The Montana Department of Natural Resources & Conservation

Montana Drought and Water Supply Outlook, Summer 2026

Thunderstorm over the Sweetgrass Hills, July 28, 2025 Photo: Michael Downey

This report was prepared by The Montana Department of Natural Resources and Conservation (DNRC) on behalf of the Governor's Drought and Water Supply Advisory Committee (DWSAC). Under 2-15-3308(6), MCA, DWSAC must submit a report to the Governor's office by July 1 each year evaluating the potential for drought for the remainder of the calendar year.

Key Takeaways

- As the summer begins, many regions in Montana are entering the sixth consecutive summer with moderate to extreme drought conditions, except in the northwest, which is currently drought-free.

- Above-average temperatures and below-average May precipitation diminished high-elevation snowpack and accelerated runoff. Near to above-average precipitation in June has improved drought conditions with moderate to extreme drought diminishing in north central and eastern Montana prior to the onset of the dry season.

- Winter's low snowpack and drier than average spring in southwest and central Montana greatly diminished streamflows by late June with daily all-time lows recorded on the Big Hole, Jefferson, Powder, Musselshell, and Yellowstone rivers by mid-June. Streamflows in the northwest are closer to average and are indicative of better snowpack and above-average precipitation in April and May. By early July, summer precipitation has improved streamflows in some locations, and local conditions moving forward will depend on the influence of regional temperatures and summer precipitation.

- Surface water storage levels at state reservoirs in the west are near or above average. Levels at facilities east of the Divide are below average and unlikely to reach full pool. Conditions at private reservoirs and dugouts are similar. Surface water for livestock and wildlife east of the Continental Divide is severely depleted. While some areas improved with June rainfall, surface water supplies are likely to remain challenging for many users and wildlife.

- The outlook for significant wildfire potential is above normal in eastern Montana and western North Dakota and normal in western and central Montana. In July, Southwest Montana is expected to shift into above normal potential as drought expands and the impacts of low snowpack are realized. By August, eastern Montana and North Dakota are expected to return to normal as seasonal thunderstorms and increased moisture help moderate fuels. Southwest Montana will likely remain above normal due to ongoing drought and peak summer curing.

- Approximately 75% of Montana is currently in moderate to extreme drought and 10% indicate abnormally dry conditions at the onset of the dry season. With a high probability of above-average temperatures and below-average precipitation over the next three months, continued development of severe to extreme drought conditions during the summer and early fall is likely.

- These combined indicators point to a negative outlook for the remainder of the summer and early fall. Diminished streamflow and low water supply in ponds and reservoirs result in

negative impacts to agriculture, livestock, fish, wildlife, recreation and domestic water use. Conditions could worsen quickly in the event of much above-average temperatures and below-average precipitation in the coming weeks.

Summary of Recent Conditions

The 2025 water year (Oct. 1, 2024, to 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 and 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.

The period from September through December was the warmest on record with temperatures exceeding the average by about 5.5 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.

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

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. A strong storm in mid-March improved snowpack at most locations, but near-record warm temperatures immediately following quickly depleted gains in snowpack. Rain and freezing rain were common at lower elevations, and no locations below 5,000 feet in elevation developed appreciable snowpack all winter. April precipitation and temperatures were closer to average and while few watersheds increased snowpack, the rapid decline that began in late March was delayed in most watersheds.

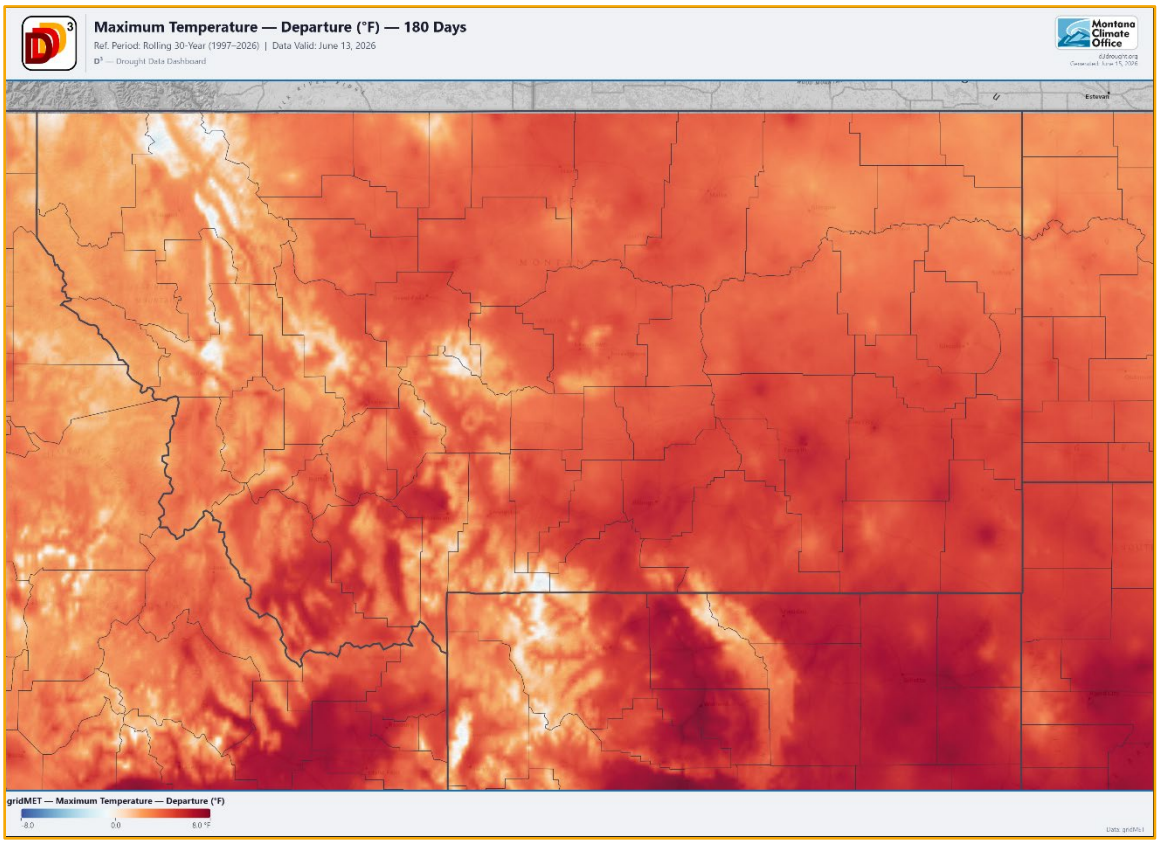

Figure 1- Temperature – Difference from Average Dec. 15, 2025 to June 14, 2026
Map Generated by Montana Climate Office

Persistent warm and dry conditions in May, a critical precipitation month, proved worrisome for most across Montana. In the first two weeks of May, Hamilton in the far west and Sidney in the far east recorded only .01 inches in a month that averages 2+ inches of precipitation for most of the state. Conditions were marginally better in Central Montana but still far below average. A large statewide weather event over the last three days in May and first two days in June brought significant rainfall with most areas recording 2 to 3 inches of precipitation that resulted in local flooding in some areas. Despite near average temperatures though the middle of June, May's early snowmelt combined with low snowpack has resulted in below-average streamflow across Montana. Daily all-time low flows on the Big Hole, Jefferson, Musselshell, Yellowstone, and Powder Rivers were recorded by mid-June this year.

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. Despite closer to average conditions in March and April, by late May, 74% of Montana was in moderate (D1) to extreme (D3) drought. Severe (D2) and extreme (D3) drought has expanded over the last 90 days across southwest, central and eastern Montana.

