Publications of the Washington Geological Survey

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## Washington State Geology News
The Survey now has a blog, called the Washington State Geology News, where we share current events within the Survey, preliminary research findings, exciting geology photography, and recent publication announcements. Once there you can subscribe to receive new blog posts automatically. [ONLINE]

## Washington Geologic Information Portal
The portal allows you to access interactive earth science mapping, data, and related information. Using our interactive maps, you can create, save, and print custom maps, find out more about map features, and download map data for use in a geographic information system (GIS). In addition to a variety of geoscience layers that can be turned on and off, each interactive map has many base layers to choose from, so you can customize your map in any number of ways. [ONLINE]

## Catalog of the Washington Geology Library
Looking for an obscure geologic report? This searchable database of library holdings will help you find it. The Washington Geology library contains more than 40,000 titles on the geology of Washington State, more than 3000 current and historic topographic and geologic maps, a comprehensive set of dissertations and theses, environmental impact statements and watershed analyses, and the National Tsunami Hazard Mitigation Program library collection. There are links to online publications where available. [ONLINE]

## 1:100,000-, 1:250,000-, and 1:500,000-scale Geologic Maps of Washington State
All of our geologic maps are now available through our website on our Publications and Maps page. Scroll down and click on “Geologic Maps”. The maps can also be found on a page-size color map that shows published geologic mapping of 7.5-minute topographic quadrangles in Washington State from all sources. Attached text lists quads alphabetically and by author, with links to online publications. [ONLINE]

## 1:24,000-scale (7.5-minute) Geologic Maps of Washington State
All of our geologic maps are now available through our website on our Publications and Maps page. Scroll down and click on “Geologic Maps”. The maps can also be found on a page-size color map that shows published geologic mapping of 7.5-minute topographic quadrangles in Washington State from all sources. Attached text lists quads alphabetically and by author, with links to online publications. [ONLINE]

## Geoscience GIS Data
A variety of geographic information system (GIS) data is available on our website in ESRI shapefile format, including geologic coverage of the entire state of Washington at scales of 1:24,000, 1:100,000, 1:250,000, and 1:500,000. [ONLINE]

## TsuInfo Alert
TsuInfo Alert is a bi-monthly newsletter that links scientists, emergency responders, and community planners to the latest tsunami research. It is published by WGS for the National Tsunami Hazard Mitigation Program, a state/federal partnership funded through the National Oceanic and Atmospheric Administration. It is made possible by a grant from the Federal Emergency Management Agency via the Washington Military Department Emergency Management Division. [ONLINE]

## Coal Mine Map Collection
Coal has been mined in Washington since 1853. Although current production is from surface mines, nearly all coal produced prior to about 1970 came from underground workings. Since early in this century, Washington State law has required mine operators to submit detailed plans of all underground coal operations to the state on an annual basis. About 1,100 individual maps representing about 230 mines have been scanned and are available electronically. [ONLINE]
Publications are listed by series. This document is searchable using the Acrobat search function. Online publications are indicated by a hyperlink [ONLINE] at the end of the publication description. Where possible, larger files have been broken into parts for ease of downloading [PART 1] [PART 2]. For unusual cases, we have tried to make the link name descriptive enough to distinguish between files. If you need a hard copy of a large-format report, such as a map, and do not have access to a plotter, your local copy center may be able to print it out. Reports marked “Lib. use only” may be viewed in the Survey library in Olympia. All new Survey reports and maps are announced on our website.

**CONTACT US**

Mailing Address
Washington Geological Survey
MS 47007; Olympia, WA  98504-7007
See map for street address
Phone:  360-902-1450; Fax:  360-902-1785
E-mail:  geology@dnr.wa.gov (general services)
         stephanie.earls@dnr.wa.gov (library services)
URL:   www.dnr.wa.gov/geology

Visitors may enter the Natural Resources Building parking lot using the Washington Street entrance. Visitor parking (VP) is on level P1. Follow the signs. There is a fee for parking.

The Survey is across the Rotunda, past the four elevators, on the north side of first floor. See the building directory in the lobby. Sign in at the Information Desk in the Rotunda to get a visitor’s pass.

Staff List
The Survey Staff List has contact information for individual staff.

**PRINTED PUBLICATIONS**

Our publications are no longer for sale as printed documents through the Department of Enterprise Services, but they are available online. If you can’t find what you are looking for in this publications list, search our online library catalog at: [http://www.dnr.wa.gov/programs-and-services/geology/washington-geology-library](http://www.dnr.wa.gov/programs-and-services/geology/washington-geology-library). Printed items are sometimes returned to the Survey and are made available ‘first-come, first-served’. Availability changes often; e-mail stephanie.earls@dnr.wa.gov for current availability.
**Geologic Map (GM) and Map Series (MS)**

Geologic Maps (GMs) and Map Series (MS) publications are geological, geophysical, or derivative maps, with text on the map or in an accompanying pamphlet. The maps are the chief vehicles of communication. They are usually the result of original field investigations or extensive compilation and re-presentation of data in map form. Geologic Maps are peer reviewed and edited to Survey/USGS/major journal standards. Map Series are not peer reviewed, but are still edited to conform to Survey/USGS/major journal standards.

**Report of Investigations (RI)**

A Report of Investigations (RI) conveys the results of significant field investigations, usually by a Survey staff geologist. It may contain a map or maps larger than page size, but the report is chiefly text and page-sized figures and tables. It is usually shorter than a Bulletin and narrower in scope and more restricted in geographic coverage. It is still a thorough and often scholarly presentation that conveys important information and is complete and able to stand on its own. RIs are usually written for a geologic audience. They are peer reviewed and edited to Survey/USGS/major journal standards.

**Information Circular (IC)**

An Information Circular (IC) is a vehicle for all types of geologic or geology-related information, usually in 8½ x 11 in. format. Original field work may be involved but often is not. Instead, the report is usually a compilation of data or historical records, assembled because the information has geologic significance, is needed by a large number of people, or is otherwise unavailable in convenient form. An IC is sometimes written for a geologic audience, but is more often written to be useful to geologists and understandable to the general public. ICs have been catalogs (earthquake hypocenters, oil and gas exploration wells, mining operations, map indexes, theses), road logs, or reports on particular areas. An IC is edited to Survey/USGS/major journal standards, but is not always peer reviewed.

**Topographic Map (TM)**

The only Topographic Maps (TM) issued to date are the 1:250,000 topographic maps prepared by the Survey to serve as base maps for the southwest, northeast, and southeast quadrants of the state geologic map (GM-34, GM-39, and GM-45).
GeMS Geodatabase

The Geologic Map Schema (GeMS) is a standard geospatial coding system for geologic map data. Our GeMS data are distributed as .zip files that contain a geodatabase (.gdb), supporting metadata, and a copy of the associated geologic map. These data can be loaded in a program like ArcGIS or QGIS, allowing a user to create custom maps and perform geospatial analysis with geologic data.
Annual Reports are available online only.

