

# Publications of the Washington Geological Survey

March 2024



WASHINGTON STATE DEPT OF  
**NATURAL  
RESOURCES**  
WASHINGTON  
GEOLOGICAL SURVEY

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## ■ FEATURED PRODUCTS ■

### **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 30- by 60-minute topographic quadrangles in Washington State from all sources, as well as quadrant and whole state maps. 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. [\[ONLINE\]](#)

## ■ HOW TO OBTAIN PUBLICATIONS ■

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>. 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](mailto:stephanie.earls@dnr.wa.gov) for current availability.

## ■ CONTACT US ■

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*URL:* [www.dnr.wa.gov/geology](http://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.



## ■ PUBLICATION SERIES DESCRIPTIONS ■

### **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 geologic audiences. Bulletins are peer reviewed and edited to Survey/USGS/major journal standards.

### **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 pamphlets. 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).

### **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 example, DR-1, ver. 8/26/1998). 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](#)]

Out of print

Out of print

Mines and minerals of Washington—Second annual report of George A. Bethune, State Geologist, by G. A. Bethune. 1892. 186 p. [[ONLINE](#)]

Out of print

Out of print

### **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](#)]

Out of print

Out of print

### **Washington Geological Survey**

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

Out of print

Out of print

*The chapters are also available separately:*

Part I. Creation of a state geological survey, and, An outline of the geology of Washington, by Henry Landes. 1902. 35 p., 5 pl. [[ONLINE](#)]

Out of print

Out of print

Part II. The metalliferous resources of Washington, except iron, by Henry Landes, W. S. Thyng, D. A. Lyon, and Milnor Roberts. 1902. 123 p., 4 pl. [[ONLINE](#)]

Out of print

Out of print

Part III. The non-metalliferous resources of Washington, except coal, by Henry Landes. 1902. 55 p., 11 pl. [[ONLINE](#)]

Out of print

Out of print

Part IV. The iron ores of Washington, by Solon Shedd, and, The coal deposits of Washington, by Henry Landes. 1902. 67 p., 13 pl. [[ONLINE](#)]

Out of print

Out of print

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](#)]

Out of print

Out of print

Part VI. Bibliography of the literature referring to the geology of Washington, by Ralph Arnold. 1902. 16 p. [[ONLINE](#)]

Out of print

Out of print

Annual report for 1902; Volume II. 1903. 277 p., 23 pl. (Contains: Part I. The building and ornamental stones of Washington, by Solon Shedd [[ONLINE](#)]; Part II. Coal deposits of Washington, by Henry Landes and C. A. Ruddy [[ONLINE](#)])

Out of print

Out of print

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

Out of print

Out of print

The biennial report of the Board of Geological Survey of the State of Washington for the term 1909-11. 1910. 24 p. 1 pl. [[ONLINE](#)]

Out of print

Out of print

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](#)]

Out of print

Out of print

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](#)]

Out of print

Out of print

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](#)]

Out of print

Out of print

The biennial report of the Board of Geological Survey of the State of Washington for the term 1917-1919. 1919. 26 p. 3 pl. [[ONLINE](#)]

Out of print

The biennial report of the Board of Geological Survey of the State of Washington for the term 1919-1921. 1921. 29 p. [[ONLINE](#)]

Out of print

### **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](#)]

Out of print

Report of the Supervisor of Geology, Department of Conservation and Development, from October 1, 1922, to September 30, 1924, by Solon Shedd. 1924. 12 p. 1 pl. [[ONLINE](#)]

Out of print

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](#)]

Out of print

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](#)]

Out of print

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

Out of print

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

Out of print

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](#)]

Out of print

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](#)]

Out of print

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

Out of print

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

Out of print

[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](#)]

Out of print

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

Out of print

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]

Out of print

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

Out of print

\* 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. <a href="#">[ONLINE]</a>	Out of print	Out of print
Twelfth biennial report of the Department of Conservation and Development—October 1, 1942–September 30, 1944, by Ed Davis. 1944. 52 p. <a href="#">[ONLINE]</a>	Out of print	Out of print
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. <a href="#">[ONLINE]</a>	Out of print	Out of print
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. <a href="#">[ONLINE]</a>	Out of print	Out of print
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. <a href="#">[ONLINE]</a>	Out of print	Out of print
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. <a href="#">[ONLINE]</a>	Out of print	Out of print
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. <a href="#">[ONLINE]</a>	Out of print	Out of print
Biennial report no. 5 of the Division of Mines and Geology for the period commencing July 1, 1952 and ending June 30, 1954; Including a special report: One hundred years of mining, by S. L. Glover. 1954? 20 p. <a href="#">[ONLINE]</a>	Out of print	Out of print
Biennial report no. 6 of the Division of Mines and Geology for the period commencing July 1, 1954 and ending June 30, 1956, by S. L. Glover. 1956? 12 p. <a href="#">[ONLINE]</a>	Out of print	Out of print
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. <a href="#">[ONLINE]</a>	Out of print	Out of print
Biennial report no. 8 of the Division of Mines and Geology [for the period commencing July 1, 1958 and ending June 30, 1960], by M. T. Huntting. 1960. 26 p. <a href="#">[ONLINE]</a>		
Biennial report no. 9 [of the] Division of Mines and Geology for the period commencing July 1, 1960 and ending June 30, 1962, by M. T. Huntting. 1962? 19 p. <a href="#">[ONLINE]</a>		
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. <a href="#">[ONLINE]</a>		
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. <a href="#">[ONLINE]</a>		
[Biennial report no. 12 of the] Mines and Geology Division [1966-1968], by M. E. Felt. 1968? 5 p. <a href="#">[ONLINE]</a>		
<b>Department of Natural Resources Division of Geology and Earth Resources</b>		
Geology for the decade 1980-1990, by Raymond Lasmanis. 1983. 67 p. <a href="#">[ONLINE]</a>		Out of print
The Washington Division of Geology and Earth Resources—Geology in the public interest. 2003. 4 p. <a href="#">[ONLINE]</a>		Out of print
The Washington Division of Geology and Earth Resources—Geology in the public interest. 2005. 4 p. <a href="#">[ONLINE]</a>		Out of print
The Washington Division of Geology and Earth Resources—Geology in the public interest [short version]. 2005. 2 p. <a href="#">[ONLINE]</a>		Out of print
The Washington Division of Geology and Earth Resources—Geology in the public interest. 2009. 4 p. <a href="#">[ONLINE]</a>		Out of print

## ■ 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. [\[ONLINE\]](#)
12. Bibliography of Washington geology and geography, by Gretchen O'Donnell. 1913. 63 p.  
*Superseded by the [online bibliography](#).*
13. The Tertiary formations of western Washington, by C. E. Weaver. 1916. 327 p., 30 figs., 3 pl. [\[PART 1\]](#) [\[PART 2\]](#)
14. A preliminary report on the Quincy Valley Irrigation Project, by Henry Landes, A. W. Mangum, H. K. Benson, E. J. Saunders, and Joseph Jacobs. 1912. 49 p., 7 pl. [\[ONLINE\]](#)
15. A preliminary report on the Tertiary paleontology of western Washington, by C. E. Weaver. 1912. 80 p., 16 pl. [\[ONLINE\]](#)
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. [\[ONLINE\]](#)
19. The coal fields of southwestern Washington, by H. E. Culver. 1919. 155 p., 24 pl., 12 figs. [\[ONLINE\]](#)
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	21. The mineral resources of Washington, with statistics for 1919, by E. N. Patty and S. L. Glover. 1921. 155 p., 13 pl., 3 figs. <a href="#">[ONLINE]</a>	Out of print
Out of print	22. The road building sands and gravels of Washington, by M. M. Leighton. 1919. 307 p., 9 pl., 36 figs. <a href="#">[ONLINE]</a>	Out of print
Out of print	23. The metal mines of Washington, by E. N. Patty. 1921. 366 p., 36 pl., 27 figs. <a href="#">[PART 1]</a> <a href="#">[PART 2]</a>	Out of print
	<b>Division of Geology</b>	
Out of print	24. Clays and shales of Washington, by S. L. Glover. 1941. 368 p., 14 pl., 6 figs. <a href="#">[PART 1]</a> <a href="#">[PART 2]</a>	Out of print
Out of print	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. <a href="#">[ONLINE]</a>	Out of print
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. <a href="#">[ONLINE]</a>	Out of print
Out of print	27. Iron ores, fuels, and fluxes of Washington, by Solon Shedd, O. P. Jenkins, and H. H. Cooper. 1922. 160 p., 1 pl., 11 figs. <a href="#">[ONLINE]</a>	Out of print
Out of print	28. Geological investigation of the coal fields of western Whatcom County, Washington, by O. P. Jenkins. 1923. 135 p., 4 pl., 2 figs. <a href="#">[ONLINE]</a>	Out of print
Out of print	29. Geological investigation of the coal fields of Skagit County, Washington, by O. P. Jenkins. 1924. 63 p., 7 pl., 5 figs. <a href="#">[ONLINE]</a>	Out of print
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. <a href="#">[ONLINE]</a>	Out of print
Out of print	31. Lead deposits of Pend Oreille and Stevens Counties, Washington, by O. P. Jenkins. 1924. 153 p., 3 pl., 15 figs. <a href="#">[ONLINE]</a>	Out of print
Out of print	32. Geology of Washington, by H. E. Culver. (Part I: General features of Washington geology; to accompany the preliminary geologic map, 1936). 1936. 70 p. <a href="#">[ONLINE]</a>	Out of print
Out of print	33. Nonmetallic mineral resources of Washington, with statistics for 1933, by S. L. Glover. 1936. 135 p. <a href="#">[ONLINE]</a>	Out of print
Out of print	34. Tungsten resources of Washington, by H. E. Culver and W. A. Broughton. 1945. 89 p., 23 pl., 9 figs. <a href="#">[ONLINE]</a>	Out of print
Out of print	35. Bibliography and index of geology and mineral resources of Washington, 1814–1936, by W. A. G. Bennett. 1939. 140 p. <i>Superseded by the <a href="#">online bibliography</a>.</i>	Out of print
	<b>Division of Mines and Geology</b>	
Out of print	36. Geology and ore deposits of the Sultan Basin, Snohomish County, Washington, by Ward Carrithers and A. K. Guard. 1945. 90 p., 3 pl., 18 figs. <a href="#">[ONLINE]</a>	Out of print
Out of print	37. Inventory of Washington minerals: Part I. (2nd ed.) Nonmetallic minerals, by G. M. Valentine, revised by M. T. Hunting. 1960. 2 v. (v. 1, 175 p. text; v. 2, maps, 39 pl.). <a href="#">[TEXT]</a> <a href="#">[MAPS]</a>	In print
Out of print	Part II. Metallic minerals, by M. T. Hunting. 1956. 2 v. (v. 1, 428 p. text; v. 2, maps, 67 p. text, 27 pl.). <a href="#">[PART 1]</a> , <a href="#">[PART 2]</a> , <a href="#">[PART 3]</a> , <a href="#">[PART 4]</a> , <a href="#">[MAPS]</a>	Out of print

■ BULLETINS ■

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

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 figs. <a href="#">[ONLINE]</a>	Out of print	57.	Mines and mineral deposits of Whatcom County, Washington, by W. S. Moen. 1969. 134 p., 14 pl., 44 figs. <a href="#">[PART 1]</a> <a href="#">[PART 2]</a>	Out of print
39.	Antimony occurrences of Washington, by C. P. Purdy Jr. 1951. 186 p., 14 figs. <a href="#">[ONLINE]</a>	Out of print	58.	Chemical and physical controls for base metal deposition in the Cascade Range of Washington, by A. R. Grant. 1969. 107 p., 33 figs. <a href="#">[ONLINE]</a>	Out of print
40.	Geology of the Bead Lake district, Pend Oreille County, Washington, by M. C. Schroeder. 1952. 57 p., 1 pl., 6 figs. <a href="#">[ONLINE]</a>	Out of print	59.	Bibliography and index of the geology and mineral resources of Washington, 1957–1962, by W. H. Reichert. 1969. 375 p. <i>Superseded by the <a href="#">online bibliography</a>.</i>	Out of print
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. <a href="#">[ONLINE]</a>	Out of print	60.	Cenozoic volcanism in the Cascade Mountains of southern Washington, by W. S. Wise. 1970. 45 p., 1 pl., 14 figs. <a href="#">[ONLINE]</a>	Out of print
42.	Gold in Washington, by M. T. Hunting. 1955. 158 p., 2 figs. <a href="#">[ONLINE]</a>	Web only	61.	Lead-zinc deposits in the Kootenay arc, northeastern Washington and adjacent British Columbia, edited by A. E. Weissenborn, F. C. Armstrong, and J. T. Fyles. 1970. 123 p. <a href="#">[ONLINE]</a>	In print
43.	Eocene stratigraphy of the lower Cowlitz River–eastern Willapa Hills area, southwestern Washington, by D. A. Henriksen. 1956. 122 p. <a href="#">[ONLINE]</a>	In print	62.	Foraminifera, stratigraphy, and paleoecology of the Quinault Formation, Point Grenville–Raft River coastal area, Washington, by W. W. Rau. 1970. 41 p. <a href="#">[ONLINE]</a>	In print
44.	Peat resources of Washington, by G. B. Rigg. 1958. 272 p., 1 pl., 263 figs. <a href="#">[PART 1]</a> <a href="#">[PART 2]</a> <a href="#">[PART 3]</a>	Out of print	63.	Geology and mineral resources of King County, Washington, by V. E. Livingston Jr. 1971. 200 p., 6 pl., 103 figs. <a href="#">[PART 1]</a> , <a href="#">[PART 2]</a>	Out of print
45.	Washington's channeled scabland, by J. H. Bretz. 1959. 57 p., 4 pl., 36 figs. <a href="#">[ONLINE]</a>	Out of print	64.	Geology and mineral deposits of the Loomis [15-minute] quadrangle, Okanogan County, Washington, by C. D. Rinehart and K. F. Fox Jr. 1972. 124 p., 3 pl. (pl. 1: 27 x 33 in. color geologic map, scale 1:62,500), 32 figs. <a href="#">[ONLINE]</a>	Out of print
46.	Bibliography and index of the geology and mineral resources of Washington, 1937–1956, by W. H. Reichert. 1960. 721 p. <i>Superseded by the <a href="#">online bibliography</a>.</i>	Out of print	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 figs. <a href="#">[ONLINE]</a>	In print
47.	Coal reserves of Washington, by H. M. Beikman, H. D. Gower, and T. A. M. Dana. 1961. 115 p. [Reprinted with 15-p. addendum by H. W. Schasse, T. J. Walsh, and W. M. Phillips. 1984.] <a href="#">[ONLINE]</a>	In print	<b>Division of Geology and Earth Resources</b>		
48.	High-calcium limestones of eastern Washington, by J. W. Mills. 1962. 268 p., 7 pl., 64 figs. <a href="#">[PART 1]</a> <a href="#">[PART 2]</a> <a href="#">[PART 3]</a> <a href="#">[PART 4]</a>	Out of print	66.	Geology of the Washington coast between Point Grenville and the Hoh River, by W. W. Rau. 1973. 58 p. <a href="#">[ONLINE]</a>	In print
49.	Saline lake deposits in Washington, by W. A. G. Bennett. 1962. 129 p. <a href="#">[ONLINE]</a>	In print	67.	Mining laws of the State of Washington, by J. L. Neff and R. L. Magnuson. 1974. 109 p., 9 figs. <a href="#">[ONLINE]</a>	Out of print
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 figs. <a href="#">[ONLINE]</a>	Out of Print	68.	Geology of the Methow Valley, Okanogan County, Washington, by J. D. Barksdale. 1975. 72 p., 1 pl., 17 figs. <a href="#">[ONLINE]</a>	Out of print
51.	Barite in Washington, by W. S. Moen. 1964. 112 p., 2 pl. <a href="#">[ONLINE]</a>	In print	69.	Silver occurrences of Washington, by W. S. Moen. 1976. 188 p. [Reprinted 1982.] <a href="#">[ONLINE]</a>	In print
52.	Limestone resources of western Washington, by W. R. Danner. 1966. 474 p. <a href="#">[PART 1]</a> <a href="#">[PART 2]</a> <a href="#">[PART 3]</a>	In print	70.	Zinc and lead ore deposits in carbonate rocks, Stevens County, Washington, by J. W. Mills. 1977. 171 p. <a href="#">[ONLINE]</a>	In print
53.	Stratigraphy and foraminifera of the Satsop River area, southern Olympic Peninsula, Washington, by W. W. Rau. 1966. 66 p. <a href="#">[ONLINE]</a>	In print	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 figs. <a href="#">[ONLINE]</a>	Out of print
54.	Geology and mineral resources of the Kelso–Cathlamet area, Cowlitz and Wahkiakum Counties, Washington, by V. E. Livingston Jr. 1966. 110 p., 23 figs. <a href="#">[ONLINE]</a>	Out of print	72.	Washington coastal geology between the Hoh and Quillayute Rivers, by W. W. Rau. 1980. 57 p. <a href="#">[ONLINE]</a>	In print
55.	Building stone of Washington, by W. S. Moen. 1967. 85 p. <a href="#">[ONLINE]</a>	In print	73.	Myers Creek and Wauconda mining districts of northeastern Okanogan County, Washington, by W. S. Moen. 1980. 96 p., 6 pl., 36 figs. <a href="#">[ONLINE]</a>	Out of print
56.	Geology of the Wynoochee Valley [15-minute] quadrangle, Grays Harbor County, Washington, by W. W. Rau. 1967. 51 p., 1 pl., scale 1:62,500. <a href="#">[ONLINE]</a>	In print			

