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

Greetings from the Centennial Valley Association!

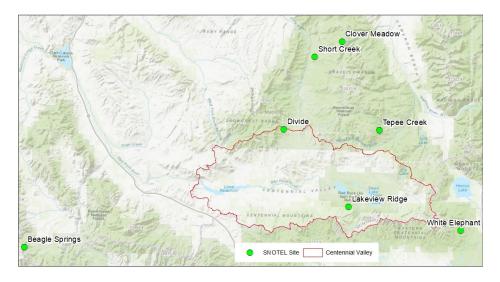
Happy March! February brought some precipitation to the Centennial. A cold snap that brought snow to the valley contributed for much of the precipitation accumulation by February 15th. The latter half of the month did not produce much for precipitation accumulation. Hopefully we will get more snow in March! February didn't bring temperature swings like we had in January. The average mean temperature for February was 22.2 °F, with an average maximum temperature of 33.3 °F. The lowest temperature recorded in February was –22 °F and the maximum temperature was 44 °F (RAWS).

Although we received some moisture, 47.3% of the state remains in drought, with 47.6% of the state experiencing abnormally dry conditions. Unfortunately, 98.97% of Beaverhead County's residents are experiencing drought (NIDIS). Hopefully we'll get a little more moisture in March before spring is officially on its way. The current outlook for precipitation in Montana for March is equal chance above or below normal precipitation levels (NIDIS). As we look onward into March, lets hope for a little more snow!

Snowpack and Precipitation Data - As of February 29th, 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 February ranged from 90% (Clover Meadow) to 112% (Divide). Percent of median for February SWE ranged from 61% (Lakeview Ridge) and the highest at 104% (Beagle Springs). In February, all SNOTEL sites received at least 2" of precipitation for the month. White Elephant received the most precipitation in February (6.5"), and Short Creek received the least precipitation (2.0").

Source: NRCS Report Generator



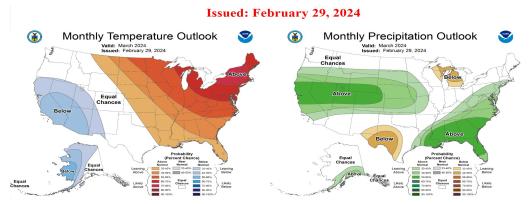
Snowpack and Precipitation Data - End of Day Values for February 29th, 2024

	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)	2.5	7.4	108%	7.5	7.2	104%	37
Clover Meadow (8,600 ft)	2.8	12.6	90%	9.0	12.3	73%	36
Divide (7,800 ft)	2.9	8.5	112%	6.1	7.7	79%	26
Lakeview Ridge (7,400 ft)	3.4	11.2	91%	5.1	8.3	61%	22
Short Creek (7,000 ft)	2.0	6.0	100%	3.4	4.6	74%	16
Tepee Creek (8,000 ft)	3.2	11.4	93%	9.0	10.3	87%	37
White Elephant (7,710 ft)	6.5	23.3	92%	17.7	20.4	87%	64
Red Rock BLM RAWS	0.75"	-	-	-	-	-	-
Lakeview Rain Gauge	1.74"	-	-	-	-	-	-

Precipitation and Temperature Outlook – March 2024

For the month of March, western Montana has equal chances of being above or below normal temperature. Eastern Montana has a 33-50% chance of above normal temperatures. For precipitation in March, the majority of Montana has an equal chance of being above or below normal for precipitation. Fortunately, the southern portion of the state, including Beaverhead and Madison Counties, has a 33-40% chance of precipitation being above normal.

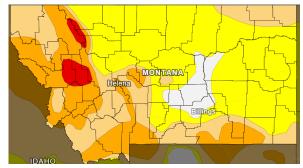
Source: NWS NOAA Climate Prediction Center



Drought Data - February 2024

During the month of February, 47.3% of the state is experiencing some level of drought designation, while 47.6% of the state is experiencing abnormally dry conditions. The majority of the western half of the state is experiencing moderate to severe drought with a few counties experiencing extreme drought. In Beaverhead County, 98.97% of the county is experiencing drought rated moderate to severe. The Red Rock watershed and Centennial Valley are experiencing moderate to severe drought conditions.

Source: National Integrated Drought Information System

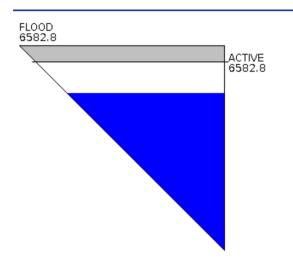


Lima Reservoir Data - As of March 5th, 2024

The Lima Reservoir currently has a pool elevation of 6578 feet and is 69.3% full. The reservoir inflow is 91.1 CFS and the outflow is 0.0 CFS. On February 1st, 2024, the Lima Reservoir had a pool elevation of 6576.9 feet and 63.7% full. The Reservoir inflow was 43.5 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 03/05/2024

Pool Elevation is 6578.0 Feet
Reservoir Storage is 58245.0 Acre-Feet
Reservoir Inflow is 91.1 CFS
Reservoir Outflow is 0.0 CFS
Reservoir is 69.3 % 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.

Evaluating Irrigation Efficiency: Toward a Sustainable Water Future for Montana

This is a longer article (44 pages) published back in 2020. The paper takes a deep dive into the topic of irrigation, and the essential role that irrigation and agriculture have in Montana. The paper covers many conversations around irrigation, maybe some of it may interest you! Check out the link below if you're interested.

Link: https://dnrc.mt.gov/ docs/water/Planning implementation coor/Evaluating-Irrigation-Efficiency-MontanaWaterCenter.pdf

Stories for Action Podcast: The Upper Yellowstone River: Part 1 Flood & Reconnection

This new episode of the Stories for Action Podcast discusses the historic flooding that occurred on the Yellowstone River in 2022. The podcast interviews many individuals from different stakeholder groups and how the flooding impacted them. The episode is prefaced with the intricacies of Paradise Valley and the challenges that are being faced there, as well as the uniqueness of the Yellowstone River being the longest free flowing river in the lower 48. This episode of the podcast also pairs with the film Life in the Land: The Upper Yellowstone River, the link is below. The podcast addresses many current issues, if you're interested, checkout the link below!

Link to podcast: https://www.storiesforaction.org/podcast/episode/1f90e819/the-upper-yellowstone-river-part-1-flood-and-reconnection

Link to film: https://www.lifeintheland.org/upperyellowstoneriver

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