**Washington State Geologist**

Mines and minerals of Washington—Annual report of George A. Bethune, first State Geologist, 1890, by G. A. Bethune. 1891. 122 p. [ONLINE]


**Washington Mining Bureau**

First annual report of the Mining Bureau of the State of Washington, from April 1, 1891 to April 1, 1892. 1892. 46 p., 5 pl. [ONLINE]

**Washington Geological Survey**

Annual Report for 1901; Volume I. 1902. 344 p. [PARTS I-II][PARTS III-VI]

_The chapters are also available separately:_

- Part II. The metalliferous resources of Washington, except iron, by Henry Landes, W. S. Thynge, D. A. Lyon, and Milnor Roberts. 1902. 123 p., 4 pl. [ONLINE]
- Part III. The non-metalliferous resources of Washington, except coal, by Henry Landes. 1902. 55 p., 11 pl. [ONLINE]
- Part V. The water resources of Washington—Potable and mineral water, by H. G. Byers; Artesian water, by C. A. Ruddy; and, Water power, by R. E. Heine. 1902. 37 p., 7 pl. [ONLINE]
- Part VI. Bibliography of the literature referring to the geology of Washington, by Ralph Arnold. 1902. 16 p. [ONLINE]


The biennial report of the Board of Geological Survey of the State of Washington for the term 1901-1903. 1903. 7 p. [ONLINE]


The biennial report of the Board of Geological Survey of the State of Washington for the term 1911-13. 1913. 24 p. 3 pl. [ONLINE]

The biennial report of the Board of Geological Survey of the State of Washington for the term 1913-1915. 1915. 31 p. 3 pl. [ONLINE]

The biennial report of the Board of Geological Survey of the State of Washington for the term 1915-1917. 1917. 29 p. 3 pl. [ONLINE]

**Department of Conservation and Development**

First biennial report of the Department of Conservation and Development from April 1, 1921, to September 30, 1922, by Solon Shedd. 1922. 9 p. [ONLINE]


Third biennial report of the Department of Conservation and Development from April 1, 1925, to September 30, 1926, by E. J. Barnes. 1927. 93 p. 2 pl. [ONLINE]

Fourth biennial report of the Department of Conservation and Development from October 1, 1926, to September 30, 1928, by E. J. Barnes. 1928. 75 p. 2 pl. [ONLINE]

Seventh biennial report of the Department of Conservation and Development from October 1, 1932, to September 30, 1934, by E. F. Banker. 1935. 57 p. [ONLINE]

Biennial report of Division of Geology—April 1, 1933, to November 30, 1934, by H. E. Culver. 1935. 14 p. [ONLINE]

Eighth biennial report of the Department of Conservation and Development—October 1, 1934, to September 30, 1936, by J. B. Fink. 1937. 68 p. [ONLINE]

First biennial report of the Division of Mines and Mining, June 1, 1935, to December 31, 1936, by T. B. Hill. 1937. 6 p. [ONLINE]

Summary report of major activities, Division of Geology, for the biennium 1935-37, by H. E. Culver. 1936. 7 p. [ONLINE]

Ninth biennial report of the Department of Conservation and Development—October 1, 1936–September 30, 1938, by J. B. Fink. 1939. 115 p. [ONLINE]

[Second biennial report of the] Division of Mines and Mining, January 1, 1937, to December 31, 1938, by T. B. Hill. 1939. 17 p. [ONLINE]

Tenth biennial report of the Department of Conservation and Development, October 1, 1938–September 30, 1940, by J. B. Fink. 1941. 150 p. [ONLINE]

Third biennial report of the Division of Mines and Mining for the period commencing January 1, 1939 and ending January 1, 1941, by T. B. Hill. 1941. [ONLINE]

Eleventh biennial report of the Department of Conservation and Development—October 1, 1940–September 30, 1942, by Ed Davis. 1943. 54 p. [ONLINE]

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1 We have published under several different names, as our organization and our parent agency have changed significantly since its inception. Former publishing names include the Department of Conservation and Development, the Division of Geology, the Division of Mines and Mining, and the Division of Mines and Geology. In 1965, the Division was made a part of the Department of Natural Resources. In 1973, the Division of Mines and Geology became the Division of Geology and Earth Resources. In 2017, we became the Washington Geological Survey.
Fourth biennial report of the Division of Mines and Mining for the period commencing October 1, 1940 and ending September 30, 1942, by S. L. Glover. 1943. 9 p. [ONLINE]

Twelfth biennial report of the Department of Conservation and Development—October 1, 1942–September 30, 1944, by Ed Davis. 1944. 52 p. [ONLINE]

Fifth biennial report of the Division of Mines and Mining for the period commencing October 1, 1942, and ending September 30, 1944, by S. L. Glover. 1944. 6 p. [ONLINE]

Biennial report no. 1 of the Division of Mines and Geology for the period commencing October 1, 1944 and ending September 30, 1946, by S. L. Glover. 1946. 24 p. [ONLINE]

Biennial report no. 2 of the Division of Mines and Geology for the period commencing October 1, 1946 and ending September 30, 1948; including a report on Washington’s mineral industry, by S. L. Glover. 1948. 28 p. [ONLINE]

Biennial report no. 3 of the Division of Mines and Geology for the period commencing October 1, 1948 and ending September 30, 1950, by S. L. Glover. 1951. 13 p. [ONLINE]

Biennial report no. 4 of the Division of Mines and Geology for the period commencing October 1, 1950 and ending September 30, 1952, by S. L. Glover. 1952. 8 p. [ONLINE]


Biennial report no. 7 of the Division of Mines and Geology for the period commencing July 1, 1956 and ending June 30, 1958, by M. T. Huntting. 1958. 19 p. [ONLINE]

Out of print


Out of print


Out of print


Out of print


Out of print


Out of print

Department of Natural Resources
Division of Geology and Earth Resources


Out of print

The Washington Division of Geology and Earth Resources—Geology in the public interest. 2003. 4 p. [ONLINE]

Out of print

The Washington Division of Geology and Earth Resources—Geology in the public interest. 2005. 4 p. [ONLINE]

Out of print

The Washington Division of Geology and Earth Resources—Geology in the public interest [short version]. 2005. 2 p. [ONLINE]

Out of print

The Washington Division of Geology and Earth Resources—Geology in the public interest. 2009. 4 p. [ONLINE]

Out of print
## Washington Geological Survey

3. The coal fields of King County, by G. W. Evans. 1912. 247 p., 23 pl., 59 figs. [ONLINE] Out of print
5. Part I. Geology and ore deposits of the Myers Creek mining district; Part II. Geology and ore deposits of the Oroville–Nighthawk mining district, by J. B. Umpleby. 1911. 113 p., 3 pl., 5 figs. [ONLINE] Out of print
6. Geology and ore deposits of the Blewett mining district, by C. E. Weaver. 1911. 104 p., 10 pl., 1 fig. [ONLINE] Out of print
7. Geology and ore deposits of the Index mining district, by C. E. Weaver. 1912. 96 p., 7 pl. [ONLINE] Out of print
13. The Tertiary formations of western Washington, by C. E. Weaver. 1916. 327 p., 30 figs., 3 pl. [PART 1] [PART 2] Out of print
16. Geology and ore deposits of the Covanda mining district, by C. E. Weaver. 1913. 87 p., 5 pl., 3 figs. [ONLINE] Out of print
20. The mineral resources of Stevens County, by C. E. Weaver. 1920. 350 p., 20 pl., 14 figs. [PART 1] [PART 2] Out of print
23. The metal mines of Washington, by E. N. Patty. 1921. 366 p., 36 pl., 27 figs. [PART 1] [PART 2] Out of print
26. Underground water supply of the region about White Bluffs and Hanford, by O. P. Jenkins. 1922. 41 p., 3 pl., 1 fig. [ONLINE] Out of print
30. The mineral resources of Washington, with statistics for 1922, by Solon Shedd, with an article on coal and coke by G. W. Evans. 1924. 224 p., 3 figs. [ONLINE] Out of print

### Division of Mines and Geology

38. The place of steam-electric generating stations in the orderly program of electric power development in the


40. Geology of the Bead Lake district, Pend Oreille County, Washington, by M. C. Schroeder. 1952. 57 p., 1 pl.,
6 fgs. [ONLINE]

41. An outline of mining laws of the State of Washington [includes 16 p. supplement], compiled and annotated by
M. H. Van Nuys. 1953. 142 p. [ONLINE]


43. Eocene stratigraphy of the lower Cowlitz River--eastern Willapa Hills area, southwestern Washington, by D. A.
 Henriksen. 1956. 122 p. [ONLINE]

44. Peat resources of Washington, by G. B. Rigg. 1958. 272 p., 1 pl., 263 fgs. [PART 1] [PART 2] [PART 3]


Superseded by the online bibliography.


