The Montana Department of Natural Resources & Conservation

Montana Drought & Water Supply Outlook Report – Spring 2026

Dry prairie pothole, near Lavina, MT March 29, 2026 **Photo: DNRC Staff Michael Downey**

This report was prepared by The Montana Department of Natural Resources and Conservation on behalf of the Governor's Drought and Water Supply Advisory Committee

Key Takeaways

- As spring unfolds, Montana enters the sixth consecutive year with abnormally dry, and in some areas, severe drought conditions.
- Although there is additional opportunity to add to the mountain snowpack in the coming weeks, low elevation snowpack below 6,500 feet melted about a month earlier than normal. A warmer and drier forecast for mid-April threatens to accelerate the onset of spring runoff. Without sustained spring and summer precipitation, streamflow is likely to taper off earlier than normal this summer due to low snowpack and warm spring temperatures. Fortunately, rain in late fall of 2025 and early winter increased soil moisture and recharged shallow aquifers that feed some rivers and streams during the dry season.
- Most of Montana's state and federal water storage projects are expected to fill this spring. However, reservoir conditions for the summer will depend on the rate of late spring and summer inflows, which could fall short due to severely depleted watersheds following multiple years of below-average snowpack.
- Unfilled potholes, dugouts and stock water ponds in areas east of the Continental Divide will present challenges for livestock and wildlife this summer and fall.
- Warmer than average temperatures in late March and early April have hastened snowmelt and the potential for local flooding will increase over the next several weeks. Despite lower-than-normal snowpack in the mountains, a rain-on-snow event could result in severe to extreme flooding in some locations. Residents living near rivers or streams are encouraged to develop a flood evacuation plan and consider the following precautions:
    - Purchase flood insurance. Most policies have a 30-day waiting period before becoming effective.
    - Ensure you have an adequate supply of drinking water as flooding may compromise local water systems.
- The next ten weeks are critical, and water supplies have the potential to improve or degrade statewide. Diminished forage for livestock and wildlife is forecast in the southwest, north central, and northeast regions that missed the extensive late 2025 and early winter rains that replenished soil moisture. Grazing conditions in central Montana are forecast to be average to above average but remain dependent on spring and early summer precipitation and temperatures.

Summary of Recent Conditions

The 2025 water year (Oct. 1, 2024, through Sept. 30, 2025) closed following a wetter and warmer than average summer east of the Continental Divide. Hotter and drier than average conditions west of the divide along the Rocky Mountain Front resulted in severe (D2) and extreme (D3) drought conditions in the western third of Montana that persisted through the end of the calendar year in some locations. Despite near average snowpack in 2025, five consecutive years of drought and high temperatures translated into record low streamflow in the west, and low water coupled with high temperatures led to widespread fishing closures that

lasted into the fall. East of the divide, timely summer rains in July and August helped suppress the fire season that started in early April, and by late August this area of Montana was drought-free. However, western Montana remained mired in severe (D2) and extreme (D3) drought resulting from record low stream flows, and hotter and drier conditions kept fires burning through September. Precipitation in October was generally wetter than average with the southeast receiving more than one inch above average. Temperatures generally cooled in October, except in the east where temperatures trended nearly three degrees Fahrenheit above average.

The period from September through December was the warmest on record with temperatures exceeding the average by five and half degrees Fahrenheit statewide, with some areas reaching more than eight degrees Fahrenheit above normal. The northwest and north-central regions were particularly hard hit, with a broad expansion of severe (D2) and extreme (D3) drought conditions that worsened through November and improved only after unusually rainy conditions arrived in early December. Despite the late onset of the first killing freeze, precipitation in late October, November and December greatly improved soil moisture, mitigating the impacts of warm and dry conditions that controlled the weather pattern in January and February.

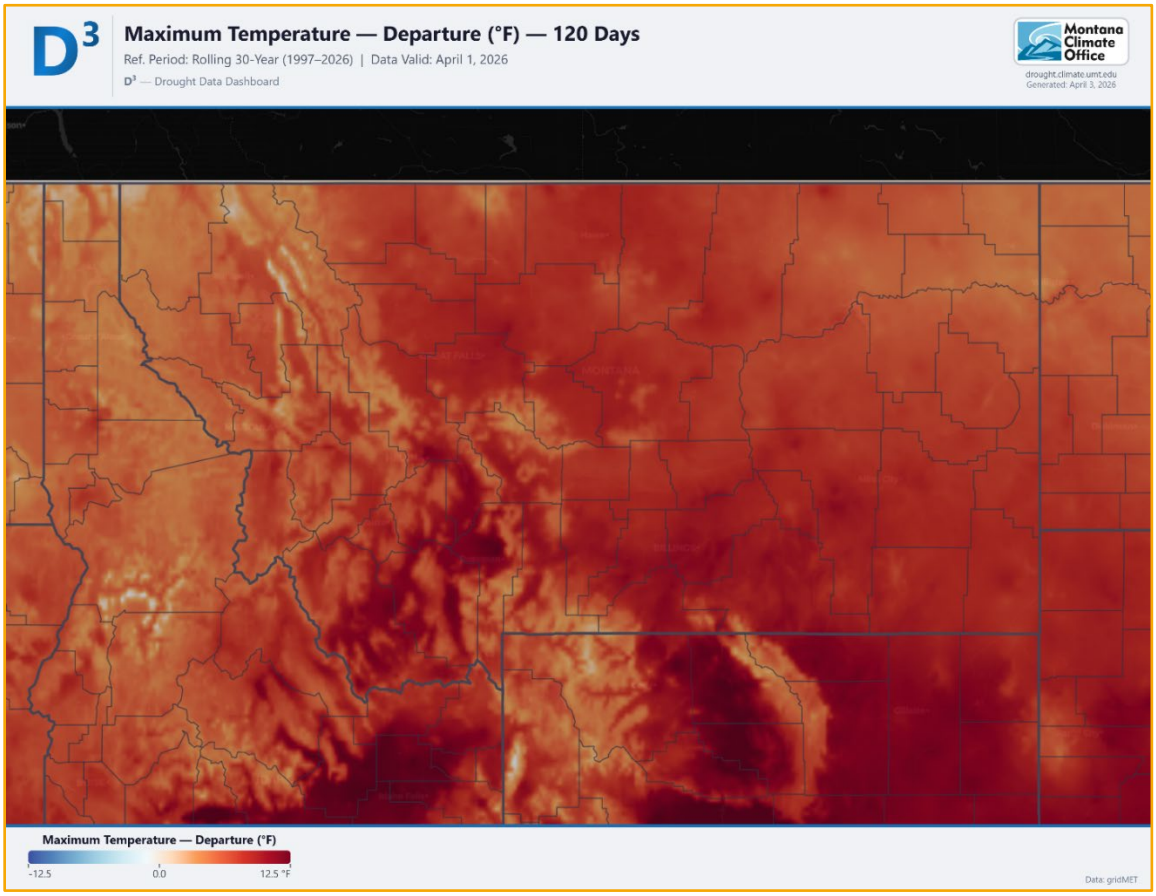

Figure 1- Temperature – Difference from Average December 1, 2025 – April 1, 2026
Map Generated by Montana Climate Office

