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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]

TSUNAMI ALERT

TsunInfo 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.

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.

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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.
### 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).

### Bulletin

The subject matter of a Bulletin is of widespread interest in the geologic community and the subject matter is treated thoroughly and in a well-organized, scholarly manner. Bulletins are usually written for geographic audiences. Bulletins are peer reviewed and edited to Survey/USGS/major journal standards.

### Digital Data Series (DS)

Digital Data Series (DS) present geologic data in GIS file geodatabase format. The data are available online and intended to be used interactively (that is, the data can be analyzed, displayed, or otherwise manipulated to meet the user’s needs). The datasets may be updated from time to time, will not exist on paper, and are not archived; that is, when the data is updated, no copy of the previous version is kept. For DSs, there are specific hardware/software/expertise requirements. Updates are identified by a version number, typically the date. For some Digital Reports, requesters may be asked to execute a product license agreement. Digital Data Series are usually edited for conformance to Survey digital data standards.

### Digital Report (DR)

Digital Reports (DR) present large data sets in electronic form. The reports are available online and intended to be used interactively (that is, the data can be sorted, subdivided, or otherwise manipulated to meet the user’s needs). The reports may be updated from time to time, may not exist on paper, and are not archived; that is, when the report is updated, no copy of the previous version is kept. For some DRs, there are specific hardware/software/expertise requirements. Updates are identified by a version number, typically the date. For some Digital Reports, requesters may be asked to execute a product license agreement. Digital Reports are usually not edited or peer reviewed in the usual sense. Instead they are prepared with due care and then modified or corrected as authors and (or) users find problems or errors.

### Open File Report (OFR)

An Open File Report (OFR) is a body of geologic or geology-related information in map and (or) text form that is significant enough to make available to the public, but, for one reason or another, has not been prepared and released as a Bulletin, GM, RI, or IC. These reasons include: (1) the report is preliminary, (2) the report must be released quickly, (3) the report was never intended for publication, perhaps because very few copies will be needed, (4) the report is informal or doesn’t lend itself to one of the formal report series, or (5) people, money, and (or) time are not available to prepare a Bulletin, GM, RI, or IC. OFRs may or may not be peer reviewed and (or) edited to Survey/USGS/major journal standards.

### Field Trip Guide (FTG)

A Field Trip Guide (FTG) is just what it says it is—a field trip guide. FTGs may or may not be peer reviewed and (or) edited to Survey/USGS/major journal standards.
ANNUAL REPORTS

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*
Report of the Supervisor of Geology, 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]

* 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.
ANNUAL REPORTS

Annual Reports are available online only.

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]


Biennial report no. 10 of the Division of Mines and Geology for the period commencing July 1, 1962 and ending June 30, 1964], by M. T. Huntting. 1964? 18 p. [ONLINE]

Biennial report no. 11 of the Division of Mines and Geology for the period commencing July 1, 1964 and ending June 30, 1966], by M. T. Huntting. 1966? 17 p. [ONLINE]


