

Geoscience in Your State: Michigan

Businesses that help the state and the people prosper, make a difference, and improve processes that sustain life and the economy. Understanding the state's values and objectives, its resources, history, and landscape are deeply relevant to social, economic, environmental, health, and development issues.



- 134 species employed in industrial employment
- 76 million people depend on minerals in their lives
- \$2.5 billion value in mineral production in 2017
- Mineral-based businesses, including 11 food & beverage, and 14 chemical, in 193 countries
- \$1.1 trillion/16-22 jobs created in 2017

- 52.6 billion dose of vaccine injected in 2017
- low cost, potent, easy to use and good (cost/benefit)
- to be used in high risk of disease outbreak

- 3.6 billion due to solid waste production in 2017
- to be solid waste control and pollution control
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- 2017

• 130 sec. exp. no. dead exp. in 30'	• 50 min. exp. no. in 30 sec. 30'
• 130 sec. exp. no. dead exp. in 30'	• 10 min. exp. no. in 30 sec. 30'
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| • 130 sec. exp. no. dead exp. in 30' | • 50 min. exp. no. in 30 sec. 30' |
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- 1. [Download the sample project](#)
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Gli studi di riferimento riportano 200 punti
 Compila il questionario presso la TU. Trovi schemi utili a www.NCO.it
<http://www.ncoincosapi.it/ricerca/> | <http://www.ncoincosapi.it/>

- 9,569 geoscience employees (excludes self-employed)¹
- 767 million gallons/day: total groundwater withdrawal³

- \$2.45 billion: value of nonfuel mineral production in 2017⁴
- 36 total disaster declarations, including 11 flood, 8 severe storm, and 6 tornado disasters (1953-2017)⁶
- \$11.8 million: NSF GEO grants awarded in 2017...

Read more in this Geoscience in Your State Factsheet...

Agencies Working on Geoscience Issues in Michigan

Michigan Department of Environment, Great Lakes, and Energy

<https://www.michigan.gov/egle/0,9429,,00.html>

The Department of Environment, Great Lakes, and Energy's mission is to protect Michigan's environment and public health by managing air, water, land, and energy resources.

Michigan Geological Survey

<https://wmich.edu/geologysurvey>

The mission of the Michigan Geological Survey is to facilitate basic and applied geological research to promote the best use of Michigan's geological resources for their social and economic benefits while protecting associated resource values and the environment.

Michigan Office of the Great Lakes

<https://www.michigan.gov/ogl/>

The Office of the Great Lakes was created by the Michigan Legislature in 1985 under the Great Lakes Protection Act. It presently houses the Areas of Concern Program, Coastal Management Program, and the Great Lakes Coordination Program. The Michigan Office of the Great Lakes is a leader in Great Lakes policy development and strategic program implementation to protect, restore, and sustain the Great Lakes watershed. The OGL collaborates with partner organizations to support sustainable use of coastal resources, coordinate restoration of severely degraded areas, manage water quality and quantity, prevent aquatic invasive species, and engage in emerging policy issues. The OGL provides advice and assistance to the Governor's Office and other state offices.

Michigan State Police, Emergency Management and Homeland Security Division

https://www.michigan.gov/msp/0,4643,7-123-72297_60152_66814---,00.html

The Michigan State Police, Emergency Management and Homeland Security Division (MSP/EMHSD) is responsible for coordinating state and federal resources to assist local government in response and relief activities in the event of an emergency or disaster. The division also coordinates homeland security initiatives and various federal grants.

Maps & Visualizations



Interactive database for geologic maps of the United States

U.S. Geological Survey

The U.S. Geological Survey hosts the National Geologic Map Database (NGMDB). This interactive tool serves as a national archive for high-quality, standardized geologic maps created by the U.S. Geological Survey and state geological surveys. The MapView section of the NGMDB displays geologic maps...

Search all Maps & Visualizations [➤](#)

Case Studies & Factsheets

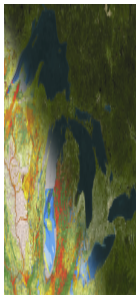


Dry well usage across the United States

Introduction Dry wells improve stormwater drainage and aquifer recharge by providing a fast, direct route for rainwater to drain deep into underlying sediment and rock. Dry wells are most common in the western U.S. where clay or caliche layers slow down the natural drainage of water into underlying...

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Webinars & Forums



Geologic Mapping to Empower Communities: Examples from the Great Lakes

This webinar will introduce geologic mapping in the Great Lakes region, showcase projects from the Great Lakes Geologic Mapping Coalition, and review planning decisions made based on their work. Speakers from the Illinois, Minnesota, and Michigan State Geological Surveys will discuss case...

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