Warmer than average temperatures dominated from December through March with the average daily high more than 10 degrees Fahrenheit above normal during this period. Warm fall temperatures delayed the build-

up of snowpack, and most basins were far below average at the end of November. Precipitation in December set records in some areas and resulted in severe flooding in the northwest. The December storms brought wide-ranging benefits: because the ground in most locations remained unfrozen, late November and December rains soaked into the soil profile and helped replenish soil moisture that was severely depleted during the previous summer and early fall.

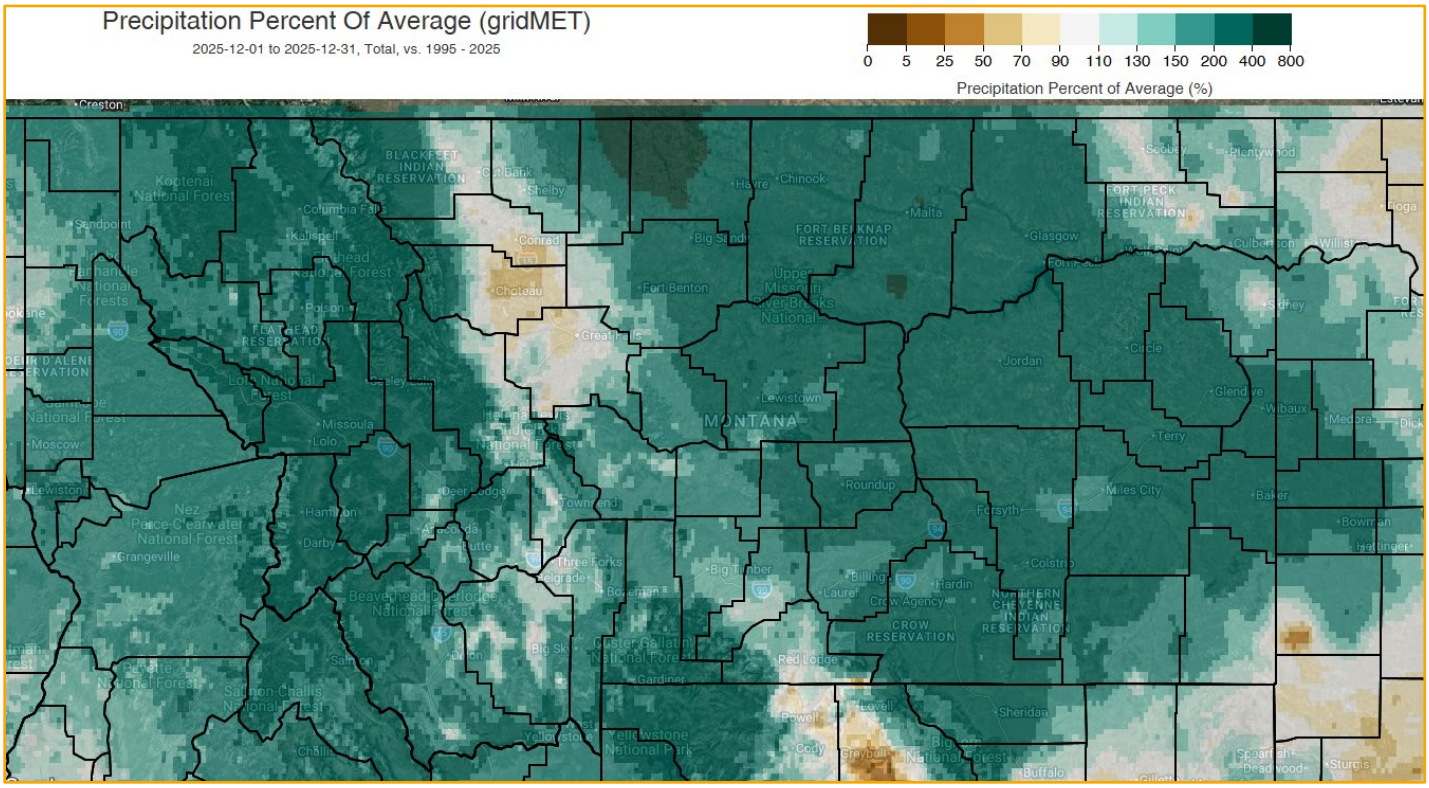

Figure 2- Precipitation Percent of Average, December 1-31, 2025
Map Generated by Climate Engine

Precipitation in the new year got off to a slow start, with large areas of Montana receiving less than half of normal precipitation in January and February. Apart from the northeast where temperatures were closer to average this winter, temperatures across Montana were exceptionally warm, and the December, January and February period was the warmest on record. Rain and freezing rain were common at lower elevations, and nowhere below 5,000 feet in elevation developed appreciable snowpack all winter. According to the Natural Resources Conservation Service (NRCS) Snow Survey, 24 of 232 monitoring stations with 30 years or more of data recorded the lowest March 1 snow water equivalent values on record. A wide-reaching atmospheric river battered the state on March 14, 15 and 16 delivering over four feet of snow on the Continental Divide and blanketing the plains to the east. The storm briefly boosted high elevation snowpack to near average in many basins but record warm temperatures in the following week quickly melted accumulations below 6,000 feet. The storm missed the Madison, Ruby and Beaverhead watersheds, and snowpack in these basins remained far below-average at the end of March. Soil moisture monitors across the state indicate that December rains and the early thaw were absorbed into the soil profile, giving a substantial boost to soil moisture heading into spring.

Current Drought Conditions

While drought conditions retreated statewide through December, exceptionally warm and dry conditions in January and February marked an unusually early onset of increasing drought east of the divide. As of early April, 57% of Montana is in moderate (D1) to extreme (D3) drought. Severe (D2) and extreme (D3) drought is currently limited to areas in the north-central and southwest and south-central regions east of the Continental Divide.

