USDA United States Department of Agriculture

Natural Resources Conservation Service

Montana Water Supply Outlook Report

February 1, 2025

Three snow surveyors walk across Upper Holland Lake. The snow course on the far end of the lake averaged 44” inches deep, which is 63% of median (depth) for February 1. After a strong start to the winter in northwest Montana, precipitation during January tapered resulting in well below normal snow totals. As storms missed northwest Montana, they provided consistent snowfall to central Montana and the Bighorns. The Bear Paw and Little Belt Mountains set snowfall records for January, while the rest of the region saw near normal snowfall. Early season deficits still exist across much of the state, but a quick start to February may help ease snowpack shortfalls. (Photo: Eric Larson 01/29/2025)

Table of Contents

For more water supply information, contact:

Eric Larson
Supervisory Hydrologist
Montana Data Collection Office
USDA NRCS Montana Snow Survey and Water Supply Forecasting Program
eric.larson@usda.gov

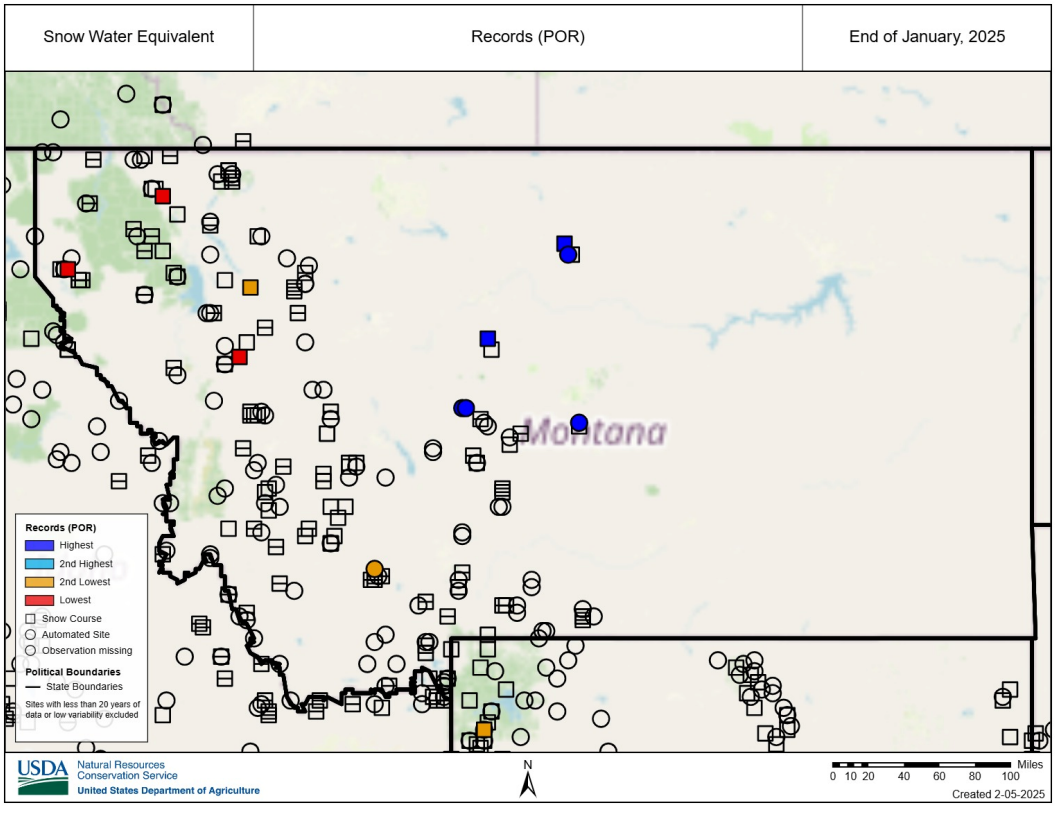
Statewide Overview

Summary

Snowpack accumulation during January varied drastically across the state. In northwest Montana, an above normal January 1 snowpack dropped to below normal after receiving minimal precipitation the second half of January. In contrast, a strong storm system hit central Montana resulting in well above normal snowpack for February 1. The Gallatin, Powder, and Tongue River basins had above normal precipitation during January, but following a slow start to the season the snowpack in these regions is still below normal. Consistent smaller storms across the rest of the state resulted in below to near normal precipitation, which maintained the below normal snowpack conditions from January 1.

There are still two to three months remaining in the Montana snowpack accumulation season. The snowpack typically peaks in April or early May at the highest elevations. With a significant portion of the winter ahead, time remains for snowpack conditions to change considerably before the end of the season. The snowpack in April and May will provide a better indication of spring runoff and summer streamflows. Currently, most snow courses and SNOTEL sites are measuring slightly above normal to 4” below normal snow water equivalent values. The St. Mary and Sun-Teton-Marias River basins have a 3-7” snow water equivalent deficit. A snowy February could improve conditions in basins with a deficit, but if they remain large later in the season a recovery will be more difficult. Last year’s well below normal snowpack resulted in reduced soil moisture, widespread drought, and low streamflow levels. Those antecedent conditions could potentially influence this season’s streamflow levels as well.

The following map shows snow courses and SNOTEL sites reporting record high or record low snow water equivalent on February 1, 2025. Consistent with the wide variation of precipitation during January across the state, seven snow monitoring stations in central Montana have a record high February 1 snowpack, while three low elevation snow courses in northwest Montana have a record low February 1 snowpack.



Statewide Overview

Precipitation

January's weather patterns favored certain basins while leaving others mostly dry. Western Montana began January with several small precipitation events. SNOTEL sites in basins surrounding the Flathead Valley picked up 1-3" of precipitation early in the month. However, by January 12 storms dissipated and western Montana did not receive significant precipitation until February. Precipitation since October 1 in northwest Montana remains well below normal, but not historically low.

The early January storms impacted some regions more significantly. SNOTEL stations in the Little Belt and Bear Paw Mountains received up to four inches of precipitation and snow depth increased over 20" between January 9 and 13. The rest of January provided a more seasonally normal 1-2" of snow water equivalent. The Bear Paw and Smith-Judith-Musselshell are the only two basins with above normal precipitation since October 1.

Consistent smaller storms throughout January resulted in below to near normal precipitation among most other basins. The exceptions are the Gallatin, Powder and Tongue River basins which received 110%, 175% and 175% of median precipitation respectively. The parade of storms dropped 3-5" of snow water equivalent at SNOTEL sites in the Gallatin during January. Higher elevation SNOTEL sites located in the Tongue and Powder River basins picked up 2-3" precipitation or 10-20" of snow. Despite large accumulation in the Bighorn Mountains, the basin wide January total was only near normal due to less impressive totals in the Wind River and Absaroka Ranges. Overall, early season deficits persist in southern Montana and northern Wyoming and water year precipitation remains below normal since October 1 in the region.

January - Highest Total Accumulated Precipitation - SNOTEL/SNOLITE

Station	Precipitation (Inches)	Median (Inches)	Elevation	Basin
Crystal Lake	7.8	2.8	6130	Smith-Judith-Musselshell
Onion Park	6.2	2.6	7420	Smith-Judith-Musselshell
Rocky Boy	6.1	1.6	4730	Bear Paw
Stringer Creek	5.8	2.1	6550	Smith-Judith-Musselshell
Spur Park	5.7	3.4	8080	Smith-Judith-Musselshell

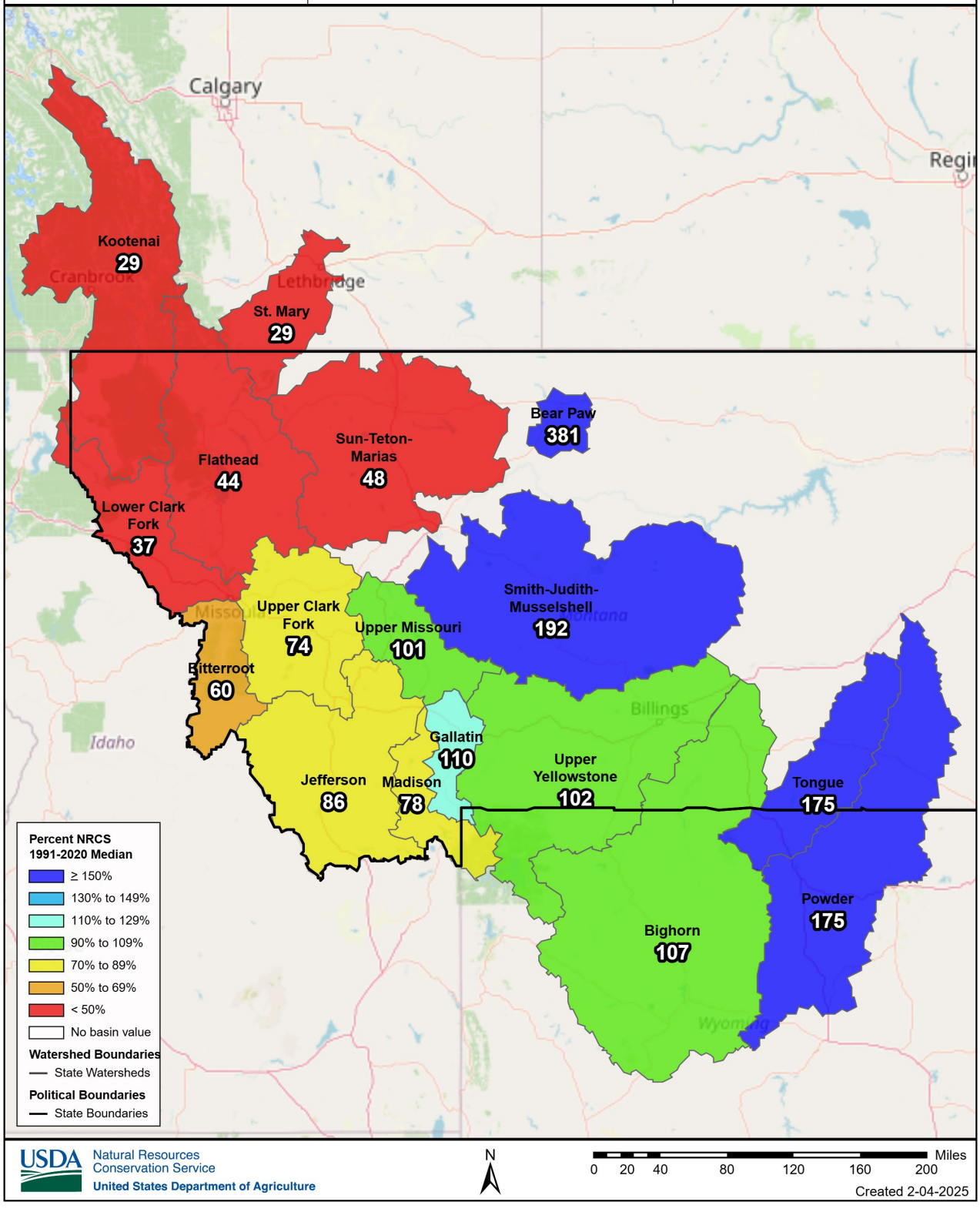
January - Lowest Total Accumulated Precipitation- SNOTEL/SNOLITE

Station	Precipitation (Inches)	Median (Inches)	Elevation	Basin
Lubrecht Flume	0.8	1.5	4690	Upper Clark Fork
Cold Springs	0.8	1.2	9640	Bighorn
Timber Creek	0.9	0.6	7910	Bighorn
Wood Creek	1.0	2.2	5970	Sun-Teton-Marias
Owl Creek	1.0	0.5	8990	Bighorn

Statewide Overview

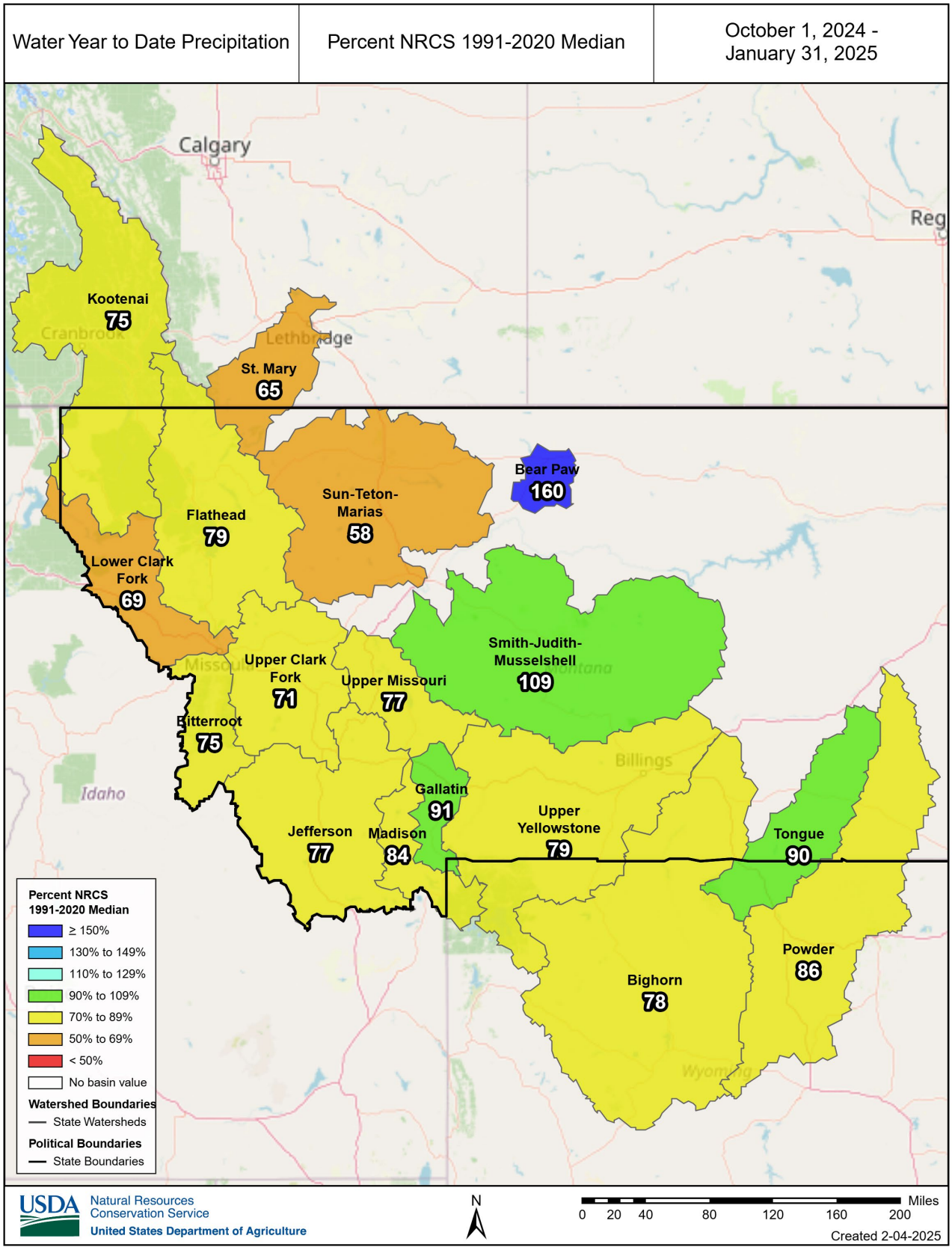
Precipitation (Continued)

1 month Precipitation	Percent NRCS 1991-2020 Median	January 1, 2025 - January 31, 2025



Statewide Overview

Precipitation (Continued)



Statewide Overview

Snowpack

As of February 1, Montana's snowpack is mostly below normal. The Sun-Teton-Marias and St. Mary River basins have a well below normal snowpack at about 55-65% of median. Winter storms favored central Montana, resulting in the Smith-Judith-Musselshell reporting about 130% of normal snowpack and the Bear Paw reporting over 200% of normal. Other than these exceptions snowpack percentages are consistent across the state at about 75-85% of normal. However, there was a wide variation in change across Montana's basins from January 1 to February 1. Northwest Montana's snowpack decreased from about 110% of normal on January 1 to around 80% of normal on February 1. Southwest Montana's snowpack improved slightly or stayed about the same. Northern Wyoming basins made significant snowpack gains increasing from about 60-70% of normal to about 80-95%.

Maximum snow depths in Montana range from 50-60" in the Greater Yellowstone area to 60-70" in northwest Montana. Noisy Basin SNOTEL near Bigfork is reporting slightly more at 87", which is less than January 1 due to the snowpack settling and lack of recent precipitation. Six SNOTEL sites and snow courses in central Montana (Taylor Road, Rocky Boy, Highwood Station, Stringer Creek, Onion Park, and Crystal Lake) are recording record high February 1 snow water equivalent. Three lower elevation snow courses in Northwest Montana (Rock Creek Meadows, Chicken Creek, and Coyote Hill) measured record low February 1 snow water equivalent.

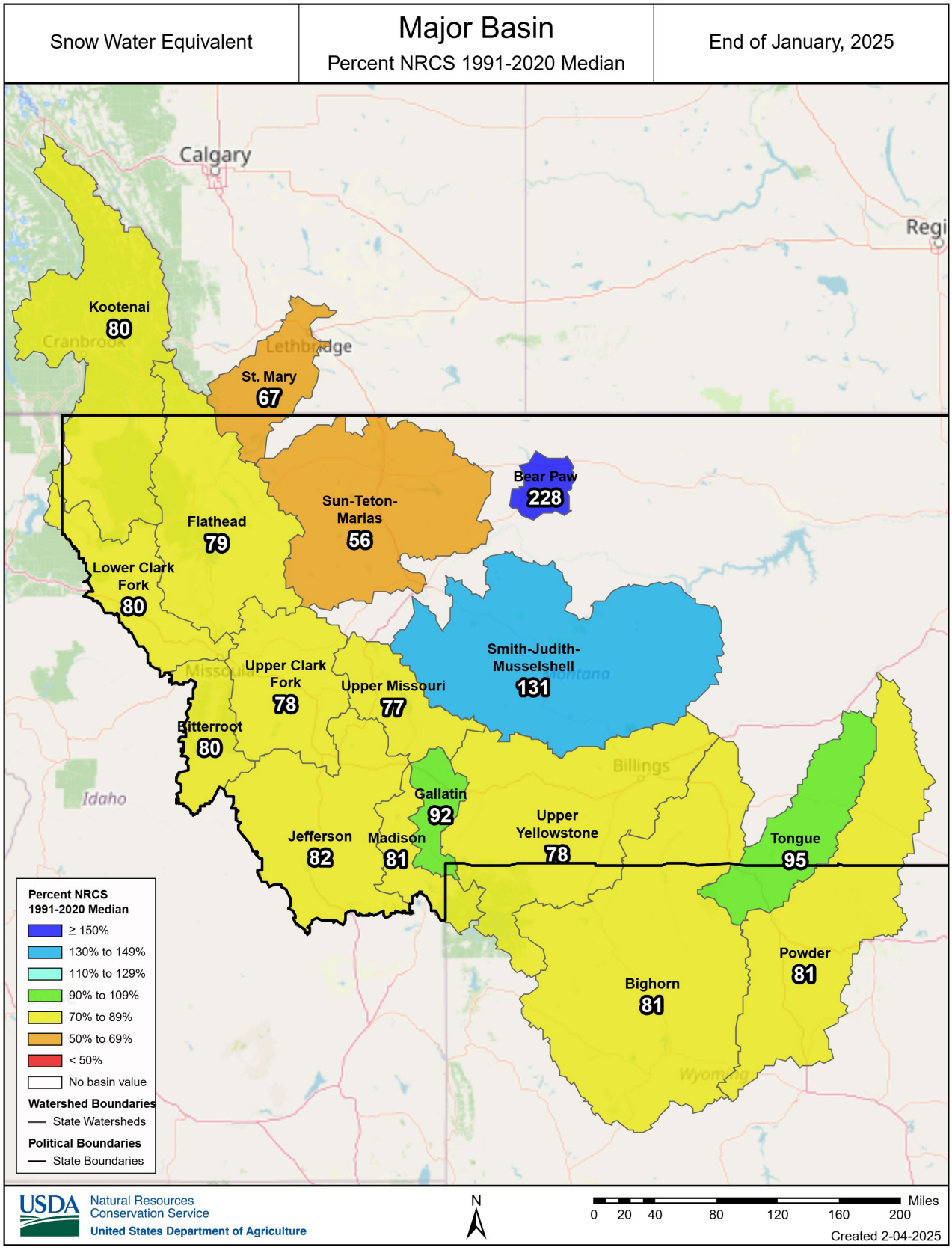
Most snow monitoring stations across the state are reporting 0-4" of snow water equivalent below normal, with some stations reporting up to 2" of above normal. Overall, snowpack conditions look similar to 2021, 2019, and 2003. There are two to three months left in the snowpack accumulation season, leaving time for the snowpack to recover if favorable weather conditions persist. In central Montana, SNOTEL sites are reporting about 2-7" of snow water equivalent above normal, resembling the snowpack on February 1, 2011. The St. Mary and Sun-Teton-Marias snowpack is 3-7" of snow water equivalent below normal and is similar to 2016 and 2005. Significant accumulation is needed on the Rocky Mountain Front over the next couple months for the snowpack to recover. With that said, it is not uncommon for that region to make significant snowpack gains later in the season.