Department of Natural Resources
Division of Geology and Earth Resources


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

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

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

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

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

Washington Geological Survey

1. Geology and ore deposits of Republic mining district, by J. B. Umpleby. 1910. 66 p., 13 pl., 5 figs. [ONLINE]
2. The road materials of Washington, by Henry Landes. 1911. 204 p., 17 pl., 51 figs. [ONLINE]
3. The coal fields of King County, by G. W. Evans. 1912. 247 p., 23 pl., 59 figs. [ONLINE]
4. Cement materials and industry in Washington, by Solon Shedd. 1913. 268 p., 21 pl., 10 figs. [PART 1] [PART 2]
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]
6. Geology and ore deposits of the Blewett mining district, by C. E. Weaver. 1911. 104 p., 10 pl., 1 fig. [ONLINE]
7. Geology and ore deposits of the Index mining district, by C. E. Weaver. 1912. 96 p., 7 pl. [ONLINE]
8. Glaciation of the Puget Sound region, by J H. Bretz. 1913. 244 p., 24 pl., 27 figs. [ONLINE]
9. The coal fields of Kittitas County, by E. J. Saunders. 1914. 204 p., 38 pl., 52 figs. [ONLINE]
10. The coal fields of Pierce County, by Joseph Daniels. 1914. 146 p., 30 pl., 23 figs. [ONLINE]
11. The mineral resources of Washington, with statistics for 1912, by Henry Landes. 1914. 53 p., 1 pl. [ONLINE]
13. The Tertiary formations of western Washington, by C. E. Weaver. 1916. 327 p., 30 figs., 3 pl. [PART 1] [PART 2]
16. Geology and ore deposits of the Covada mining district, by C. E. Weaver. 1913. 87 p., 5 pl., 3 figs. [ONLINE]
17. A geographic dictionary of Washington, by Henry Landes. 1917. 346 p., 10 pl. [PART 1] [PART 2]
18. The country about Camp Lewis, by M. M. Leighton. 1918. 105 p., 12 pl., 6 figs. [ONLINE]
20. The mineral resources of Stevens County, by C. E. Weaver. 1920. 350 p., 20 pl., 14 figs. [PART 1] [PART 2]
23. The metal mines of Washington, by E. N. Patty. 1921. 366 p., 36 pl., 27 figs. [PART 1] [PART 2]
25. The magnesite deposits of Washington, their occurrence and technology, by G. E. Whitwell and E. N. Patty. 1921. 194 p., 13 pl., 5 figs. [ONLINE]
26. Underground water supply of the region about White Bluffs and Hanford, by O. P. Jenkins. 1922. 41 p., 3 pl., 1 fig. [ONLINE]
30. The mineral resources of Washington, with statistics for 1922, by Solon Shedd, with an article on coal and coke by W. G. Evans. 1924. 224 p., 3 figs. [ONLINE]
34. Tungsten resources of Washington, by H. E. Culver and W. A. Broughton. 1945. 89 p., 23 pl., 9 figs. [ONLINE]
37. Inventory of Washington minerals:


38. The place of steam-electric generating stations in the orderly program of electric power development in the Pacific Northwest, by H. H. Houston. 1950. 117 p., 1 pl., 25 fgs. [ONLINE]


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


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


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.


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


Division of Geology and Earth Resources


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


| BULLETINS |

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

| 74. | Geological Survey of the Wenatchee and Monitor quadrangles, Engineering geology in Washington, edited by R. W. Galster, chairman. 1989. [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] |

Superseded by the online bibliography.

| 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] [VOL 1 PART 1] [VOL 1 PART 2] [VOL 1 PART 3] [VOL 1 PART 4] [VOL 2] [VOL 2 PART 1] [VOL 2 PART 2] [VOL 2 PART 3] [VOL 2 PART 4] |

Superseded by the online bibliography.

### DIGITAL DATA SERIES

Digital Data Series are available only online.

<p>| 18. | Surface geology, 1:100,000—GIS data, by Washington Division of Geology and Earth Resources. 2016. [ONLINE] |</p>
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
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</table>
Digital Reports are available online only.

1. Digital bibliography of the geology and mineral resources of Washington State, 1798–2000, by C. J. Manson, editor and compiler. 2001. Lib. use only


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]


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


Geologic Field Trip Guide to the Hobart and Maple Valley quadrangles, King County, Washington, by J. D. Vine. 1962. 43 x 36 in. color sheet, scale 1:24,000. [ONLINE]

Geologic Field Trip Guide to the Cumberland quadrangle, King County, Washington, by H. D. Gower and A. A. Wanek. 1963. 30 x 41 in. color sheet, scale 1:24,000. [ONLINE]

Note: Geologic maps may also be found under other categories, such as Open File Reports, Bulletins, and Information Circulars.

