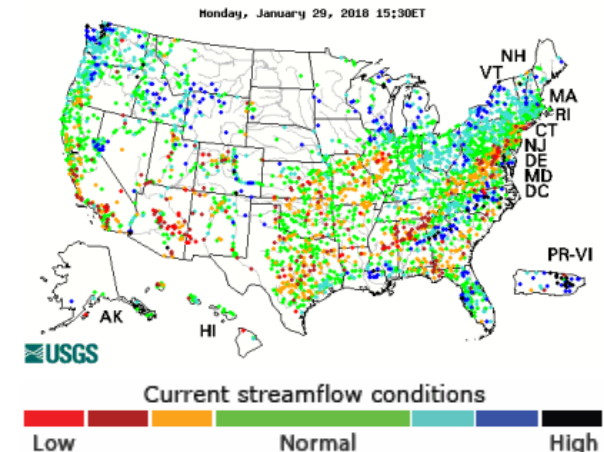
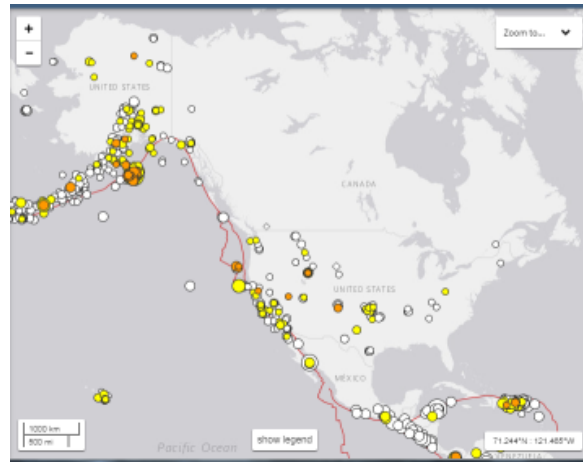


U.S. Geological Survey(USGS) Library Materials: Measuring Research Impact - What Really Counts?

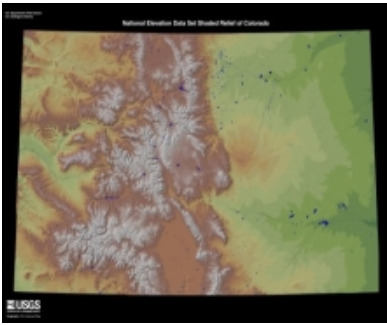
Emily C. Wild, Librarian (Physical Scientist)

American Library Association (ALA) , February 11, 2018, Denver, Colorado



Overview

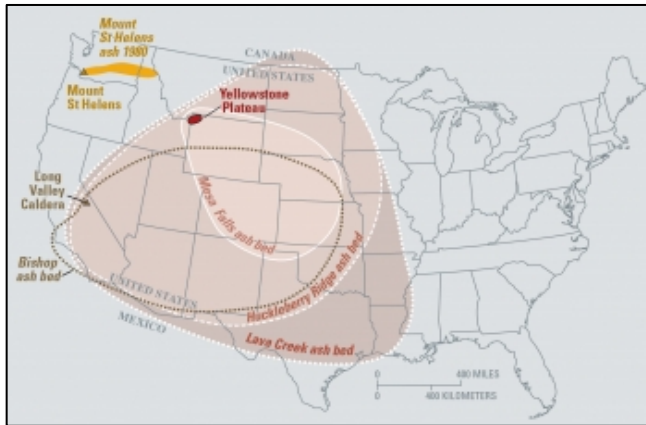
- U.S. Geological Survey Information
- Publications: Downloads versus Cited
- Cited & Highly Cited Researchers



USGS National Elevation Data



USGS Ortho Image



Modeling the Ash Distribution of a Yellowstone Supereruption (2014)



Mount St. Helens Videos

[USGS Library Update](http://www.usgs.gov)
[November 2017](http://www.usgs.gov)

<http://www.usgs.gov>

<http://Library.usgs.gov>

<http://www.doi.gov/library>

U.S. Geological Survey: Mission Areas

- Climate and Land Use Change
- Core Science Systems
 - Core Science Analytics, Synthesis, and Libraries (CSAS&L)
- Ecosystems
- Energy and Minerals
- Environmental Health
- Natural Hazards
- Water



Placer gold diggings. Hahns Peak, Colorado. Routt County, Colorado. 1903.