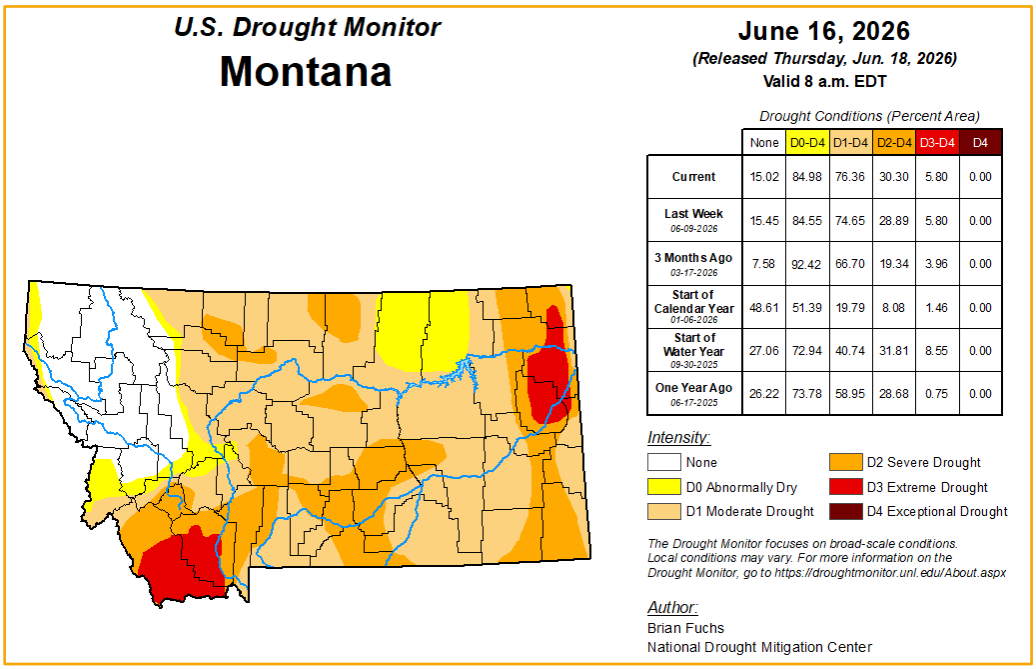

Figure 2 – Drought Categories, June 9, 2026 – National Drought Mitigation Center

April, May, and June are typically some of Montana's wettest months, and the hope was for above-average precipitation and cooler temperatures during this period to prevent the onset and spread of severe drought. Unfortunately, May proved stubbornly warm and dry resulting in widespread degradations for all except the northwest with extreme drought conditions taking hold in the northeast and southwest. June trended average to cooler than average, and timely rains in May and June provided a boost for crops and forage suppressing the most extreme drought impacts occurring in the southwest, north central and eastern regions of the state. A late June rain event greatly improved conditions in north central Montana. This area, along with the northwest, closed June with above-average precipitation over the last 180 days, as shown in Figure 4. Conditions in the southwest, central and eastern regions remain below-average. These deficits coupled with long term shortages since the summer of 2020 are likely to result in ongoing drought impacts for the remainder of the summer. Diminished streamflow and low water supply in ponds and reservoirs will result in negative impacts to agriculture, livestock, fish, wildlife, recreation and domestic water use.

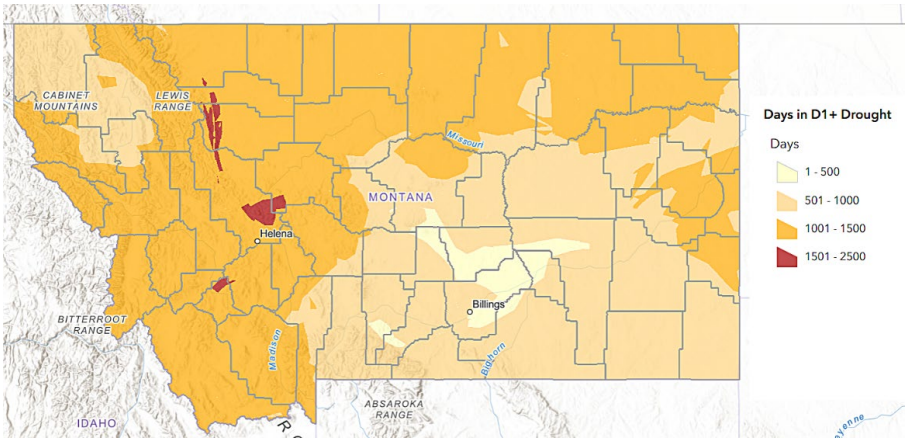

Figure 3 – Days in D1 or Higher Drought in the last 5 years – Montana State Library

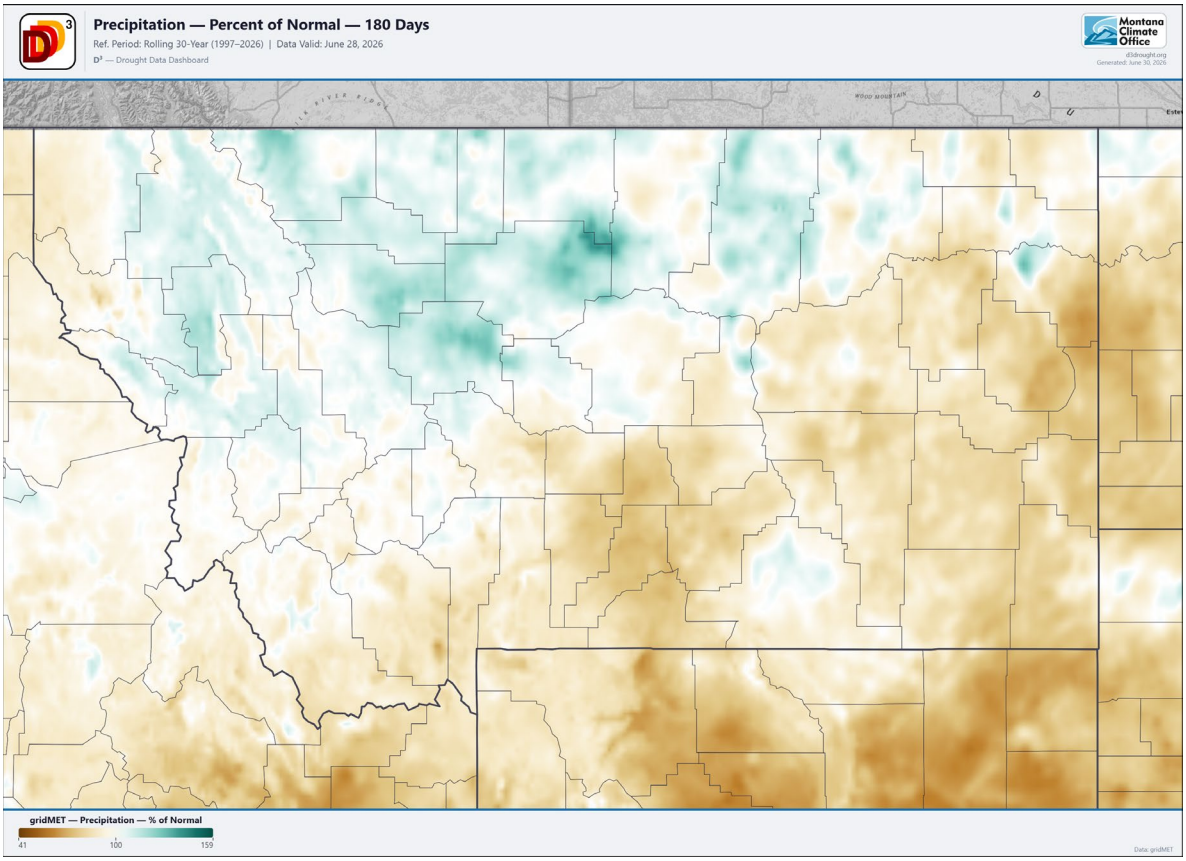

Figure 4 – Precipitation, Percent of Normal, 180 Days – Dec. 13, 2025 to June 13, 2026

Seasonal Drought Forecast

Late June to early July typically marks the end of Montana's high precipitation months, with the onset of the hot and dry summer season. While the potential for significant summer precipitation diminishes in the coming weeks, regionally significant summer precipitation can materialize as late as mid-July. After that, summer precipitation is mostly limited to smaller storm cells which can be locally significant. The abundance or absence of summer rainstorms and the prevalence of daytime temperatures exceeding 90 degrees Fahrenheit will play an important role in determining the severity of drought conditions locally this summer. July and August are typically hot and dry in Montana, but late summer storms are important for sustaining crops, wildlife, stockwater ponds and for suppressing wildfire.

Above-average temperatures in May quickly stripped the high elevation snowpack and increased evaporative demand, particularly in the southwest and east. Near-average precipitation in June eased extreme conditions in north central and eastern Montana. With July forecasts trending hotter than average with less than average precipitation, the probability for improved conditions in the next month is waning by the day. Approximately 75% of the state is currently in moderate to extreme drought and 10% indicate abnormally dry conditions at the onset of the dry season. With a high probability of above-average temperatures and below-average precipitation over the next three months, continued development of severe to extreme drought conditions during the summer and early fall is possible.

Large areas of Montana have experienced nearly continuous drought since the spring of 2020. The extended depletions in these areas will deepen this summer's drought and worsen impacts. Some areas will see diminished forage and crop production, declining surface water availability, increased grasshopper infestations, wildfire risk, health impacts due to excessive heat and smoke, reduced recreational opportunities due to forest and fishing closures among others. Northwest Montana is the one bright spot indicating better conditions at the end of June than it has in prior years. Looking ahead, the appearance and severity of drought impact this summer will depend largely on temperature and summer precipitation in July and August.

Warm winter temperatures, poor snowpack and below-average precipitation in May and June have resulted in diminished greenness as evidenced by the Vegetative Health Index (a satellite-based product) which shows a negative response statewide. While not as severe as in 2021 at this date, the indicator, in Figure 5, shows substantially diminished vegetative health on this date as compared with 2019, 2020, 2022, 2023 and 2024. Figure 6 shows last year's reading on this date. Green to blue colors indicate a positive trend and yellow to pink colors indicate more compromised conditions.