[PART 2] [PART 3] [PART 4]


50. Geology and mineral deposits of the north half of the Van Zandt quadrangle, Whatcom County, Washington,
by W. S. Moen. 1962. 129 p., 4 pl., 41 fgs. [ONLINE]


52. Limestone resources of western Washington, by W. R. Danner. 1966. 474 p. [PART 1] [PART 2] [PART 3]

1966. 66 p. [ONLINE]

54. Geology and mineral resources of the Kelso–Cathlamet area, Cowlitz and Wahkiakum Counties, Washington, by
V. E. Livingston Jr. 1966. 110 p., 23 fgs. [ONLINE]


[PART 1] [PART 2]

58. Chemical and physical controls for base metal deposition in the Cascade Range of Washington, by A. R. Grant.
1969. 107 p., 33 fgs. [ONLINE]


Superseded by the online bibliography.

60. Cenozoic volcanism in the Cascade Mountains of southern Washington, by W. S. Wise. 1970. 45 p., 1 pl.,
14 fgs. [ONLINE]

61. Lead-zinc deposits in the Kootenay arc, northeastern Washington and adjacent British Columbia, edited by

62. Foraminifera, stratigraphy, and paleoecology of the Quinault Formation, Point Grenville–Raft River coastal area,

63. Geology and mineral resources of King County, Washington, by V. E. Livingston Jr. 1971. 200 p., 6 pl.,
103 fgs. [PART 1, PART 2]

64. Geology and mineral deposits of the Loomis [15-minute] quadrangle, Okanogan County, Washington, by C. D.
[ONLINE]

65. Distribution of copper and other metals in gully sediments of part of Okanogan County, Washington, by
K. F. Fox Jr., and C. D. Rinehart. 1972. 38 p., 4 pl. (pl. 1: 26 x 28 in. color geologic map, scale 1:96,000, with 2
overlays), 10 fgs. [ONLINE]

Division of Geology and Earth Resources

[ONLINE]


68. Geology of the Methow Valley, Okanogan County, Washington, by J. D. Barksdale. 1975. 72 p., 1 pl.,
17 fgs. [ONLINE]


[ONLINE]

71. Geology of parts of Grant, Adams, and Franklin Counties, east-central Washington, by M. J. Grolier and
J. W. Bingham. 1978. 91 p., 33 fgs. [ONLINE]


73. Myers Creek and Wauconda mining districts of northeastern Okanogan County, Washington, by W. S.
Moen. 1980. 96 p., 6 pl., 36 fgs. [ONLINE]


77. Selected papers on the geology of Washington, edited by J. E. Schuster. 1987. 406 p. [PART 1] [PART 2] [PART 3]

78. Engineering geology in Washington, edited by R. W. Galster, chairman. 1989. [2 v.], 1234 p. [VOL 1 PART 1] [VOL 1 PART 2] [VOL 1 PART 3] [VOL 1 PART 4] [VOL 2 PART 1] [VOL 2 PART 2] [VOL 2 PART 3] [VOL 2 PART 4]


80. Regional Geology of Washington State, Raymond Lasmanis and E. S. Cheney, convenors. 1994. 227 p., 136 figs., 18 tables. [PART 1, PART 2]


### DIGITAL DATA SERIES

**Digital Data Series are available only online.**


18. Surface geology, 1:100,000—GIS data, by Washington Division of Geology and Earth Resources. 2016. [ONLINE]


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<th>Digital Data Series are available online only:</th>
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■ DIGITAL REPORTS ■

Digital Reports are available online only.

   Lib. use only
   Superseded by the online bibliography.

   Superseded by the Geologic Information Portal.


■ FACT SHEETS ■

Fact Sheets are available online only.

Geology in the public interest. 2015. 4 p. [ONLINE]
The Washington Geology Library. 2015. 2 p. [ONLINE]
Landslide hazards in Washington state. 2015. 2 p. [ONLINE]
What are landslides and how do they occur? 2015. 2 p. [ONLINE]
Washington State Geologic Information Portal. 2014. 2 p. [ONLINE]

■ FIELD TRIP GUIDES ■

Contact us to see if paper copies are available (see p. 3)

Waterfall loop tour on the historic Columbia River Highway [Oregon] [ONLINE]

■ GeMS GEODATABASES ■

**GEOLOGIC MAPS**

Contact us to see if paper copies are available (see p. 3)

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**Division of Geology**


GM-12. Thickness of unconsolidated sediments, Puget Sound, by W. S. Moen. 1961. One 75 x 50 in. color sheet or two 50 x 40 in. color sheets, scale 1:500,000. [1 SHEET] [SHEET 1 OF 2] [SHEET 2 OF 2] [ONLINE]


GM-14. Preliminary surficial geologic map of the Edmonds and Edmonds West [7.5-minute] quadrangles, Snohomish and King Counties, Washington, by Mackey Smith. 1975. 31 x 24 in. sheet, scale 1:24,000. [ONLINE]


GM-20. Preliminary surficial geologic map of the Mukilteo and Everett [7.5-minute] quadrangles, Snohomish County, Washington, by Mackey Smith. 1976. 35 x 24 in. sheet, scale 1:24,000. [ONLINE]


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**Division of Mines and Geology**

Geologic map of Washington, by M. T. Huntting, W. A. G. Bennett, V. E. Livingstone Jr., and W. S. Moen. 1961. One 75 x 50 in. color sheet or two 50 x 40 in. color sheets, scale 1:500,000. [1 SHEET] [SHEET 1 OF 2] [SHEET 2 OF 2]

GM-1. Preliminary geologic map of the Hobart and Maple Valley [7.5-minute] quadrangles, King County, Washington, by J. D. Vine. 1962. 43 x 36 in. color sheet, scale 1:24,000. [ONLINE]

GM-2. Preliminary geologic map of the Cumberland [7.5-minute] quadrangle, King County, Washington, by H. D. Gower and A. A. Wanek. 1963. 30 x 41 in. color sheet, scale 1:24,000. [ONLINE]


| GEOLOGIC MAPS |

Contact us to see if paper copies are available (see p. 3)

| GM-44. Liquefaction susceptibility for the Sumner 7.5-minute quadrangles, Washington, by J. D. Dragovich and P. T. Pringle, with a section on liquefaction by S. P. Palmer. 1995. 24 x 26 in. color sheet, scale 1:24,000, with 26 p. text. **[ONLINE]** |


GM-63. Geologic map of the Fox Island 7.5-minute quadrangle, Pierce County, Washington, by R. L. Logan, T. J. Walsh, and K. G. Troost. 2006. 33 x 36 in. color sheet, scale 1:24,000. [ONLINE]

GM-64. Geologic map of the Freeland and northern part of the Hansville 7.5-minute quadrangles, Island County, Washington, by Michael Polenz, H. W. Schasse, and B. B. Petersen. 2006. 46 x 36 in. color sheet, scale 1:24,000. [ONLINE]

GM-65. Geologic map of the Vaughn 7.5-minute quadrangle, Pierce and Mason Counties, Washington, by R. L. Logan and T. J. Walsh. 2007. 42 x 36 in. color sheet, scale 1:24,000. [ONLINE]


GM-67. Geologic map of the Fall City 7.5-minute quadrangle, King County, Washington, by J. D. Dragovich, M. L. Anderson, T. J. Walsh, B. L. Johnson, and T. L. Adams. 2007. 42 x 36 in. color sheet, scale 1:24,000, with 16 p. text. [ONLINE]


GM-73  Geologic map of the North Bend 7.5-minute quadrangle, King County, Washington, with a discussion of major faults, folds, and basins in the map area, by J. D. Dragovich, T. J. Walsh, M. L. Anderson, Renate Hartog, S. A. DuFran, Jeff Vervoot, S. A. Williams, Recep Cakir, K. D. Stanton, F. E. Wolff, and D. K. Norman. 2009. 38 x 36 in. color sheet, scale 1:24,000, with 39 p. text. [ONLINE]

