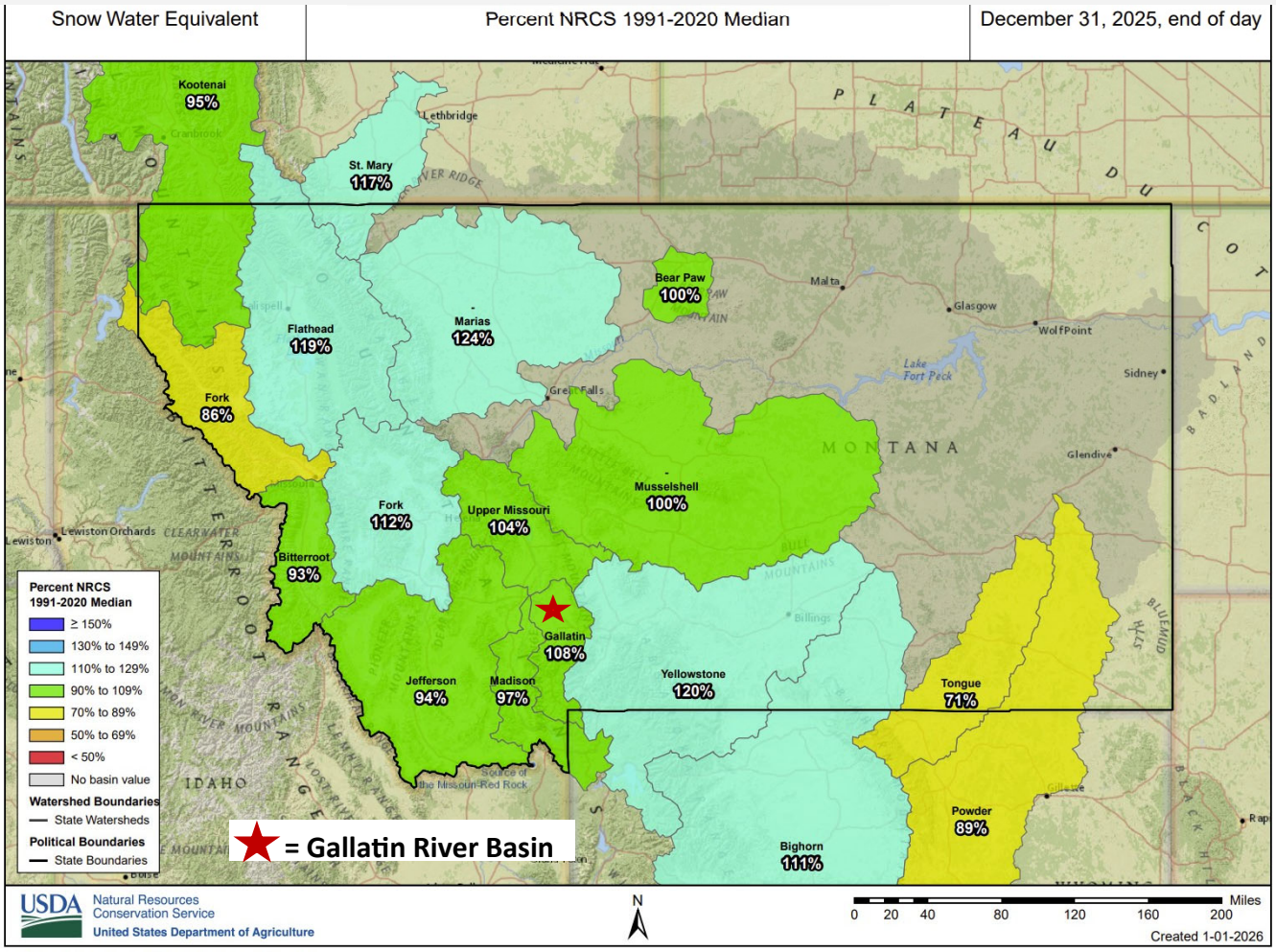
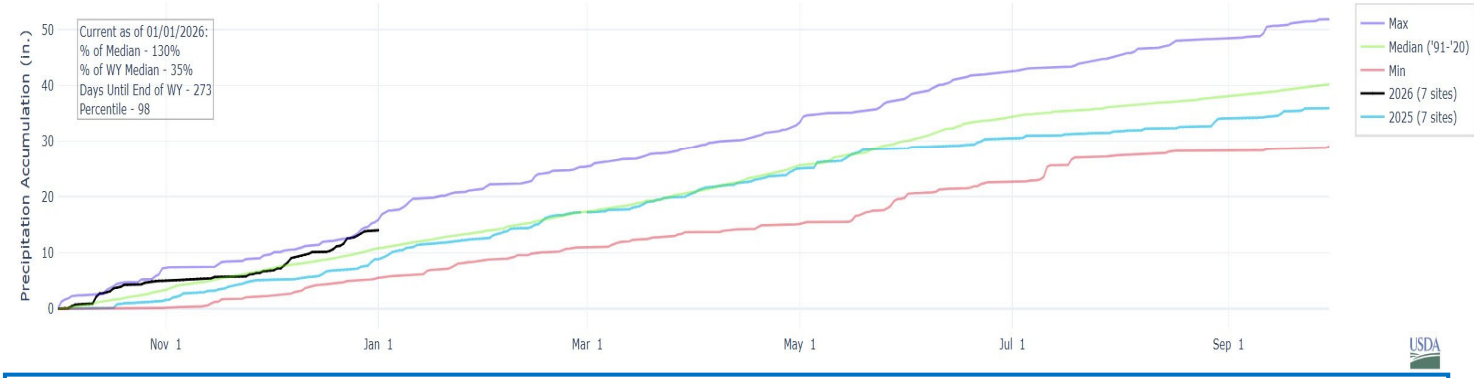
Gallatin Water Supply Outlook
December 2025



PRECIPITATION ACCUMULATION IN GALLATIN



SNOWPACK SUMMARY (Water Year (WY) = October 1st—September 30)

*Data current as of 1/1/2026

We are currently in Water Year 2026 (black line). The Snow Water Equivalent (SWE) was above normal (median, green line) within the Gallatin River Basin on December 31st, 2025 at 8.4 inches (a 6.0 increase since last month). Last year on December 31st, 2024, the SWE was at 7.3 inches (central blue line). Detailed end-of-month SNOTEL site information follows.

