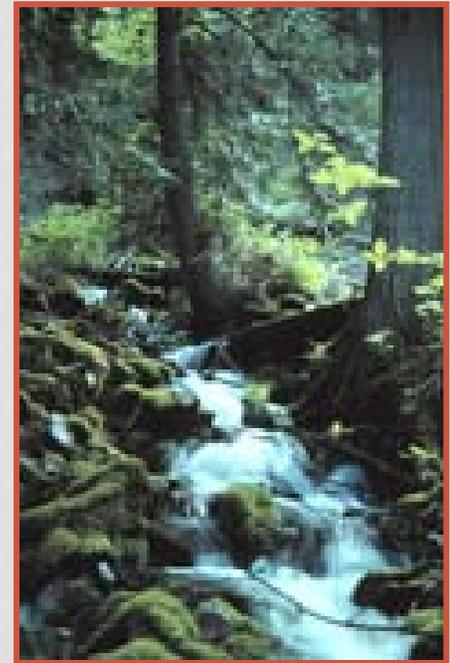
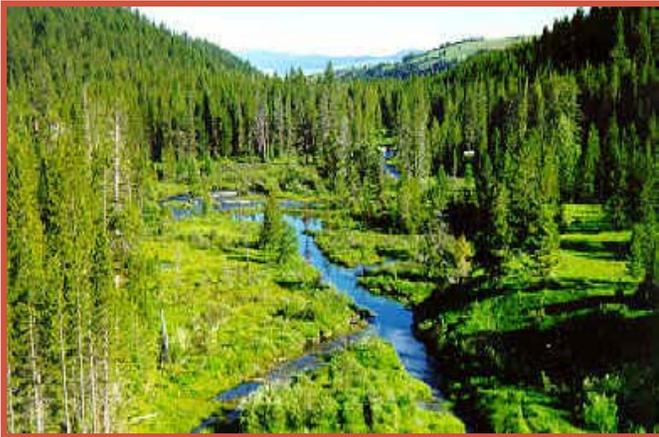




Montana
Natural Resource
Information System





Montana's Official State Website



MONTANA STATE LIBRARY



State Library

[Geographic Information](#)

[Water Information](#)

[Natural Heritage Program](#)

[Base Map Service Center](#)

[About NRIS](#)

What's New

- Big Data Updates!
- Flood Declarations Map
- New Land Cover Data
- Census 2010 Block Data
- Flathead Basin Mapper

[More NRIS news...](#)

GIS Community

- Montana Land Information Advisory Council
- Montana Association of Geographic Information Professionals
- Montana GIS Coordination
- Montana Spatial Data Infrastructure



[Submit a Request](#)

Montana Natural Resource Information System (NRIS)

NRIS is a comprehensive program for the acquisition, storage, and retrieval of existing data relating to the natural resources of Montana.

- [Montana GIS Portal](#)
- [Digital Atlas of Montana](#)
- [Topographic Map Finder](#)
- [Natural Heritage Map Viewer](#)
- [Montana Cadastral Mapping](#)
- [Montana Maps](#)
- [Montana Field Guide](#)

State of Montana Judicial Districts



Click on the image above to see it in full size.

Search Library Catalog (Books, Videos, etc.)

[Search](#)

Search NRIS Website (Web pages, PDFs, etc.)

[Search](#)

Related Resources

- [Base Map Service Center](#)
- [Geographic Literacy](#)
- [Local Government GIS](#)
- [State Government GIS and maps](#)
- [Federal GIS and maps](#)
- [Montana Geography Facts](#)





Montana Natural Resource Information System

Water Information System

Water Quality
Climate
Surface Water
Ground Water
Water Rights

Geographic Information System

Maps
GIS Data
Analytical Services
Technical Assistance
Metadata

Natural Heritage Program

Plant & Animal Data
Natural Communities
Rare, Threatened, or
Endangered Species
Online Field Guides

Browser address bar: <http://nris.mt.gov/wi.asp>

Water Information Home P... X



Montana's Official State Website



NATURAL RESOURCE INFORMATION SYSTEM

Geographic Information | Natural Heritage Program | Water Information | Request Tracker | Library Home | NRIS Home

Water Information

The Water Information System is the starting point for locating water resources information in Montana, such as data on surface water, groundwater, water quality, riparian areas, water rights, climate data and more.

