

WHY STABLE GEOLOGIC FUNDING MATTERS FOR MICHIGAN

Stable funding for the Michigan Geological Survey is foundational infrastructure.

Michigan's decisions on drinking water, infrastructure, energy, mineral, and land use rely on geologic expertise and data that cannot be rapidly rebuilt once lost; keeping and growing access to that information requires \$3M in ongoing state support.

This funding is at risk, limiting the Survey's ability to deliver statewide geologic data and expertise at a time when demand for this information is increasing and Michigan's ability to compete, contribute, and lead nationally is at stake.

At the national level, U.S. resilience and national security priorities are increasingly focused on understanding critical minerals, domestic energy resources, groundwater, and other geologic information essential to food and national security, infrastructure, and economic stability.

WHAT'S AT RISK *Without Stable Funding*



Loss of federal and partner funding opportunities when state matching funds are unavailable. From 2023-2025, MGS was awarded \$12M in federal dollars.



Increased risk to drinking water and public health from incomplete groundwater data.



Outdated geologic information guiding infrastructure, housing, and land-use decisions.



Disruption of long-term projects due to stop-and-start funding cycles.



Loss of public, precompetitive geologic data needed to reduce risk and attract private investment.



Limited scientific support for energy development and climate resilience, including critical minerals and hydrogen.



Permanent loss of geologic samples and data, scientific capacity and institutional knowledge.

WHAT STABLE FUNDING ENABLES



Leverage of federal and partner investments

through reliable state matching funds. Federal agencies have issued more than \$50 million in geologic resource related funding opportunities in 2026.



Protection of drinking water supplies

through improved groundwater understanding supports public health and Michigan's multi-billion-dollar economy.



Production of current, statewide geologic maps

that support infrastructure and land use decisions and delivers an estimated \$7-\$10 return for every \$1 invested.



Certainty allowing sustained commitment

to and uninterrupted completion of large, multi-year projects that reduce risk and protect long-term economic value.



Provision of public, precompetitive geologic data

that lowers risk, attracts private-sector and federal investment, and supports billions of dollars in long-term economic value.



Support for safe energy development & climate resilience, including critical minerals and hydrogen, to build new sectors in Michigan's multi-billion-dollar economy.



Trusted, unbiased science

that preserves geologic data/samples, capacity, and institutional knowledge essential to public safety and an economy fundamentally dependent on Michigan's geologic resources.

THE INVESTMENT GAP

Michigan has already made a \$6M investment in the long-term preservation of geologic samples and data by funding a new geologic repository at Western Michigan University (WMU), with additional \$2M loan from WMU.

However, there is no stable funding to:

- Employ and retain scientists to interpret and apply the data.
- Preserve future geologic samples and data.
- Provide state matching funds required to leverage federal and partner investments.
- Develop proposals to fuel new research funding and economic activity in Michigan.

At \$400,000 ongoing funding, fixed facilities maintenance/lease obligations alone leave virtually no capacity to employ scientists, maintain public data, or acquire new samples.

TIMING MATTERS

PRE-2023: Limited and inconsistent state investment.

2023: First stable funding of \$3M annually; diversified team expertise and digital data access established.

2026 Risk: Funding reduced to \$400,000 annually halts progress before returns are realized.

Without staff and operational support, geologic samples and data cannot be preserved, placing the State's investment at risk. Michigan cannot afford to lose the Survey, the science, or the public data needed to compete in emerging resource, infrastructure, and energy markets.



Scan to learn more



THE MICHIGAN GEOLOGICAL SURVEY PROVIDES AUTHORITY GEOLOGIC DATA, TOOLS, AND EXPERTISE FOR NATURAL RESOURCE DECISIONS

Statutory Authority and State Responsibility

*Michigan law directs the Michigan Geological Survey at Western Michigan University to conduct a comprehensive survey of the State's geologic resources, determine their character and potential uses, and collect and preserve geologic samples and data for public benefit, subject to available facilities and funding.**

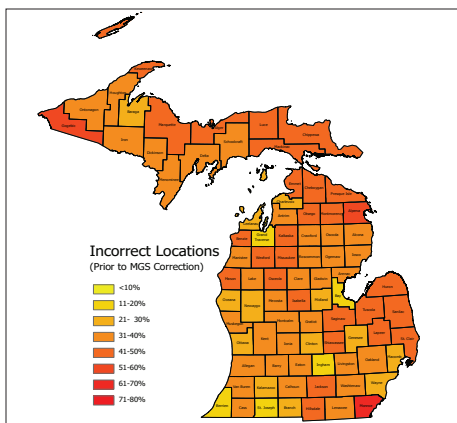
WHERE MGS DIRECTLY SUPPORTS STATE DECISION-MAKING

Drinking Water and Groundwater Protection

Groundwater Data Validation

Statewide correction and validation of water well records.