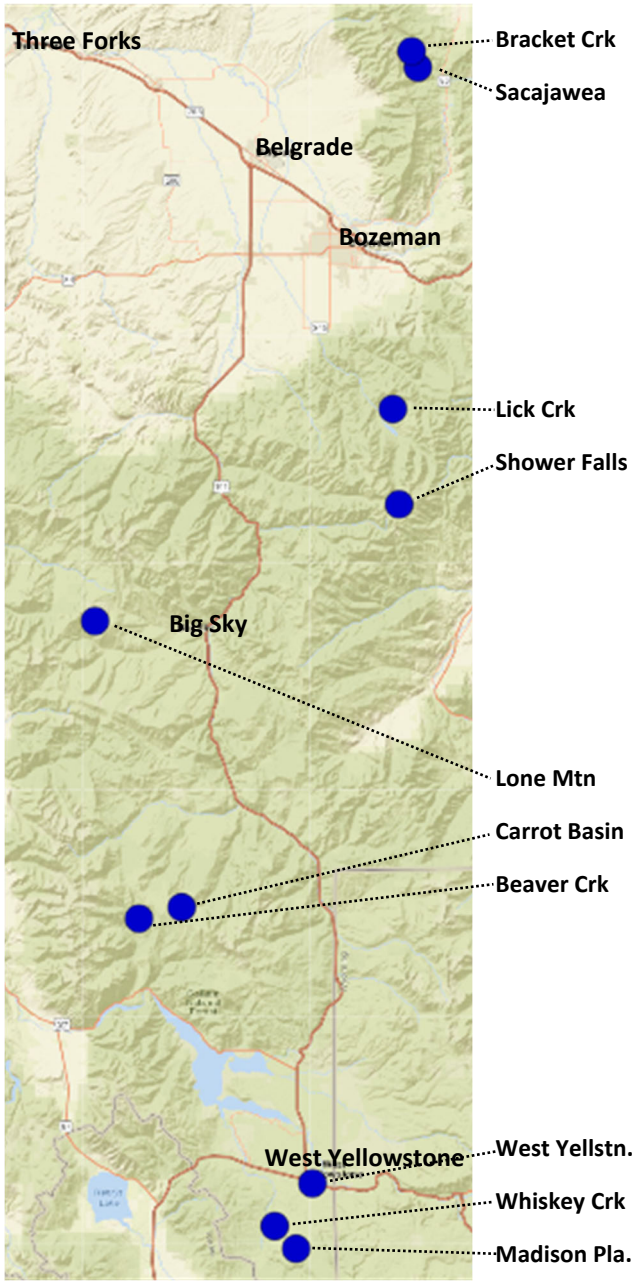
Snowpack Data
Gallatin River Basin—December 2025

Gallatin Valley Region (Bozeman-Belgrade-Four Corners)					
Station Name	*Date*	*Snow Depth (in)*	*SWE (in)*	*SWE % Normal*	*Normal SWE 1971-2000 (in)*
Brackett Creek	Dec. 2024	40	7.6	85	8.9
	Dec. 2025	31	9.2	103	
Sacajawea	Dec. 2024	32	5.5	108	5.1
	Dec. 2025	10	3.6	71	

Hyalite Region (Gallatin Gateway)					
Station Name	*Date*	*Snow Depth (in)*	*SWE (in)*	*SWE % Normal*	*Normal SWE 1971-2000 (in)*
Lick Creek	Dec. 2024	20	3.8	72	5.3
	Dec. 2025	11	3.3	62	
Shower Falls	Dec. 2024	43	9.9	98	10.1
	Dec. 2025	35	10.2	101	

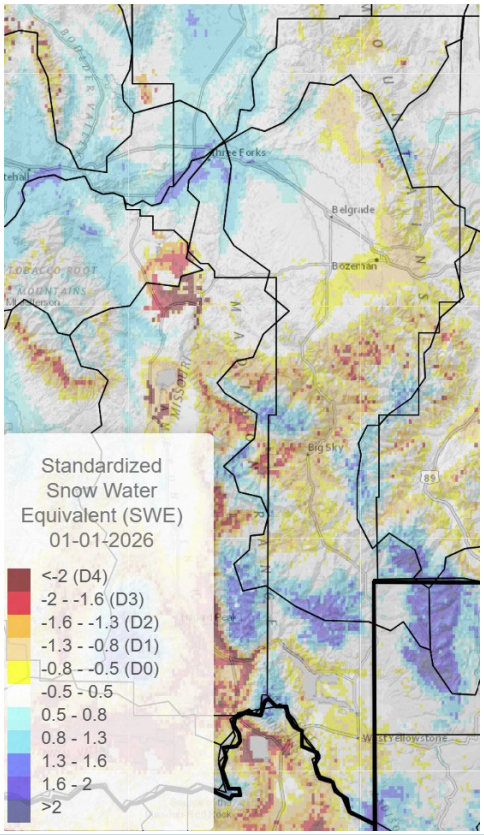
Lee Metcalf Wilderness Region (Big Sky)					
Station Name	*Date*	*Snow Depth (in)*	*SWE (in)*	*SWE % Normal*	*Normal SWE 1971-2000 (in)*
Beaver Creek	Dec. 2024	29	5.8	73	7.9
	Dec. 2025	28	7.8	99	
Carrot Basin	Dec. 2024	48	11.0	85	13.0
	Dec. 2025	55	16.0	123	
Lone Mountain	Dec. 2024	33	7.4	94	7.9
	Dec. 2025	29	8.5	108	

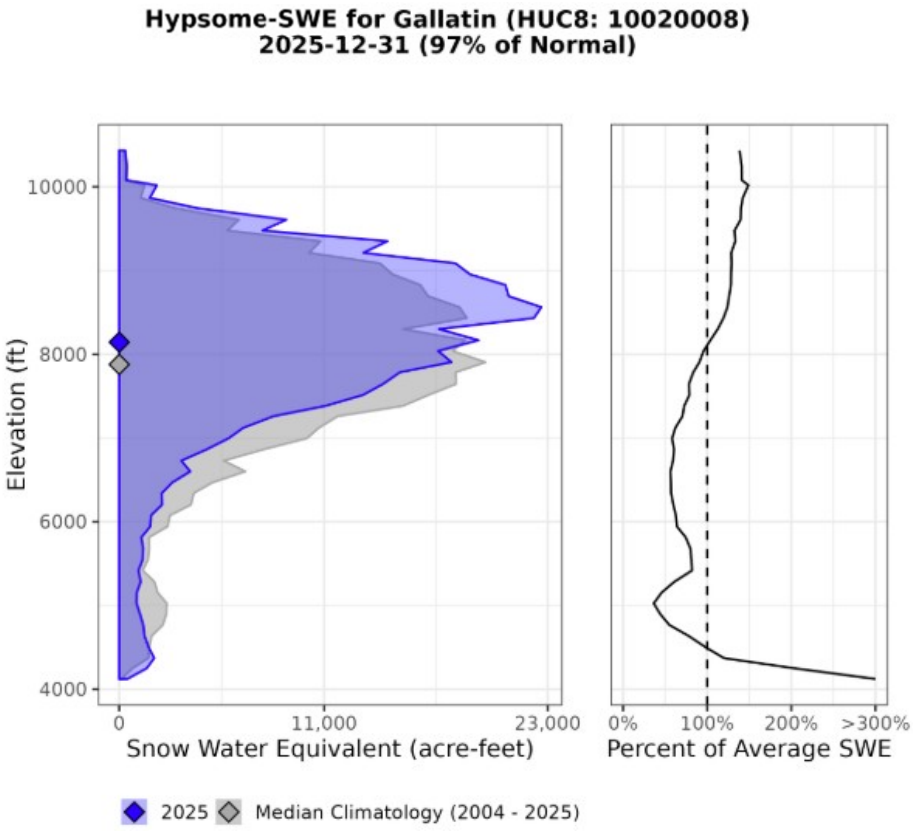
West Yellowstone Region					
Station Name	*Date*	*Snow Depth (in)*	*SWE (in)*	*SWE % Normal*	*Normal SWE 1971-2000 (in)*
Madison Plateau	Dec. 2024	35	8.1	72	11.2
	Dec. 2025	28	8.4	75	
West Yellowstone	Dec. 2024	21	4.3	73	5.9
	Dec. 2025	12	3.3	56	
Whiskey Creek	Dec. 2024	26	5.8	77	7.5
	Dec. 2025	18	5.1	68	