-  [Montana Water Organization Links](#)
-  [Interactive Map and Data Tools](#)
-  [Montana State Library searchable databases](#)
-  [Search GIS Data](#)

- [Agriculture](#)
- [Climate](#)
- [Drought](#)
- [Fire](#)
- [Fisheries](#)
- [Ground Water](#)
- [Precipitation](#)
- [Snowpack and Surface Water Supply Information \(SWSI\)](#)
- [Watershed Information](#)
- [Wetlands Clearinghouse](#)
- [Water Quality](#)
- [Water Rights](#)
- [Montana Water News](#)

Privacy & Security | Accessibility | Contact Us | Search mt.gov



Ground Water Information

- [NRIS Ground Water Resources Page](#)
- [USGS Groundwater Data for Montana](#)
- [Montana Ground Water Atlas \(pdf\)](#)
- [Montana Bureau of Mines and Geology](#)
- [Search for Well Information](#) with the Montana Digital Atlas
- [Groundwater Wells Layer Metadata](#)
- [Groundwater Wells Layer Shapefile](#)

Snowpack and Surface Water Information

- [USGS Stream Flow Data](#)
- [Montana Snowpack and Water Supply](#)
 - Surface Water Supply Index (SWSI)
 - Snow Water Equivalent (SWE)
 - Streamflow Prospects
- [NRIS Hydrography Page \(NHD\)](#)
- [US Bureau of Reclamation Reservoir Storage](#)
- [DNRC Reservoir Storage](#)
- [Army Corp of Engineers Stream and Wetlands Permits Since 1990](#)
- [Stream Corridor Assessment Screening Tool](#)
- [Center for Riverine Science and Stream Re-naturalization](#)

Water Rights Information

- [Water Rights Adjudication – House Bill 22](#)
- [Montana Water Rights Query System](#)
- [DNRC Water Rights Bureau](#)
- [Water Rights in Montana – 2008](#)
- [Water Rights in Montana – 2006](#)

Water Information System

Water-related topic guides with relevant links, maps and information.

Current Conditions & Statistics | Drought Responses | Publications & Catalog Search | History & Public Awareness | Drought Advisory Committee