Water Year 2025 - Major Basin - Snowpack Percent of Normal ('91-'20)

Basin	Nov 1	Dec 1	Jan 1	Feb 1	Mar 1	Apr 1	May 1	Jun 1
Kootenai	56	127	117	80	-	-	-	-
Flathead	51	124	105	79	-	-	-	-
Upper Clark Fork	38	83	72	78	-	-	-	-
Bitterroot	74	99	91	80	-	-	-	-
Lower Clark Fork	55	134	112	80	-	-	-	-
Jefferson	44	81	75	82	-	-	-	-
Madison	55	88	84	81	-	-	-	-
Gallatin	53	85	93	92	-	-	-	-
Upper Missouri	-	67	67	77	-	-	-	-
Smith-Judith-Musselshell	2	86	91	131	-	-	-	-
Sun-Teton-Marias	25	81	70	56	-	-	-	-
St. Mary	50	106	94	67	-	-	-	-
Upper Yellowstone	41	62	72	78	-	-	-	-
Bighorn	54	65	69	81	-	-	-	-
Powder	54	65	60	81	-	-	-	-
Tongue	80	81	65	95	-	-	-	-
Bear Paw	-	222	136	228	-	-	-	-

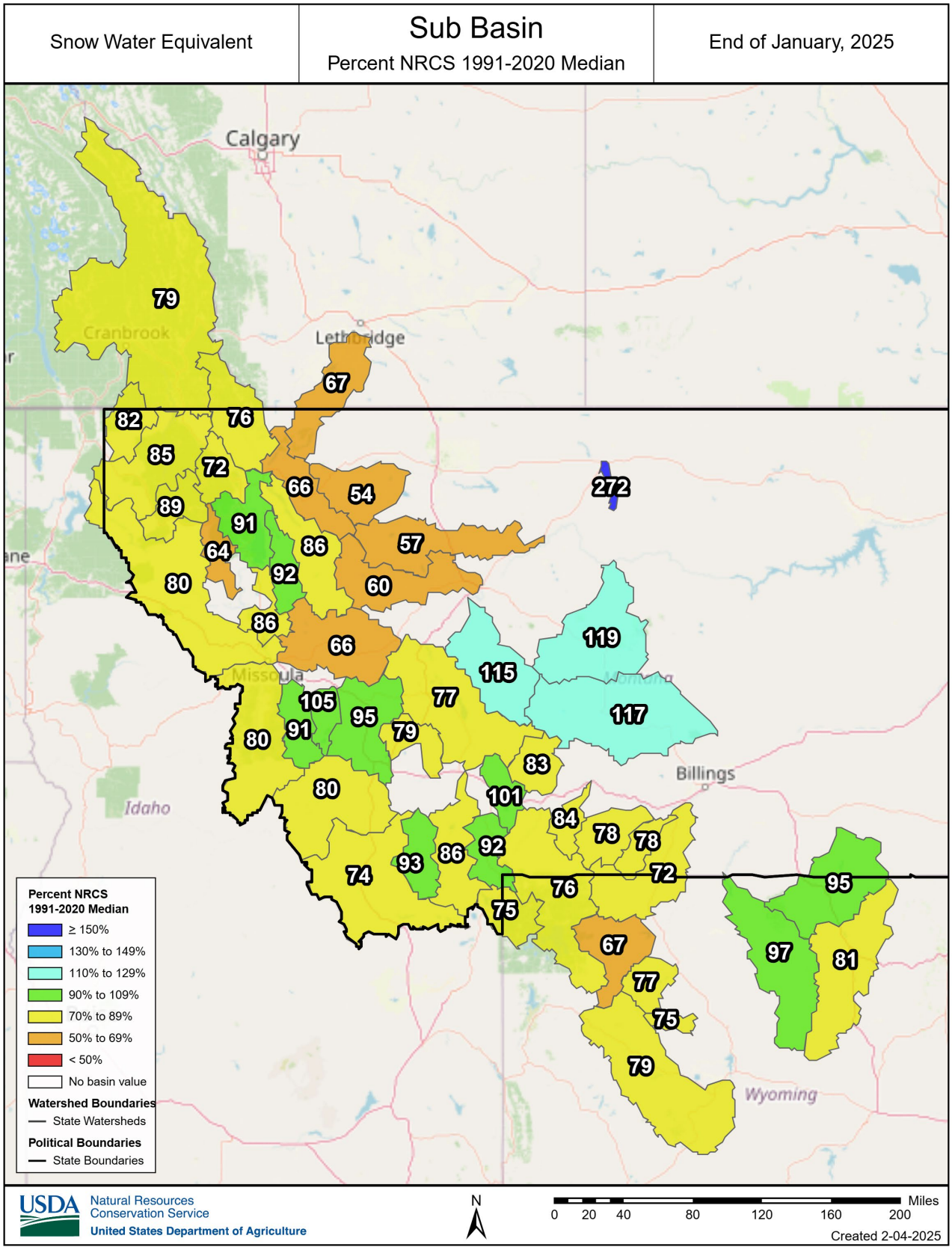
Statewide Overview

Snowpack (Continued)



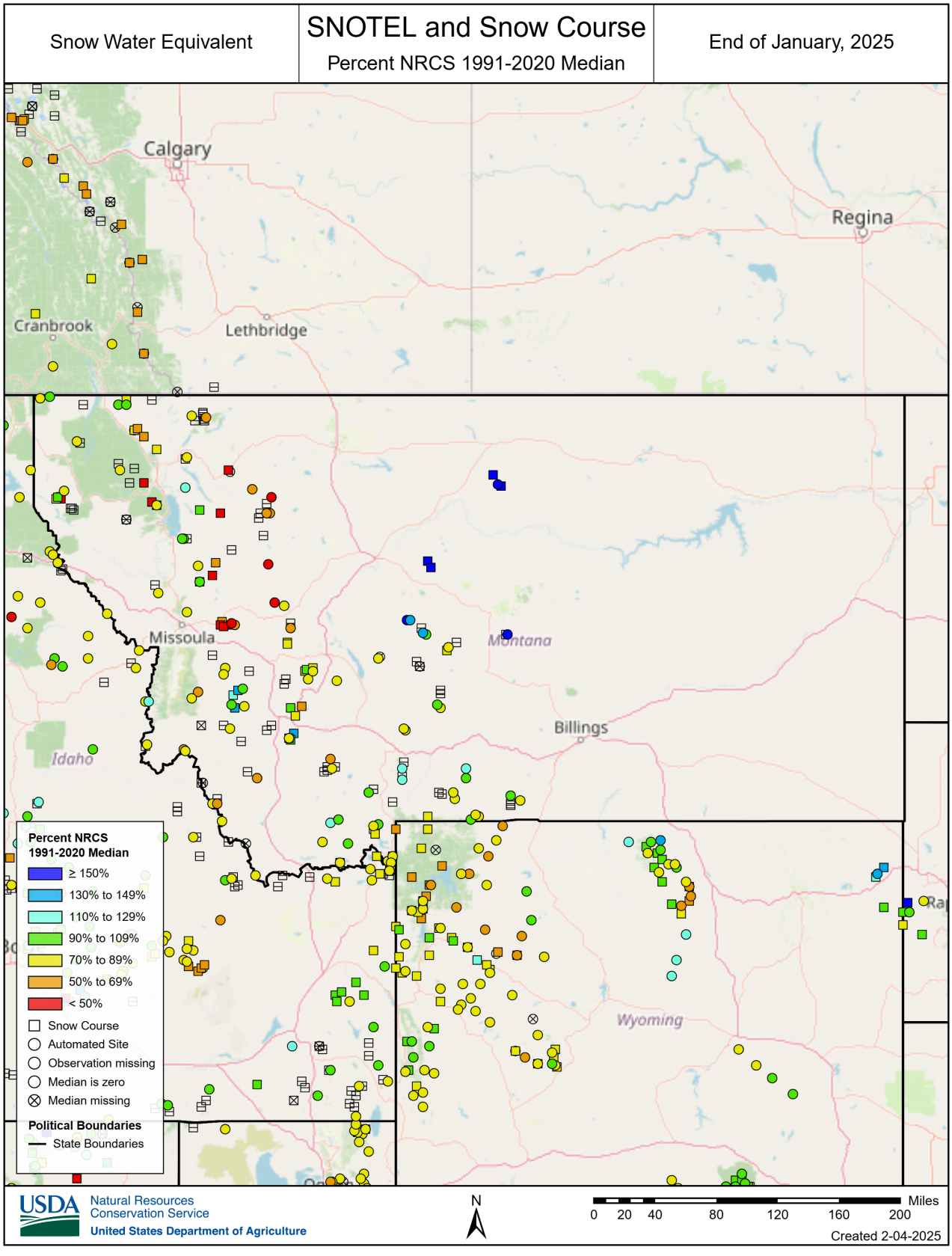
Statewide Overview

Snowpack (Continued)



Statewide Overview

Snowpack (Continued)



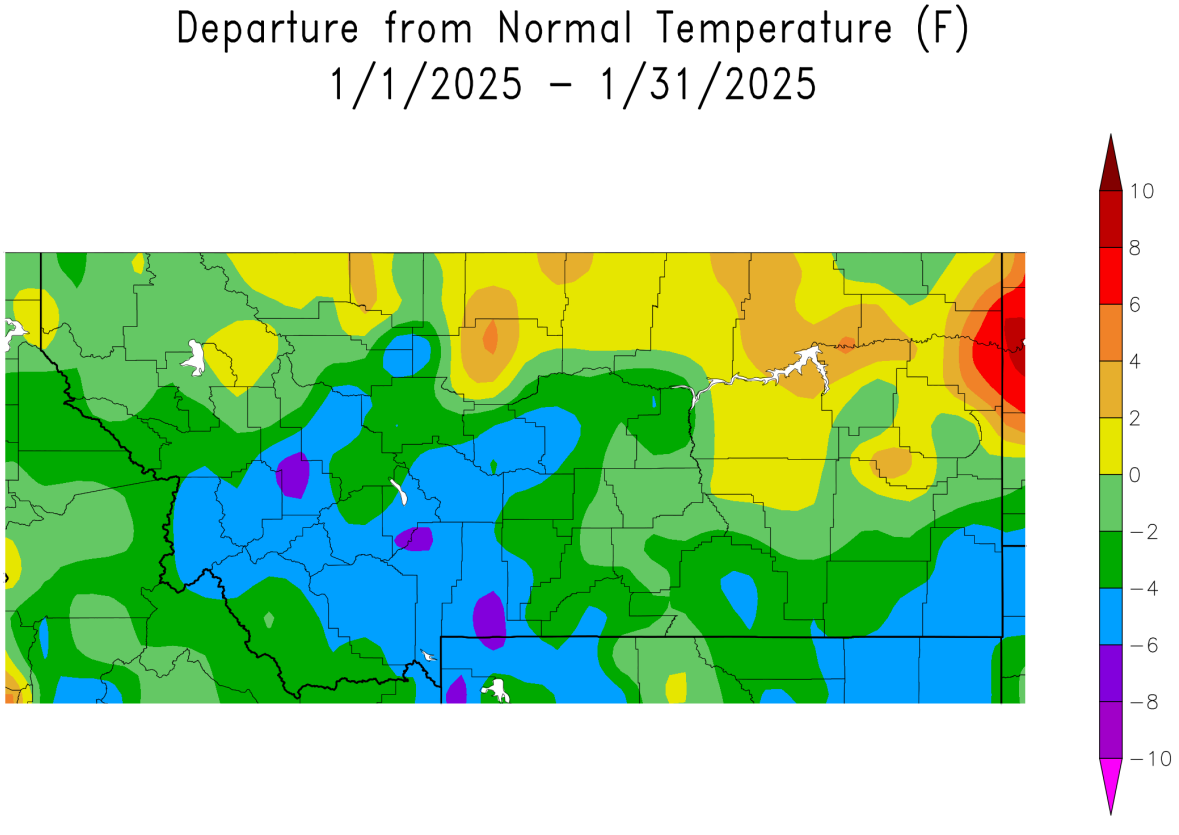
Statewide Overview

Temperature

Several notable weather pattern shifts and swings influenced temperatures during January, including the short but powerful arctic blast peaking on January 21. This means that the monthly average temperatures miss much of the story. Despite this, January temperatures averaged slightly above normal in northeast Montana and below average in southwest Montana. The rest of the state remained near normal during January.

As a warm December ended, temperatures transitioned in early January to colder than average east of the continental divide, while warm temperatures persisted along the western border. This split pattern persisted for the first two weeks of January. The next shift ushered in several regionwide temperature swings. On January 17, statewide SNOTEL sites averaged near 10 °F above normal, with daytime highs well above freezing. Four days later, on January 21, temps dipped to 26 °F below normal. Forty-seven SNOTEL sites recorded values below -20 °F and several sites notched -40 °F. Temperatures rebounded by January 23 and lingered slightly below normal until January 26 when a second smaller cold front suppressed nighttime lows at a handful of SNOTEL sites to -25 °F. January ended with a pattern opposite of the way it started. Southwest Montana experienced temperatures below normal and northeast Montana recorded temperatures well above normal. Statewide SNOTEL stations averaged 3-5 °F above normal the last week of January.

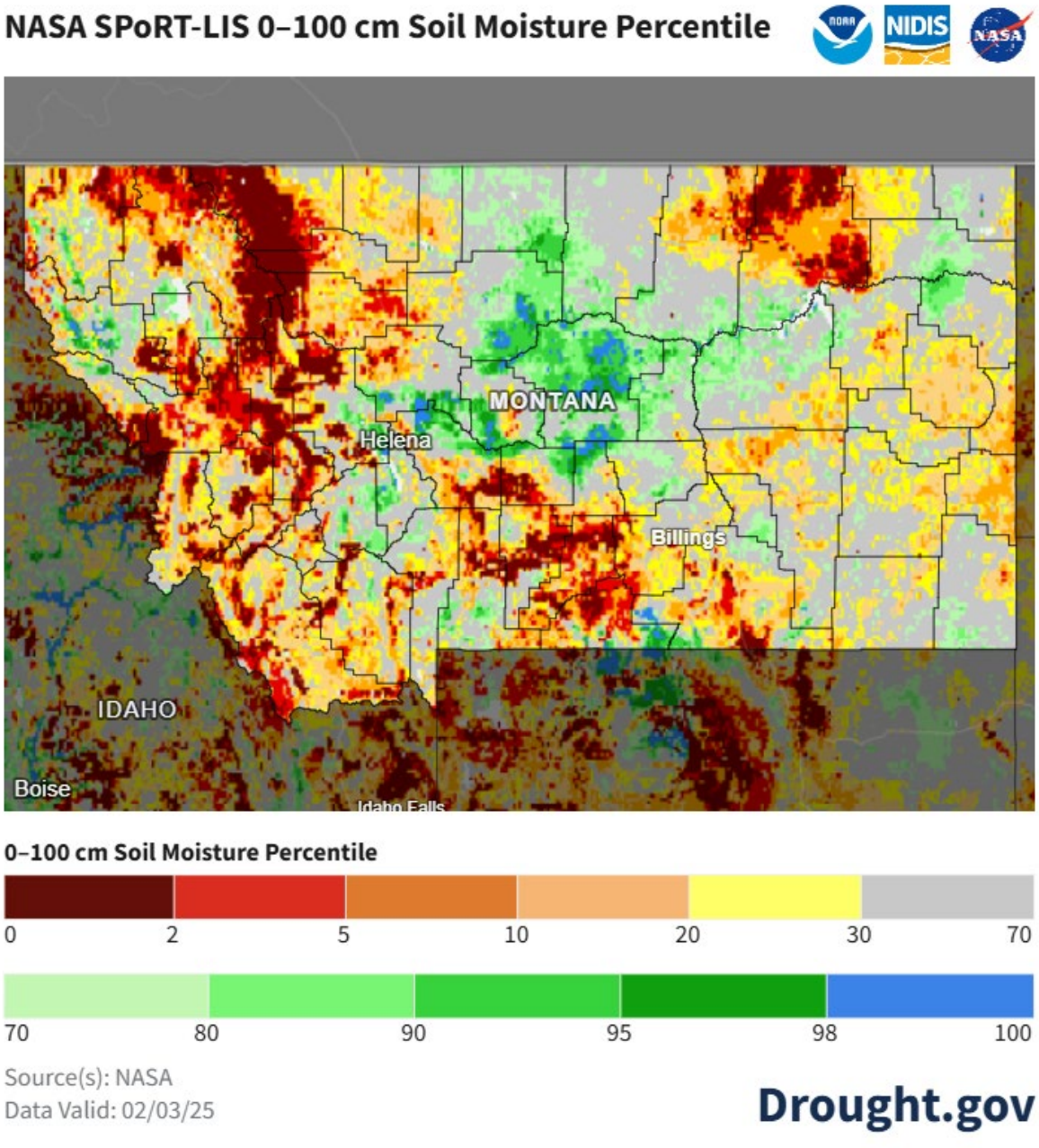
Despite the large temperature swings and warmer than normal periods, temperatures remained much more seasonally appropriate this time last year. Temperatures were not warm enough to see significant melting across SNOTEL sites.



Statewide Overview

Soil Moisture

Since last month, there weren't significant soil moisture changes in the top 0-100 cm. Widespread portions of the state still have soil moisture percentiles as low as 0-2%. Some other scattered areas have near normal soil moisture percentiles at 30-70%. The central portion of the state, as well as isolated parts of the far northwest, have soil moisture percentiles in the ranges of 80-100%. Cold temperatures during the month of January could explain the lack of soil moisture changes. Continued snow accumulation is needed to improve soil moisture percentiles as we move closer to spring.



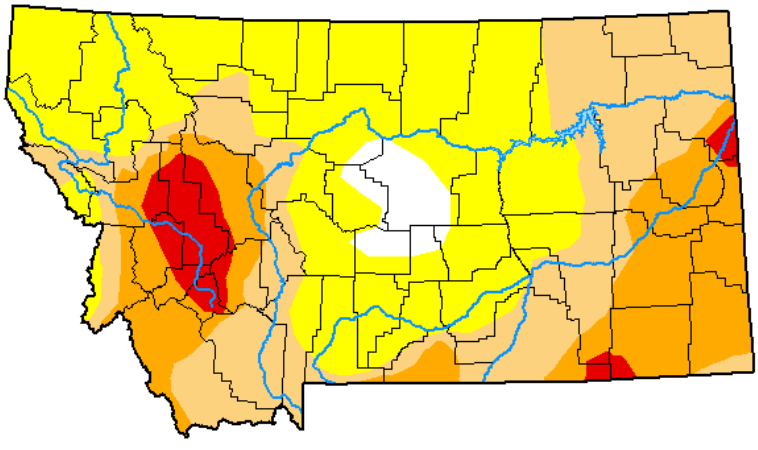
Statewide Overview

Drought Monitor

Drought conditions in the state of Montana improved slightly since last month. Less of the state is in extreme drought. Since the start of the calendar year, the area in extreme drought went from about 14% to 5%. The southeast portion of the state is an example of this improvement, conditions improved from extreme drought to severe drought. Despite some drought condition improvements, most of the state is classified as abnormally dry. Currently, only 4% of the state is drought free, a decrease from 7% at the start of the year. The northwest corner of the state changed from no drought to abnormally dry. The central portion of the state changed from abnormally dry to no drought conditions. Drought conditions persist from last year. The snow accumulations this winter and future precipitation will determine future changes in drought conditions.