Standardized SWE from SNODAS & Hypsome-SWE

Gallatin River Watershed—December 2025





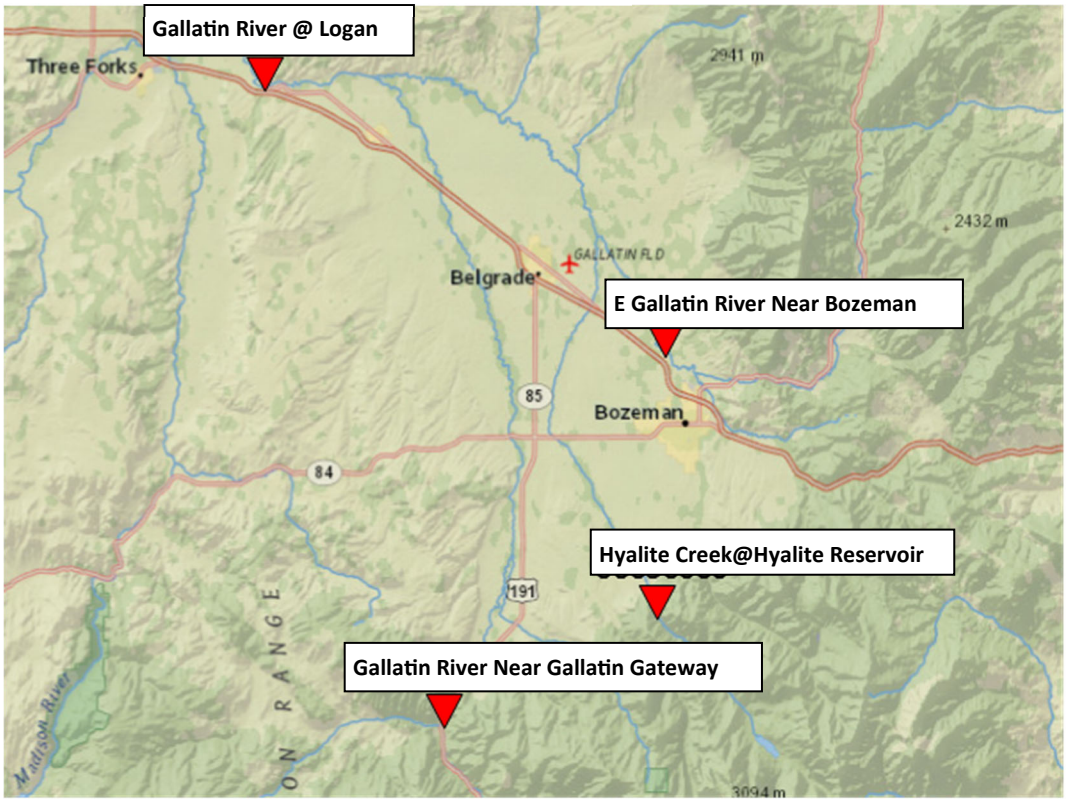
OVERVIEW *Data current as of 12/31/2025 and 1/1/2026

Left Map: This data set contains estimates of standardized snow pack anomalies based on the snow water equivalent (SWE) depth from the NOAA National Weather Service's National Operational Hydrologic Remote Sensing Center SNOw Data Assimilation System (SNODAS). SNODAS is a modeling and data assimilation system created to provide the best possible estimates of snow cover and associated parameters to support hydrologic modeling and analysis. Negative (red) values represent less than average SWE, while positive (blue) values represent greater than average SWE. Standardization is based on data from 2004-present and computed daily.

Right Graph: Hypsome-SWE represents a method to evaluate the distribution of SWE across watersheds. Hypsome-SWE is loosely based on hypsometry, the area-elevation relationship of a basin. Instead of evaluating the area-elevation relationship, here they evaluate the cumulative SWE and elevation relationship. More specifically, in this module, they compare the median hypsome-SWE curve for December using the SNODAS period of record (2004-present) to the December 2025 SWE distribution. This allows for a rapid assessment of the distribution of SWE within a basin with respect to elevation and allows for easy comparison to the expected distribution given the SNODAS period of record.

Streamflow Data

Gallatin River Basin—December 2025



January 1st 2026 Gallatin Watershed Streamflow					
Station Name	2025 Discharge (cfs)	% Normal	Normal Discharge (cfs)	2024 Discharge (cfs)	Period Of Record (Yrs)
Gallatin at Logan	Ice affected	-	688	659	109
E Gallatin near Bozeman	Ice affected	-	48.3	38.5	11
Hyalite Creek at Hyalite Reservoir	Ice affected	-	18	17.5	71
Gallatin near Gallatin Gateway	288	95	302	274	95