GM-74  Geologic map of the Meeks Table and western two-thirds of the Nile 7.5-minute quadrangles, Yakima County, Washington, by P. E. Hammond. 2009. 36 x 38 in. color sheet, scale 1:24,000, with 12 p. text. [ONLINE]

GM-75  Geologic map of the Snoqualmie 7.5-minute quadrangle, King County, Washington, by J. D. Dragovich, H. A. Littke, M. L. Anderson, Renate Hartog, G. R. Wessel, S. A. DuFran, T. J. Walsh, J. H. MacDonald Jr., J. F. Mangano, and Recep Cakir. 2009. Two 42 x 36 in. color sheets, scale 1:24,000. [ONLINE]

GM-76  Geologic map of the Cliffdell and western two-thirds of the Manastash Lake 7.5-minute quadrangles, Yakima and Kittitas Counties, Washington, by P. E. Hammond. 2010. 36 x 48 in. color sheet, scale 1:24,000, with 11 p. text. [ONLINE]

Note:  STATEMAP 7.5-minute quadrangles from 2012 through the present have been published under the new Map Series.
**Division of Geology**

3. State publications in geology, issued by the First State Geologist, 1890-1892, the Washington Geological Survey, 1901-1902, the Division of Geology, 1921—1947, compiled by S. L. Glover. 1937. 5 p. [ONLINE]

**Division of Mines and Mining**

1. Directory of Washington mines 1938, compiled by the Division of Mines and Mining. 1938. 15 p. [ONLINE]
2. Directory of Washington mines, 1939, compiled by the Division of Mines and Mining. 1939. 21 p. [ONLINE]
3. January, 1940, supplement to directory of Washington mines, 1939, compiled by the Division of Mines and Mining. 1940. 3 p. [ONLINE]
4. Preliminary report on strategic metals in Washington, by the Division of Mines and Mining. 1940. 7 p. [ONLINE]
5. Directory of Washington metallic mining properties, by the Division of Mines and Mining. 1940. 72 p. [ONLINE]
6. Summary of information on iron ore deposits of Washington, by the Division of Mines and Mining. 1940. 11 p. [ONLINE]
7. Directory of Washington metallic mining properties, by Division of Mines and Mining. 1941. 74 p. [ONLINE]
9. 1944 directory of Washington mining operations, by S. H. Green. 1944. 36 p. [ONLINE]

**Division of Mines and Geology**

12. 1946 directory of Washington mining operations, by S. H. Green. 1946. 57 p. [ONLINE]
17. 1948 directory of Washington mining operations, by S. H. Green. 1948. 51 p. [ONLINE]
20. 1951 directory of Washington mining operations, by R. H. Stebbins. 1951. 75 p., 2 figs. [ONLINE]
22. Introduction to Washington geology and resources, by C. P. Purdy Jr. 1953. 81 p., 2 figs. [ONLINE]
25. 1956 directory of Washington mining operations, by H. D. Banta. 1956. 88 p., 2 fig. [ONLINE]
27. 1957 directory of Washington mining operations, by V. E. Livingston Jr. 1957. 96 p., 2 figs. [ONLINE]
30. Archeology in Washington, by Bruce Stallard. 1958. 64 p., 1 pl., 34 figs. [ONLINE]
34. 1959 directory of Washington mining operations, by G. W. Thorsen. 1960. 78 p., 2 figs. [ONLINE]
37. 1962 directory of Washington mining operations, by G. W. Thorsen. 1963. 81 p., 2 figs. [ONLINE]
38. A geologic trip along Snoqualmie, Swauk, and Stevens Pass highways, by University of Washington Geology Department staff, revised by V. E. Livingston Jr. 1963. 51 p. [ONLINE]


42. 1964 directory of Washington mining operations, by W. S. Moen and G. W. Thorsen. 1965. 86 p., 3 figs. [ONLINE]


Division of Geology and Earth Resources

50. Energy resources of Washington, by Washington Division of Geology and Earth Resources staff; and others. 1974. 158 p. [ONLINE]


54. A geologic road log over Chinook, White Pass, and Ellensburg to Yakima highways, by N. P. Campbell. 1975. 82 p., figs. [ONLINE]


58. Engineering geologic studies, by Washington Division of Geology and Earth Resources staff; and others. 1976. 40 p. [ONLINE]


61. Annotated guide to sources of information on the geology, minerals, and ground-water resources of the Puget Sound region, Washington, King County section, by W. H. Reichert, with supplemental references by D. D. Dethier. 1978. 63 p., 8 figs. [ONLINE]


Superseded by Information Circular 75.


Superseded by Information Circular 75.


Superseded by the online bibliography.


73. Index to geologic and geophysical mapping of Washington, compiled by C. J. Manson. 1981. 63 p., 10 pl. [ONLINE]
<table>
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<th>INACTIVE AND ABANDONED MINE LANDS</th>
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2023-02  Tsunami hazard maps of the Chehalis, Hoquiam, Willapa, and Wishkah Rivers—Model results from an L1 Mw 9.0 Cascadia subduction zone megathrust earthquake scenario, by Alexander Dolcimascolo, D. W. Ewbank, Corina Allen. 2023. 36 x 42 in. sheet, scales 1:48,000 and 1:166,000. [ONLINE]  Web


2023-06  Geologic map of the Adams Mountain and Hunters 7.5-minute quadrangles, Stevens County, Washington, by A. N. Steely. 2023. 60 x 36 in. sheet, scale 1:24,000, with 56 p. text. [ONLINE]  Web

2024-01  Aggregate resource inventory of Skagit County, Washington, by Rudko, Amy; Steely, A. N., 2024. 62 x 22 in. sheet, scale 1:100,000, with 21 p. text. [ONLINE]  Web
Contact us to see if paper copies are available (see p. 3)


2014-02 Geologic map of the Center 7.5-minute quadrangle, Jefferson County, Washington, by M. P. Polenz, H.O. Gordon, I. J. Hubert, T. A. Contreras, A. I. Patton, Gabriel Legorreta Paulín, and Recep Cakir. 2014. 42 x 36 in. color plate, scale 1:24,000, with 35 p. text. [ONLINE]

2014-03 Geologic map of the Quilcene 7.5-minute quadrangle, Jefferson County, Washington, by T. A. Contreras, A. I. Patton, Gabriel Legorreta Paulín, I. J. Hubert, Recep Cakir, and R. J. Carson. 2014. 42 x 36 in. color plate, scale 1:24,000, with 27 p. text. [ONLINE]


2015-02 Geologic map of the Port Ludlow and southern half of the Hansville 7.5-minute quadrangles, Kitsap and Jefferson Counties, Washington, by Michael Polenz, J. G. Favia, I. J. Hubert, Gabriel Legorreta Paulín, and Recep Cakir. 2015. 42 x 36 in. color plate, scale 1:24,000, with 40 p. text. [ONLINE]

2015-03 Geologic map of the Tacoma 1:100,000-scale quadrangle, Washington, by J. E. Schuster, A. A. Cabibbo, J. F. Schilter, and I. J. Hubert. 2015. 42 x 36 in. color plate, scale 1:100,000, with 31 p. text. [ONLINE]

2016-01 Tsunami hazard maps of the San Juan Islands, Washington—Model results from a Cascadia subduction zone earthquake scenario, by T. J. Walsh, Edison Gica, Diego Arcas, V. V. Titov, and D. W. Eungard. 2016. Four 36 x 36 in. map sheets, scale 1:24,000 and 1:48,000, with 9 p. text. [ONLINE]

Partially superseded by Map Series 2021-01.
Most open-file reports are preliminary and have not been edited or reviewed for conformity with our standards and geologic nomenclature. Those reports marked “Lib. use only” may be inspected in the Division library in Olympia. Those marked “Web only” may be downloaded from the Division website. Where possible, larger files (20MB+) have been broken into parts for ease of downloading [PART 1] [PART 2]. For unusual cases, we have tried to make the link name descriptive enough to distinguish between files. If you need a hard copy of a large format report, such as a map, and do not have access to a plotter, your local copy center may be able to print it out.