Tungsten Vein mine. Nederland, Colorado. Boulder County, Colorado. 1930.



Ash plume and crater rim at Mount St. Helens, October 5, 2004, aerial view.

USGS Reference Librarian (Scientist & GIS)

Outreach & Instruction = Print and Electronic Products: <https://library.usgs.gov/publicresources.html>

Provide tabular, text, & geospatial data: <https://sciencebase.usgs.gov/>

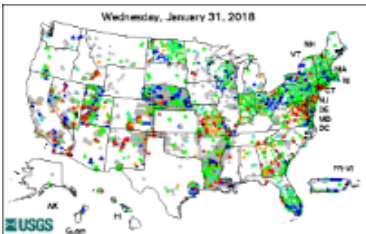
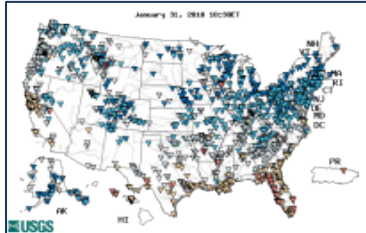
USGS, U.S. Government Agencies, Countries, and Public

Real-Time Data Librarian: current conditions <https://data.usgs.gov>

Disaster Librarian: recent & historical hazard events <https://www.usgs.gov/science/mission-areas/natural-hazards/emergency-management>

Research Librarian: Earth's past, present, and future on subjects = biology, geology, geography, and water resources [USGS Denver Library: <http://www.worldcat.org/libraries/48419>]

Law & Legal Librarian: USGS data interconnected with local, state, federal, and international laws , and laws and regulations governing USGS activities <https://www2.usgs.gov/laws/>



[Water-Quality Watch](#)
[Groundwater Watch](#)



[Hurricane Irma](#)



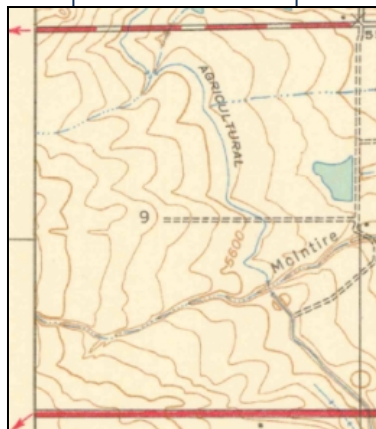
[USGS Projects in Afghanistan](#)



[Gold King Mine Release](#)

What types of questions do you get?

1937, 1941
USGS Topo Map



1954, 1957
USGS Topo Map



- **Library Inquiries within the USGS**

- Emergency Response: Earthquakes, Floods, Droughts, Water Quality, Mines, Energy, Human Health, Wildlife Health
- Research of Science on Earth (Land, Ocean) and other Planets: Subjects = Biology, Geology, Geography, & Water