U.S. Drought Monitor

September 6, 2011
Valid 8 a.m. EDT

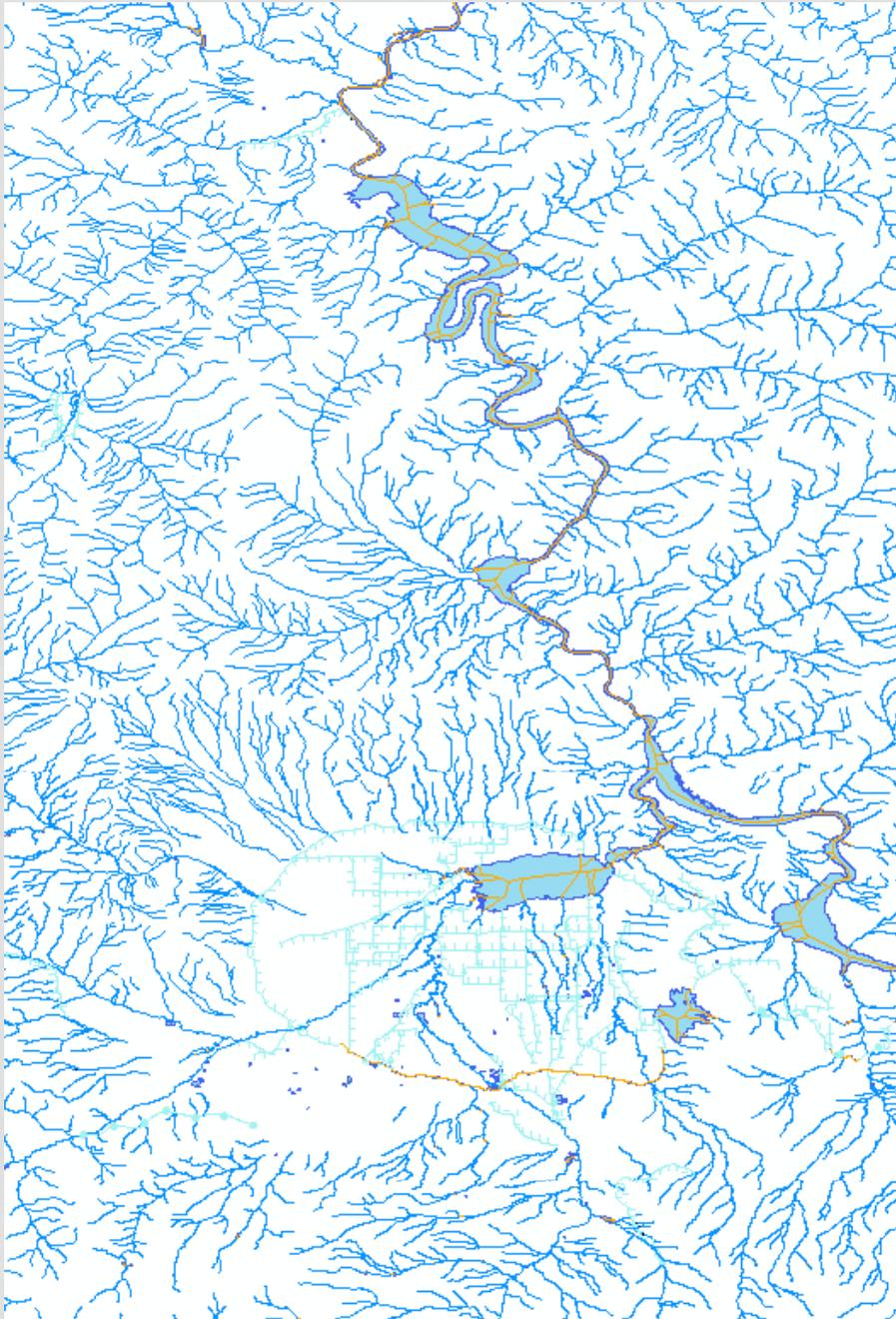
Montana County Drought Status

Montana Drought Status by County - August 2011

Click on the image above for a printable version of this map and associated drought histories created by the [Montana Drought Advisory Committee](#).

CURRENT CONDITIONS

1. [Montana County Drought Status](#) map and county table.
2. [U.S. Drought Monitor](#) map updated weekly includes text summary.
3. [U.S. Drought Monitor Current Condition](#) maps of indices on one page.
4. [Current Year Water Data](#)
5. [Montana Snow and Water maps 2001-2008](#) of Mountain Snow Water Equivalents, Monthly Stream Flow Prospects, and Surface Water Supply Index.
6. [U.S. Soil Moisture Monitoring](#)
7. [Stream flow in Montana](#)
8. [Surface Water in Montana](#)
9. [Montana Bureau of Mines and Geology Ground Water-Information Center](#)
10. [Montana Moisture Status](#)
11. [Drought Information-Billings, MT area](#)
12. [Drought Information-Great Falls, MT area](#)



NRIS Maintains a dataset of surface water features based on the USGS Topographic Quadrangle maps. This dataset contains lakes, ponds, rivers, streams, irrigation ditches and other water features for the entire state.

This dataset is one of 14 priority data layers in the Montana Spatial Data Infrastructure (MSDI)

The goal is to get input from water users across the state to help develop a common layer that will meet their business needs.

NRIS' work on this layer is funded through partnerships with the USGS and the Montana Land Information Council



Water Right Query System

Query, report, and map Department of Natural Resources and Conservation Water Right Data.

<http://nris.mt.gov/dnrc/waterrights/default.aspx>

[Home](#) » [Water Resources Division](#) » [Water Rights Query](#) » [simple Index](#)

[Water Rights Web Guide - pdf](#)

[\[Modify Existing Search\]](#)[\[New Search\]](#)

[Click here for Water Right Data Explanations](#)

If you have problems, contact the DNRC Waterrights Help.

Click on column headings to sort.