## ■ BULLETINS ■

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

74.	Reconnaissance geochemical survey of gully and stream sediments, and geologic summary, in part of the Okanogan Range, Okanogan County, Washington, by C. D. Rinehart. 1981. 24 p., 3 pl. <a href="#">[ONLINE]</a>	In print	79.	Bibliography and index of the geology and mineral resources of Washington, 1981–1985, compiled by C. J. Manson. 1990. 484 p. <i>Superseded by the <a href="#">online bibliography</a>.</i>	Out of print
75.	Geology of the Wenatchee and Monitor quadrangles, Chelan and Douglas Counties, Washington, by R. L. Gresens. 1983. 75 p., 3 pl., scale 1:24,000. <a href="#">[ONLINE]</a>	In print	80.	Regional Geology of Washington State, Raymond Lasmanis and E. S. Cheney, convenors. 1994. 227 p., 136 figs., 18 tables. <a href="#">[PART 1, PART 2]</a>	Out of print
76.	Bibliography and index of the geology and mineral resources of Washington, 1963–1980, compiled by C. J. Manson and Debbie Burnett. 1983. 398 p. <i>Superseded by the <a href="#">online bibliography</a>.</i>	Out of print	81.	Bibliography and index of the geology and mineral resources of Washington, 1986–1990, by C. J. Manson. 1996. 476 p. <i>Superseded by the <a href="#">online bibliography</a>.</i>	Out of print
77.	Selected papers on the geology of Washington, edited by J. E. Schuster. 1987. 406 p. <a href="#">[PART 1]</a> <a href="#">[PART 2]</a> <a href="#">[PART 3]</a>	In print		<b>Washington Geological Survey</b>	
78.	Engineering geology in Washington, edited by R. W. Galster, chairman. 1989. [2 v.], 1234 p. <a href="#">[VOL 1 PART 1]</a> <a href="#">[VOL 1 PART 2]</a> <a href="#">[VOL 1 PART 3]</a> , <a href="#">[VOL 1 PART 4]</a> <a href="#">[VOL 1 PART 5]</a> <a href="#">[VOL 2 PART 1]</a> <a href="#">[VOL 2 PART 2]</a> <a href="#">[VOL 2 PART 3]</a> <a href="#">[VOL 2 PART 4]</a>	In print	82.	Protocol for landslide inventory mapping from lidar data in Washington State, S. L. Slaughter, W. J. Burns, K. A. Mickelson, K. E. Jacobacci, Alyssa Biel, and T. A. Contreras. 2017. 27 p., 2 ESRI geodatabases, and 1 Excel data supplement. <a href="#">[ONLINE]</a>	Web only

## ■ DIGITAL DATA SERIES ■

*Digital Data Series are available online only.*

1.	Washington State seismogenic features database—GIS data, by J. D. Bowman and J. L. Czajkowski. 2019. <a href="#">[ONLINE]</a>	Web only	12	Landslides compilation of Washington State—GIS data, by Washington Geological Survey, 2020. SUPERSEDED by Digital Data Series 29.	Web only
2.	Washington State aeromagnetic and gravity anomaly data—GIS data, by J. D. Bowman. 2013. SUPERSEDED by Digital Data Series 28.	Web only	13	Metallic minerals database—GIS data, by Washington Division of Geology and Earth Resources. 2015. SUPERSEDED by Digital Data Series 30.	Web only
3.	Volcanic vents database for Washington State—GIS data, by J. L. Czajkowski and J. D. Bowman. 2013. <a href="#">[ONLINE]</a>	Web only	14	Nonmetallic (industrial) minerals database—GIS data, by Washington Division of Geology and Earth Resources. 2015. SUPERSEDED by Digital Data Series 30.	Web only
4.	Geothermal direct-use database in Washington State—GIS data, by J. D. Bowman. 2014. <a href="#">[ONLINE]</a>	Web only	15	Hazardous minerals database—GIS data, by Washington Division of Geology and Earth Resources. 2015. SUPERSEDED by Digital Data Series 30.	Web only
5.	Washington State rock geochemistry database—GIS data, by J. D. Bowman, J. L. Czajkowski, S. P. Reidel, D. E. Boschmann, and L. A. Fusso. 2014. <a href="#">[ONLINE]</a>	Web only	16	Coal database—GIS data, by Washington Division of Geology and Earth Resources. 2015. SUPERSEDED by Digital Data Series 30.	Web only
6.	Washington State geochronology database—GIS data, by J. L. Czajkowski. 2016. <a href="#">[ONLINE]</a>	Web only	17	Shear wave database—GIS data, by Washington Geological Survey. 2021. <a href="#">[ONLINE]</a>	Web only
7.	Thermal and mineral springs database for Washington State—GIS data, by J. L. Czajkowski, J. D. Bowman, L.A. Fusso, and D. E. Boschmann. 2014. <a href="#">[ONLINE]</a>	Web only	18	Surface geology, 1:100,000—GIS data, by Washington Division of Geology and Earth Resources. 2016. <a href="#">[ONLINE]</a>	Web only
8.	Washington State geothermal well database—GIS data, by Washington Geological Survey. 2024. <a href="#">[ONLINE]</a>	Web only	19	Landslide inventory protocol mapping—GIS data, by Washington Geological Survey, 2020. SUPERSEDED by Digital Data Series 29.	Web only
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29	Washington State Landslide Inventory Database—GIS data, by Washington Geological Survey. 2023. <a href="#">[ONLINE]</a>	Web only
30	Mines and Minerals Database—GIS data, by Washington Geological Survey. 2023. <a href="#">[ONLINE]</a>	Web only
31	Aggregate Resources—GIS data, by Washington Geological Survey. 2024. <a href="#">[ONLINE]</a>	Web only

## ■ ■ DIGITAL REPORTS ■ ■

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| <p>1. Digital bibliography of the geology and mineral resources of Washington State, 1798–2000, by C. J. Manson, editor and compiler. 20010.<br/><i>Superseded by the <a href="#">online bibliography</a>.</i></p> <p>2. Digital geologic maps of the 1:100,000 quadrangles of Washington, by Washington Division of Geology and Earth Resources staff. 2001 and 2003.<br/><i>Superseded by the <a href="#">Geologic Information Portal</a>.</i></p> | <p>3. Digital inventory of flood-plain mines in Washington State, by L. R. Baker, K. W. Wegmann, D. T. McKay Jr., D. K. Norman, and C. N. Johnson. 2003. Includes ArcView files plus 4 p. text as a PDF file. [<a href="#">ONLINE</a>]</p> <p>4. Pacific Northwest Tertiary foraminiferal collections of the U.S. Geological Survey and the state of Washington, by W. W. Rau. 2004. 1 Microsoft Excel spreadsheet with 9 p. text as a PDF file. [<a href="#">ONLINE</a>]</p> |
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## ■ ■ FACT SHEETS ■ ■

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| <p>Geology in the public interest. 2015. 4 p.<br/>[<a href="#">ONLINE</a>]</p> <p>The Washington Geology Library. 2015. 2 p.<br/>[<a href="#">ONLINE</a>]</p> <p>Landslide hazards in Washington state. 2015. 2 p.<br/>[<a href="#">ONLINE</a>]</p> | <p>Web<br/>only</p> <p>What are landslides and how do they occur? 2015. 2 p.<br/>[<a href="#">ONLINE</a>]</p> <p>Web<br/>only</p> <p>Washington State Geologic Information Portal. 2014. 2 p.<br/>[<a href="#">ONLINE</a>]</p> <p>Web<br/>only</p> |
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## ■ ■ FIELD TRIP GUIDES ■ ■

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| <p>Geology of the Yakima Valley wine country—A geologic field trip guide from Stevenson to Zillah, Washington, by D. K. Norman, A. J. Busacca, and Ron Teissere. 2004. Color, 13 p.<br/>[<a href="#">ONLINE</a>]</p> <p>Geologic guide to the Yakima Valley wine-growing region, Benton and Yakima Counties, Washington, by D. K. Norman and A. J. Busacca. 2008. 10 p. [<a href="#">ONLINE</a>]</p> | <p>In<br/>print</p> <p>Geologic Field Trip to the Aldercrest–Banyon Landslide and Mount St. Helens, Washington, Part I—Stevenson to Castle Rock, by K. W. Wegmann. 2004. 24 p. [<a href="#">ONLINE</a>]</p> <p>Web<br/>only</p> <p>Waterfall loop tour on the historic Columbia River Highway [Oregon] [<a href="#">ONLINE</a>]</p> |
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## ■ ■ GEOLOGIC MAPS ■ ■

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- Note:* Geologic maps may also be found under other categories, such as Open File Reports, Bulletins, and Information Circulars.
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| <p><b>Division of Geology</b></p> <p>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.] [<a href="#">ONLINE</a>]</p> <p><b>Division of Mines and Geology</b></p> <p>Geologic map of Washington, by M. T. Hunting, W. A. G. 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. [<a href="#">1 SHEET</a>] [<a href="#">SHEET 1 OF 2</a>] [<a href="#">SHEET 2 OF 2</a>]</p> <p>Geologic cross section to accompany the 1961 Geologic map of Washington, by V. E. Livingston, Jr. 1961. 1 sheet, scale 1:500,000. [<a href="#">ONLINE</a>]</p> | <p>Out of<br/>print</p> <p>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. [<a href="#">ONLINE</a>]</p> <p>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. [<a href="#">ONLINE</a>]</p> <p>GM-3. Geology of the Simcoe Mountains volcanic area, Washington, by R. A. Sheppard. 1967. 43 x 23 in. sheet, scale 1:125,000. [<a href="#">ONLINE</a>]</p> <p>GM-4. Geology of the Grays River [15-minute] quadrangle, Wahkiakum and Pacific Counties, Washington, by E. W. Wolfe and E. H. McKee. 1968. 23 x 34 in. color sheet, scale 1:62,500, with 6 p. text. [<a href="#">ONLINE</a>]</p> <p>Out of<br/>print</p> <p>Out of<br/>print</p> |
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## ■ GEOLOGIC MAPS ■

