



Centennial Valley Water Report - March 2024

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Please contact drought@centennialvalleyassociation.org if you have any questions, comments, or suggestions.

Greetings from the Centennial Valley Association!

Happy April; spring is finally here! March brought more precipitation to the Centennial Valley than we saw in February, with higher precipitation accumulation at all seven SNOTEL sites. Early on in March, we had some colder weather with the lowest temperature recorded for the month at -14 °F, but as the month continued, the colder weather became less drastic. The high temperature for the month was 57 °F during a warm snap in mid-March where we had a few days with temperatures in the 50s (RAWS).

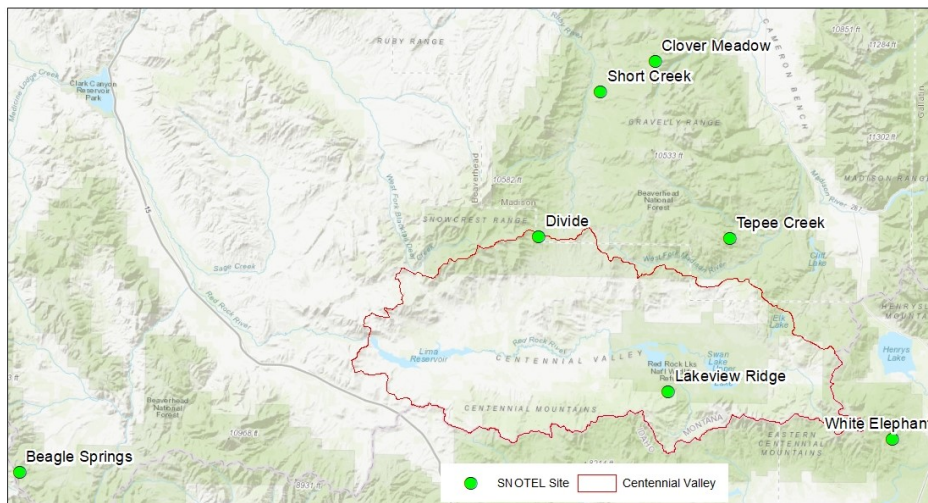
The Centennial Valley lies within the greater Jefferson Watershed, which was 82% of median for snow water equivalent (SWE) at the end of March, while the Red Rock watershed, a sub-basin of the Jefferson watershed was 89% of the median for SWE (NRCS). Even with the moisture March received, 41.3% of the state is still experiencing some level of drought, a slight decrease from the 47.3% of the state experiencing drought in February. In March, 63.6% of people in Beaverhead County were affected by drought, a decrease from the 98.97% of Beaverhead County's residents experiencing drought in February (NIDIS). Hopefully we'll get a little more moisture as the spring continues, since April showers bring May flowers!

Lastly, some exciting news as we look towards the summer, CVA is expanding the Water and Drought Awareness Program to include soil moisture monitoring and add new, mid-elevation rain gauges! This will bring in additional data, that will support CVA's members and greater community when looking at water resources and the landscape for their own management, recreation or curiosity. Let us know what you think or if you have specific location suggestions for monitoring sites this year!

Snowpack and Precipitation Data - As of March 31st, 2024

There are seven Natural Resources Conservation Service (NRCS) SNOTEL sites that surround the Centennial Valley (below). Percent of median for precipitation for the month of March ranged from 93% (Clover Meadow) to 113% (Divide). Percent of median for March SWE ranged from 83% (Clover Meadow) to 111% (Beagle Springs). All SNOTEL sites received at least 3" of precipitation for the month. White Elephant received the most precipitation (12.4"), and Beagle Springs received the least precipitation (3.0").

Source: [NRCS Report Generator](#)



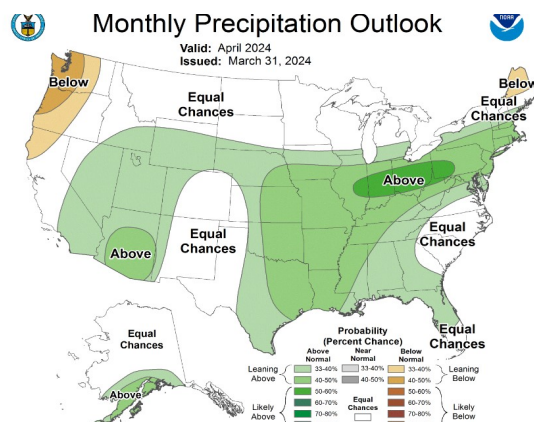
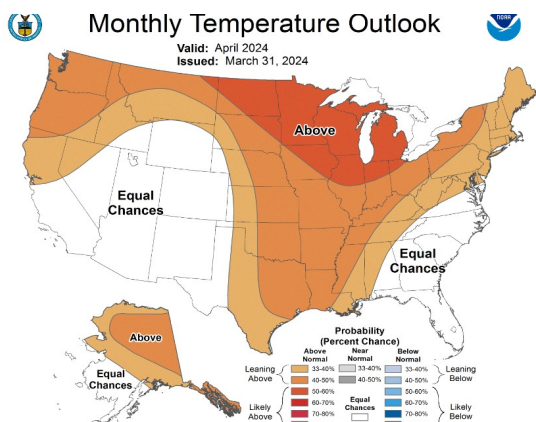
Snowpack and Precipitation Data - End of Day Values for March 31st, 2024

