Blackfoot Water Supply Report

February 7, 2025

Montana Water Supply Report data as of February 1, 2025 (from NRCS):
https://www.nrcs.usda.gov/..../montana/montana-snow-survey/water-supply-outlook-reports-montana

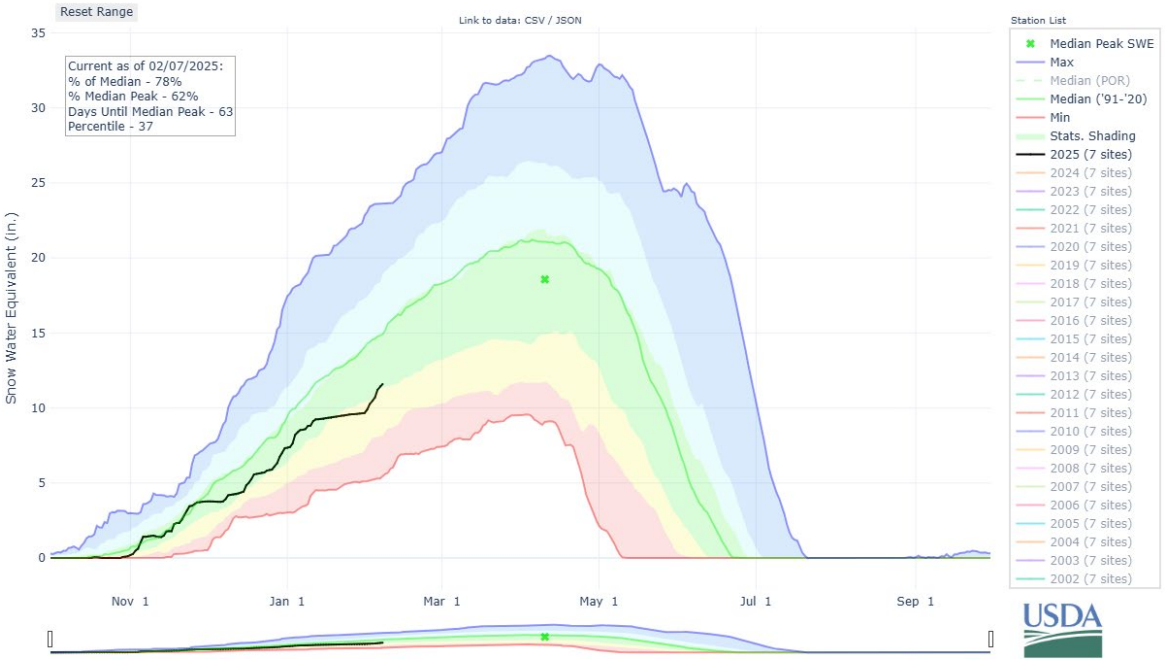
Overview

Following a slow start to snowpack accumulation coming into the year, the month of January did not improve conditions; February is off to a better start. The Blackfoot received just 59% of its normal precipitation in January, ending the month with just 66% of normal snowpack according to SNOTEL observations. A week into the month of February and numbers have improved to 78% of normal with recent snowfall. The SNODAS model which accounts for snowpack at all elevations, puts the basin closer to 70% of normal with the most volume of snow missing from moderate elevations of 5,500 to 7,000 feet.

With two to three months left in the snow accumulation season, there is still time to build a more normal snowpack; however, lingering moisture deficits from previous years of drought remain a concern. Extreme deficits in groundwater and soil moisture conditions mean that well above normal precipitation may be needed to see rebounds in water supply this spring and summer as dry soils soak up any available moisture.

