INDIANA GEOLOGICAL & WATER SURVEY
INDIANA UNIVERSITY

HAZARDS | WATER | ENERGY | MINERALS

Geology in the public interest

The Indiana Geological and Water Survey, established in 1837, contributes to the safety and well-being of Indiana residents by educating the public, government, and industry about geologic resources and hazards.

- **Non-regulatory, state-funded research institute housed at Indiana University Bloomington**
- **Collects and preserves geologic specimens (fossils, rock core, minerals, etc.)**
- **Researches and maps geologic resources, hazards, water resources, and energy opportunities**
- **Provides unbiased information and data for the wise stewardship of Indiana's energy, water, and mineral resources and their byproducts**

Learn more at igws.indiana.edu

Mission: The Indiana Geological and Water Survey (IGWS) conducts research, surveys the state, collects and preserves geologic specimens and data, and disseminates information to contribute to the mitigation of geologic hazards and the wise stewardship of the energy, mineral, and water resources of Indiana.

Vision: The IGWS's vision is to be the principal source of geological information about and for Indiana to address local, regional, and global challenges.

Indiana statute 21-47-2
Chapter 2. State Geologist; Geological Survey

Indiana Geological & Water Survey | Indiana University | 1001 E. 10th St, Bloomington, IN 47405-1405
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HAZARDS

A geologic hazard or "geohazard" is a geological condition capable of causing damage or loss of property and/or life. Indiana has been the location of a number of geohazards, including earthquakes, landslides, karst (caves and sinkholes), flooding, radon emissions, mine subsidence, and coastal erosion.

While many geohazards are not life-threatening, they can be costly when not properly recognized and accommodated with land-use management and emergency planning. Geological maps can provide technical assistance in the mitigation of and response to natural hazards. | **igws.indiana.edu/hazards**

Earthquakes **Landslides** **Karst** **Coastal erosion** **Mine subsidence**

WATER

Water constantly moves above and below the Earth's surface in a process known as the hydrologic (water) cycle. Areas of land that drain water to a common outlet are called watersheds. Watersheds gain water through precipitation and lose water through infiltration, surface runoff, and evapotranspiration. The sum of these processes is called a water balance.

Watersheds include streams and lakes on the surface, as well as underground aquifers and groundwater that contribute to those streams. The amount of water available in a watershed–and therefore the amount of water that is available to be used in everyday life–depends upon an area's geology and climate. | **igws.indiana.edu/water**

Aquifers **Groundwater monitoring** **Water quality** **Springs** **Indiana Water Balance Network**

ENERGY

Energy resources are earth materials or elements that can be used as a source of energy. Nonrenewable energy resources, like coal, oil, and gas, come from finite sources; they are commonly called "fossil fuels" because they are formed from the remains of ancient plants and animals. Renewable energy sources, such as geothermal and biomass, are those that are naturally replenished. The study of Indiana's energy resources includes the characterization of mineral fuels and their byproducts and the evaluation of renewable, low-carbon energy technologies. | **igws.indiana.edu/energy**

Carbon sequestration **Oil and gas** **Coal** **Coalbed methane** **Renewables**

MINERALS

If it can't be grown, it must be mined. Indiana is a mineral-rich state that provides millions of tons of raw materials each year to support the state's growth and economy. Nonfuel mineral resources are known as industrial minerals because they are used in numerous industries and in the production of everyday products. | **igws.indiana.edu/mineral**

Indiana limestone **Aggregrate** **Critical minerals** **Rare earth elements**

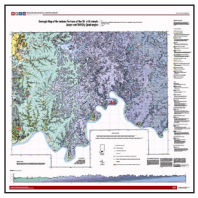
PUBLICATIONS, DATA, AND OUTREACH

Open-access scholarly journal

The *Indiana Journal of Earth Sciences,* launched in 2019, publishes peer-reviewed earth science research about Indiana and the surrounding region. Visit **igws.indiana.edu/IJES.**

Learning Lab museum-classroom

Learners of all ages are welcome to visit the Learning Lab, featuring more than 2,000 geologic specimens for hands-on study and frequent special activities. Start exploring at **igws.indiana.edu/learninglab.**



Maps and publications

Interactive maps, two-dimensional maps, historic and current publications, and geospatial data can be viewed and downloaded from **igws.indiana.edu/maps.**

Digital and physical collections

The IGWS collects and facilitates access to more than 2.1 million objects that are representative of the geology and geologic history of Indiana. Browse at **igws.indiana.edu/collections.**