CONSERVATION AND EFFICIENCY PROGRAM CONSISTENCY WITH REGIONAL OBJECTIVES, AND THE PROMOTION OF ENVIRONMENTALLY SOUND AND ECONOMICALLY FEASIBLE WATER CONSERVATION MEASURES

Compact's Water Conservation and Efficiency Objectives	Summary of Current Efforts
I. Guide programs toward long-term sustainable water use.	• Regulatory framework that requires resource conservation. • Adaptive programs that integrate new data, methods, and policies in response to changing environmental conditions. • Develop centralized comprehensive groundwater database to inform decision-making.
II. Adopt and implement supply and demand management to promote efficient use and conservation of water resources.	• Sub-watershed scale cumulative impact limits for withdrawals. • Notification of nearby water users and local government when limits are approached. • Restrictions on withdrawals when local impact would exceed limits or is unreasonable. • Drinking water infrastructure grants and loans to communities involving water main work, service line replacements, plant enhancements, and other upgrades. • Continue offering technical assistance to small and medium businesses in Michigan in the manufacturing sector with energy and sustainability assessments.
III. Improve monitoring and standardize data reporting within water conservation and efficiency programs.	• Outreach efforts continue with property owners, well drillers, and other interested parties to increase awareness of Part 327's requirements and increase compliance. • Continue asset management planning initiatives.
IV. Develop science, technology, and research.	• Ongoing state/federal glacial geology mapping partnerships. • Optimizing groundwater and stream gage networks through state-wide analysis of monitoring sites and program goals in collaboration with the United States Geological Survey (USGS). • Funded research study to identify innovations and technological advancements in water conservation and efficiency best management practices for business and industry sectors.

Compact's Water Conservation and Efficiency Objectives	Summary of Current Efforts
V. Develop education programs and information sharing for all water users.	• Provide public access to tools and data used by the Water Withdrawal Assessment Tool (WWAT) to increase collaborative regulatory decision making. • Water use data published in media outlets. • Integrated assessments provide on-site, direct assistance services to help businesses and communities to meet their sustainability goals. • Completed program implementation to build capacity to deliver existing education programs and trainings on water efficiency for the agricultural sector including animal industries. • Annual agriculture irrigation practices workshops. • Began implementation of a mobile lab pilot program to replace center pivot systems with water efficient equipment and track changes to agricultural output. • Michigan Water School is available as online modules to educate and train local appointed and elected officials on water management. • Hosted annual Great Lakes Freshwater Week and World Lake Day to celebrate water resources, raise awareness of the wellness benefits of water and encourage Michigan residents to experience water, become educated about water resources, take action to become water stewards, and promote water workforce development. • Partnered with the United States Environmental Protection Agency's (EPA) WaterSense Program and hosted Fix a Leak Week. • Implement Phase 3 of the From Students to Stewards Initiative additional Great Lakes Restoration Initiative (GLRI) funding. This phase provides funding opportunities for student-led, community-based water stewardship projects that address local issues and reimburses field trip expenses for hands-on water-based learning experiences to Michigan freshwater ecosystems. This work also includes developing, sharing, and annually updating a comprehensive, web-based freshwater education program database.

I. Guide programs toward long-term sustainable water use

Michigan continues to guide programs toward long-term water sustainability through the implementation of its water withdrawal assessment program. Michigan's LQW assessment process, environmental impact standard, and cumulative impact tracking system have effected significant changes in the planning and development of LQW. This process has driven the integration of long-term sustainable water use concepts into water management decisions and has raised the awareness of water use and resource impact implications. The LQW assessment process is designed to be adaptive and able to respond to changing environmental conditions. Additional hydrologic data is continually being collected and combined with refined models to inform LQW assessment methods and policies to support better decision making and ensure long-term sustainable water use.

Additionally, the WUAC works collaboratively to continuously assess and improve the program based on new science, data, advancements in modeling, and new technology. The WUAC created the Water Conservation and Efficiency Committee (WCEC) as a standing committee under the WUAC. The WCEC advises and makes recommendations to the WUAC on opportunities to improve and enhance Michigan's water conservation and efficiency program and support sustainable water use. The WCEC is working with state, academic, industry, and utility partners on projects and programs that advance water conservation and efficiency within Michigan's water sectors through best practices, improve public education on Great Lakes water conservation, and account for and measure water and energy savings from water infrastructure improvements.