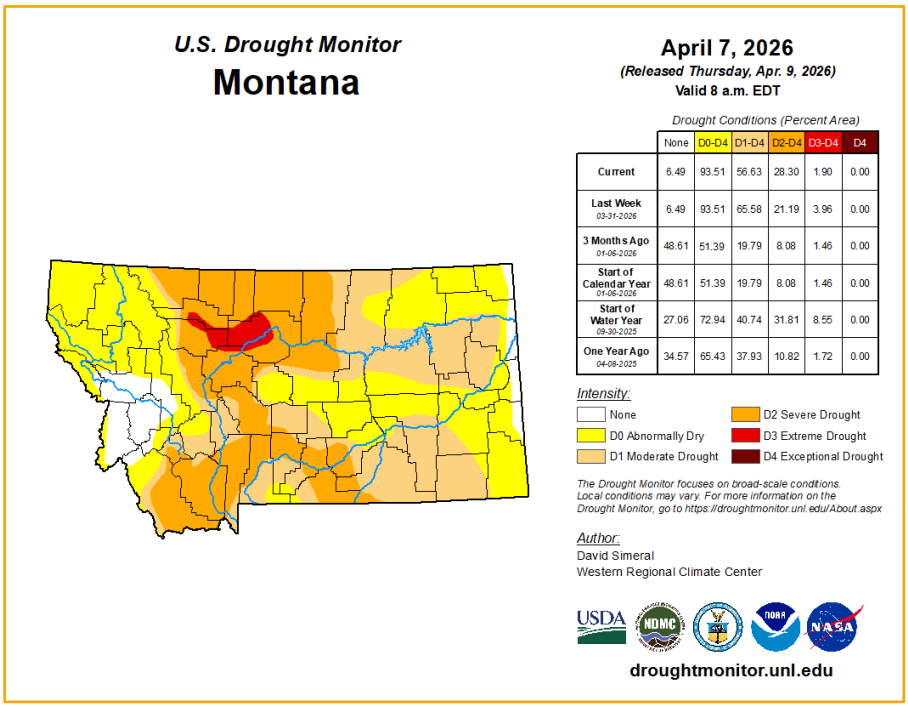

Figure 3 – Current Drought Categories, April 7, 2026

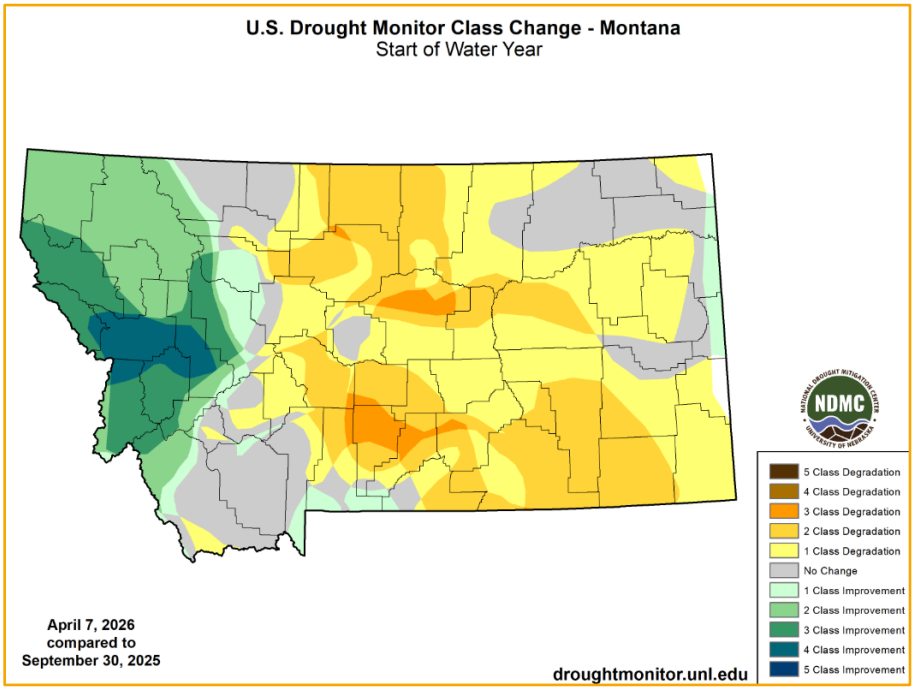

Figure 4 – Change in Drought Categories Since the End of the 2025 Water Year

Drought conditions could worsen quickly depending on the timing and amount of spring precipitation and the onset of warmer temperatures. Above-average precipitation and cooler temperatures in the next eight weeks will be necessary in the southwest and north-central regions to relieve long-term drought and avoid more severe conditions in those areas. April, May and June are historically some of Montana's wettest months and there is still time for conditions to improve between now and the end of June. Figure 3 shows current drought conditions as of March 31, 2026. Figure 4 shows the change in drought categories since Sept. 30, 2025, as compared with current conditions.

Snowpack

Late October typically marks the onset of seasonal snowpack accumulation in Montana. Fall and early winter are the most important precipitation months in the northwest, while east of the Continental Divide, late fall and early winter are some of the driest months of the year. The weather pattern from October through late November favored northwest and southeast Montana with above-normal accumulations while the central region languished under warm temperatures and drier than average conditions. Early December brought a swift change in the form of rain at lower elevations and snow above 6,000 feet. On Jan. 1, accumulated precipitation measured at SNOTEL locations exceeded 100% in every basin represented by the network. Despite record precipitation in some areas, warmer than average temperatures in December resulted in rain and rain-on-snow events that suppressed snow accumulation. Because so much precipitation came as rain, accumulated snowpack was closer to average in most basins at the start of the new year and was below-average in some basins that also experienced severe flooding in December.