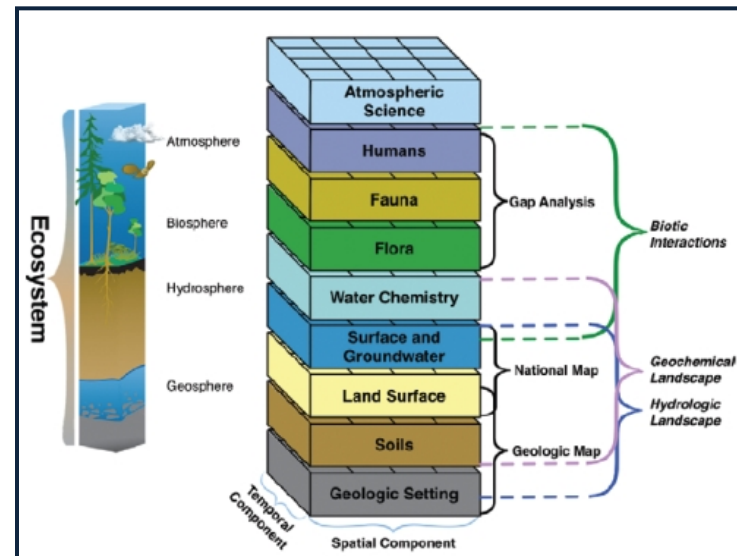
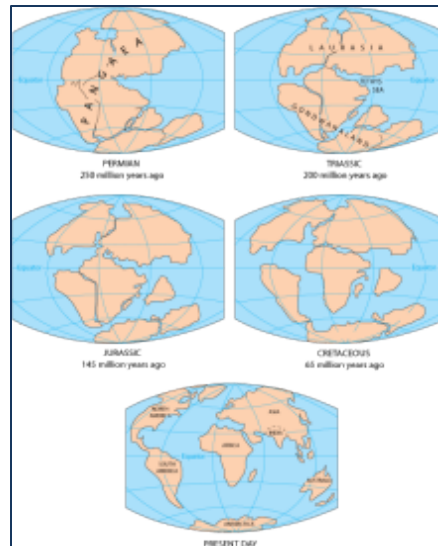
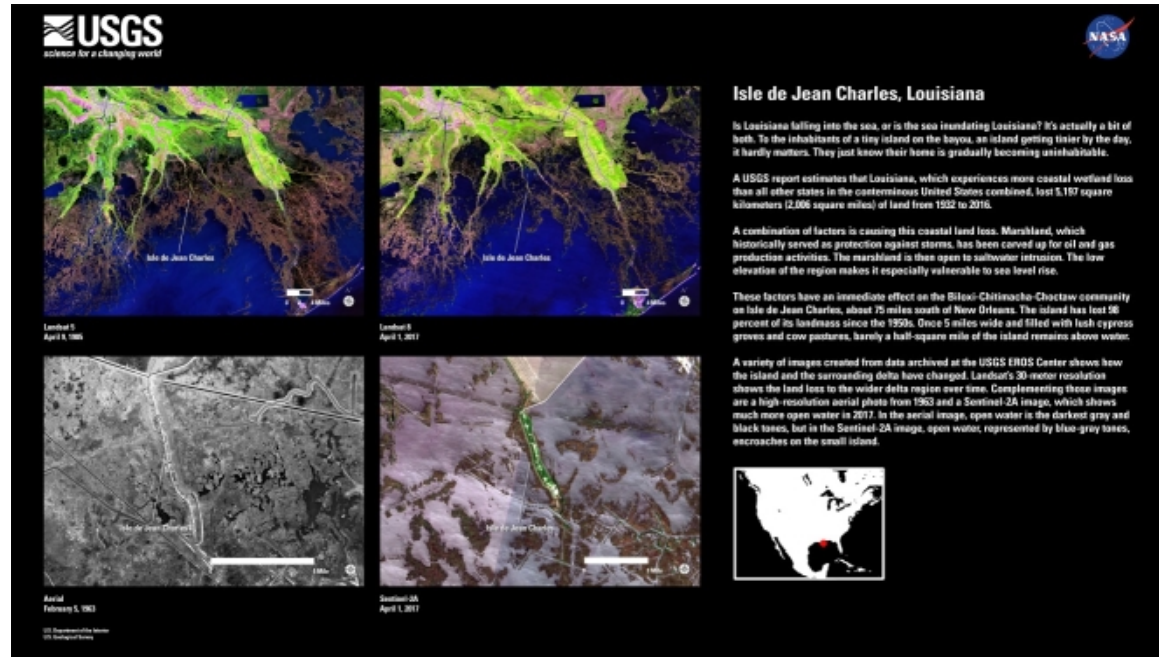
- **Library Inquiries from Federal Government**

- Disasters: Explosions, Chemical Spills, Floods, Health
- Scientific Research: Local, State, National, International
- Legal: Disasters, Names, Land, Water, Oil, Gas, Minerals
- USGS Data Referenced in Legislation & Legislative Hearings

- **Library Inquiries from Industry & Communities**

- Land-Use Change: Hazards, Permitting, Zoning, Preservation
 - Legal: Names, Land, Water, Oil, Gas, Minerals, Disasters
 - To Understand the Science: Local, Regional, National, World
- Ex: [Induced Earthquakes](#), [Water Supply](#), [Topo Maps](#)

