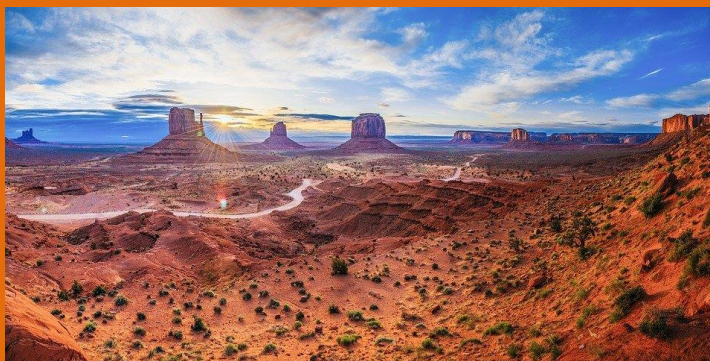
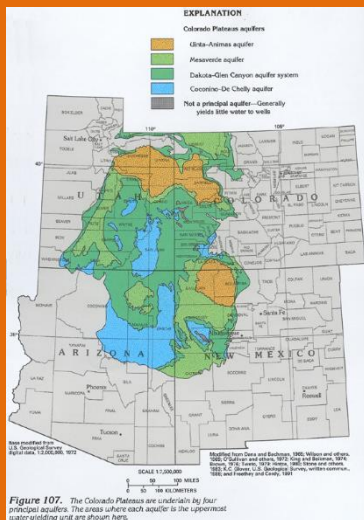
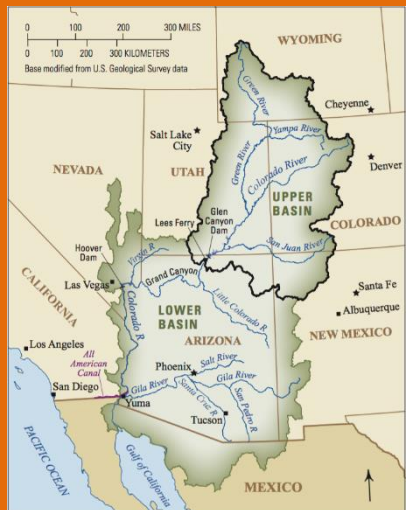


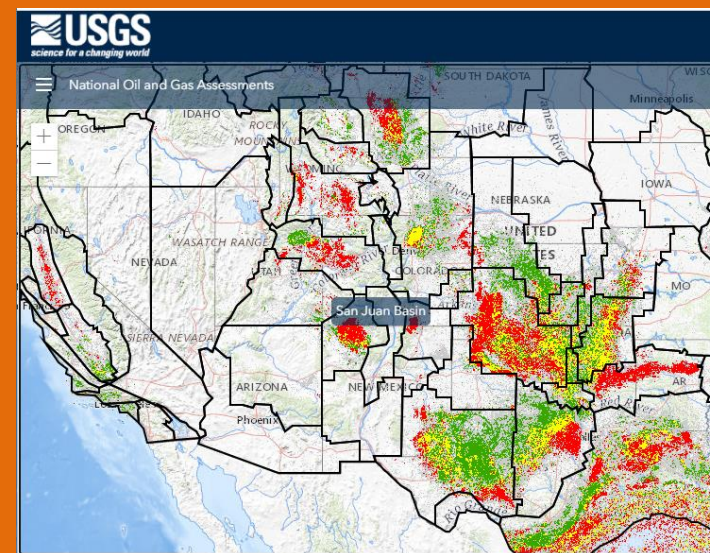
Library Research for the Colorado River Basin

GPO FDLP Webinar: July 27, 2021

Emily C. Wild, Chemistry, Geosciences and Environmental Studies Librarian
ewild@princeton.edu



Monument Valley, Utah



Library User: "I spent two weeks searching for what you found in five minutes"

Colorado River Basin

“Princeton in the nation’s service and the service of humanity”

Princeton University – GPO FDLP since 1884

Upcoming and Past Webinars:

<https://libguides.princeton.edu/geo/librarianwebinars>

Princeton University Library <http://library.princeton.edu>

Princeton University, Geosciences <http://geosciences.princeton.edu>

Geophysical Fluid Dynamics Laboratory <https://www.gfdl.noaa.gov/>

High Meadows Environmental Institute <http://environment.princeton.edu>

Princeton University, Chemistry <https://chemistry.princeton.edu/>

Andlinger Center for Energy and the Environment <https://acee.princeton.edu/>

Princeton School of Public and International Affairs <https://spia.princeton.edu/>

Center for Policy Research on Energy and the Environment (C-PREE)

<https://cpree.princeton.edu/>

Bendheim Center for Finance <https://bcf.princeton.edu/>

Operations Research and Financial Engineering (ORFE) <https://orfe.princeton.edu/>

Princeton Writing Program <https://writing.princeton.edu/undergraduates/writing-seminars>

Who Do I help the most?

Non-scientists:

Policy, Law, Finance, Librarians





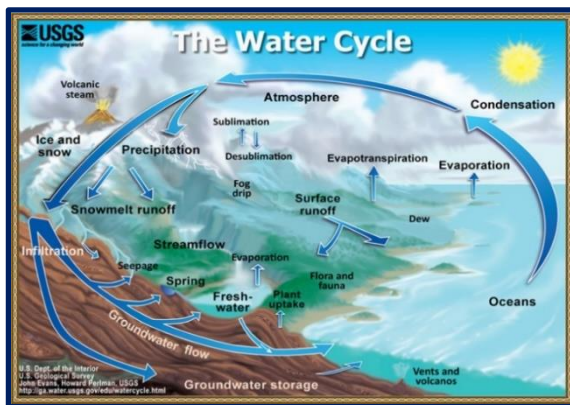
Emily C. Wild

Princeton University Library

ewild@princeton.edu

Schedule a Research Consultation : Mon – Fri

[Meet Our Specialists – Emily Wild](#)



Princeton University Library, 2018-Present
Chemistry, Geosciences and Environmental Studies Librarian

<https://library.princeton.edu/staff/ewild>

U.S. Geological Survey: <https://www.usgs.gov/staff-profiles/emily-wild>

2008-2018 : Librarian (Physical Scientist): Denver, Colorado

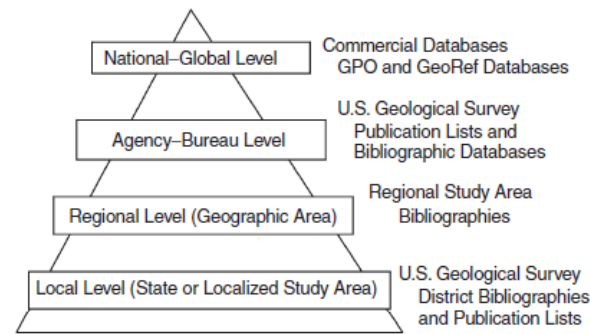
1996-2008 : Hydrologist : [1998-2008 in Providence, Rhode Island]

2001: Master’s Library & Information Studies (MLIS), Univ. of Rhode Island

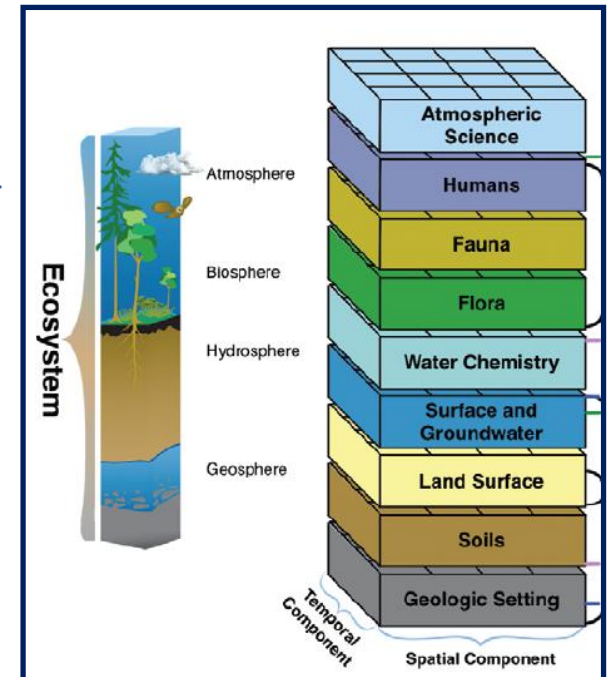
1995: BA Geology, Hartwick College

*“Online bibliographic sources in hydrology”
 Science and Technology Libraries, 2001*

FIGURE 2. Indexing and Availability Trends of U.S. Geological Survey Publications in Hydrology



<https://pubs.er.usgs.gov/publication/70023512>

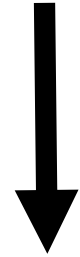


Colorado River Basin

“Online bibliographic sources in hydrology”

<https://pubs.er.usgs.gov/publication/70023512>

Scientist



Raw Data: Real-Time, Continuous, Recent Partial Records, Historical

Calculated Data: Equations, Software Results, Lab Results, and Model Results

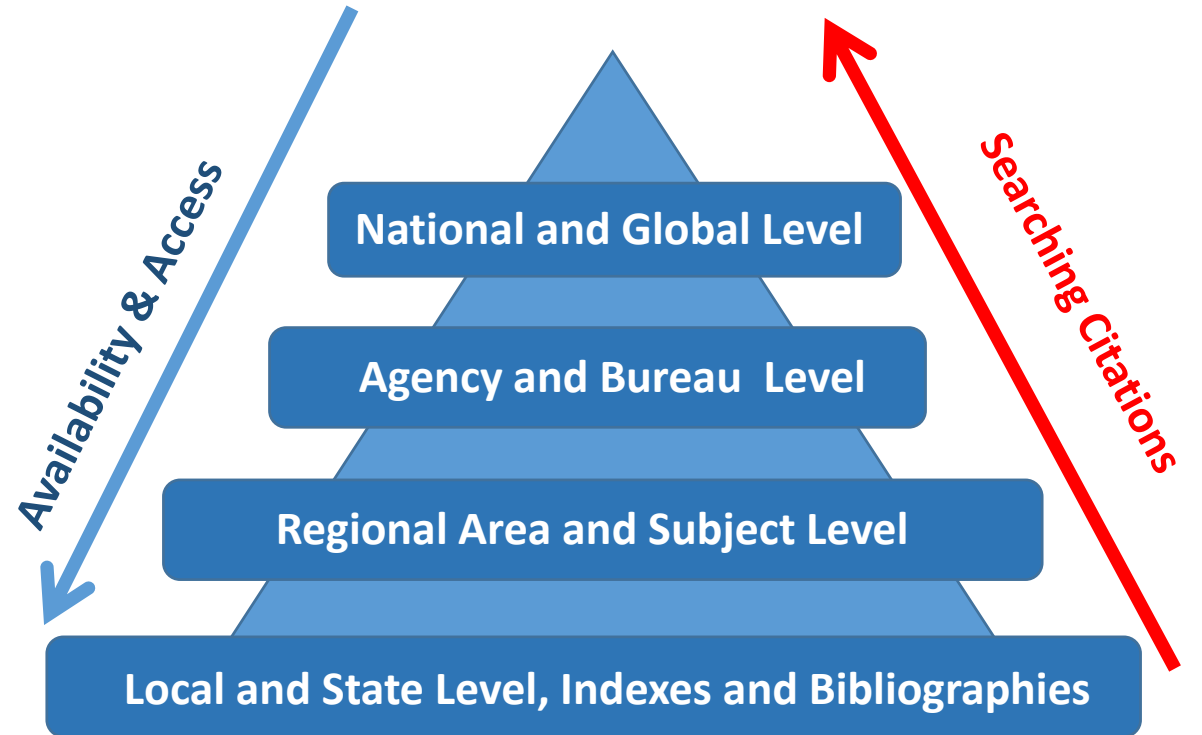
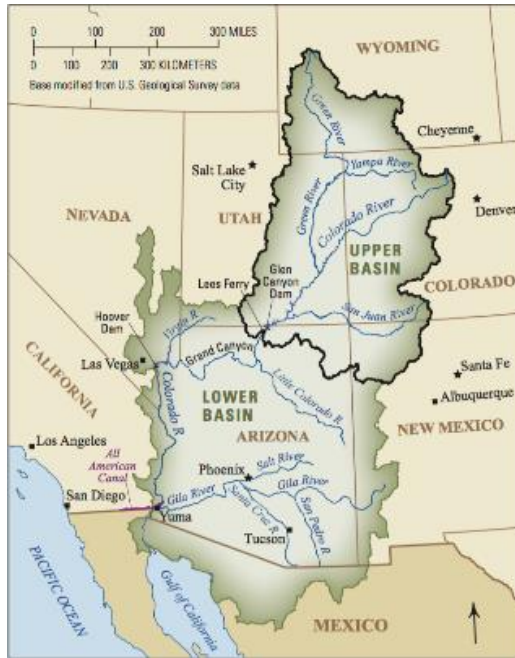
Map Data: Specific Location Information by Geosciences Topic

Citation Data: Bibliographic Information & Finding Publications



Non-Scientist

This session will provide an overview of print and digital resources available for the geology, groundwater aquifers, oil and gas, uranium, mining activities, environmental issues, ecology, biological activities, cultural heritage sites, and historical geographic names within the Colorado River Basin.