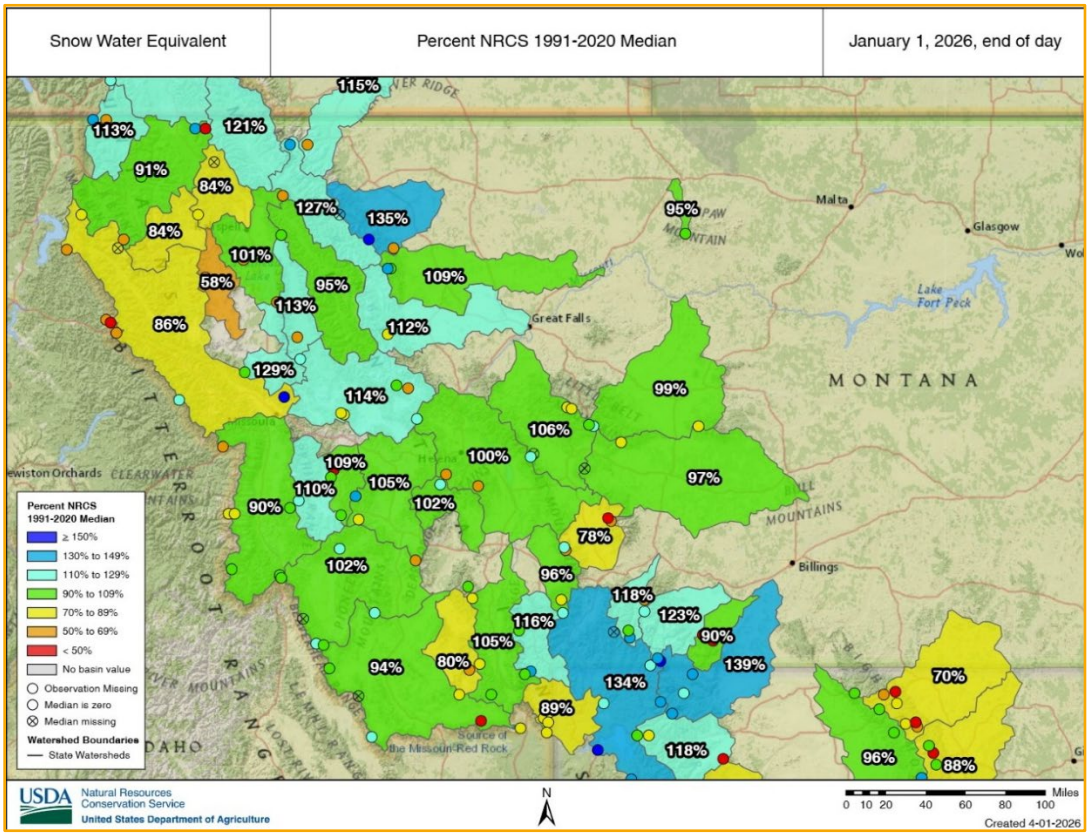

Figure 5 – Snow Water Equivalent January 1, 2026, Percent of Median by Basin
USDA – NRCS – Snow Survey Program

By the start of the new year, the snowpack varied widely from 135% of average in the Marias watershed to 80% of average in the Ruby and 70% of average in the Upper Tongue River drainages. In early January, a stubborn high-pressure system moved into Montana that persisted with warmer and drier than average conditions though February. Even at high elevations, snow accumulation stagnated, and lower elevation areas remained snow free. Northeast Montana was the only area with near-average temperatures in January and February due to the influence of the polar vortex that affected the Dakotas and Midwest this winter. Storm tracks in March favored the northwest and central regions of Montana. A strong multiday storm in mid-March pushed snowpack to near-average in a swath extending west to east through the middle of the state. Drainages along the Rocky Mountain Front, and from the Bitterroot east to the Judith and Musselshell improved significantly in March, but most basins remained well below average, near 80% of the median on April 1.

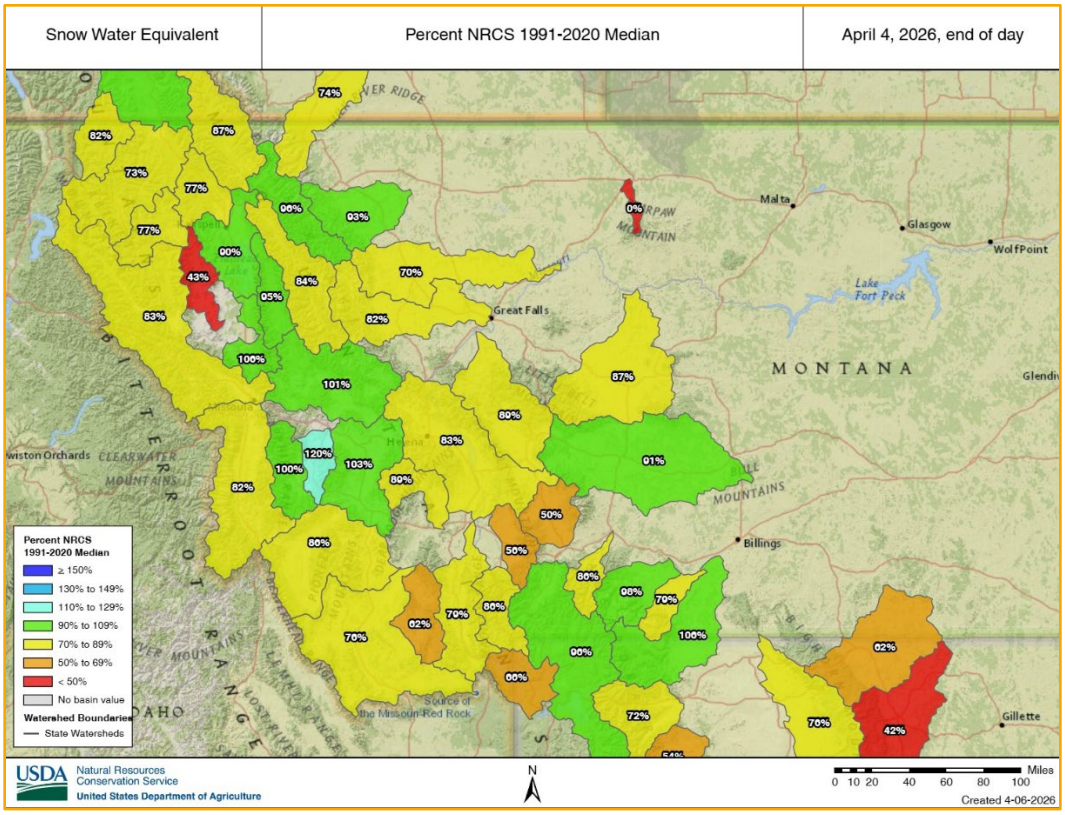

Figure 6 – Snow Water Equivalent April 4, 2026, Percent of Median by Basin
USDA – NRCS – Snow Survey Program

Record high temperatures arrived during the last two weeks in March with temperatures in the high 60s in the northwest to low 80s in the east. Even high elevation areas lost snowpack in most of Montana's watersheds, and streamflow in many rivers and streams in the west rose to above normal levels with the warmer weather. While there is still time to add high elevation snowpack, below-average accumulations and warmer than average temperatures forecast for April has increased the likelihood of below-average snowpack and earlier than normal snowmelt in all but a handful of Montana's watersheds.