Division of Geology

Preliminary geologic map, State of Washington, compiled from published and unpublished sources, edited by G. W. Stose. 1936. 53 x 35 in. color sheet, scale 1:500,000. [Accompanied by Bulletin 32, which is out of print.] [ONLINE]

Geologic map of Washington, by M. T. Huntingting, W. A. Bennett, V. E. Livingston 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]

Geologic cross section to accompany the 1961 Geologic map of Washington, by V. E. Livingston, Jr. 1961. 1 sheet, scale 1:500,000. [ONLINE]
### GEOLOGIC MAPS

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


**Division of Geology and Earth Resources**

| GM-16. | Relative ground settlement hazards of Thurston County, Washington, by E. R. Artim. 1976. 31 x 19 in. color sheet, scale 1:125,000. [ONLINE] | In print |
| 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] | In print |


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 Freemont 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. DuFrane, 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. DuFrane, 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.
### INFORMATION CIRCULARS

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<table>
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<th>Number</th>
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<td>22</td>
<td>Introduction to Washington geology and resources, by C. D. Campbell. 1953. 42 p., 5 figs.</td>
<td>1953</td>
<td>42 p., 5 figs.</td>
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<td>Out of print</td>
</tr>
<tr>
<td>22R</td>
<td>Introduction to Washington geology and resources, revised by C. D. Campbell. 44 p., 5 figs. [Revised 1962.]</td>
<td>1953</td>
<td>44 p., 5 figs.</td>
<td></td>
<td>In print</td>
</tr>
<tr>
<td>30</td>
<td>Archeology in Washington, by Bruce Stallard. 1958. 64 p., 1 pl., 34 figs.</td>
<td>1958</td>
<td>64 p., 1 pl., 34 figs.</td>
<td></td>
<td>Out of print</td>
</tr>
</tbody>
</table>
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]


76. Mount St. Helens—Annotated index to video archives, by R. L. Logan and C. J. Manson. 1983. 51 p. [Note: the videos were ¾-inch broadcast tapes. The collection was sent to the Smithsonian for preservation.] [ONLINE]


78. A guide for the preliminary evaluation of rock for road surfacing, by V. E. Livingston Jr. 1984. 8 p., 7 photos, 3 tables. [ONLINE]


81. The Puget Lowland earthquakes of 1949 and 1965—Reproductions of selected articles describing damage, compiled by G. W. Thorsen. 1986. 113 p. [ONLINE]


86. Geologic guidebook for Washington and adjacent areas, edited by N. L. Joseph and others. 1989. 369 p. [loose-leaf only] [ONLINE]


88. Roadside geology of Mount St. Helens National Volcanic Monument and vicinity, by P. T. Pringle. 1993. 132 p., 70 fgs. [Revised 2002.] [WHOLE BOOK] [PART 1] [PART 2]


91. Reconnaissance investigation of sand, gravel, and quarried bedrock resources in the Bellingham 1:100,000 quadrangle, Washington, by J. S. Loen, W. S. Lingley Jr., Garth Anderson, and T. J. Lapen. 2001. 45 p., 4 fgs., 4 tables, 1 pl., scale 1:100,000. [ONLINE]

92. Reconnaissance investigation of sand, gravel, and quarried bedrock resources in the Yakima 1:100,000 quadrangle, Washington, by K. D. Weberling, A. B. Dunn, and J. E. Powell. 2001. 34 p., 2 fgs., 5 tables, 1 pl., scale 1:100,000. [ONLINE]

93. Reconnaissance investigation of sand, gravel, and quarried bedrock resources in the Toppenish 1:100,000 quadrangle, Washington, by A. B. Dunn. 2001. 23 p., 3 fgs., 5 tables, 1 pl., scale 1:100,000. [ONLINE]


95. Reconnaissance investigation of sand, gravel, and quarried bedrock resources in the Mount St. Helens 1:100,000 quadrangle, Washington, by D. K. Norman, A. B. Dunn, and C. M. Kenner. 2001. 52 p., 2 fgs., 4 tables, 1 pl., scale 1:100,000. [ONLINE]


97. Reconnaissance investigation of sand, gravel, and quarried bedrock resources in the Shelton 1:100,000 quadrangle, Washington, by A. B. Dunn, Gordon Adams, W. S. Lingley Jr., J. S. Loen, and A. L. Pittelkau. 2002. 54 p., 1 fig., 5 tables, 1 pl., scale 1:100,000. [ONLINE]