Colorado River Basin



- Wyoming – 1890 (44)
- Colorado – 1876 (38)
- Utah – 1896 (45)
- New Mexico – 1912 (47)
- Arizona – 1912 (48)
- Nevada – 1864 (36)
- California – 1850 (31)

<https://store.usgs.gov/maps>

<https://store.usgs.gov/filter-products?categories=%5B1751%5D&page=1>



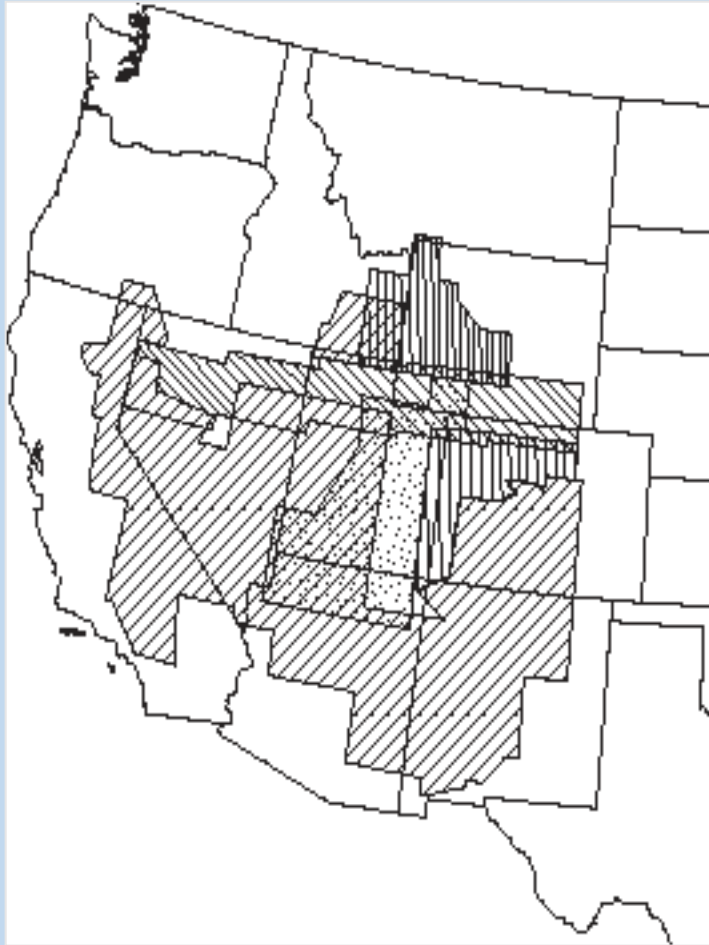
MAP OF THE UNITED STATES OF AMERICA 1857

https://store.usgs.gov/assets/MOD/StoreFiles/PDF/113632_US_1857.pdf

USGS History: the Pre-USGS Map Area the Four Surveys, 1867-1879

Catalogue and index of the publications of the Hayden, King, Powell, and Wheeler surveys

The Four Great Surveys of the West



U.S. Geological and Geographical
Survey of the Territories
(Hayden)



U.S. Geological Exploration of the
Fortieth Parallel (King)



U.S. Geographical and Geological
Survey of the Rocky Mountain
Region (Powell)

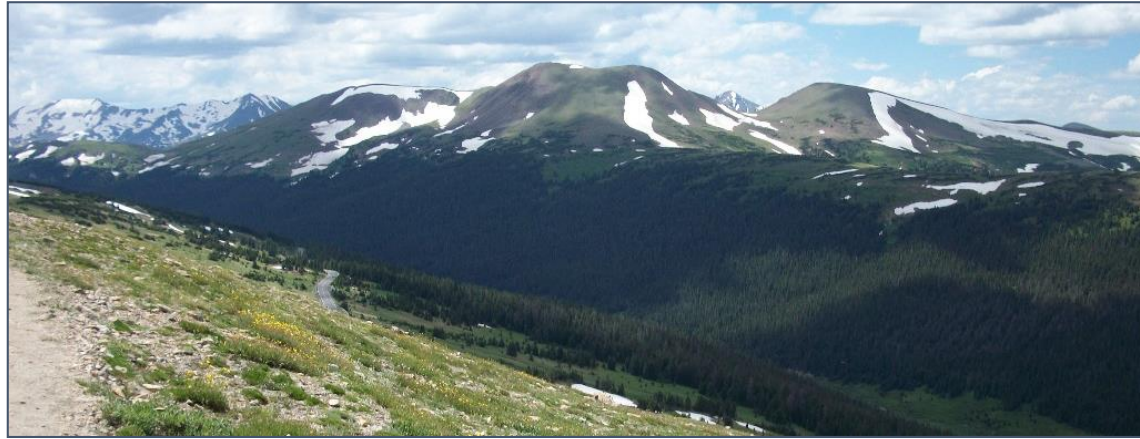


U.S. Geographical Surveys West
of the One Hundredth Meridian
(Wheeler)



March 3, 1879: Legislation to rename the Coast and Geodetic Survey and transfer it to the Department of the Interior and to establish the U.S. Geological Survey for "classification of the public lands, and examination of the geological structure, mineral resources, and products of the national domain"

Colorado River Basin



Department of the Interior:

U.S. Geological Survey (USGS)

1902: Bureau of Reclamation within USGS

Becomes a USGS “Spin-Off” in 1907 <https://www.usbr.gov/>

Today: Upper Colorado Projects, Powerplants, Dams:

<https://www.usbr.gov/projects/facilities.php?region=Upper%20Colorado%20Basin%20Region>

Today: Lower Colorado Projects, Powerplants, Dams:

<https://www.usbr.gov/projects/facilities.php?region=Lower%20Colorado%20Basin%20Region>

Colorado River Basin

<https://pubs.er.usgs.gov/publication/70039204>

A brief history of the U.S. Geological Survey

Established by an Act of Congress in 1879 and charged with responsibility for "classification of the public lands, and examination of the geological structure, mineral resources, and products of the national domain," the U. S. Department of the Interior's Geological Survey has been the Nation's principal source of information about its physical resources the configuration and character of the land surface, the composition and structure of the underlying rocks, and the quality, extent, and distribution of water and mineral resources. Although primarily a research and fact-finding agency, it has responsibility also for the classification of Federal mineral lands and waterpower sites, and **since 1926 it has been responsible for the supervision of oil and mining operations authorized under leases on Federal land**. From the outset, the Survey has been concerned with critical land and resource problems. **Often referred to as the Mother of Bureaus, many of its activities led to the formation of new organizations where a management or developmental function evolved.** These included the Reclamation Service (1902), the Bureau of Mines (1910), the Federal Power Commission (1920), and the Grazing Service (1934, since combined with other functions as the Bureau of Land Management). Mrs. Rabbitt's summary of the Survey's history in the following pages brings out well the development of these diverse activities and the Survey's past contributions to national needs related to land and resources.

More "Spin-Offs"

U.S. Bureau of Mines – dissolved in 1996...

Bureau of Land Management : <https://www.blm.gov/>



Colorado River Basin



USGS : Biology, Geography, Geology, and Water Resources

<https://www.usgs.gov/>

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

Data: <https://data.usgs.gov/datacatalog/>

Real-time Data: <https://www.usgs.gov/products/data-and-tools/real-time-data>

Upper Colorado Basin: <https://www.usgs.gov/unified-interior-regions/region-7>

Lower Colorado Basin: <https://www.usgs.gov/unified-interior-regions/region-8>

Wyoming <https://www.usgs.gov/centers/wy-mt-water>

Colorado <https://www.usgs.gov/centers/co-water>

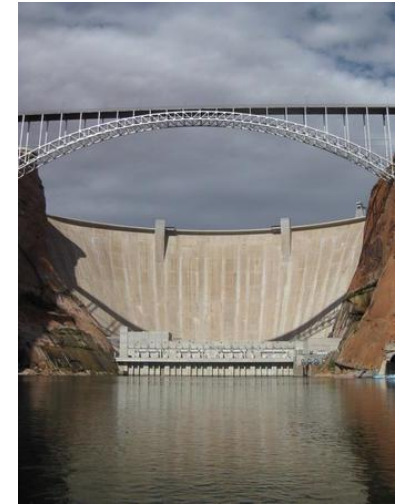
Utah <https://www.usgs.gov/centers/ut-water>

New Mexico <https://www.usgs.gov/centers/nm-water>

Arizona <https://www.usgs.gov/centers/az-water>

Nevada <https://www.usgs.gov/centers/nv-water>

California <https://www.usgs.gov/centers/ca-water>



Colorado River Basin

https://ngmdb.usgs.gov/ngmdb/ngmdb_home.html

<https://www.stategeologists.org/>

Wyoming State Geological Survey <https://www.wsgs.wyo.gov/>

Colorado Geological Survey <https://coloradogeologicalsurvey.org/>

Utah Geological Survey <https://geology.utah.gov/>

New Mexico Bureau of Geology & Mineral Resources

<https://geoinfo.nmt.edu/index.html>

Arizona Geological Survey <https://azgs.arizona.edu/>

Nevada Bureau of Mines and Geology <http://www.nbmng.unr.edu/>

California Geological Survey

<https://www.conservation.ca.gov/cgs/Pages/Index.aspx>

The Bibliography of Arizona Geology (AZGeoBib) comprises more than 13,000 citations of geologic studies from throughout Arizona. The citation record goes back to A.D. 1848! <http://www.azgs.az.gov/AZGEOBIB.shtml>

Utah: Publication Repository

Search over 2,300 UGS publications. <https://geology.utah.gov/map-pub/publications/>



Colorado River Basin

Wyoming Water Development Commission <https://wwdc.state.wy.us/>
Colorado Division of Water Resources <https://dwr.colorado.gov/>
Utah Division of Water Resources <https://water.utah.gov/>
New Mexico Water Resources & Management <https://www.env.nm.gov/water/>
Arizona Department of Water Resources <https://new.azwater.gov/>
Nevada Division of Water Resources <http://water.nv.gov/>
California Department of Water Resources <https://water.ca.gov/>
Ex. California Water System <https://water.ca.gov/Water-Basics/The-California-Water-System>
- Metropolitan Water District of Southern California <http://www.mwdh2o.com/>



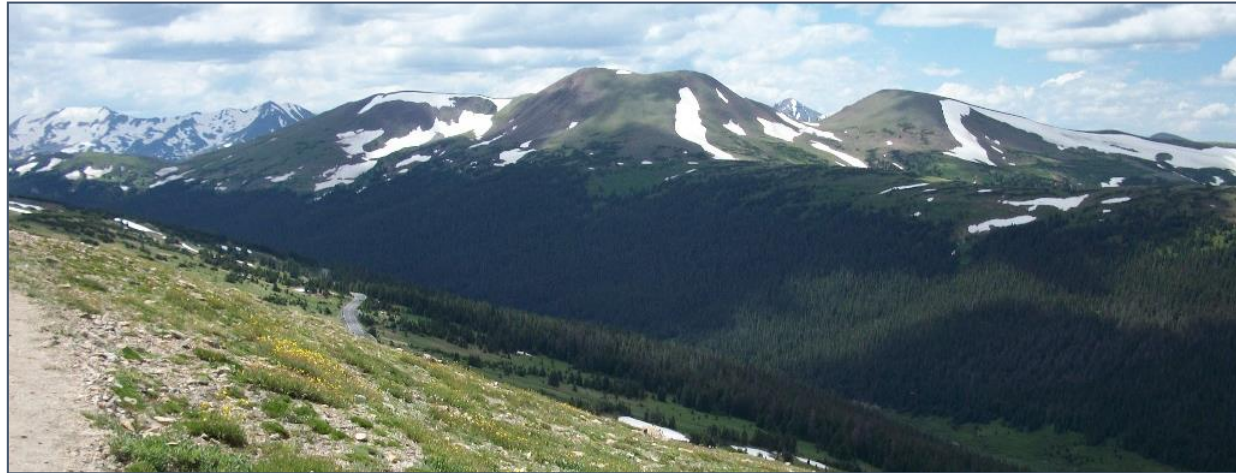
The Colorado River Aqueduct has been the backbone of Southern California's imported water supply for more than 70 years. Built and operated by Metropolitan, the 242-mile aqueduct delivers water from the Colorado River at Lake Havasu west of the California/Arizona border. Along with the State Water Project, the CRA is one of two imported drinking water sources for Southern California.

<http://www.mwdh2o.com/AboutYourWater/Sources%20Of%20Supply/Pages/Imported.aspx>



Geology along Trail Ridge Road: A Self-Guided Tour for Motorists

<https://txpub.usgs.gov/DSS/streamer/web/>



About This Report

This report provides information about the water bodies, streams, and streamflow gaging (measuring) stations along the routes that you trace using [Streamer](#). It also identifies places (states, counties, and cities) your trace encounters as it moves downstream or upstream. Streamer uses one million-scale map layers from [The National Map Small-Scale Collection](#).

The U.S. Geological Survey (USGS) maintains a [national network of gaging stations that measure streamflow](#) and other water characteristics.

Click [here](#) for more information about this report and how to download The National Map Small-Scale Collection data.