Moving through spring, April, May and June are typically some of the wettest months of the year in watersheds east of the divide. West of the divide, precipitation generally tapers off as summer approaches. With warmer-than-average temperatures and below-average precipitation forecast for mid-April, snowpack has likely reached its peak for the season in most watersheds. Some high elevation sites may continue to build snowpack into early May. Cooler temperatures and snow the first week in April gave a late season boost to basins across the southwest and southcentral mountains. The storm also briefly delayed the melt-off which started in mid-March.

Streamflow (Stream Gaging Stations, USGS Water Dashboard, Missouri Basin Forecast Center)

Currently, streamflows and streamflow estimates vary widely across Montana. It is a dynamic time of year and extremely difficult to determine whether higher than average flows are the result of melting snowpack or enhanced base flow from groundwater infiltration during December rain events and several unseasonal warm-ups that melted the low- and mid-elevation snowpack this winter and spring. It is most likely a combination of both. On larger rivers, like the Madison and Beaverhead, low flows this time of year can also indicate that dam operators are reducing releases to fill reservoirs. Water managers will be watching streamflow closely in the coming weeks to develop better forecasts for late spring and early summer. The Missouri River Basin Forecast Center estimates runoff for the Missouri River basin above Fort Peck at 79% of average. Water supply in the Columbia River Basin is forecast for 107% of average as of April 1. The forecast average for major rivers west of the Divide is 87% on the Flathead, 97% on the Clarks Fork near Plains, and 98% on the Bitterroot.

According to the Natural Resources Conservation Service (NRCS) April Water Supply Outlook Report, April through July streamflow forecasts vary widely from near average in the northwest to much below average in the Yellowstone and Missouri basins. Regions with greater water year precipitation and snowpack deficits like the Powder and Tongue River basins are predicting much below normal streamflow of 40%-70% of median. Streamflow forecasts are near to above the median in most watersheds in the northwest. Streamflows in southwest Montana are forecast for much below normal at 50% to 80% of median. Streams on the Rocky Mountain Front east of the Continental Divide like the St. Mary, Sun-Teton-Marias are forecast for below normal flow, however, conditions are improved compared with last year and estimates range from 75% to 80% of median. The streamflow forecasts on the Smith, Judith and Musselshell are poor with high elevation snowpack at 85% of the median and basin-wide snowpack at 50% to 70% of median. April through July flows on the Smith are estimated at 50% to 70% of median and flows on the Musselshell at Harlowton are estimated at 40% to 70% of median.

The translation of current snowpack into summer stream forecasts remains uncertain and will depend on the rate of snowmelt and evaporation, which is driven primarily by temperature. Warmer temperatures will accelerate runoff, while cooler-than-average temperatures could suppress runoff, effectively extending the season. A prolonged period of high pressure with abundant sunshine, high daily temperatures, and nights with above-freezing temperatures could release a substantial amount of water in a short period, resulting in local and potentially regional flooding. Snowpack is a critical component of early season streamflow across the state, but it is not the only component. Total water year precipitation, peak snowpack accumulation, spring and summer precipitation, and the departure from seasonal average temperatures all contribute to the overall water volume available during the growing season.

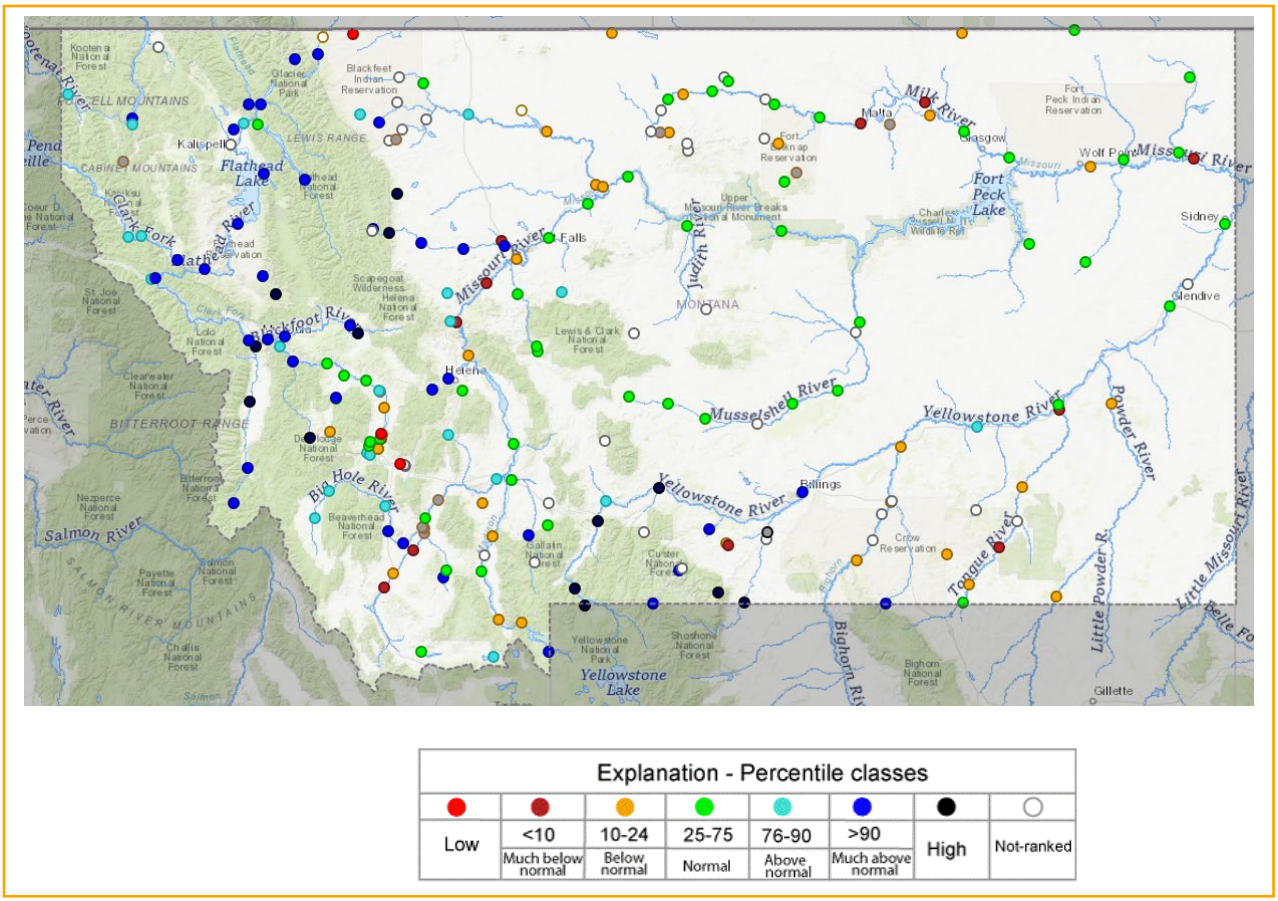

Figure 7 – Current Streamflow at USGS Stream Gages as Compared to Historical Streamflow for Wednesday, April 1, 2026