STREAMFLOW SUMMARY *Data current as of 1/1/2026

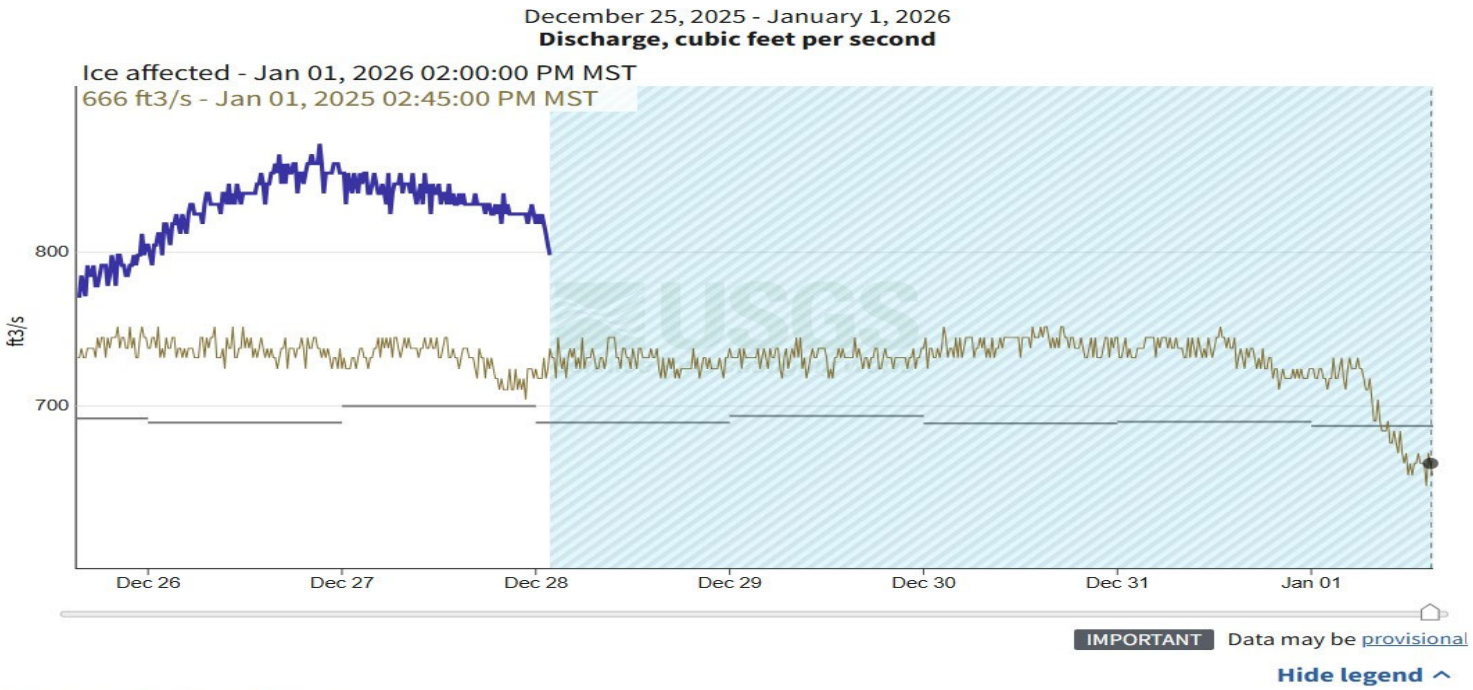
The Gallatin at Logan, E Gallatin near Bozeman, and Hyalite Creek sites are ice affected.

The Gallatin near Gallatin Gateway site has a slightly below normal discharge value for this time of year but it is above what is was at this time last year.

Streamflow Data

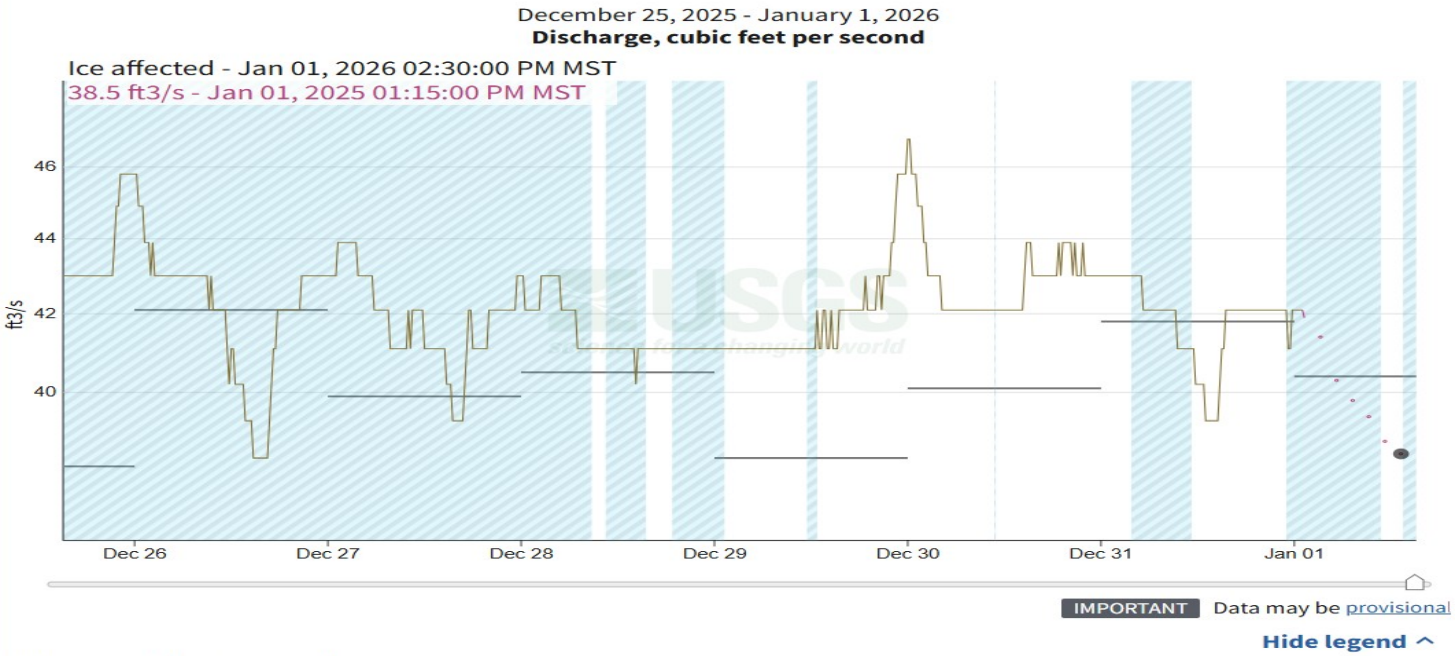
Gallatin River Basin—December 2025

Gallatin River at Logan MT - USGS-06052500 Subscribe to WaterAlert



Discharge data is ice affected.

E Gallatin R ab Water Reclamation Fa nr Bozeman MT - USGS-06048650 Subscribe to WaterAlert



Discharge data is ice affected.