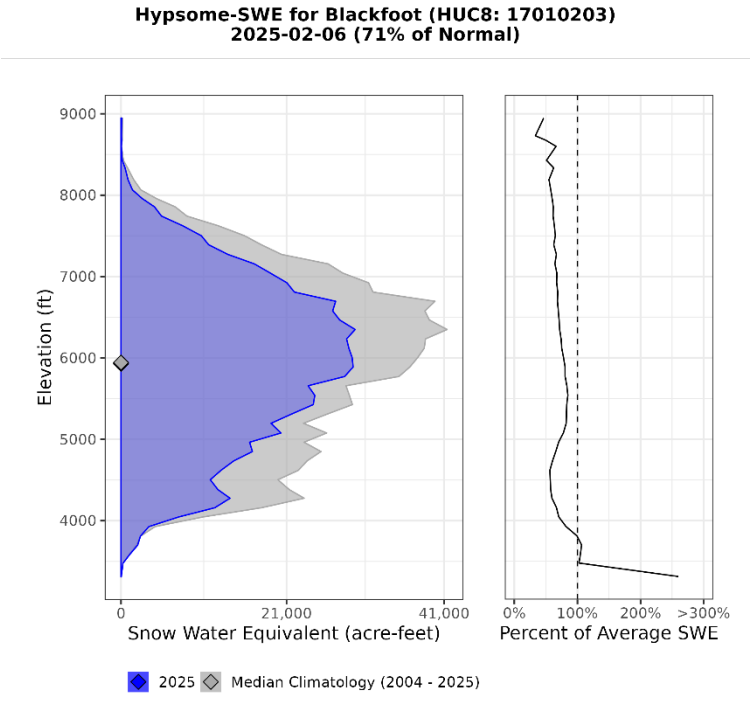
A weak La Nina weather pattern is currently present and is driving positive outlooks for below normal temperatures and above normal precipitation through April. Water supply forecasts won't be available until March.

Blackfoot River Basin Snow Water Equivalent – SNOTEL observed data



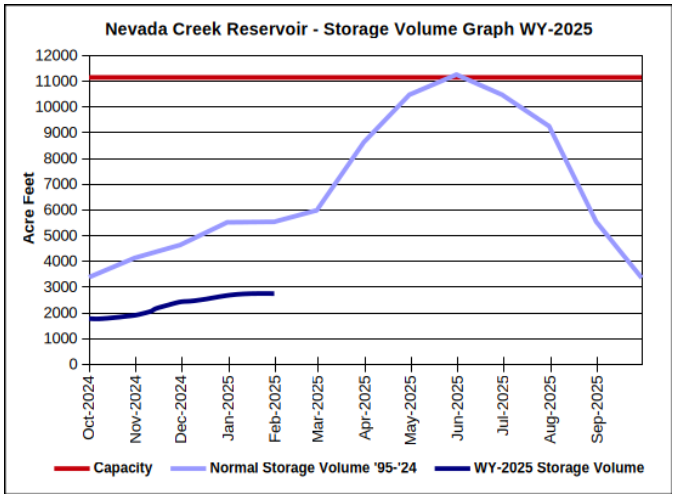
Black line: 2025 Water Year Green line: 30-year median Orange line: 2024 Water Year

Blackfoot River Basin Snow Water Equivalent by Elevation – SNODAS modeled data

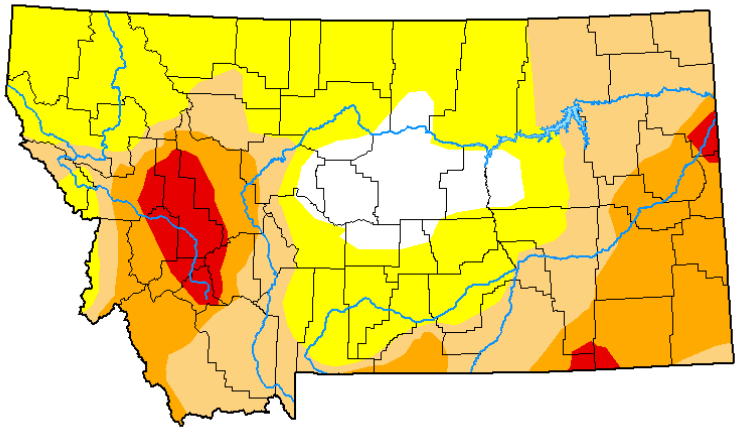


Reservoir Storage

On January 31st, Nevada Creek Reservoir was storing 2,750 Acre Feet which is only 50% of normal and is 25% of its total capacity.