Reservoirs (Bureau of Reclamation Reservoirs, State Reservoirs)

Water levels in storage facilities on Dec. 31 were near to above-average as dam tenders maximized carryover from the summer irrigation season and fall and early winter rainfall improved inflows across the state. Inflows boosted storage pools in most major storage facilities. In the west, all the large federal water projects except Clark Canyon are holding more than 100% of average at the outset of the spring runoff season. Gibson Reservoir, which failed to fill last year, is currently 80% full and over 200% of average for the season. Other facilities, like Deadman's Basin in central Montana and the West Fork Bitterroot, held 134% and 174% of normal, respectively, by year's end. Nevada Creek, which failed to fill in 2025 and started the new year far below average at 72%, is now nearly full and will spill soon.

Water elevations at most state water projects across Montana are close to average for this time of year. Projects in central Montana are generally above average while some in the west, like Bair, Martinsdale, and Nilan reservoirs, are currently below average and unlikely to fill without the benefit of additional spring precipitation. Some of the higher reservoir pools this spring are partly due to warmer than average temperatures in March that accelerated spring runoff which started in mid-March, about a month earlier than normal. Water managers are doing their best to retain runoff at many projects in anticipation of diminished inflows due to this winter's below-average snowpack.

The Bureau of Reclamation (BOR) and U.S. Army Corps of Engineers (USACE) are actively managing large reservoir projects across the state. How the snowpack translates into lake levels this summer will depend on

how long the snow accumulation season lasts, how rapidly runoff occurs, streamflow post runoff, summer precipitation, and evaporation. Despite the siphon failure on the St. Mary's diversion in July 2024, the milder winter enabled the BOR to make continued progress on those repairs, with the recent completion of the Hall's Coulee siphon repair. The Milk River Project will have a reduced irrigation allotment this summer resulting from diminished carryover in Fresno Reservoir and reduced inflows caused by low snowpack.

Soil Moisture

Soil moisture indicators from satellite-generated soil moisture maps and data from Montana's Mesonet Soil Moisture Monitoring Network vary widely statewide. Spring soil moisture values are heavily influenced by carryover from last summer and fall, in addition to accumulations this spring. Not surprisingly, conditions in the northwest, central and southeast are the most promising with the southwestern and northcentral regions of the state appearing more compromised. Current conditions, shown in Figure 8, have improved substantially compared with this time last year. The Mesonet network is nearing full build-out, but many stations have less than five years of monitoring data. This shorter period of record means those sites are less reliable as indicators of average soil moisture. However, they are very useful as near-term indicators of changes in soil moisture due to factors such as recent precipitation and the impacts of evaporation from wind, temperature and plant transpiration. Access to individual station data is available here: Montana Mesonet Dashboard.