118. Geomorphic mapping of the Chehalis River floodplain, Cosmopolis to Pe Ell, Grays Harbor, Thurston, and Lewis Counties, Washington by S. L. Slaughter and I. J. Hubert. 2014. 61 p. [ONLINE]

119. Rock aggregate resource inventory map of Pierce County, Washington by D. W. Eungard and J. L. Czajkowski. 2015. 23 p., 1 pl., scale 1:100,000. [ONLINE]

120. Rock aggregate resource inventory map of Lewis County, Washington by D. W. Eungard. 2015. 25 p., 1 pl., scale 1:100,000. [ONLINE]


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 Hinsville 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]


Washington Geological Survey


2017-03 Geologic map of the Rimrock Lake, Tieton Basin, and western two-thirds of the Weddle Canyon 7.5-minute quadrangles, Yakima County, Washington, by P. E. Hammond. 2017. 48 x 36 in. color plate, scale 1:24,000, with 19 p. text. [ONLINE]
## MAP SERIES

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2023-01  Aggregate resource inventory of Kitsap County, Washington, by Amy Rudko, A. N. Steely. 2023. 20 x 28 in. sheet, scale 1:100,000, with 17 p. text. [ONLINE]

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. Ewingard, Corina Allen. 2023. 36 x 42 in. sheet, scales 1:48,000 and 1:166,000. [ONLINE]


2023-05  Geologic map of the Kittitas and East Kittitas 7.5-minute quadrangles, Kittitas County, Washington, by A. J. Sadowski, L. R. Wetherell, M. L. Anderson, J. E. Powell. 2023. 64 x 36 in. sheet, scale 1:24,000, with 32 p. text. [ONLINE]

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]

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]
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] Web only

**Division of Mines and Geology**


69-0. Compilation of geologic mapping in Washington through 1968—A continuation of Leona Boardman’s index 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. Lib. use only


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] Web only


**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] Web only


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] Web only


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] Web only


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] Web only


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

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] Web only


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| Web only | 76-14. | 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] |
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]
78-1. Kittitas County, Washington, coal reserves, by E. R. Vonheeder. 1978. 6 sheets including 3 maps, scale 1:130,000. [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]

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]


80-12. Ash from the May 18, 1980, eruption of Mount St. Helens—maps showing bulk density, depth of uncompacted ash [2 sheets], time of first ashfall, kilograms of ash per square meter, and depth of rain-compacted ash, by M. M. Folsom and R. R. Quinn. 1980. 6 sheets, scales 1:100,000 and 1:200,000 [ONLINE]

81-1. Detailed fault maps—Hoquiam, Vancouver, Yakima, and The Dalles [1 x 2°] quadrangles, by G. B. McLucas. 1981. 5 sheets including explanation, scale 1:250,000. [PART 1] [PART 2]


Note: Also released as Open File Report 81-3, Table 4.1.

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

Note: Also released as OFR 81-3. Appendix A.

Note: Also released as Open File Report 81-3, Appendix D. Report is not available with OFR 81-3; only available separately.

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.


82-3. Table of chemical analyses for thermal and mineral spring and well waters collected in 1980 and 1981, by M. A. Korosec. 1982. 5 p. [ONLINE]


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86-4. 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]


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]


88-5. 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]


88-10. 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]


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| Open File Report 91-10 | Coal maturation and the natural gas potential of central Washington, by T. J. Walsh and W. S. Lingley Jr. 1991. 37 p., 8 pl. | Lib. use only |
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Low-temperature geothermal resources of Washington, compiled by P. R. Hooper and B. A. Gillespie. 1996. 26 p., 1 pl., scale 1:38,520. [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]

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94-10. Geologic map of the east 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]


94-12. Geologic map of the east 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]


95-1. 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 1:36,000. [TEXT] [PLATES]


95-3. 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]


96-5. 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]


96-7. 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]


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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]


2003-1. Tsunami inundation map of the Quilute, Washington, area, by T. J. Walsh, E. P. Myers III, and A. M. Baptista. 2003. 44 x 36 in. color sheet, scale 1:24,000. [ONLINE]