Streamflow Data

Gallatin River Basin—December 2025

Hyalite C at Hyalite R S nr Bozeman MT - USGS-06050000 Subscribe to WaterAlert

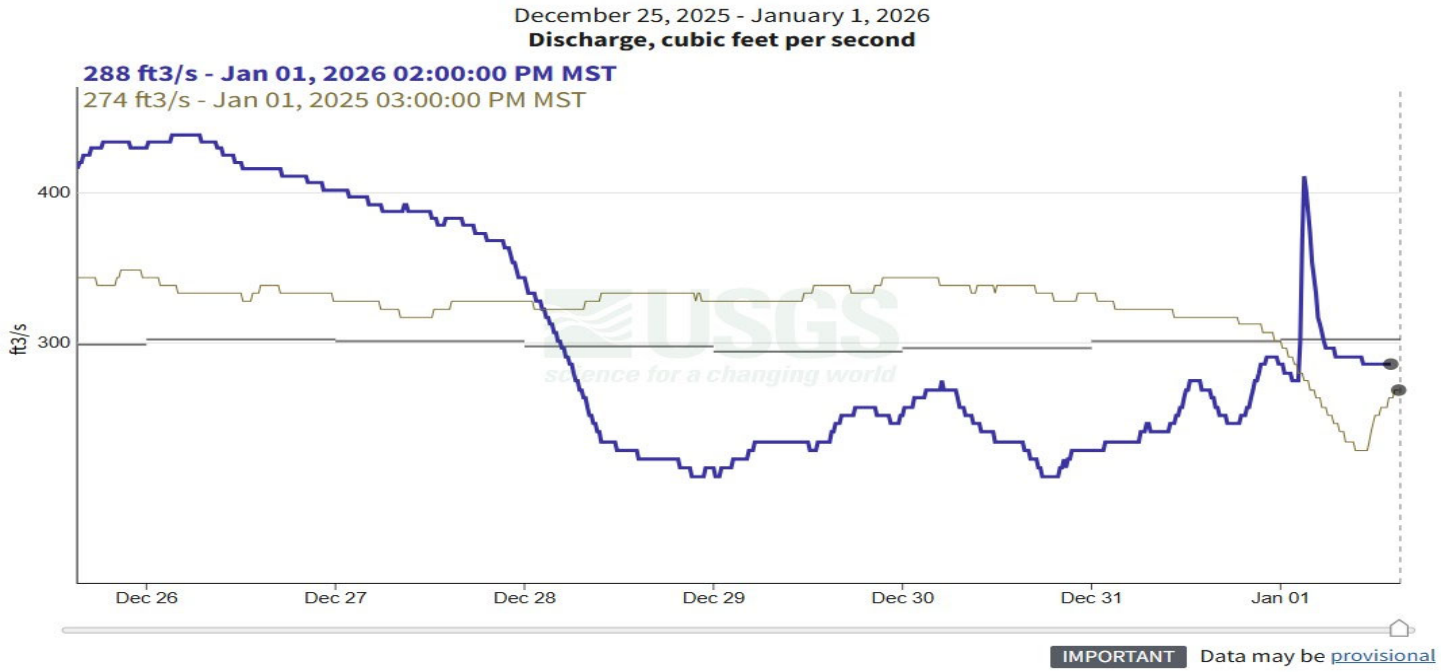
IMPORTANT Data may be provisional

Hide legend

Discharge, cubic feet per second
This year
Recorded
Ice affected
prior year
Recorded
Estimated
Selected field measurement : No data in time span
Median 1895 - 2025

Discharge data is ice affected.

Gallatin River near Gallatin Gateway, MT - USGS-06043500 Subscribe to WaterAlert



IMPORTANT Data may be provisional

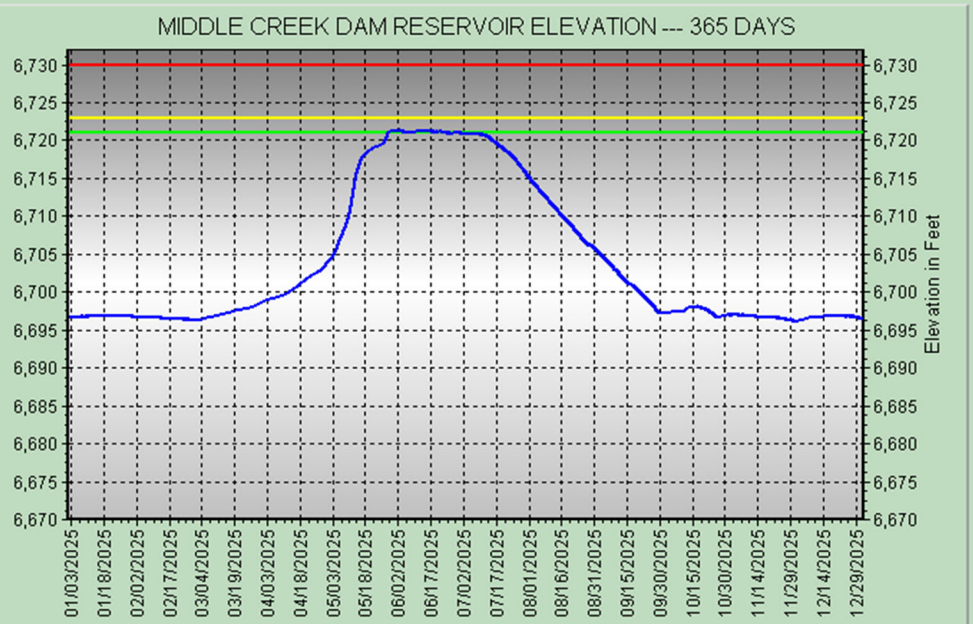
Hide legend

Discharge, cubic feet per second
This year
Recorded
prior year
Recorded
Selected field measurement : No data in time span
Median 1889 - 2025

Discharge data is below normal.

Water Storage Data

Middle Creek Dam, Hyalite Reservoir—December 2025



TIME OF LAST READING	1/1/2026 1:00 PM
RESERVOIR ELEVATION	6,696.5 FT
RESERVOIR VOLUME	5,384 AF

REFERENCE INFORMATION	FT (MSL)	AC-FT
DAM CREST	6730	12,790
EMERGENCY SPILLWAY CREST	6723	10,707
PRINCIPAL SPILLWAY CREST	6721	10,184
LOWEST USEABLE ELEVATION	6637	0