Water Right	A	WR Type	Status	Purpose	Priority Date yyyymmdd (hhmm)	Src	Src Name	Means of Diversion	Owner	Flow Rate	Volume	Acres	Doc Image	Div Count & map	Use Count & map	Irr Count & map	Res Count & map
39E 113451 00	A	GROUND WATER CERTIFICATE	ACTV	STOCK	200009131041	G	GROUNDWATER	WELL	JOHNSON G MALCOM	10.00 GPM	5.10		View	1	1		
39E 113451 00	A	GROUND WATER CERTIFICATE	ACTV	STOCK	200009131041	G	GROUNDWATER	WELL	JOHNSON PEGGY J	10.00 GPM	5.10		View	1	1		
39E 13930 00	A	STATEMENT OF CLAIM	ACTV	STOCK	19281231	S	UNNAMED TRIBUTARY OF BOXELDER CREEK	LIVESTOCK DIRECT FROM SOURCE	JOHNSON G MALCOM				View	1	1		1
39E 13930 00	A	STATEMENT OF CLAIM	ACTV	STOCK	19281231	S	UNNAMED TRIBUTARY OF BOXELDER CREEK	LIVESTOCK DIRECT FROM SOURCE	JOHNSON PEGGY J				View	1	1		1
39E 23893 00	A	STATEMENT OF CLAIM	ACTV	STOCK	19610605	G	GROUNDWATER	WELL	JOHNSON G MALCOM	6.00 GPM			View	1	1		
39E 23893 00	A	STATEMENT OF CLAIM	ACTV	STOCK	19610605	G	GROUNDWATER	WELL	JOHNSON PEGGY J	6.00 GPM			View	1	1		
39E 23894 00	A	STATEMENT OF CLAIM	ACTV	STOCK	19600630	G	GROUNDWATER	WELL	JOHNSON G MALCOM	3.00 GPM			View	1	1		
39E 23894 00	A	STATEMENT OF CLAIM	ACTV	STOCK	19600630	G	GROUNDWATER	WELL	JOHNSON PEGGY J	3.00 GPM			View	1	1		



Water Right Number: **39E 23895 00**

Map Click Function

Select Identification Item ▼

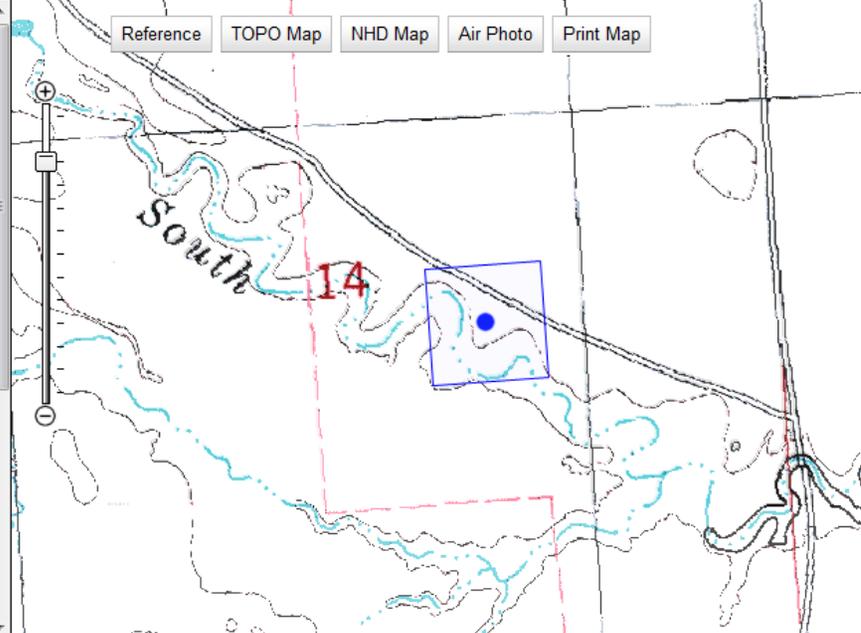
View

[Help](#) [Abstract](#) [Map](#)

Legend

- Diversion Count: 1
- ▲ Surface water diversion.
- Ground water diversion.
- Adjacent Diversions:
- ▲ Surface water diversion.
- Ground water diversion.
- Place of Use Legal Land Descriptions

Reference TOPO Map NHD Map Air Photo Print Map



Watershed Information

- [Watershed Maps](#)
- [NRIS Watershed Boundary Page](#)
- [NRCS Watershed Boundary Page](#)
- [NRIS Hydrography Page \(NHD\)](#)
- [EPA Surf Your Watershed](#)
- [EPA On-line Training in Watershed Management](#)
- [Get GIS Data for your Watershed](#)

Watershed Groups in Montana

Use the above link to find a complete list. The groups listed below requested that a link to their site be included on this page.

- [Montana Watershed Coordination Council](#)
- [Blackfoot Challenge](#)
- [Missouri River Conservation Districts Council](#)
- [Sun River Watershed](#)
- [Yellowstone River Corridor Study](#)

Flathead Basin Mapping Project, 2009



The Montana DNRC facilitated a region-wide approach to obtaining new digital topographic and aerial imagery covering a large portion of the Flathead Valley. Data collection utilized state of the art LiDAR (Light Detection and Ranging) technologies, in lieu of traditional aerial photogrammetric methods, to map the surface terrain.