In addition, EGLE is building more capacity to deliver existing education programs and training on water efficiency for the agricultural sector including animal industries. Funding appropriated by Michigan's Legislature to support implementation of the 2020 WUAC recommendations has provided support for two educators that were hired in 2024 through a contract between EGLE, MDARD, and Michigan State University (MSU) Extension. The educators conducted a needs assessment with agricultural irrigators and are providing education through various methods tailored to the local needs (phone app, newsletter, content in Spanish, etc.). The Legislature appropriated funds to implement the 2022 WUAC recommendations in the fiscal year 2024 budget. With this funding, EGLE and MSU Extension started work in 2025 on a pilot program to evaluate and retrofit existing irrigation systems to improve water and energy efficiency. The program includes on-farm demonstrations, evaluating and retrofitting existing irrigation systems, measuring the improved water, energy use, and crop yield efficiency, and estimating the potential reduction of greenhouse gas emission and cost savings (more details and data below).

II. Adopt and implement supply and demand management to promote efficient use and conservation of water resources

EGLE works with many water users and industry contractors on an individual basis throughout the assessment process to ensure withdrawals are implemented in an efficient manner. This assessment process incorporates both supply-side management of the water resources using a specialized database that tracks cumulative impacts of withdrawals at the sub-watershed level, and demand-side management by notifying all affected water users when withdrawal limits begin to be approached in an area. Michigan's common law reasonable use doctrine is the legal foundation underlying the assessment process and promotes the conservation and efficient use of water in its own way when conveying to water users that water is a shared, finite resource under this doctrine. Users are encouraged to conserve as a matter of routine, as opposed to conserving only when required, such as in the event of a conflict situation when supplies are limited or overtaxed. The LQW assessment process is designed to be adaptive and able to respond to changing environmental conditions.

III. Improve monitoring and standardize data reporting within water conservation and efficiency programs

EGLE and MDARD collect annual water use reporting which includes reporting on water conservation and efficiency best practices. Some water use sectors (e.g., industry, public water supply) have better capabilities for accurate water use reporting since they meter their withdrawals and discharges. Measurement and evaluation of water conservation, water use efficiency, and changes over time remain difficult to track from an agency perspective based on water use reporting data alone. EGLE compliance staff continue to work on a case-by-case basis with property owners, well drillers, consultants, and other interested parties to bring other violations of Part 327 into compliance.

EGLE and the Michigan Department of Technology, Management and Budget (DTMB) have begun work with EarthSoft to adapt its Environmental Quality Information System (EQuIS) database for EGLE's new Groundwater Data Management System (GWDMS). EGLE and DTMB staff are meeting on an ongoing basis with EarthSoft's EQuIS development team. This will be a multi-phase project that will take several years to complete. The initial phase is working to ingest chemical and geologic information to build a foundational dataset, including data migration and replacement of the current Wellogic system. All ~1.2 million water well records from Wellogic were migrated into the GWDMS in February 2026. Full

Wellogic functionality is expected in the GWDMS by Spring 2027. The current Wellogic system will be decommissioned afterwards. Further, the GWDMS will accept data submitted by both EGLE staff and external users (e.g., consultants, regulated parties, researchers) and will eventually house all of EGLE's groundwater-related data. The GWDMS will be linked to a Geographic Information System (GIS) environment to display data, as well as to external databases (e.g., EPA, USGS) so that EGLE can pull data directly from EQuIS for its use in reporting to federal agencies (e.g., EPA, USGS). The GWDMS will allow for standard interpretation of available data to allow regulators to better visualize the environmental and hydrogeological context of a site based off all data available within state databases.

The WUAC's recommendation to create an Integrated Water Management Database (MIWMD) is being implemented. The purpose of the MIWMD is to increase the effectiveness and efficiency of all water-related programs in Michigan by making hydrogeologic data published from external resources such as the USGS easily accessible in a common geospatial format. The MIWMD will eventually be able to interface with other groundwater focused data efforts such as the GWDMS and the Michigan Hydrologic Framework. The MIWMD project was combined with the Michigan Hydrologic Framework project into a single grant project that is being administered by MSU. The Michigan Hydrologic Framework and MIWMD are planned to be released in December 2026.