Earth



Indexing and Availability of USGS Citations in 2001

National and Global Level: Commercial Databases (GeoRef)

Agency and Bureau Level: USGS Library (online catalog) and USGS publication links (report series web sites)

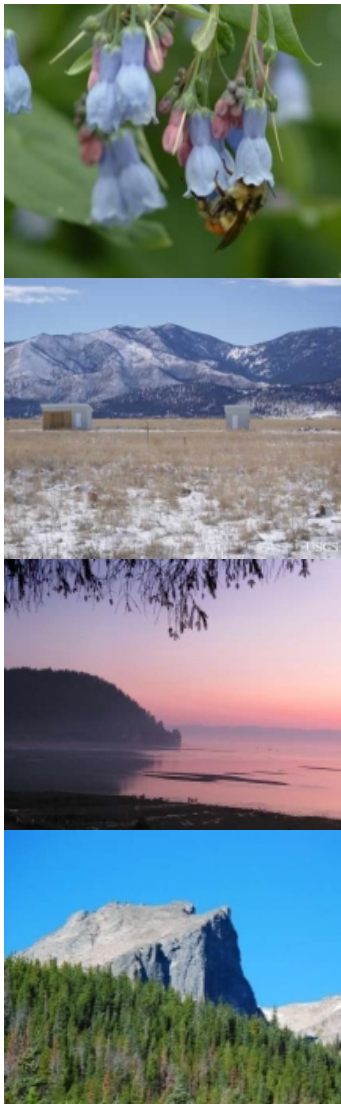
Regional Area and Subject Level: USGS field libraries, project and(or) program bibliographies

Local and State Level: USGS State office libraries, bibliographies, publication links and GIS datasets

Wild, E.C., and Havener, M.W., 2001, "Online bibliographic sources in hydrology," in Baldwin,

Virginia, and Hallmark, Julie, eds., Information and the Scientist and Engineer, 222 p.

Wild, E.C., and Havener, M.W., 2001, "Online bibliographic sources in hydrology," Science and Technology Libraries, Volume 21, Issue 2-4, 2001, pages 63-86. [\[Link\]](#)



USGS Authored Publication Access

USGS Publications Warehouse: <https://pubs.er.usgs.gov/>

USGS National Geologic Map Database: <https://ngmdb.usgs.gov>

USGS Topographic Maps: [text search](#) ; [interactive map search](#)

USGS Long-Term Archive: https://lta.cr.usgs.gov/products_overview/

GeoScienceWorld: <https://pubs.geoscienceworld.org/>

AAPG Datapages: <http://archives.datapages.com/data/index.html>

American Geosciences Institute (AGI) List of open-access journals/series:
<https://www.americangeosciences.org/georef/open-access-journalseries>