	Precipitation Accumulation (in)	Median Precipitation Accumulation (1991-2020) (in)	Precipitation Accumulation % of Median (1991-2020)	Snow Water Equivalent (in)	Median Snow Water Equivalent (1991-2020)	Snow Water Equivalent % of Median (1991-2020)	Snow Depth (in)
Beagle Springs (8,850 ft)	10.5	9.4	112%	10.3	9.3	111%	40
Clover Meadow (8,600 ft)	14.8	16.0	93%	12.6	15.2	83%	47
Divide (7,800 ft)	12.0	10.6	113%	8.5	9.8	87%	34
Lakeview Ridge (7,400 ft)	14.4	13.4	107%	8.9	9.8	91%	29
Short Creek (7,000 ft)	7.6	7.3	104%	5.3	5.8	91%	18
Tepee Creek (8,000 ft)	13.6	13.8	99%	12.0	13.1	92%	43
White Elephant (7,710 ft)	30.1	27.2	111%	26.3	26.6	99%	82
Red Rock BLM RAWS	0.52"	-	-	-	-	-	-
Lakeview Rain Gauge	0.67"	-	-	-	-	-	-

Precipitation and Temperature Outlook – April 2024

For the month of April, the northern half of Montana has a 40-50% chance of above normal temperature. The Southern half of Montana has a 33-40% chance of above normal temperatures. For precipitation in April, Montana has an equal chance of being above or below normal for precipitation.

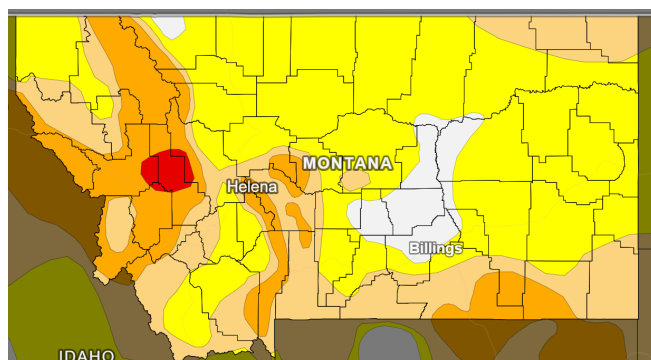
Source: [NWS NOAA Climate Prediction Center](https://www.noaa.gov/climate-prediction-center)



Drought Data - March 2024

During the month of March, 41.3% of the state is experiencing some level of drought designation, while 52.9% of the state is experiencing abnormally dry conditions. Parts of the western half of the state are experiencing moderate to severe drought, with a few counties experiencing extreme drought. The Red Rock watershed and Centennial Valley are experiencing abnormally dry conditions with some moderate drought indicated in yellow.

Source: [National Integrated Drought Information System](https://www.nidms.gov/)

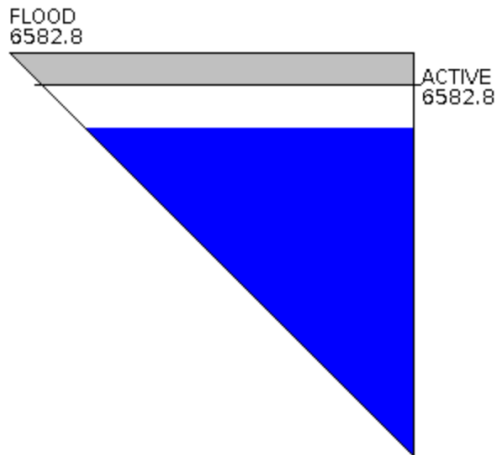


Lima Reservoir Data - As of April 1st, 2024

The Lima Reservoir currently has a pool elevation of 6579.4 feet and is 77.5% full. The reservoir inflow is 125.5 CFS and the outflow is 0.0 CFS. On March 5th, 2024, the Lima Reservoir had a pool elevation of 6578 feet and was 69.3% full. The reservoir inflow was 91.1 CFS and the outflow was 0.0 CFS.

Source: [Bureau of Reclamation](#)

Water Users Irrigation Company Current Reservoir Data for Lima Reservoir, MT



Daily Reservoir Data as of 04/01/2024

Pool Elevation is 6579.4 Feet
Reservoir Storage is 65149.5 Acre-Feet
Reservoir Inflow is 125.5 CFS
Reservoir Outflow is 0.0 CFS
Reservoir is 77.5 % Full*
Reservoir Flood Control Pool is filled 0.0 %

** Reservoir is considered "full" when pool elevation is at top of active conservation pool. Percentage is based on total reservoir volume below that level.*

Montana State receives \$1 million grant to test snowpack measurement methods

Snow and water scientists at Montana State University have received funding for testing new ways of measuring snowpack levels to find ways for improving water forecasting for drought, flood and irrigation management in the United States.

Link to article: <https://www.montana.edu/news/23593/montana-state-receives-1-million-grant-to-test-snowpack-measurement-methods>

What's Up Down There?

“By regularly monitoring fish populations, FWP crews gather information essential for managing and conserving Montana’s world-renowned sport fisheries and imperiled native species.”

This article was published in Montana Outdoors magazine and goes over FWP's monitoring process of fish populations in Montana's fisheries. The article describes the importance of having estimates on fish populations to evaluate fisheries health and stream health, and help inform management and conservation decisions.

Link: <https://fwp.mt.gov/binaries/content/assets/fwpmontana-outdoors/2024/fishmonitoring.pdf>

If you have any questions, comments, or trouble interpreting the data, please contact drought@centennialvalleyassociation.org



Helpful Links:

[Montana Drought Status Percentage](#)

[NRCS SNOTEL Report Generator](#)

[USGS Streamflow Data](#)

[Lima Reservoir](#)