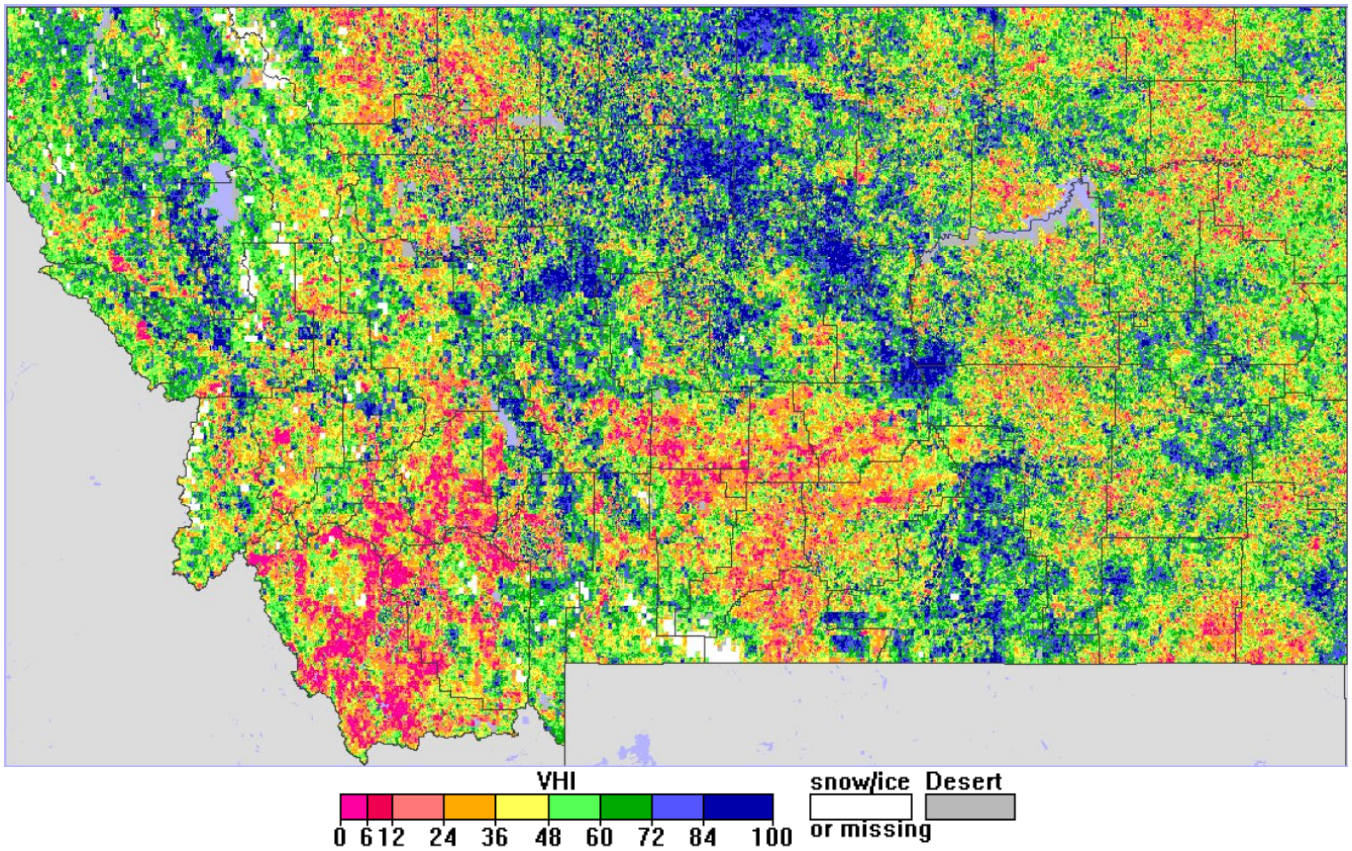

Figure 5 - Montana, Vegetative Health Index, week 26-June 24, 2026 - Center for Satellite Applications and Research, NOAA

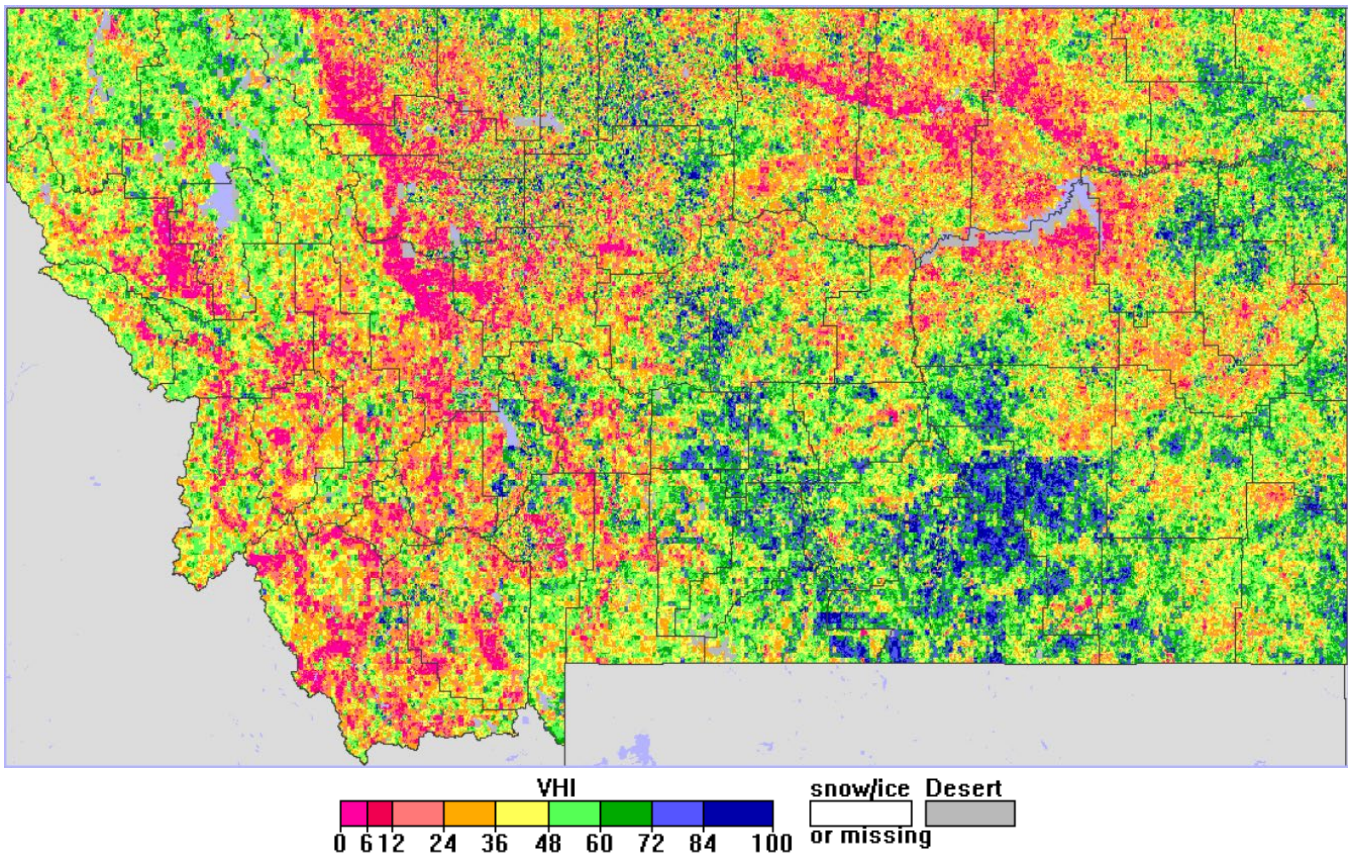

Figure 6 - Montana, Vegetative Health Index, week 25 – June 24, 2025 - Center for Satellite Applications and Research, NOAA

Spring Snowpack and Precipitation Overview

The June Natural Resources Conservation (NRCS) Snow Survey Report offers a good summation of the conclusion of the season's snowpack. Snowpack percentages decreased from approximately 55 to 90% of median statewide on May 1 to around 55 to 70% of median in the northwest and at-or below 50% of median across the rest of the state on June 1. The Upper Missouri, Tongue and Powder River basins completely melted out by June 1 with 0% of normal. Near-average snowpack in early June was limited to the very highest elevations sites in only a handful of watersheds. Sixty-six of 145 SNOTEL sites recorded the earliest or second earliest melt-out on record. The maps in Figures 7 and 8 show snow water equivalent on April 15 and June 1 as compared to the median for that day. The percentages displayed do not represent the snowpack percentage for the season.