Division of Geology


25-0. Geology and resources of the Pasco and Prosser quadrangles, by Solon Shedd. 1925. 125 p., 1 pl. [PART 1] [PART 2] [PART 3]

Division of Mines and Geology


69-0. Compilation of geologic mapping in Washington through 1968—A continuation of Leona Boardman’s guide to geologic mapping in Washington; also, Geologic maps from theses on Washington geology, by W. H. Reichert. 1969. 43 p., 11 maps, scale 1:1,000,000.


69-2. Analyses of stream sediment samples in Washington for copper, molybdenum, lead, and zinc, by W. S. Moen. 1969. 91 p. (including 15 tables), 39 pl., scale 1:125,000. [PART 1] [PART 2] [PART 3] [PART 4] [PART 5] [PART 6] [PART 7] [PART 8] [PART 9]


Division of Geology and Earth Resources

73-1. Preliminary report on the geology of southern Snohomish County, by Gerald Capps, J. D. Simmons, and F. D. Videgar. 1973. 12 p., 1 pl. [PART 1] [PART 2] [PART 3] [PART 4] [PART 5] [PART 6] [PART 7]


73-3. Preliminary geologic map of the southern Cascade Range, by P. E. Hammond. 1973. 5 pl., scales 1:24,000, 1:125,000, 1:500,000. [ONLINE]


73-5. East Wenatchee and vicinity geologic hazard maps, by E. R. Artim. 1973. 9 sheets, scale 1:24,000 [nonreproducible]. [PART 1] [PART 2] [PART 3] [PART 4] [PART 5] [PART 6]


74 Flood hazards of part of Chelan County, Washington, by E. R. Artim. 1974? [no number]. 3 p., 1 pl. [plate missing] [ONLINE]


75-1. Ground water in the Methow Valley, Mazama to Winthrop, by E. R. Artim. 1975. 9 p., 4 pl., scale 1:200. [PART 1] [PART 2]

75-2. Environmental geology of the Parkland–Spanaway area, Washington, by John Battie, Donnella Johnston, and Craig Searls. 1975. 7 sheets, scale 1:24,000. [PART 1] [PART 2]


75-6. Geologic mapping of the Wenatchee area, by R. L. Greesons. 1975. 2 sheets, scale 1:12,000. Also available in hand-colored version. [ORIGINAL] [COLOR 1] [COLOR 2]

75-7. Geologic interpretive map showing areas of unstable slopes, Kitsap County, Washington, by K. L. Othberg. 1975. 5 p., 12 pl., 1 fig., explanation, scale 1:24,000. [PART 1] [PART 2] [PART 3] [PART 4]


75-12. Earthquake hazards of Clark County [Washington], by Mackey Smith. 1975. 2 p., 1 pl., scale 1:63,360. [ONLINE]
Contact us to see if paper copies are available (see p. 3)

75-13. Preliminary geologic map and cross sections with emphasis on Quaternary volcanic rocks, southern Cascade mountains, Washington, by P. E. Hammond. 1975. 1 sheet, scale 1:120,000. [ONLINE]


76-0. Differential settlement hazards of the Kirkland area, Washington, by E. R. Artim. 1976. 1 sheet, scale 1:24,000. [ONLINE]


Superseded by the online bibliography.


76-6. Petrogenesis of the Mount Stuart batholith plutonic equivalent of the high-alumina basalt association, by E. H. Erikson Jr. 1976. 38 p., 2 pl., scale 1:190,000. [ONLINE]


76-11. Geologic map of the Yakima area [Washington], by N. P. Campbell. 1976. 1 sheet, scale 1:24,000. [ONLINE]

76-12. Monitoring of an active fault near Lilliwaup, Mason County, Washington, by K. L. Othberg and J. B. Hall. 1976. 7 p. [ONLINE]


77-3. Whatcom County, Washington, coal reserves, by E. R. Vonheeder. 1977. 3 sheets, scale 1:130,000. [ONLINE]
77-4. Lewis County, Washington, coal resources, by E. R. Vonheeder. 1977. 7 sheets, scale 1:130,000. [ONLINE]
77-5. Cowlitz County, Washington, coal resources, by E. R. Vonheeder. 1977. 2 sheets, scale 1:130,000. [ONLINE]
77-7. Geology, relative slope stability, and flood hazards of the Selah area, Yakima County, Washington, by N. P. Campbell. 1977. 3 sheets, scale 1:24,000. [ONLINE]
77-8. Geology, relative slope stability, and flood hazards of the Snipes Mountain area, Yakima County, Washington, by N. P. Campbell. 1977. 3 sheets, scale 1:24,000. [ONLINE]
77-9. Geologic map of the City of Tacoma, Pierce County, Washington, by Mackey Smith. 1977. 1 sheet, scale 1:24,000. [ONLINE]

Superseded by Information Circular 64.


Superseded by Information Circular 65.


78-1. Kittitas County, Washington, coal reserves, by E. R. Vonheeder. 1978. 6 sheets including 3 maps, scale 1:130,000. [ONLINE]


Superseded by Information Circular 66.

78-5. Skagit County, Washington, coal reserves, by E. R. Vonheeder. 1978. 3 sheets, scale 1:130,000. [ONLINE]


79-2. An assessment of the uranium potential in the Ellensburg Formation, south-central Washington, by P. C. Milne. 1979. 32 p., 4 pl., scale 1:250,000. [PART 1] [PART 2] [PART 3] [PHOTOS]


79-4. Pierce County, Washington, coal reserves, by E. R. Vonheeder. 1979. 5 sheets, scale 1:130,000, including 6 tables. [ONLINE]


80-1. Geology and energy resources of the Roslyn–Cle Elum area, Kittitas County, Washington, by C. W. Walker. 1980. 59 p., 26 pl. [PART 1] [PART 2] [PART 3] [PART 4] [PART 5] [PART 6] [PART 7] Web only

80-2. Preliminary fault map of Washington, by G. B. McLucas. 1980. 5 p., 2 pl., map scales 1:1,000,000 and 1:500,000. [ONLINE] Web only


Note: Also released as Open File Report 81-3, Appendix A.

Note: Chapter IX available separately as Open File Report 80-4; Table 4.1 available separately as OFR 80-11; Appendix A available separately as OFR 80-7; Appendix B available separately as OFR 80-8; Appendix D only available separately as OFR 80-9.


Preliminary geologic framework studies showing the pre-Tertiary Rimrock Lake inlier, southern Washington, by T. J. Walsh. 1983. 1 pl., scale 1:24,000, 4-p. explanation. [ONLINE]


84-3. Geology and coal resources of central King County, Washington, by T. J. Walsh. 1984. 24 p., 3 pl. [ONLINE]


85-3. Geologic maps of the west half of the Toppenish quadrangle, Washington, compiled by T. J. Walsh. 1986. 7 p., 1 pl., scale 1:100,000. [ONLINE]

85-4. Geologic map of the west half of the Yakima quadrangle, Washington, compiled by T. J. Walsh. 1986. 9 p., 1 pl., scale 1:100,000. [ONLINE]


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87-12. Bibliography and index of mineral resources of the U.S. Exclusive Economic Zone west of the Washington State coastline, compiled by V. J. Taken. 1987. 151 p., 1 pl., scale 1:2,000,000. [ONLINE]


Superseded by the online bibliography:

87-17. Geology of the Twisp River–Chelan divide region, North Cascades, Washington, by R. B. Miller. 1987. 12 p., 12 pl., scales 1:100,000 (pl. 1); 1:24,000 (pl. 2-11); cross sections, pl. 12. [PART 1] [PART 2] [PART 3] [PART 4]


88-2. Bibliography of the geology and mineral resources of Ferry County, Washington, 1900–1987, compiled by C. J. Manson. 1988. 54 p. Lib. use only

Superseded by the online bibliography:


88-5. Structural geology along the northwestern Columbia River basalt margin, Washington, by N. P. Campbell. 1988. 108 p., 8 pl. [PART 1] [PART 2] [PART 3] [PART 4]


90-1. Geologic map of the Moses Lake 1:100,000 quadrangle, Washington, compiled by C. W. Gulick. 1990. 9 p., 1 pl., scale 1:100,000. [ONLINE] only

90-2. Geologic map of the Ritzville 1:100,000 quadrangle, Washington, compiled by C. W. Gulick. 1990. 7 p., 1 pl., scale 1:100,000. [ONLINE] only


Superseded by the online bibliography:


90-9. Geologic map of the east half of the Twisp 1:100,000 quadrangle, Washington, compiled by B. B. Bunning. 1990. 52 p., 1 pl., scale 1:100,000. [ONLINE] only


90-16. Geologic map of the Nespelem 1:100,000 quadrangle, Washington, compiled by N. L. Joseph. 1990. 47 p., 1 pl., scale 1:100,000. [ONLINE] Lib. use only

90-17. Geologic map of the Spokane 1:100,000 quadrangle, Washington, compiled by N. L. Joseph. 1990. 29 p., 1 pl., scale 1:100,000. [ONLINE] Lib. use only


Succeeded by the online bibliography.


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Superseded by the online bibliography.


94-1. Bibliography and index of geothermal resources and development in Washington State, with selected general works, compiled by R. A. Christie. 1994. 56 p. Lib. use only


Tsunamis on the Pacific coast of Washington State and adjacent areas—An annotated bibliography and directory, compiled by C. J. Manson. 1994. 18 p. [ONLINE]

Geologic map of the Pullman 1:100,000 quadrangle, Washington–Idaho, compiled by C. W. Gulick. 1994. 22 p., 1 pl., scale 1:100,000. [ONLINE]


Geologic map of the eastern half of the Washington portion of the Goldendale 1:100,000 quadrangle and the Washington portion of the Hermiston 1:100,000 quadrangle, compiled by J. E. Schuster. 1994. 1 sheet, scale 1:100,000, with 17 p. text. [ONLINE]

Geologic map of the eastern half of the Toppenish 1:100,000 quadrangle, Washington, compiled by J. E. Schuster. 1994. 1 sheet, scale 1:100,000, with 15 p. text. [ONLINE]

Low-temperature geothermal resources of Washington, by J. E. Schuster and R. G. Bloomquist. 1994. 58 p., 2 pl., scales 1:1,000,000 and 1:500,000. [ONLINE]

Geologic map of the eastern half of the Yakima 1:100,000 quadrangle, Washington, compiled by J. E. Schuster. 1994. 1 sheet, scale 1:100,000, with 22 p. text. [ONLINE]

Geologic map of the Priest Rapids 1:100,000 quadrangle, Washington, compiled by S. P. Reidel and K. R. Fecht. 1994. 1 sheet, scale 1:100,000, with 22 p. text. [ONLINE]

Geologic map of the Connell 1:100,000 quadrangle, Washington, compiled by C. W. Gulick. 1994. 1 sheet, scale 1:100,000, with 18 p. text. [ONLINE]


Landslide map and inventory, Tilton River–Mineral Creek area, Lewis County, Washington by J. D. Dragovich and M. J. Brunengo. 1995. 165 p., 3 pl., scale 1:36,600. [TEXT] [PLATES]


Geologic map of the west half of the Twisp 1:100,000 quadrangle, Washington, compiled by J. D. Dragovich and D. K. Norman. 1995. 63 p., 1 pl. [ONLINE]


Slope stability analysis of the bluffs along the Washington State Capitol Campus, Olympia, Washington, by W. J. Gerstel. 1996. 6 p. text, 7 appendices, 14 color photos, 1 pl. [ONLINE]


Geologic map of the Pomeroy area, southeastern Washington, compiled by P. R. Hooper and B. A. Gillespie. 1996. 26 p., 1 pl., scale 1:38,520. [ONLINE]


Maps of the surficial geology and depth to bedrock of False Bay, Friday Harbor, Richardson, and Shaw Island 7.5-minute quadrangles, San Juan County, Washington, by D. P. Dethier, D. P. White, and C. M. Brookfield. 1996. 7 p., 2 pl. [ONLINE]

The Miocene to Pliocene Ringold Formation and associated deposits of the ancestral Columbia River system, south-central Washington and north-central Oregon, by K. A. Lindsey. 1996. 45 p., 4 appendices. [ONLINE]


Geologic map of the Mead 7.5-minute quadrangle, Spokane County, Washington, by R. E. Derkey. 1997. 9 p., 2 pl. [ONLINE]


Superseded by the online bibliography.


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2002-1. Tsunami inundation map of the Port Angeles, Washington, area, by T. J. Walsh, E. P. Myers III, and A. M. Baptista. 2002. 48 x 36 in. color sheet, scale 1:24,000. [ONLINE]


2003-5. Geologic map of the Washington portion of the Cape Flattery 1:100,000 quadrangle, by H. W. Schasse. 2003. 45 x 36 in. color sheet, scale 1:100,000. [ONLINE] Web only


Superseded by Map Series 2022-03.


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2005-4. Development of design guidelines for structures that serve as tsunami vertical evacuation sites, by Harry Yeh, Ian Robertson, and Jane Preuss. 2005. 34 p. [ONLINE]

2005-5. Supplement to Geologic Map GM-60, Geologic map of the Timberwolf Mountain 7.5-minute quadrangle, Yakima County, Washington, by P. E. Hammond. 2005. Contains description and location of sample sites by map unit, analyses of samples, $^{40}$Ar/$^{39}$Ar age dates, and $^{40}$Ar/$^{39}$Ar age plateau and inverse isochron diagrams in Microsoft Excel and Adobe PDF formats. [ONLINE]


2007-3. Sand point count and geochemical data in the Fall City and Carnation 7.5-minute quadrangles, King County, Washington, by J. D. Dragovich. 2007. 2 Microsoft Excel files with 6 p. text. [ONLINE]

2007-4. Seismic design category maps for residential construction in Washington, by Recep Cakir and T. J. Walsh. 2007. 2 color sheets, 58 x 36 in., scale 1:500,000. [ONLINE]


2008-4. Geochemical sample analyses of Tertiary and pre-Tertiary volcanic rocks in and around the North Bend 7.5-minute quadrangle, King County, Washington, by J. D. Dragovich and T. J. Walsh. 2008. 1 Microsoft Excel file with 6 p. text. [ONLINE]


Supersedes Open File Report 94-1.

2009-3. Data supplement to GM-74—Geologic map of the Meeks Table and western two-thirds of the Nile 7.5-minute quadrangles, Yakima County, Washington, by P. E. Hammond. 2009. 1 Microsoft Excel file. [ONLINE]


2009-5. Geologic map of the Lake Wooten 7.5-minute quadrangle, Mason County, Washington, by R. E. Derkey, N. J. Hehemann, and Katelin Aldrill. 2009. 35 x 36 in. color sheet, scale 1:24,000. [ONLINE]


Partially superseded by Map Series 2022-03.


2010-4 Geologic map of the Lilliwaup 7.5-minute quadrangle, Mason County, Washington, by T. A. Contreras, Gabriel Legorreta Paulin, J. L. Czajkowski, Michael Polenz, R. L. Logan, R. J. Carson, S. A. Mahan, T. J. Walsh, C. N. Johnson, and R. H. Skov. 2010. 27.5 x 36 in. color sheet, scale 1:24,000, with 13 p. text. [ONLINE]


2013-01 Passive seismic analyses in the Sultan 7.5-Minute quadrangle, King and Snohomish Counties, Washington, by Koichi Hayashi, Recep Cakir, J. D. Dragovich, B. A. Stoker, T. J. Walsh, and H. A. Littke. 2013. 9 p. [ONLINE]


2014-02 Geothermal favorability model of Washington State, by D. E. Boschmann, J. L. Czajkowski, and J. D. Bowman. 2014. 20 p. with 48 x 36 in. color plate, scale 1:900,000. [ONLINE]

2014-03 Tsunami hazard map of Everett, Washington: Model results for magnitude 7.3 and 6.7 Seattle fault earthquakes, by T. J. Walsh, Diego Arcas, V. V. Titov, and C. C. Chamberlin. 2014. 50 x 36 in. color sheet, scale 1:32,000. [ONLINE]

Superseded by Map Series 2022-03.