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GM-5.	Preliminary geologic map of the Chewelah Mountain [15-minute] quadrangle, Stevens County, Washington, by L. D. Clark and F. K. Miller. 1968. Two 25 x 32 in. color sheets, scale 1:62,500, with 6 p. text. [ <a href="#">ONLINE</a> ]	In print	GM-18.	Relative slope stability of Gig Harbor Peninsula, Pierce County, Washington, by Mackey Smith. 1976. 21 x 35 in. color sheet, scale 1:31,250. [ <a href="#">ONLINE</a> ]	In print
GM-6.	Preliminary geologic map of the Loon Lake [15-minute] quadrangle, Stevens and Spokane Counties, Washington, by F. K. Miller. 1969. 30 x 29 in. color sheet, scale 1:62,500, with 7 p. text. [ <a href="#">ONLINE</a> ]	In print	GM-19.	Geologic factors affecting waste disposal practices, Gig Harbor Peninsula, Pierce County, Washington, by Mackey Smith. 1976. 1 sheet (21 x 35 in.), scale 1:31,250. [ <a href="#">ONLINE</a> ]	In print
<b>Division of Geology and Earth Resources</b>					
GM-7.	Preliminary geologic map of the Newport Number 1 [15-minute] quadrangle, Pend Oreille County, Washington, and Bonner County, Idaho, by F. K. Miller. 1974. 24 x 31 in. color sheet, scale 1:62,500, with 6 p. text. [ <a href="#">ONLINE</a> ]	Out of 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. [ <a href="#">ONLINE</a> ]	In print
GM-8.	Preliminary geologic map of the Newport Number 2 [15-minute] quadrangle, Pend Oreille and Stevens Counties, Washington, by F. K. Miller. 1974. 22 x 32 in. color sheet, scale 1:62,500, with 6 p. text. [ <a href="#">ONLINE</a> ]	Out of print	GM-21.	Mineral resources of the southern Hood Canal area, Washington, by Mackey Smith and R. J. Carson. 1976. 23 x 27 in. sheet, scale 1:62,500. [ <a href="#">ONLINE</a> ]	In print
GM-9.	Preliminary geologic map of the Newport Number 3 [15-minute] quadrangle, Pend Oreille, Stevens, and Spokane Counties, Washington, by F. K. Miller. 1974. 23 x 32 in. color sheet, scale 1:62,500, with 7 p. text. [ <a href="#">ONLINE</a> ]	Out of print	GM-22.	Mineral resource maps of Washington, by W. S. Moen. 1978. Four 28 x 19 in. color sheets, scale 1:1,000,000, with 4 p. text. [Reprinted 1986.] [ <a href="#">ONLINE</a> ]	In print
GM-10.	Preliminary geologic map of the Newport Number 4 [15-minute] quadrangle, Spokane and Pend Oreille Counties, Washington, and Bonner County, Idaho, by F. K. Miller. 1974. 24 x 30 in. color sheet, scale 1:62,500, 6 p. text. [ <a href="#">ONLINE</a> ]	Out of print	GM-23.	Geologic map of the Marblemount [15-minute] quadrangle, Washington, by Peter Misch. 1979. 36 x 30 in. color sheet, scale 1:48,000. [ <a href="#">ONLINE</a> ]	In print
GM-11.	Complete Bouguer gravity anomaly map of Washington, by W. E. Bonini, D. W. Hughes, and Z. F. Daneš. 1974. 59 x 43 in. sheet, scale 1:500,000. [ <a href="#">ONLINE</a> ]	Out of print	GM-24.	Geologic map in the vicinity of the lower Bogachiel and Hoh River valleys and the Washington coast, by W. W. Rau. 1979. 29 x 47 in. color sheet, scale 1:62,500. [ <a href="#">ONLINE</a> ]	In print
GM-12.	Thickness of unconsolidated sediments, Puget Lowland, Washington, by J. B. Hall and K. L. Othberg. 1974. 23 x 35 in. sheet, scale 1:250,000, with 3 p. text. [ <a href="#">ONLINE</a> ]	Out of print	GM-25.	Geothermal resources of Washington, compiled by M. A. Korosec, K. L. Kaler, J. E. Schuster, R. G. Bloomquist, S. J. Simpson, and D. D. Blackwell. 1981. 50 x 42 in. color sheet, scale 1:500,000. [ <a href="#">ONLINE</a> ]	In print
GM-13.	Geologic map of the Destruction Island and Taholah [15-minute] quadrangles, Washington, by W. W. Rau. 1975. 36 x 47 color sheet, scale 1:62,500. [ <a href="#">ONLINE</a> ]	Out of print	GM-26.	Geology of the Pullman, Moscow West, Colton, and Uniontown 7½-minute quadrangles, Washington and Idaho, by P. R. Hooper and G. D. Webster. 1982. 33 x 22 in. two-color sheet, scale 1:62,500. [ <a href="#">ONLINE</a> ]	Out of print
GM-14.	Preliminary surficial geologic map of the Edmonds East 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. [ <a href="#">ONLINE</a> ]	Out of print	GM-27.	Complete Bouguer gravity anomaly map, Cascade Mountains, Washington, by Z. F. Daneš and W. M. Phillips. 1983. Two 24 x 35 in. two-color sheets, scale 1:250,000. [ <a href="#">ONLINE</a> ]	In print
GM-15.	Slope stability map of Thurston County, Washington, by E. R. Artim. 1976. 31 x 19 in. color sheet, scale 1:125,000. [ <a href="#">ONLINE</a> ]	In print	GM-28.	Geologic map of the Ellensburg [15-minute] quadrangle, Washington, by R. D. Bentley and N. P. Campbell. 1983. 34 x 23 in. two-color sheet, scale 1:62,500. [ <a href="#">ONLINE</a> ]	Out of print
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. [ <a href="#">ONLINE</a> ]	In print	GM-29.	Geologic map of the Yakima quadrangle, Washington, by R. D. Bentley and N. P. Campbell. 1983. 34 x 23 in. two-color sheet, scale 1:62,500. [ <a href="#">ONLINE</a> ]	Out of print
GM-17.	Relative potential for differential settlement, Gig Harbor Peninsula, Pierce County, Washington, by Mackey Smith. 1976. 21 x 35 in. color sheet, scale 1:31,250. [ <a href="#">ONLINE</a> ]	In print	GM-30.	Availability of Federal land for mineral exploration and development in the State of Washington, by D. P. Banister, D. J. Barnes, and W. D. Longwill. 1984. Four 50 x 37 in. color sheets, scale 1:500,000, with 17 p. text. [ <a href="#">ONLINE</a> ]	In print
			GM-31.	Geologic map of the Clarkston 15-minute quadrangle, Washington and Idaho, by P. R. Hooper, G. D. Webster, and V. E. Camp. 1985. 27 x 33 in. color sheet, scale 1:48,000, with 11 p. text. [ <a href="#">ONLINE</a> ]	Out of print
			GM-32.	Geologic maps of the Marcus and Kettle Falls [7.5-minute] quadrangles, Stevens and Ferry Counties, Washington, by J. W. Mills. 1985. Two 27 x 29 in. color sheets, scale 1:24,000, with 18 p. text. [ <a href="#">ONLINE</a> ]	In print

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GM-33.	Geologic map of the Humptulips [15-minute] quadrangle and adjacent areas, Grays Harbor County, Washington, by W. W. Rau. 1986. 31 x 41 in. color sheet, scale 1:62,500. <a href="#">[ONLINE]</a>	In print	
GM-34.	Geologic map of Washington—Southwest quadrant, by T. J. Walsh, M. A. Korosec, W. M. Phillips, R. L. Logan, and H. W. Schasse. 1987. 54 x 39 in. color sheet, scale 1:250,000, and accompanying explanatory sheet (63 x 40 in.), with 28 p. text. <a href="#">[ONLINE]</a>	In print	In print
GM-35.	Geologic map of the Bluelight 15-minute quadrangle, Washington, by R. D. Bentley, N. P. Campbell, and J. E. Powell. 1988. 25 x 37 in. two-color sheet, scale 1:48,000. <a href="#">[ONLINE]</a>	In print	
GM-36.	Geologic map of the Poisel Butte 15-minute quadrangle, Washington, by R. D. Bentley, N. P. Campbell, and J. E. Powell. 1988. 25 x 37 in. two-color sheet, scale 1:48,000. <a href="#">[ONLINE]</a>	In print	
GM-37.	Geologic map of the Logy Creek 15-minute quadrangle, Washington, by R. D. Bentley, N. P. Campbell, and J. E. Powell. 1988. 26 x 37 in. two-color sheet, scale 1:48,000. <a href="#">[ONLINE]</a>	In print	
GM-38.	Geologic map of the Saddle Mountains, Washington, by S. P. Reidel. 1988. 28 p., 5 pl. (3 two-color)(pl. 1 & 2, 25 x 16 in.; pl. 3, 18 x 27 in.; pl. 4, 27 x 19 in.; pl. 5, 25 x 21 in.), scale 1:48,000. <a href="#">[ONLINE]</a>	In print	
GM-39.	Geologic map of Washington—Northeast quadrant, by K. L. Stoffel, N. L. Joseph, S. Z. Waggoner, C. W. Gulick, M. A. Korosec, and B. B. Bunning. 1991. 62 x 39 in. color sheet, scale 1:250,000, and two accompanying explanatory sheets (57 x 39 in. and 46 x 39 in.), including a bedrock geologic and tectonic map at 1:625,000 scale, with 36 p. text. <a href="#">[ONLINE]</a>	In print	
GM-40.	Geologic map of southeast Asotin County, Washington, by S. P. Reidel, P. R. Hooper, G. D. Webster, and V. E. Camp. 1992. 27 x 38 in. two-color sheet, scale 1:48,000, with 22 p. text. <a href="#">[ONLINE]</a>	In print	
GM-41.	Liquefaction susceptibility for the Des Moines and Renton 7.5-minute quadrangles, Washington, by S. P. Palmer, H. W. Schasse, and D. K. Norman. 1994. Two 28 x 27 in. color sheets, scale 1:24,000, with 15 p. text. <a href="#">[ONLINE]</a>	In print	
GM-42.	Relative earthquake hazard map for the Vancouver, Washington, urban region, by M. A. Mabey, I. P. Madin, and S. P. Palmer. 1994. Two color sheets (28 x 30 in. and 28 x 32 in.), scale 1:24,000, with 5 p. text. <a href="#">[ONLINE]</a>	In print	
GM-43.	Liquefaction susceptibility for the Auburn and Poverty Bay 7.5-minute quadrangles, Washington, by S. P. Palmer, T. J. Walsh, R. L. Logan, and W. G. Gerstel. 1995. Two 24 x 26 in. color sheets, scale 1:24,000, with 15 p. text. <a href="#">[ONLINE]</a>	In print	
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. <a href="#">[ONLINE]</a>	In print	
GM-45.	Geologic map of Washington—Southeast quadrant, by J. E. Schuster, C. W. Gulick, S. P. Reidel, K. R. Fecht, and Stephanie Zurenko. 1997. 62 x 39 in. color sheet, scale 1:250,000, and accompanying explanatory sheet (38 x 31 in.) with bedrock geology and tectonic map at 1:625,000, with 20 p. text. <a href="#">[ONLINE]</a>		In print
GM-46.	Geologic map and bedrock history of the Gilbert 7.5-minute quadrangle, Chelan and Okanogan Counties, Washington, by J. D. Dragovich, D. K. Norman, R. A. Haugerud, and R. B. Miller. 1997. 40 x 28 in. two-color sheet, scale 1:24,000, with 67 p. text. <a href="#">[ONLINE]</a>		In print
GM-47.	Geologic folio of the Olympia—Lacey—Tumwater urban area, Washington—Liquefaction susceptibility map, by S. P. Palmer, T. J. Walsh, and W. G. Gerstel. 1999. 31 x 27 in. color sheet, scale 1:48,000, with 16 p. text. <a href="#">[ONLINE]</a>		Out of print
GM-48.	Liquefaction susceptibility of the greater Eastside area, King County, Washington, by S. P. Palmer, B. D. Evans, and H. W. Schasse. 2002. 29 x 36 in. color sheet, scale 1:36,000, with 14 p. text. <a href="#">[ONLINE]</a>		In print
GM-49.	Tsunami hazard map of the southern Washington coast—Modeled tsunami inundation from a Cascadia subduction zone earthquake, by T. J. Walsh, C. G. Caruthers, A. C. Heinitz, E. P. Myers III, A. M. Baptista, G. B. Erdakos, and R. A. Kamphaus. 2000. 26 x 52 color sheet, scale 1:100,000, with 12 p. text. <a href="#">[ONLINE]</a>		
GM-50.	Geologic map of Washington—Northwest quadrant, by J. D. Dragovich, R. L. Logan, H. W. Schasse, T. J. Walsh, W. S. Lingley Jr., D. K. Norman, W. J. Gerstel, T. J. Lapen, J. E. Schuster, and K. D. Meyers. 2002. 62 x 45 in. color sheet, scale 1:250,000, and two accompanying explanatory sheets (52 x 36 in. and 40 x 33 in.), with 72 p. text. <a href="#">[ONLINE]</a>		In print
GM-51.	Liquefaction susceptibility of the greater Tacoma urban area, Pierce and King Counties, Washington, by S. P. Palmer, W. J. Perkins, and W. P. Grant. 2003. 48 x 36 in. color pl., scale 1:30,000, with 11 p. text. <a href="#">[ONLINE]</a>		In print
GM-52.	Tectonic elements and evolution of northwest Washington, by E. H. Brown and J. D. Dragovich. 2003. 38 x 36 in. color sheet, scale 1:625,000, with 12 p. text. <a href="#">[ONLINE]</a>		In print
GM-53.	Geologic map of Washington State, by J. E. Schuster. 2005. 55.5 x 36 in. color sheet, scale 1:500,000, with 44 p. text. <a href="#">[ONLINE]</a>		In print
GM-54.	Geologic map of the Deer Park 7.5-minute quadrangle, Spokane County, Washington, by R. E. Derkey, M. M. Hamilton, and D. F. Stradling. 2005. 36 x 42 in. color sheet, scale 1:24,000. <a href="#">[ONLINE]</a>		In print
GM-55.	Geologic map of the Chattaroy 7.5-minute quadrangle, Spokane County, Washington, by R. E. Derkey, M. M. Hamilton, and D. F. Stradling. 2005. 36 x 42 in. color sheet, scale 1:24,000. <a href="#">[ONLINE]</a>		In print
GM-56.	Geologic map of the East Olympia 7.5-minute quadrangle, Thurston County, Washington, by T. J. Walsh and R. L. Logan. 2005. 42 x 36 in. color sheet, scale 1:24,000. <a href="#">[ONLINE]</a>		In print

## ■ GEOLOGIC MAPS ■

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

GM-57.	Geologic map of the Port Townsend South and part of the Port Townsend North 7.5-minute quadrangles, Jefferson County, Washington, by H. W. Schasse and S. L. Slaughter. 2005. 42 x 36 in. color sheet, scale 1:24,000. [ <a href="#">ONLINE</a> ]	In print		
GM-58.	Geologic map of the Coupeville and part of the Port Townsend North 7.5-minute quadrangles, Island County, Washington, by Michael Polenz, S. L. Slaughter, and G. W. Thorsen. 2005. 50 x 36 in. color sheet, scale 1:24,000. [ <a href="#">ONLINE</a> ]	In print		
GM-59.	Geologic map of the Oak Harbor, Crescent Harbor, and part of the Smith Island 7.5-minute quadrangles, Island County, Washington, by J. D. Dragovich, G. T. Petro, G. W. Thorsen, S. L. Larson, G. R. Foster, and D. K. Norman. 2005. Two 42 x 36 in. color sheets, scale 1:24,000. [ <a href="#">ONLINE</a> ]	In print		
GM-60.	Geologic map of the Timberwolf Mountain 7.5-minute quadrangle, Yakima County, Washington, by P. E. Hammond. 2005. 48 x 36 in. color sheet, scale 1:24,000. Additional information available as Open File Report 2005-5. [ <a href="#">ONLINE</a> ]	In print		
GM-61.	Geologic map of the McMurray 7.5-minute quadrangle, Skagit and Snohomish Counties, Washington, with a discussion of the evidence for Holocene activity on the Darrington–Devils Mountain fault zone, by J. D. Dragovich and A. J. DeOme. 2006. 33 x 36 in. color sheet, scale 1:24,000, with 18 p. text. [ <a href="#">ONLINE</a> ]	In print		
GM-62.	Geologic map of the College Place and Walla Walla 7.5-minute quadrangles, Walla Walla County, Washington, and Umatilla County, Oregon, by R. E. Derkey, D. F. Stradling, K. A. Lindsey, and T. L. Tolan. 2006. 46 x 36 in. color sheet, scale 1:24,000. [ <a href="#">ONLINE</a> ]	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. [ <a href="#">ONLINE</a> ]	In print		
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. [ <a href="#">ONLINE</a> ]	In print		
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. [ <a href="#">ONLINE</a> ].	In print		
GM-66.	Geologic map of the Four Mound Prairie 7.5-minute quadrangle, Spokane and Stevens Counties, Washington, by R. E. Derkey and M. M. Hamilton. 2007. 42 x 36 in. color sheet, scale 1:24,000. [ <a href="#">ONLINE</a> ]	In print		
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. [ <a href="#">ONLINE</a> ]		In print	
GM-68.	Geologic map of the Camano 7.5-minute quadrangle, Island County, Washington, by Michael Polenz, H. W. Schasse, M. L. Kalk, and B. B. Petersen. 2009. 48 x 36 in. color sheet, scale 1:24,000. [ <a href="#">ONLINE</a> ]		In print	
GM-69.	Geologic map of the Langley and western part of the Tulalip 7.5-minute quadrangles, Island County, Washington, by H. W. Schasse, M. L. Kalk, B. B. Petersen, and Michael Polenz, 2009. 47 x 36 in. color sheet, scale 1:24,000. [ <a href="#">ONLINE</a> ]		In print	
GM-70.	Geologic map of the Juniper Beach 7.5-minute quadrangle, Island County, Washington, by H. W. Schasse, M. L. Kalk, and Michael Polenz. 2009. 39 x 36 in. color sheet, scale 1:24,000. [ <a href="#">ONLINE</a> ]		In print	
GM-71.	Geologic map of the Olsen Canyon 7.5-minute quadrangle, Lincoln and Stevens Counties, Washington, by R. E. Derkey and M. M. Hamilton. 2009. 42 x 36 in. color sheet, scale 1:24,000. [ <a href="#">ONLINE</a> ]		In print	
GM-72.	Geologic map of the Maytown 7.5-minute quadrangle, Thurston County, Washington, by R. L. Logan, T. J. Walsh, B. W. Stanton, and I. Y. Sarikhan. 2009. 42 x 36 in. color sheet, scale 1:24,000. [ <a href="#">ONLINE</a> ]		In print	
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. [ <a href="#">ONLINE</a> ]		In print	
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. [ <a href="#">ONLINE</a> ]		In print	
GM-75.	Geologic map of the Snoqualmie 7.5-minute quadrangle, King County, Washington, by J. D. Dragovich, H. A. Little, 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. [ <a href="#">ONLINE</a> ]		In print	
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. [ <a href="#">ONLINE</a> ]		In print	

*Note:* STATEMAP 7.5-minute quadrangles from 2012 through the present have been published under the new [Map Series](#).

