

The interactive map component of the Washington State Geologic Information Portal was developed by the Washington State Department of Natural Resources (DNR). The development of this product was a collaborative effort between the Geology and Earth Resources Division and Information Technology Division of DNR.

# The Washington State Geologic Information Portal

## FREQUENTLY ASKED QUESTIONS

### Do I need to understand GIS?

Although Geographic Information System (GIS) experience would be nice, you do not need to be a GIS professional to use the Portal.

### What can I use the Portal for?

Interactive maps have two advantages over paper maps—they access the most current information and allow users to manipulate the data. You can:

- Zoom to a geographic area and specific coordinates
- Find information about rock types and geologic hazards
- Ask questions about an area
- Compare data layers by using a transparency slider tool
- Draw on your map
- Measure a distance or area

### How can it improve my bottom line?

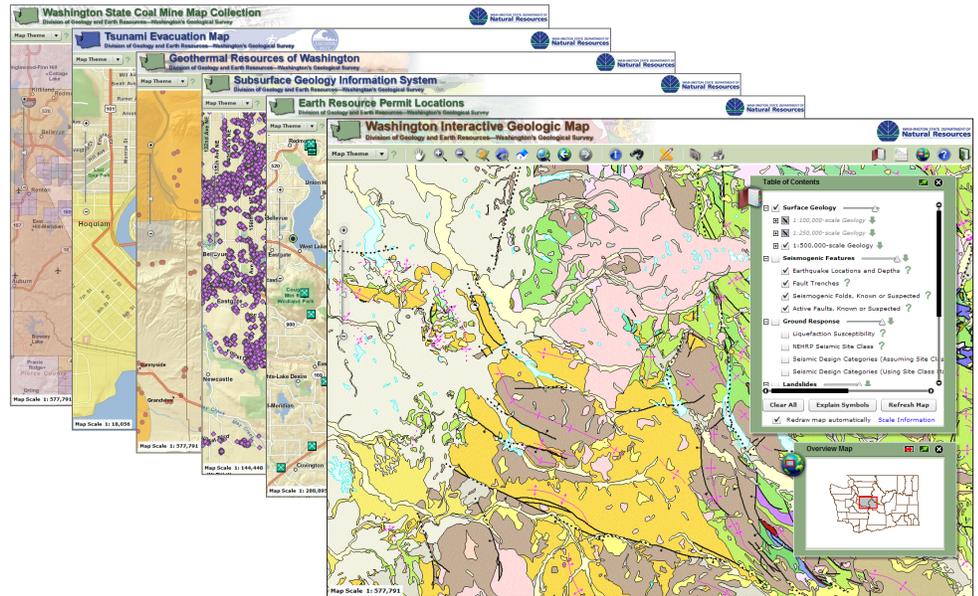
It can improve your efficiency and save you money by enabling you to find the information you need faster and without having to hire outside help. There is a vast amount of data available at your fingertips. What took hours or weeks to find before is now available in minutes.



WASHINGTON STATE DEPARTMENT OF  
**Natural Resources**  
Peter Goldmark - Commissioner of Public Lands

Division of Geology and Earth Resources  
David K. Norman - State Geologist

[www.dnr.wa.gov/](http://www.dnr.wa.gov/)



Access the Geologic Information Portal at [www.dnr.wa.gov/geologyportal](http://www.dnr.wa.gov/geologyportal).

## What the Portal Can Do for You

Users of geoscience data often need the ability to overlay and compare multiple map layers to make informed decisions on issues such as the environment, natural resource protection and exploration, land use, and public or personal safety. Our Portal provides this capability to users in an intuitive way, regardless of geographic information systems (GIS) skills or resources. It was developed to give users the ability to: (1) create custom geoscience maps for online display; (2) use online tools to find out more about individual map features; and (3) download the corresponding geospatial data for their own use if they do have access to a GIS.

This application puts complex geologic and hazards information into the hands of everyone—citizens and community decision-makers as well as scientists and technical professionals—allowing them to quickly compare and synthesize data of different types (geology, hazards, resources, base maps) to help solve a variety of problems.

**BASE MAPS**

- Cities, towns, and roads
- County and 30 x 60-minute and 7.5-minute quadrangle boundaries
- Township, range, and section
- Elevation contours
- Major public and tribal lands
- Aerial photography
- Shaded relief
- USGS topographic maps
- National Geographic World Map
- Bathymetry

**MAP THEMES**

**Interactive Geologic Map** – geologic and geologic hazards mapping:

- Geologic mapping
- Landslides
- Earthquake locations and depths
- Active fault and fold locations
- Liquefaction susceptibility mapping
- Seismic site class and seismic design category mapping
- Geophysical data

**Seismic Scenarios Catalog** – scenario earthquakes on 20 known fault zones in Washington State. Linked PDFs contain earthquake descriptions and damage estimates.

**Natural Hazards** – landslides, earthquakes, tsunamis, and volcanoes

**Tsunami Evacuation Map** – tsunami hazard zones, evacuation routes, and assembly areas—if you live in a tsunami hazard area, you can find evacuation routes and assembly areas near you using the address locator tool.

**Geothermal Resources** – thermal springs, temperature-gradient wells, and geothermal potential models

**Subsurface Geology** – database of subsurface geologic information from geotechnical boring logs throughout Washington

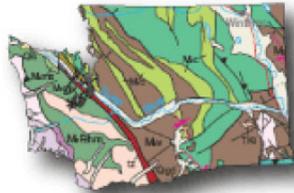
**Earth Resource Permit Locations** –

- Active surface mines
- Oil and gas exploration wells

**Washington State Coal Mine Map Collection** – scanned archival coal mine maps

## The Interactive Web Mapping Application— Make Your Own Map

The interactive map application (<https://fortress.wa.gov/dnr/protectiongis/geology/>) allows you to choose which layers to overlay (for example, compare hazard zones with the underlying geology). The application currently has eight different map themes, each of which can be accessed through the mapping application itself, or the Washington State Geologic Information Portal main page.



**Washington Interactive Geologic Map**  
[Launch] | [About]



**Seismic Scenarios Catalog**  
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**Natural Hazards**  
[Launch] | [About]



**Tsunami Evacuation Map**  
[Launch] | [About]



**Geothermal Resources Of Washington**  
[Launch] | [About]



**Subsurface Geology Information System**  
[Launch] | [About]



**Earth Resource Permit Locations**  
[Launch] | [About]



**Washington State Coal Mine Map Collection**  
[Launch] | [About]

**GEOSCIENCE DATA AND COLLECTIONS**

The Division of Geology and Earth Resources has assembled and maintains a wide range of geoscience data and collections that provide information to improve state and local government planning and help protect people, infrastructure, and other important resources. Geoscience data and collections (such as rock and sediment cores, geophysical data, engineering records, historical coal mine maps, and fossils) are used to discover and develop natural resources, such as geothermal energy, and to determine the availability of a earth material, such as sand and gravel for road building.