- ✓ 1.3 million water well records validated and digitized (2019–2025) to support PFAS response and protect public health.
- ✓ Corrected well locations statewide, creating Michigan's first and only reliable groundwater dataset.
- ✓ Enables aquifer mapping, contamination vulnerability assessment, and groundwater–surface water analysis.
- ✓ Supports Great Lakes Compact compliance and large quantity water withdrawal reviews.
- ✓ Informs agricultural irrigation needs and water availability.
- ✓ Reduces risk for water-dependent economic development, including manufacturing, battery plants, and data centers.



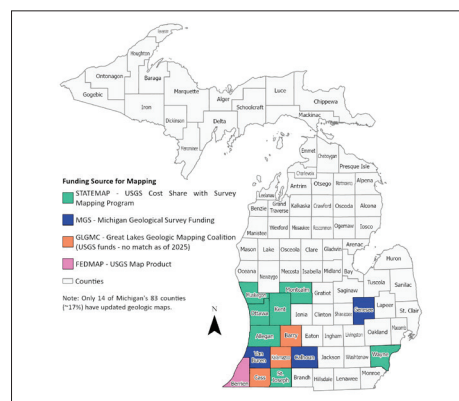
Map shows the percentage of water well locations corrected through the MGS water well validation project, illustrating the scale of historical errors and the value of the validated groundwater dataset supporting statewide decision-making.

Infrastructure and Land-Use Planning

Modern Geologic Mapping

High-resolution mapping using advanced technology to build 3D subsurface models.

- ✓ Modern, high-resolution geologic mapping completed in 14 counties, representing only ~17% of Michigan, leaving most infrastructure and land-use decisions reliant on outdated geologic information.
- ✓ Countywide mapping requires dollar-for-dollar state matching funds to secure federal funding, leveraging state investment to expand coverage.
- ✓ Statewide aggregate resource mapping underway - a \$5 million, five-year state-funded aggregate project, currently halfway complete - to identify both existing and potential construction materials critical for road building.
- ✓ Karst geologic mapping underway in the Hiawatha National Forest, with the U.S. Forest Service and Michigan DNR, to support forest management, groundwater protection, and land-use decisions.
- ✓ Identifies previously unknown groundwater resources, supporting agriculture and water-dependent land use.



Only highlighted counties mapped by MGS at high resolution. Statewide mapping is far from complete.

Energy, Critical Mineral and Resource Security

Geologic Data Preservation

Management of geologic samples and data through expert scientific analysis for long-term public benefit.

- ✓ Advances state and national priorities for critical minerals and energy, including emerging interest in geologic hydrogen under the Governor's Executive Directive.
- ✓ Preserves over 600,000 linear feet of geologic core representing more than a century of industry investment in Michigan—an irreplaceable asset essential to resource evaluation, public health, and safety.
- ✓ Provides the physical data and expertise needed to resolve key questions on hydrogen, energy storage, and subsurface integrity, using preserved core and statewide geologic data.
- ✓ Digitized and photographed thousands of core boxes and geologic samples, making these materials publicly accessible online worldwide for research, education, and workforce development. (*photo below*)
- ✓ Supports critical mineral identification and mine-waste characterization in the Upper Peninsula, assessing legacy mine-waste piles for recoverable minerals and environmental risks.
- ✓ Delivers strong return on investment, converting preserved industry core and expert analysis into federal funding, private investment, and research activity capable of generating billions in long-term economic value for Michigan.



Geologic cores produce resource data.

*Authority: Act No. 167, Public Acts of 2011 (Secs. 60104–60105; effective October 11, 2011).