The data will be utilized for new floodplain studies, support of local resource and development planning, and to provide baseline scientific mapping data for a host of derivative products; such as vegetation and forest inventory assessments, habitat analysis, canopy mapping, etc. Since acquisition costs for LiDAR and Digital Imagery decrease as the coverage area increases, DNRC sought to maximize the project area by combining funding resources of communities and agencies that shared overlapping applications for the new data.

- [Online Map Viewer](#)
- [Reports and Documents](#)
- [Web Services for GIS Clients](#)
- [Downloadable GIS Data](#)
 - [Color Aerial Photos](#)
 - [Infrared Aerial Photos](#)
 - [Digital Elevation Models](#)
 - [Contour Lines](#)
 - [LiDAR Point Data](#)
 - [Vector Roads, Streams, Breaklines, and Download indices](#)

http://nris.mt.gov/Flathead_2009/



Yellowstone River Corridor Resource Clearinghouse

This web page provides a single point of access to data and publications that the Montana State Library archives for the Yellowstone River Corridor, and is intended to provide a clearinghouse for information associated with the river. The data and publications were developed by federal and state agencies primarily through contracted services.

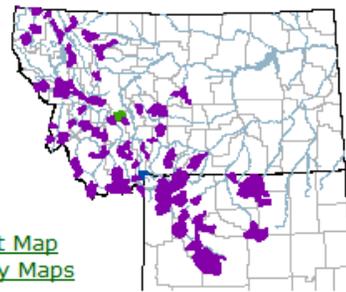
<http://nris.mt.gov/yellowstone/>



Montana Snowpack and Water Supply

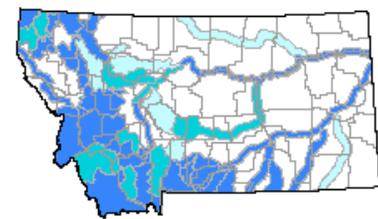
Latest data is shown.

Snow Water Equivalent Watersheds



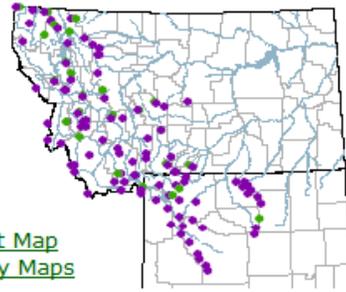
[Current Map](#)
[Monthly Maps](#)

Water Supply Forecast Surface Water Supply Index (SWSI)



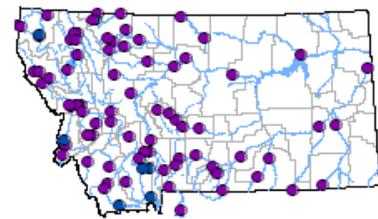
[Current Map](#)
[Monthly Maps](#)

Snow Water Equivalent Data Stations



[Current Map](#)
[Monthly Maps](#)

Water Supply Forecast Streamflow Prospects



[Current Map](#)
[Monthly Maps](#)