2014-05 Faults and earthquakes in Washington State, by J. L. Czajkowski and J. D. Bowman. 2014. 36 x 45 color sheet, scale 1:750,000. [ONLINE]


2020-01 Earthquake regional impact analysis for Columbia County, Oregon and Clark County, Washington, by J. M. Bauer, Recep Cakir, Corina Allen, Kate Mickelson, Trevor Contreras, Robert Hairston-Porter, and Yumei Wang. 2020. 93 p. text, 14 plates, 3 Esri file geodatabases. [ONLINE]

Note: STATEMAP 7.5-minute quadrangles from 2012 through the present have been published under the new Map Series.

Division of Mines and Mining

1. Olympic Peninsula manganese, by J. W. Melrose. 1940. 30 p. [ONLINE]

2. Washington iron ores, a summary report, by S. L. Glover. 1942. 23 p. [ONLINE]


4R. Coal and coal mining in Washington, by S. H. Green. 1947. 41 p., 3 figs. [Revision of RI 4.] [ONLINE]

5. Memorandum report on iron ores of the Cle Elum district, Washington, by Carl Zappfie. 1944. 27 p., 2 pl., 5 figs. [ONLINE]


Division of Geology

1. Abstract of the report [by Solon Shedd] on the geology and resources of the Pasco and Prosser quadrangles, by H. E. Culver. 1926. 7 p., 1 pl., 29 x 22 in., scale 1:125,000. [ONLINE]

2. Oil and gas possibilities of western Whatcom County, by S. L. Glover. 1935. 69 p., 1 pl., 1 fig. [ONLINE]

3. A report on a geologic reconnaissance of the St. Helens mining district, Washington, by Everett Hougland. 1935. 4 p., 1 fig., 1 pl., 18 x 19 in. [ONLINE]


6. Inventory of mineral properties in Snohomish County, Washington, by W. A. Broughton. 1942. 64 p., 1 pl. [Accompanied by Index to mineral properties of Snohomish County. 1942. 8 p., tables.] [ONLINE]

7. Character and tonnage of the Turk magnesite deposit, by W. A. G. Bennett. 1943. 22 p., 1 pl., 1 fig. [ONLINE]

8. The Buckhorn iron deposits of Okanogan County, Washington; Results of a magnetic survey, by W. A. Broughton. 1943. 21 p., 1 pl., 4 figs. [ONLINE]


10. The Blewett iron deposit, Chelan County, Washington (with preliminary tonnage estimates), by W. A. Broughton. 1943. 17 p., 1 pl., 2 figs. [ONLINE]


Division of Geology

15. Pumice and pumiceous occurrences of Washington, by Ward Carithers. 1946. 78 p., 6 pl., 7 figs. [ONLINE]


17. Perlite and other volcanic glass occurrences in Washington, by M. T. Huntting. 1949. 32 p. [ONLINE]


21. Stratigraphy of Eocene rocks in a part of King County, Washington, by J. D. Vine. 1962. 20 p., 3 figs. [ONLINE]


Division of Geology and Earth Resources


32. Liquefaction features from a subduction zone earthquake—Preserved examples from the 1964 Alaska earthquake, by T. J. Walsh, R. A. Combellick, and G. L. Black. 1995. 80 p., 75 figs., 3 tables. [ONLINE]


34. Digital landslide inventory for the Cowlitz County urban corridor—Kelso to Woodland (Coweeman River to Lewis River), Cowlitz County, Washington, by K. W. Wegmann. 2003. Consists of a GIS inventory of landslides as ArcView shapefiles, a Microsoft Access database, a Microsoft Excel spreadsheet version of the database, digital photographs of individual landslides, associated metadata, 1:24,000-scale landslide inventory maps for 7.5-minute quadrangles in the inventory area, and 20 p. text. 1 CD-ROM. Superseded by Report of Investigations 35.

35. Digital landslide inventory for the Cowlitz County urban corridor, Washington, by K. W. Wegmann. 2006. Consists of a GIS inventory of landslides as ESRI shapefiles with associated metadata, digital photographs of individual landslides, 1:24,000-scale landslide inventory maps for 7.5-minute quadrangles in the inventory area, and 24 p. text. 1 CD-ROM. [ONLINE]


Washington Geological Survey


41. Landslide inventory of western King County, by K. A. Mickelson, K. E. Jacobacci, T. A. Contreras, W. N. Gallin, and S. L. Slaughter. 2019. 7 p. text and 1 ESRI geodatabase. [ONLINE]  


44. Alluvial fan inventory of Klickitat County, Washington, by K. A. Mickelson, Trent Adams, and Crystal Lambert. 2023. 5 p. text. [ONLINE]  


5. What are the prospects in Washington State?, by F. H. Wurden; and Puget Sound area has several prospective oil and gas basins, by J. Q. Anderson. 1959. 10 p. [ONLINE] 


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TM-1. State of Washington—Southwest quadrant, prepared by Division of Geology and Earth Resources staff. 1987. 1 sheet, scale 1:250,000. [Available rolled (R) or folded (F).] [ONLINE] 

TM-2. State of Washington—Northeast quadrant, prepared by Division of Geology and Earth Resources staff. 1991. 1 sheet, scale 1:250,000. [Available rolled (R) or folded (F).] [ONLINE] 

TM-3. Topographic map, State of Washington—Southeast quadrant, prepared by Division of Geology and Earth Resources staff. 1997. 1 sheet, scale 1:250,000. [Available rolled (R) or folded (F).] [ONLINE] 


### MISCELLANEOUS REPORTS

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<td>Shallow seismic site characterizations at 25 ANSS/PNSN stations and compilation of site-specific data for the entire strong motion network in Washington and Oregon, by Recep Cakir and T. J. Walsh. 2012. 61 p.</td>
<td>[ONLINE]</td>
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<td>Shallow seismic site characterizations at 23 strong-motion station sites in and near Washington State, by Recep Cakir and T. J. Walsh. 2011. 101 p.</td>
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<td>Shallow-seismic site characterizations of near-surface geology at 20 strong-motion stations in Washington State, by Recep Cakir and T. J. Walsh. 2010. 39 p.</td>
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<td>Thunder Creek basin, Skagit County—Report of DNR Study Team, by Jerry Thorsen. 1989. 33 p.</td>
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<td>Introduction to the petroleum geology of the Olympic coast of Washington and adjacent portions of the continental shelf—A road log—Ocean Shores to Kalaloch guidebook, by Washington Division of Geology and Earth Resources staff. 1988. 46 p.</td>
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<td>Notes on division history, by J. E. Schuster. 1986. 9 p.</td>
<td>[ONLINE]</td>
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<td>A pre-1980 eruption description of Mount St. Helens, by the Washington Division of Geology and Earth Resources. 1980. 10 p.</td>
<td>[ONLINE]</td>
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<td>Bibliography of Snohomish County geology, with an index to geologic mapping, by S. J. Simpson. 1979. 81 p., 6 pl.</td>
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<td>Geothermal energy—Questions and answers, by J. E. Schuster. 1972. 4 p.</td>
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<td>Holden tailings [Holden mine, Chelan County], by G. W. Thorsen. 1970. 20 p.</td>
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<td>Landslide of January 1967 which diverted the North Fork of the Stillaguamish River near Hazel [Snohomish County], by G. W. Thorsen. 1970. 8 p.</td>
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<td>Ghost town references, by the State of Washington Board of Natural Resources. 1968? 3 p.</td>
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<td>Mineral resources in the Puget Sound area, by the U.S. Bureau of Mines; Washington Division of Mines and Geology; Washington Department of Natural Resources. 1968. 150 p.</td>
<td>[ONLINE]</td>
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<td>Mining developments and future needs of Washington, by M. T. Huntting. 1965. 6 p.</td>
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<td>State mineral production at all time high in 1964, by M. T. Huntting. 1965? 4 p.</td>
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<td>Mine resource programs—Present and future, by M. T. Huntting. 1964. 3 p.</td>
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<td>Origin of Dry Falls [Grant County], by V. E. Livingston, Jr. 1964. 4 p.</td>
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<td>Tumtum Mountain [Clark County]—A potential source of feldspar, by W. A. G. Bennett. 1964. 5 p.</td>
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<td>Annotated bibliography of Washington clays, by W. H. Reichert. 1963. 19 p.</td>
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Dolomite and andalusite deposits of northern Stevens County, by W. S. Moen and W. A. G. Bennett. 1963. 4 sheets, scale 1:62,500. [ONLINE]