U.S. Drought Monitor

Montana



January 28, 2025

(Released Thursday, Jan. 30, 2025)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	3.51	96.49	53.27	23.95	4.58	0.00
Last Week *01-21-2025*	10.21	89.79	53.27	27.60	13.79	0.00
3 Months Ago *10-29-2024*	14.53	85.47	55.10	35.67	13.88	0.90
Start of Calendar Year *01-07-2025*	6.70	93.30	54.22	27.25	13.79	0.00
Start of Water Year *10-01-2024*	15.18	84.82	42.24	21.05	9.44	0.90
One Year Ago *01-30-2024*	20.00	80.00	40.55	18.69	0.00	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author:

Brian Fuchs

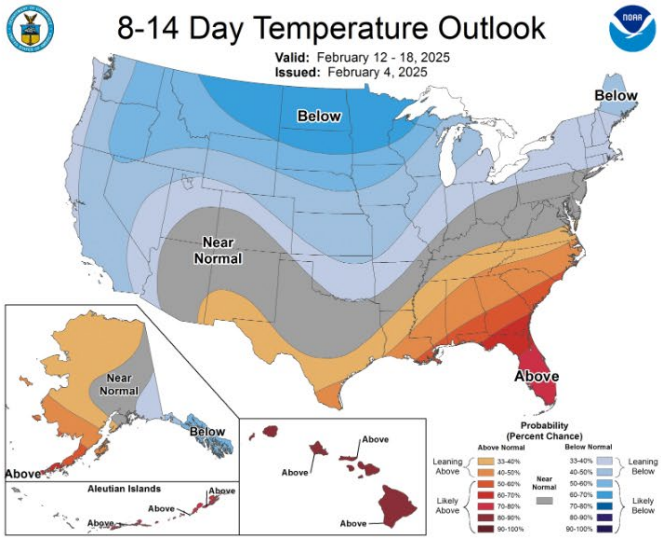
National Drought Mitigation Center

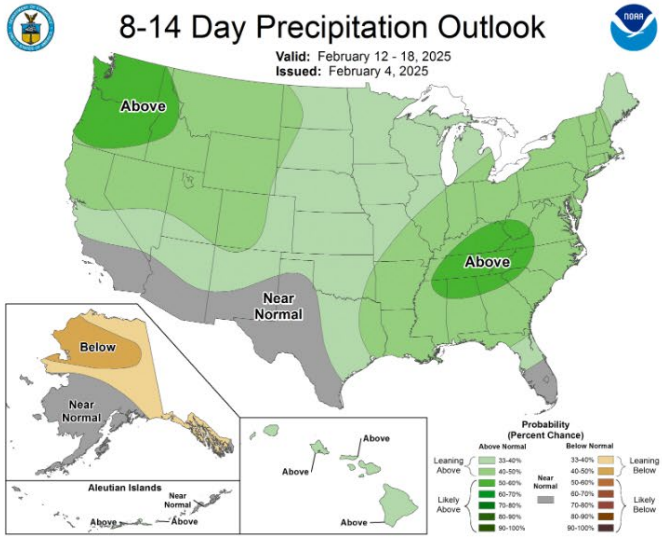
droughtmonitor.unl.edu

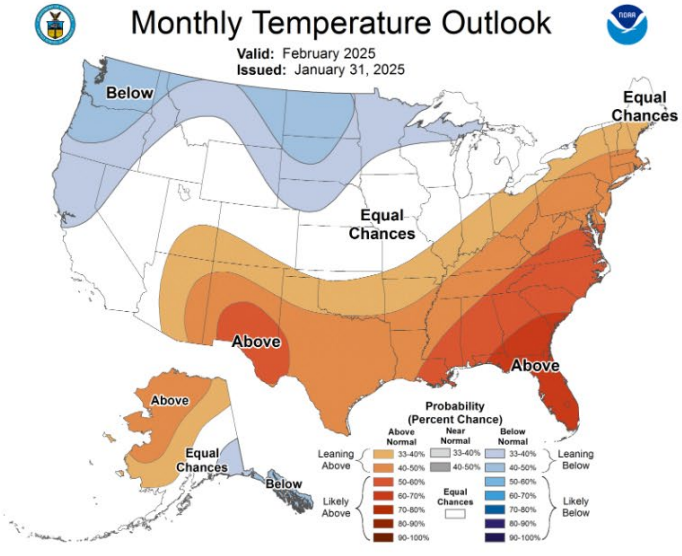
Statewide Overview

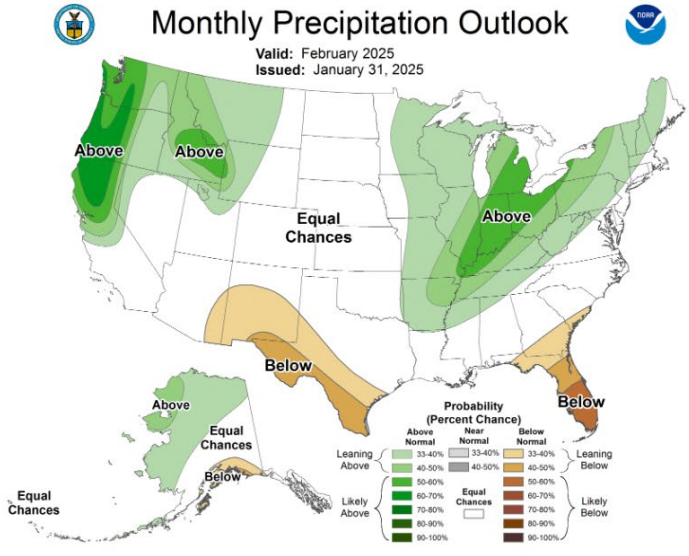
Weather Outlook

According to the NOAA Climate Prediction Center, temperatures will likely be below normal in the next 8-14 days across the state, with the northeastern half of the state having slightly higher chances of being below normal. During this time the whole state leans towards above normal precipitation. The monthly outlook (issued January 31) predicts lower than normal temperatures for most of the state, except for southwest Montana where there are equal chances of above or below normal temperatures. Monthly precipitation in the southwest portion of the state will likely be above normal. The rest of western Montana leans toward above normal precipitation, and the eastern quarter of the state has equal chances of above or below normal precipitation.



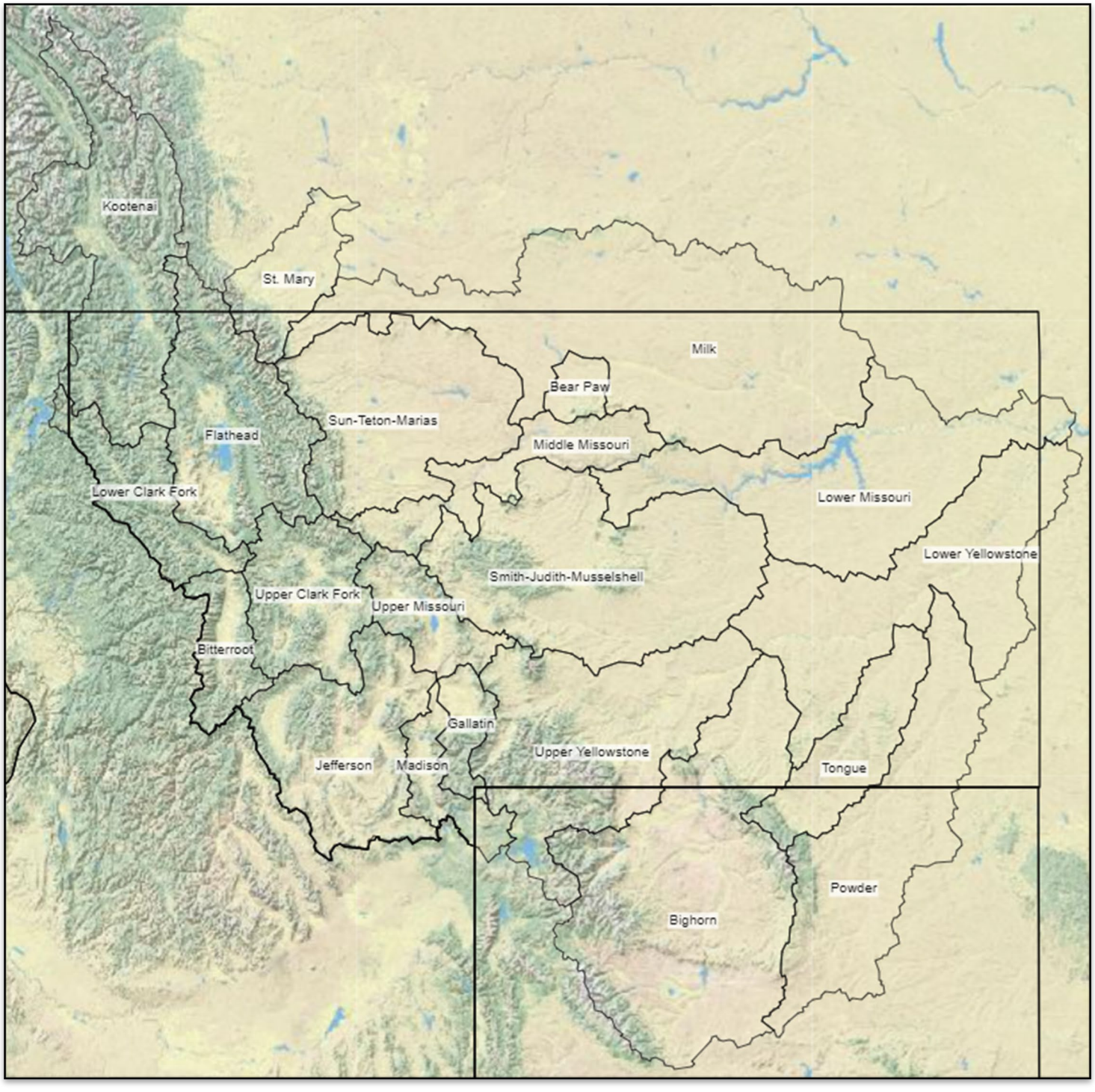






Basin Overview

Montana River Basin Definitions

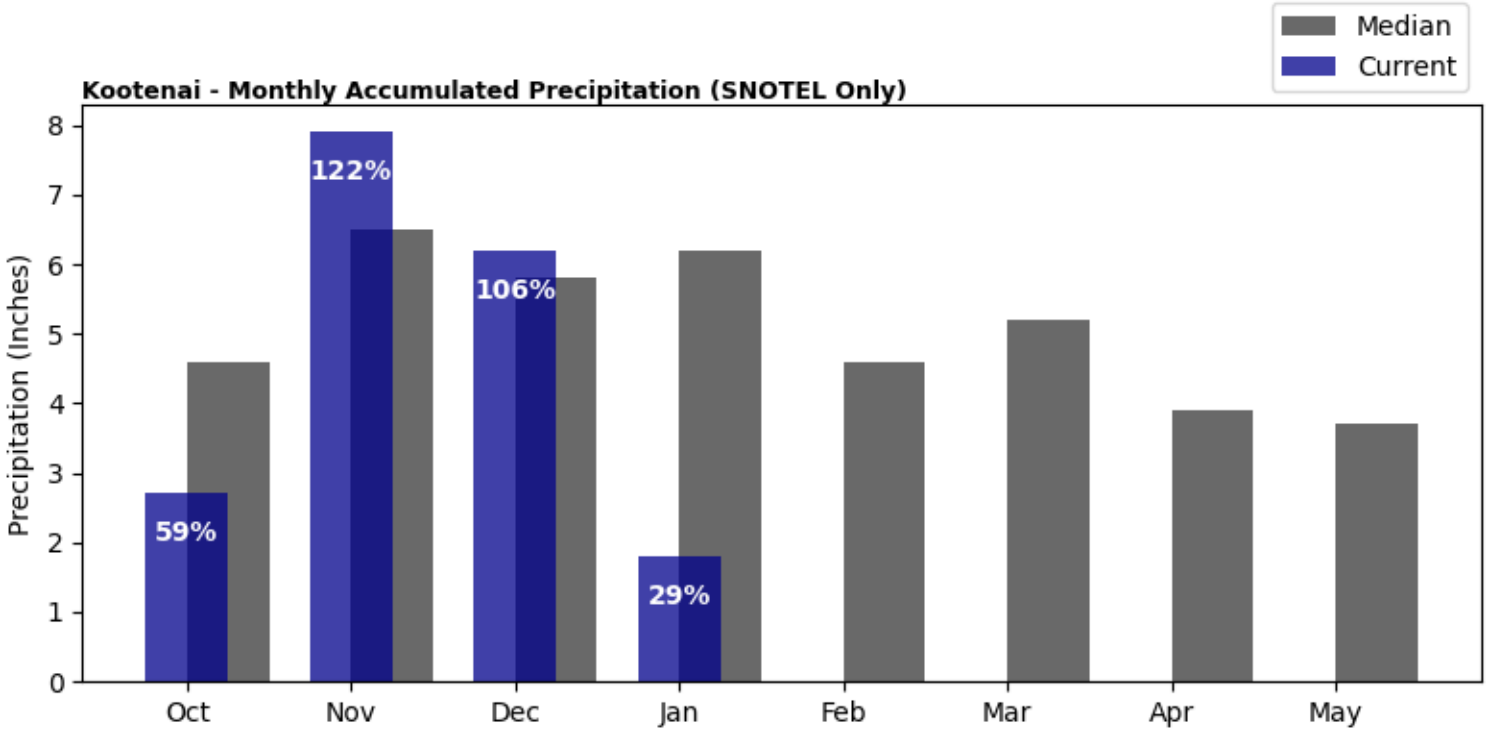


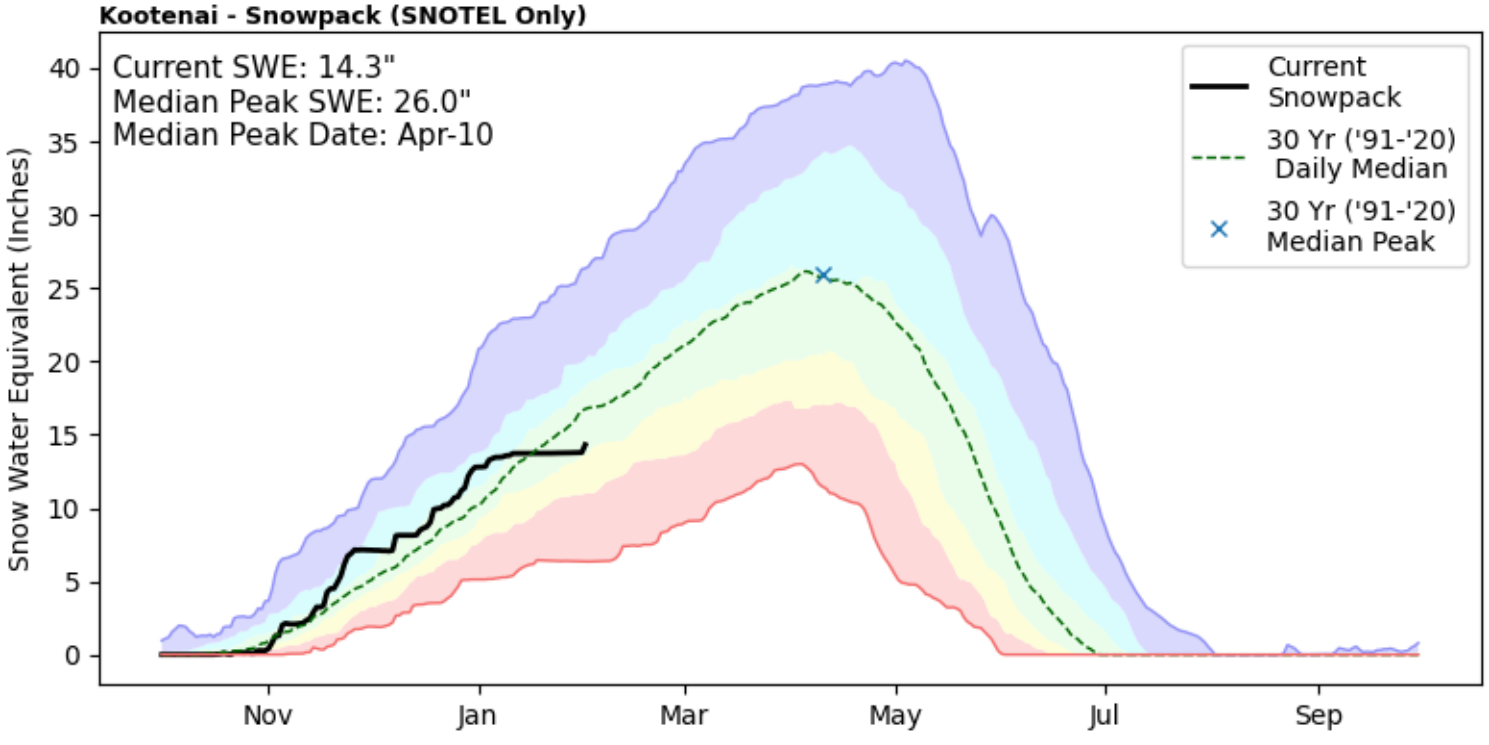
The following basin overview sections only include basins that have SNOTEL sites. For example, there is no basin overview for the Lower Yellowstone, because there are no SNOTEL sites associated with that basin. Water supply information for basins not included in the following sections can be found at https://nwcc-apps.sc.egov.usda.gov/

Basin Overview

Kootenai

Precipitation in January was well below normal at 29%, which brings the seasonal accumulation (October-January) to 75% of median. The snowpack in the Kootenai is below normal at 80% of median, compared to 67% at this time last year.

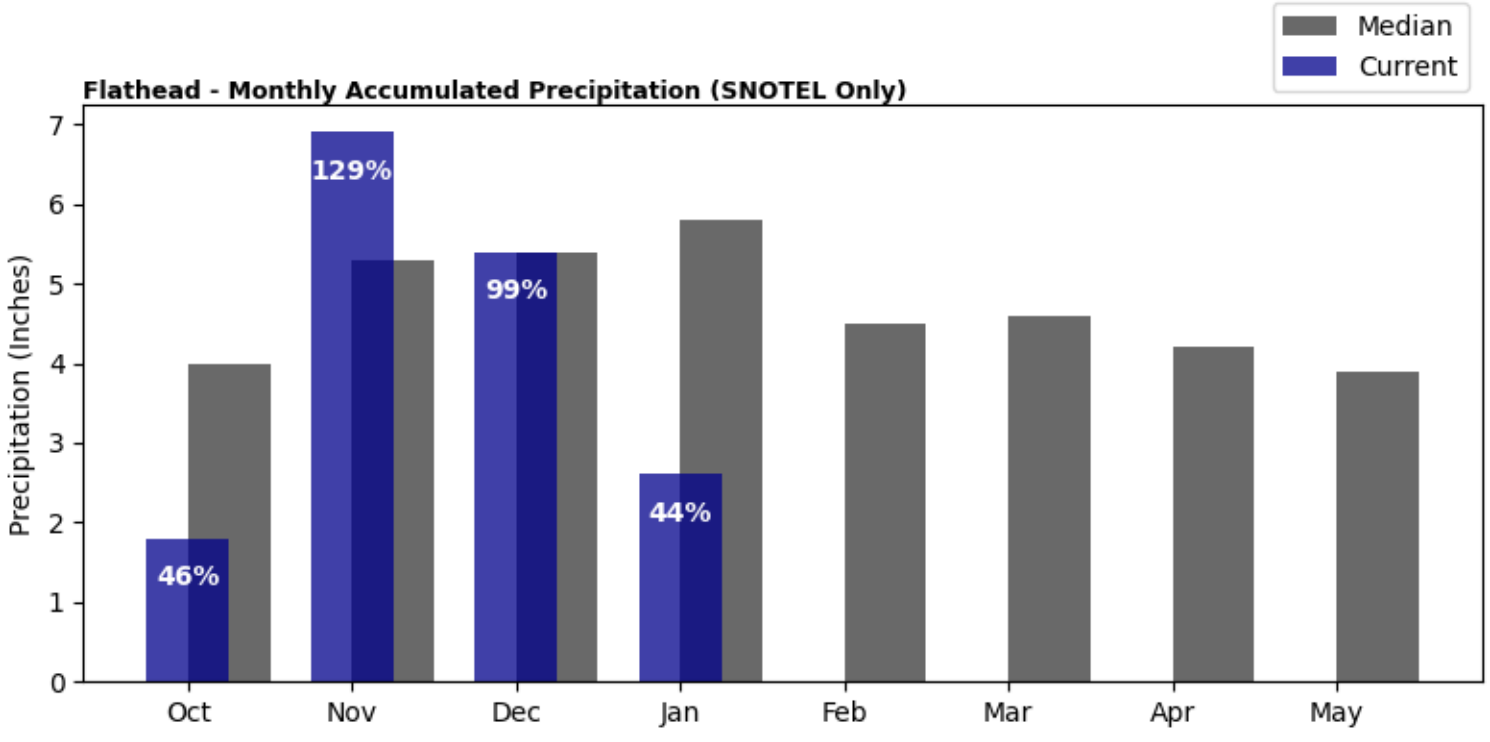


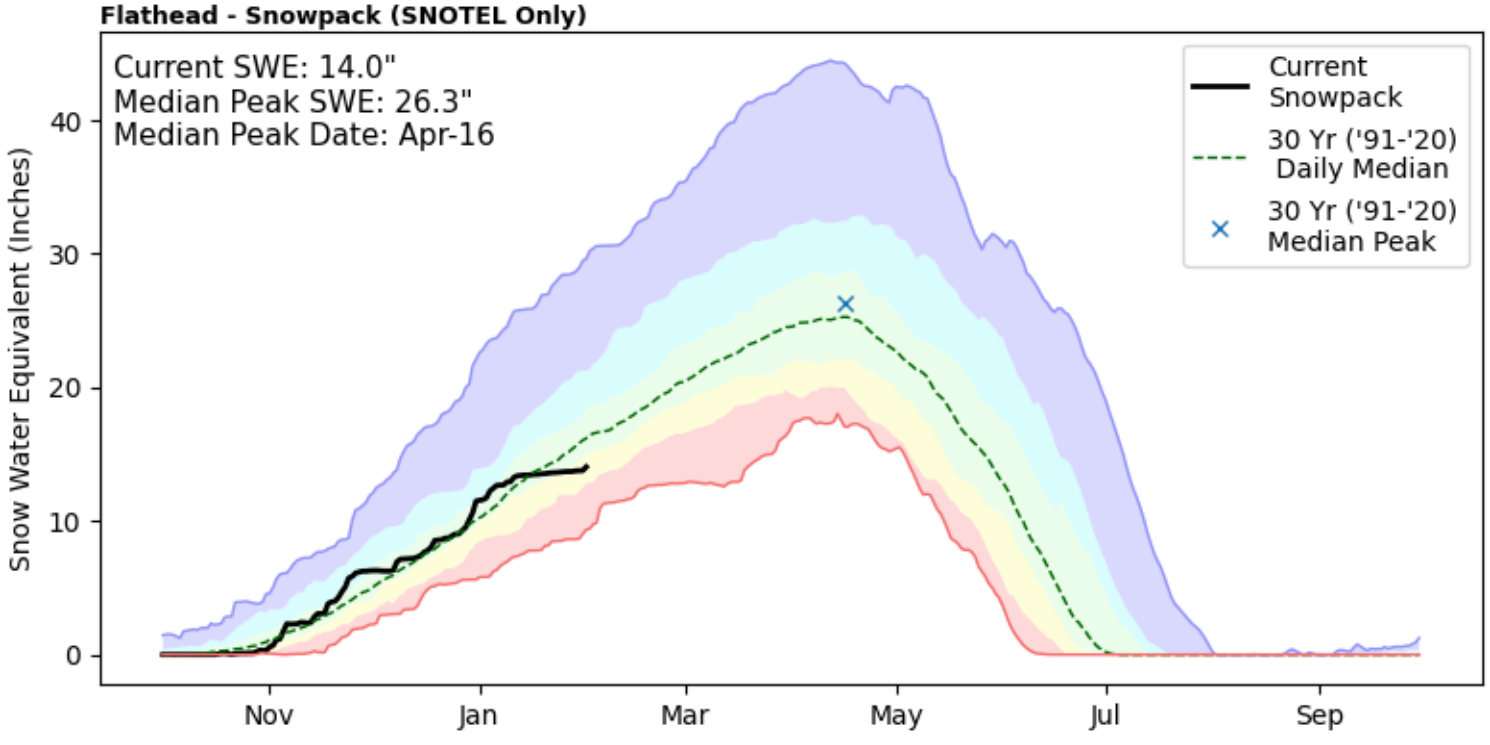


Basin Overview

Flathead

Precipitation in January was well below normal at 44%, which brings the seasonal accumulation (October-January) to 79% of median. The snowpack in the Flathead is well below normal at 79% of median, compared to 65% at this time last year.