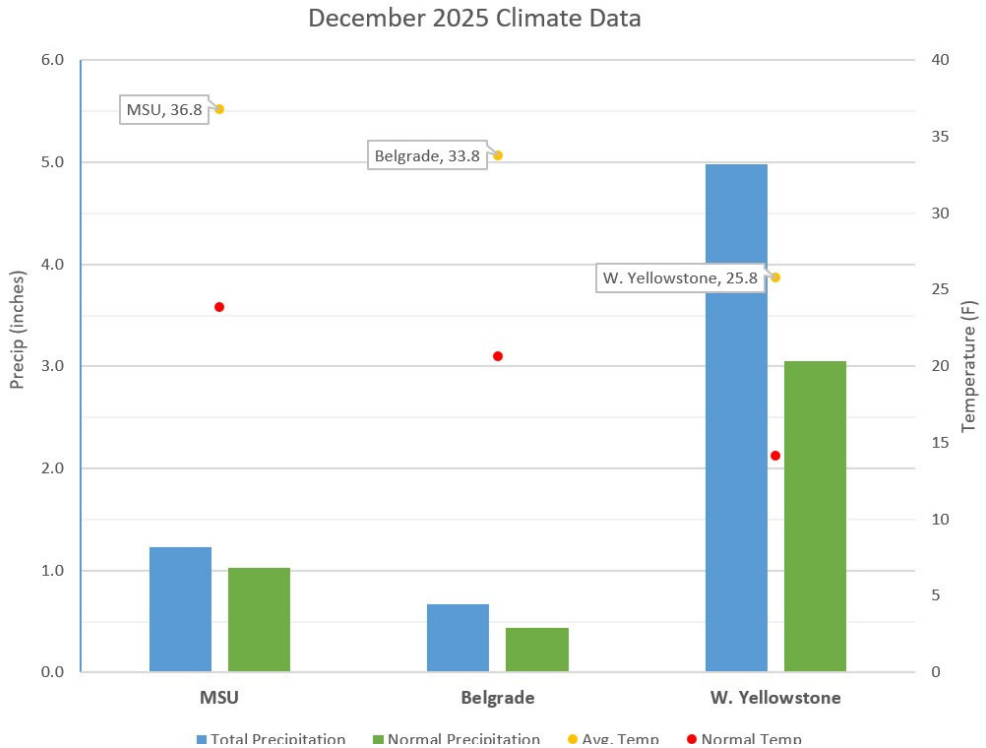
*** PROVISIONAL DATA SUBJECT TO REVISION ***

RESERVOIR SUMMARY *Data current as of 1/1/2026

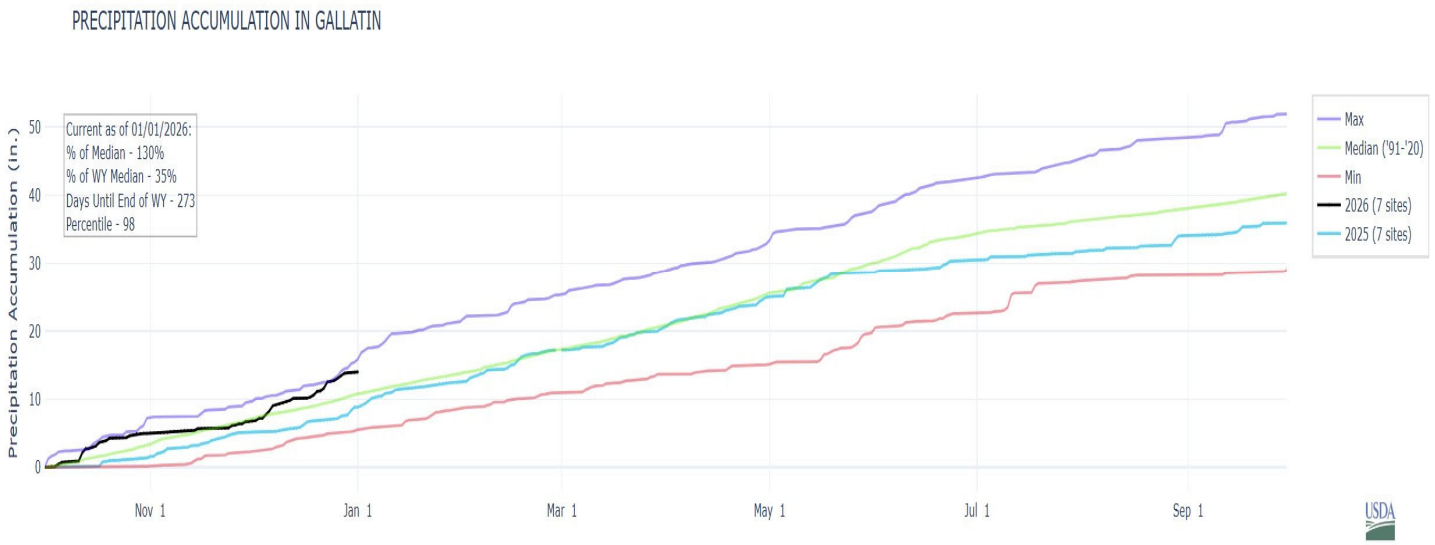
Middle Creek Dam Reservoir elevation is 6,696.5 ft, which is 24.5 ft below the principal spillway crest (6,721 ft). The reservoir elevation has increased by 0.3 ft since December 1st, 2025 (date of last relevant WSO report). Reservoir volume is 5,384 acre-ft, which is 48 acre-ft less than December 1st, 2025.

Climate Data

Gallatin County—December 2025



Above graph depicting ACIS climate data representing the entire month of December 2025.



TEMP & PRECIP SUMMARY (Water Year (WY) = October 1st—September 30)

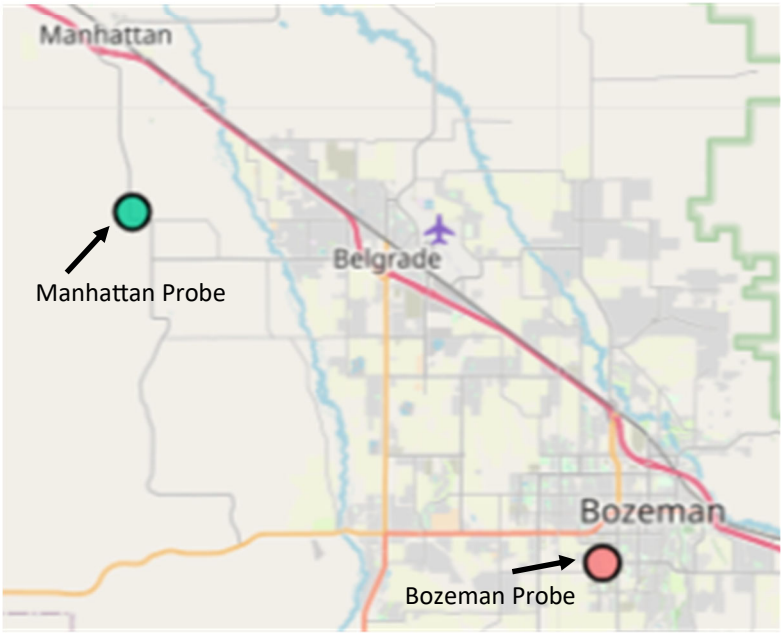
*Data is current as of 1/1/2026

Average temperatures have decreased at the MSU, Belgrade, and West Yellowstone sites since November 2025. All sites have had above average temperatures for this time of year. All sites experienced above average precipitation in December 2025 (ACIS graph).