## ■ INFORMATION CIRCULARS ■

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

<b>Division of Geology</b>			
1.	Present status of topographic mapping in Washington, by S. L. Glover. 1935. 10 p. <a href="#">[ONLINE]</a>	Out of print	Out of print
2.	Summary report on Washington minerals, production and resources, by S. L. Glover. 1935. 10 p. <a href="#">[ONLINE]</a>	Out of print	Out of print
3.	State publications in geology, issued by the First State Geologist, 1890-1892, the Washington Geological Survey, 1901-1902, the Division of Geology, 1921—, compiled by S. L. Glover. 1937. 5 p. <a href="#">[ONLINE]</a>	Out of print	Out of print
<b>Division of Mines and Mining</b>			
1.	Directory of Washington mines 1938, compiled by the Division of Mines and Mining. 1938. 15 p. <a href="#">[ONLINE]</a>	Out of print	Out of print
1.	Summary of state and federal mining laws relating to federal lands and mining laws relating to state lands, compiled by the Washington State Library. 1935. 8 p. [Reprinted 1938.] <a href="#">[ONLINE]</a>	Out of print	Out of print
2.	Directory of Washington mines, 1939, compiled by the Division of Mines and Mining. 1939. 21 p. <a href="#">[ONLINE]</a>	Out of print	Out of print
3.	January, 1940, supplement to directory of Washington mines, 1939, compiled by the Division of Mines and Mining. 1940. 3 p. <a href="#">[ONLINE]</a>	Out of print	Out of print
4.	Preliminary report on strategic metals in Washington, by the Division of Mines and Mining. 1940. 7 p. <a href="#">[ONLINE]</a>	Out of print	Out of print
5.	Directory of Washington metallic mining properties, by the Division of Mines and Mining. 1940. 72 p. <a href="#">[ONLINE]</a>	Out of print	Out of print
6.	Summary of information on iron ore deposits of Washington, by the Division of Mines and Mining. 1940. 11 p. <a href="#">[ONLINE]</a>	Out of print	Out of print
7.	Directory of Washington metallic mining properties, by Division of Mines and Mining. 1941. 74 p. <a href="#">[ONLINE]</a>	Out of print	Out of print
8.	Directory of Washington mining operations, by Ward Carithers. 1943. 36 p. <a href="#">[ONLINE]</a>	Out of print	Out of print
9.	1944 directory of Washington mining operations, by S. H. Green. 1944. 36 p. <a href="#">[ONLINE]</a>	Out of print	Out of print
10.	Geologic factors of quarrying, by S. L. Glover and W. A. G. Bennett. 1944. 18 p., 5 figs. <a href="#">[ONLINE]</a>	Out of print	Out of print
<b>Division of Mines and Geology</b>			
11.	1945 directory of Washington mining operations, by S. H. Green and Ward Carithers. 1945. 48 p. <a href="#">[ONLINE]</a>	Out of print	Out of print
12.	1946 directory of Washington mining operations, by S. H. Green. 1946. 57 p. <a href="#">[ONLINE]</a>	Out of print	Out of print
13.	1947 directory of Washington mining operations, by S. H. Green. 1947. 59 p. <a href="#">[ONLINE]</a>	Out of print	Out of print
14.	Excerpts from "Washington fuel requirements and supplies", Battelle Memorial Institute survey report to Washington State Department of Conservation and Development, compiled by R. J. Lund and J. D. Sullivan. 1947. 19 p. <a href="#">[ONLINE]</a>	Out of print	Out of print
15.	Oil and gas exploration in Washington, by S. L. Glover. 1947. 49 p., 3 figs. <a href="#">[ONLINE]</a>	Out of print	Out of print
15.	Wells drilled for oil or gas in Washington from 1945 to July 1953 inclusive; Supplement to Information Circular 15, by S. L. Glover. 1953. 9 p. (table). <a href="#">[ONLINE]</a>	Out of print	Out of print
16.	1948 directory of Washington mining operations, by S. H. Green. 1948. 51 p. <a href="#">[ONLINE]</a>	Out of print	Out of print
17.	1949 directory of Washington mining operations, by M. T. Huntting. 1949. 62 p. <a href="#">[ONLINE]</a>	Out of print	Out of print
18.	1950 directory of Washington mining operations, by M. T. Huntting. 1950. 67 p. <a href="#">[ONLINE]</a>	Out of print	Out of print
19.	1951 directory of Washington mining operations, by R. H. Stebbins. 1951. 75 p., 2 figs. <a href="#">[ONLINE]</a>	Out of print	Out of print
20.	1952 directory of Washington mining operations, by C. P. Purdy Jr. 1952. 75 p., 2 figs. <a href="#">[ONLINE]</a>	Out of print	Out of print
21.	1953 directory of Washington mining operations, by C. P. Purdy Jr. 1953. 81 p., 2 figs. <a href="#">[ONLINE]</a>	Out of print	Out of print
22.	Introduction to Washington geology and resources, by C. D. Campbell. 1953. 42 p., 5 figs. <a href="#">[ONLINE]</a>	Out of print	Out of print
22R.	Introduction to Washington geology and resources, revised by C. D. Campbell. 44 p., 5 figs. [Revised 1962.] <a href="#">[ONLINE]</a>	In print	In print
23.	1954 directory of Washington mining operations, by C. P. Purdy Jr. 1954. 73 p., 2 figs. <a href="#">[ONLINE]</a>	Out of print	Out of print
24.	1955 directory of Washington mining operations, by M. T. Huntting. 1955. 80 p., 2 figs. <a href="#">[ONLINE]</a>	Out of print	Out of print
25.	1956 directory of Washington mining operations, by H. D. Banta. 1956. 88 p., 2 fig. <a href="#">[ONLINE]</a>	Out of print	Out of print
26.	Uranium in Washington (an extract from Bulletin 37, Part II), by M. T. Huntting. 1957. 10 p., 1 pl. <a href="#">[ONLINE]</a>	Out of print	Out of print
27.	1957 directory of Washington mining operations, by V. E. Livingston Jr. 1957. 96 p., 2 figs. <a href="#">[ONLINE]</a>	Out of print	Out of print
28.	1958 directory of Washington mining operations, by W. S. Moen, V. E. Livingston Jr., and G. W. Thorsen. 1958. 76 p., 2 figs. <a href="#">[ONLINE]</a>	Out of print	Out of print
29.	Oil and gas exploration in Washington, 1900–1957, by V. E. Livingston Jr. 1958. 61 p., 1 pl. <a href="#">[ONLINE]</a>	Out of print	Out of print
30.	Archeology in Washington, by Bruce Stallard. 1958. 64 p., 1 pl., 34 figs. <a href="#">[ONLINE]</a>	Out of print	Out of print
31.	Prospecting in Washington, by D. L. Anderson. 1959. 26 p., 9 figs. <a href="#">[ONLINE]</a>	Out of print	Out of print
32.	Early man in Washington, by R. D. Daugherty. 1959. 66 p., 28 figs. <a href="#">[ONLINE]</a>	Out of print	Out of print
33.	Fossils in Washington, by V. E. Livingston Jr. 1959. 34 p., 1 pl., 17 figs. [Reprinted 1983.] <a href="#">[ONLINE]</a>	Out of print	Out of print
34.	1959 directory of Washington mining operations, by G. W. Thorsen. 1960. 78 p., 2 figs. <a href="#">[ONLINE]</a>	Out of print	Out of print
35.	1960 directory of Washington mining operations, by G. W. Thorsen. 1961. 84 p., 2 figs. <a href="#">[ONLINE]</a>	Out of print	Out of print
36.	Mineral rights and land ownership in Washington, by W. S. Moen. 1962. 23 p., 1 pl., 2 figs. <a href="#">[ONLINE]</a>	Out of print	Out of print
37.	1962 directory of Washington mining operations, by G. W. Thorsen. 1963. 81 p., 2 figs. <a href="#">[ONLINE]</a>	Out of print	Out of print