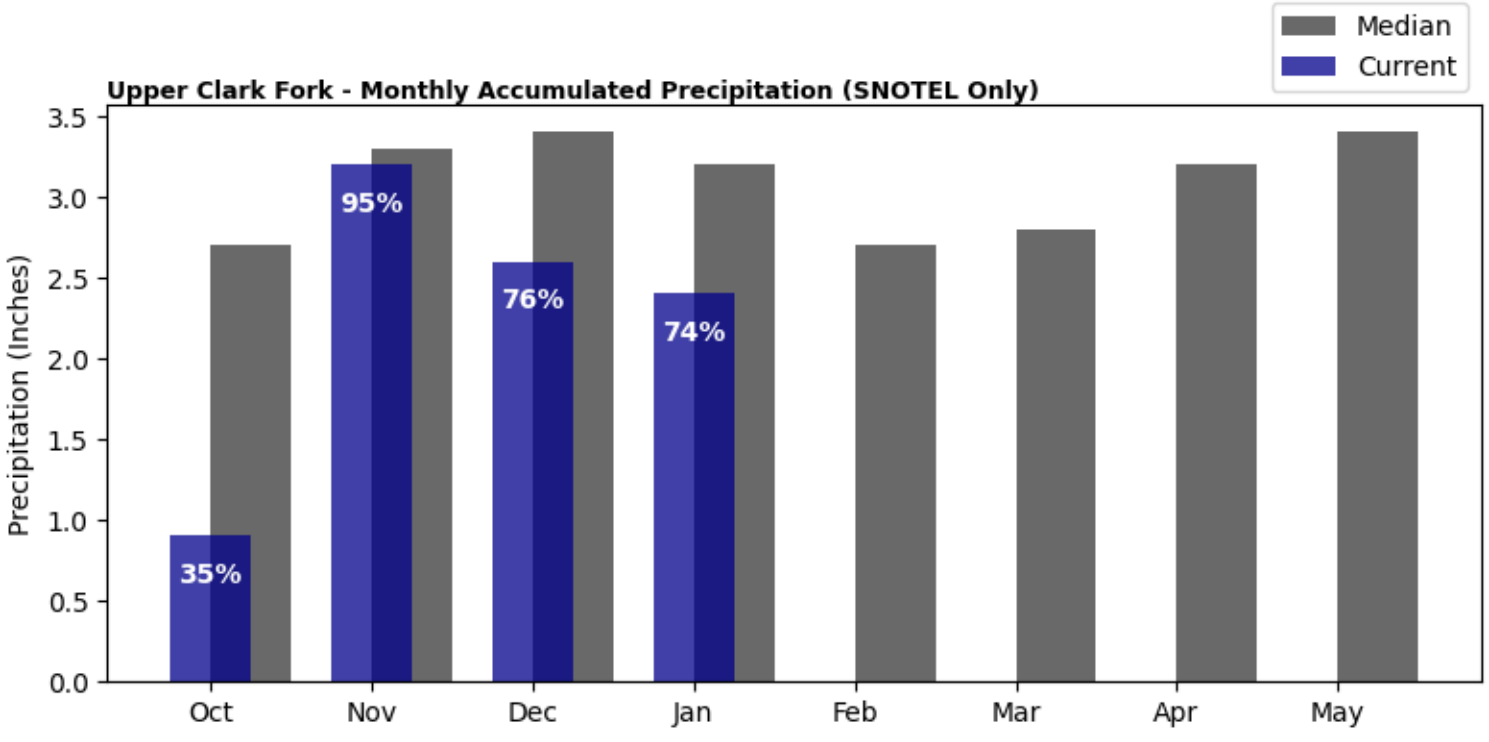


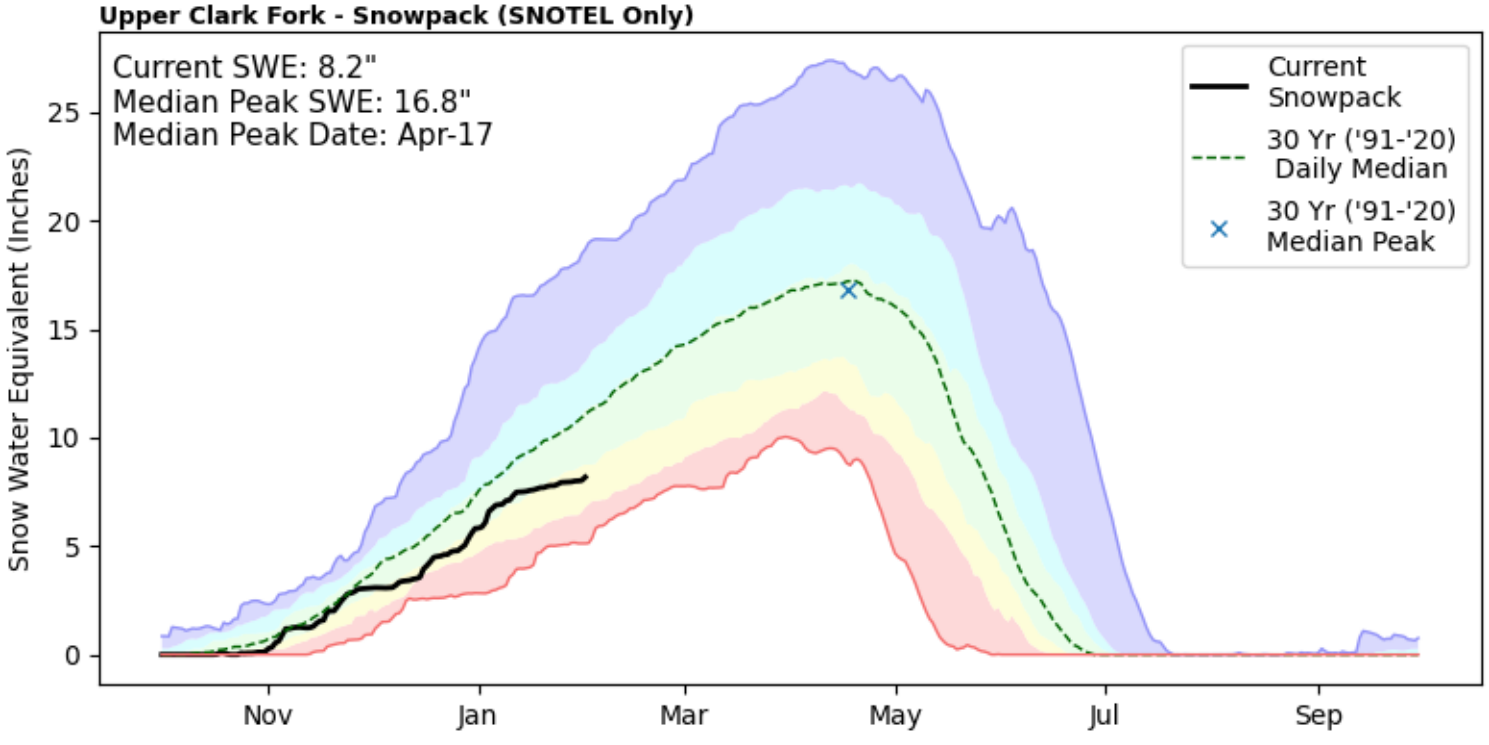


Basin Overview

Upper Clark Fork

Precipitation in January was well below normal at 74%, which brings the seasonal accumulation (October-January) to 71% of median. The snowpack in the Upper Clark Fork is well below normal at 78% of median, compared to 44% at this time last year.

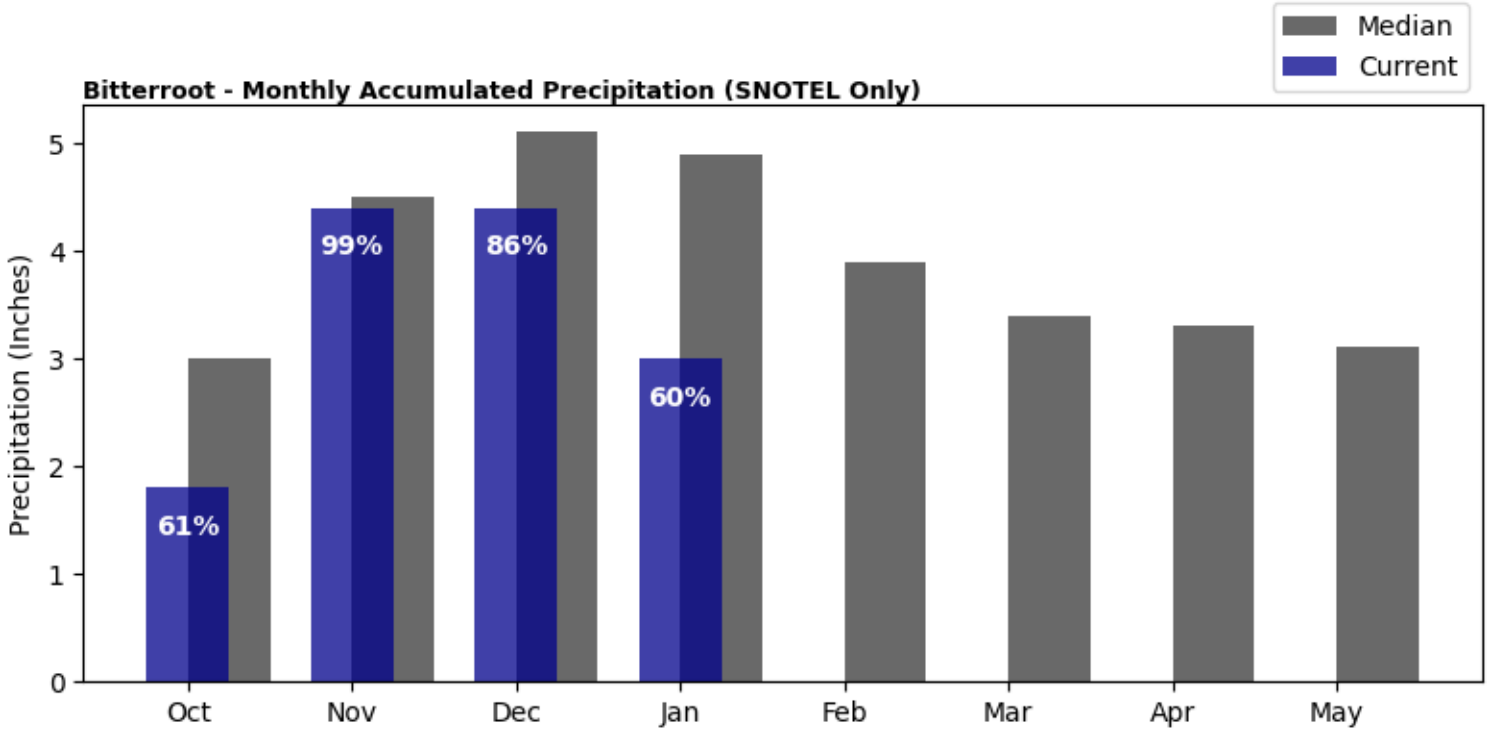


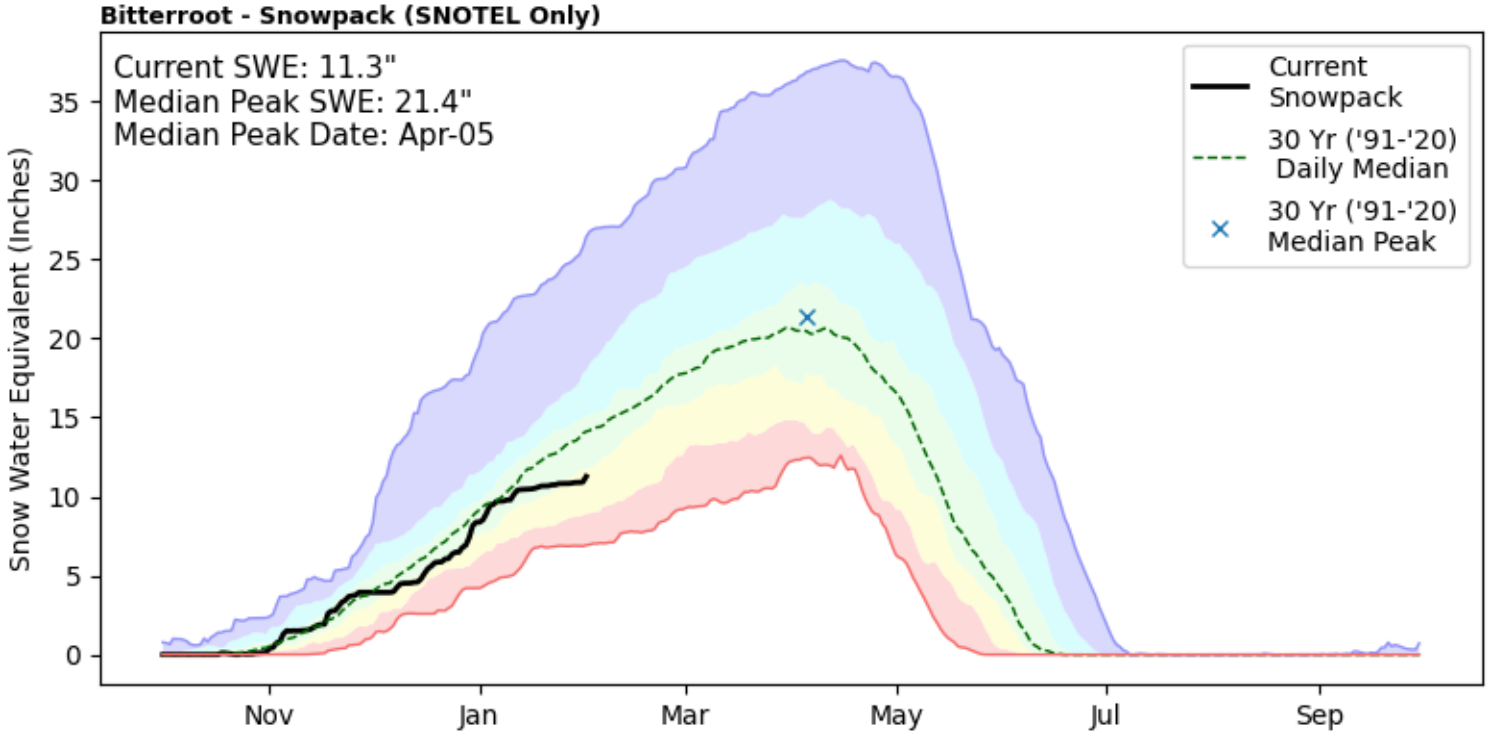


Basin Overview

Bitterroot

Precipitation in January was well below normal at 60%, which brings the seasonal accumulation (October-January) to 75% of median. The snowpack in the Bitterroot is below normal at 80% of median, compared to 60% at this time last year.

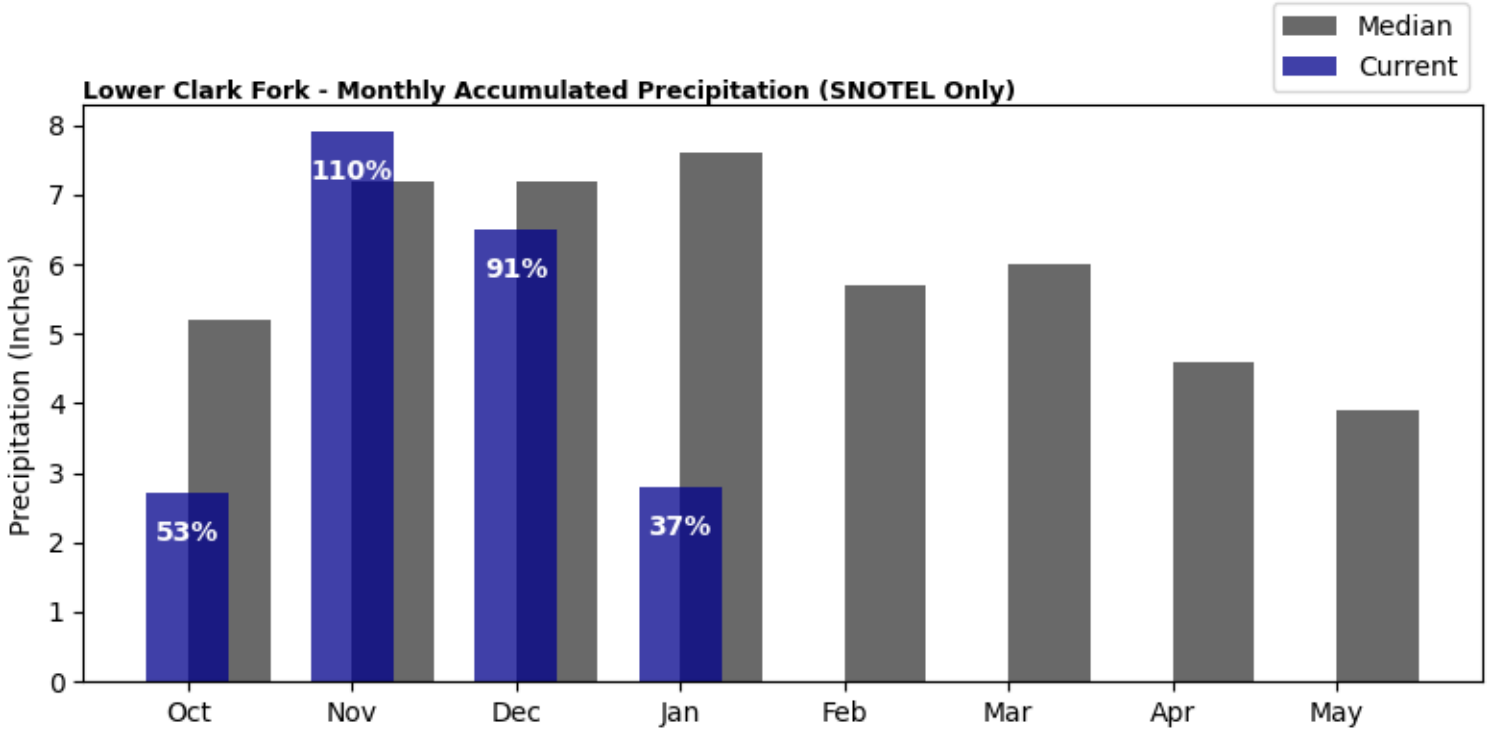


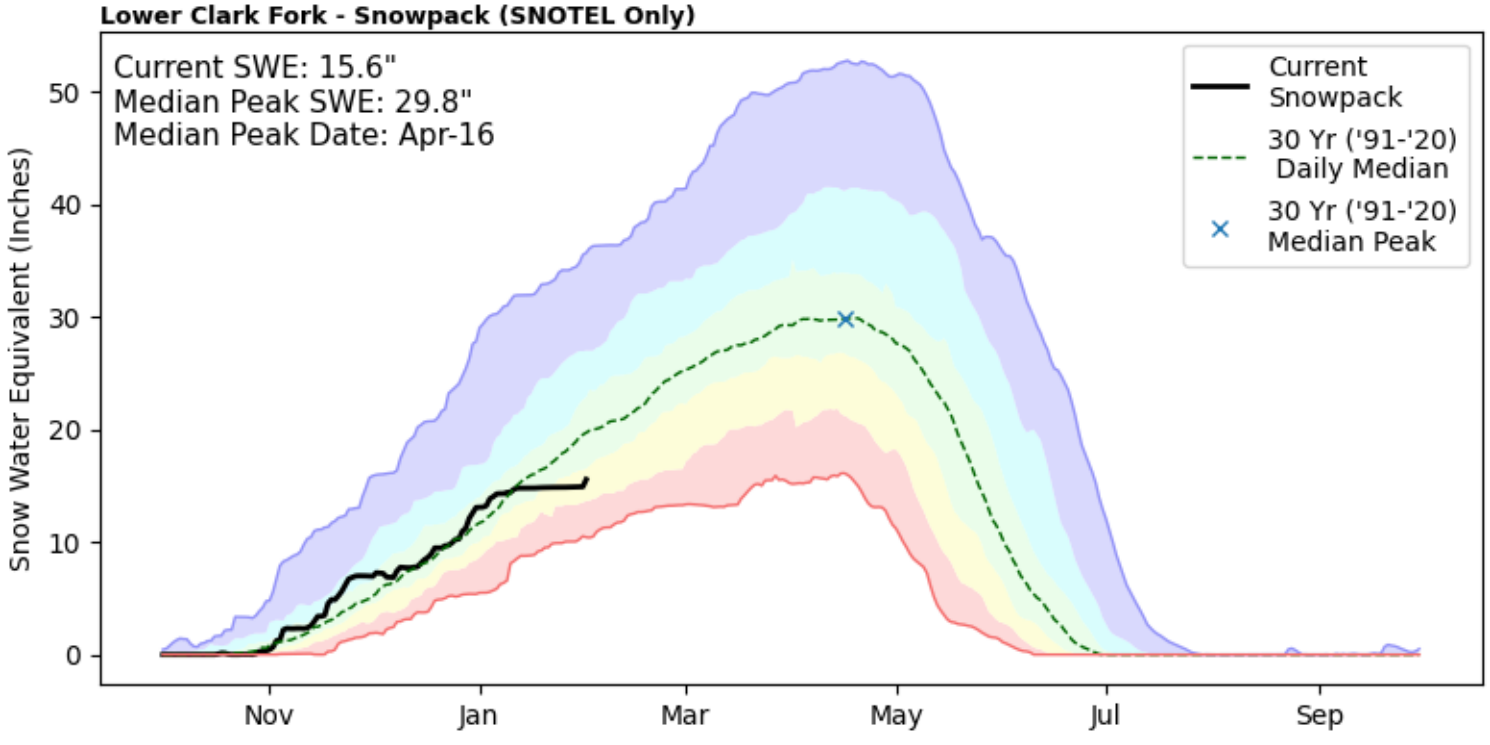


Basin Overview

Lower Clark Fork

Precipitation in January was well below normal at 37%, which brings the seasonal accumulation (October-January) to 69% of median. The snowpack in the Lower Clark Fork is below normal at 80% of median, compared to 55% at this time last year.