Google Scholar: <https://scholar.google.com/>

Publish or Perish: <https://harzing.com/resources/publish-or-perish>

Altmetric: <https://www.altmetric.com/>

Scopus: <https://www.scopus.com>

Web of Science: Cited Reference Search

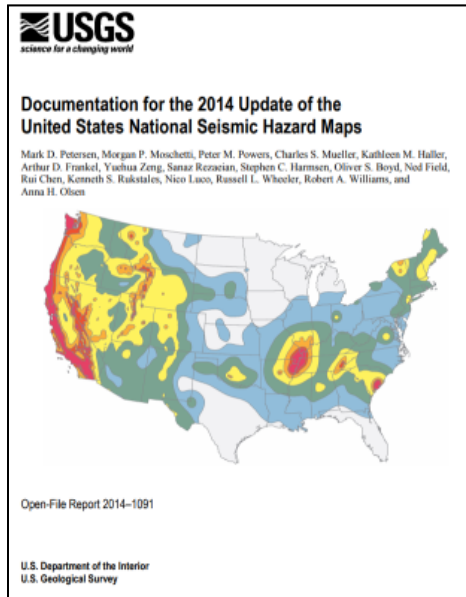


<https://library.usgs.gov/publicresources.html>

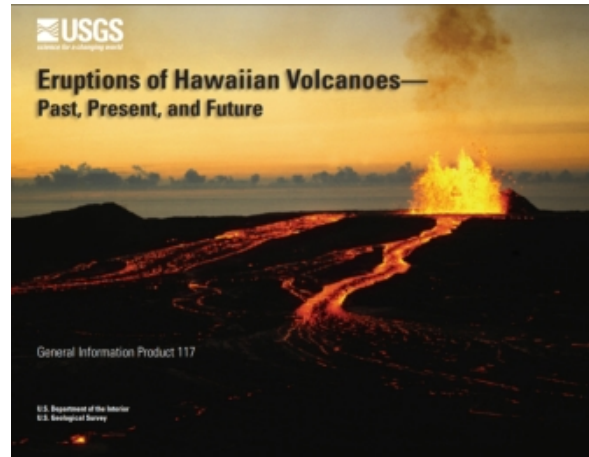


USGS Authored Publications

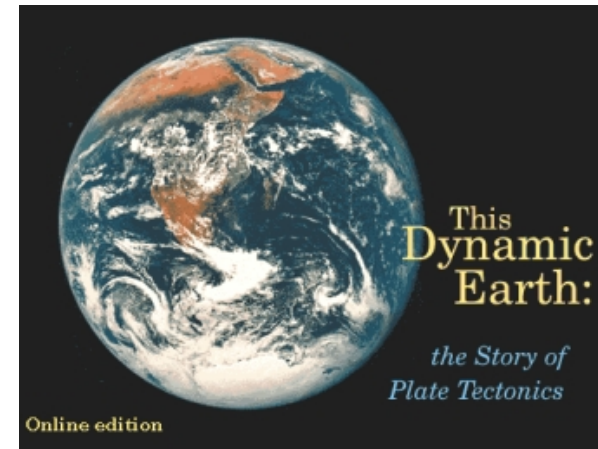
- 2017 = 2,865 publications; where 652 reports and 1,930 journal articles
- 2012 = 3,285 publications; where 1,108 reports and 1,888 journal articles
- 2007 = 3,550 publications; where 1,436 reports and 1,854 journal articles



[U.S. Geological Survey Open-File Report 2014-1091](#)
[Documentation for the 2014 Update of the United States National Seismic Hazard Maps](#)



[U.S. Geological Survey General Information Product 117](#)
[Eruptions of Hawaiian Volcanoes—Past, Present, and Future](#)



[U.S. Geological Survey General Information Product](#)
[This dynamic earth: the story of plate tectonics](#)

Publication Downloads versus Cited: 2017

2017 Downloads	Title	Year Published	#Cited in Google Scholar	#Altmetric
2,840,645	Documentation for the 2014 Update of the United States National Seismic Hazard Maps	2014	684	N/A
1,964,492	Atlas of Depth-Duration Frequency of Precipitation Annual Maxima for Texas	2004	17	N/A
1,683,298	Geochemical and Mineralogical Maps for Soils of the Conterminous United States	2014	53	3
1,439,060	Critical mineral resources of the United States—Economic and environmental geology and prospects for future supply	2017	Zero (Pub 12/19)	93
1,035,806	Discharge Measurements at Gaging Stations	2010	123	N/A
1,009,241	Frac Sand in the United States—A Geological and Industry Overview	2015	6	N/A
953,232	The 1980 eruptions of Mount St. Helens, Washington	1981	519	N/A
870,655	Study and Interpretation of the Chemical Characteristics of Natural Water	1985	5,675	N/A
829,461	Geologic Map of the Bailey 30' × 60' Quadrangle, North-Central Colorado	2011	6	N/A
821,560	Topographic Map Symbols	2005	Zero	N/A

Publication Downloads versus Cited: 2017 continued...

