



UTAH GEOLOGICAL SURVEY

a division of
UTAH DEPARTMENT OF NATURAL RESOURCES

MISSION

Our mission is to provide timely scientific information about Utah's geologic environment, resources, and hazards.

VISION

All Utahns are aware of geologic and energy information and use it to improve their lives.

VALUES

The generation and dissemination of geologic information. Excellence, integrity, and objectivity in everything we do. Responsible stewardship of Utah's geologic and energy resources. Free exchange of ideas and information in a spirit of cooperation. The worth and dignity of individuals. Providing prompt and courteous service to our customers.

EDIA STATEMENT

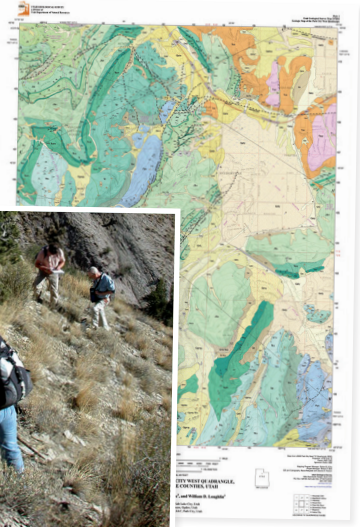
The Utah Geological Survey celebrates and supports equity, diversity, inclusion, and access in the Geosciences. We aim to maintain a safe and inclusive environment for our employees and the public we serve.

GEOLOGIC MAPPING & PALEONTOLOGY

GEOLOGIC MAPPING

We map the geology of the state at various scales and produce high-quality, accurate, digital and print-on-demand maps that describe:

- stratigraphy
- structure
- bedrock and Quaternary (surficial) geology
- geologic hazards
- economic geology
- groundwater resources



Our maps and accompanying materials are used by geologists, government officials, industry representatives, university professors and students, and the public to better understand Utah's geology, delineate and interpret the economic value and potential of property, assess geologic hazards, and make land management decisions.

PALEONTOLOGY

We maintain and publish records of Utah's fossil resources, conduct detailed studies on paleontological resources and provide:

- fossil recovery
- paleontological locality database
- fossil analysis
- permitting for select fossil excavations
- paleontological training program for amateurs through Utah Friends of Paleontology



GROUNDWATER & WETLANDS

GROUNDWATER

We evaluate the quantity and quality of Utah's groundwater resources and conduct multidisciplinary hydrogeologic studies to assess and quantify:

- geologic controls on groundwater conditions
- recharge-to-discharge flow paths
- surface water–groundwater interactions
- groundwater levels
- water-quality issues

Our studies combine aspects of geology, physical hydrology, water chemistry, geophysics and, in some cases, wetland and wildlife ecology.



WETLANDS

We conduct studies to map, inventory, and assess wetlands to determine the location, type, condition, and potential functions of wetlands in the state and develop a base-line of information to evaluate future change.

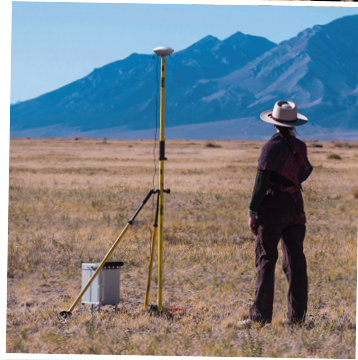
The Wetlands Section developed Utah's wetland program plan with the Utah Division of Water Quality in 2017, a strategic plan to direct the state's efforts in wetland research, protection, and regulation, and many of the actions that the UGS takes follow from the plan.



ENERGY & MINERALS

We provide geologic information to government, industry, and individuals to encourage and aid in the prudent development of the state's mineral and energy resources; operate the Utah Core Research Center; and inventory, document, and research Utah's abundant mineral and energy resources including:

- industrial minerals and metals (including critical minerals)
- geothermal
- CO₂ sequestration opportunities
- oil and natural gas
- unconventional hydrocarbon resources (oil sands, oil shale)
- coal



GEOLOGIC HAZARDS

We focus on reducing Utah's economic, property, and life-safety risk from geologic hazards; respond to geologic hazard emergencies and provide unbiased, scientific advice to local governments and incident commanders; develop small- and large-scale geologic-hazard maps; and perform detailed studies of geologic hazards, including:

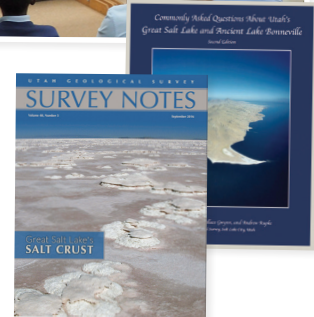
- earthquakes
- liquefaction
- land subsidence
- ground fissures
- shallow groundwater
- radon
- landslides, including debris flows and rockfalls
- problem soils (collapsible soils, expansive soils, etc.)