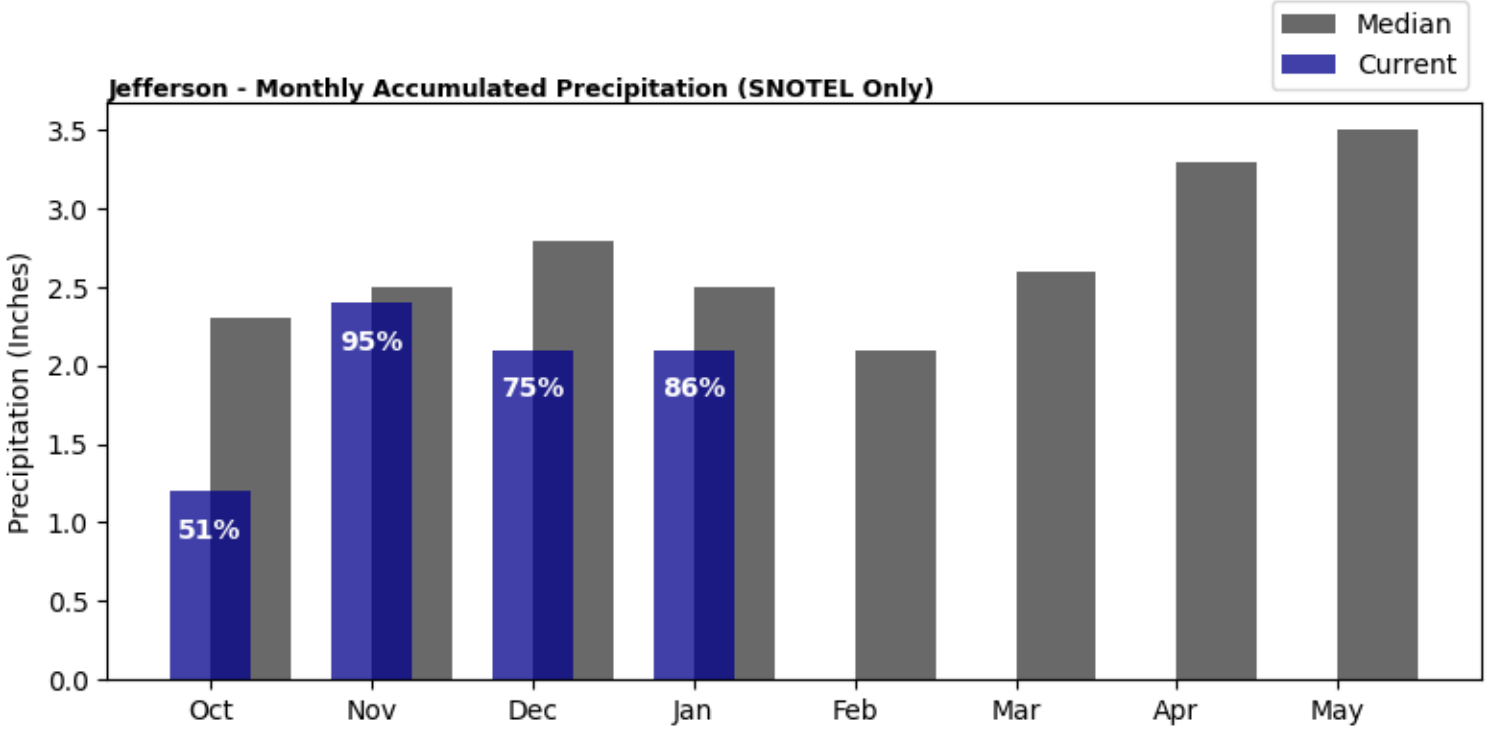


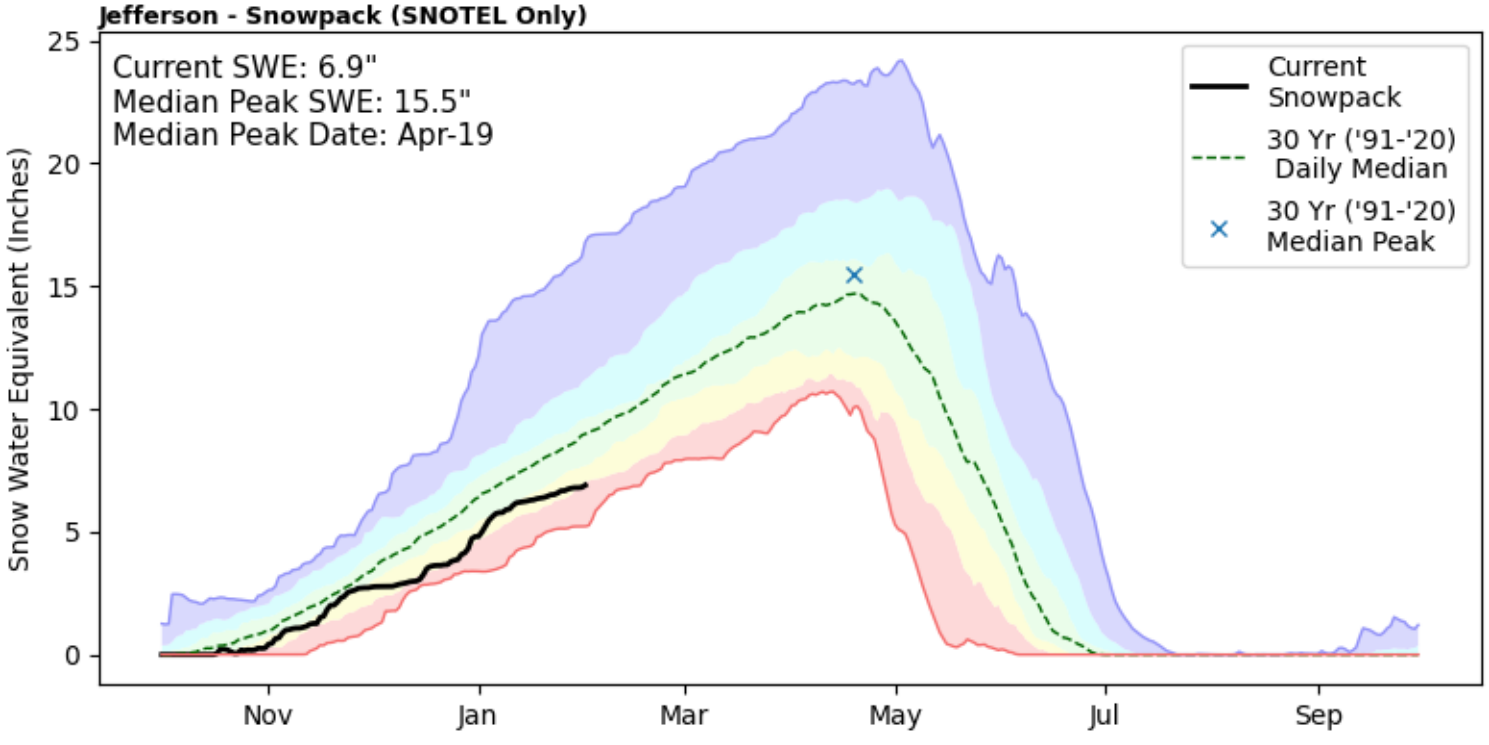


Basin Overview

Jefferson

Precipitation in January was below normal at 86%, which brings the seasonal accumulation (October-January) to 77% of median. The snowpack in the Jefferson is below normal at 82% of median, compared to 55% at this time last year.

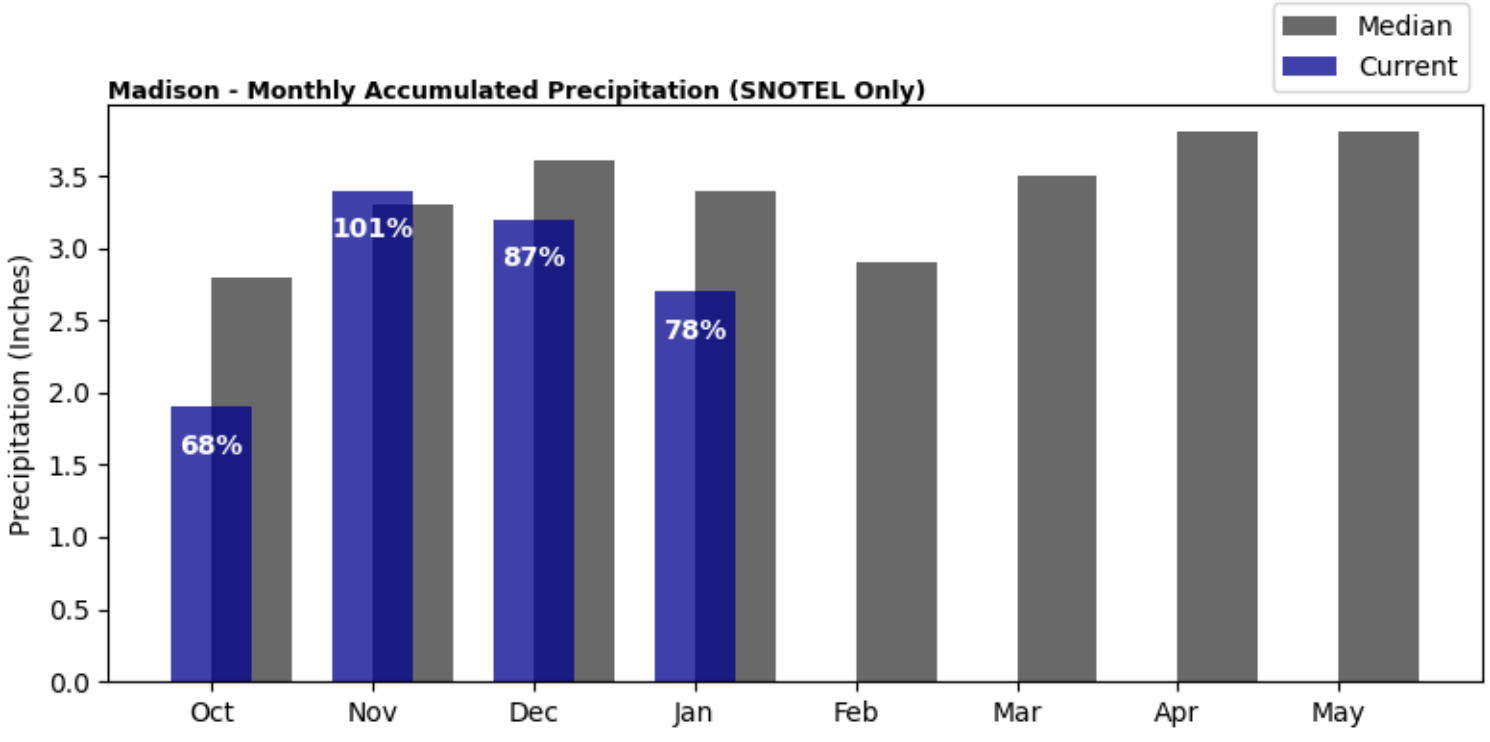


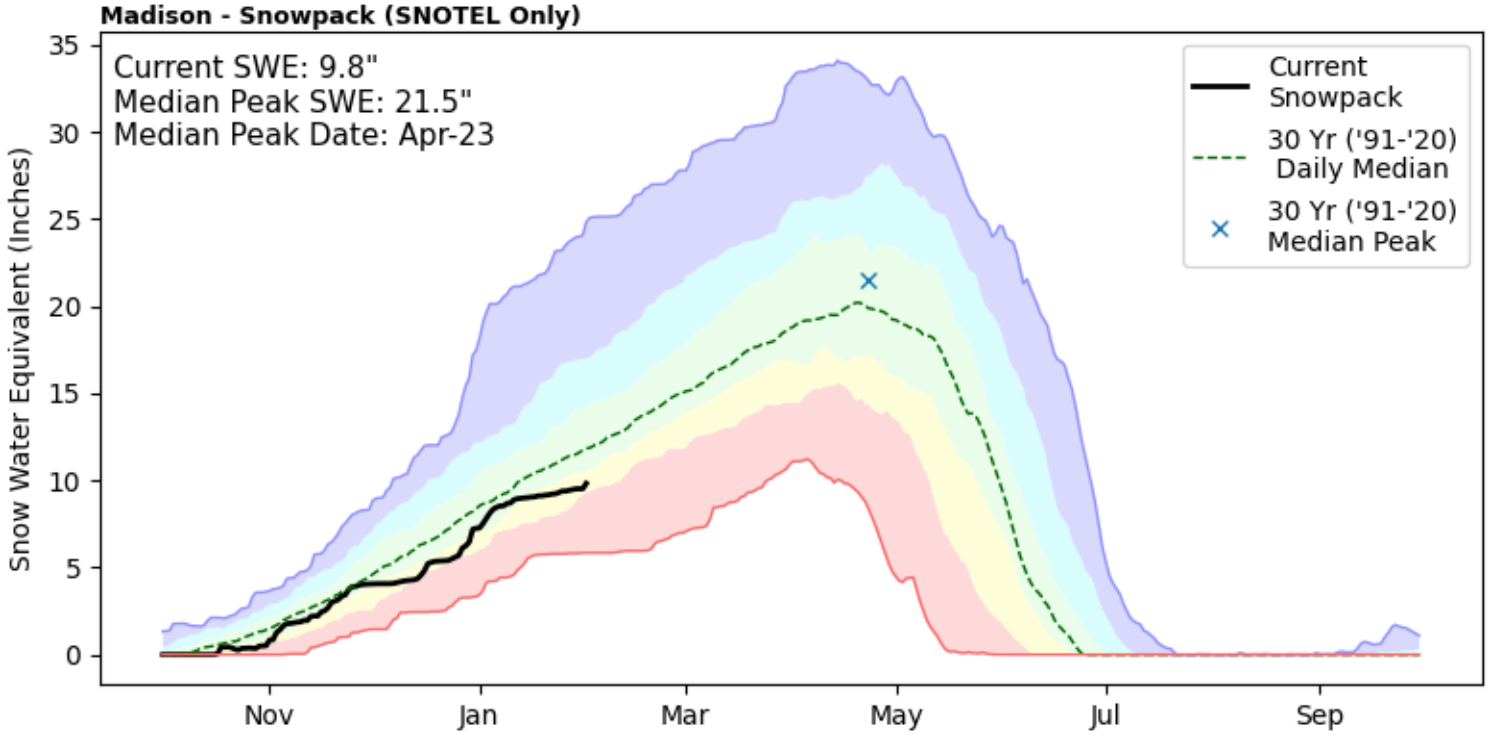


Basin Overview

Madison

Precipitation in January was well below normal at 78%, which brings the seasonal accumulation (October-January) to 84% of median. The snowpack in the Madison is below normal at 81% of median, compared to 57% at this time last year.

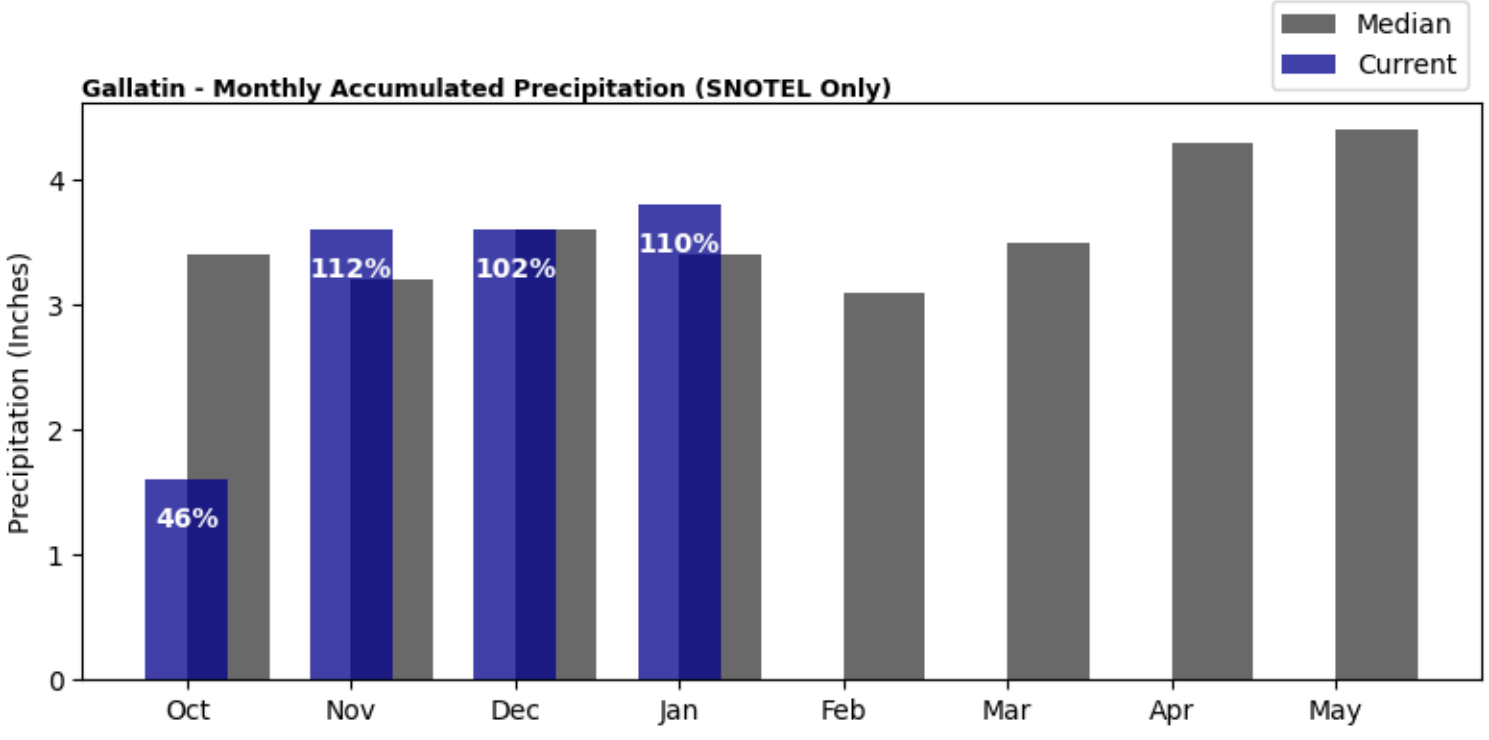


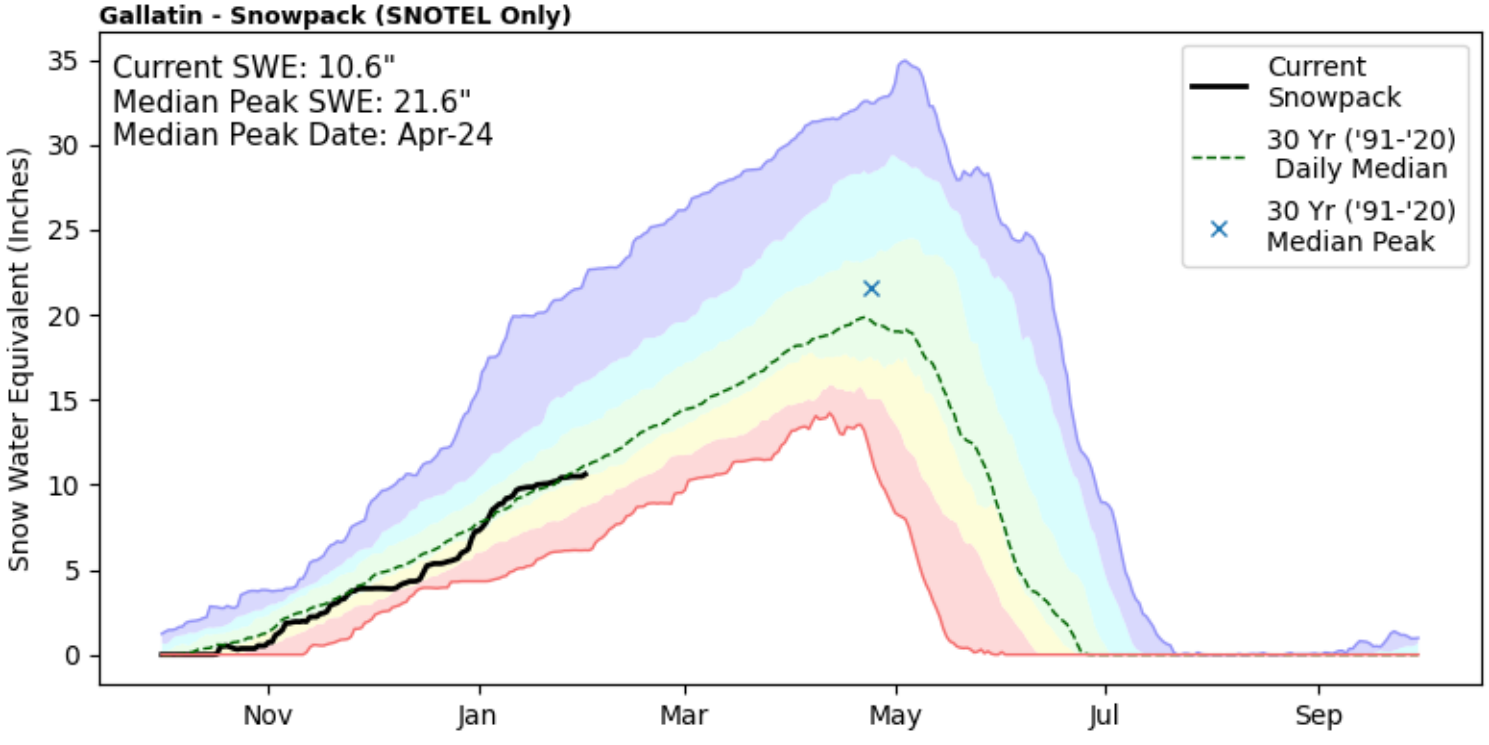


Basin Overview

Gallatin

Precipitation in January was above normal at 110%, which brings the seasonal accumulation (October-January) to 91% of median. The snowpack in the Gallatin is below normal at 92% of median, compared to 53% at this time last year.