State Department of Conservation has record year [1962], by M. T. Huntting. 1963. 7 p. [ONLINE]

Preliminary report on mineral resources of the Cougar Lake limited area [Yakima County], by W. S. Moen. 1962. 9 p. [ONLINE]


Preliminary surveys for highway salvage archeology in the State of Washington—A final report, by Bruce Stallard. 1958. 23 p. [ONLINE]

Mining in Washington, by C. P. Purdy, Jr. 1953. 3 p. [ONLINE]

Steilacoom gravel, by S. H. Green and M. T. Huntting. 1948. 9 p. [ONLINE]


Preliminary report on the mines and prospects of the upper Methow region, Okanogan and Whatcom Counties, by Ward Carithers. 1946. 40 p. [ONLINE]


Oil and gas studies by the Division of Geology, by S. L. Glover. 1936. 8 p. [ONLINE]

Report of natural resources survey from October 1, 1933, to March 1, 1935, by T. B. Hill. 1935. 30 p. [ONLINE]

Colloidal fuel, by M. C. Butler. 1934. 9 p. [ONLINE]

Mining in the Pacific Northwest, by L. K. Hodges. 1897. 183 p. [ONLINE]
Color Page-Size Geologic Map of Washington
This 8½ x 14 in. map, compiled by J. E. Schuster, includes a brief description of the geologic history of Washington. Scale 1:2,250,000 (or 1 in. ≈ 37 mi). Revised 2021. [ONLINE]

Mining Districts of Washington
A map (circa 1980?) of the named mining districts. This map is not definitive—names have changed over the years. [ONLINE]

Mount St. Helens Slide Sets
Two sets of slides of the eruptions and short descriptions of the scenes are available:
Set 1 contains 20 slides and covers the period from March through June 1980. This slide set was digitally remastered in 2015. [ONLINE]
Set 2 contains 20 slides and covers the period from May 18, 1980, to May 13, 1981. This slide set was digitally remastered in 2015. [ONLINE]
Set 3 contains 16 digitally remastered photographs and slides of the eruption and its aftermath. [ONLINE]

DGER News
DGER News was an electronic-only newsletter about the activities of the Survey. It was published quarterly from 2003 to 2007 and is available in PDF format. [ONLINE]

Washington Geology Journal
Washington Geology was published about four times a year from 1973 to 2002. It is currently on hiatus. All issues are available in PDF format. Articles cover topics of interest to both geologists and the general public. [ONLINE]

GEOLOGY RECREATION AND EDUCATION

Fossil and Mineral Collecting

Geology Resources for Teachers
Selected information about earth science for teachers, including online sources. [ONLINE]

Gold Panning
Information on recreational placer gold mining and mining claims procedures (both state and federal), includes Mining Claims and Sites on Federal Lands, Small Scale Prospecting and Placer Mining in Washington, Boundaries of State-owned Aquatic Lands, Recreational Gold Panning, and the “Gold & Fish” brochure.

REGULATORY INFORMATION

Rules, Regulations and Forms – Surface Mining Reclamation and Oil and Gas Conservation Acts and accompanying rules, regulations, fees, and forms. [ONLINE]

SCENARIO EARTHQUAKES FOR WASHINGTON STATE
Emergency management experts have created a series of reports on seismic zones at risk of a major earthquake in Washington State. These reports discuss the most likely size and type of earthquake and the amount and location of damage expected. The most up-to-date version of these data can be found in our Geologic Hazard Maps page on our website. Reports are available for the following:

- Boulder Creek in Whatcom County (M6.8)
- Canyon River–Saddle Mountain in Mason County (M7.4)
- Cascadia (M9.0)
- Cascadia North (M8.3)
- Chelan (M7.2)
- Cle Elum (M6.8)
- Darrington–Devils Mountain (M7.1)
- Darrington–Devils Mountain West (M7.4)
- Hite in Walla Walla County (M6.8)
- Lake Creek–Boundary Creek in Clallam County (M6.8)
- Mill Creek in Yakima County (M7.1)
- Nisqually (M7.2)
- Olympia (M5.7)
- Saddle Mountain in south-central Washington (M7.4)
- SeaTac (M7.2)
- Seattle (M7.2)
- Latah in Spokane County (M5.5)
- Mount St. Helens (M7.0)
- southern Whidbey Island (M7.4)
- Tacoma (M7.1)

TOPOGRAPHIC INDEXES FOR WASHINGTON STATE
We have scanned our collection of U.S. Geological Survey topographic quadrangle indexes and catalogs for Washington State. Some quadrangle names have changed over the years. These indexes provide a historical record of the evolution of topographic mapping in Washington State. [1996] [1987] [1983] [1982] [1980] [1976] [1974] [1973] [1965] [1960] [1959] [1958] [1957] [1956] [1955] [1953] [1941] [1933] [1914] [1903]

Washington State Historic Topographic Maps—Inventory held by the Washington Geology Library. This is a list of topographic maps by the USGS and Army Map Service at scales of 1:24,000, 1:25,000, 1:62,500, and 1:125,000. The maps themselves are not online, but the inventory will tell you what we have on hand before you make the trip to Olympia. [ONLINE]

You may be able to find scans of historic topographic maps at the USGS Historical Topographic Map Collection at http://nationalmap.gov/historical/

For more information on the topographic mapping of Washington State, see the article in Washington Geology [v. 20, no. 1, p. 41].

HISTORICAL FIELD NOTEBOOK COLLECTION
We have scanned our collection of field notebooks dating back to the first years of the Survey in 1899. This digitized collection includes field notebooks, maps, theses, and other publications that are out-of-print and some that may never have been published. These notebooks document geologic insights and records of mineral resources across Washington State. [ONLINE]
OTHER PUBLICATIONS

Other publications are available online only.

TSUNAMI EVACUATION WALK TIME MAPS
WILDFIRE-ASSOCIATED LANDSLIDE EMERGENCY RESPONSE TEAM (WalERT) REPORTS


Cedar Creek and Cub Creek 2 Fires, Okanogan County, Washington, by Trevor Contreras and Kate Mickelson. 2021. 2 sheets, with 14 p. text. [ONLINE]

Lick Creek and Silcott Fires, Asotin and Garfield Counties, Washington, by Trevor Contreras and Kara Jacobacci. 2021. 3 sheets, with 8 p. text. [ONLINE]


Chuweah Creek Fire, Nespelem Water Tanks, Okanogan County, Washington, by Trevor Contreras. 2021. 8 p. text. [ONLINE]

Bolt Creek, Suiattle River, Boulder Lake, and Lake Toketie Fires, King and Snohomish Counties, Washington, by Kate Mickelson and Mitchell Allen. 2022. 10 p. text. [ONLINE]

Newell Road Fire, Klickitat County, Washington, by Kate Mickelson and Emilie Richard. 2023. 1 sheet, with 6 p. text. [ONLINE]


SCHOOL SEISMIC SAFETY PROGRAM

Legislative Reports