## ■ INFORMATION CIRCULARS ■

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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. [ <a href="#">ONLINE</a> ]	Out of print	58.	Engineering geologic studies, by Washington Division of Geology and Earth Resources staff; and others. 1976. 40 p. [ <a href="#">ONLINE</a> ]	Out of print
39.	Marketing of metallic and nonmetallic minerals, by D. L. Anderson. 1963. 39 p., 2 figs. [ <a href="#">ONLINE</a> ]	In print	59.	Washington gravity base station network, by T. H. Nilsen. 1976. 83 p., 1 fig., 4 tables. [ <a href="#">ONLINE</a> ]	In print
40.	Caves of Washington, by W. R. Halliday. 1963. 132 p., 9 pl., 92 figs. [ <a href="#">ONLINE</a> ]	Out of print	60.	St. Helens and Washougal mining districts of the southern Cascades of Washington, by W. S. Moen. 1977. 71 p., 26 figs. [ <a href="#">ONLINE</a> ]	Out of print
41.	Origin of Cascade landscapes, by J. H. Mackin and A. S. Cary. 1965. 35 p., 11 figs. [ <a href="#">ONLINE</a> ]	In print	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. [ <a href="#">ONLINE</a> ]	In print
42.	1964 directory of Washington mining operations, by W. S. Moen and G. W. Thorsen. 1965. 86 p., 3 figs. [ <a href="#">ONLINE</a> ]	Out of print	62.	Heat flow studies in the Steamboat Mountain-Lemei Rock area, Skamania County, Washington, by J. E. Schuster, D. D. Blackwell, P. E. Hammond, and M. T. Huntting. 1978. 56 p., 14 figs. [ <a href="#">ONLINE</a> ]	In print
43.	1965–1966 directory of Washington mining operations, by W. S. Moen. 1967. 80 p., 3 figs. [ <a href="#">ONLINE</a> ]	Out of print	63.	1977 directory of Washington mining operations, by P. C. Milne and C. W. Walker. 1978. 117 p. [ <a href="#">ONLINE</a> ]	Out of print
44.	1967–68 directory of Washington mining operations, by W. S. Moen. 1969. 78 p., 3 figs. [ <a href="#">ONLINE</a> ]	Out of print	64.	Compilation of earthquake hypocenters in western Washington—1975, by R. S. Crosson and L. L. Noson. 1978. 12 p., 2 figs. [ <a href="#">ONLINE</a> ]	In print
45.	Geologic history and rocks and minerals of Washington, by V. E. Livingston Jr. 1969. 42 p., 49 figs. [ <a href="#">ONLINE</a> ]	Out of print	65.	Compilation of earthquake hypocenters in western Washington—1976, by R. S. Crosson and L. L. Noson. 1978. 13 p., 2 figs. [ <a href="#">ONLINE</a> ]	In print
46.	1969–70 directory of Washington mining operations, by W. S. Moen. 1971. 88 p., 3 figs. [ <a href="#">ONLINE</a> ]	Out of print	66.	Compilation of earthquake hypocenters in western Washington—1977, by R. S. Crosson and L. L. Noson. 1978. 12 p., 3 figs. [ <a href="#">ONLINE</a> ]	In print
47.	Geology in land use planning—Some guidelines for the Puget Lowland, by E. R. Artim. 1973. 18 p., 2 pl., 6 figs. [ <a href="#">ONLINE</a> ]	Out of print	67.	Oil and gas exploration in Washington, 1900–1978, by C. R. McFarland. 1979. 119 p., 43 oil and gas test well maps. [ <a href="#">ONLINE</a> ]	Out of print
48.	1971–72 directory of Washington mining operations, by J. E. Schuster. 1973. 97 p., 3 figs. [ <a href="#">ONLINE</a> ]	Out of print		<i>Superseded by Information Circular 75.</i>	
49.	Conconully mining district of Okanogan County, Washington, by W. S. Moen. 1973. 42 p., 16 figs. [ <a href="#">ONLINE</a> ]	Out of print	67R.	Oil and gas exploration in Washington, 1900–1981, by C. R. McFarland. 1981. 119 p., 43 oil and gas test well maps. [ <a href="#">ONLINE</a> ]	Out of print
	<b>Division of Geology and Earth Resources</b>			<i>Superseded by Information Circular 75.</i>	
50.	Energy resources of Washington, by Washington Division of Geology and Earth Resources staff; and others. 1974. 158 p. [ <a href="#">ONLINE</a> ]	Out of print	68.	Index to published geologic mapping in Washington, 1854–1970, by W. H. Reichert. 1979. 233 p., 104 page-size maps.	Out of print
51.	Piercement structure outcrops along the Washington coast, by W. W. Rau and G. R. Grocock. 1974. 7 p., 7 figs. [ <a href="#">ONLINE</a> ]	In print	69.	Directory of Washington mining operations—1979, by C. R. McFarland, G. B. McLucas, J. G. Rigby, and K. L. Stoffel. 1980. 100 p., 3 figs. [ <a href="#">ONLINE</a> ]	Out of print
52.	Landslides in Seattle, by D. W. Tubbs. 1974. 15 p., 1 pl., 13 figs. [Reprinted 1983.] [ <a href="#">ONLINE</a> ]	Out of print	70.	Theses on Washington geology—A comprehensive bibliography, 1901–1979, compiled by C. J. Manson. 1980. 212 p., 2 pl.	Out of print
53.	Compilation of earthquake hypocenters in western Washington [July 1970–Dec. 1972], by R. S. Crosson. 1974. 26 p., 6 figs. [ <a href="#">ONLINE</a> ]	In print		<i>Superseded by the online bibliography.</i>	
54.	A geologic road log over Chinook, White Pass, and Ellensburg to Yakima highways, by N. P. Campbell. 1975. 82 p., figs. [ <a href="#">ONLINE</a> ]	In print	71.	The 1980 eruption of Mount St. Helens, Washington, Part I: March 20–May 19, 1980, by M. A. Korosec, J. G. Rigby, and K. L. Stoffel. 1980. 27 p., 4 figs. [ <a href="#">ONLINE</a> ]	Out of print
55.	Compilation of earthquake hypocenters in western Washington—1973, by R. S. Crosson. 1975. 14 p., 1 fig. [ <a href="#">ONLINE</a> ]	In print	72.	Compilation of earthquake hypocenters in western Washington—1978, by L. L. Noson and R. S. Crosson. 1980. 18 p., 5 figs. [ <a href="#">ONLINE</a> ]	In print
56.	Compilation of earthquake hypocenters in western Washington—1974, by R. S. Crosson and R. C. Millard. 1975. 14 p., 2 figs. [ <a href="#">ONLINE</a> ]	Out of print	73.	Index to geologic and geophysical mapping of Washington, compiled by C. J. Manson. 1981. 63 p., 10 pl.	Out of print
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74.	The mineral industry of Washington—Highlights of its development, 1853–1980, by W. S. Moen. 1982. 26 p., 35 figs. [Reprinted 1983.] <a href="#">[ONLINE]</a>	In print	90.	Flood basalts and glacier floods—Roadside geology of parts of Walla Walla, Franklin, and Columbia Counties, Washington, by R. J. Carson and K. R. Pogue. 1996. 47 p., 68 figs. <a href="#">[ONLINE]</a>	Out of print
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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.] <a href="#">[ONLINE]</a>	In print	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 figs., 5 tables, 1 pl., scale 1:100,000. <a href="#">[ONLINE]</a>	In print
77.	Index to geologic and geophysical mapping of Washington, 1899–1983, compiled by C. J. Manson. 1984. 56 p., 12 pl.	Out of print	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 figs., 5 tables, 1 pl., scale 1:100,000. <a href="#">[ONLINE]</a>	In print
78.	A guide for the preliminary evaluation of rock for road surfacing, by V. E. Livingston Jr. 1984. 8 p., 7 photos, 3 tables. <a href="#">[ONLINE]</a>	In print	94.	Directory of Washington mines, 2001, compiled by D. T. McKay Jr., D. K. Norman, M. A. Shawver, and R. F. Teissiere. 2001. 104 p. <a href="#">[ONLINE]</a> <i>Superseded by <a href="#">Open File Report 2010-7</a>.</i>	In print
79.	Compilation of earthquake hypocenters in western Washington—1979, by L. L. Noson, R. S. Ludwin, and R. S. Crosson. 1985. 19 p., 4 figs. <a href="#">[ONLINE]</a>	In print	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 figs., 4 tables, 1 pl., scale 1:100,000. <a href="#">[ONLINE]</a>	In print
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82.	Earthquake hypocenters in Washington and northern Oregon—1980, compiled by Anthony Qamar, Anne Rathbun, R. S. Ludwin, R. S. Crosson, and S. D. Malone. 1986. 64 p., 9 figs. <a href="#">[ONLINE]</a>	In print	98.	Inactive and abandoned mine lands—Lone Jack Mine, Mount Baker mining district, Whatcom County, Washington, by F. E. Wolff, D. T. McKay Jr., M. I. Brookshier, and D. K. Norman. 2005. 11 p. <a href="#">[ONLINE]</a>	Web only
83.	Earthquake hypocenters in Washington and northern Oregon—1981, compiled by Anthony Qamar, Anne Rathbun, R. S. Ludwin, L. L. Noson, R. S. Crosson, and S. D. Malone. 1987. 50 p., 8 figs. <a href="#">[ONLINE]</a>	In print	99.	Inactive and abandoned mine lands—Boundary Red Mountain Mine, Mount Baker mining district, Whatcom County, Washington, by F. E. Wolff, M. I. Brookshier, and D. K. Norman. 2005. 9 p. [Revised 2008.] <a href="#">[ONLINE]</a>	Web only
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85.	Washington State earthquake hazards, by L. L. Noson, Anthony Qamar, and G. W. Thorsen. 1988. 77 p., 47 figs. <a href="#">[ONLINE]</a>	In print	101.	Inactive and abandoned mine lands—Cleveland Mine, Springdale Mining District, Stevens County, Washington, by F. E. Wolff, D. T. McKay Jr., and D. K. Norman. 2006. 19 p. <a href="#">[ONLINE]</a>	Web only
86.	Geologic guidebook for Washington and adjacent areas, edited by N. L. Joseph and others. 1989. 369 p. [looseleaf only] <a href="#">[ONLINE]</a>	Out of print	102.	Inactive and abandoned mine lands—Deer Trail Mine, Cedar Canyon Mining District, Stevens County, Washington, by F. E. Wolff, D. T. McKay Jr., and D. K. Norman. 2006. 14 p. <a href="#">[ONLINE]</a>	Web only
87.	Directory of Washington mining operations, 1992, by W. S. Lingley Jr. and C. J. Manson. 1992. 76 p., 6 figs. <a href="#">[ONLINE]</a>	Out of print			
88.	Roadside geology of Mount St. Helens National Volcanic Monument and vicinity, by P. T. Pringle. 1993. 132 p., 70 figs. [Revised 2002.] <a href="#">[WHOLE BOOK]</a> <a href="#">[PART 1]</a> <a href="#">[PART 2]</a>	Out of print			
89.	Earthquake hypocenters in Washington and northern Oregon, 1987–1989, and Operation of the Washington Regional Seismograph Network, by R. S. Ludwin, A. I. Qamar, S. D. Malone, C. Jonientz-Trisler, R. S. Crosson, Richard Benson, and S. C. Moran. 1994. 40 p., 13 figs., 11 tables. <a href="#">[ONLINE]</a>	In print			

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103.	Inactive and abandoned mine lands—First Thought Mine, Orient Mining District, Stevens County, Washington, by F. E. Wolff, D. T. McKay Jr., and D. K. Norman. 2006. 13 p. <a href="#">[ONLINE]</a>	Web only	113.	Loss estimation pilot project for lahar hazards from Mount Rainier, Washington, by Recep Cakir and T. J. Walsh. 2012. 17 p. <a href="#">[ONLINE]</a>	Web only
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112.	Inactive and abandoned mine lands—Ruby Hill Mining District, Okanogan County, Washington, by F. E. Wolff, D. T. McKay, and D. K. Norman. 2011. 35 p. <a href="#">[ONLINE]</a>	Web only			

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<p>2012-01 Geologic map of the Lake Joy 7.5-minute quadrangle, King County, Washington, by J. D. Dragovich, M. L. Anderson, S. A. Mahan, J. H. MacDonald, Jr., C. P. McCabe, Recep Cakir, B. A. Stoker, N. M. Villeneuve, D. T. Smith, and J. P. Bethel. 2012. Two color plates, 45 x 36 in. and 36 x 48.5 in., scale 1:24,000, with 79 p. text and 1 Microsoft Excel file. <a href="#">[ONLINE]</a></p>	<p>2015-01 Geologic map of the Lake Roesiger 7.5-minute quadrangle, Snohomish County, Washington, by J. D. Dragovich, S. A. Mahan, M. L. Anderson, J. H. MacDonald Jr., J. F. Schilter, C. L. Frattali, C. J. Koger, D. T. Smith, B. A. Stoker, Andrew DuFrane, M. P. Eddy, Recep Cakir, and K. B. Sauer. 2015. 42 x 36 in. color plate, scale 1:24,000, with 47 p. text. <a href="#">[ONLINE]</a></p>
<p>2012-02 Geologic map of the Brinnon 7.5-minute quadrangle, Jefferson and Kitsap Counties, Washington, by Michael Polenz, Eleanor Spangler, L. A. Fusso, D. A. Reioux, R. A. Cole, T. J. Walsh, Recep Cakir, K. P. Clark, J. H. Tepper, R. J. Carson, Domenico Pileggi, and S. A. Mahan. 2012. 42 x 36 in. color plate, scale 1:24,000, with 47 p. text. <a href="#">[ONLINE]</a></p>	<p>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. <a href="#">[ONLINE]</a></p>
<p>2012-03 Geologic map of the Eldon 7.5-minute quadrangle, Jefferson, Kitsap, and Mason Counties, Washington, by T. A. Contreras, Eleanor Spangler, L. A. Fusso, D. A. Reioux, Gabriel Legorreta Paulín, P. T. Pringle, R. J. Carson, E. F. Lindstrum, K. P. Clark, J. H. Tepper, Domenico Pilegg, and S. A. Mahan. 2012. 42 x 36 in. color plate, scale 1:24,000, with 60 p. text. <a href="#">[ONLINE]</a></p>	<p>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. <a href="#">[ONLINE]</a></p>
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<p>2013-02 Geologic map of the Seabeck and Poulsbo 7.5-minute quadrangles, Kitsap and Jefferson Counties, Washington, by Michael Polenz, G. T. Petro, T. A. Contreras, K. A. Stone, and Gabriel Legorreta Paulín, and Recep Cakir. 2013. 48 x 36 in. color plate, scale 1:24,000, with 39 p. text. <a href="#">[ONLINE]</a></p>	<p>2016-02 Geologic map of the Shelton Valley 7.5-minute quadrangle, Mason County, Washington, by Michael Polenz, M. D. Allen, Gabriel Legorreta Paulín, D. W. Eungard, Recep Cakir, S. P. Scott, and S. A. Mahan. 2016, rev. 2018. 42 x 36 in. color plate, scale 1:24,000, with 45 p. text. <a href="#">[ONLINE]</a></p>
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<p>2014-01 Geologic map of the Lake Chaplain 7.5-minute quadrangle, Snohomish County, Washington, by J. D. Dragovich, C. L. Frattali, M. L. Anderson, S. A. Mahan, J. H. MacDonald, Jr., B. A. Stoker, D. T. Smith, C. J. Koger, Recep Cakir, S. A. DuFrane, and K. B. Sauer. 2014. 42 x 36 in. color plate, scale 1:24,000, with 51 p. text. <a href="#">[ONLINE]</a></p>	<p style="text-align: center;"><b>Washington Geological Survey</b></p>
<p>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. <a href="#">[ONLINE]</a></p>	<p>2017-01 Geologic map of the Littlerock 7.5-minute quadrangle, Thurston County, Washington, by Michael Polenz, J. L. Vermeer, Gabriel Legorreta Paulín, J. H. Tepper, S. A. Mahan, and Recep Cakir. 2017. 42 x 36 in. color plate, scale 1:24,000, with 36 p. text. <a href="#">[ONLINE]</a></p>
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<p>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. <a href="#">[ONLINE]</a></p>	<p>Web only</p>

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2020-01	Geologic map of the Ellenburg North and southern half of the Reecer Canyon 7.5-minute quadrangles, Kittitas County, Washington, by A. J. Sadowski, J. B. McCosby, M. L. Anderson, T. R. Lau, Ashley Steiner, S. A. DuFrane, Tammy Rittenour, Bernard Housen. 2020. 52 x 36 in. color plate, scale 1:24,000, with 25 p. text. <a href="#">[ONLINE]</a>	Web only	2022-04	Geologic map of the Chester Morse Lake 7.5-minute quadrangle, King County, Washington, by A. N. Steely, M. L. Anderson, K. A. Alexander. 2022. 36 x 54 in. plate, scale 1:24,000, with 33 p. text. <a href="#">[ONLINE]</a>	Web only

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2004-4.	Geologic map of the Spokane Southwest 7.5-minute quadrangle, Spokane County, Washington, by M. M. Hamilton, R. E. Derkey, and D. F. Stradling. 2004. 30 x 36 in. color sheet, scale 1:24,000. [ONLINE]	Web only	2004-17.	Inactive and abandoned mine lands—Iroquois Mine, Leadpoint mining district, Stevens County, Washington, by F. E. Wolff, D. T. McKay Jr., and D. K. Norman. 2004. 9 p. [ONLINE]	Web only	
2004-5.	Inactive and abandoned mine lands—Great Excelsior mine, Mount Baker mining district, Whatcom County, Washington, by F. E. Wolff, D. T. McKay Jr., D. K. Norman, and M. I. Brookshier. 2004. 12 p. [ONLINE]	Web only	2004-18.	Inactive and abandoned mine lands—Talisman Mine, Orient mining district, Ferry County, Washington, by F. E. Wolff, D. T. McKay Jr., and D. K. Norman. 2004. 9 p. [ONLINE]	Web only	
2004-6.	A comparative study of aerial photographs and LIDAR imagery for landslide detection in the Puget Lowland, Washington, by R. D. Gold. 2004. 66 p., 1 plate, ArcView shapefiles. [ONLINE]	Web only	2004-19.	Inactive and abandoned mine lands—Gladstone and Electric Point Mines, Northport mining district, Stevens County, Washington, by F. E. Wolff, D. T. McKay Jr., and D. K. Norman. 2004. 12 p. [ONLINE]	Web only	
2004-7.	A self-guided tour of the geology of the Columbia River Gorge—Portland Airport to Skamania Lodge, Stevenson, Washington, by D. K. Norman and J. M. Roloff. 2004. 9 p. [ONLINE]	Web only	2004-20.	Liquefaction susceptibility and site class maps of Washington State, by county, by S. P. Palmer, S. L. Magsino, E. L. Bilderback, J. L. Poelstra, D. S. Folger, and R. A. Niggemann. 2004. 78 sheets, with 45 p. text. [ONLINE]	Web only	
2004-8.	Yakima River floodplain mining impact study, by the Yakima River Floodplain Mining Impact Study Team. 2004. 270 p., 15 appendices. [MAIN TEXT] [APPENDICES]	CD \$1.00	2005-1.	Tsunami hazard map of the Anacortes–Whidbey Island area, Washington—Modeled tsunami inundation from a Cascadia subduction zone earthquake, by T. J. Walsh, V. V. Titov, A. J. Venturato, H. O. Mofjeld, and F. I. González. 2005. 48 x 36 in. color sheet, scale 1:62,500. [ONLINE]	Web only	
2004-9.	Geologic map of the Stimson Hill 7.5-minute quadrangle, Skagit and Snohomish Counties, Washington, by J. D. Dragovich, M. W. Wolfe, B. W. Stanton, and D. K. Norman. 2004. 45 x 36 in. color sheet, scale 1:24,000. [ONLINE]	Web only	2005-2.	Geologic map of the Ebey's Landing National Historical Reserve, Island County, Washington, by Michael Polenz, S. L. Slaughter, J. D. Dragovich, and G. W. Thorsen. 2005. 50 x 36 in. color sheet, scale 1:24,000. [ONLINE]	Web only	
2004-10.	Geologic map of the Summit Lake 7.5-minute quadrangle, Thurston and Mason Counties, Washington, by R. L. Logan and T. J. Walsh. 2004. 42 x 36 in. color sheet, scale 1:24,000. [ONLINE]	Web only	2005-3.	Digital 1:100,000-scale geology of Washington State, version 1.0, by Washington Division of Geology and Earth Resources staff. 2005. Contains 11 ESRI shapefiles of geologic data, 3 shapefiles of nongeologic auxiliary data, and 7 documentation files in Microsoft Word, Microsoft Excel, and Adobe PDF formats.	Lib. use only	
2004-11.	Geologic map of the Greenacres 7.5-minute quadrangle, Spokane County, Washington, by R. E. Derkey, M. M. Hamilton, and D. F. Stradling. 2004. 36 x 39 in. color sheet, scale 1:24,000. [ONLINE]	Web only	<i>Superseded by online GIS data.</i>			
2004-12.	Geologic map of the Washington portions of the Liberty Lake 7.5-minute quadrangle and the south half of the Newman Lake 7.5-minute quadrangle, Spokane County, by R. E. Derkey, M. M. Hamilton, and D. F. Stradling. 2004. 36 x 40 in. color sheet, scale 1:24,000. [ONLINE]	Web only				