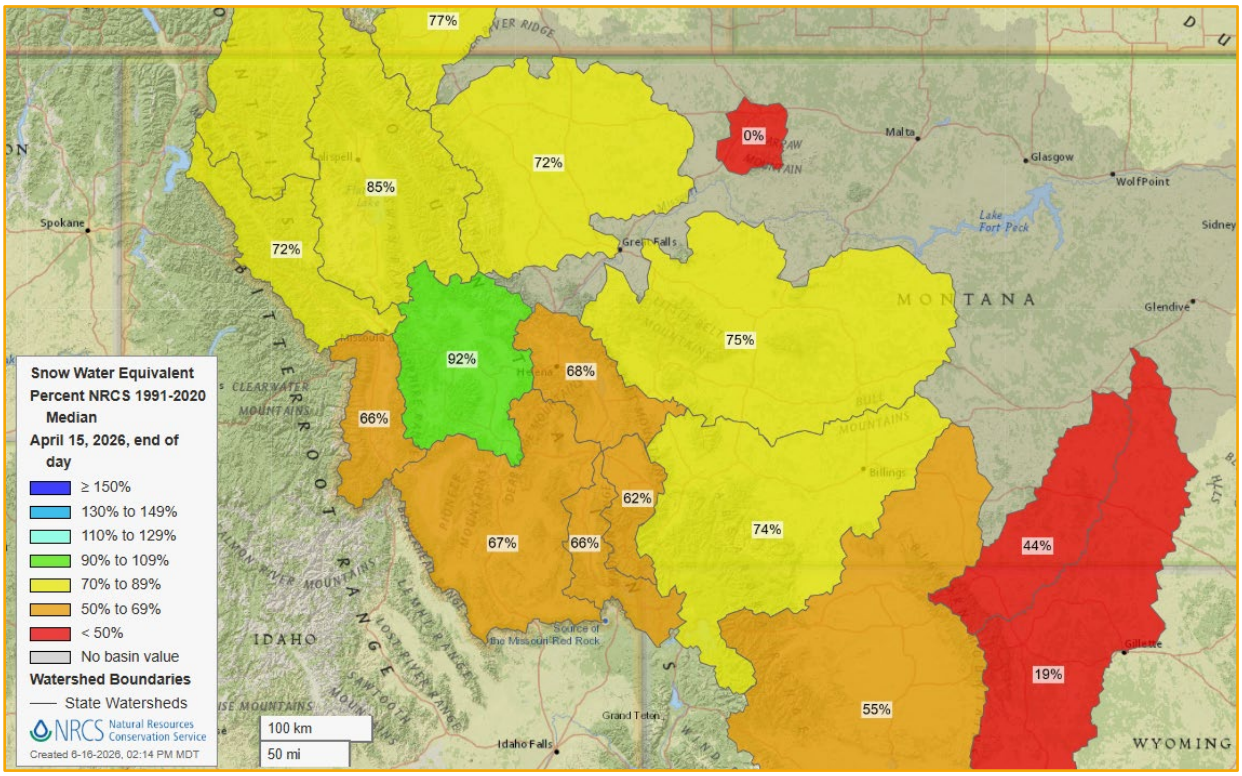

Figure 7 – Snow Water Equivalent as a percentage of median by basin - April 15, USDA – NRCS – Snow Survey Program

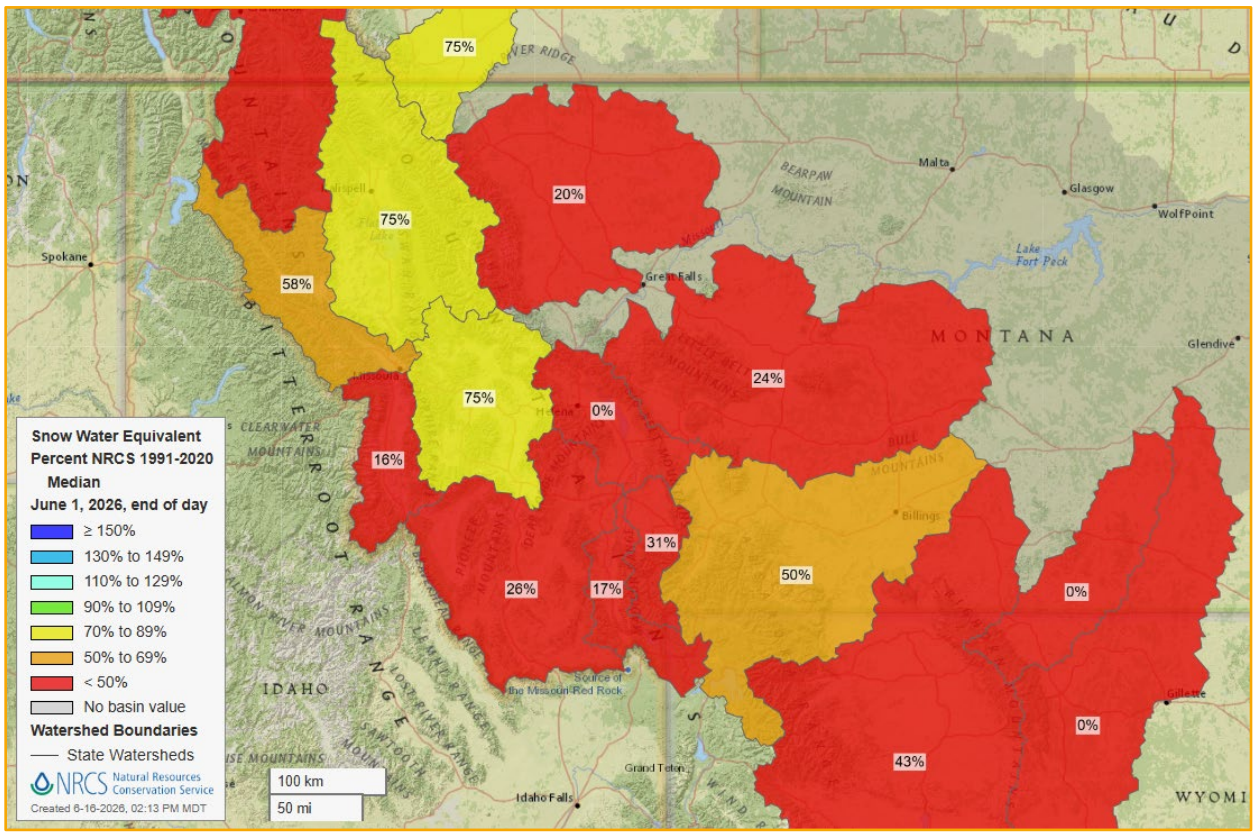

Figure 8 – Snow Water Equivalent as a percentage of median by basin - June 1, USDA – NRCS – Snow Survey Program

Despite the poor snowpack, the 2025/2026 winter season is noteworthy for the near to above-average precipitation accumulated since October 1. The challenge this winter was driven almost exclusively by very warm temperatures as opposed to overly dry conditions. Figure 9 shows accumulated precipitation as a percent of average from Oct. 1, 2025, to June 1, 2026. Most areas except for the southwest, Crazy Mountains, and northeast received near-to much-above-average precipitation for the period.