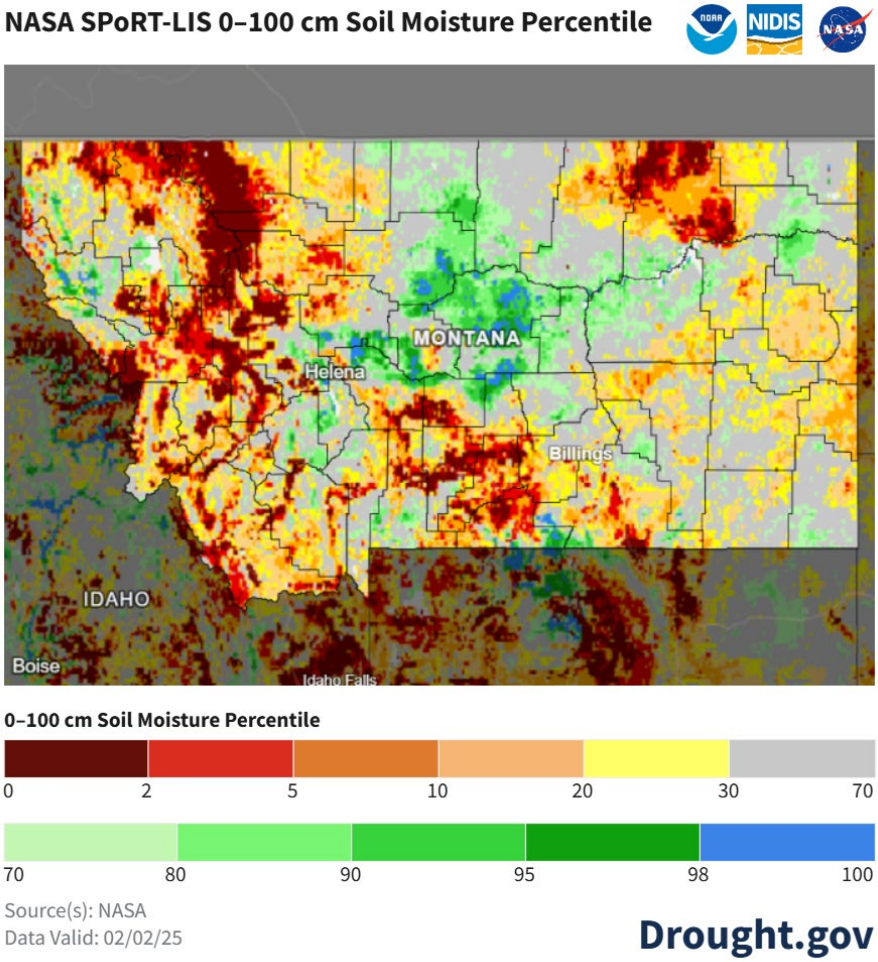
Montana Drought Monitor – February 6, 2025



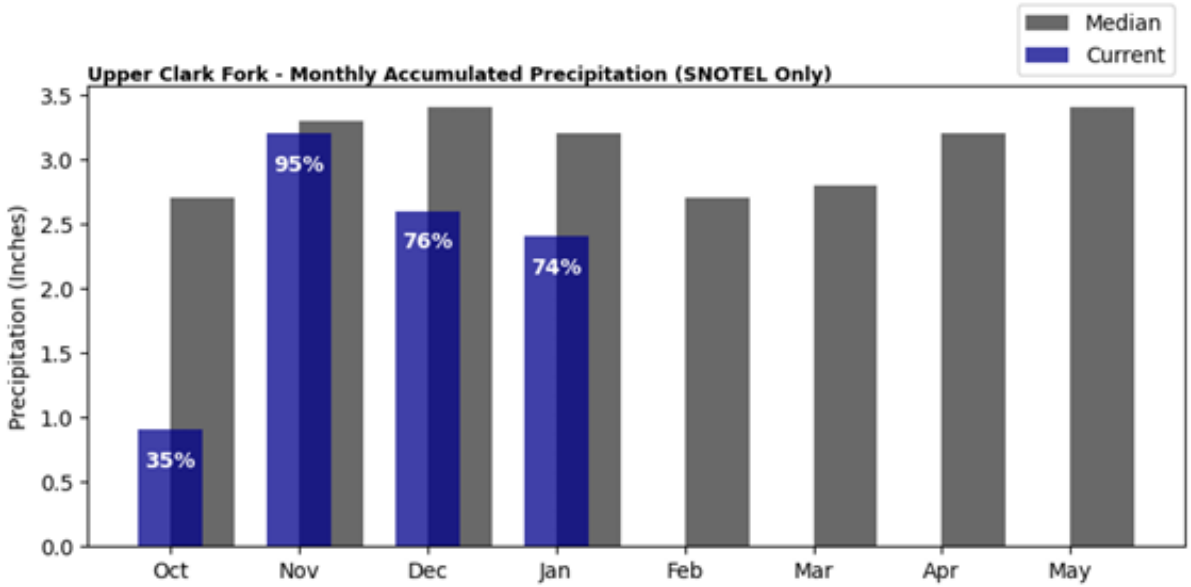
Drought Intensities

- None: No Drought
- D0: Abnormally Dry
- D1: Moderate Drought
- D2: Severe Drought
- D3: Extreme Drought
- D4: Exceptional Drought