Other efforts underway to improve data collection include the work of the Michigan Infrastructure Council and the Michigan Water Asset Management Council. Both councils were created in statute to develop and direct implementation of a statewide strategy to standardize and streamline data collection, storage, and analysis related to infrastructure.

The WUAC recommendations are consistent with Michigan's Water Strategy, which also includes a recommendation to create a coordinated strategy for groundwater data collection, including a data management system. Such data is a critical measurement and indicator of the effects of water use and the effects of water conservation and efficiency practices.

IV. Develop science, technology, and research

Michigan is actively developing science, technology, and research on an ongoing basis through the efforts of various projects by state, federal, and academic institutions. Michigan is funding several research projects in high water use areas to better understand the groundwater-surface water interaction and to better

understand Michigan's water resources and water needs both now and in the future. This data will be used to improve the assessment and forecasting of new water uses' impact on the resource through increased use of site-specific data and more localized regional models. Increasing and improving the quality of data is imperative to effectively promote proactive conservation and efficient use to water users before shortage issues occur. Michigan's Quality of Life Agencies (EGLE, MDARD, and the DNR) have been implementing several key research priorities from the WUAC's December 12, 2014, final report including:

- **Michigan Water Resource Availability Studies**: EGLE is partnering with Michigan Geological Survey (MGS) and USGS on multiple projects to map our aquifers to better understand their capacity and distribution throughout the state. Under the Hydrologic Enhancement for Michigan (HEMI) project, EGLE and USGS collaborated on an Airborne Electromagnetic Survey in Spring 2026. The survey covered 16 counties in southwest Michigan. The electrical resistivity data collected from the survey will be used to map subsurface geology and aquifers in southwest Michigan.

- **Evaluating water withdrawal effects and research to improve Michigan's WWAT:** Several projects are underway to develop and improve the WWAT. In September 2025, EGLE released a new WWAT interface using a new depletion estimate analytic solution back end published through a cooperative effort between the USGS and the Wisconsin DNR. The re-released WWAT makes tools used internally accessible to the regulated community. The WWAT also helps provide a visual context for water availability by creating live maps showing current water availability within each regulated water management area alongside publicly available withdrawal information. In January 2026, two additional streamflow depletion tools were added to the WWAT interface, allowing users to select from three different aquifer settings for withdrawal estimations. In February 2027, EGLE's Water Use Reporting tool will be fully incorporated into the WWAT application, creating a singular location within MiLogin for EGLE's assessment and reporting.

  The Michigan legislature appropriated funding to implement two recommended projects from the 2024 WUAC report. In the first project, referred to as "Conduct downstream accounting research", DNR Fisheries Division, MSU, and MSU-USGS Cooperative Research Unit are working together to assess changes in habitat in low-flow conditions in rivers monitored by streamflow gages throughout Michigan and to evaluate the effects of water withdrawals at local and catchment scales while controlling for long-term changes in precipitation, climate, and land

use. The team conducted an investigation of streamflow gages to identify those that meet analytical criteria. At each gage, annual low flow metrics were calculated and temporal trends in low flows were quantified for the time period of 1951-2025. Trends in annual and summer precipitation over the same time period were also quantified. The team prepared additional landscape variables related to water use, climate, land cover, surficial geology, aquifer properties, and tile drainage for use in the next phases of the analysis.

The second, entitled “Evaluate downstream streamflow depletion effects through a stream network,” is an USGS-led modelling analysis to better understand how water withdrawal effects either propagate or are attenuated downstream in a stream’s drainage network. The evaluation of transitional probability as an estimation tool for hydrogeologic interpretation of quaternary deposits is nearing completion, alongside an update of the statewide estimates of glacial and bedrock aquifer transmissivity and storativity using an expanded and cleaned dataset. All projects are intended to improve the WWAT so it better simulates observed hydrologic processes in Michigan watersheds, more accurately predicts effects of water withdrawals on stream habitats and fish communities, limits adverse effects of permitted water withdrawals on stream fish communities in Michigan, improves geostatistical estimates of aquifer capacity in three dimensions, and provides up-to-date aquifer property estimates used daily within, the WWAT.