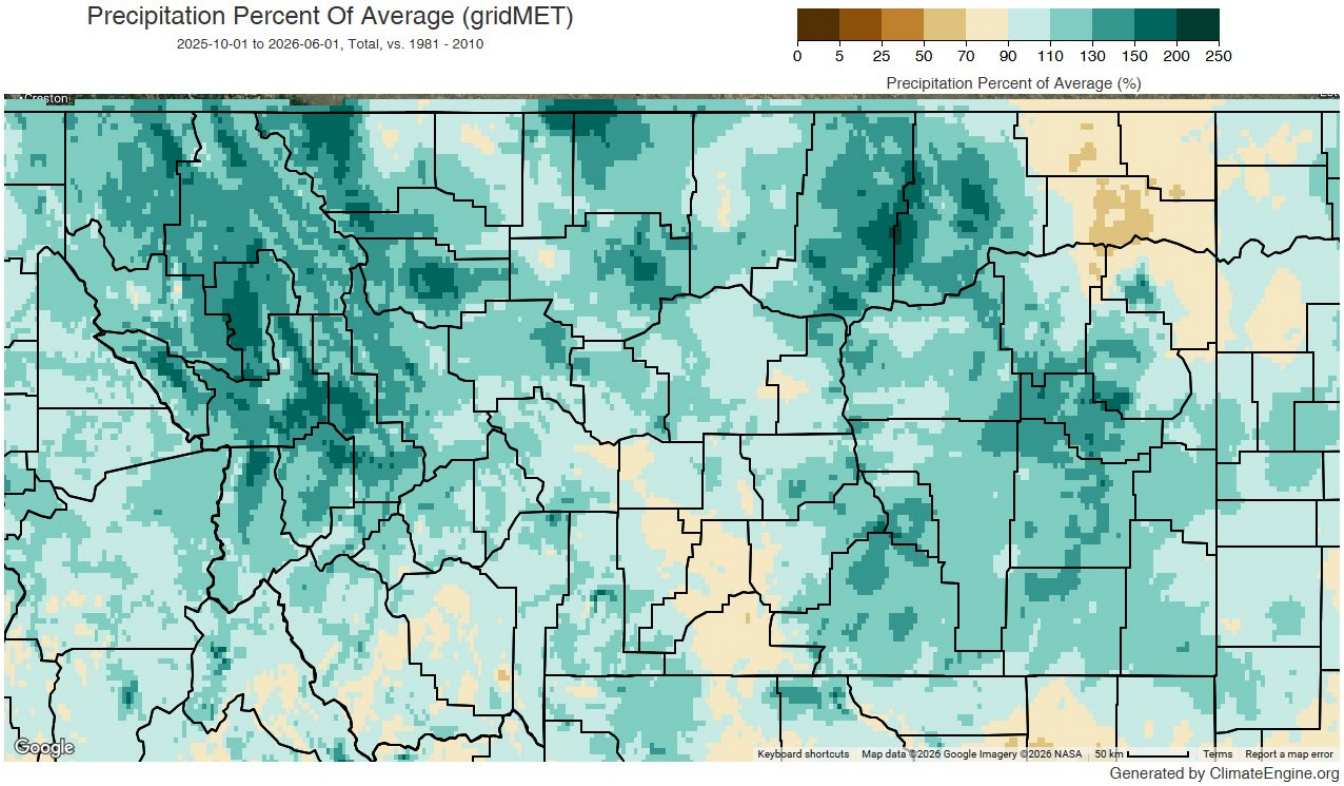

Figure 9 – Accumulated Precipitation as a percent of average Oct. 1, 2025 – June 1, 2026, Graphic by Climate Engine

Streamflow (DNRC/USGS/Gaging Stations, USGS Water Watch, Missouri Basin River Forecast Center)

According to the NRCS, streamflows for the June to July forecast period are largely expected to be near normal west of the Continental Divide, with some forecast points below normal. Streamflow from the Mission Mountains and Rocky Mountain Front is predicted to be near to above normal. The Flathead and St. Mary Basins are predicted to see 80% to 90% of normal streamflow. Rapid snowmelt decreased Bitterroot forecasts to around 60% of median streamflow. The Jefferson, Madison, Gallatin, Smith, and Musselshell basins are forecast to have 70% or less of normal streamflow. The Upper Yellowstone basin is forecasting 70% to 80% of normal streamflow, while the Bighorn and Lower Yellowstone are predicting 60% to 70% of normal streamflows. Higher elevation watersheds that drain the Absaroka-Beartooth and Wind River ranges are forecasting 75% to 100% of normal streamflow. The Musselshell, Powder and Tongue basins are predicting severely reduced streamflows of less than 60% of median. Streamflows for mid-June are substantially below normal, however, this is due in part to the early melt-off that produced higher than average streamflows in late May. Flows in some streams and rivers may stabilize by early July.

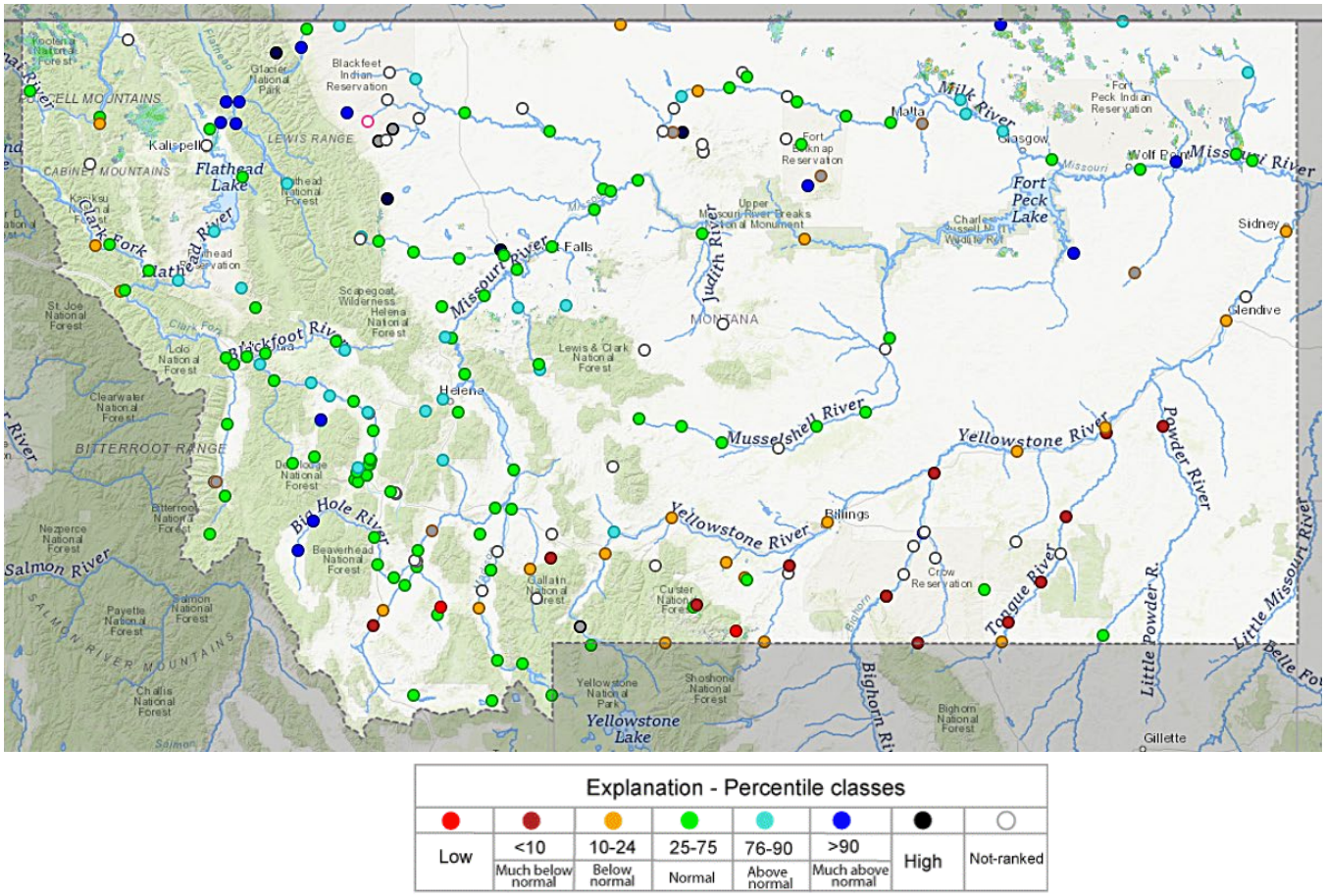

Figure 10 – Current Streamflow at USGS Stream Gages as Compared to Historical Streamflow for Monday, June 16, 2026 – USGS National Water Dashboard

Reservoirs ([Bureau of Reclamation Reservoirs](), [State Reservoirs]())

Water elevations at state-owned reservoirs in the west, such as Nevada Creek, Fred Burr, and Painted Rocks, have filled. However, state reservoirs east of the Divide are below normal and will not fill this year. Hyalite Reservoir (Middle Creek) near Bozeman is the exception. The situation is similar for federally operated dams. Hungry Horse, Libby and Flathead are near full pool, while all the federal facilities east of the Divide, except Gibson and Sherburne, are below normal and are unlikely to fill. Entering the sixth consecutive year of drought, water managers have become adept at shifting management strategies to accommodate uncertainties presented by a low-water year amid an ongoing drought. This spring, dam tenders have been effective at retaining run-off in anticipation of diminished inflows due to the much below-average snowpack. Privately owned dams and ponds are in similar condition, and facilities west of the Divide have mostly filled whereas east of the Divide are much below average. Surface water for livestock and wildlife in ponds and dugouts east of the Divide varies from below average to completely dry. The availability of drinking water for livestock will present challenges for these producers for the remainder of the summer.

Soil Moisture

Soil moisture indicators from satellite generated soil moisture maps and station data from Montana's Mesonet Soil Moisture Monitoring Network mirror conditions identified by current drought maps. The southwest, south central and northeast regions show diminishing values while the northwest and north central regions indicate wetter than average conditions. Precipitation in late November and December fell as rain and boosted mid-depth (8-20 inches) soil moisture. Near surface soil moisture (0-4 inches) also improved following storms in late May and early June as shown in Figure 11. The Mesonet network is nearing 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 but are 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. Upon completion in 2027, the Upper Missouri Basin Mesonet Network of stations in Montana, Wyoming, the Dakotas and Oklahoma will host the densest collection of soil moisture monitoring stations anywhere in the world.