Trace Details

Trace Direction: **Downstream**

Trace Origin Stream Name: **North Inlet**

Trace Origin (latitude, longitude): **40.256, -105.661**

Trace Origin Elevation (feet): **11,535**

Water Features

Total Length of Traced U.S. Streams (miles): **1,316**

Outlet Waterbody: **Pacific Ocean**

USGS Stream Gages (count): **128**

Stream Names (count): **2**

Waterbody Names (count): **9**

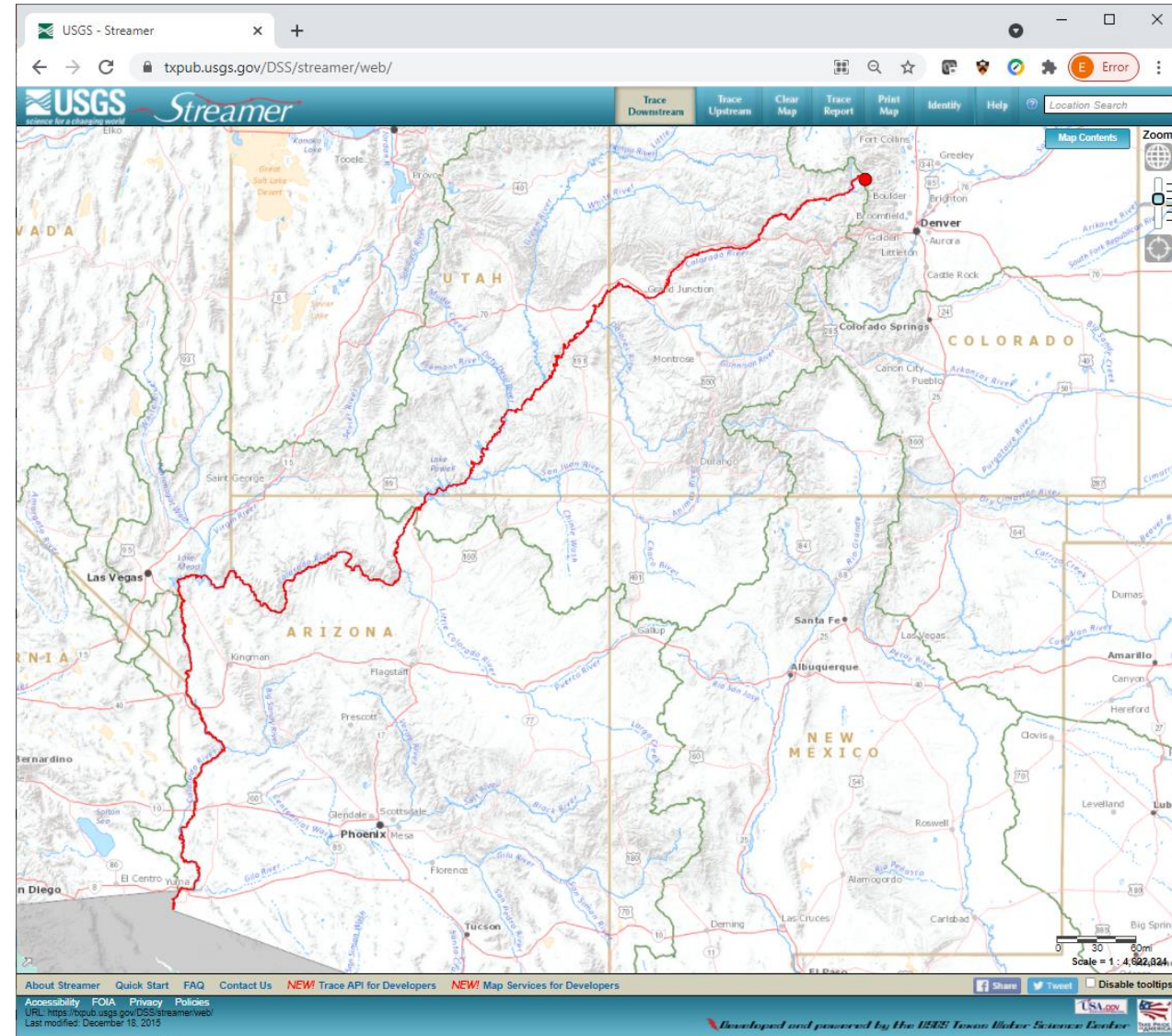
Political Features

U.S. States (count): **5**

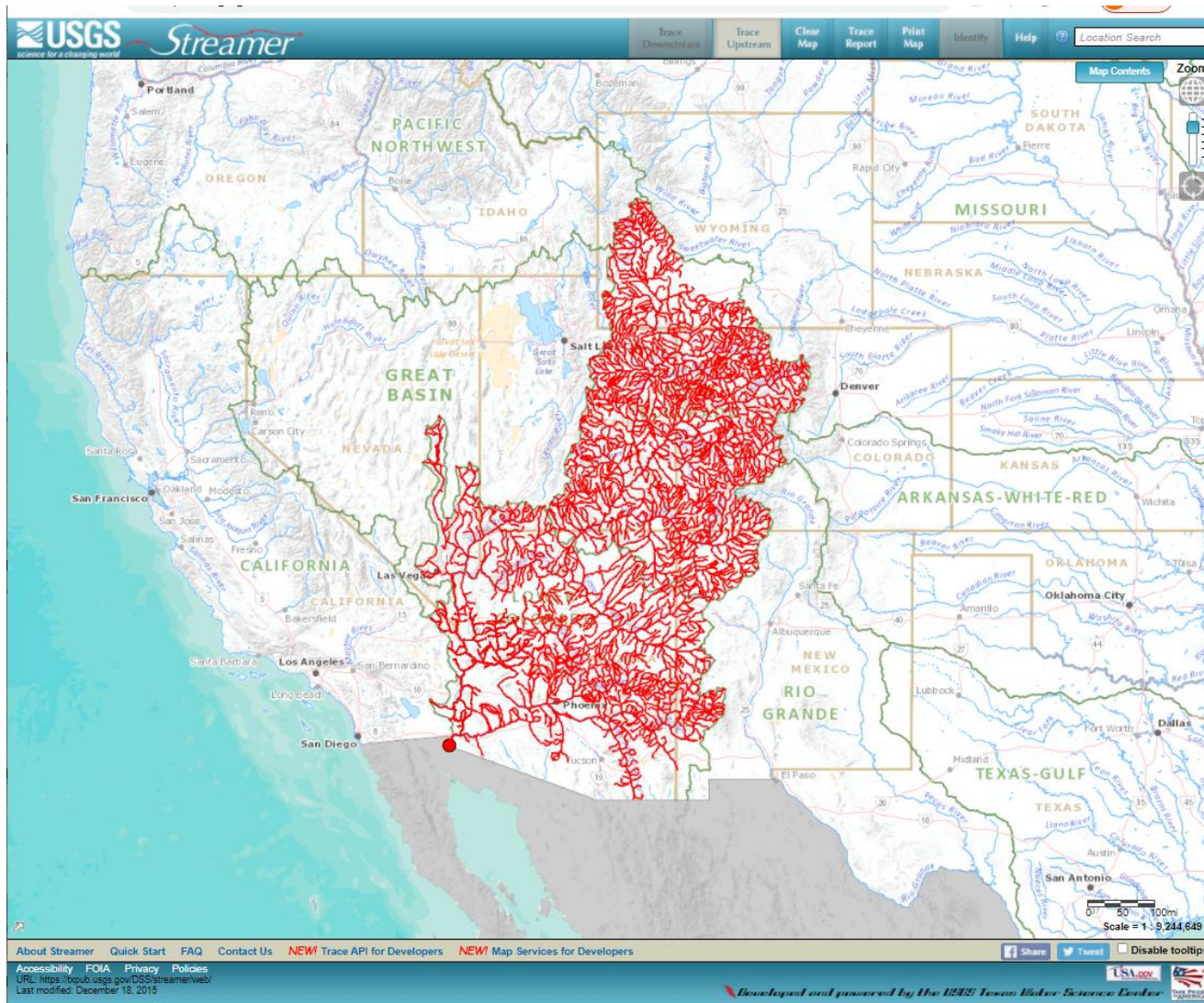
U.S. Counties (count): **17**

Total County Population (2010): **7,210,693**

Cities (count): **49**



<https://txpub.usgs.gov/DSS/streamer/web/>



About This Report

This report provides information about the water bodies, streams, and streamflow gaging (measuring) stations along the routes that you trace using [Streamer](#). It also identifies places (states, counties, and cities) your trace encounters as it moves downstream or upstream. Streamer uses one million-scale map layers from [The National Map Small-Scale Collection](#).

The U.S. Geological Survey (USGS) maintains a [national network of gaging stations that measure streamflow](#) and other water characteristics. Click [here](#) for more information about this report and how to download The National Map Small-Scale Collection data.

Trace Details

Trace Direction: **Upstream**

Trace Origin Stream Name: **Colorado River**

Trace Origin (latitude, longitude): **32.494, -114.814**

Trace Origin Elevation (feet): **N/A**

Water Features

Total Length of Traced U.S. Streams (miles): **43,811**

Outlet Waterbody: **Pacific Ocean**

USGS Stream Gages (count): **1,401**

Stream Names (count): **1,279**

Waterbody Names (count): **106**

Political Features

U.S. States (count): **7**

U.S. Counties (count): **80**

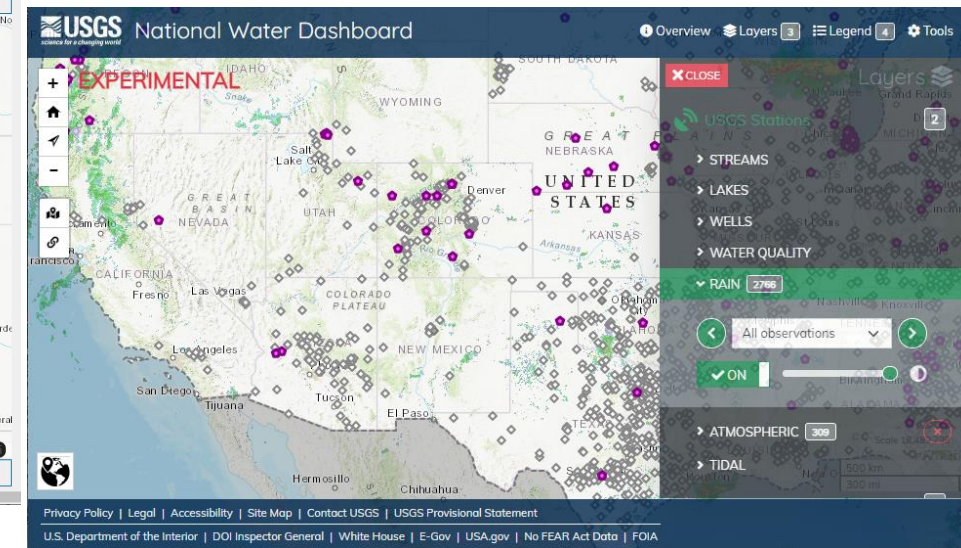
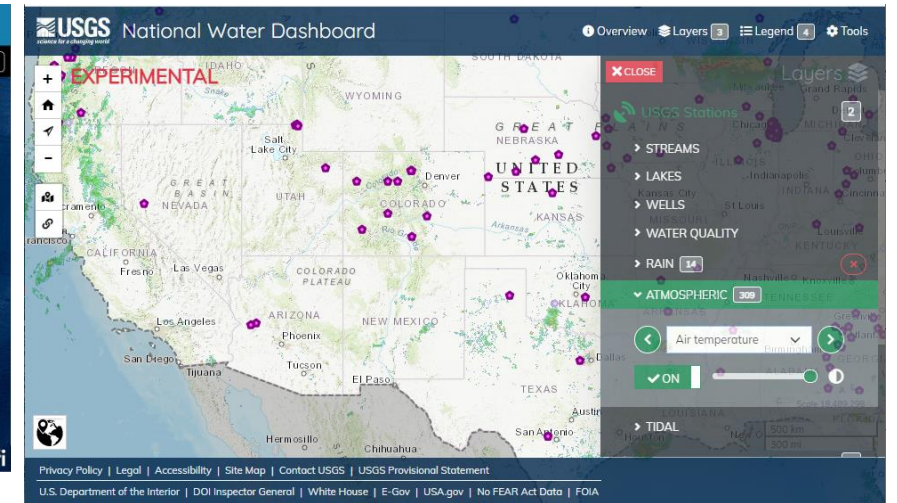
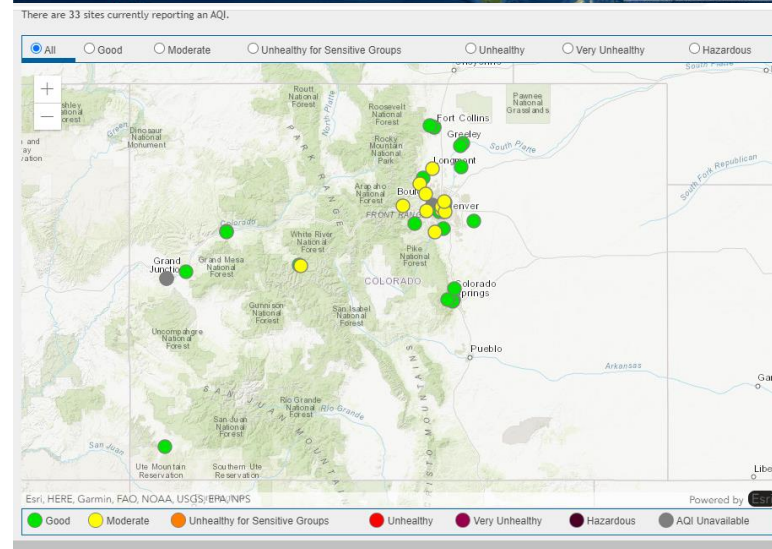
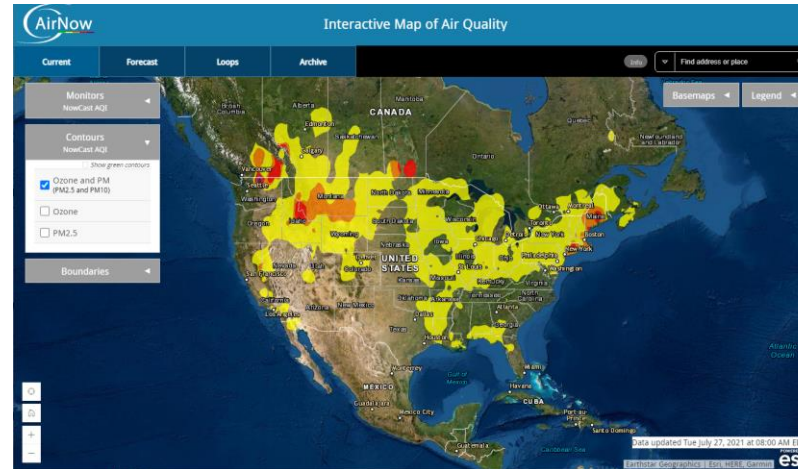
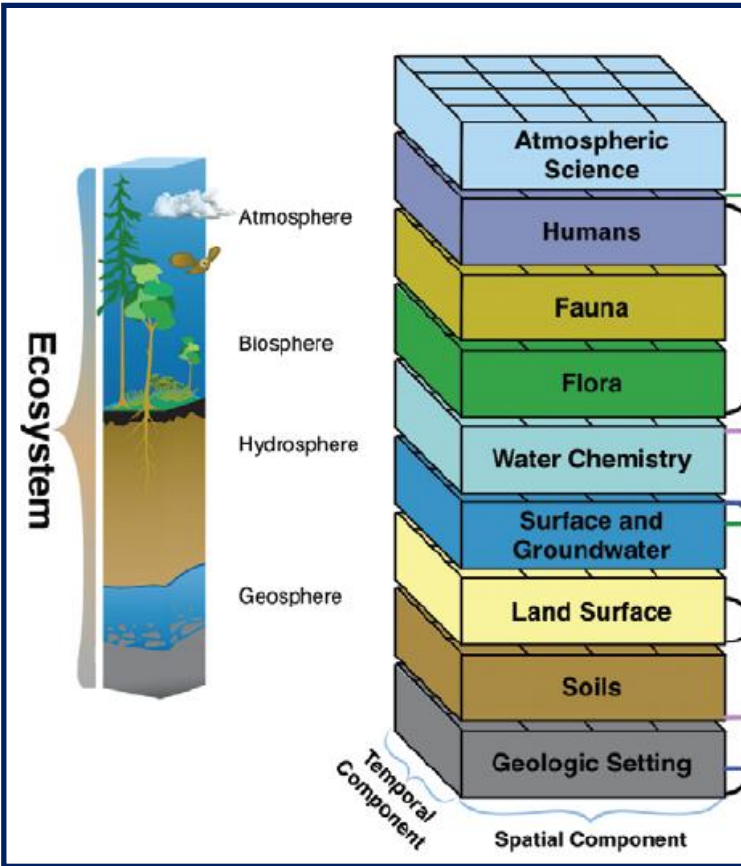
Total County Population (2010): **14,936,025**