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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]	Web only	2009-1	Landslide field trip to Morton, Glenoma, and Randle, Lewis County, Washington, by I. Y. Sarikhan and T. A. Contreras. 2009. 13 p. [ONLINE]	Web only
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, $^{40}\text{Ar}/^{39}\text{Ar}$ age dates, and $^{40}\text{Ar}/^{39}\text{Ar}$ age plateau and inverse isochron diagrams in Microsoft Excel and Adobe PDF formats. [ONLINE]	Web only	2009-2	Bibliography and index of geothermal resources and development in Washington State, with selected general works, compiled by R. A. Christie and updated by Lee Walkling. 2009. 90 p. [ONLINE]	Web only
2006-1.	Directory of Washington State surface mining reclamation sites—2006, compiled by T. C. Duerr, M. A. Shawver, and M. I. Brookshier. 2006. 271 p. [ONLINE]	Web only	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]	Web only
	<i>Superseded by Open File Report 2010-7.</i>		2009-4	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. [ONLINE]	Web only
2007-1.	Field data for a trench on the Canyon River fault, southeast Olympic Mountains, Washington, by T. J. Walsh and R. L. Logan. 2007. 60 x 36 in. color sheet. [ONLINE]	Web only	2009-5	Geologic map of the Lake Wooten 7.5-minute quadrangle, Mason County, Washington, by R. E. Derkey, N. J. Hehemann, and Katelin Alldritt. 2009. 35 x 36 in. color sheet, scale 1:24,000. [ONLINE]	Web only
2007-2.	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. [ONLINE]	Web only	2009-6	Geologic map of the Mason Lake 7.5-minute quadrangle, Mason County, Washington, by R. E. Derkey, N. J. Hehemann, and Katelin Alldritt. 2009. 35 x 36 color sheet, scale 1:24,000. [ONLINE]	Web only
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]	Web only	2009-7	Geologic map of the Belfair 7.5-minute quadrangle, Mason, Kitsap, and Pierce Counties, Washington by Michael Polenz, Katelin Alldritt, N. J. Hehemann, I. Y. Sarikhan, and R. L. Logan. 2009. 45 x 36 in. color sheet, scale 1:24,000. [ONLINE]	Web only
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]	Web only	2009-8	Geologic map of the Burley 7.5-minute quadrangle, Kitsap and Pierce Counties, Washington, by Michael Polenz, Katelin Alldritt, N. J. Hehemann, and R. L. Logan. 2009. 41 x 36 in. color sheet, scale 1:24,000. [ONLINE]	Web only
2008-1.	Cascadia deep earthquakes, by Cascadia Region Earthquake Workgroup. 2008. 26 p. [ONLINE]	Web only	2009-9	Tsunami hazard map of Tacoma, Washington—Model results for Seattle fault and Tacoma fault earthquake tsunamis, by T. J. Walsh, Diego Arcas, A. J. Venturato, V. V. Titov, H. O. Mofjeld, C. C. Chamberlin, and F. I. González. 2009. 55 x 36 in. color sheet, scales 1:36,000 and 1:62,500. [ONLINE]	Web only
2008-2.	Shear-wave database for Quaternary and bedrock geologic units, Washington State, by E. L. Bilderback, S. P. Palmer, D. S. Folger, J. L. Poelstra, S. L. Magsino, and R. A. Niggemann. 2008. Contains a database in Microsoft Access and ASCII formats, and a 528 p. text. [ONLINE]	Web only		<i>Partially superseded by Map Series 2022-03.</i>	Web only
2008-3.	Tuff of Stampede Pass and tuff of Green Canyon in the central Cascade Range, King and Kittitas Counties, Washington, by P. E. Hammond and J. D. Dragovich. 2008. 2 Microsoft Excel files with 8 p. text. [ONLINE]	Web only	2010-1	Geologic map of the Carnation 7.5-minute quadrangle, King County, Washington, by J. D. Dragovich, H. A. Littke, M. L. Anderson, G. R. Wessel, C. J. Koger, J. H. Saltonstall, J. H. MacDonald Jr., S. A. Mahan, and S. A. DuFrane. 2010. 42 x 36 in. color sheet, scale 1:24,000, with 21 p. text. [ONLINE]	Web only
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]	Web only			
2008-5.	Landslide reconnaissance following the storm event of December 1–3, 2007, in western Washington, by I. Y. Sarikhan, K. D. Stanton, T. A. Contreras, Michael Polenz, Jack Powell, T. J. Walsh, and R. L. Logan. 2008. 16 p. [ONLINE]	Web only			

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2010-2	Supplement to the geologic map of the Carnation 7.5-minute quadrangle, King County, Washington—Geochronologic, geochemical, point count, geophysical, earthquake, fault, and neotectonic data, by J. D. Dragovich, M. L. Anderson, J. H. MacDonald Jr., S. A. Mahan, S. A. DuFrane, H. A. Littke, G. R. Wessel, J. H. Saltonstall, C. J. Koger, and Recep Cakir. 2010. 42 p. with 8 digital appendices. [ONLINE]	Web only	2011-3	Geologic map of the Hoodspur 7.5-minute quadrangle, Mason County, Washington, by Michael Polenz, B. A. Miller, Nigel Davies, B. B. Perry, K. P. Clark, T. J. Walsh, R. J. Carson, and J. F. Hughes. 2012. 33 x 36 in. color sheet, scale 1:24,000, with 18 p. text. [ONLINE]	Web only
2010-3	Geologic map of the Skokomish Valley and Union 7.5-minute quadrangles, Mason County, Washington, by Michael Polenz, J. L. Czajkowski, Gabriel Legorreta Paulin, T. A. Contreras, B. A. Miller, M. E. Martin, T. J. Walsh, R. L. Logan, R. J. Carson, C. N. Johnson, R. H. Skov, S. A. Mahan, and C. R. Cohan. 2010, rev. 2011. 42 x 36 in. color sheet, scale 1:24,000, with 21 p. text. [ONLINE]	Web only	2011-4	Analytical data from the Hoodspur 7.5-minute quadrangle, Mason County, Washington—Supplement to Open File Report 2011-3, by Michael Polenz, B. A. Miller, Nigel Davies, B. B. Perry, J. F. Hughes, K. P. Clark, T. J. Walsh, J. H. Tepper, and R. J. Carson. 2012. 42 p. [ONLINE]	Web only
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]	Web only	2011-5	Geologic map of the Holly 7.5-minute quadrangle, Jefferson, Kitsap, and Mason Counties, Washington, by T. A. Contreras, S. A. Weeks, K. M. D. Stanton, B. W. Stanton, B. B. Perry, T. J. Walsh, R. J. Carson, K. P. Clark, and S. A. Mahan. 2012. 37 x 36 in. color sheet, scale 1:24,000, with 13 p. text. [ONLINE]	Web only
2010-5	Supplement to geologic maps of the Lilliwaup, Skokomish Valley, and Union 7.5-minute quadrangles, Mason County, Washington—Geologic setting and development around the Great Bend of Hood Canal, by Michael Polenz, T. A. Contreras, J. L. Czajkowski, Gabriel Legorreta Paulin, B. A. Miller, M. E. Martin, T. J. Walsh, R. L. Logan, R. J. Carson, C. N. Johnson, R. H. Skov, S. A. Mahan, and C. R. Cohan. 2010. 27 p. [ONLINE]	Web only	2011-6	Analytical data from the Holly 7.5-minute quadrangle, Jefferson, Kitsap, and Mason Counties, Washington—Supplement to Open File Report 2011-5, by T. A. Contreras, S. A. Weeks, and B. B. Perry. 2012. 16 p. [ONLINE]	Web only
2010-6	Supplement to 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. 1 Microsoft Excel file. [ONLINE]	Web only	2011-7	Washington State School Seismic Safety Pilot Project—Providing safe schools for our students, by T. J. Walsh, J. D. Schelling, and the Washington State Seismic Safety Committee. 2011. 14 p. [ONLINE]	In print
2010-7	Directory of Washington State surface mining reclamation sites – 2010, by T. C. Duerr. 2010. 282 p. [ONLINE]	Web only	2012-01	Remotely operated vehicle (ROV) video investigation of two large seafloor mounds in southern Hood Canal, Washington, by Recep Cakir, R. L. Logan, C. N. Johnson, T. J. Walsh, Todd Palzer, R. E. Pacunski, James Beam, and Lisa Hillier. 2012. 14 p. plus 6 shapefiles. [ONLINE]	Web only
2011-1	Geologic map of the Monroe 7.5-minute quadrangle, King and Snohomish Counties, Washington, by J. D. Dragovich, M. L. Anderson, S. A. Mahan, C. J. Koger, J. H. Saltonstall, J. H. MacDonald Jr., G. R. Wessel, B. A. Stoker, J. P. Bethel, J. E. Labadie, Recep Cakir, J. D. Bowman, and S. A. DuFrane. 2011. 42 x 36 in. color sheet, scale 1:24,000, with 24 p. text. [ONLINE]	Web only	2012-02	Oil and gas wells in Washington State, by J. L. Czajkowski, J. D. Bowman, J. E. Schuster, and C. M. Wheeler. 2012., rev. 2015, 1 Microsoft Excel file with 4 p. text. [ONLINE]	Web only
2011-2	Analytical data from the Monroe 7.5-minute quadrangle, King and Snohomish Counties, Washington—Supplement to Open File Report 2011-1, by J. D. Dragovich, S. A. Mahan, M. L. Anderson, J. H. MacDonald Jr., G. R. Wessel, S. A. DuFrane, Recep Cakir, J. D. Bowman, and H. A. Littke. 2011. 61 p., 2 plates, and 2 Microsoft Excel files. [ONLINE]	Web only	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]	Web only
			2014-01	Geologic mapping and geothermal assessment of the Wind River valley, Skamania County, Washington, by J. L. Czajkowski, J. D. Bowman, L. A. Fusso, and D. E. Boschmann. 2014. 30 p. with 42 x 42 in. color plate, scale 1:24,000. [ONLINE]	Web only
			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]	Web only
			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]	Web only

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2014-04	Models of bedrock elevation and unconsolidated sediment thickness in the Puget Lowland, Washington, by D. W. Eungard. 2014. 2 plates, scale 1:475,000, with 20 p. text. [ONLINE]	Web only
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]	Web only
2019-01	Report on site class assessments for the Washington State School Seismic Safety Project, by L. T. West, Travis Neilson, and Corina Forson. 2019. 214 p. text. [ONLINE]	Web only
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]	Web only
2022-01	Surficial geologic map of the Sadie Creek fault, Clallam County, Washington, by W. C. Duckworth, Y. E. Perez, C. B. Amos, E. R. Schermer, and Michael Polenz. 2022. 60 x 30 in. color sheet, scale 1:10,000. [ONLINE]	Web only

*Note:* STATEMAP 7.5-minute quadrangles from 2012 through the present have been published under the new [Map Series](#).