2017 Downloads	Title	Year Published	#Cited in Google Scholar	#Altmetric
794,610	State of Florida 1:24,000- and 1:100,000-scale Quadrangle Index Map—Highlighting Low-Lying areas Derived from USGS Digital Elevation Models	2008	1	N/A
776,349	UCERF3: A new earthquake forecast for California's complex fault system	2015	zero	N/A
682,915	A history of phosphate mining in southeastern Idaho	2000	9	N/A
572,868	Integrated investigations of environmental effects of historical mining in the Animas River Watershed, San Juan County, Colorado	2007	30	N/A
560,355	Putting down roots in earthquake country-Your handbook for earthquakes in the Central United States	2011	zero	N/A
507,816	The orphan tsunami of 1700—Japanese clues to a parent earthquake in North America	2005	288	183
451,832	Brackish groundwater in the United States	2017	1	60
319,754	Overview of the ARkStorm scenario	2011	31	N/A
289,941	This dynamic earth: the story of plate tectonics	1996	96	N/A
280,169	Field-trip guides to selected volcanoes and volcanic landscapes of the western United States	2017	zero	90

Publication Downloads versus Cited: 2012

2012 Downloads	Title	Year Published
4,667,610	Eruptions of Hawaiian Volcanoes— Past, Present, and Future	2010
1,565,456	Putting down roots in earthquake country-Your handbook for earthquakes in the Central United States	2011
1,090,932	This dynamic earth: the story of plate tectonics	1996
1,028,845	An Estimate of Undiscovered Conventional Oil and Gas Resources of the World, 2012	2012
871,249	Atlas of Depth-Duration Frequency of Precipitation Annual Maxima for Texas	2004
686,208	The Story of the Hawaiian Volcano Observatory— A Remarkable First 100 Years of Tracking Eruptions and Earthquakes	2011, 2012
664,453	Documentation for the 2008 Update of the United States National Seismic Hazard Maps	2008
657,880	Streamflow Depletion by Wells—Understanding and Managing the Effects of Groundwater Pumping on Streamflow	2012
566,971	Effects of Urban Development on Stream Ecosystems in Nine Metropolitan Study Areas Across the United States	2012
521,474	Uranium	2004

Publication Downloads versus Cited: 2007

2007 Downloads	Title	Year Published
2,412,117	This dynamic earth: the story of plate tectonics	1996
511,664	The San Andreas Fault	1992
436,437	Volcanoes	1997
285,389	Dinosaurs, facts and fiction	1999
181,989	Putting Down Roots in Earthquake Country	2005
155,188	Acid Rain and Our Nation's Capital	N/A
135,807	Surviving a Tsunami—Lessons from Chile, Hawaii, and Japan	1999
104,978	U.S. Geological Survey Mineral Resources Program—Science Supporting Mineral Resource Stewardship	2007
95,149	The Interior of the Earth	1989
71,996	Collecting Rocks	N/A

Publications Downloaded & Reference Inquiries

- Outreach & Education, Recent News & Earth Events
- Interest in an Earth Event(s): Earthquake, Landslide, Flood, Hurricane, Wildfire, Volcanic Eruption, Contamination, Explosion
- Interest in a new USGS authored product or USGS mission area subject: USGS report/map, Journal Article, Book Chapter, Video, Podcast, TV Episode...

Public Broadcasting Services (PBS) NOVA :

Killer Floods : <http://www.pbs.org/wgbh/nova/earth/killer-floods.html>

Killer Hurricanes : <http://www.pbs.org/wgbh/nova/earth/killer-hurricanes.html>

Killer Volcanoes : <http://www.pbs.org/wgbh/nova/earth/killer-volcanoes.html>

Killer Landslides: <http://www.pbs.org/wgbh/nova/earth/killer-landslide.html>

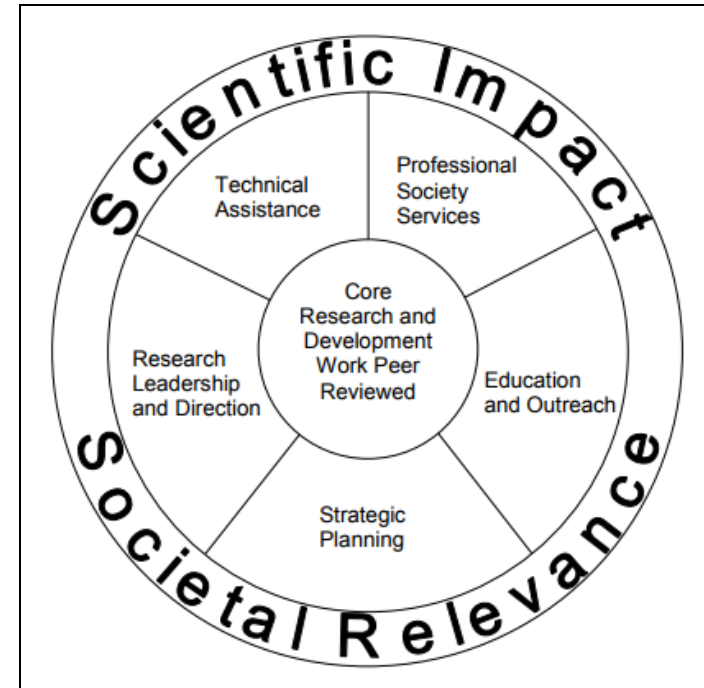
Himalayan Megaquake: The 2015 quake that rocked Nepal was the biggest in 90 years—can we forecast the next one? <http://www.pbs.org/wgbh/nova/earth/himalayan-megaquake.html>