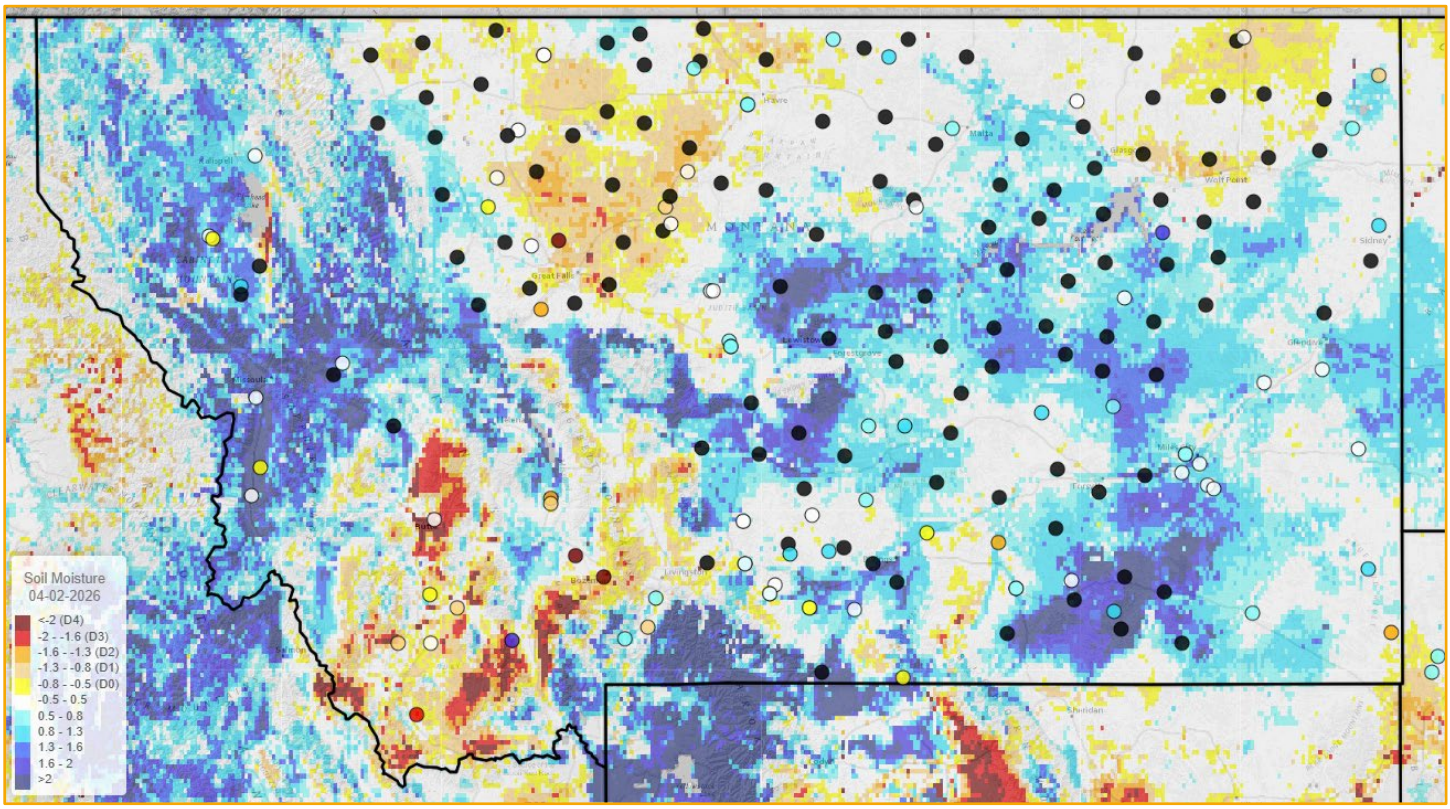

Figure 8 – SPoRT Soil Moisture Model – April 1, 2026
UMRB Drought Indicators Dashboard - Montana Climate Office

Drought Outlook

Extreme variability in temperature, precipitation and spatial reach over the last six months have made the status of current water supply and drought conditions difficult to characterize. This variability coupled with six years of above-average temperatures and below-average precipitation in some locations has resulted in conditions that vary from abnormally dry (D0) to extremely dry (D3) statewide. While drought conditions improved considerably across Montana in 2025, the southwest and north-central regions remain especially vulnerable to drought onset due to multiyear precipitation deficits and highly variable winter temperatures that depleted the low-and mid-elevation snowpack. Surface water in ponds and dugouts that provide drinking water for livestock and wildlife could be severely depleted in areas east of the Continental Divide this summer without average to above-average spring and summer precipitation. The unusually wet fall and early winter provided a boost to depleted soil moisture and diminished shallow aquifers that affected spring and summer water supplies in recent years. However, wet conditions last fall are unlikely to offset the winter's below-average snowpack compounded by multiyear deficits as Montana enters its sixth consecutive year of drought. Conditions this summer will hinge on both temperature and precipitation over the next three months. The next 60 days are a critical precipitation window and will likely determine conditions this summer and early fall. However, even the benefits of a cool and wet spring could vanish quickly with the onset of unusually hot and dry conditions this summer.

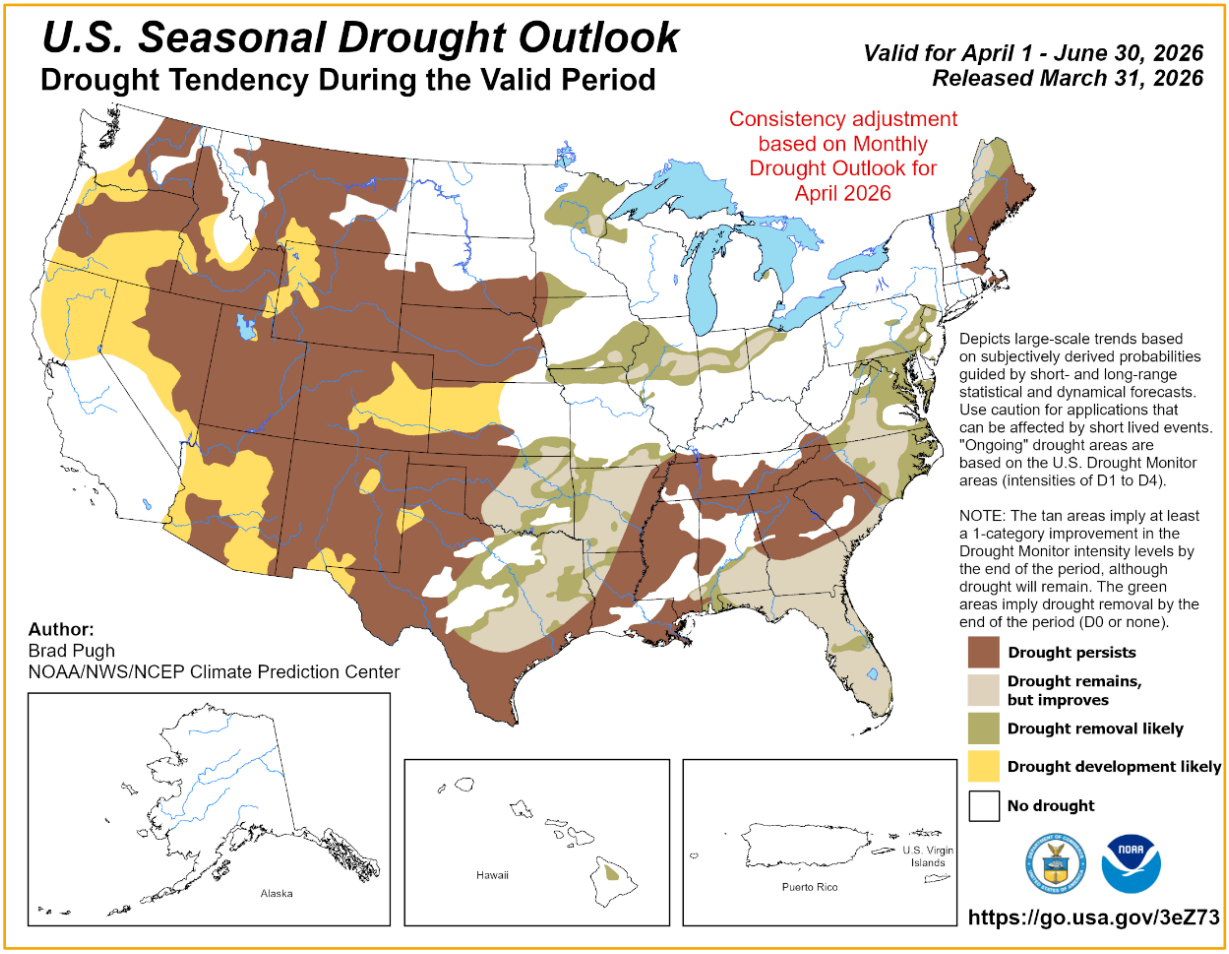

Figure 9 – Seasonal Drought Outlook April 1 through June 30
Climate Prediction Center

Long-term Forecast

The long-term weather outlook (three months) indicates a 30% to 60% chance for above-normal temperatures across Montana this spring and early summer. The long-term precipitation forecast indicates a 30% - 40% chance of below-average precipitation across the western, central and southern extent of the state.