2003-4. Geologic map of the Mount Olympus 1:100,000 quadrangle, Washington, by W. J. Gerstel and W. S. Lingley Jr. 2003. 52 x 36 in. color sheet, scale 1:100,000. [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]

2003-6. Geologic map of the Washington portion of the Port Angeles 1:100,000 quadrangle, by H. W. Schasse. 2003. 45 x 36 in. color sheet, scale 1:100,000. [ONLINE]


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<td>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}\text{Ar}/^{39}\text{Ar}) age dates, and (^{40}\text{Ar}/^{39}\text{Ar}) age plateau and inverse isochron diagrams in Microsoft Excel and Adobe PDF formats.</td>
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<td>The Darrington–Devils Mountain fault—A probably active reverse-oblique-slip fault zone in Skagit and Island Counties, Washington, by J. D. Dragovich and B. W. Stanton. 2007. 2 color sheets: 101 x 36 in. (scale 1:31,104) and 26 x 36 in.</td>
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<td>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.</td>
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<td>2009-3</td>
<td>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.</td>
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<td>Geochemistry, geochronology, and sand point count data for the Snoqualmie 7.5-minute quadrangle, King County, Washington, by J. D. Dragovich, H. A. Littke, J. H. MacDonald, Jr., S. A. DuFrane, M. L. Anderson, G. R. Wessel, Renate Hartog. 2009. 3 Microsoft Excel files with 35 p. text.</td>
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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. 50 p. [ONLINE]
2. Washington iron ores, a summary report, by S. L. Glover. 1942. 23 p. [ONLINE]
6. Memorandum report on iron ores of the Cle Elum district, Washington, by Carl Zappfe. 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]
15. Pumice and pumicite 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. Hunting. 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. Supersedes by Report of Investigations 35.


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]


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]

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]

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]


Shallow seismic site characterizations at 25 ANSS/PNSN stations and compilation of site-specific data for the entire strongmotion network in Washington and Oregon, by Recep Cakir and T. J. Walsh. 2012. 61 p. [ONLINE]

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. [ONLINE]

Shallow-seismic site characterizations of near-surface geology at 20 strongmotion stations in Washington State, by Recep Cakir and T. J. Walsh. 2010. 39 p. [ONLINE]


Thunder Creek basin, Skagit County—Report of DNR Study Team, by Jerry Thorsen. 1989. 33 p. [ONLINE]


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. [ONLINE]


Notes on division history, by J. E. Schuster. 1986. 9 p. [ONLINE]


A pre-1980 eruption description of Mount St. Helens, by the Washington Division of Geology and Earth Resources. 1980. 10 p. [ONLINE]

Bibliography of Snohomish County geology, with an index to geologic mapping, by S. J. Simpson. 1979. 81 p., 6 pl. [ONLINE]


Geothermal energy—Questions and answers, by J. E. Schuster. 1972. 4 p. [ONLINE]

Holden tailings [Holden mine, Chelan County], by G. W. Thorsen. 1970. 20 p. [ONLINE]

Landslide of January 1967 which diverted the North Fork of the Stillaguamish River near Hazel [Snohomish County], by G. W. Thorsen. 1970. 8 p. [ONLINE]


Ghost town references, by the State of Washington Board of Natural Resources. 1968? 3 p. [ONLINE]

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. [ONLINE]


State mineral production at all time high in 1964, by M. T. Hunting. 1965? 4 p. [ONLINE]


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Mine resource programs—Present and future, by M. T. Huntting. 1964. 3 p. [ONLINE]

Origin of Dry Falls [Grant County], by V. E. Livingston, Jr. 1964. 4 p. [ONLINE]

Tumtum Mountain [Clark County]—A potential source of feldspar, by W. A. G. Bennett. 1964. 5 p. [ONLINE]

Annotated bibliography of Washington clays, by W. H. Reichert. 1963. 19 p. [ONLINE]

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]
Other publications are available online only.

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. [1903] [1914] [1924] [1933] [1941] [1951] [1960] [1974] [1983] [1993] [2000] [2007] [2014] [2016]

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
OTHER PUBLICATIONS

Other publications are available online only:

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