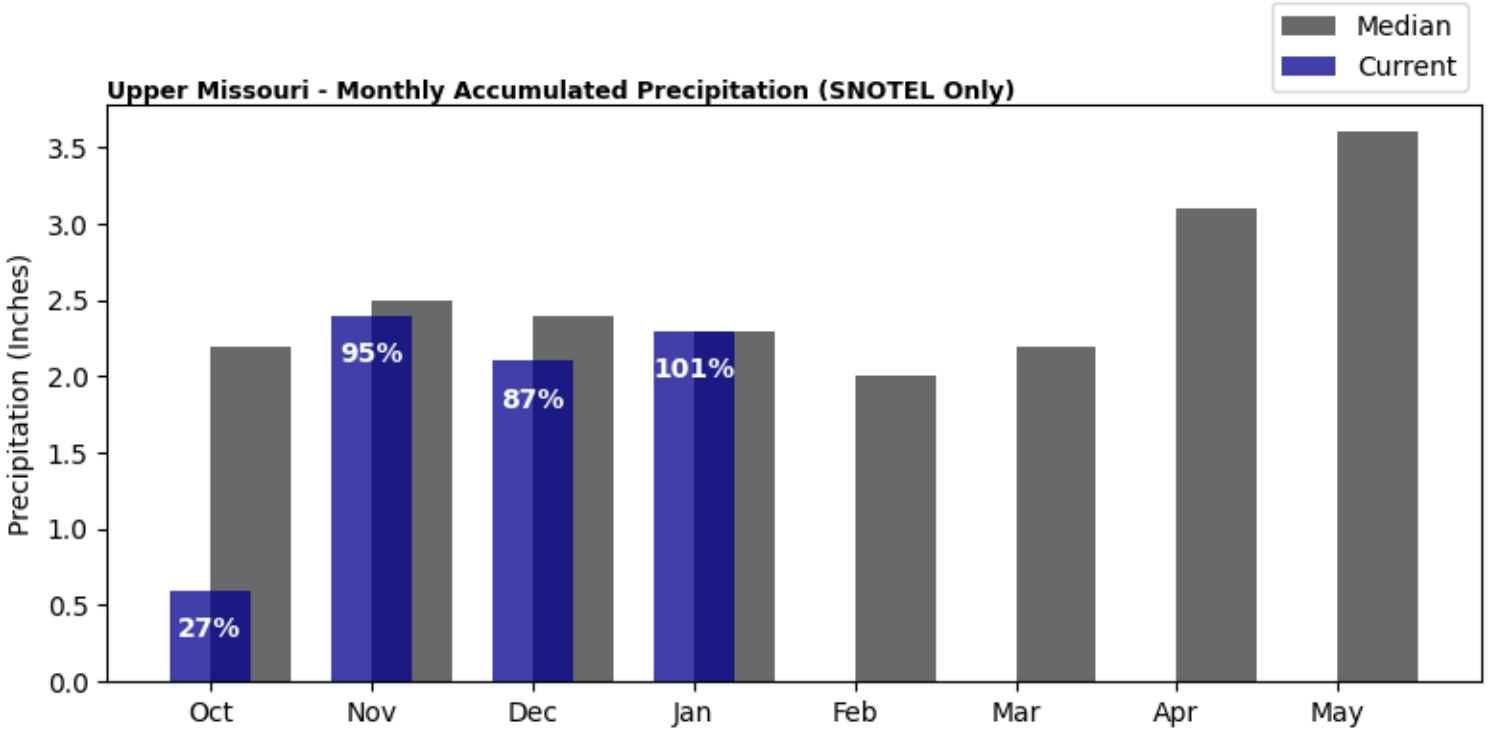


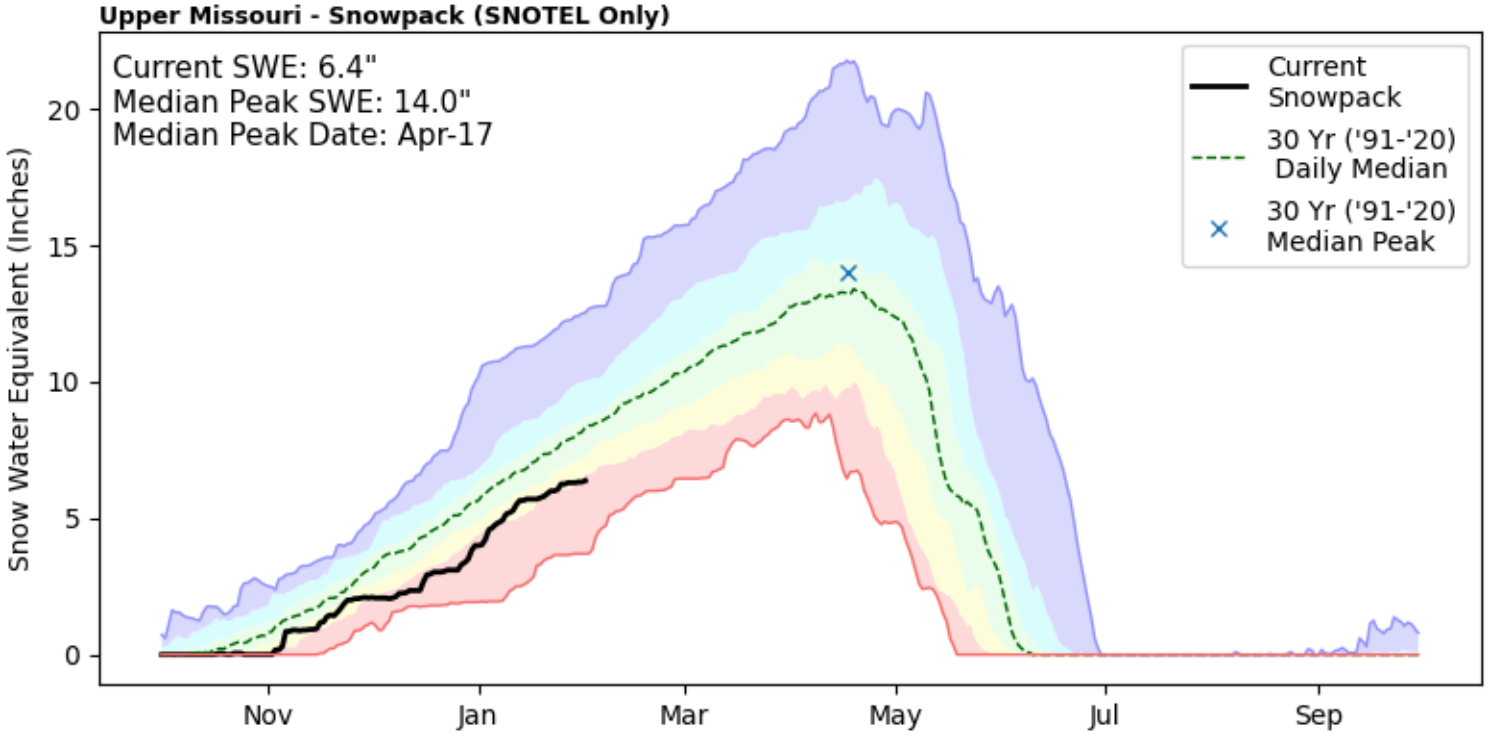


Basin Overview

Upper Missouri

Precipitation in January was near normal at 101%, which brings the seasonal accumulation (October-January) to 77% of median. The snowpack in the Upper Missouri is well below normal at 77% of median, compared to 41% at this time last year.

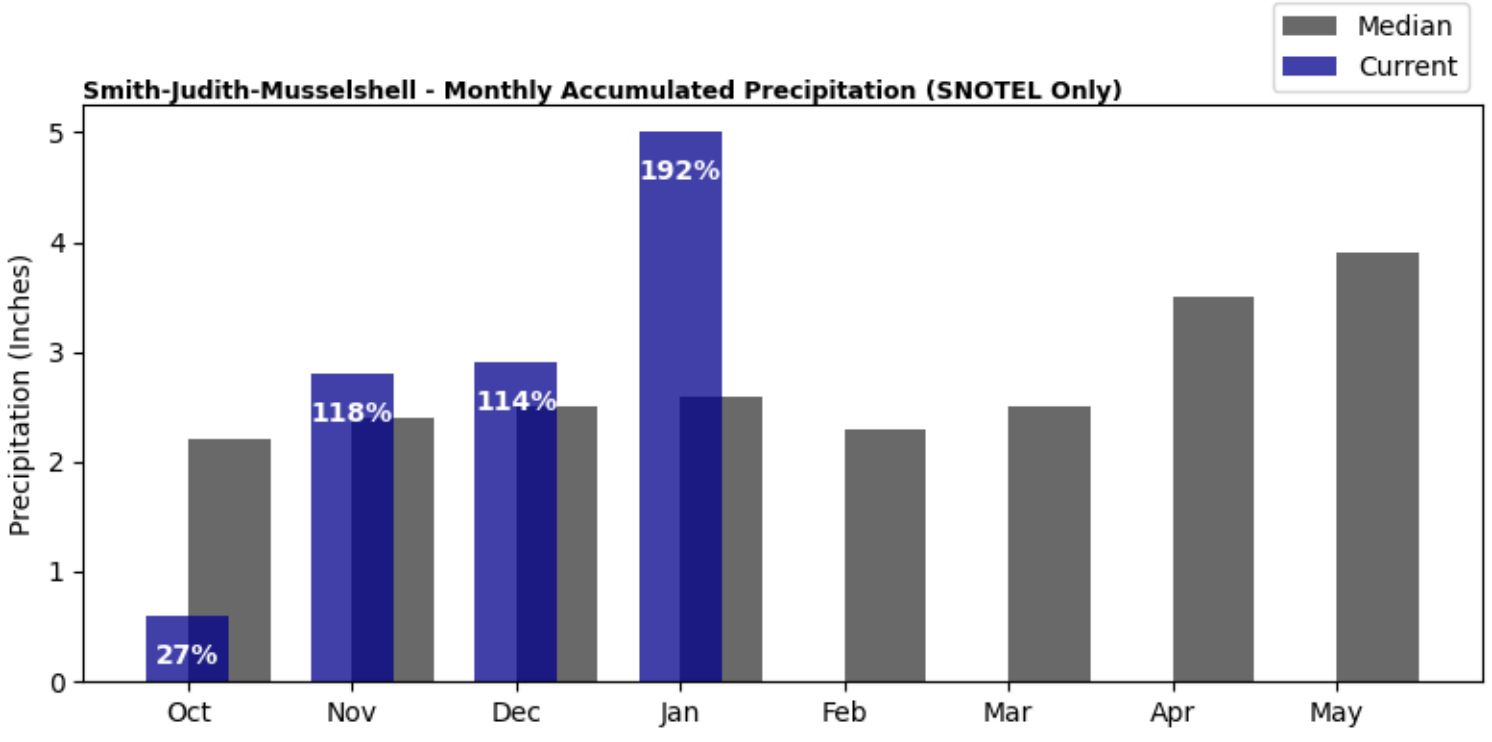


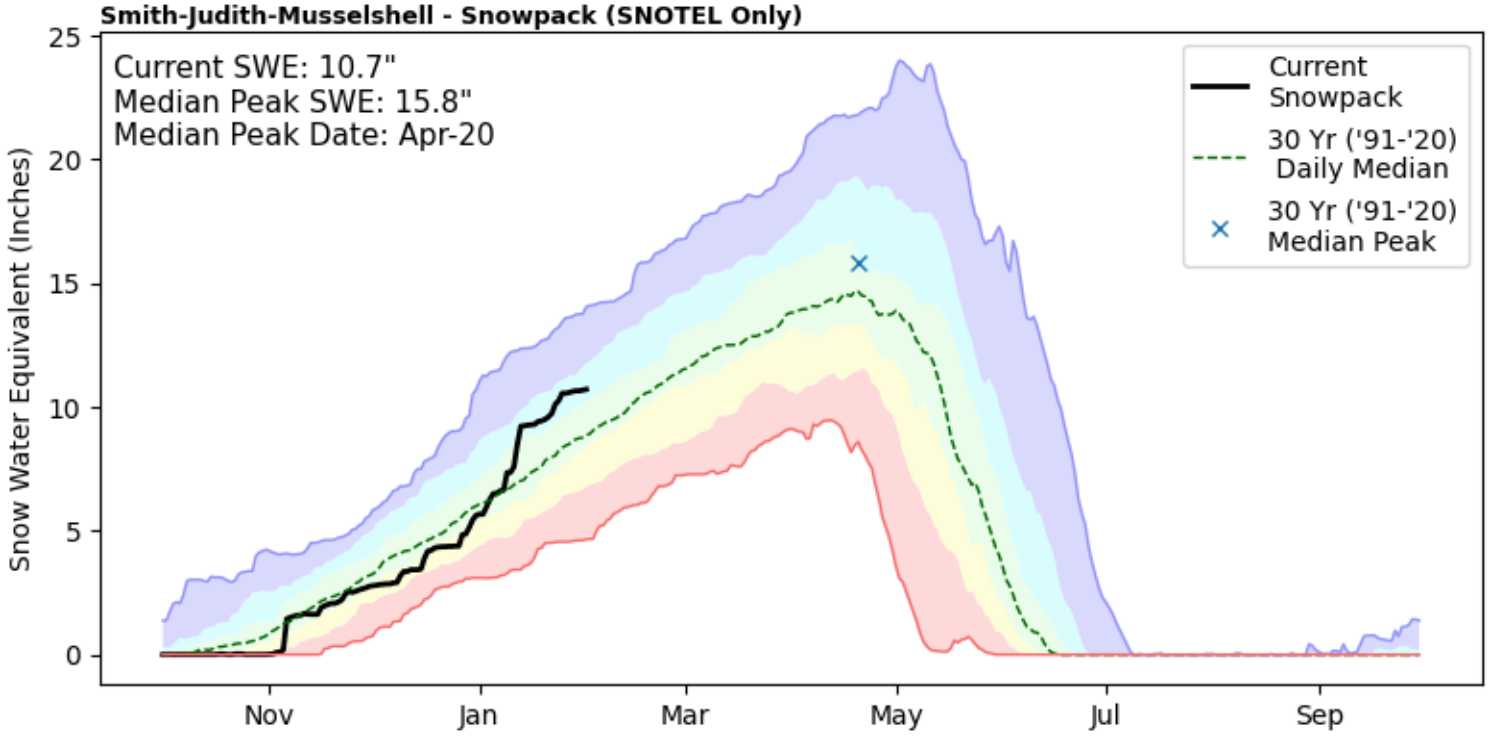


Basin Overview

Smith-Judith-Musselshell

Precipitation in January was well above normal at 192%, which brings the seasonal accumulation (October-January) to 109% of median. The snowpack in the Smith-Judith-Musselshell is well above normal at 131% of median, compared to 51% at this time last year.

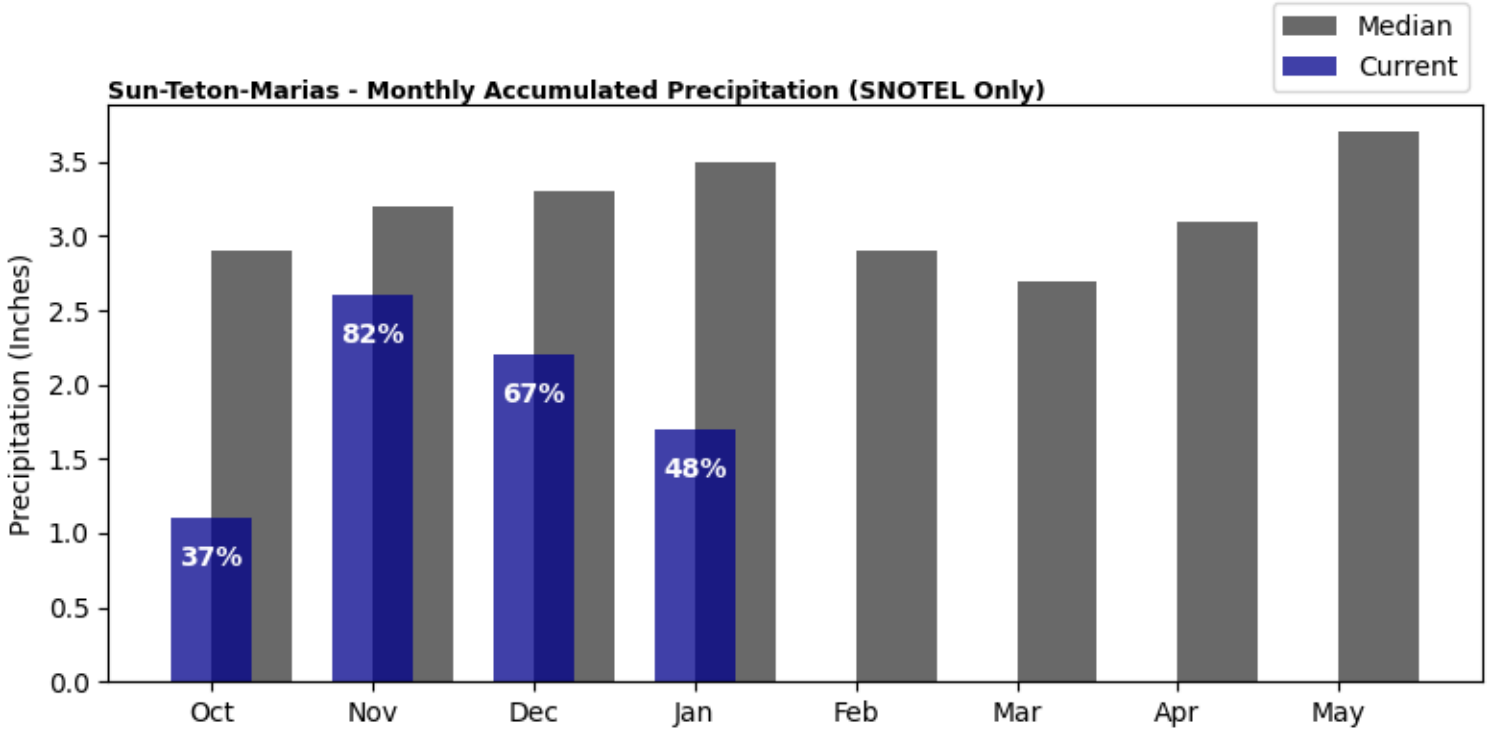


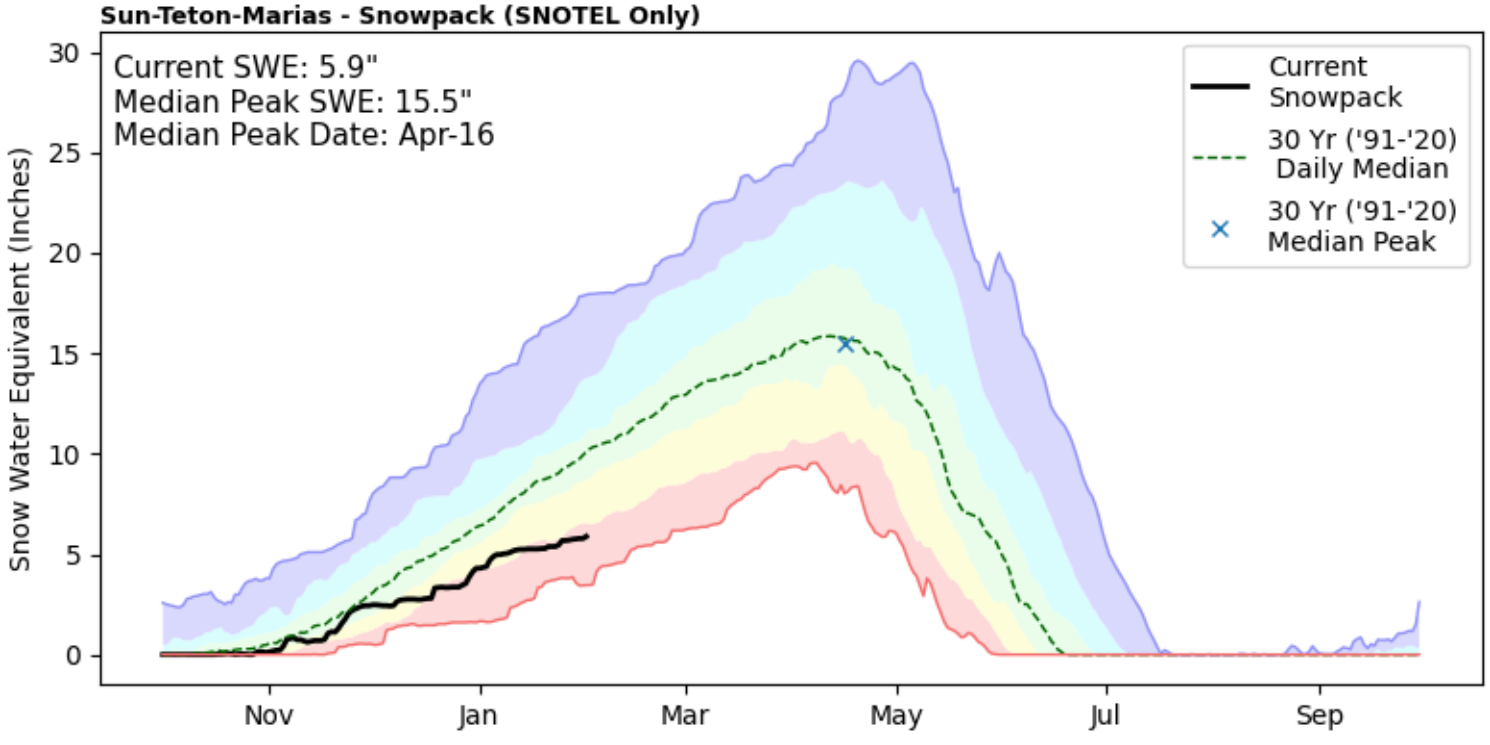


Basin Overview

Sun-Teton-Marias

Precipitation in January was well below normal at 48%, which brings the seasonal accumulation (October-January) to 58% of median. The snowpack in the Sun-Teton-Marias is well below normal at 56% of median, compared to 34% at this time last year.