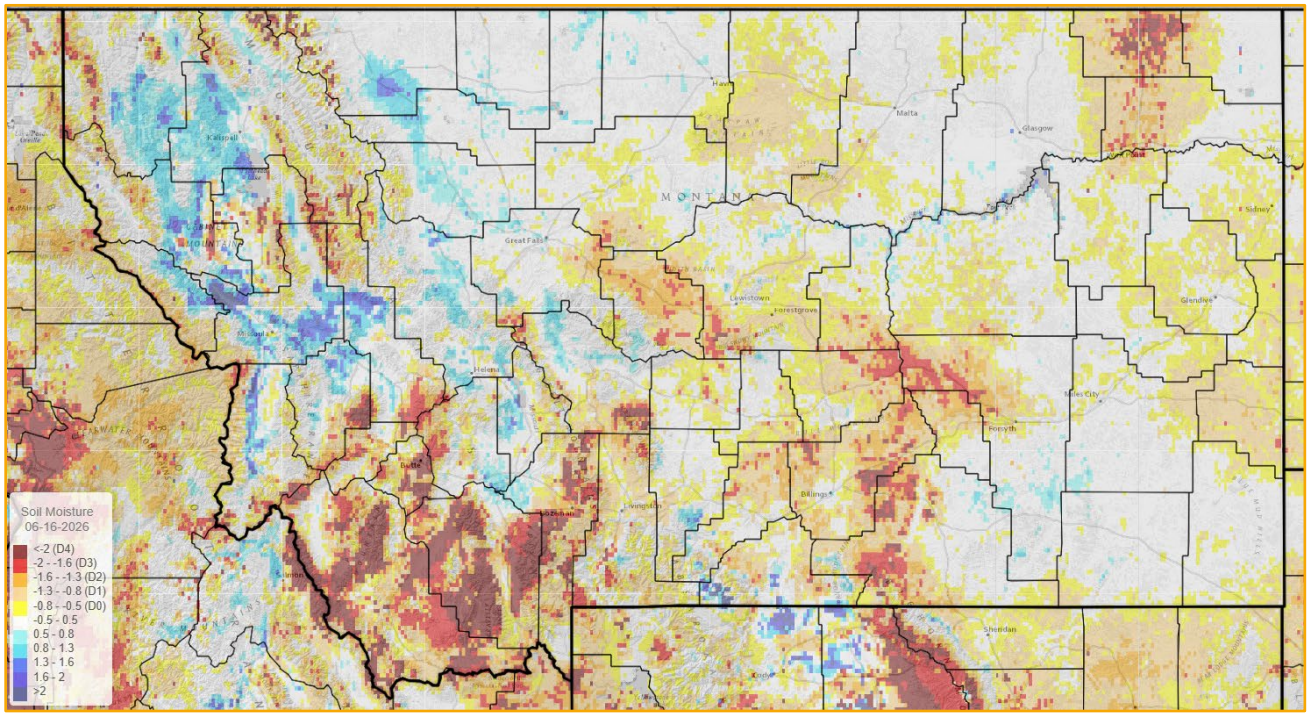

Figure 11 – SPoRT Soil Moisture Model – June 15, 2026 – UMRB Drought Indicators Dashboard - MT Climate Office

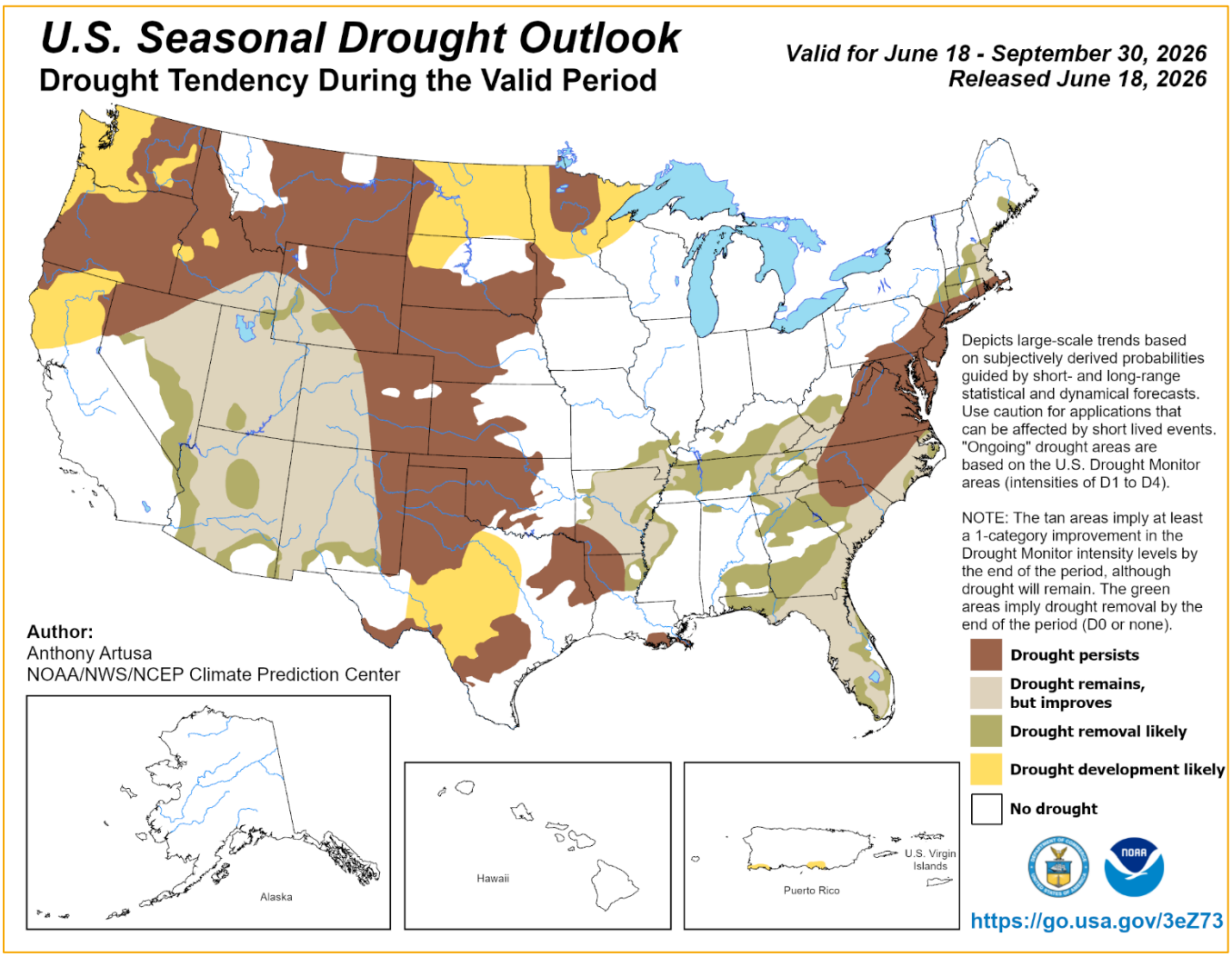

Figure 12 – Seasonal Drought Outlook June 18 to Sept. 30 **Climate Prediction Center-NOAA**

Long-term Forecast

The long-term drought forecast indicates ongoing drought across Montana through September but does not forecast further drought development at this time. Climate Prediction Center's monthly weather forecast for July indicates a 40 to 70% chance for above-average temperatures and no clear signal for above-or-below-average precipitation. The three-month outlook offers a 40 to 70% chance of above-average temperatures across Montana this summer, and no clear indication for above-or-below-average precipitation.