- **USGS Monitoring Partnerships:** EGLE and USGS continue a joint funding agreement for operating stream gages and monitoring wells, as well as collecting miscellaneous stream flow measurements, including monitoring of the nested wells located in Hillsdale County, Michigan, within the predicted zone of influence for AquaBounty’s aquaculture well field in Pioneer, Ohio. Recent collaboration between USGS and EGLE include the HEMI Study, which is focused on optimizing the state-wide groundwater monitoring well and stream gage networks, collecting aerial electromagnetic data for southwest Michigan, and completing a regional-scale groundwater flow model which will cover the area extending from Jackson to Berrien to Mecosta counties.

  As part of a federal grant from USGS, EGLE became a new data provider to the USGS’ National Ground Water Monitoring Network (NGWMN) in 2025. This was a three-year grant where EGLE identified unimpacted monitoring wells to be added to the NGWMN, created a web service using an ArcGIS Rest API to share data with the NGWMN, and collected groundwater elevation data. When the GWMDS is developed, it will be linked to the NGWMN. As of October 2026,

EGLE contributes data from 17 wells to the NGWMN. In addition to becoming a new data provider to the NGWMN, EGLE is working to develop a statewide groundwater monitoring network. EGLE has identified an additional 212 pre-existing wells that can be added to a statewide groundwater monitoring network. EGLE hired a contractor to rehabilitate the 212 wells. This work will continue through 2029. As wells are rehabilitated, EGLE will begin collecting and publishing water level measurements.

- **Geologic and Groundwater Research:** A $3 million appropriation enabled the MGS in fiscal year 2023 to establish a statewide geologic mapping program and rebuild the scientific and technical capacity needed to serve Michigan. This investment supports the people, equipment, facilities, and data systems required to investigate how Michigan's geology controls the location, quantity, and quality of groundwater. It also provides required matching funds for eligible federal projects. Through the USGS STATEMAP program, state contributions are matched dollar for dollar, expanding the geologic information available for Michigan's water-resource decisions. In fiscal year 2026, the appropriation decreased by 10% to $2.7 million, consisting of $400,000 in ongoing support and $2.3 million in one-time funding. For fiscal year 2027, an additional $2.7 million was appropriate to provide one time funding. Long-term sustained funding is still needed to continue statewide geologic mapping and durable scientific and technical capacity.

  During 2026, MGS advanced county-scale mapping and subsurface characterization in Montcalm County. Borings through the complete sequence of glacial deposits to bedrock were completed during the third quarter, and shallow geologic investigations began in September. A monitoring well was also installed at Farnsworth Park in Greenville for the National Ground Water Monitoring Network. The countywide surficial geologic map and standardized digital geodatabase are scheduled for completion by May 1, 2027. MGS also continued developing an interactive map and three-dimensional web application for Muskegon County to make its geologic information easier to explore and use.

  Partnerships with counties are connecting this geologic framework with measurements of groundwater conditions. In Allegan County, MGS completed 17 borings, and the County funded construction of groundwater monitoring wells. MGS installed water-level instruments and remote telemetry equipment and submitted well information to EGLE for sharing with USGS toward inclusion in the National Ground Water Monitoring Network. These efforts will provide measurements needed to identify seasonal changes and longer-term

groundwater trends. In Ottawa County, MGS conducted gamma logging in five monitoring wells to better define the depths and thicknesses of geologic layers and improve correlations between wells. MGS also continues to provide scientific expertise through participation on the Ottawa County Groundwater Board.

Fiscal year 2026 STATEMAP funding will support surficial and bedrock mapping in Monroe County, with work planned for 2027. This mapping will improve understanding of aquifers, karst features, and the geologic conditions associated with groundwater concerns, including naturally occurring hydrogen sulfide. The work will provide new subsurface information that complements other water investigations and helps guide further evaluation of groundwater conditions.