Japan's Killer Quake: An eyewitness account and investigation of the epic earthquake, tsunami, and nuclear crisis <http://www.pbs.org/wgbh/nova/earth/japan-killer-quake.html>



USGS Research Grade Evaluation (RGE) and Equipment Development Grade Evaluation (EDGE) Guides

- Research and Development Evaluation Guidance
<https://www2.usgs.gov/humancapital/hr/rgeg.html>
- Research and Equipment Development Grade Evaluation Process Handbook
<https://www2.usgs.gov/humancapital/hr/documents/RGE-EDGEHandbook.pdf>
- Research Grade Evaluation Guide Checklist
https://www2.usgs.gov/humancapital/hr/documents/exhibitA-3_rgegchecklist.pdf



Research Factors

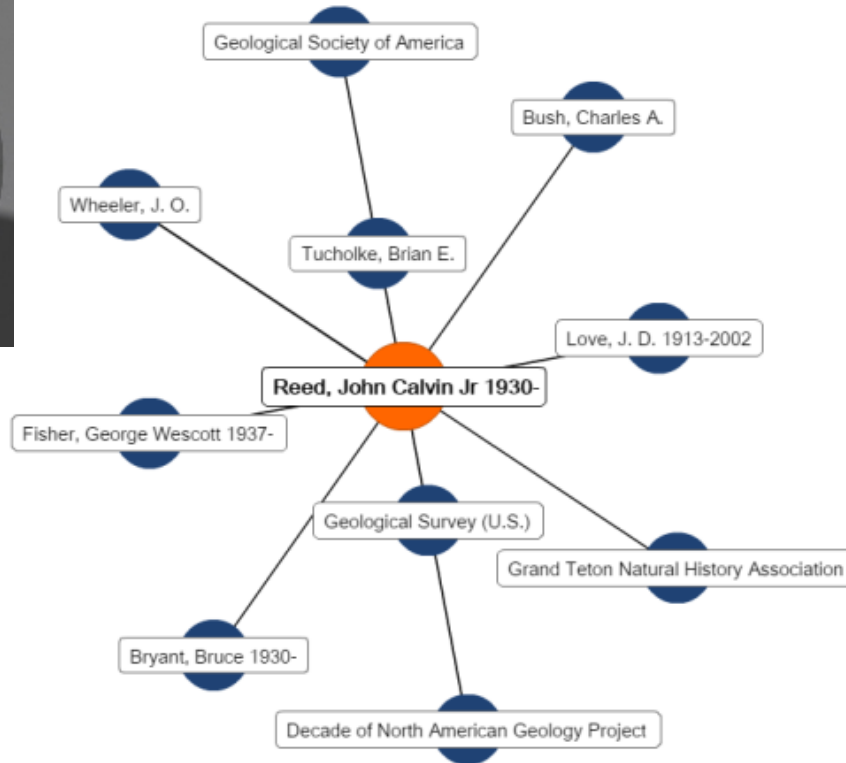
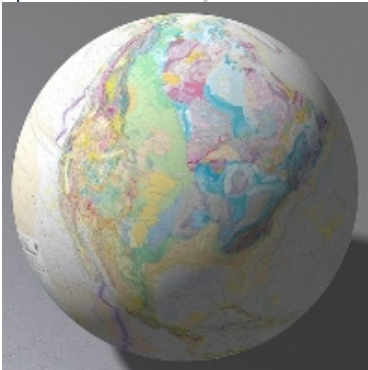
- 1: Research Assignment
- 2: Supervisory Controls
- 3: Guidelines and Originality
- 4: Contributions, Impact, and Stature

