Wyoming State Geological Survey

Interpreting the past, providing for the future

Mission

The Wyoming State Geological Survey's mission is to promote the beneficial and environmentally sound use of Wyoming's vast geologic, mineral, and energy resources while helping to protect the public from geologic hazards.

The WSGS has four main areas of research:

Energy resources
Gems and minerals
Water resources
Geologic hazards

Research and Information

Wyoming's geology is fascinating and complex. To help navigate the many facets of the state's geologic processes our team of geologists and GIS specialists produce scientific reports and maps with technical analyses on a wide range of subjects. Many of our reports, maps, images, and data are available on our website for browsing, purchase, or free download.

Public Outreach

Imperative to WSGS' mission is outreach aimed at promoting public awareness, geo-tourism, education, and understanding of Wyoming's geology. Through our scientific contributions, we strive to apprise the public, policy makers, and managers of the state's natural resources and geologic wonders.

(307) 766-2286
Located on the University of Wyoming campus in Laramie

www.wsgs.wyo.gov

Log on to our online store to purchase or download a wide array of publications and maps

Follow us on social media

Our products are the outcome of extensive geologic investigations, field work, and mapping efforts. The knowledge we provide through our reports and maps enables Wyoming's residents, land managers, decision makers, planners, researchers, and industry leaders to work together toward responsible, environmentally sound resource development. We also collaborate with state and federal management agencies and the University of Wyoming.

Energy Resources: Wyoming is an energy leader in oil, natural gas, coal, and uranium production. WSGS geologists investigate the geology of these resources with projects ranging from subsurface stratigraphic models designed to better understand reservoirs and resource availability, to mapping and petrological and geochronological studies of surface analogs.

Gems and Minerals: Wyoming's structural and erosional history, combined with its dry climate, provides some of the best rock exposures worldwide. This makes the state an ideal place to explore for economic minerals, hunt for gemstones, or view diverse rock types and structures, including world-class faults and folds. Minerals found in Wyoming include bentonite, gypsum, diamonds, trona, and jade.

Water Resources: Water resources in Wyoming are renewable but often limited in supply and depend on annual precipitation for replenishment. WSGS hydrogeologists conduct research, compile data, create maps and reports, and provide analyses of groundwater and surface water issues.

Geologic Hazards: Earthquakes, landslides, volcanic eruptions, expansive soils, and windblown deposits are all geologic hazards that occur in the state, and have shaped the extraordinary landscape from the Yellowstone hot spot to the Killpecker sand dunes. Geologists research, compile and analyze data, create hazards maps and reports, and address these geologic hazards to better assist the public, state and federal agencies, as well as local planners.

Map Projects: As part of the WSGS' StateMap Program, geologists spend hundreds of hours every year in the field gathering data to publish maps establishing the geologic framework of areas vital to Wyoming. Recent mapping efforts have also resulted in several online interactive maps, including oil and gas, groundwater, and geochronology.

Fossils: The WSGS serves as a repository for many fossil specimens from around the state, including some of the most rare samples of flora and fauna. Some fossils from our collection are on display at the WSGS office in Laramie and can be borrowed on loan for display in academic and museum settings.

For more information, visit our website: www.wsgs.wyo.gov