Through a separate $5 million, five-year state appropriation, MGS continues mapping Michigan's aggregate resources in coordination with the DNR. By the third quarter of 2026, aggregate resource mapping covered approximately 41% of Michigan's land area, with additional areas in progress. The work incorporates geologic maps, well records, field observations, deposit thickness, and water-table information. Because sand and gravel deposits can also form aquifers and groundwater recharge pathways, these investigations contribute information useful for both resource planning and groundwater protection. MGS also completed its first field season of karst mapping in the Hiawatha National Forest, documenting 202 features across 5,040 acres and improving information about areas where subsurface pathways may increase groundwater vulnerability.

MGS completed the Water Data Gap Analysis under contract with EGLE on September 30, 2026. Building on an assessment of more than 2,400 water-related datasets, the final phase identified options for addressing gaps in geographic coverage, monitoring, geologic characterization, and data accessibility. This work advances earlier WUAC recommendations and provides a basis for selecting future investments according to water-management needs, geographic priorities, and available resources.

The extended Wellogic Triage project also concluded on September 30, 2026. Building on statewide well-record validation and data-entry efforts across all 83 counties, the final phase addressed problem logs and remaining record reviews. Correcting well locations and making previously inaccessible records available improves the information used for geologic mapping, groundwater investigations, withdrawal reviews, and contamination assessments. This work complements the geologic and aquifer information MGS has provided to support Michigan PFAS Action Response Team investigations.

Public education and workforce development remain part of the Survey's service to Michigan. Through September 2026, MGS education and outreach programs reached 13,742 attendees statewide. Activities included the Survey's first participation in the Collaborative Summer Library Program, community presentations, and a September PFAS symposium that brought together 110 participants. Students also contributed to field mapping, geophysical surveys, borehole logging, laboratory investigations, and preparation of repository collections. These experiences develop practical geoscience skills while contributing to the information Michigan needs to understand and manage its groundwater and other natural resources.

V. Develop education programs and information sharing for all water users

Michigan has several new and ongoing outreach and education programs that provide information about water conservation and efficiency and promote water stewardship principles and practices. Efforts are also ongoing to promote water stewardship through effective statewide communication strategies to improve the public's understanding of their impact on water resources and actions and behaviors that support responsible water use.

Presentations, Conferences, Webinars, and Trainings

EGLE and MDARD staff make educational presentations at meetings and various conferences as well as share information upon request, to a variety of interested parties. The WUAC and its subcommittee meetings are open to the public and provide educational opportunities and information sharing for water users and water managers about Michigan's ongoing program implementation. Meeting notes and informational materials from the WUAC proceedings are posted on an EGLE webpage.

EGLE continues to increase public awareness of water use information and access to data by publishing additional water use data online, holding public information meetings, and utilizing various media outlets. In addition, EGLE provides webinars, conferences, training, and information for businesses and industry to support enhanced water conservation and efficiency.

Outreach for Agricultural Irrigators

Two Agricultural Water Use Efficiency Extension educators, together with two existing irrigation specialists, reached more than 3,500 farmers, agricultural professionals, and policymakers through presentations, consultations, and outreach

programs on irrigation management from October 2025 – September 2026. The team also conducted seven hands-on irrigation workshops, providing training on irrigation scheduling, soil moisture monitoring, and irrigation system performance. Extension articles, fact sheets, and educational resources developed through the program received more than 15,000 views, demonstrating strong demand for irrigation education. They wrote 57 MSU Extension News articles, two fact sheets, and published a weekly newsletter during the growing season and another monthly news digest that has grown to over 2,900 subscribers. Nearly 14,750 people visited the Irrigation website (https://www.canr.msu.edu/irrigation/) in the past year, a 141% increase from the previous year. They consulted with over 260 farmers and attended six industry-sponsored outreach events. Evaluation data from 79 participants who responded at programs and field days indicated over 78,600 acres impacted an estimated yield or financial savings of over $633,446. This represents estimated financial impact from about 33% of attendees for these programs.

In addition, the two Agricultural Water Use Efficiency Extension educators conducted a regional needs assessment that engaged 104 stakeholders across Michigan and the Great Lakes region, representing more than 103,000 irrigated acres. Findings revealed (Gradiz et al., 2026) strong interest in adopting data-driven irrigation management practices. While many producers currently rely on weather observations and field experience to guide irrigation decisions, stakeholders expressed a clear need for tools and technical support that can improve water management and operational efficiency. The assessment also demonstrates both a substantial demand for advanced irrigation management and persistent knowledge gaps that cannot be addressed through technology alone. Moreover, stakeholders specifically requested practical, hands-on training on determining when and how much to irrigate, as well as irrigation uniformity testing to maximize system performance.