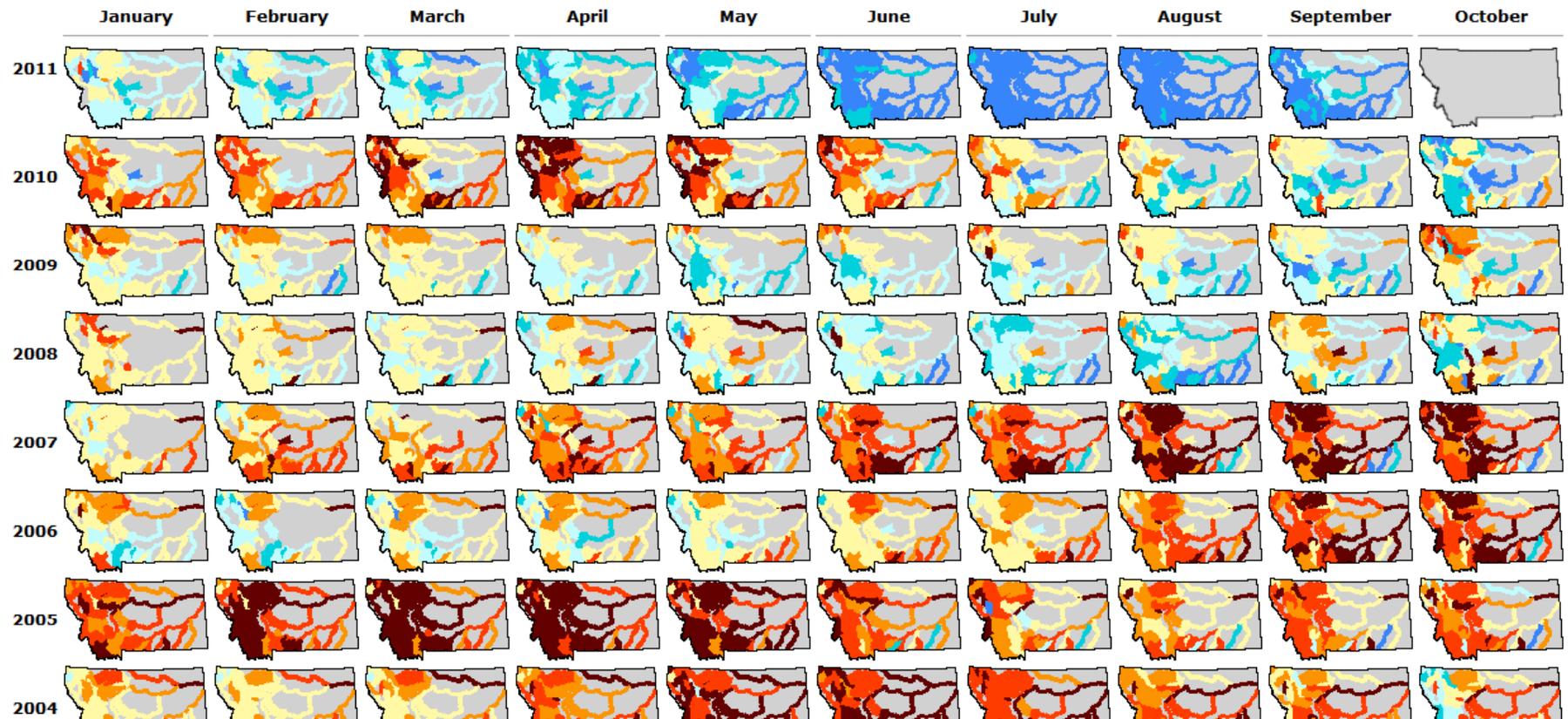


[Water Supply](#) > [Core Months](#) > [All Months](#)

Historical Surface Water Supply Index (SWSI) Maps: 1992 – Present

[Current SWSI Index Maps and Reports](#)

Click on the map images for a larger view.
No data are available for months with gray maps.



Montana County Drought Status Maps: 2003 – 2011

Click on map or hyperlinked text to view maps and status tables.

2011 Montana County Drought Status

January	February	March	April
			
PDF Map PDF Status Table	PDF Map PDF Status Table	PDF Map PDF Status Table	PDF Map PDF Status Table
May	June	July	August
			
PDF Map PDF Status Table	PDF Map PDF Status Table	PDF Map PDF Status Table	PDF Map PDF Status Table

2010 Montana County Drought Status

January	February	March	April
			
PDF Map PDF Status Table	PDF Map PDF Status Table	PDF Map PDF Status Table	PDF Map PDF Status Table
May	June	July	August
			

Ground Water Information

Page Index

- [Links to Related Sites](#)
- [Ground-water Maps](#)
- [Ground-water Terms and Definitions](#)

Ground-Water Use In Montana

Ground water is an important resource in Montana, and will become more so in the future as the state's population and industries continue to grow. Ground water provides 94 percent of Montana's rural domestic-water supply and 39 percent of the public-water supply. Every day approximately 90 million gallons of ground water are used for irrigation, 16 million gallons to supply water for livestock, and 20 million gallons per day are used to support industry (Solley and others, 1990). [Montana Ground-water Atlas \(PDF\)](#)

Ground-Water Use In The United States

The EPA reports that:

- o Nationally 53% of the population relies to some extent on ground water as a source of drinking water. This percentage is even higher in rural areas where most residents rely on potable or treatable ground water as an economical source of drinking water.
- o Eighty-one percent of community water systems are dependent on ground water.
- o Seventy-four percent of community water systems are small ground water systems serving 3,300 people or less.
- o Ninety-five percent of the approximately 200,000 non-community water systems (serving schools, parks, etc.) are ground water systems.
- o Irrigation accounts for approximately 64% of national ground water withdrawals.
- o Public drinking water supplies account for approximately 19% of the Nation's total ground water withdrawals.
- o Domestic, commercial, livestock, industrial, mining, and thermoelectric withdrawals together account for approximately 17% of national ground water withdrawals.