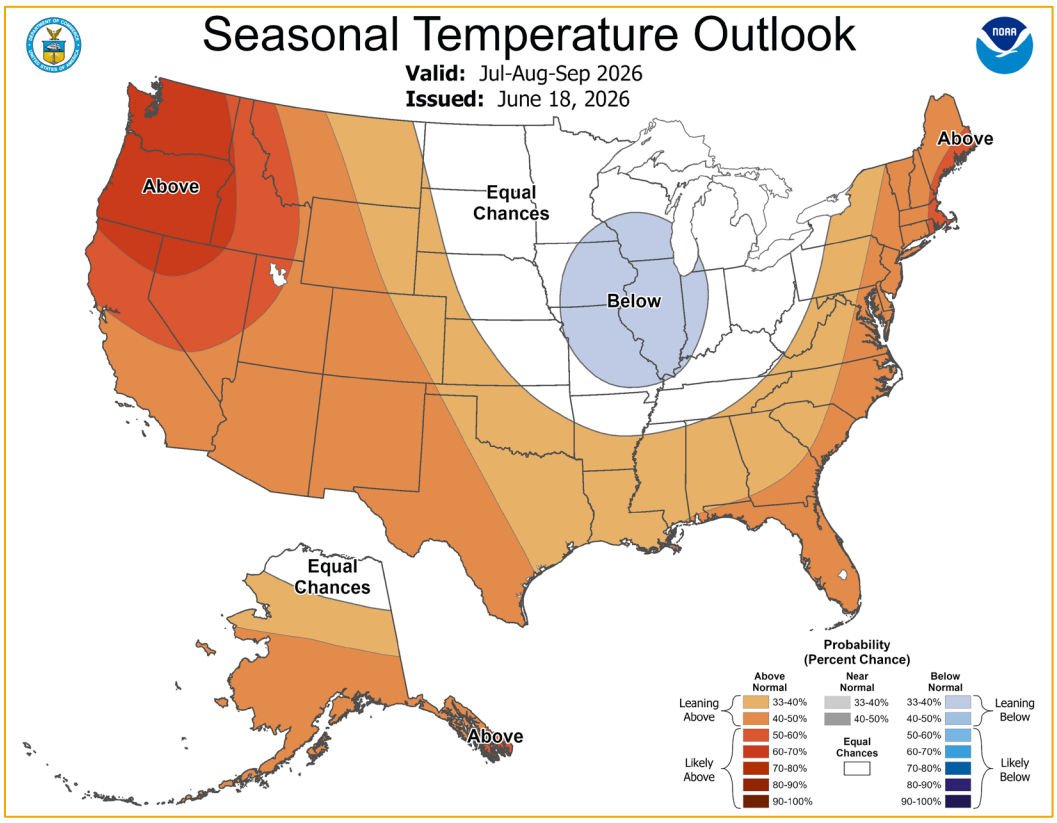

Figure 13 – Seasonal Temperature Outlook July to Aug. 31 **Climate Prediction Center, NOAA**

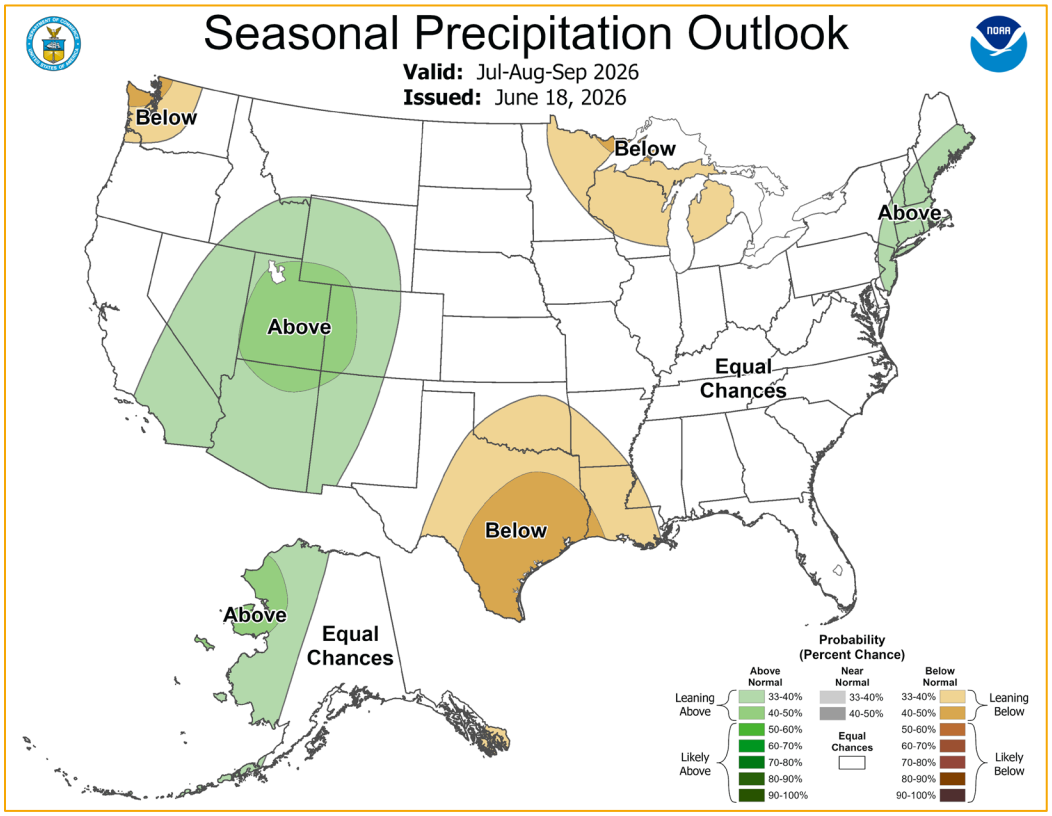

Figure 14 – Seasonal Precipitation Outlook July 1 to Aug. 31 Climate Prediction Center, NOAA

Wildfire Outlook

According to the National Interagency Fire Center, the June wildfire outlook indicates an early shift toward above normal significant wildland fire potential across eastern Montana and North Dakota with normal potential for the rest of the Northern Rockies Geographic Area (NRGA). In July, Southwest Montana is expected to shift into above normal potential as drought expands and impacts of low snowpack are realized. By August, eastern Montana and North Dakota are expected to return to normal as seasonal thunderstorms and increased moisture help moderate fuels. Southwest Montana will likely remain above normal due to ongoing drought and peak summer curing.

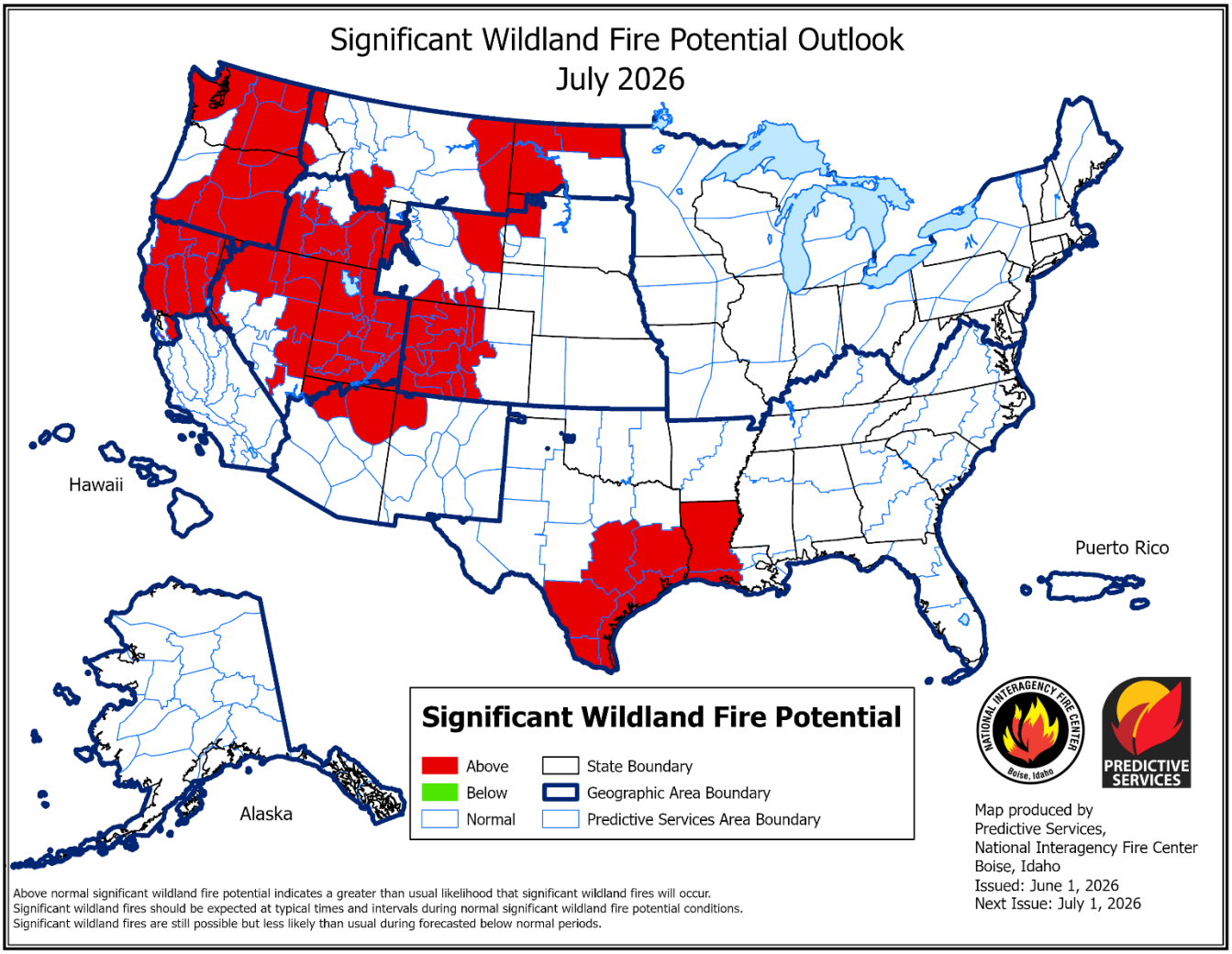

Figure 15 – Significant Wildland Fire Potential Outlook, July National Interagency Fire Center