The two Agricultural Water Use Efficiency Extension educators have actively trained growers and agricultural professionals on using the irrigation scheduling app. Their outreach and training efforts have contributed to the adoption of the app by 433 registered users managing 449 fields across 60,657 acres of cropland in Michigan, including corn, soybeans, vegetables, and fruit crops.

The MSU Mobile Irrigation Lab program completed 20 center pivot irrigation system evaluations across nine Michigan counties. Following each evaluation, participating farmers received a comprehensive report summarizing irrigation system performance, including application uniformity, operating pressure, flow rate, identified sprinkler deficiencies, and recommendations for improving system

efficiency. When producers implemented recommended upgrades, the program conducted follow-up evaluations to quantify the impact of those improvements and document resulting water and energy savings.

Sustained Irrigation Extension programming will accelerate adoption of proven water-saving practices, improve farm profitability, enhance nutrient stewardship, and ensure that producers have the knowledge and support needed to make informed irrigation decisions in an increasingly resource-constrained agricultural environment. A recommendation will be submitted related to this effort.

Fix a Leak Week

EGLE's Office of the Clean Water Public Advocate promotes the EPA's Fix a Leak Week each March. Fixing leaks can save money, energy, and reduce health risks for individuals and communities. During this week, EGLE encourages Michiganders to find and fix household leaks, shares educational and how-to materials, and promotes water conservation resources available to Michigan residents.

Michigan Water School

MSU Institute of Water Research, MSU Extension, and Michigan Sea Grant continue to offer the Michigan Water School now available in an online module series. This program focuses on educating local appointed and elected officials and staff about critical, relevant information needed to understand Michigan's water resources to support sound water management decisions. The program includes modules on water quantity, water quality, water finance and planning, and water policy issues. Topics covered include the Blue Economy, fiscal benefits of water management, incorporating water into local planning and placemaking, resources to help address water problems, and water policy at the federal, tribal, state, and local levels.

From Students to Stewards Initiative

In 2020, EGLE launched an initiative to integrate water literacy principles in K-12 school curriculum, in partnership with the Michigan Departments of Labor and Economic Opportunity, Education, and Natural Resources, along with numerous community partners. This effort, called the From Students to Stewards Initiative, is intended to develop a life-long culture of stewardship by integrating Great Lakes and freshwater literacy principles into standards-based school curricula through place-based, authentic-experience approaches to improve stewardship behavior and provide an engaging context to motivate school performance. This initiative teaches science, technology, engineering, and mathematics concepts using place-based, problem-based, and project-based approaches with a focus on Great Lakes literacy

principles to foster the next generation of water stewards, leaders, skilled workers, and decision makers needed to solve complex water issues in a changing world.

EGLE received additional funding from the EPA GLRI to implement Phase 3 of the From Students to Stewards Initiative from 2024 to 2027. This project builds on the success of previous work funded by the GLRI and state programs. The project will extend learning beyond the classroom by providing a funding opportunity for student-led, community-based water stewardship projects that address local issues; by developing and sharing a comprehensive freshwater education program database that connects teachers, classrooms, and partners to educational programming, community resources, and water-focused career pathways; and by providing funding to cover field trip travel expenses for hands-on Great Lakes learning experiences on and around bodies of water in Michigan. This program has funded 5 grants to support student water stewardship projects in the 2026-2027 school year and is continuing to fund grants to reimburse field trip transportation expenses through the Wheels to Water Program. The Wheels to Water Program has partnered with the Department of Natural Resources' Nature Awaits to assist with transportation costs for student field trips to visit state parks.

Great Lakes and Fresh Water Week

EGLE and its partners hosted the annual Great Lakes and Fresh Water Week (GLFWW) June 6 through June 14, 2026, to celebrate Michigan's water resources, encourage Michigan residents to experience water resources, become educated about water resources, and take action to become water stewards. In 2026, GLFWW focused on how protecting the Great Lakes and our fresh waters sustains us as well as them and published several MI Environment articles highlighting ongoing efforts and opportunities to become a Great Lakes steward and learn more about the Great Lakes. In addition, many Michigan organizations, regional and local units of government, and other community partners hosted events to encourage water stewardship.