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<b>Division of Mines and Mining</b>		
1. Olympic Peninsula manganese, by J. W. Melrose. 1940. 30 p. <a href="#">[ONLINE]</a>	Out of print	10. The Blewett iron deposit, Chelan County, Washington (with preliminary tonnage estimates), by W. A. Broughton. 1943. 17 p., 1 pl., 2 figs. <a href="#">[ONLINE]</a>
2. Washington iron ores, a summary report, by S. L. Glover. 1942. 23 p. <a href="#">[ONLINE]</a>	Out of print	11. Stratigraphic aspects of the Blewett-Cle Elum iron ore zone, Chelan and Kittitas Counties, Washington, by R. L. Luper. 1944. 63 p., 2 pl. <a href="#">[ONLINE]</a>
3. Mineral resources of the Wenatchee-Ellensburg-Yakima region, by S. L. Glover. 1942. 13 p. <a href="#">[ONLINE]</a>	Out of print	12. Economic aspects of the Blewett-Cle Elum iron ore zone, Chelan and Kittitas Counties, Washington, by W. A. Broughton. 1944. 42 p., 7 pl., 14 figs. <a href="#">[ONLINE]</a>
4. Coal and coal mining in Washington, by S. H. Green. 1943. 41 p., 3 figs. <a href="#">[ONLINE]</a>	Out of print	13. Dolomite resources of Washington, by W. A. G. Bennett. 1944. 35 p., 12 pl., 2 figs. <a href="#">[ONLINE]</a>
4R. Coal and coal mining in Washington, by S. H. Green. 1947. 41 p., 3 figs. [Revision of RI 4.] <a href="#">[ONLINE]</a>	Out of print	14. Some magnetite deposits of Stevens and Okanogan Counties, Washington, by W. A. Broughton. 1945. 24 p., 5 pl., 1 fig. <a href="#">[ONLINE]</a>
5. Memorandum report on iron ores of the Cle Elum district, Washington, by Carl Zappfe. 1944. 27 p., 2 pl., 5 figs. <a href="#">[ONLINE]</a>	Out of print	<b>Division of Mines and Geology</b>
6. Relation of geology to mineralization in the Morton cinnabar district, Lewis County, Washington, by J. H. Mackin. 1944. 47 p., 2 pl., 13 figs. <a href="#">[ONLINE]</a>	Out of print	15. Pumice and pumicite occurrences of Washington, by Ward Carithers. 1946. 78 p., 6 pl., 7 figs. <a href="#">[ONLINE]</a>
7. Manganese deposits of the Olympic Peninsula, Washington, by S. H. Green. 1945. 45 p., 5 pl., 1 fig. <a href="#">[ONLINE]</a>	Out of print	16. Origin and occurrence of gem stones in Washington, by S. L. Glover. 1949. 32 p. <a href="#">[ONLINE]</a>
<b>Division of Geology</b>		
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. <a href="#">[ONLINE]</a>	Out of print	17. Perlite and other volcanic glass occurrences in Washington, by M. T. Hunting. 1949. 32 p. <a href="#">[ONLINE]</a>
2. Oil and gas possibilities of western Whatcom County, by S. L. Glover. 1935. 69 p., 1 pl., 1 fig. <a href="#">[ONLINE]</a>	Out of print	18. Molybdenum occurrences of Washington, by C. P. Purdy Jr. 1954. 118 p., 13 pl., 4 figs. <a href="#">[ONLINE]</a>
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. <a href="#">[ONLINE]</a>	Out of print	19. A stratigraphic section in the Yakima Basalt and the Ellensburg Formation in south-central Washington, by J. H. Mackin. 1961. 5 p., 9 pl., 4 figs. <a href="#">[ONLINE]</a>
4. Preliminary report on petroleum and natural gas in Washington, by S. L. Glover. 1936. 24 p., 1 pl. <a href="#">[ONLINE]</a>	Out of print	20. Geological interpretation of airborne magnetometer and scintillometer survey—Mt. Bonaparte, Bodie Mountain, Curlew, Aeneas, and Republic quadrangles, Okanogan and Ferry Counties, Washington, by Hunting Geophysical Services, Inc. 1960. 34 p., 25 pl., 2 figs. <a href="#">[ONLINE]</a>
5. Preliminary report on magnesite deposits of Stevens County, Washington, by W. A. G. Bennett. 1941. 25 p., 2 pl., 1 fig. <a href="#">[ONLINE]</a>	Out of print	21. Stratigraphy of Eocene rocks in a part of King County, Washington, by J. D. Vine. 1962. 20 p., 3 figs. <a href="#">[ONLINE]</a>
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.] <a href="#">[ONLINE]</a>	Out of print	22. Tertiary geologic history of western Oregon and Washington, by P. D. Snavely Jr. and H. C. Wagner. 1963. 25 p., 23 figs. <a href="#">[ONLINE]</a>
7. Character and tonnage of the Turk magnesite deposit, by W. A. G. Bennett. 1943. 22 p., 1 pl., 1 fig. <a href="#">[ONLINE]</a>	In print	23. Mineralogy of black sands at Grays Harbor, Washington, by G. W. Thorsen. 1964. 29 p., 6 figs. <a href="#">[ONLINE]</a>
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. <a href="#">[ONLINE]</a>	Out of print	<b>Division of Geology and Earth Resources</b>
9. Inventory of mineral properties in Chelan County, Washington, by M. T. Hunting. 1943. 63 p., 1 pl. <a href="#">[ONLINE]</a>	Out of print	24. Mount St. Helens ash—Properties and possible uses, by W. S. Moen and G. B. McLucas. 1981. 60 p., 28 figs. <a href="#">[ONLINE]</a>
	Out of print	25. A cross section of a Nevada-style thrust in northeast Washington, by J. R. Snook, H. E. Lucas, and M. J. Abrams. 1981. 9 p., 2 figs. <a href="#">[ONLINE]</a>
	Out of print	26. Coastal wells of Washington, by W. W. Rau and C. R. McFarland. 1982. 4 sheets. <a href="#">[ONLINE]</a>

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<p>27. Geology of the Grande Ronde lignite field, Asotin County, Washington, by K. L. Stoffel. 1984. 79 p., 1 pl., scale 1:48,000, 71 figs. <a href="#">[ONLINE]</a></p>	<p>In print</p>	<p>37. Landslide and liquefaction maps for the Long Beach Peninsula, Pacific County, Washington—Effects on tsunami inundation zones of a Cascadia subduction zone earthquake, by S. L. Slaughter, T. J. Walsh, Anton Ypma, K. M. D. Stanton, Recep Cakir, and T. A. Contreras. 2013. Three color sheets: 44.5 x 36 in., scale 1:18,000, plus 27 p. text. <a href="#">[ONLINE]</a></p>	<p>In print</p>
<p>28. Tin, tungsten, and molybdenum geochemistry of parts of Stevens and Spokane Counties, Washington, by B. B. Bunning. 1985. 57 p., 30 figs. <a href="#">[ONLINE]</a></p>	<p>In print</p>	<p>38. Landslide and liquefaction maps for the Ocean Shores and Westport peninsulas, Grays Harbor County, Washington—Effects on tsunami inundation zones of a Cascadia subduction zone earthquake, by S. L. Slaughter, T. J. Walsh, Anton Ypma, and Recep Cakir. 2014. Three color sheets: 39 x 36 in., scale 1:18,000, plus 26 p. text. <a href="#">[ONLINE]</a></p>	<p>In print</p>
<p>29. Mima Mounds—An evaluation of proposed origins with special reference to the Puget Lowland, by A. L. Washburn. 1988. 53 p., 13 figs. <a href="#">[ONLINE]</a></p>	<p>In print</p>	<p>39. Landslide inventory, susceptibility, and exposure analysis of Pierce County, Washington, by K. A. Mickelson, K. E. Jacobacci, T. A. Contreras, A. Biel, and S. L. Slaughter. 2017. 26 p. text, 2 ESRI geodatabases, and 1 Microsoft Excel file. <a href="#">[ONLINE]</a></p>	<p>Web only</p>
<p>30. Geology of the Upper Proterozoic to Lower Cambrian Three Sisters Formation, Gypsy Quartzite, and Addy Quartzite, Stevens and Pend Oreille Counties, northeastern Washington, by K. A. Lindsey, D. R. Gaylord, and L. H. Groffman. 1990. 37 p., 29 figs. <a href="#">[ONLINE]</a></p>	<p>In print</p>	<p>40. Landslide inventory and susceptibility of the Columbia Gorge in Clark, Skamania, and Klickitat Counties, Washington, by K. A. Mickelson, K. E. Jacobacci, T. A. Contreras, W. Gallin, and S. L. Slaughter. 2018. 11 p. text and 2 ESRI geodatabases. <a href="#">[ONLINE]</a></p>	<p>Web only</p>
<p>31. Paleontology and stratigraphy of Eocene rocks at Pulali Point, Jefferson County, eastern Olympic Peninsula, Washington, by R. L. Squires, J. L. Goedert, and K. L. Kaler. 1992. 27 p., 3 pl., 7 figs. <a href="#">[ONLINE]</a></p>	<p>In print</p>	<p>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. <a href="#">[ONLINE]</a></p>	<p>Web only</p>
<p>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. <a href="#">[ONLINE]</a></p>	<p>In print</p>	<p>42. Landslide inventory of western Whatcom County, by K. A. Mickelson, T. A. Contreras, W. N. Gallin, K. E. Jacobacci, and S. L. Slaughter. 2020. 7 p. text and 1 ESRI geodatabase. <a href="#">[ONLINE]</a></p>	<p>Web only</p>
<p>33. Late Pleistocene stratigraphy in the south-central Puget Lowland, Pierce County, Washington, by R. K. Borden and K. G. Troost. 2001. 33 p., 29 figs., 3 tables. <a href="#">[ONLINE]</a></p>	<p>In print</p>	<p>43. Landslide inventory of portions of Snohomish County, Washington by K. A. Mickelson, T. A. Contreras, M. D. Allen, K. E. Jacobacci, E. M. Richard, W. N. Gallin, Kara Fisher, and Gabriel Legoretta Paulín. 2022. 7 p. text. <a href="#">[ONLINE]</a></p>	<p>Web only</p>
<p>34. Digital landslide inventory for the Cowlitz County urban corridor—Kelso to Woodland (Ceweeman 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.</p> <p><i>Superseded by Report of Investigations 35.</i></p>	<p>Out of print</p>	<p>44. Alluvial fan inventory of Klickitat County, Washington, by K. A. Mickelson, Trent Adams, and Crystal Lambert. 2023. 5 p. text. <a href="#">[ONLINE]</a></p>	<p>Web only</p>
<p>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 a 24 p. text. 1 CD-ROM. <a href="#">[ONLINE]</a></p> <p><i>Supersedes Report of Investigations 34.</i></p>	<p>In print</p>	<p>45. Landslide inventory update of the Columbia River Gorge in Clark, Skamania, and Klickitat Counties, Washington, by M. D. Allen, E. M. Richard, Kara Fisher, Josh Hardesty, K. A. Mickelson, Trent Adams, and Crystal Lambert. 2023. 7 p. text. <a href="#">[ONLINE]</a></p>	<p>Web only</p>
<p>36. Earthquake-induced landslide and liquefaction susceptibility and initiation potential maps for tsunami inundation zones in Aberdeen, Hoquiam, and Cosmopolis, Grays Harbor County, Washington, for a M9+ Cascadia subduction zone event, by S. L. Slaughter, T. J. Walsh, Anton Ypma, K. M. D. Stanton, Recep Cakir, and T. A. Contreras. 2013. Two color sheets: 36 x 43 in. and 36 x 28 in., scale 1:18,000, plus 39 p. text. <a href="#">[ONLINE]</a></p>	<p>In print</p>		

## ■ REPRINTS ■

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

1.	Ringold Formation of Pleistocene age in type locality, the White Bluff's, Washington, by R. C. Newcomb. 1958. 14 p. [ONLINE]	Web only	6.	Geology of the Jumbo Mountain nickel deposit, Snohomish County, Washington, by J. W. Mills. 1960. 4 p. [ONLINE]	Web only
2.	Pleistocene sequence in southeastern part of the Puget Sound lowland, Washington, by D. R. Crandell, D. R. Mullineaux, and H. H. Waldron. 1958. 15 p. [ONLINE]	Web only	7.	Mineralogy and geochemistry of the Read magnetite deposit, southwestern Stevens County, Washington, by W. A. G. Bennett; and Ludwigite from the Read magnetite deposit, Stevens County, Washington, by W. T. Schaller and A. C. Vlisdjis. 1962. 13 p. [ONLINE]	Web only
3.	Tertiary stratigraphic papers, southwestern Washington: Mcintosh formation, Centralia-Chehalis coal district, Washington, by P. D. Snavely, Jr., W. W. Rau, Linn Hoover, Jr., and A. E. Roberts; Lyre formation (redefinition), northern Olympic Peninsula, Washington, by R. D. Brown, Jr., P. D. Snavely, Jr., and H. D. Gower; Twin River formation (redefinition), northern Olympic Peninsula, Washington, by R. D. Brown, Jr., and H. D. Gower. 1959. 50 p. [ONLINE]	Web only	8.	Emplacement of the Twin Sisters Dunite, Washington, by D. M. Ragan. 1963. 16 p. [ONLINE]	Web only
4.	Nickel-gold ore of the Mackinaw mine, Snohomish County, Washington, by Charles Milton and D. J. Milton. 1959. 22 p. [ONLINE]	Web only	9.	Mineral and water resources of Washington, by the U.S. Geological Survey and others. 1966. 436 p. [ONLINE]	Web only
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]	Web only	10.	Washington mineral deposits, by M. T. Hunting. 1966. 7 p. [ONLINE]	Web only
			11.	The search for hot rocks—Geothermal exploration, Northwest, by J. E. Schuster. 1973. 3 p. [ONLINE]	Web only
			12.	Geology of Washington, by the U.S. Geological Survey. 1978. 51 p., 1 pl. [ONLINE]	Web only
			13.	An assessment of the oil and gas potential of the Washington outer continental shelf, by S. P. Palmer and W. S. Lingley, Jr. 1989. 83 p., 12 pl. [ONLINE]	Web only

## ■ RESOURCE MAPS ■

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

1.	Rock aggregate resource lands inventory map for Clark County, Washington, by C. N. Johnson, S. P. Palmer, and J. L. Poelstra. 2005. 36 x 36 in. color sheet, scale 1:100,000. [ONLINE]	In print	3.	Potential growing areas for wine grapes in the Yakima Valley, Washington, by D. K. Norman, A. J. Busacca, and Wade Wolfe. 2009. 48 x 36 in. color sheet, scale 1:110,000. [ONLINE]	In print
2.	Rock aggregate resource lands inventory map for Yakima County, Washington, by S. P. Palmer, J. L. Poelstra, and C. N. Johnson. 2005. 38 x 36 in. color sheet, scale 1:200,000. [ONLINE]	In print			

## ■ TOPOGRAPHIC MAPS ■

*Topographic Maps are available online only.*

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]	Web only
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]	Web only
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]	Web only