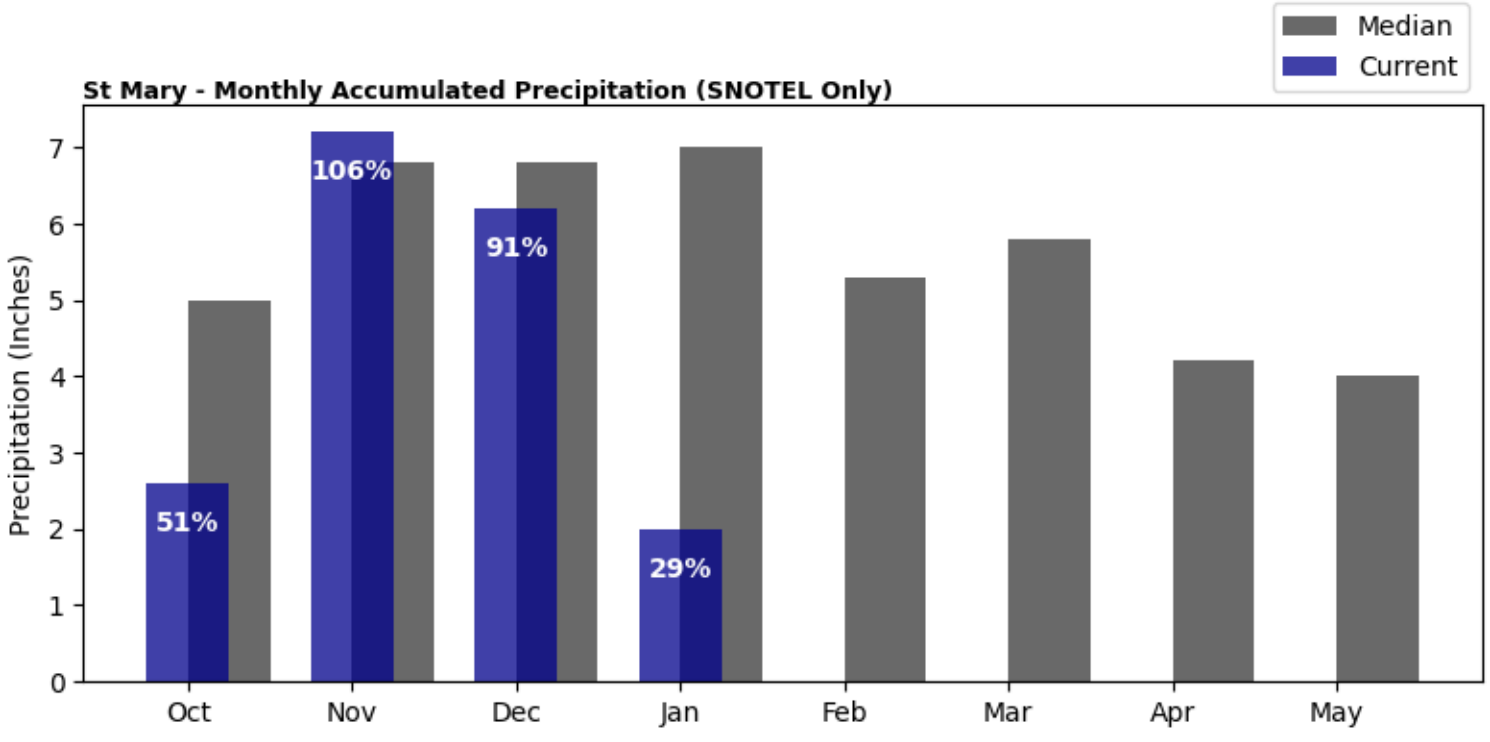


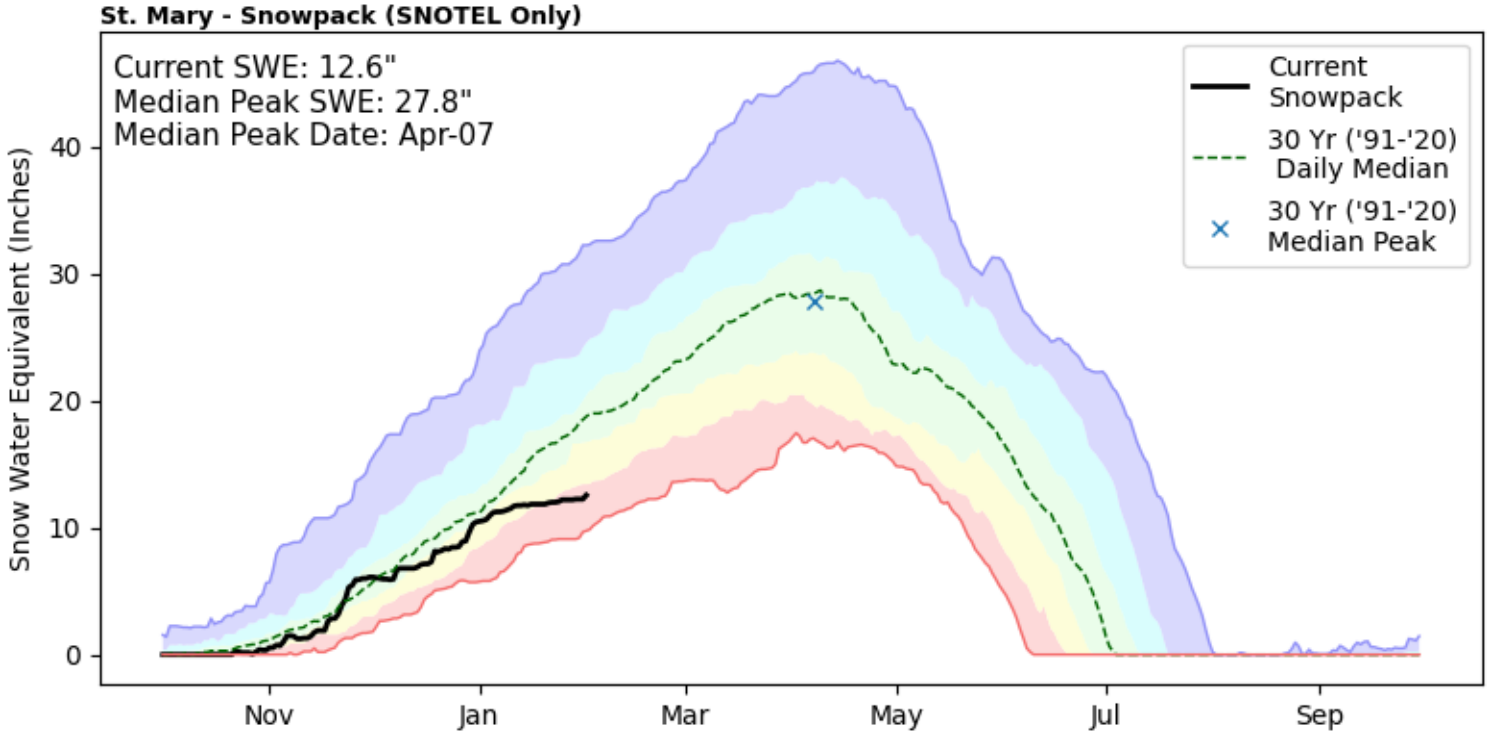


Basin Overview

St. Mary

Precipitation in January was well below normal at 29%, which brings the seasonal accumulation (October-January) to 65% of median. The snowpack in the St. Mary is well below normal at 67% of median, compared to 55% at this time last year.

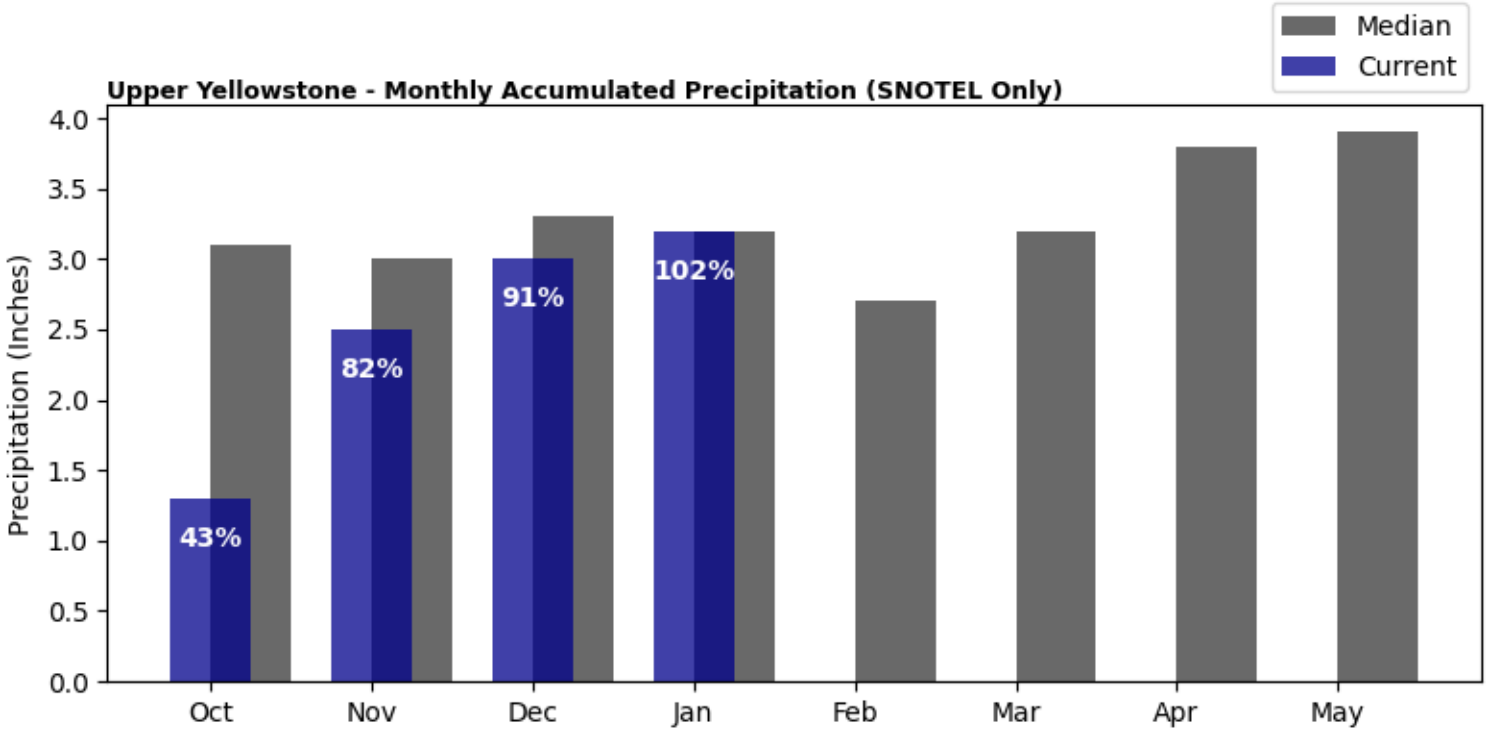


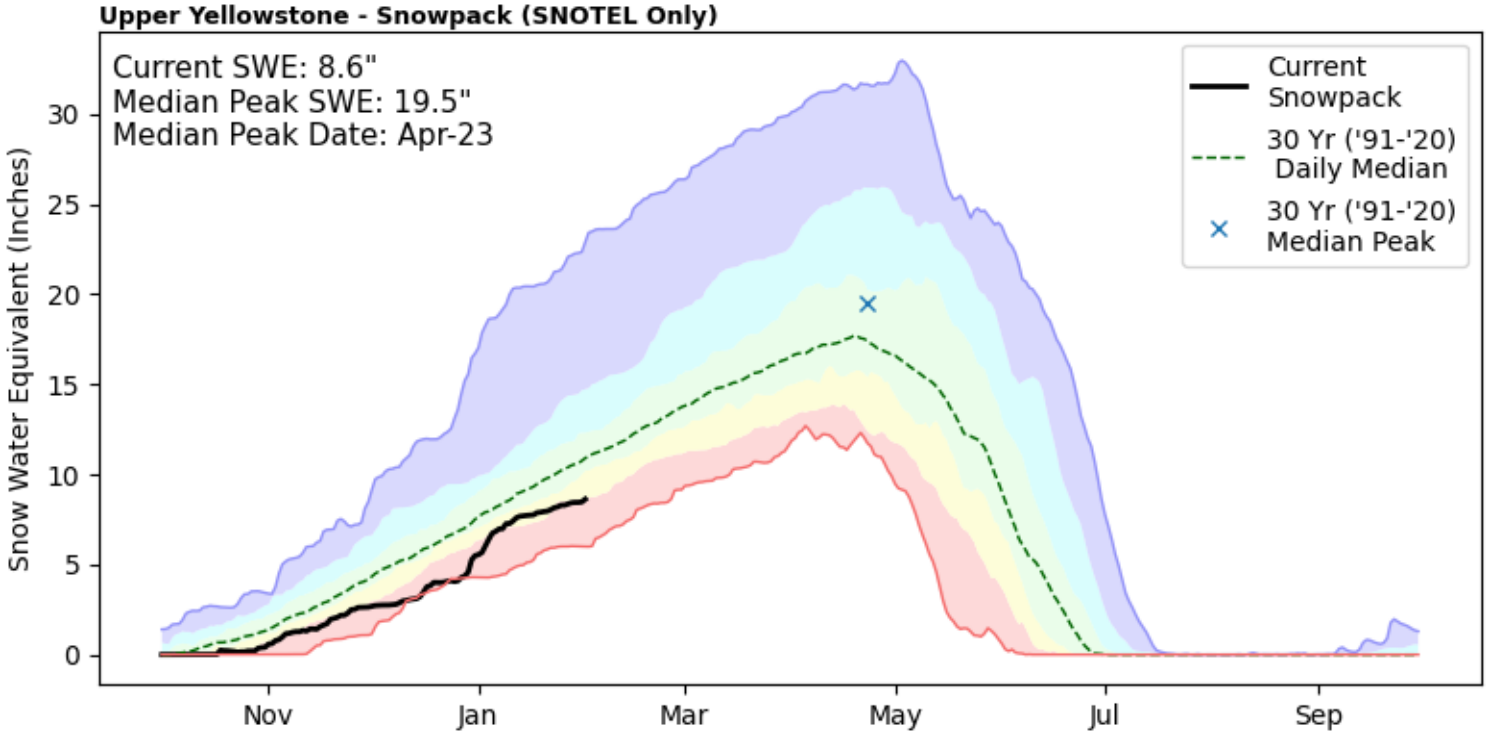


Basin Overview

Upper Yellowstone

Precipitation in January was near normal at 102%, which brings the seasonal accumulation (October-January) to 79% of median. The snowpack in the Upper Yellowstone is well below normal at 78% of median, compared to 55% at this time last year.