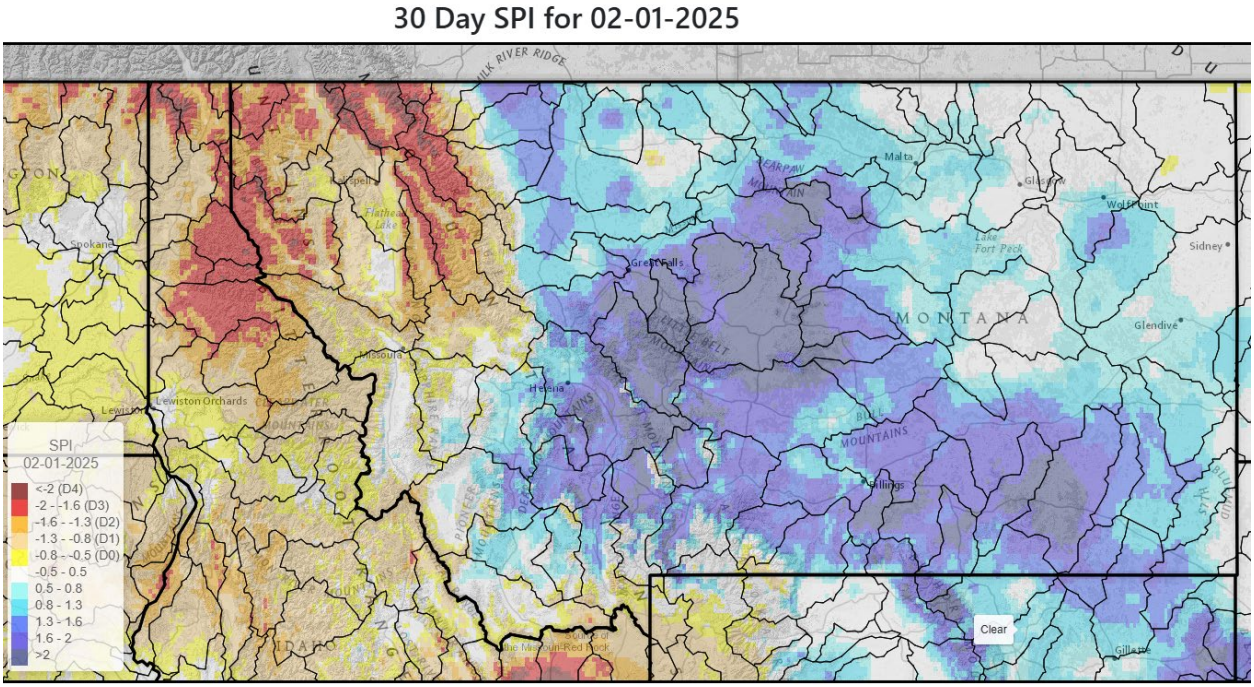
Soil Moisture – February 2, 2025



Upper Clark Fork SNOTEL Precipitation: February 1, 2025



Montana 30-day Standardized Precipitation Index: February 1, 2025



February 7, 2025 USGS Real Time Stream Flow Conditions

Nevada Creek above Reservoir

Discharge, cubic feet per second

Most recent instantaneous value: Ice affected

Blackfoot River above Nevada Creek

Discharge, cubic feet per second

Most recent instantaneous value: Ice affected

North Fork Blackfoot

Discharge, cubic feet per second

Most recent instantaneous value: 77 cfs on 02/07/2025 at 3:00 PM MST

Blackfoot River at Bonner

Discharge, cubic feet per second

Most recent instantaneous value: Ice affected

Streamflow Forecast:

Insufficient data exists to forecast streamflow currently. Forecasts will become available beginning in March.

Three-Month Climate Outlook: February 2025

National Weather Service Climate Prediction Center

http://www.cpc.ncep.noaa.gov/

Below normal temperatures for February through April are favored.

Above normal precipitation is favored for February through April.