Cities (count): **613**

Atmosphere

<https://gispub.epa.gov/airnow/> <https://www.epa.gov/outdoor-air-quality-data>

Air Data: Air Quality Data Collected at Outdoor Monitors Across the US



Colorado Air Quality:

https://www.colorado.gov/airquality/colorado_summary.aspx

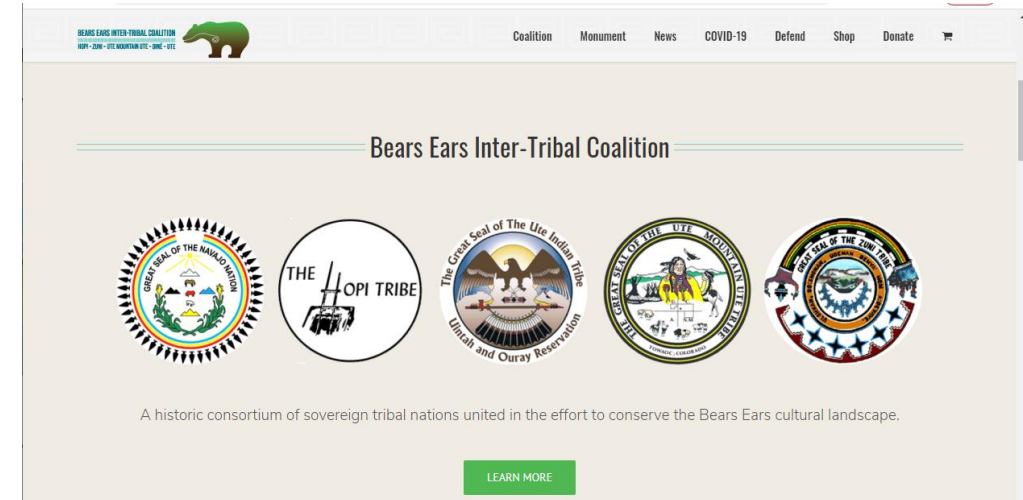
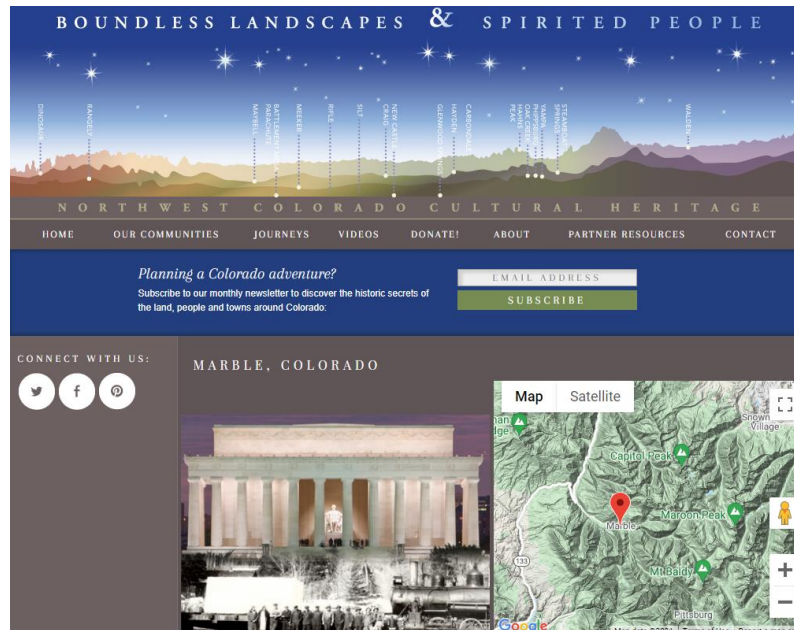
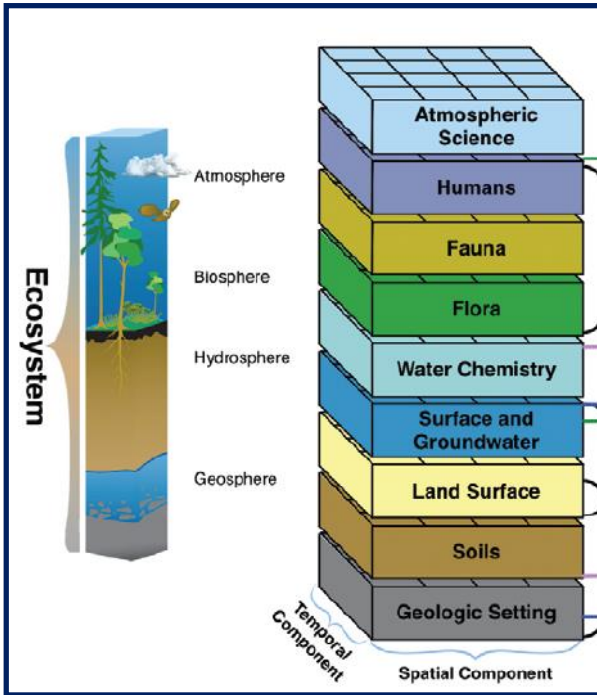
<https://dashboard.waterdata.usgs.gov/app/nwd/?aoi=default>

Humans

<http://nwcoloradoheritagetravel.org/>

<http://nwcoloradoheritagetravel.org/marble-colorado/>

<https://bearscoalition.org/>



In July of 2015, leaders from the [Hopi Tribe](#), [Navajo Nation](#), [Ute Mountain Ute Tribe](#), [Pueblo of Zuni](#), and [Ute Indian Tribe](#) founded the Bears Ears Inter-Tribal Coalition. Each Coalition Tribe exercises its inherent right to self-determination by appointing a delegate to represent its interests in the Coalition's work, in tandem with an MOU signed by all five Tribal councils that invests power in and ascribes limits to Coalition activities. In this way, we are distinct from a typical non-profit or grassroots organization because we are an extension of each Tribe's sovereign authority. The Coalition Tribes are unified in the effort to protect this landscape we call Hoon'Naqvut, Shash Jáa, Kwiyaqatu Nukavachi, Ansh An Lashokdiwe, in our Native languages, all of which mean "Bears Ears." Today, a total of [30 Tribes have expressed support](#) for protecting the Bears Ears landscape for all future generations.

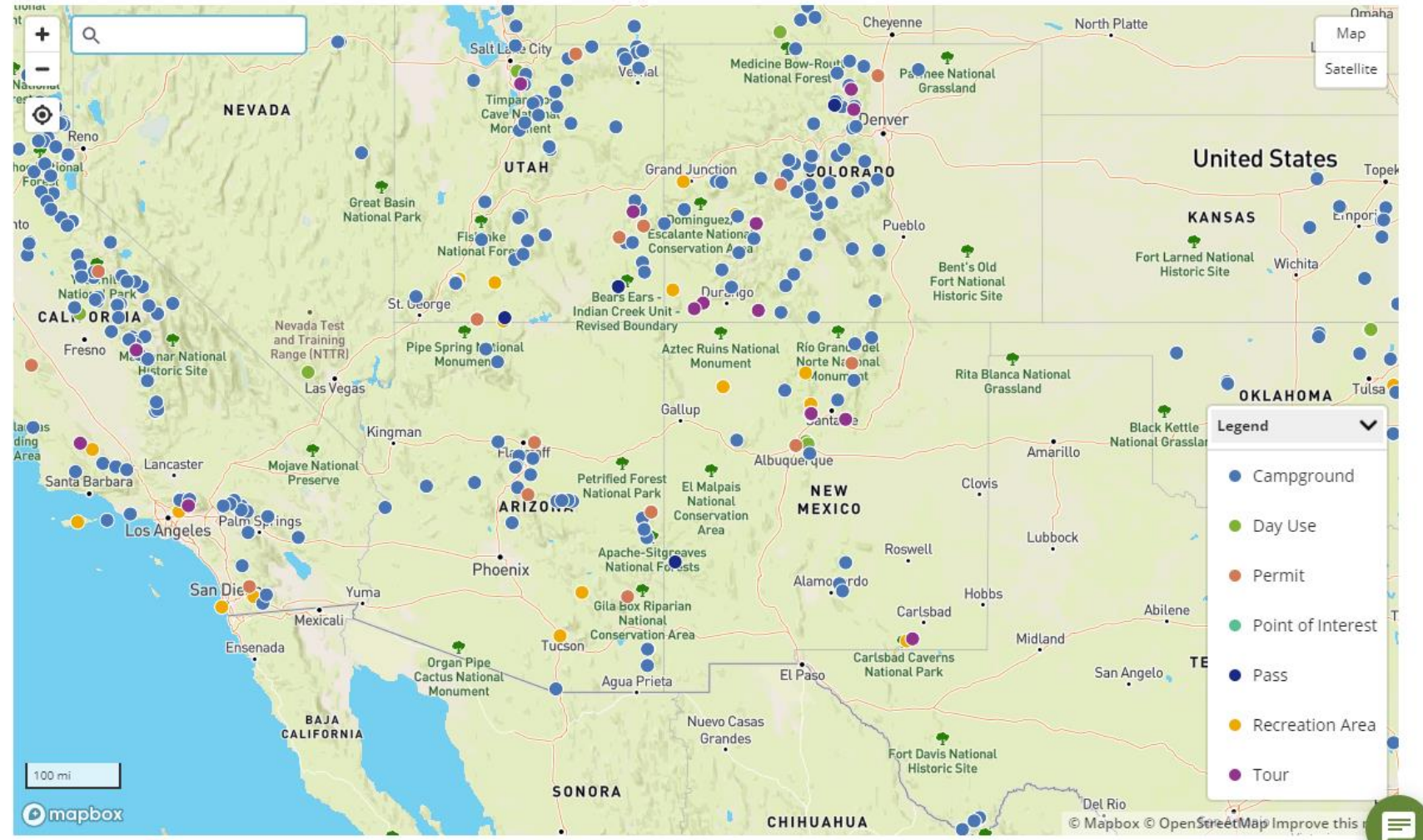
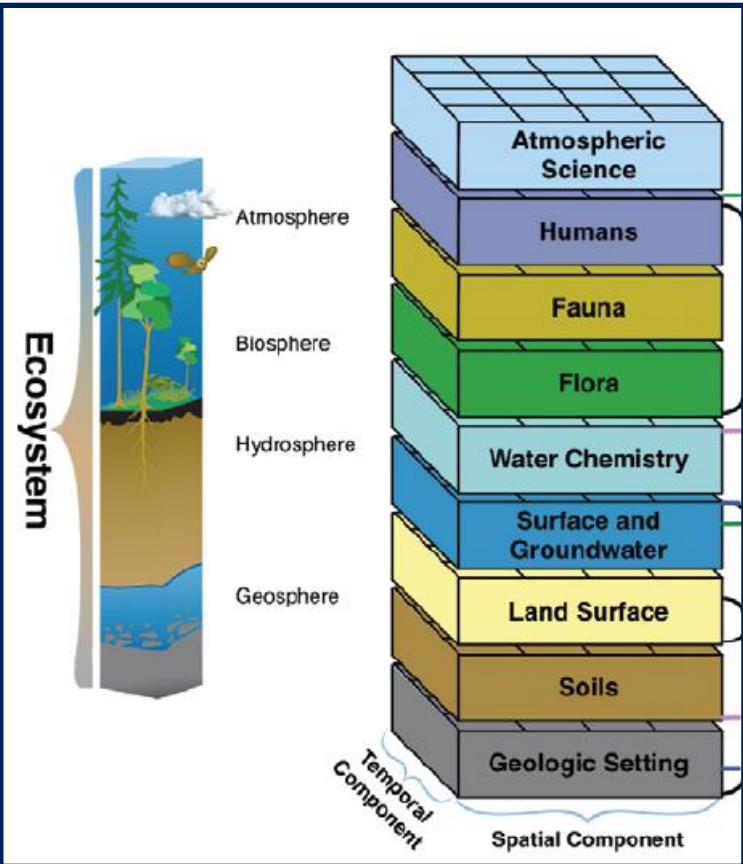
Humans

<https://www.recreation.gov/>

RECREATION.gov

What are you looking for? What's New Help Sign Up Log In

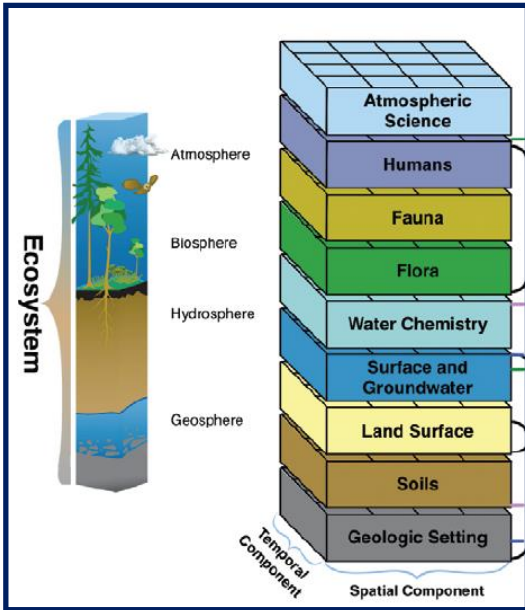
hiking, and horseback riding to wildlife viewing, monument tours, and ranger-led activities - you can find it on Recreation.gov!