GEOLOGIC INFORMATION & OUTREACH (GIO)

We increase public awareness of geologic information, and appreciation for how that information can make a difference in the lives of Utah's citizens; and provide timely and accurate information that is easily accessible and available to a broad audience through a wide variety of mediums such as:

- online interactive maps and databases
- technical reports and maps in our formal publication series available as digital files or printed copies
- non-technical publications including the tri-annual UGS newsletter, *Survey Notes*
- social media

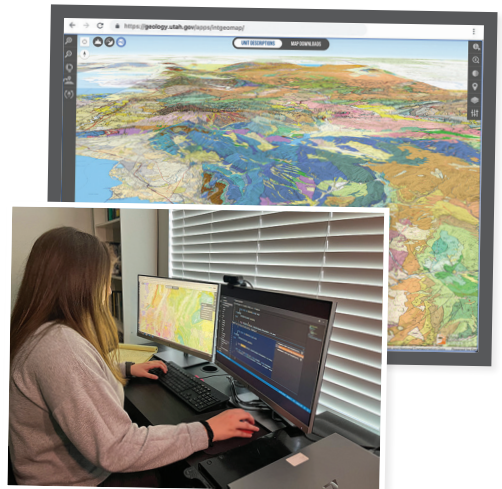


GIO geologists answer public inquiries, participate in community outreach activities, and provide geologic resources to teachers. The GIO Program also operates the Natural Resources Map & Bookstore and UGS Library.

DATA MANAGEMENT

Our Data Management Program provides technical solutions for the UGS's flow of data from the field to the public by ensuring that the data are collected, stored, and delivered in a secure, highly compatible, and efficient manner; and applies new technologies to improve public accessibility to critical geologic information by:

- developing and updating online interactive applications and maps
- organizing, optimizing, and securing the data behind UGS web applications, maps, and websites
- maintaining the UGS website with up-to-date, scientific, and public-friendly information
- assisting other UGS programs on grant-funded projects that include web-related deliverables
- managing all UGS tabular and GIS datasets, resources, and databases



UGS SERVICES

UTAH CORE RESEARCH CENTER (UCRC)

The UCRC serves as a repository and laboratory for Utah well cuttings and core, providing petroleum, coal, and mineral samples for industry and academic research. The collection represents about \$5 billion worth of investment in Utah's natural resources.

GEOLOGIC-HAZARD ASSISTANCE

The Geologic Hazards Program assists governments in responding to geologic-hazard emergencies, reviews geologic-hazard reports for school districts, investigates geologic hazards and prepares geologic-hazard maps for use by local governments, consultants, and the public.

NATURAL RESOURCES MAP & BOOKSTORE

In addition to offering a selection of publications and maps on Utah geology and other natural resource topics, the Bookstore is the only retail outlet that maintains an inventory of topographic maps for the entire state of Utah.

PALEONTOLOGICAL SERVICES

The Paleontology Section evaluates paleontological sites, excavates critical fossils in danger of destruction, and issues paleontological excavation permits.

ENERGY AND MINERAL RESEARCH

Geologists specializing in Utah's various energy and mineral resources provide assessment information to various organizations and land agencies.

WATER RESOURCE/ ENVIRONMENTAL EVALUATIONS

The Groundwater Section evaluates groundwater resources and protects drinking-water supplies by investigating the environmental impacts of waste disposal, storage and treatment facilities for local, state and federal agencies.

PUBLIC INQUIRY

The Geologic Information and Outreach Program provides information on Utah geology and geologic issues to governments, industry, educators and the general public.

UGS LIBRARY

Maintains numerous reference materials on Utah geology. Available to the public for research (by appointment only). <https://geology.utah.gov/library/>

LOCATIONS

UGS SALT LAKE CITY OFFICE

1594 W. North Temple
PO Box 146100
Salt Lake City, UT 84114-6100
Phone: (801) 537-3300
geology.utah.gov

UGS SOUTHERN UTAH REGIONAL OFFICE

646 N. Main Street
Cedar City, UT 84721-5128
Phone: (435) 865-9036
geology.utah.gov/s-utah-regional

UTAH CORE RESEARCH CENTER

240 N. Redwood Road
PO Box 146100
Salt Lake City, UT 84114-6100
Phone: (801) 537-3359
geology.utah.gov/ucrc

NATURAL RESOURCES MAP & BOOKSTORE

1594 W. North Temple
Salt Lake City, UT 84116-3154
Phone: (801) 537-3320 OR (888) UTAH MAP
utahmapstore.com