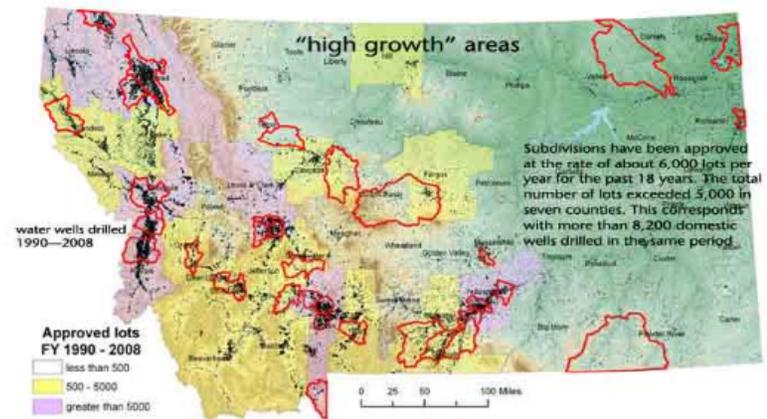
Most frequently reported ground-water contamination sources and types by States include:

- o Leaking underground storage tanks. About 400,000 of an estimated 5 to 6 million underground storage tanks in the United States are thought to be leaking. About 30% of all tanks store petroleum or hazardous materials.
- o Septic tanks. Approximately 23 million domestic septic systems are in operation in the United States. About half a million new systems are installed each year.
- o Municipal landfills. Of the quarter million solid waste disposal facilities in the United States, about 6,000 are municipal solid waste facilities. Approximately 25% of these municipal facilities have ground water monitoring capabilities.
- o Agricultural activities. Seventy-seven percent of the 1.1 billion pounds of pesticides produced annually in the United States is applied to land in agricultural production, which often overlies aquifers.
- o Abandoned hazardous waste sites. Approximately 33,000 sites have been identified as abandoned hazardous waste sites, of which 42% involve ground water contamination.

<http://nris.mt.gov/wis/mtgwres.asp>



1 Eureka	8 Georgetown Lake, Philipsburg	16 Manhattan	24 Rock Creek	32 Sidney
2 Flathead Valley	9 Summit Valley	17 Belgrade	25 Prior Mtns	33 Coaled methane
3 Smith Valley	10 Priest Butte Lake	18 Four Corners	26 Park City	34 North Fork Flathead
4 Noxon	11 Greenfield Bench	19 Pine Creek	27 West Billings	35 Lower Beaverhead River - West
5 Missoula Valley	12 North Hills	20 West Yellowstone	28 East Billings	36 Big Sky
6 Florence	13 Scratchgravel Hills	21 Belt, Monarch	29 Roundup	37 Boulder River
7 Hamilton	14 Townsend, Toston	22 Little Belt Mtns	30 Flaxville gravels	38 Upper Madison River
	15 Three Forks	23 Stillwater Valley	31 Clear Lake	39 Lower Madison River



<http://www.mbm.mtech.edu/gwip/gwip.asp>



[Clean Water Act Information Center](http://cwaic.mt.gov/)

CWAIC is the Department of Environmental Quality's public access clearinghouse for obtaining information on federal and state mandated 305(b)/303(d) water quality reports, public comment, water quality laws, and Montana's water quality programs.

<http://cwaic.mt.gov/>



[Public Water Supplies](http://nris.mt.gov/wis/swap/swapquery.asp)

Search the Department of Environmental Quality's Source Water Protection Program database for Source Water Assessments and maps of Montana's public water supplies.

<http://nris.mt.gov/wis/swap/swapquery.asp>



**US Army Corps
of Engineers** ®

[404 Permit Finder](http://maps2.nris.mt.gov/mapper/Corp404/CorpMain.asp)

Interactive query and mapping of Army Corps of Engineers stream and wetland permits since 1990.

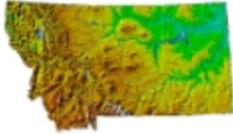
<http://maps2.nris.mt.gov/mapper/Corp404/CorpMain.asp>



[MT Water Quality Tracker](http://nris.mt.gov/Apps/WQProject/watermain.asp)

This database contains information about all the water quality monitoring sites available from 12 Federal, State, Tribal, and Private agencies in Montana. The application contains links to data about each site and maps of the site areas.

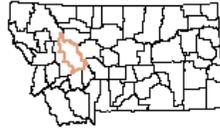
<http://nris.mt.gov/Apps/WQProject/watermain.asp>



Digital Atlas of Montana

An interactive mapping tool for accessing a wide variety of information about Montana's counties, streams, towns, and watersheds.