Development Factors

- I: Nature of Assignment Factor
- II: Supervision Received
- III: Guidelines and Originality
- IV: Qualifications and Contributions

Reed, John Calvin Jr 1930-

Past away June 25, 2015



Geologic Map of North America (GMNA)

[USGS GMNA Resources](#)

(National Geologic Map Database)

[OCLC WorldCat Record](#)

[GSA Press Release](#)

[\(DNAG\)](#) =

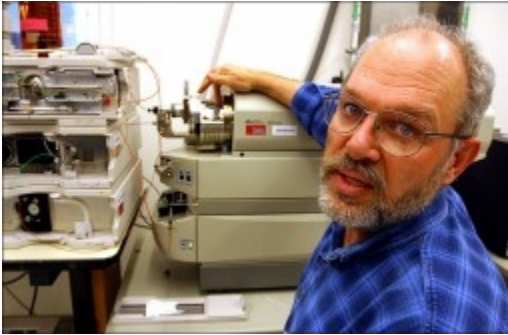
Decade of North American Geology

[GeoScienceWorld Records](#)

RELATED IDENTITIES FOR REED, JOHN CALVIN JR 1930-

- [About the Geologic Map in the National Atlas of the United States of America](#)
- [The National Atlas, 1997-2014, 260 Datasets](#)

U.S. Geological Survey Scientist Recognized as Highly Cited Researcher, 2015 & 2016



Dr. Edward T. Furlong in the laboratory. Photo Credit: Chris Lindley, USGS(retired).

For the second consecutive year, U.S. Geological Survey (USGS) scientist Dr. Edward T. Furlong has been designated a [Thomson Reuters Highly Cited Researcher](#), ranking among the top one percent of researchers from 2003 to 2016 for most cited documents in their specific field (Environment/Ecology). He previously was listed in Thomson Reuters' "[The World's Most Influential Scientific Minds 2015](#)" report.

NWQL Water-Resources Reports

[Techniques and Methods \(TM\)](#) - Sandstrom, M.W., Kanagy, L.K., Anderson, C.A., and Kanagy, C.J., 2015, Determination of pesticides and pesticide degradates in filtered water by direct aqueous-injection liquid chromatography-tandem mass spectrometry: U.S. Geological Survey Techniques and Methods book 5, chap. B11, 73 p.

[Scientific Investigation Reports \(SIR\)](#) - Patton, C.J., and Kryskalla, J.R., 2013, Analytical properties of some commercially available nitrate reductase enzymes evaluated as replacements of nitrate plus nitrite in water: U.S. Geological Survey Scientific Investigations Report 2013-5033, 36 p.

[Fact Sheets \(FS\)](#) - Water Fact Sheets are concise and timely publications that increase the understanding and visibility of WRD activities and accomplishments. They describe water-resources topics to either a general or professional office.

[Open-File Reports \(OFR\)](#) - Open File Reports make available timely information about WRD programs, projects, products, and water-resources topics.

[Professional Papers \(PP\)](#) - This series is commonly used for summaries of wide popular, scientific, or geographic interest, and for significant scientific contributions. Professional Papers present comprehensive or topical reports on any field in the earth sciences.

[Techniques and Methods \(TM\)](#) - This series consists of reports on methods and techniques used in collecting, analyzing, and processing hydrologic data for a technically oriented audience.



National Water Quality Laboratory, Denver, Colorado

Thank You!

For more information:

Ask-A-Geologist ask-a-geologist@usgs.gov

Ask-A-Librarian library@usgs.gov

ASK USGS: <https://answers.usgs.gov/>

Emily C. Wild, Librarian (Physical Scientist), U.S. Geological Survey Library, Denver, CO
303-236-1003 or ecwild@usgs.gov ; [Emily Wild - USGS Profile](#)



*View of Continental Divide from Ute Trail, Fall River Pass to Milner Pass,
elevation about 11,800 feet, Rocky Mountain National Park*