Fauna

<https://azstateparks.com/arizona-wildlife>

<https://www.usgs.gov/centers/nwhc>



The screenshot shows the WHISPers website interface. The header includes the logo 'WHISPers Wildlife Health Information Sharing Partnership Event Reporting System' and navigation links for 'About', 'Log In', and 'Register'. The main content area is divided into a search sidebar on the left and a map on the right. The search sidebar contains various filters such as 'Event ID', 'Event Type', 'Date Range' (set to Jul 27, 2020 - Jul 27, 2021), 'Diagnosis Type', 'Event Diagnosis', 'Species', 'State (or equivalent)', 'County (or equivalent)', 'Number Affected', 'Record Status', and 'Export Search' options. The map on the right displays a geographical view of the United States with numerous colored circles representing event locations. A legend on the right side of the map explains the symbols: 'Events Mapped to Center of County', 'Event Type' (Mortality/Morbidity, Surveillance), 'Event Record Status' (Incomplete, Complete), and 'Animal Type' (Mammal, Bird, Reptile/Amphibian, Fish, Other, Multiple Types). The map also shows a scale bar and coordinates.

<https://whispers.usgs.gov/home>

Flora

<https://pubs.er.usgs.gov/search?q=Sagebrush>

Sagebrush Conservation Strategy—Challenges to Sagebrush Conservation

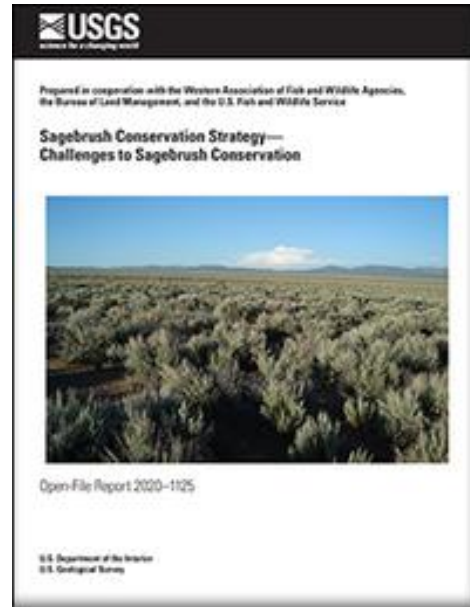
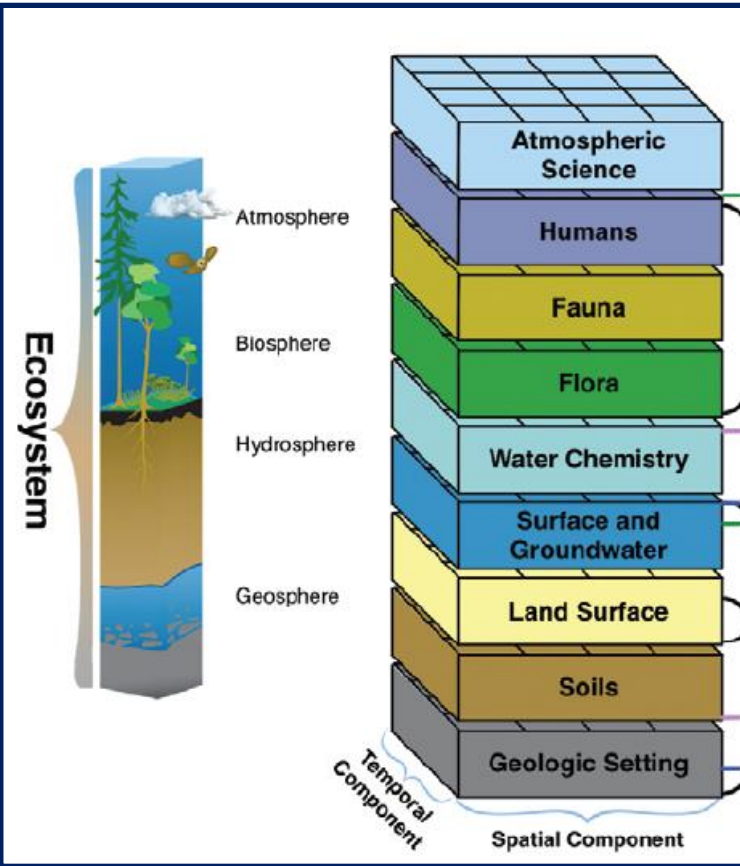
Open-File Report 2020-1125

Prepared in cooperation with the Western Association of Fish and Wildlife Agencies, the Bureau of Land Management, and the U.S. Fish and Wildlife Service

Abstract

First posted March 11, 2021

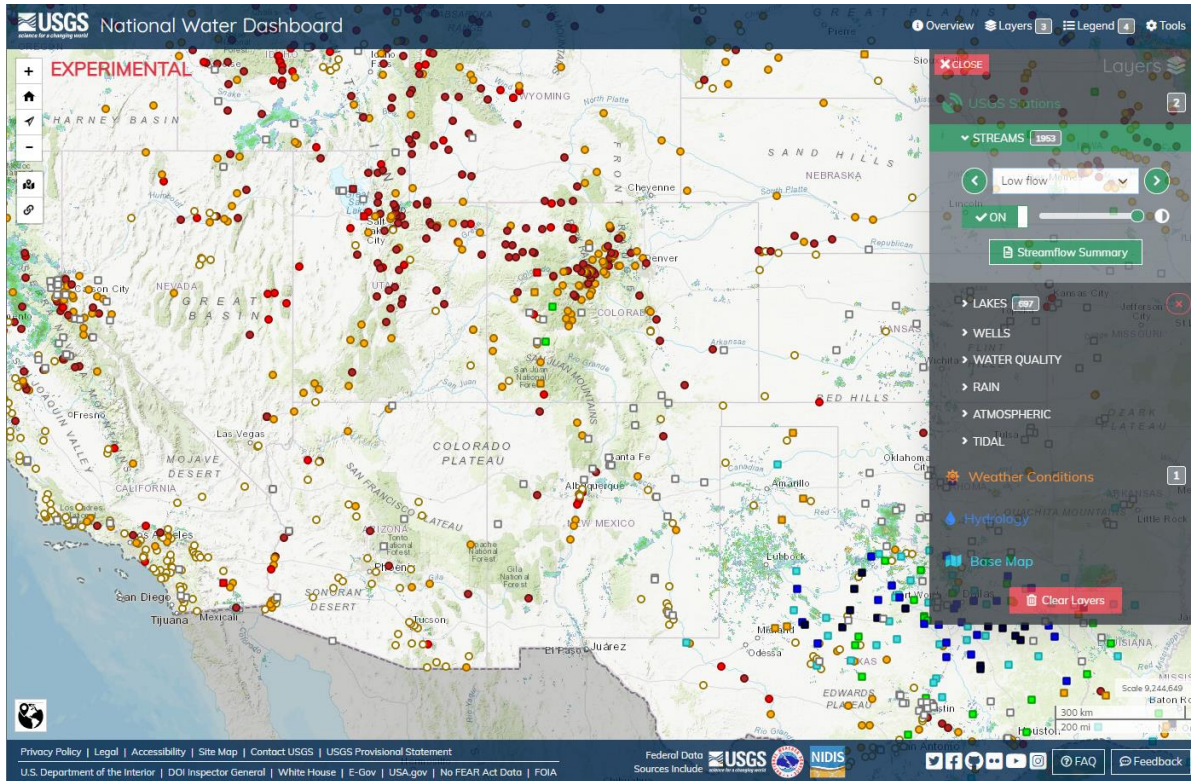
The sagebrush (*Artemisia* spp.) biome, its wildlife, and the services and benefits it provides people and local communities are at risk. Development in the sagebrush biome, for many purposes, has resulted in multiple and often cumulative negative impacts. These impacts, ranging from simple habitat loss to complex, interactive changes in ecosystem function, continue to accelerate even as the need grows for the resources provided by this biome. This “Sagebrush Conservation Strategy—Challenges to Sagebrush Conservation,” is an overview and assessment of the challenges facing land managers and landowners in conserving sagebrush ecosystems. This strategy is intended to provide guidance so that the unparalleled collaborative efforts to conserve the iconic greater sage-grouse (*Centrocercus urophasianus*) by State and Federal agencies, Tribes, academia, nongovernmental organizations, and stakeholders can be expanded to the entire sagebrush biome to benefit the people and wildlife that depend on this ecosystem. This report is organized into 3 parts.