World Lake Day

In a late summer complement to GLFWW, Michigan also celebrated the second international World Lake Day to raise awareness of the Great Lakes and their importance and highlight opportunities for Michiganders to help protect and steward these waters on August 27, 2026. On World Lake Day, EGLE participated in the "World Water Day: Many Lakes. One Mission" webinar, sharing powerful lake stories, youth-led action, and science-based solutions across continents and highlighting the importance of lakes in sustaining life, biodiversity, and livelihoods.

EGLE Classroom

Educators, youth, and families can learn about EGLE's work to protect Michigan's air, land, water, and public health and how they can participate through EGLE Classroom. Operated by EGLE's Environmental Education program, EGLE Classroom provides Michigan-based environmental curriculum, free hands-on resources to classrooms, professional development opportunities for educators, and video lessons on Michigan's environment and environmental careers. EGLE Classroom also administers the Michigan Green Schools certification program, holds an annual Earth Day poster contest, recognizes outstanding youth-led stewardship projects through the Environmental Service Award, and hosts an annual Michigan Student Sustainability Summit. To view EGLE's environmental education opportunities or to borrow a hands-on, Great Lakes-focused activity from the Environmental Education Lending Station, visit Michigan.gov/EGLEclassroom and follow #EGLEClassroom on social media.

Direct Assistance for Sustainability

EGLE's Sustainability Section provides a variety of direct assistance services to help businesses and communities meet their sustainability goals. Benefits include efficiency increases and associative cost savings, elimination/minimization of waste streams, conservation of energy and water resources, and mitigation of risks.

EGLE also holds a Sustainability Webinar series promoting sustainability practices targeted toward businesses and industries in the water sector. EGLE continues offering technical assistance to small and medium businesses in Michigan in the manufacturing sector with energy and sustainability assessments.

Forest to Mi Faucet

The DNR leads an initiative called "Forest to Mi Faucet" to showcase connections between forests and drinking water. Twenty conservation groups are helping municipal water utilities implement their source water protection plans and educating woodland owners about relationships between forests and drinking water. The project builds on the national Forests to Faucets spatial analysis of priority watersheds for protecting surface drinking water. The analysis, detailed in an interactive story map, identifies watersheds with potential for forest protection and management to protect surface drinking water.

Forest to Mi Faucet has six components:

1. Help 12+ municipal water utilities implement their source water protection plans.
2. Partners educated 77,490 people in the past four years about connections between forests and their drinking water.
3. Partners planted 125,885 trees in the past four years in urban and rural riparian zones to reduce runoff.
4. Protect high conservation value forests through conservation easements, nature preserves, etc.
5. Ecological restoration of forests for water quality with prescribed fire.
6. Manage all forests better with forest certification and Master Loggers using best management practices.

A long-term goal of Forest to Mi Faucet is to build the foundation for a payment for ecosystem services market where forest owners are compensated for practices that provide clean water. Michigan Forest Association is investing $6.4 million in ~300 forest landowners with its Forest and Water Fund in 15 priority watersheds. Forest to Mi Faucet and the Forest and Water Fund are both funded by the United States Department of Agriculture Forest Service. More information is at Michigan.gov/ForestToMiFaucet.

WATER CONSERVATION AND EFFICIENCY PROGRAM IMPLEMENTATION TIMELINE AND STATUS

All components of Michigan's water conservation and efficiency program have been implemented. The foundation of the program, the water withdrawal assessment process, has been in effect since 2009. Sector-based water conservation measures are required to be reviewed annually by all large water users. Additional state funding resources have recently been allocated to bolster program areas of need. From the beginning, it has been recognized that the program would continually adapt based on new science, data, research, advancements in modeling, and technological innovation to improve and enhance sustainable water use. Michigan has shown a strong commitment to this forward-looking approach, continuing to improve its program, and remains dedicated to the betterment of the program and to upholding the ideals of the Compact.