## ■ MISCELLANEOUS REPORTS ■

*Miscellaneous Reports are available online only.*

Quick report for the Ledgewood–Bonair landslide, Whidbey Island, Island County, Washington, by Stephen Slaughter, Isabelle Sarikhan, Michael Polenz, and Tim Walsh. 2013. [7 p.] <a href="#">[ONLINE]</a>	Web only	Mount St. Helens—A bibliography of geoscience literature, 1882–1986, by C. J. Manson, C. H. Messick, and G. M. Sinnott. 1987. 205 p. <a href="#">[AUTHOR]</a> <a href="#">[SUBJECT]</a>	Web only
Strategies for establishing a Washington State post-earthquake information clearinghouse: A report to the Washington Emergency Management Division, by T. J. Walsh and Recep Cakir. 2013. [20 p.] <a href="#">[ONLINE]</a>	Web only	Notes on division history, by J. E. Schuster. 1986. 9 p. <a href="#">[ONLINE]</a>	Web only
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. <a href="#">[ONLINE]</a>	Web only	Gems and minerals of Washington, by Bob Pattie. 1985. 1 sheet, scale 1:443,520. <a href="#">[ONLINE]</a>	Web only
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. <a href="#">[ONLINE]</a>	Web only	Washington's coal—History and future development potential, by Raymond Lasmanis and H. W. Schasse. 1982. 24 p. <a href="#">[ONLINE]</a>	Web only
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. <a href="#">[ONLINE]</a>	Web only	Forest Slope Stability Project, Phase II, by A. J. Fiksdal and M. J. Brunengo. 1981. 2 v. <a href="#">[ONLINE]</a>	Web only
Liquefaction susceptibility mapping for selected urban areas in the central Puget Sound region, Washington—Final technical report, by S. P. Palmer, W. J. Perkins, and W. P. Grant. 2004. 1 v. <a href="#">[ONLINE]</a>	Web only	Forest Slope Stability Project, Phase I, by A. J. Fiksdal and M. J. Brunengo. 1980. 18 p., 7 pl. <a href="#">[ONLINE]</a>	Web only
Holocene geologic history and sedimentology of the Duwamish and Puyallup valleys, Washington, by S. P. Palmer. 1997. 32 p. <a href="#">[ONLINE]</a>	Web only	A pre-1980 eruption description of Mount St. Helens, by the Washington Division of Geology and Earth Resources. 1980. 10 p. <a href="#">[ONLINE]</a>	Web only
Reconnaissance geology of the Matheny Ridge–Higley Peak areas, Olympic Peninsula, Washington, by W. S. Lingley, Jr., R. L. Logan, T. J. Walsh, W. J. Gerstel, H. W. Schasse. 1996. 31 p., 1 pl., scale 1:62,500. <a href="#">[ONLINE]</a>	Web only	Bibliography of Snohomish County geology, with an index to geologic mapping, by S. J. Simpson. 1979. 81 p., 6 pl. <a href="#">[ONLINE]</a>	Web only
Capitol campus greenhouse soil stability investigation status report, by S. P. Palmer and W. J. Gerstel. 1995. 1 v. <a href="#">[ONLINE]</a>	Web only	Photographic guide keyed to 15-minute quadrangles [supplement to OFR 79-2. An assessment of the uranium potential in the Ellensburg Formation, south-central Washington], by P. C. Milne. 1979. [47 p.] <a href="#">[ONLINE]</a>	Web only
Petroleum potential and probability of renewed mineral-rights leasing in the Columbia Basin, Washington, by W. S. Lingley, Jr. 1995. 43 p. <a href="#">[ONLINE]</a>	Web only	A learning guide on the geology of the Cispus Environmental Center area, Lewis County, Washington, by J. E. Schuster. 1973. 53 p. <a href="#">[ONLINE]</a>	Web only
Cyanide heap leaching—A report to the Legislature, by D. K. Norman and R. L. Raforth. 1994. 28 p. <a href="#">[ONLINE]</a>	Web only	Geothermal energy—Questions and answers, by J. E. Schuster. 1972. 4 p. <a href="#">[ONLINE]</a>	Web only
Fundamentals of blasting and reclamation workshop, by A. E. Teller. 1994. <a href="#">[ONLINE]</a>	Web only	Holden tailings [Holden mine, Chelan County], by G. W. Thorsen. 1970. 20 p. <a href="#">[ONLINE]</a>	Web only
Index of geotechnical studies of the Washington State capitol campus and vicinity, by R. A. Christie. 1993. 4 p., 1 pl. <a href="#">[ONLINE]</a>	Web only	Landslide of January 1967 which diverted the North Fork of the Stillaguamish River near Hazel [Snohomish County], by G. W. Thorsen. 1970. 8 p. <a href="#">[ONLINE]</a>	Web only
General geology and paleontology of the Harsha 7.5 quadrangle, by P. K. Spencer. 1992? 14 p. <a href="#">[ONLINE]</a>	Web only	Surface-mined land reclamation act training session, by M. T. Huntting, D. M. Ford, and John Griffiths. 1970. 1 v., 76 p. <a href="#">[ONLINE]</a>	Web only
Thunder Creek basin, Skagit County—Report of DNR Study Team, by Jerry Thorsen. 1989. 33 p. <a href="#">[ONLINE]</a>	Web only	Ghost town references, by the State of Washington Board of Natural Resources. 1968? 3 p. <a href="#">[ONLINE]</a>	Web only
The Culver System in Washington State, by J. E. Schuster. 1988. <a href="#">[ONLINE]</a>	Web only	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. <a href="#">[ONLINE]</a>	Web only
Guide to production of 1:100,000-series open file reports, by Bill Phillips. 1988. 17 p. <a href="#">[ONLINE]</a>	Web only	State mineral production near record level in 1966, by M. T. Huntting. 1967? 9 p. <a href="#">[ONLINE]</a>	Web only
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. <a href="#">[ONLINE]</a>	Web only	Mine production record set in 1965, by M. T. Huntting. 1966? 3 p. <a href="#">[ONLINE]</a>	Web only
Mining developments and future needs of Washington, by M. T. Huntting. 1965. 6 p. <a href="#">[ONLINE]</a>	Web only	State mineral production at all time high in 1964, by M. T. Huntting. 1965? 4 p. <a href="#">[ONLINE]</a>	Web only
“Firsts,” 1957–1964—Division of Mines and Geology, by M. T. Huntting? 1964? 2 p. <a href="#">[ONLINE]</a>	Web only	“Firsts,” 1957–1964—Division of Mines and Geology, by M. T. Huntting? 1964? 2 p. <a href="#">[ONLINE]</a>	Web only

## ■ MISCELLANEOUS REPORTS ■

*Miscellaneous Reports are available online only.*

Mine resource programs—Present and future, by M. T. Huntingt. 1964. 3 p. <a href="#">[ONLINE]</a>	Web only	Preliminary surveys for highway salvage archeology in the State of Washington—A final report, by Bruce Stallard. 1958. 23 p. <a href="#">[ONLINE]</a>	Web only
Origin of Dry Falls [Grant County], by V. E. Livingston, Jr. 1964. 4 p. <a href="#">[ONLINE]</a>	Web only	Mining in Washington, by C. P. Purdy, Jr. 1953. 3 p. <a href="#">[ONLINE]</a>	Web only
Tumtum Mountain [Clark County]—A potential source of feldspar, by W. A. G. Bennett. 1964. 5 p. <a href="#">[ONLINE]</a>	Web only	Steilacoom gravel, by S. H. Green and M. T. Huntingt. 1948. 9 p. <a href="#">[ONLINE]</a>	Web only
Annotated bibliography of Washington clays, by W. H. Reichert. 1963. 19 p. <a href="#">[ONLINE]</a>	Web only	A factual review of mining developments in the State of Washington in 1947, by S. H. Green. 1947. 4 p. <a href="#">[ONLINE]</a>	Web only
Dolomite and andalusite deposits of northern Stevens County, by W. S. Moen and W. A. G. Bennett. 1963. 4 sheets, scale 1:62,500. <a href="#">[ONLINE]</a>	Web only	Preliminary report on the mines and prospects of the upper Methow region, Okanogan and Whatcom Counties, by Ward Carithers. 1946. 40 p. <a href="#">[ONLINE]</a>	Web only
A set of Washington rocks and minerals for schools, by Washington Division of Mines and Geology; Washington State Superintendent of Public Instruction. 1963. 13 p. <a href="#">[ONLINE]</a>	Web only	An outline of mining laws of the State of Washington, compiled and annotated, by M. H. Van Nuys. 1940. 55 p. <a href="#">[ONLINE]</a> <i>Superseded by Bulletin 41.</i>	Web only
State Department of Conservation has record year [1962], by M. T. Huntingt. 1963. 7 p. <a href="#">[ONLINE]</a>	Web only	Oil and gas studies by the Division of Geology, by S. L. Glover. 1936. 8 p. <a href="#">[ONLINE]</a>	Web only
Preliminary report on mineral resources of the Cougar Lake limited area [Yakima County], by W. S. Moen. 1962. 9 p. <a href="#">[ONLINE]</a>	Web only	Report of natural resources survey from October 1, 1933, to March 1, 1935, by T. B. Hill. 1935. 30 p. <a href="#">[ONLINE]</a>	Web only
Mineral exploration in Washington—1960, by M. T. Huntingt. 1961? 2 p. <a href="#">[ONLINE]</a>	Web only	Colloidal fuel, by M. C. Butler. 1934. 9 p. <a href="#">[ONLINE]</a>	Web only
Washington mineral industry—1960, by M. T. Huntingt. 1961? 5 p. <a href="#">[ONLINE]</a>	Web only	Mining in the Pacific Northwest, by L. K. Hodges. 1897. 183 p. <a href="#">[ONLINE]</a>	Web only

## ■ OTHER PUBLICATIONS ■

*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

Information on fossil and mineral collecting in Washington, includes [Fossils in Washington](#), [Gems and Minerals of Washington](#), and [Mineral Checklist](#).

### 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

Washington Geological Survey, 2019, Aberdeen, Hoquiam, and Cosmopolis Tsunami Evacuation Walk Times: Washington Department of Natural Resources, Washington Geological Survey, 1 sheet. [\[ONLINE\]](#)

Washington Geological Survey, 2019, Anacortes Tsunami Evacuation Walk Times: Washington Department of Natural Resources, Washington Geological Survey, 1 sheet. [\[ONLINE\]](#)

Washington Geological Survey, 2019, Bellingham Tsunami Evacuation Walk Times: Washington Department of Natural Resources, Washington Geological Survey, 1 sheet. [\[ONLINE\]](#)

Washington Geological Survey, 2019, Ilwaco and Cape Disappointment Tsunami Evacuation Walk Times: Washington Department of Natural Resources, Washington Geological Survey, 1 sheet. [\[ONLINE\]](#)

Washington Geological Survey, 2019, Long Beach and Seaview Tsunami Evacuation Walk Times: Washington Department of Natural Resources, Washington Geological Survey, 1 sheet. [\[ONLINE\]](#)

Washington Geological Survey, 2019, Port Angeles Tsunami Evacuation Walk Times: Washington Department of Natural Resources, Washington Geological Survey, 1 sheet. [\[ONLINE\]](#)

Washington Geological Survey, 2019, Port Townsend Tsunami Evacuation Walk Times: Washington Department of Natural Resources, Washington Geological Survey, 1 sheet. [\[ONLINE\]](#)

Washington Geological Survey, 2019, Westport Tsunami Evacuation Walk Times: Washington Department of Natural Resources, Washington Geological Survey, 1 sheet. [\[ONLINE\]](#)

Washington Geological Survey, 2022, Cranberry Road to Ocean Park Tsunami Evacuation Walk Times: Washington Department of Natural Resources, Washington Geological Survey, 1 sheet. [\[ONLINE\]](#)

Washington Geological Survey, 2022, Leadbetter Point Tsunami Evacuation Walk Times: Washington Department of Natural Resources, Washington Geological Survey, 1 sheet. [\[ONLINE\]](#)

Washington Geological Survey, 2022, North Cove to Shoalwater Bay Tsunami Evacuation Walk Times: Washington Department of Natural Resources, Washington Geological Survey, 1 sheet. [\[ONLINE\]](#)

Washington Geological Survey, 2022, Ocean Park to Leadbetter State Park Tsunami Evacuation Walk Times: Washington Department of Natural Resources, Washington Geological Survey, 1 sheet. [\[ONLINE\]](#)

Washington Geological Survey, 2022, Tokeland Peninsula Tsunami Evacuation Walk Times: Washington Department of Natural Resources, Washington Geological Survey, 1 sheet. [\[ONLINE\]](#)

Washington Geological Survey, 2022, North Ocean Shores Tsunami Evacuation Walk Times: Washington Department of Natural Resources, Washington Geological Survey, 1 sheet. [\[ONLINE\]](#)

Washington Geological Survey, 2022, Grayland Tsunami Evacuation Walk Times: Washington Department of Natural Resources, Washington Geological Survey, 1 sheet. [\[ONLINE\]](#)

Washington Geological Survey, 2023, La Push Tsunami Evacuation Walk Times: Washington Department of Natural Resources, Washington Geological Survey, 1 sheet. [\[ONLINE\]](#)

Washington Geological Survey, 2023, Copalis Beach to Pacific Beach Tsunami Evacuation Walk Times: Washington Department of Natural Resources, Washington Geological Survey, 1 sheet. [\[ONLINE\]](#)

Washington Geological Survey, 2023, Ocean City to Copalis Beach Tsunami Evacuation Walk Times: Washington Department of Natural Resources, Washington Geological Survey, 1 sheet. [\[ONLINE\]](#)

Washington Geological Survey, 2023, Hoh Tsunami Evacuation Walk Times: Washington Department of Natural Resources, Washington Geological Survey, 1 sheet. [\[ONLINE\]](#)

Washington Geological Survey, 2023, Queets Tsunami Evacuation Walk Times: Washington Department of Natural Resources, Washington Geological Survey, 1 sheet. [\[ONLINE\]](#)

Washington Geological Survey, 2023, Taholah Tsunami Evacuation Walk Times: Washington Department of Natural Resources, Washington Geological Survey, 1 sheet. [\[ONLINE\]](#)

Washington Geological Survey, 2023, Moclips Tsunami Evacuation Walk Times: Washington Department of Natural Resources, Washington Geological Survey, 1 sheet. [\[ONLINE\]](#)

## ■ OTHER PUBLICATIONS ■

*Other publications are available online only.*

### **WILDFIRE-ASSOCIATED LANDSLIDE EMERGENCY RESPONSE TEAM (WALERT) REPORTS**

Burned Area Emergency Response (BAER) Norse Peak and American Fires, Geology: Landslides, by Stephen Slaughter and Trevor Contreras. 2017. 18 p. text. [\[ONLINE\]](#)

Burned Area Emergency Response (BAER) Jolly Mountain Fire, Geology: Landslides, by Stephen Slaughter and Trevor Contreras. 2017. 11 p. text. [\[ONLINE\]](#)

Crescent Mountain Fire Twisp River Debris Flow Evaluation, by Trevor Contreras. 2018. 16 p. text. [\[ONLINE\]](#)

Burned Area Emergency Response (BAER) Cougar Creek Fire, Geology: Entiat River Road Debris Flow Evaluation, by Stephen Slaughter and Trevor Contreras. 2018. 19 p. text. [\[ONLINE\]](#)

Wildfire-associated Landslide Emergency Response Team (WaLERT) Report for the Left Hand Fire, by Trevor Contreras and William Gallin. 2019. 15 p. text. [\[ONLINE\]](#)

Evans Canyon Fire, Wenas and Untanum Creeks, Yakima and Kittitas Counties, Washington, by Trevor Contreras and Emilie Richard. 2020. 1 sheet, with 5 p. text. [\[ONLINE\]](#)

Twentyfive Mile Fire, Chelan County, Washington, by Trevor Contreras and Katherine Mickelson. 2021. 6 p. text. [\[ONLINE\]](#)

Muckamuck Fire, Okanogan County, Washington, by Trevor Contreras and Katherine Mickelson. 2021. 1 sheet, with 7 p. text. [\[ONLINE\]](#)

Schneider Springs Fire, Yakima County, Washington, by Trevor Contreras, William Gallin, Katherine Mickelson, and Kara Jacobacci. 2021. 7 p. text. [\[ONLINE\]](#)

Ford Corkscrew Fire, Stevens County, Washington, by Trevor Contreras and Mitchell Allen. 2021. 1 sheet, with 6 p. text. [\[ONLINE\]](#)

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. [\[ONLINE\]](#)

Red Apple Fire, Burch Mountain, Chelan County, Washington, by Trevor Contreras and Emilie Richard. 2021. 1 sheet with 10 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. [\[ONLINE\]](#)

Eagle Bluff Fire, Okanogan County, Washington, by Mitchell Allen and Josh Hardesty. 2023. 1 sheet, with 6 p. text. [\[ONLINE\]](#)

Sourdough and Blue Lake Fires, Whatcom and Chelan Counties, Washington, by Josh Hardesty and Kara Fisher. 2023. 2 sheets, with 10 p. text. [\[ONLINE\]](#)

### **SCHOOL SEISMIC SAFETY PROGRAM**

#### **Legislative Reports**

School Seismic Safety Project Phase 1 (2017–2019) Progress Report, by D. K. Norman and Joanna Eide, 2018. 187 p. text. [\[ONLINE\]](#)

School Seismic Safety Project Phase 1 (2017–2019) Final Legislative Report, by Washington Geological Survey. 2019. 88 p. text. [\[ONLINE\]](#)

School Seismic Safety Project Phase 2 (2019–2021) Final Legislative Report, by Washington Geological Survey. 2021. 147 p. text. [\[ONLINE\]](#)