We are currently in Water Year 2026 (black line). The total accrued precipitation for the Gallatin River Basin as of December 31st, 2025 is above normal (median, green line) at 13.9 inches (USDA graph). The total accrued precipitation for WY 2024 on December 31st, 2024 was 8.8 inches (central blue line).

Soil Moisture Data

Mesonet Stations—December 2025



Manhattan Soil Probe Depth (in)	Soil Temp (°F)	Soil Water Content (%)
8" - Surface	33.26	24.00
20" - Shallow rooting	37.04	8.00
36" - Deep Rooting	41.18	19.10

Bozeman Soil Probe Depth (in)	Soil Temp (°F)	Soil Water Content (%)
4" - Surface	32.99	28.45
8" - Shallow rooting	34.07	28.75
20" - Deep Rooting	36.68	18.25

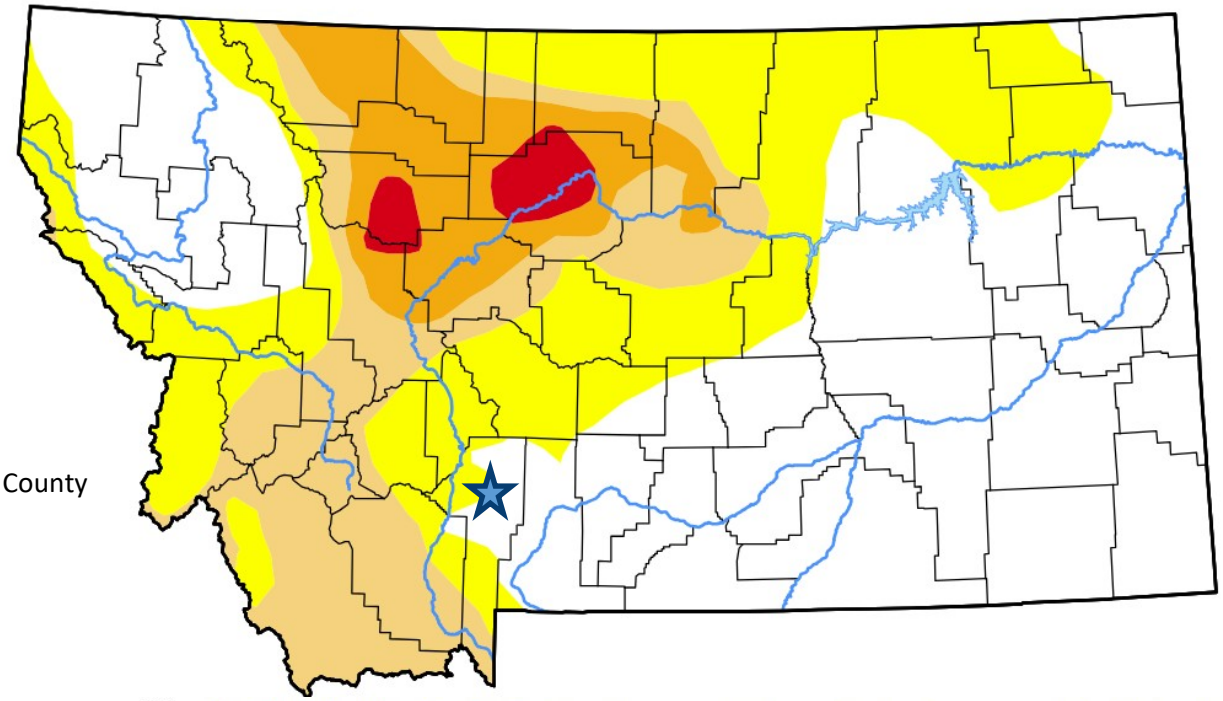
SOIL MOISTURE SUMMARY *Data current as of 1/1/2026

At the Manhattan and Bozeman stations, the soil temperature has decreased at both stations at all depths since November2025.

Since November 2025, the soil water content at the Manhattan station has been the same or very similar to last month at all depths. At the Bozeman station, soil water content increased at all depths

Drought Index Data

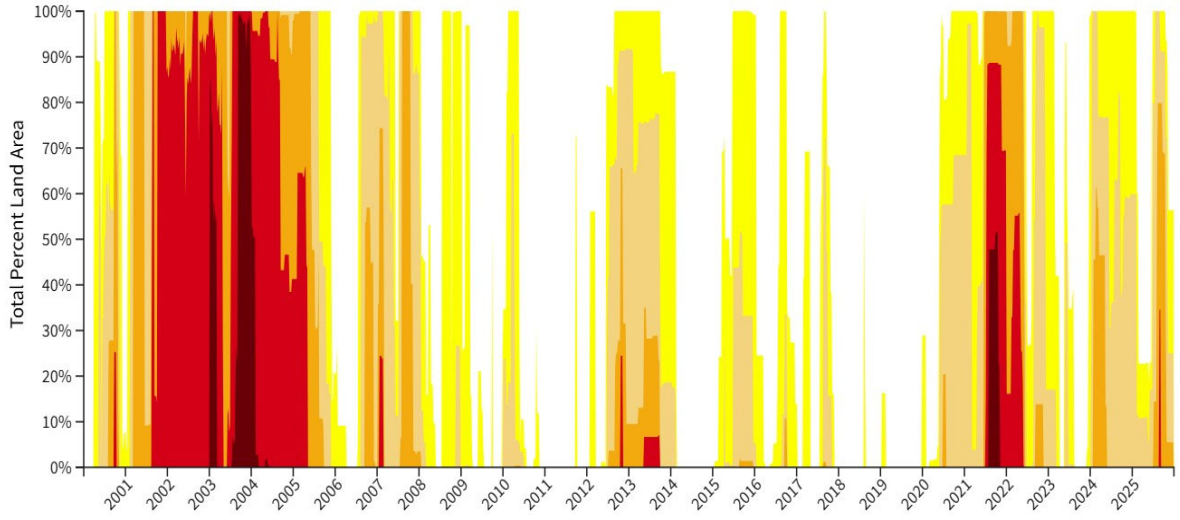
Gallatin County— December 2025



= Gallatin County

Intensity:

- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)
- No Data



Historical Conditions for Gallatin County, 2000-Present

DROUGHT INDEX SUMMARY *Data is current as of 12/31/2025

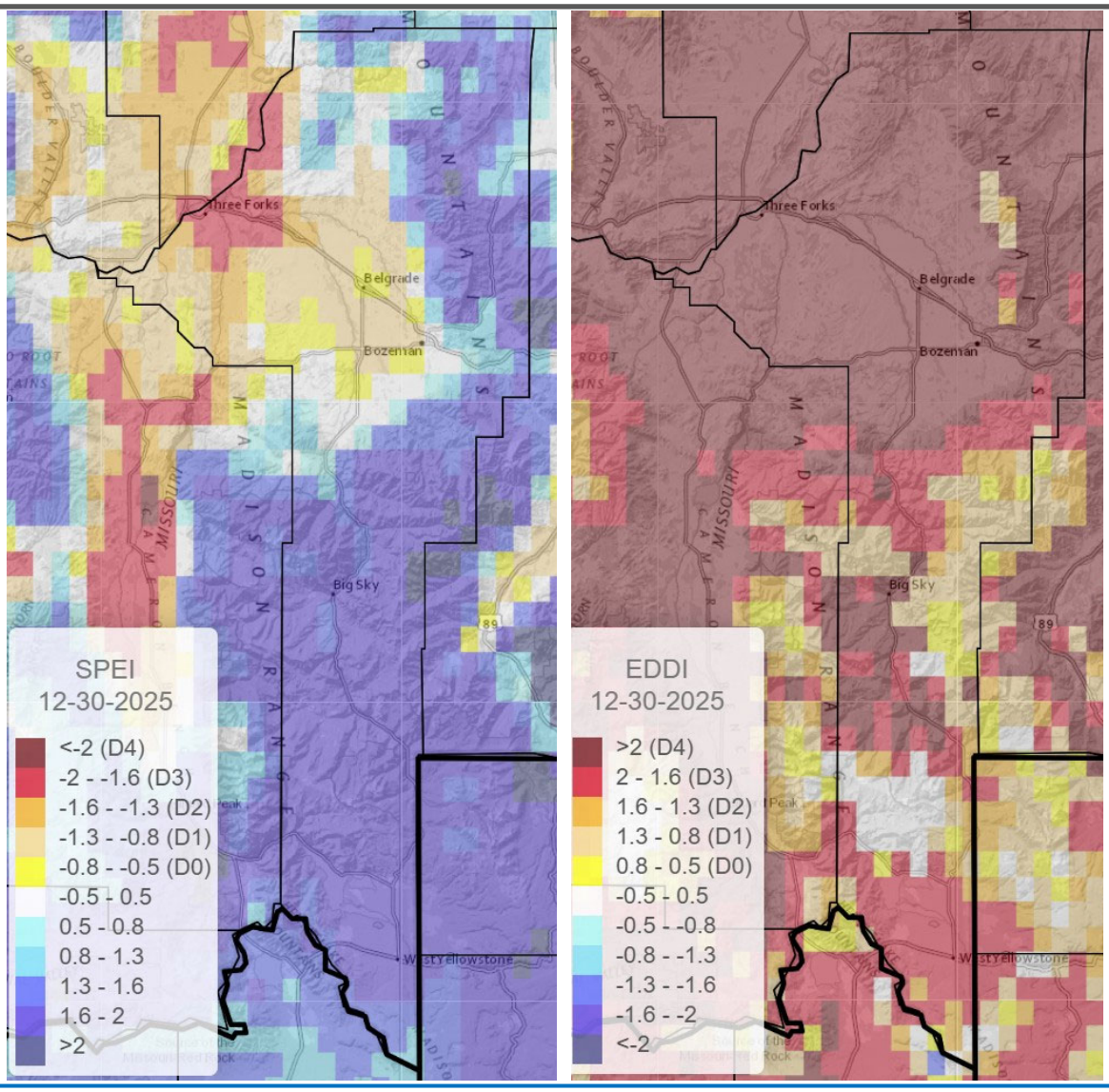
43.61% of Gallatin County is not experiencing drought.

41.31% of Gallatin County is experiencing abnormally dry drought conditions. Impacts include low soil moisture contributing to poor crop germination and dry pastures, increased fire danger, and low streamflow with impacts to recreational fishing.

15.08% of Gallatin County is experiencing moderate drought conditions. Impacts include feeding livestock supplemental hay, crops are stressed, and growth is poor. Fire restrictions may be implemented.

Standardized Precipitation Evapotranspiration Index

Evaporative Demand Drought Index



SPEI & EDDI Overview *Data is current as of 12/30/2025

The maps above show the current Standardized Precipitation Evapotranspiration Index (SPEI, Left) and Evaporative Demand Drought Index (EDDI, Right) for December 2025.

SPEI takes into account both precipitation and potential evapotranspiration to describe the wetness (positive blue values) or dryness (negative red values) of a time period. SPEI has been calculated for December 2025 to represent drought impacts on hydrological conditions for the past 30 days. SPEI incorporates the important effect of atmospheric demand on drought.

EDDI has examined how deviated from normal the atmospheric evaporative demand is for Gallatin County in December 2025. EDDI is an experimental drought monitoring and early warning guidance tool. EDDI can offer early warning of agricultural drought, hydrologic drought, and fire-weather risk. Positive (red) values represent dryness categories, while negative (blue) values represent wetness categories.

Gallatin County Water Supply Outlook

Source Information & Helpful Links

Gallatin Conservation District:

- Archive of Water Supply Outlook Reports
- Living by the Water
- 310 Permit Forms & Info

Snowpack:

- USDA / NRCS Interactive Map
- Montana Snow Survey Homepage
- NRCS / NWCC National Water & Climate Center
- Standardized Snow Water Equivalent (SWE from SNODAS & Hypsome –SWE

Streamflow:

- USGS Real Time Streamflow
- State of Montana Gaging Stations
- DNRC Water Right Query System

Water Storage:

- DNRC Water Projects—Middle Creek Real Time Data
- Middle Creek Early Warning System
- BOR—Montana Lakes and Reservoirs

Climate:

- ACIS Database
- NRCS Montana Current Conditions
- Montana Snow Survey Homepage
- US Climate Data

Soil Moisture:

- Montana Mesonet
- DNRC Drought Status by County

Drought:

- US Drought Portal
- US Drought Monitor

SPEI & EDDI:

Standardized Precipitation Evapotranspiration Index

Evaporative Demand Drought Index

Helpful Partner Websites:

- Department of Natural Resources & Conservation
- Gallatin County MSU Extension Office
- Gallatin Local Water Quality District
- Gallatin River Task Force
- Gallatin Watershed Council
- Montana Fish, Wildlife, & Parks
- Montana Natural Resource Conservation Services
- Association of Gallatin Agricultural Irrigators