<http://nris.mt.gov/mapper>



Geographic Area: County = Lewis And Clark

-- Pick a New Study Area --

Select a category from the list below,
then click a link to view the map for your area of interest.

Census /
Base Map

Climate

Environmental
Impacts

Land
Information

Water

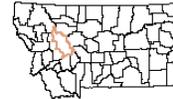
Biological
Data

Surface Water

- Corps of Engineers 404 Permits -- All
- Corps of Engineers 404 Permits -- Nationwide Only
- DNRC Water Project Grants
- FWP Stream Data
- Lakes
- Hydrologic Units
- Major Lakes
- Major Streams
- Montana Watershed Group Areas
- Montana Dams
- Public Water Supplies
- USGS Gauging Stations
- Yellowstone River Physical Features Inventory
- Yellowstone River Physical Features Inventory with Corps 404 permits
- Floodplain Maps

The floodplain map is an index map showing locations of FEMA FIRM floodplain maps available for use the identify tool to click on a floodplain map, a window will pop up with a link to a MrSID image

Montana Natural Resource Information System On-Line GIS Data Bundler



Your Geographic Query: County = Lewis And Clark

If no map of Montana appears on the left showing the location of your query, the Bundler is not working. Please [send us an email](#) to let us know we need to fix it.

Select the data bundles and individual layers you want. When you press the Go button, the Bundler will clip the layers to your study area for you.

[Help](#)

Data Bundles: Water Info GIS Starter Kit DES / Homeland Sec Clear

Please enter your e-mail address:
We will send you an e-mail when your data bundle is ready to download.

Select a Coordinate System

Business and Economic	Cadastral and Land Descs	Cultural and Demographic	Elevation and Derived Prods	Environmental	Facilities and Structures	Geologic and Geophysical	Human Health and Disease
Administration and Political Boundaries	Agriculture and Farming	Atmospheric and Climatic	Biologic and Ecologic	Imagery and Base Maps	Inland Water Resources	Locations and Geodetic Nets	Transportation Networks
<input type="checkbox"/> American Indian reservations (polygons)	<input type="checkbox"/> BLM Administrative Districts (polygons)	<input type="checkbox"/> Counties, MSDI (polygons)	<input type="checkbox"/> Counties, U.S. Census Bureau (polygons)	<input type="checkbox"/> Land Ownership of Public and Conservation Lands (polygons)	<input type="checkbox"/> Land Stewardship and Managed areas (polygons)	<input type="checkbox"/> FWP routed stream cover (lines)	<input type="checkbox"/> Groundwater Wells From GWIC (points)
						<input type="checkbox"/> Major Lakes and Streams - 1:100,000 scale (lines)	<input type="checkbox"/> Major Lakes and Streams - 1:100,000 scale (polygons)
						<input type="checkbox"/> Montana Lakes from 2000 TIGER files (polygons)	<input type="checkbox"/> National Hydrography Dataset - Lakes (polygons)

Montana's primary catalog of GIS data

Find Data You Need

Search

[Advanced Search](#)

[Search Tips](#)

Publish

M

Po

[Disclaimer](#)

[Privacy](#)

TEXT SEARCH

water hydro hydrography hydrology flood precipit:

Search

[Search Tips](#)

GEOGRAPHIC SEARCH

Anywhere Intersecting Fully within



1) Hold Shift key and draw a box. 2) Select Intersecting or Fully Within. 3) Set other search criteria and click Search or press Enter.

Advanced Search

SORT BY

Relevance

Results 1-10 of 166 record(s) [1](#) [2](#) [3](#) [4](#) [5](#) [>](#) [Last](#)

Expand results [Zoom To Results](#) [Zoom To Searched Area](#)

[Simplified Montana Hydrography](#)

[Upper Clark Fork Hydrography Polygons from 1:24,000 scale U.S.G.S. quadrangles](#)

[Greater Yellowstone Area, Montana Hydrography Polygons from 1:24,000 scale U.S.G.S. quadrangles](#)

[Greater Yellowstone Area, Wyoming and Idaho, Hydrography Polygons from 1:24,000 scale U.S.G.S. quadrangles](#)

[Digital Flood Insurance Rate Map Database, Montana](#)

[Yellowstone River Floodplain Map Service, Montana and North Dakota](#)

[Waterbody Reach Features \(Lakes\), Medium Resolution National Hydrography Dataset, Montana](#)