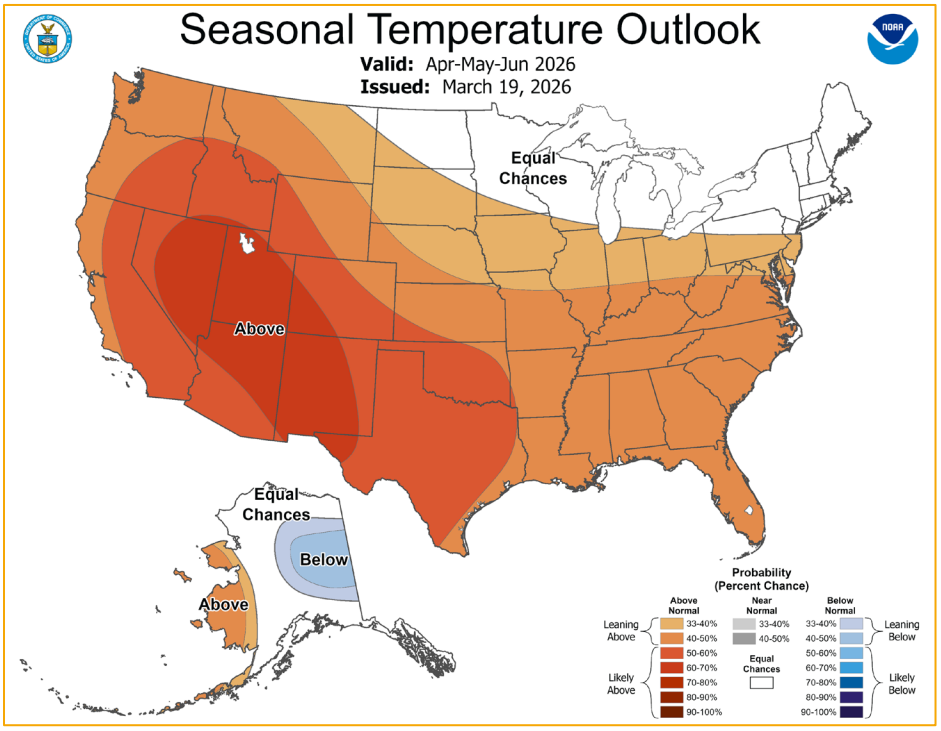

Figure 10 – Seasonal Temperature Outlook April 1 through June 30, 2026 Climate Prediction Center

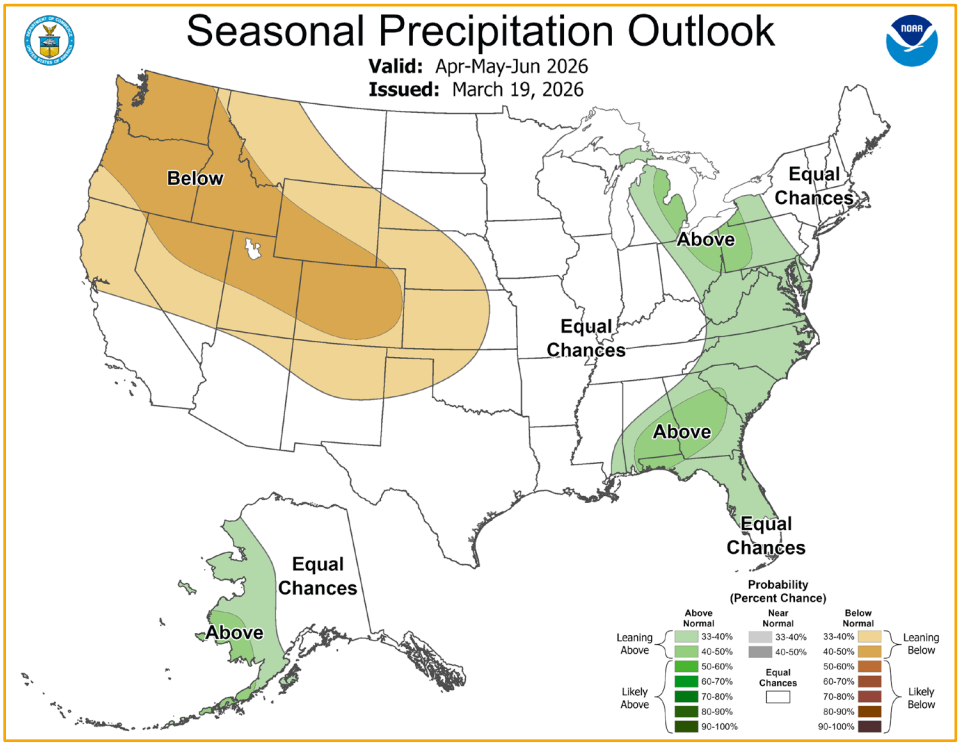

Figure 11 – Seasonal Precipitation Outlook April 1 through June 3, 2026 Climate Prediction Center

Drought Evaluation Tools and Resources – The following resources provide useful tools that the DNRC and partners use to evaluate drought and water supply conditions on a weekly basis across Montana.

- Upper Missouri Drought Dashboard
- Montana Drought Impacts Reporter
- NRCS Interactive Precipitation Portal
- NOAA/Climate-At-A-Glance
- USGS Water Watch Dashboard
- Montana Mesonet Data Downloader

The DNRC compiled this Spring Water Supply and Drought Outlook on behalf of the Governor's Drought and Water Supply Advisory Committee. This report provides a synopsis of statewide conditions from multiple sources and offers links to additional resources with more in-depth information.

In partnership with other state and federal agencies and Tribes, experts in climate science, snowpack, streamflow and weather information collect and evaluate drought and water supply data on a weekly basis year-round. This information is distilled into weekly recommendations to the U.S. Drought Monitor which tracks drought conditions nationally. Much of the information contained in this report comes from the Montana Climate Office, NRCS Water Supply Outlook Reports, U.S. Drought Monitor, Climate Prediction Center, National Integrated Drought Information System and others. Please contact Michael Downey, Drought Program Coordinator at DNRC at mdowney2@mt.gov if you have any questions or feedback about any of the information contained in this report. The next drought update will be in late June.

This report would not be possible without the ongoing participation and contributions of our local, university, state, Tribal and federal partners, some of which are listed below:

This report was developed by DNRC on behalf of the Drought and Water Supply Advisory Committee pursuant to 2-15-3308(5), MCA.