<https://pubs.er.usgs.gov/publication/ofr20201125>

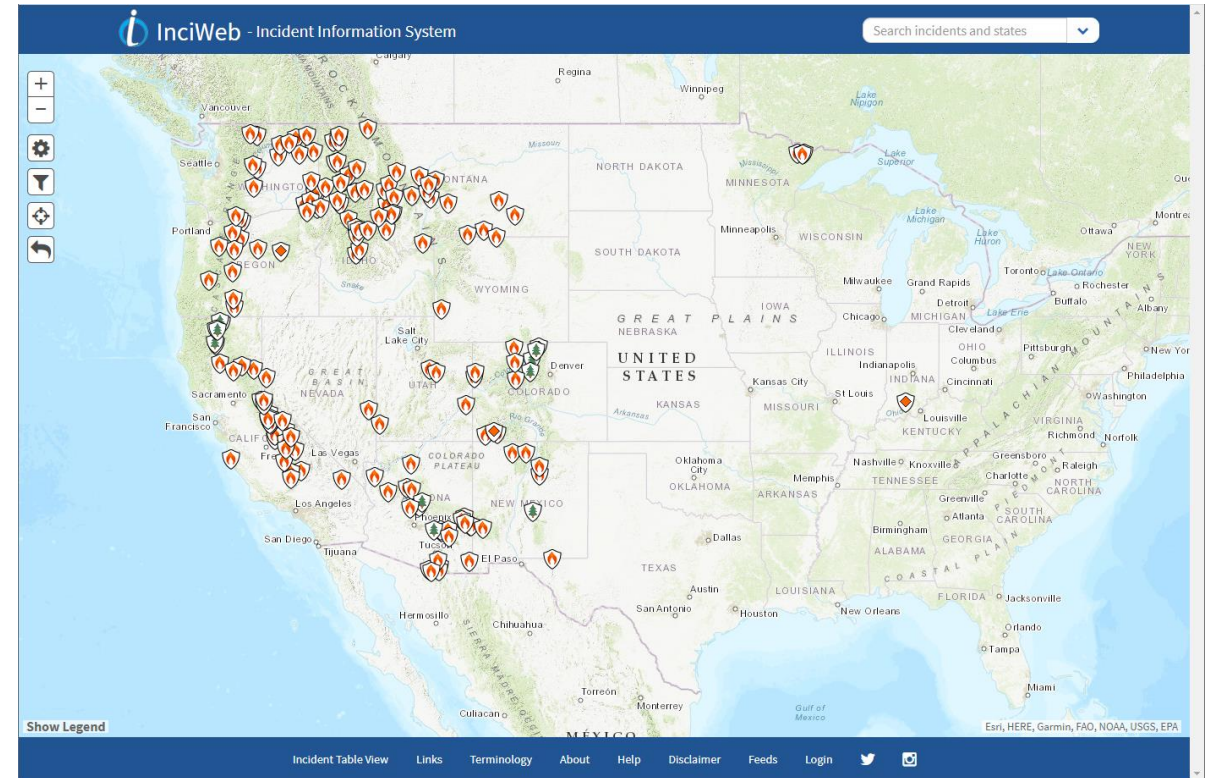
Low Flow Streams – Today, 7/27/2021

<https://dashboard.waterdata.usgs.gov/app/nwd/?aoi=default>



Wildfires – Today, 7/27/2021

<https://inciweb.nwcg.gov/>

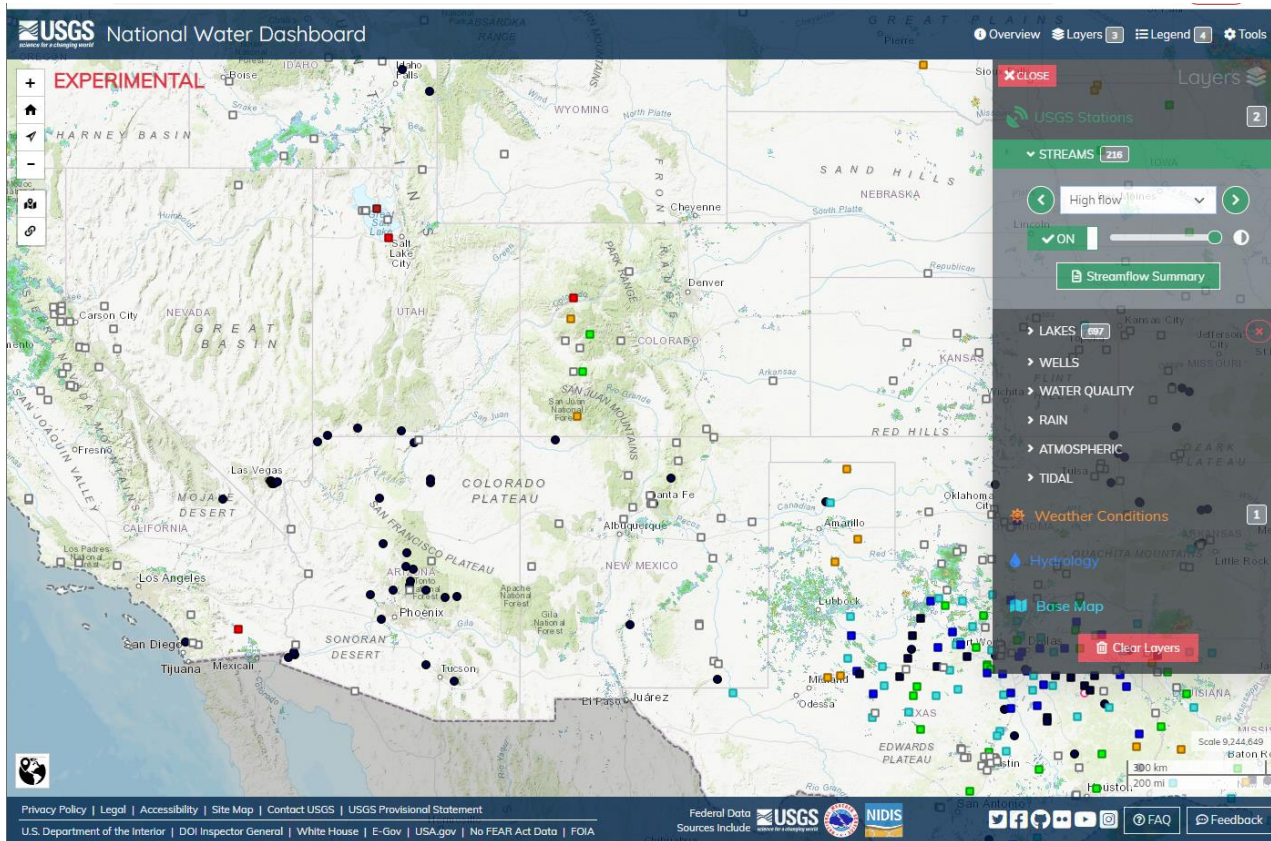


Landslides

<https://www.usgs.gov/natural-hazards/landslide-hazards>

High Flow Streams – Today, 7/27/2021

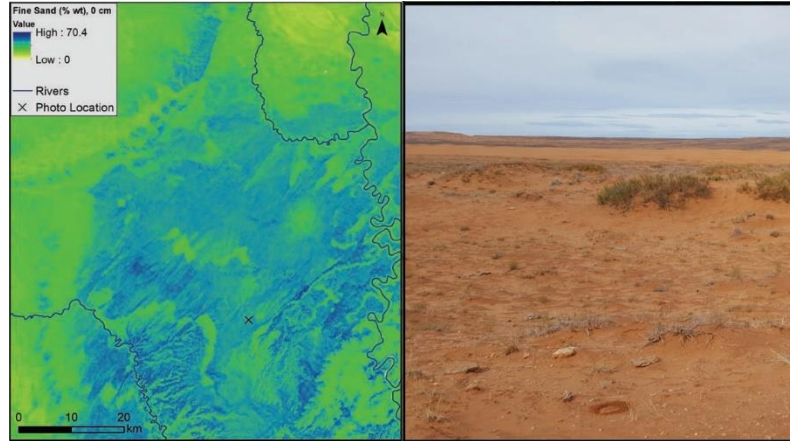
<https://dashboard.waterdata.usgs.gov/app/nwd/?aoi=default>



<https://denver.cbslocal.com/2021/06/28/mudslides-interstate-70-closed-glenwood-canyon-springs/>

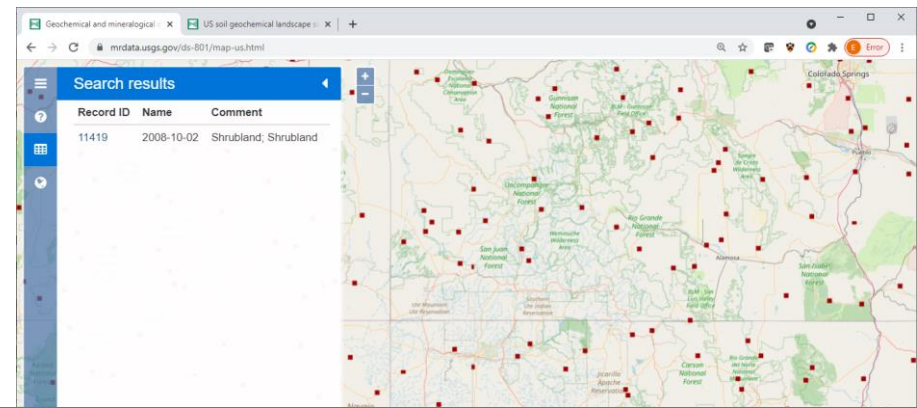
Digital Soil Mapping: New Tools for Modern Land Management Decisions

<https://www.usgs.gov/centers/sbsc/science/digital-soil-mapping-new-tools-modern-land-management-decisions>



Geochemical and Mineralogical Maps, with Interpretation, for Soils of the Conterminous United States

<https://pubs.er.usgs.gov/publication/sir20175118>



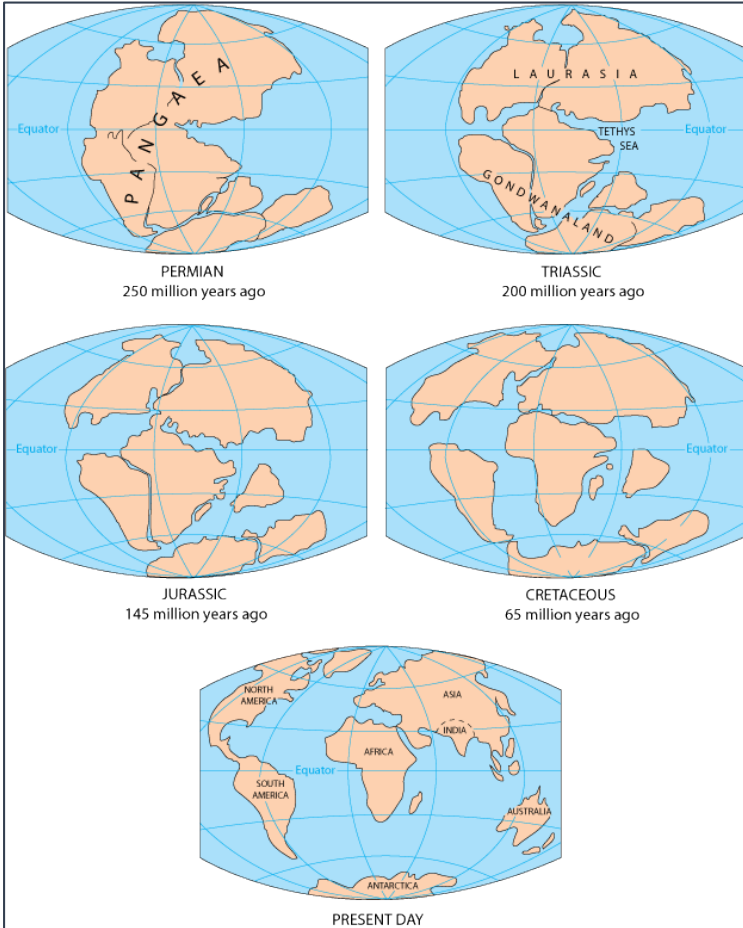
US soil geochemical landscape site #11419, Montezuma county, Colorado

Map XML JSON KML

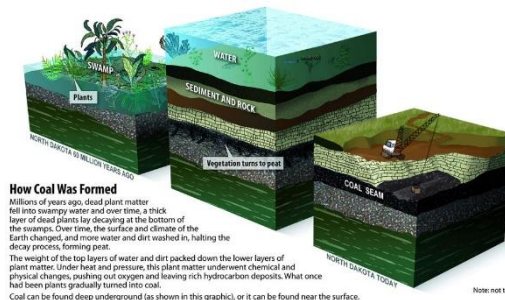
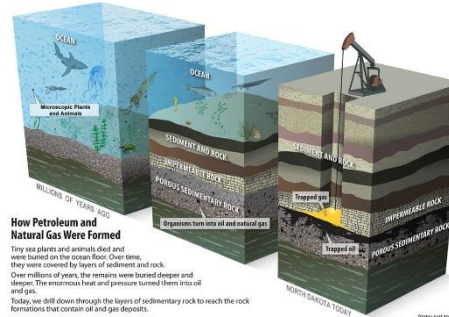
About the site Chemistry and mineralogy

Element or mineral	Top 5cm	A horizon	C horizon	Units	Method
Lab ID	C-319484	C-319692	C-319888		
Sample depth	0-5	0-10	63-73	cm	
Quartz		52.2	53.9	wt. %	XRD
Potassium feldspar		6.8	7.1	wt. %	XRD
Plagioclase		7.1	4.4	wt. %	XRD
Total feldspar		13.9	11.5	wt. %	XRD
14Å clays			6.2	wt. %	XRD
10Å clays		13.5	6.5	wt. %	XRD
Total clays		13.5	12.7	wt. %	XRD
Calcite			0.4	wt. %	XRD
Total carbonate			0.4	wt. %	XRD
Amorphous material		20.4	21.6	wt. %	XRD
Silver	<1	<1	<1	mg/kg	ICP-MS
Aluminum	4.17	4.63	4.97	wt. %	ICP-AES
Arsenic	3.1	4.5	5.5	mg/kg	HYD-AA
Barium	529	515	529	mg/kg	ICP-AES
Beryllium	1.2	1.4	1.5	mg/kg	ICP-MS
Bismuth	0.16	0.19	0.2	mg/kg	ICP-MS

Colorado River Basin



<https://pubs.usgs.gov/gip/dynamic/>



North Dakota Studies:

<http://ndstudies.gov/>

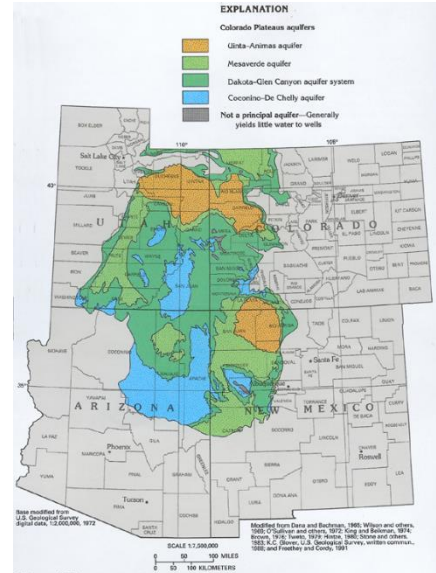
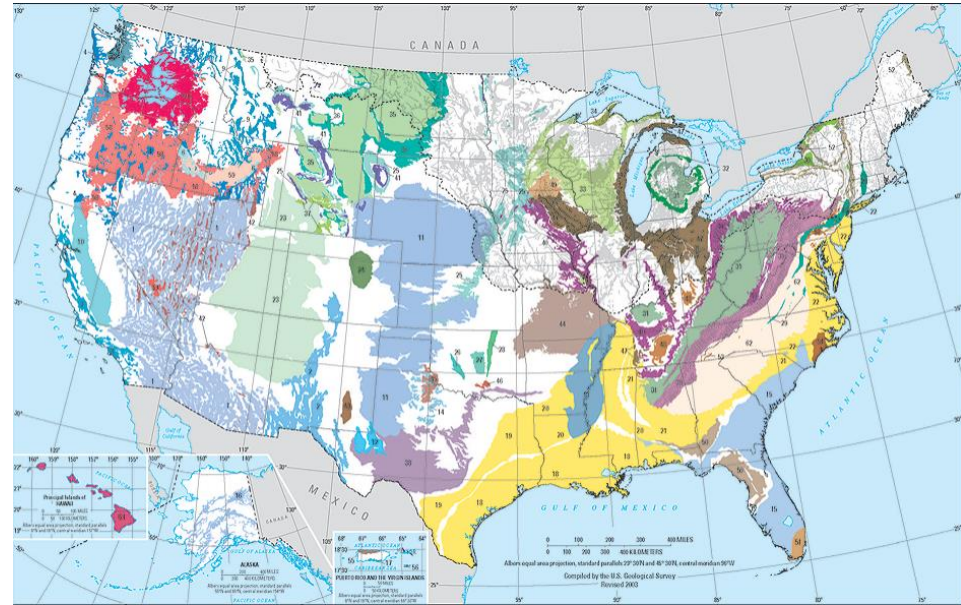
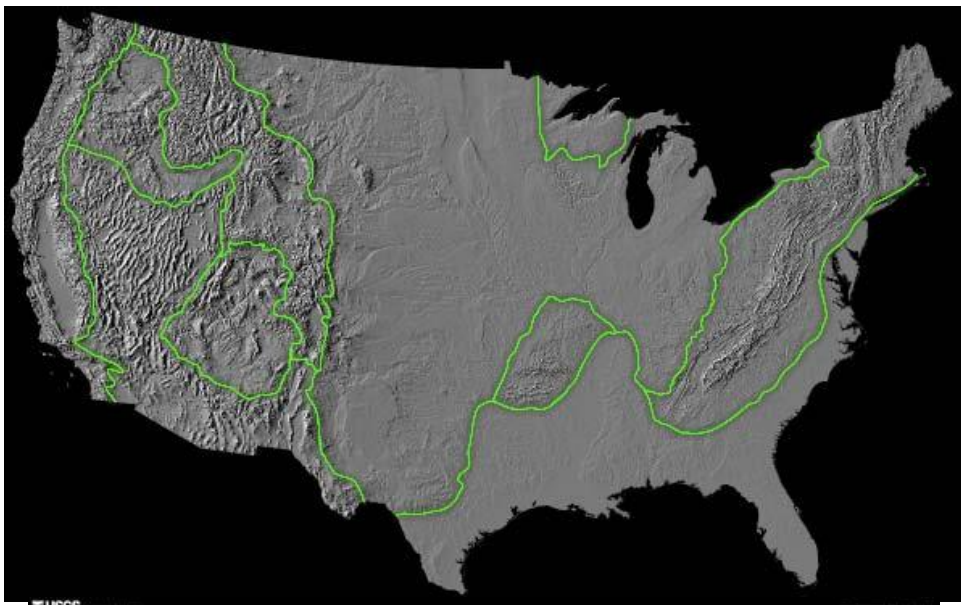
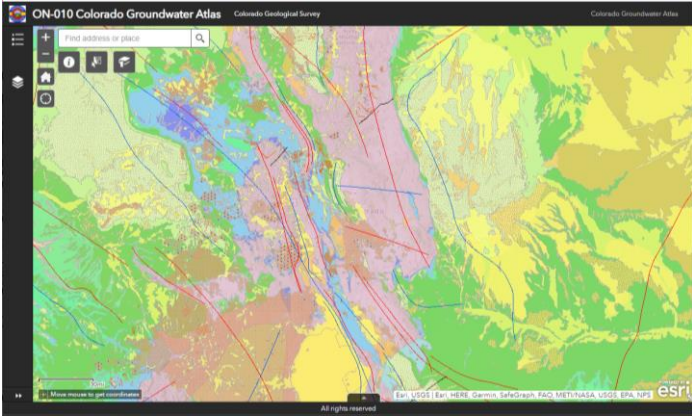
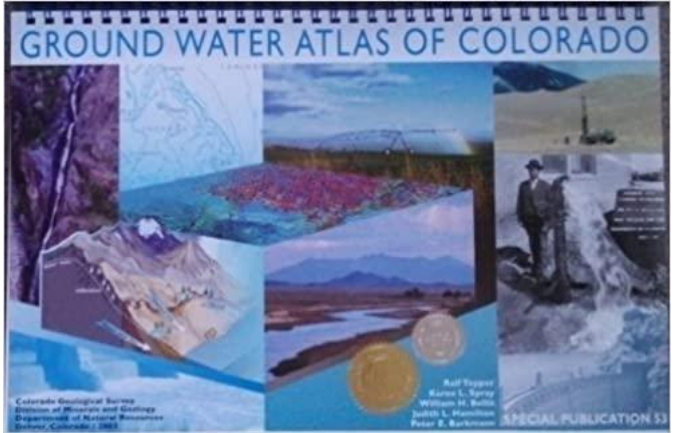


Figure 107. The Colorado Plateau is underlain by four principal aquifers. The areas within each aquifer is the uppermost water-yielding unit as shown here.

<https://water.usgs.gov/ogw/aquifer/atlas.html>



<https://cologeosurvey.maps.arcgis.com/apps/webappviewer/index.html?id=b9995c1f85c841bd955fd124c2c48070>



<https://coloradogeologicalsurvey.org/publications/colorado-groundwater-atlas/>

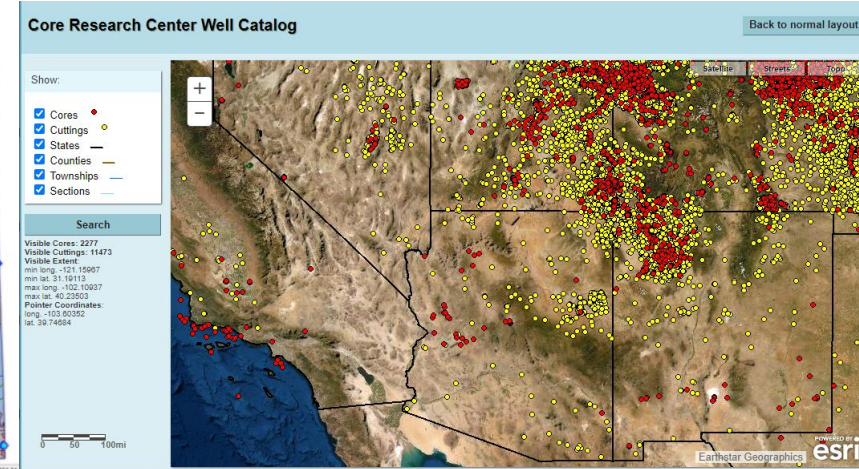
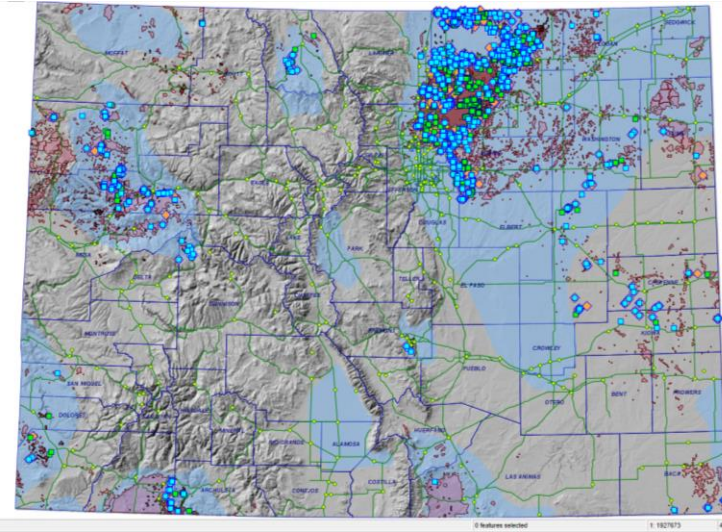
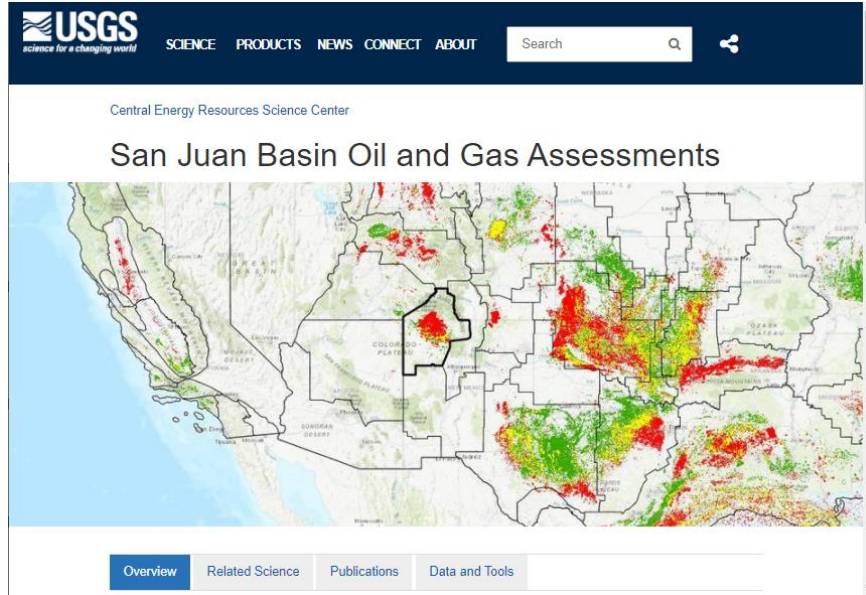
Energy Resources: Oil and Gas

<https://www.usgs.gov/centers/cersc/science>

U.S. Energy Information Administration

<https://www.eia.gov/petroleum/data.php>

<https://www.eia.gov/naturalgas/>



https://cogccmap.state.co.us/cogcc_gis_online/

<https://my.usgs.gov/crcwc/map>

San Juan Basin Oil and Gas Assessments

USGS Energy: <https://on.doi.gov/2UTpHsm>

GeoscienceWorld: <https://bit.ly/3hLc9bh>

AAPG datapages: <https://bit.ly/3iqdDXs>

Microsoft Academic: <https://bit.ly/3iEmLbI>

Google Scholar: <https://bit.ly/2Unihxv>

Core Library Number A797					
Township:	28N	Range:	12W	Section:	32
Quarter:	NENW	County:	SAN JUAN	State:	NM
API Number:	3004507057	Operator:	PAN AM PETROLEUM	Well Name:	190 GALLEGOS CANYON
Latitude:	36.6227193374141	Longitude:	-108.138435719239	Coordinate Source:	FROM STATE RECORDS
Security Flag:	NO SPECIAL RESTRICTIONS				
2 Intervals					
Min Depth	Max Depth	Age	Formation	5 Photos	
5740	5800	CRET	GRANEROS	download all	
5800	5856	CRET	DAKOTA	seq. 1 seq. 3 seq. 5 seq. 7 seq. 9	
3 Thin Sections					
Sequence	Min Depth	Max Depth	View	download all	
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1	5810.0	0.0	photo	seq. 3	
1	5824.0	0.0	photo	seq. 5	

<https://my.usgs.gov/crcwc/core/report/8821>

Energy Resources: Coal

<https://www.usgs.gov/centers/cersc/science>

U.S. Energy Information Administration

Coal Data: <https://www.eia.gov/coal/>

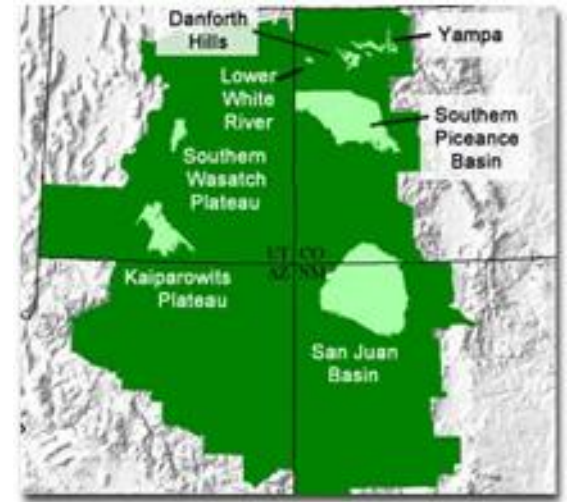
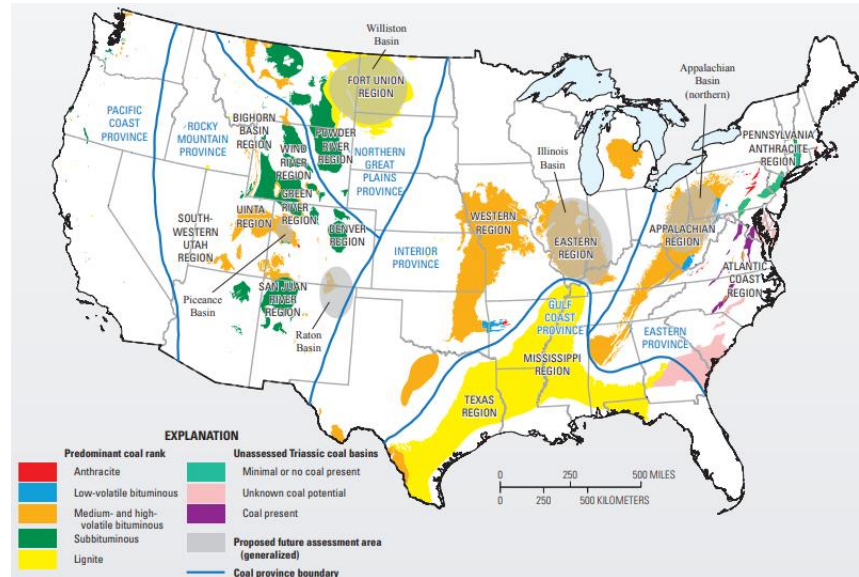
Stratigraphy and Chemistry of Coal

National Coal Resources Data System (NCRDS)



U.S. Coal Resources and Reserves Assessment

<https://www.usgs.gov/centers/cersc/science/us-coal-resources-and-reserves-assessment>



<https://certmapper.cr.usgs.gov/data/apps/coal-cp-data/>

??? Is this USGS Prof

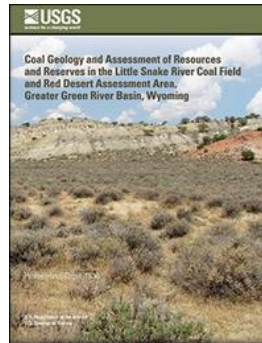
Paper findable in:

GeoscienceWorld: No

AAPG datapages: No

Microsoft Academic: Yes

Google Scholar: Yes

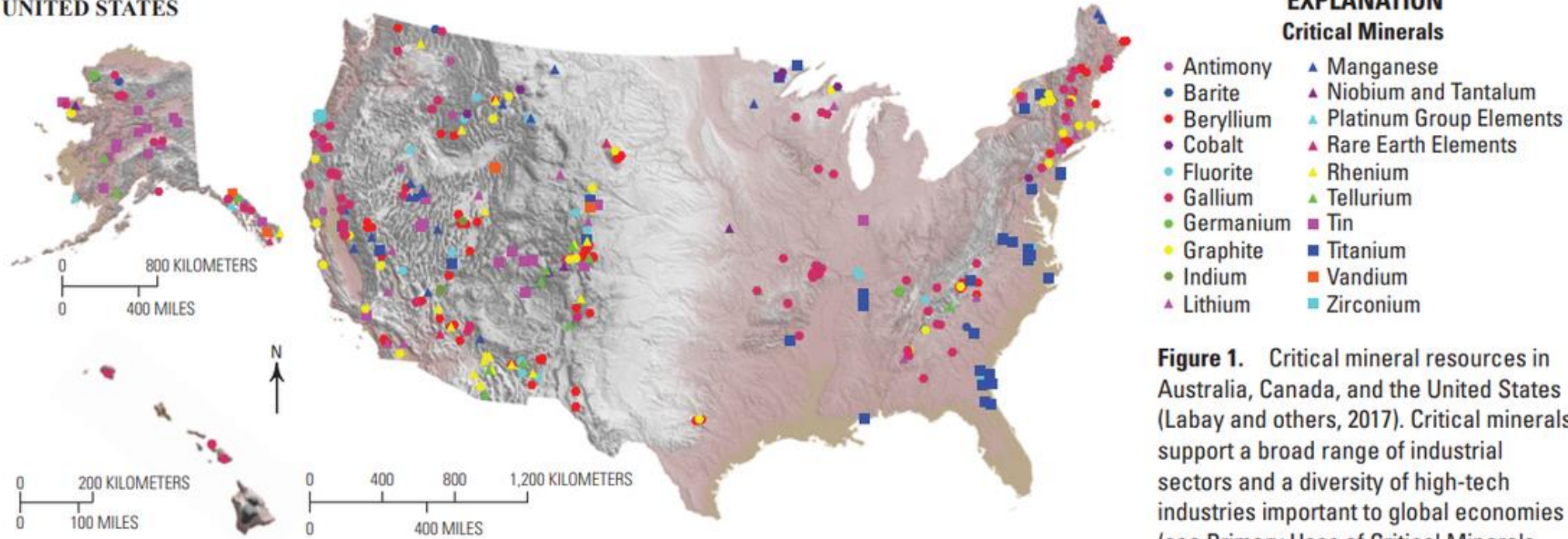


Coal Geology and Assessment of Resources and Reserves in the Little Snake River Coal Field and Red Desert Assessment Area, Greater Green River Basin, Wyoming

Mineral Resources : Critical Minerals - land

<https://www.usgs.gov/energy-and-minerals/mineral-resources-program/science/critical-mineral-resources>

UNITED STATES



Base from National Oceanic and Atmospheric Administration ETOPO1 1 Arc-Minute Global Relief Model, 2017

Figure 1. Critical mineral resources in Australia, Canada, and the United States (Labay and others, 2017). Critical minerals support a broad range of industrial sectors and a diversity of high-tech industries important to global economies (see Primary Uses of Critical Minerals sidebar).

<https://www.usgs.gov/news/critical-cooperation-how-australia-canada-and-united-states-are-working-together-support>



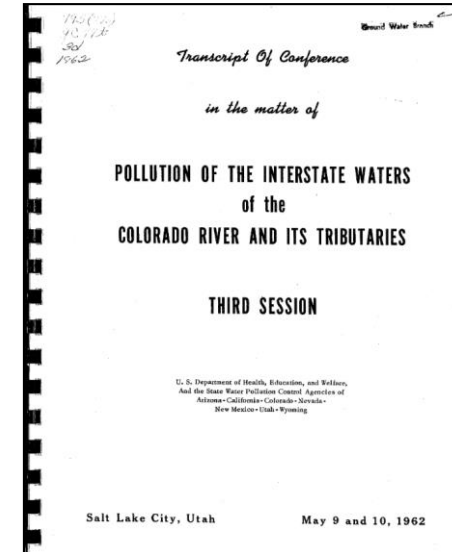
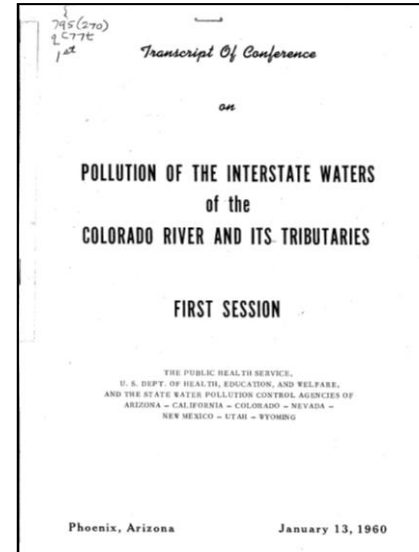
Mineral Resources : Critical Minerals - land

<https://www.usgs.gov/energy-and-minerals/mineral-resources-program/science/critical-mineral-resources>



<https://portal.ga.gov.au/persona/cmmi>

Mining and Water Quality



Pollution of Interstate Waters Reports

<http://www.worldcat.org/search?q=ti%3APollution+of+Interstate+Waters+&qt=advanced&dblist=638>



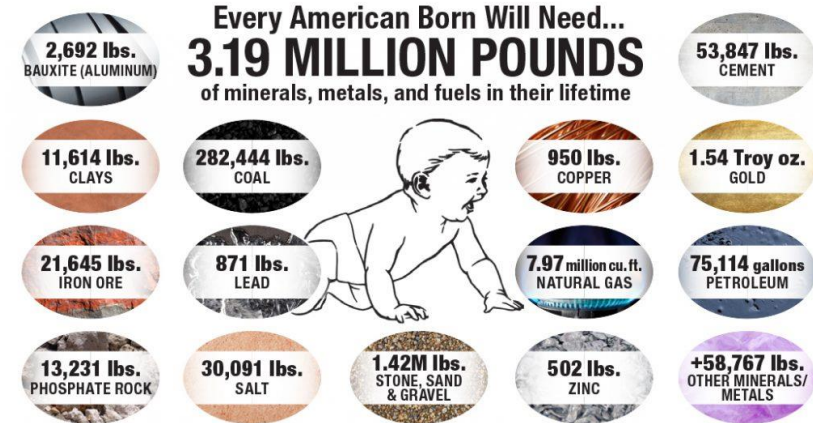
Most Humans Use Petroleum Products and Minerals – Every day!

Everyday products made possible by oil & natural gas



<https://www.coga.org/factsheets/everyday-products-uses>

<https://www.usgs.gov/news/ordinary-minerals-give-smartphones-extraordinary-capabilities>



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Learn more at www.MineralsEducationCoalition.org

<https://mineralseducationcoalition.org/>



<https://www.usgs.gov/core-science-systems/ngp/board-on-geographic-names/domestic-names>

**Feature Detail Report for: Colorado River
ID: 45730**

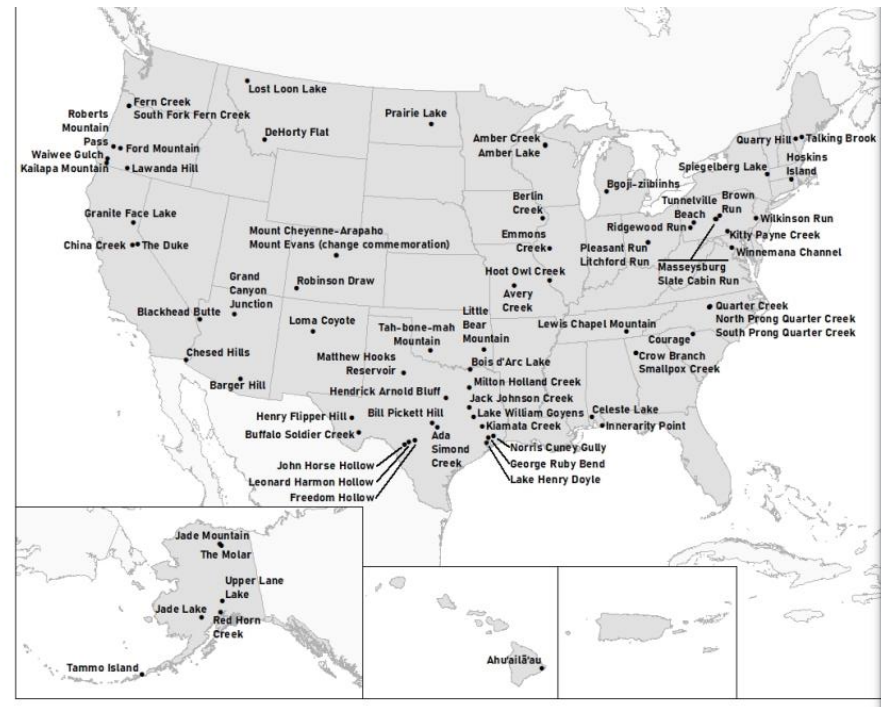
Variant Name

Ahan Yava Kothickwa	Citation	Packet-to	Citation	Rio Grande De Buena Esperanza	Citation
Ancon de San Andres	Citation	Pagah	Citation	Rio Grande de Buena Esperanza	Citation
Big River	Citation	Pocket-to	Citation	Rio Grande de los Cosninas	Citation
Blue River	Citation	Red River of California	Citation	Rio Grande de los Martyres	Citation
Bunkara River	Citation	Red River of the West	Citation	Rio de Buena Guia	Citation
Buqui Acqumuri	Citation	Rio Buena Guia	Citation	Rio de los Martires	Citation
Canon of the Colorado River	Citation	Rio Colorado	Citation	Rio del Nort	Citation
El Rio de Buena Guia	Citation	Rio Colorado Del Norte	Citation	Rio del Norte	Citation
Grand River	Citation	Rio Colorado del Norte	Citation	Rio del Tizon	Citation
Green River	Citation	Rio Cosnina	Citation	Seedekeeden	Citation
Gritetho	Citation	Rio Del Norte	Citation	Seeds Keedee	Citation
Hah Weal Asientic	Citation	Rio Del Tizon	Citation	Seeds Keeden	Citation
Hahweel	Citation			Seeds Keeder	Citation
Javill	Citation			Seeds-ke-Agie	Citation
Mar Bermejo	Citation			Seedskeedee Agie	Citation
Nah Oon Kara	Citation			Seedskeeden	Citation
North Fork	Citation			Seetes-Ker-Der	Citation
North Fork Colorado River	Citation				
North Fork of Grand River	Citation				
Pa-na-weap	Citation				

1450 miles long. Lowest elevation in AZ at 70 feet near Yuma, AZ. Lowest elevation in NV at 479 feet near Clark, NV. Heads at La Poudre Pass Lake, Colorado and flows southwest through Utah and Lake Powell, then generally W through the Grand Canyon AZ, turning south at Lake Meade forming partial boundaries between AZ, NV, and CA before continuing generally south into Mexico to join the Gulf of California.

<https://www.usgs.gov/core-science-systems/ngp/board-on-geographic-names/domestic-names>

Quarterly Review List 443



COLORADO

Change Mount Evans to Mount Cheyenne-Arapaho: summit; elevation 14,264 ft.; in the Mount Evans Wilderness on the boundary of Arapaho and Roosevelt National Forests and Pike and San Isabel National Forests 1.4 mi. NE of Mount Bierstadt; named for the Cheyenne and Arapaho Tribes, members of which were killed in the Sand Creek Massacre; Sec 26, T5S, R74W, Sixth Principal Meridian; Clear Creek County, Colorado; 39°35'18"N, 105°38'37"W; USGS map – Mount Evans 1:24,000; Not: Evans Peak, Monte Rosa, Mount Evans, Mount Rosa, Mount Rosalia, Mount Rosalie, Rosa Mountain.

https://geonames.usgs.gov/apex/gazvector.getesrimap?p_lat=39.588228&p_longi=-105.643716&fid=204716

Proposal: to change a name considered offensive

Map: USGS Mount Evans 1:24,000

Proponent: Otto Braided Hair; Lame Deer, MT

Administrative area: Mount Evans Wilderness / Arapaho and Roosevelt National Forests / Pike and San Isabel National Forests / Denver City and County Parks

Previous BGN Action: None

Names associated with feature:

GNIS: Mount Evans (FID 204716)

Local Usage: Mount Evans (many sources)

Published: Evans Peak (Wheeler, 1879, *Topographical Atlas*); Monte Rosa (Hart, 1925, *Fourteen Thousand Feet*); Mount Evans (USGS 1903, 1905, 1957, 1983; AMS 1953, 1957, 1958, 1960, 2011, 2013, 2016; USFS 1970, 1974, 1997, 2012, 2018; Rand McNally, 1879 and onwards; Colorado map, Thayer 1800; *Geological and Geographical Survey*, Hayden 1881; Colorado map, Adams and Son, 1887; Gannett, 1906; many other local, state, and national sources, both historical and current); Mount Rosa (Byers, 1890, "Bierstadt's Visit to Colorado" in *Magazine of Western History*; Hart, 1925, *Fourteen Thousand Feet*; *Denver Post*, 2017); Mount Rosalia (Denver Pacific Railway map 1868); Mount Rosalie (Hart 1925, *Fourteen Thousand Feet*; *Colorado Place Names*, Bright 1993; *Denver Post*, 1987, 2017); Rosa Mountain

Case Summary: This proposal would change the name of Mount Evans in Clear Creek County