Michigan is advancing new policies and programs to address climate, energy, and water that will further impact both state and Compact goals. This focus on climate, energy, and water presents new opportunities to identify specific innovative opportunities to improve Michigan's water conservation and efficiency program by building connections

between current and new policies and programs and technological innovations. EGLE and the WUAC WCEC are working collaboratively to identify strategies to integrate water stewardship into climate, energy, and water infrastructure policies and programs, including innovative technologies. These efforts will support the WUAC charge to identify priority recommendations for improvements to Michigan's Water Use Program and Water Conservation and Efficiency Program. In addition, state policies and offices focused on environmental justice and clean water advocacy are improving state program administration and outreach and engagement efforts to address goals of equity, diversity, and inclusion.

Appendix 1 provides a full list of the water conservation and efficiency goals and objectives of Michigan's water conservation and efficiency program.

APPENDIX 1: MICHIGAN WATER CONSERVATION AND EFFICIENCY PROGRAM

Water Conservation and Efficiency Goals and Objectives

Goals

1. Ensuring improvement of the waters and water dependent natural resources;
2. Protecting and restoring the hydrologic and ecosystem integrity of the Basin;
3. Retaining the quantity of surface water and groundwater in the Basin;
4. Ensuring sustainable use of waters of the Basin; and
5. Promoting the efficiency of use and reducing losses and waste of water.

Objectives

1. Utilize Michigan's Water Use Program and Water Withdrawal Assessment Process to guide long-term sustainable water use.
   a. The programs will be adaptive, goal-based, accountable, and measurable.
   b. Continue to develop and implement programs openly and collaboratively, with local stakeholders, Tribes and First Nations, governments, and the public.
   c. Prepare and maintain long-term water demand forecasts.
   d. Develop long-term strategies that incorporate water conservation and efficient water use practices.
   e. Review and build upon existing planning efforts by considering practices and experiences from other jurisdictions.
2. Adopt and implement supply and demand management to promote efficient use and conservation of water resources.
   a. Maximize water use efficiency and minimize waste of water.
   b. Promote appropriate innovative technology for water reuse.
   c. Conserve and manage existing water supplies to prevent or delay the demand for and development of additional supplies.
   d. Provide incentives to encourage efficient water use and conservation.
   e. Consider water conservation and efficiency in the review of proposed new or increased uses.
   f. Promote investment in and maintenance of efficient water infrastructure.
3. Improve monitoring and standardize data reporting among State and Provincial water conservation and efficiency programs.
   a. Improve the measurement and evaluation of water conservation and water use efficiency.
   b. Encourage measures to monitor, account for, and minimize water loss.
   c. Track and report program progress and effectiveness.

4. Develop science, technology, and research.
    a. Encourage the identification and sharing of innovative management practices and state-of-the-art technologies.
    b. Encourage research, development, and implementation of water use and efficiency and water conservation technologies.
    c. Seek a greater understanding of traditional knowledge and practices of Basin First Nations and Tribes.
    d. Strengthen scientific understanding of the linkages between water conservation practices and ecological responses.
5. Develop education programs and information sharing for all water users.
    a. Ensure equitable public access to water conservation and efficiency tools and information.
    b. Inform, educate, and increase awareness regarding water use, conservation, efficiency and the importance of water.
    c. Promote the cost-saving aspect of water conservation and efficiency for both short and long-term economic sustainability.
    d. Share conservation and efficiency experiences, including successes and lessons learned across the Basin.
    e. Enhance and contribute to regional information sharing.
    f. Encourage and increase training opportunities in collaboration with professional or other organizations to increase water conservation and efficiency practices and technological applications.
    g. Ensure that conservation programs are transparent and that information is readily available.
    h. Aid in the development and dissemination of sector-based best management practices and results achieved.
    i. Seek opportunities for the sharing of traditional knowledge and practices of Basin First Nations and Tribes.

APPENDIX 2: LINKS TO MICHIGAN WATER CONSERVATION AND EFFICIENCY DOCUMENTS

Michigan Water Strategy

2020 Water Use Advisory Council Biennial Report to the Michigan Legislature

2022 Water Use Advisory Council Biennial Report to the Michigan Legislature

2024 Water Use Advisory Council Biennial Report to the Michigan Legislature