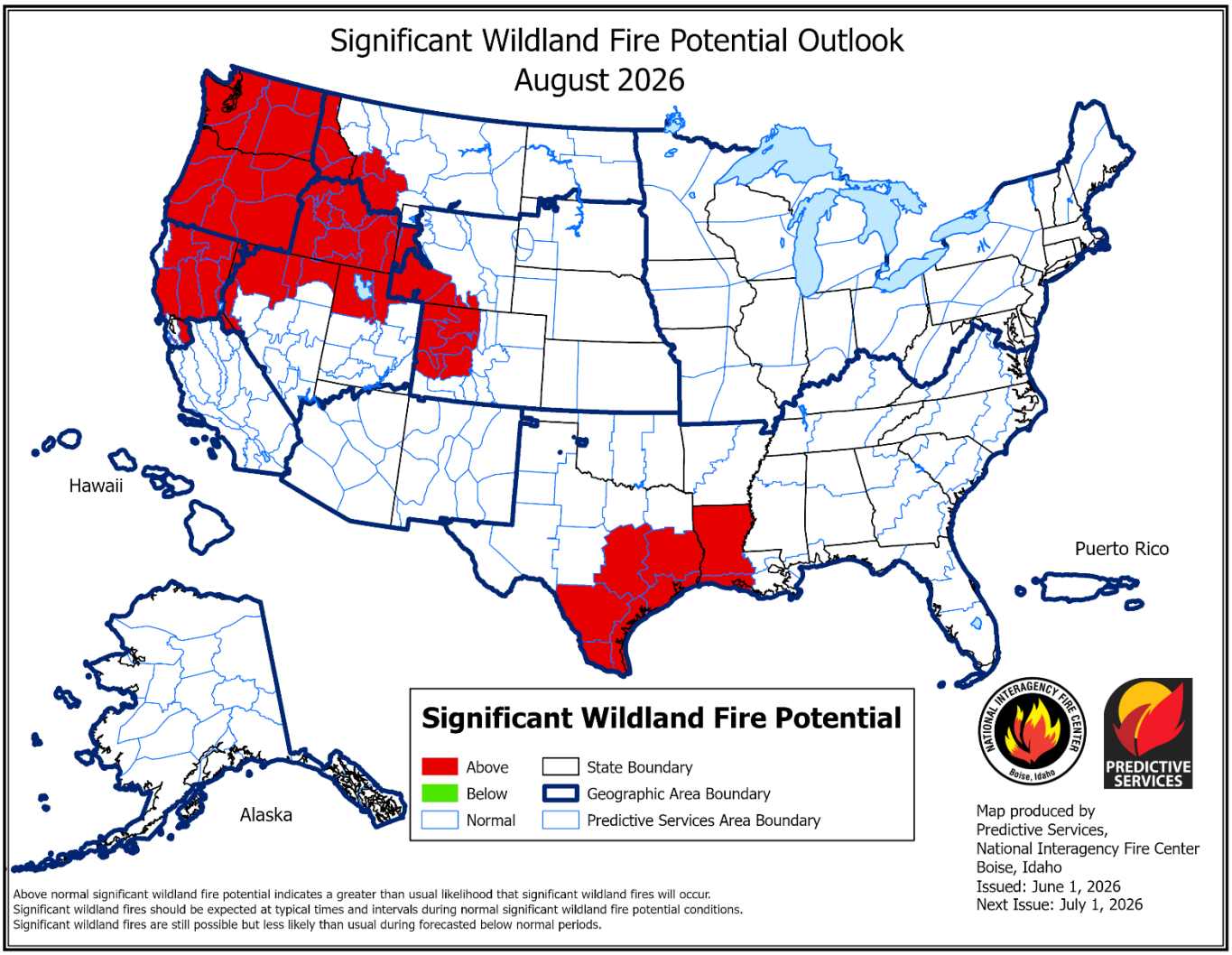

Figure 16 – Significant Wildland Fire Potential Outlook, August, National Interagency Fire Center

USDA Drought Disaster Declarations

The secretarial natural disaster designation allows the United States Department of Agriculture (USDA) Farm Service Agency (FSA) to extend much-needed emergency assistance to producers recovering from natural disasters through emergency loans and other aid. Assistance can be used to meet various recovery needs including the replacement of essential items such as equipment or livestock, reorganization of a farming operation, or to refinance certain debts. Producers should contact their local FSA representative for more information.

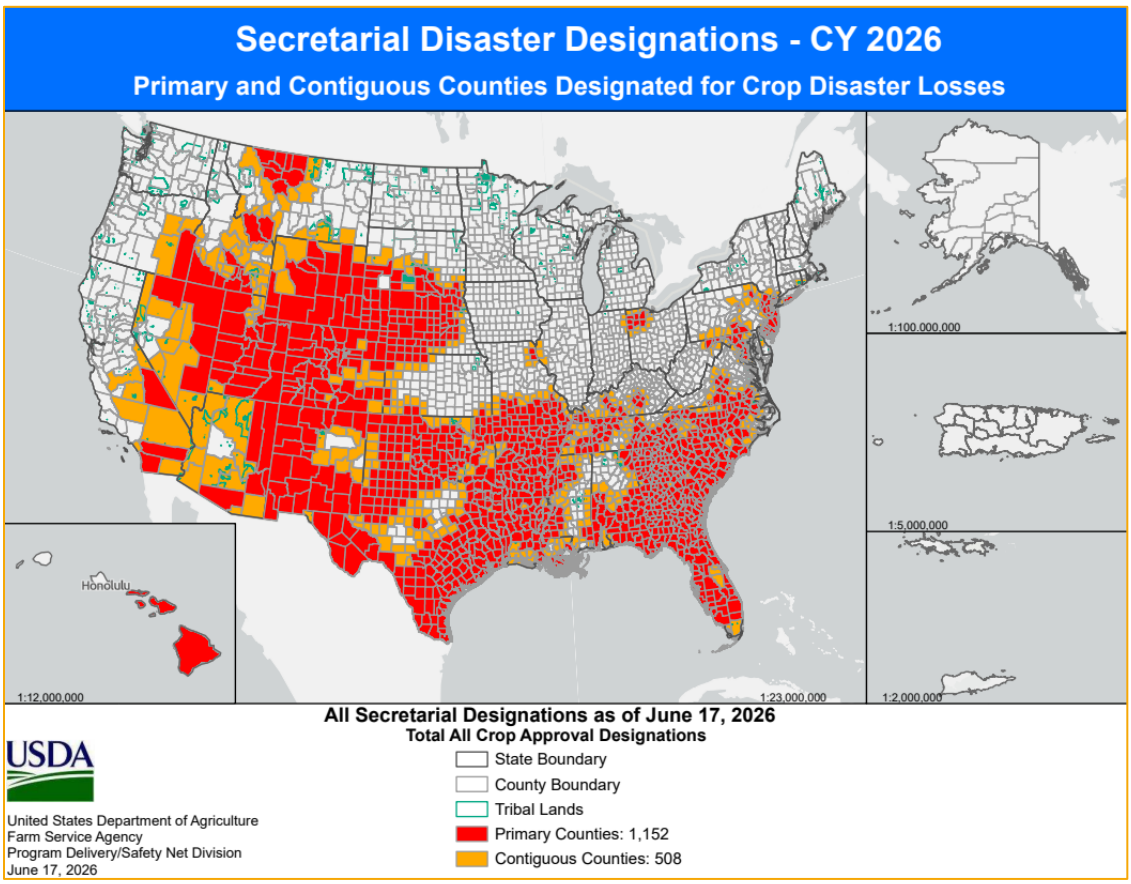

Figure 17 – Drought Disaster Declarations as of June 17, 2026. **Farm Services Agency, USDA**

Montana counties designated as a drought disaster area for Crop Year 2026 as of June 17, 2026.
Primary: Beaverhead, Cascade, Chouteau, Glacier, Hill, Liberty, Madison, Pondera, Teton, Toole.

Secondary: Big Horn, Blaine, Carbon, Deer Lodge, Fergus, Flathead, Gallatin, Jefferson, Judith Basin, Lewis and Clark, Meagher, Powder, Ravalli, Silver Bow.

Drought Evaluation Tools and Resources

The following resources provide useful tools that DNRC and their partners use to evaluate drought and water supply conditions on a weekly basis across Montana.

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

DNRC compiled the Montana Drought and Water Supply Outlook, Summer 2026 on behalf of the Governor's Drought and Water Supply Advisory Committee (DWSAC). This report provides a synopsis of statewide conditions gleaned 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 at DNRC (mdowney2@mt.gov) if you have any questions or feedback about this report.

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 Governor's Drought and Water Supply Advisory Committee pursuant to MCA 2-15-3308(5).