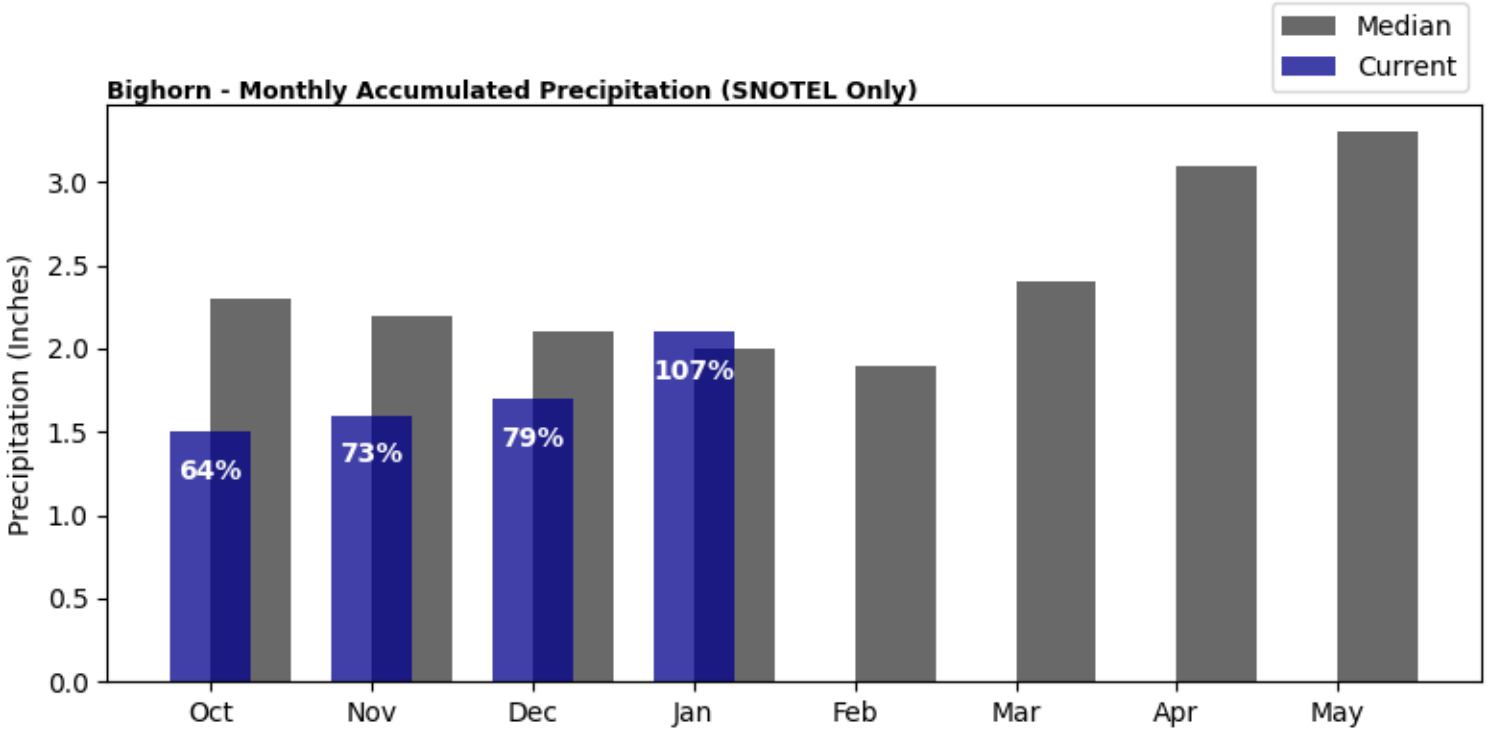


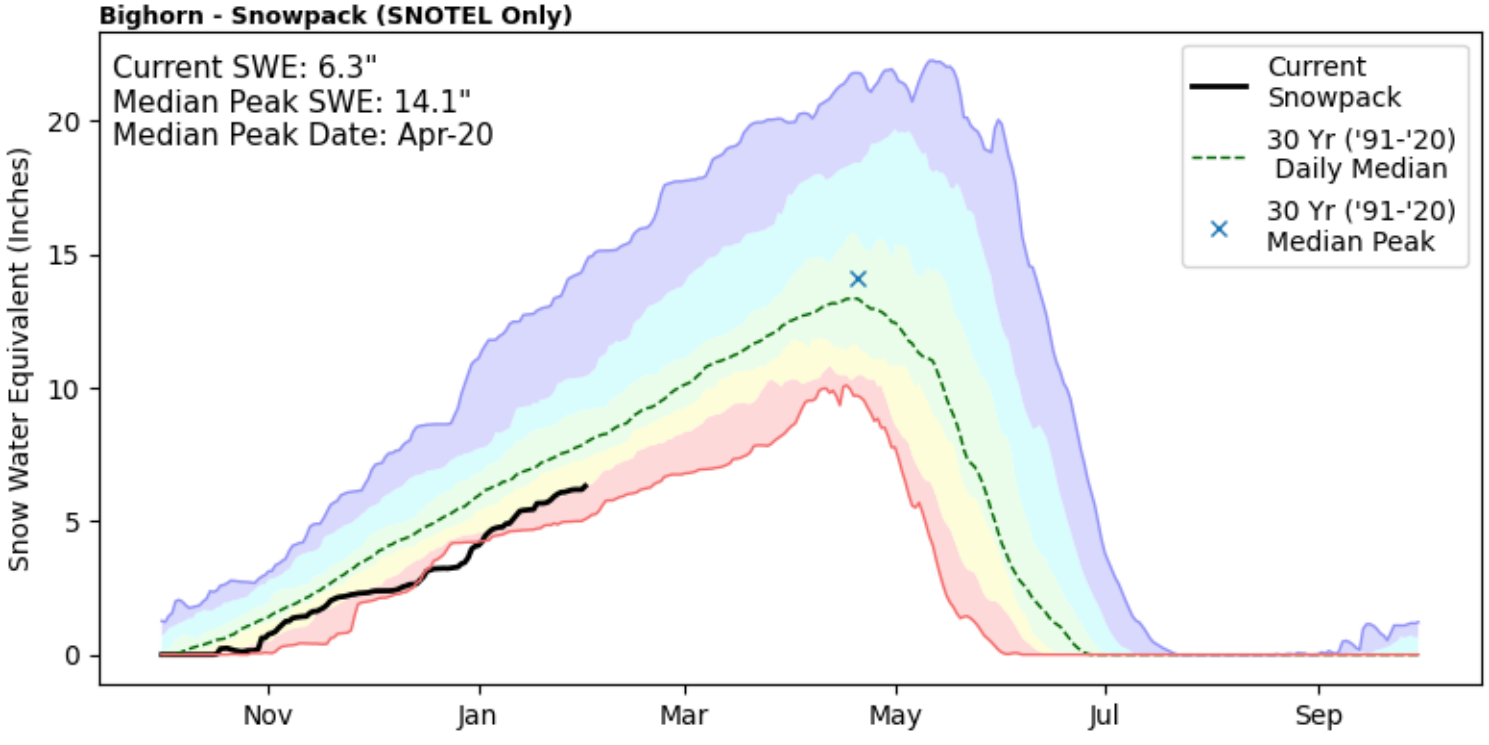


Basin Overview

Bighorn

Precipitation in January was above normal at 107%, which brings the seasonal accumulation (October-January) to 78% of median. The snowpack in the Bighorn is below normal at 81% of median, compared to 74% at this time last year.

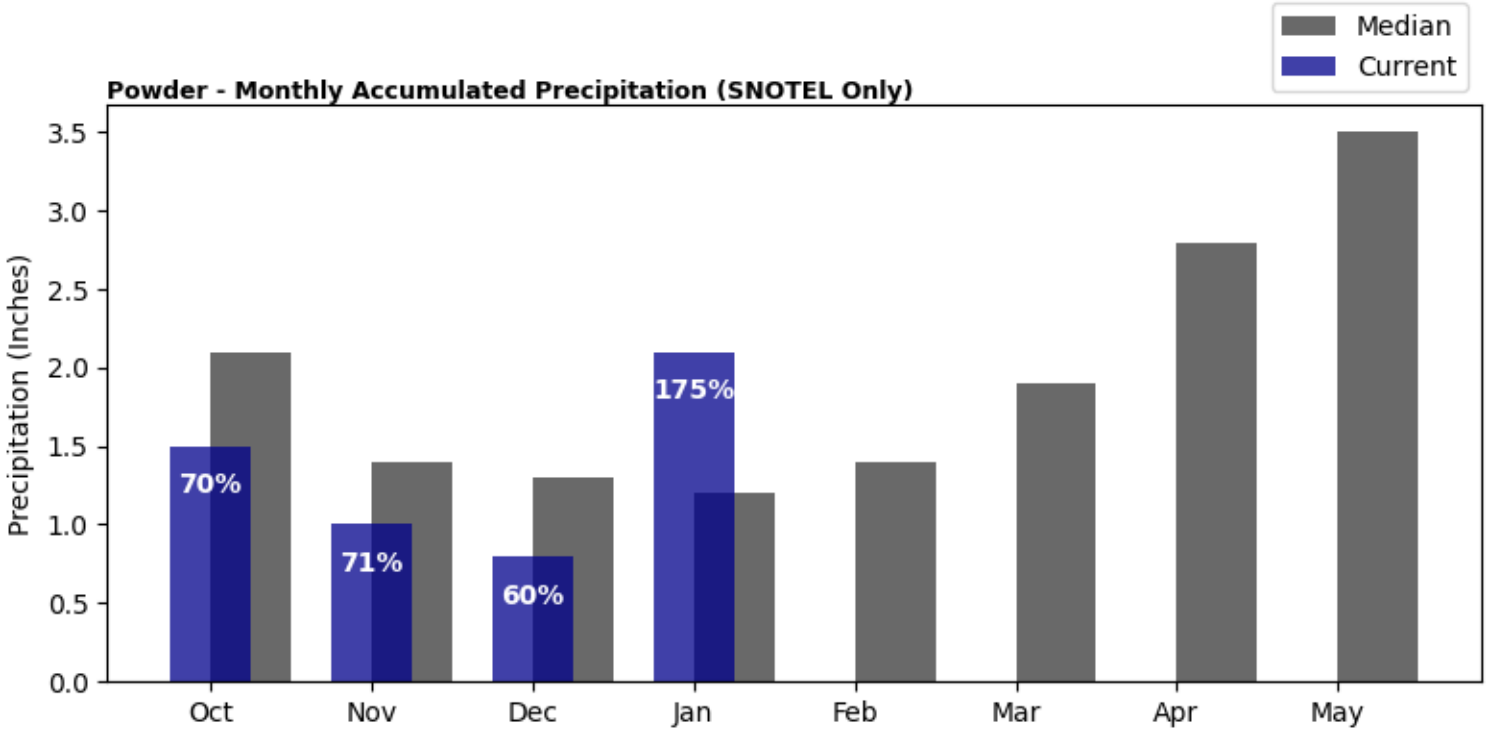


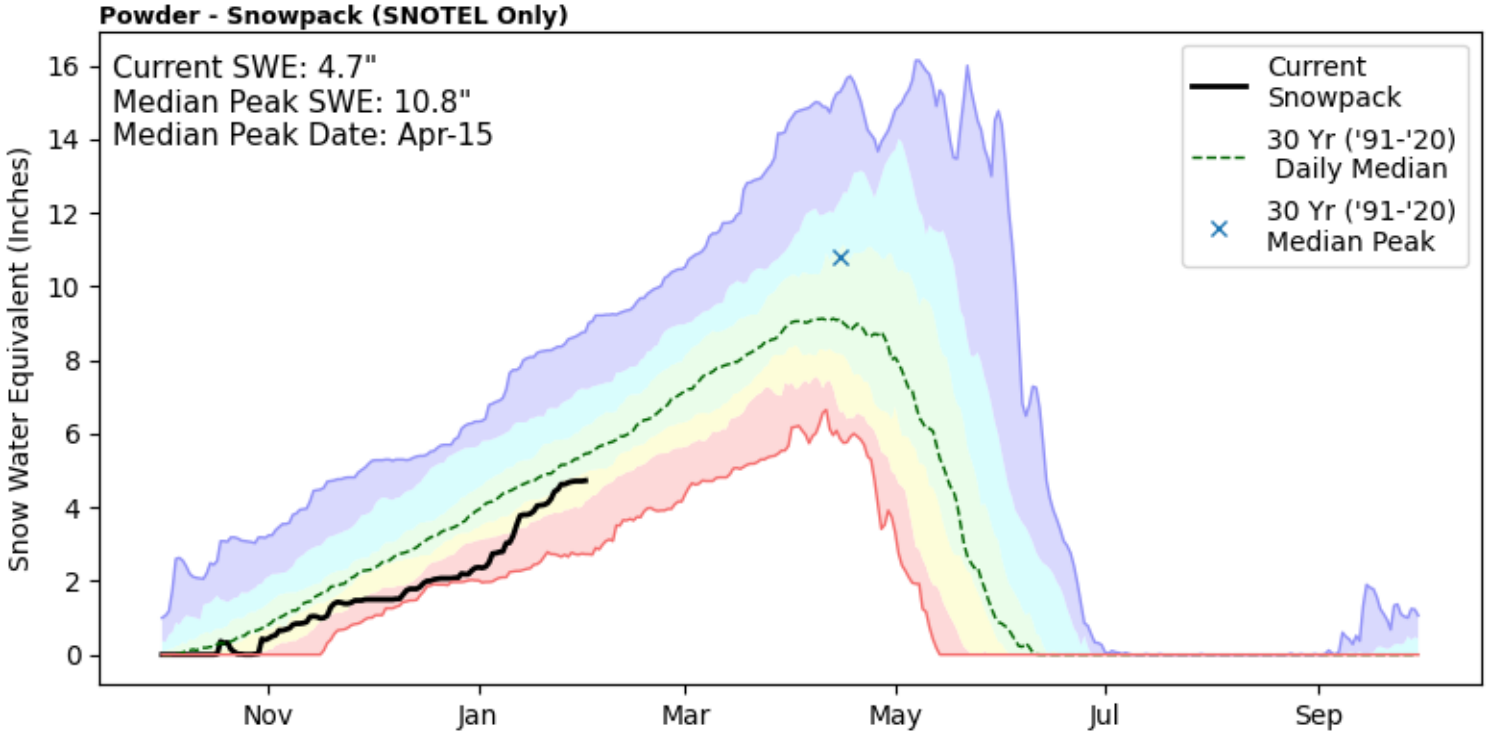


Basin Overview

Powder

Precipitation in January was well above normal at 175%, which brings the seasonal accumulation (October-January) to 86% of median. The snowpack in the Powder is below normal at 81% of median, compared to 51% at this time last year.

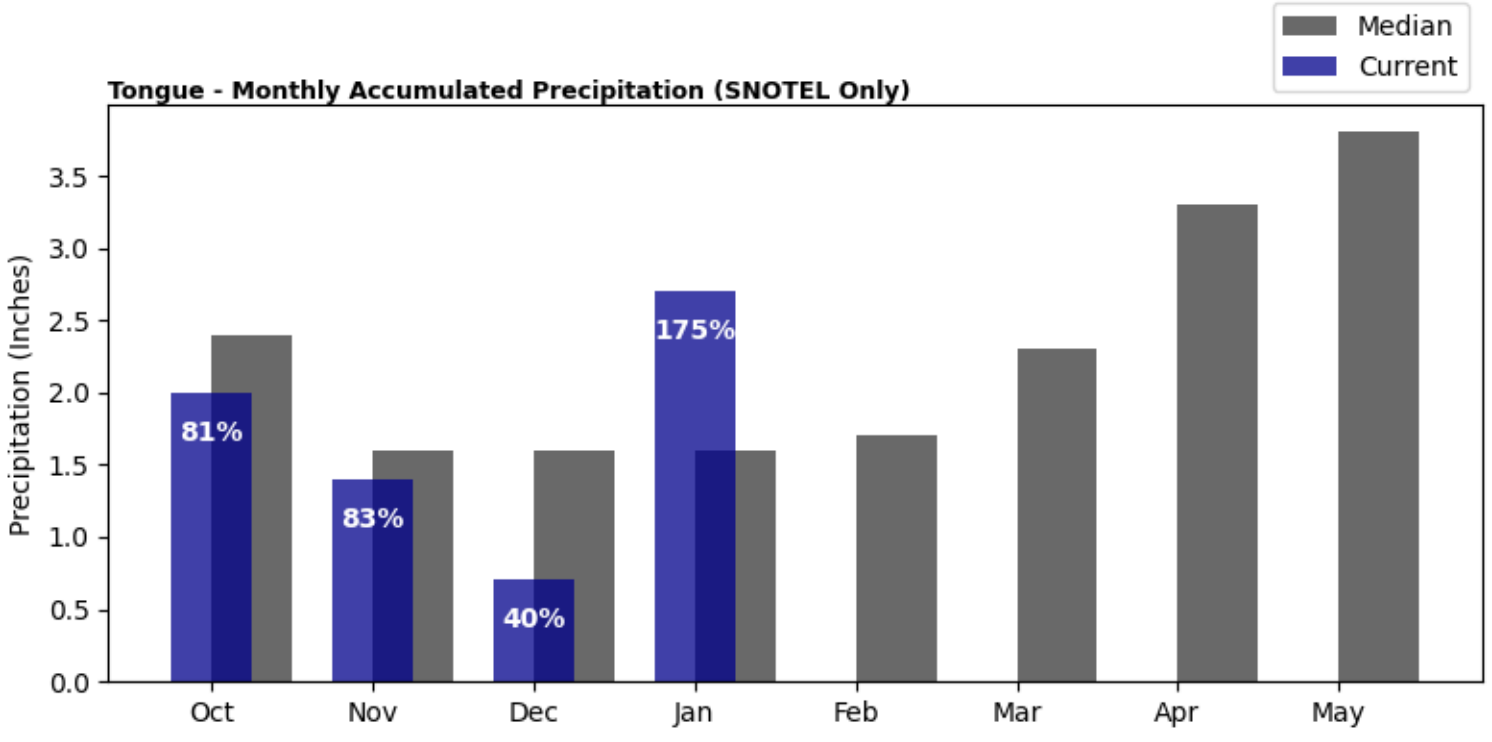


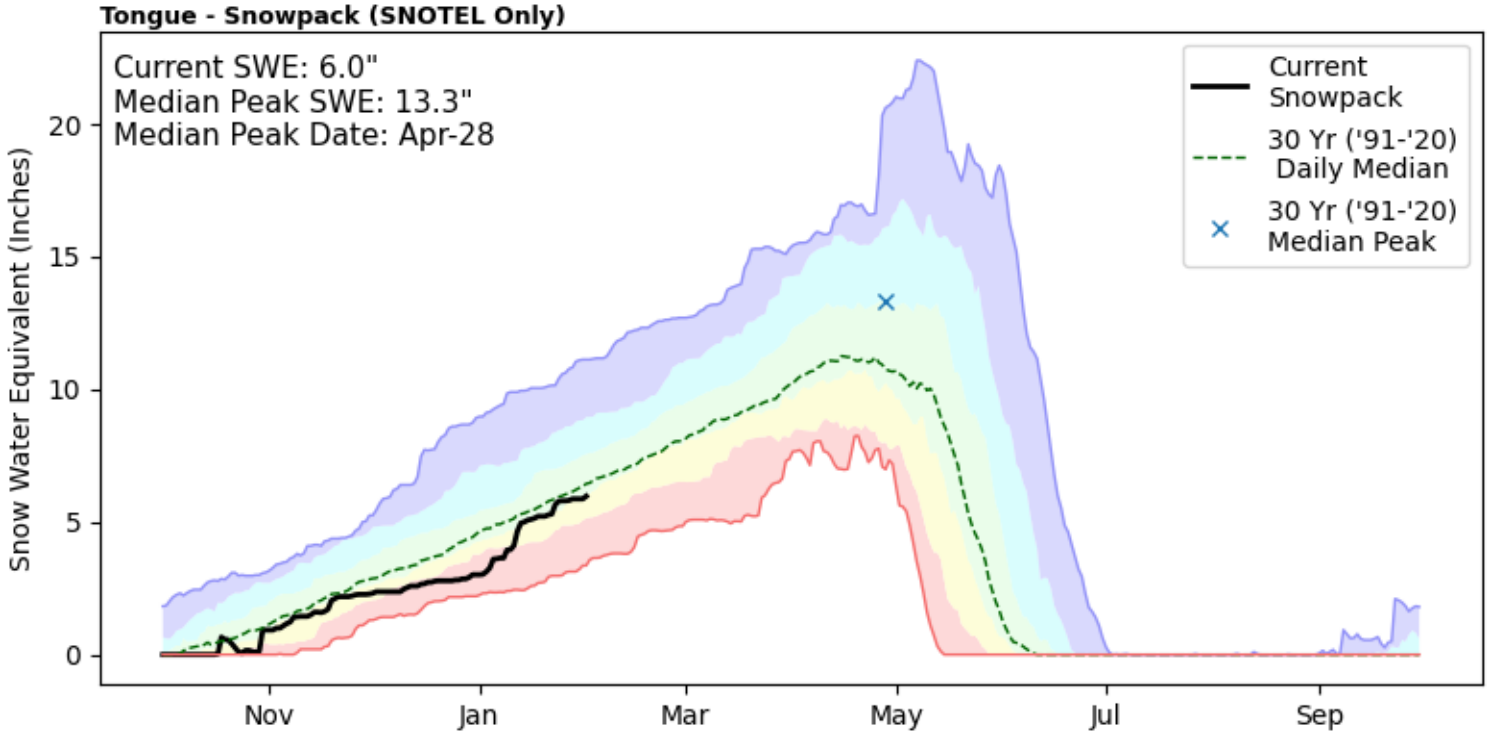


Basin Overview

Tongue

Precipitation in January was well above normal at 175%, which brings the seasonal accumulation (October-January) to 90% of median. The snowpack in the Tongue is near normal at 95% of median, compared to 64% at this time last year.

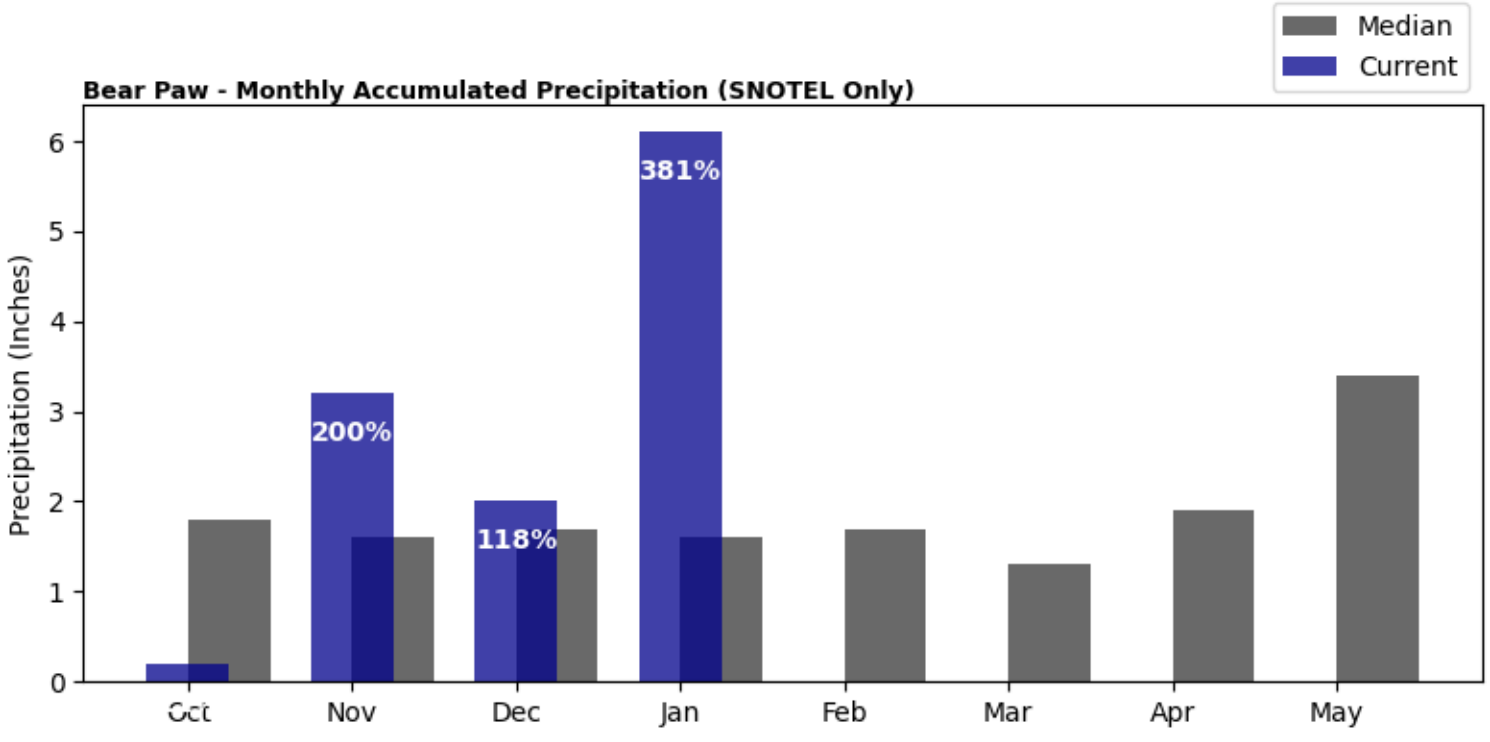


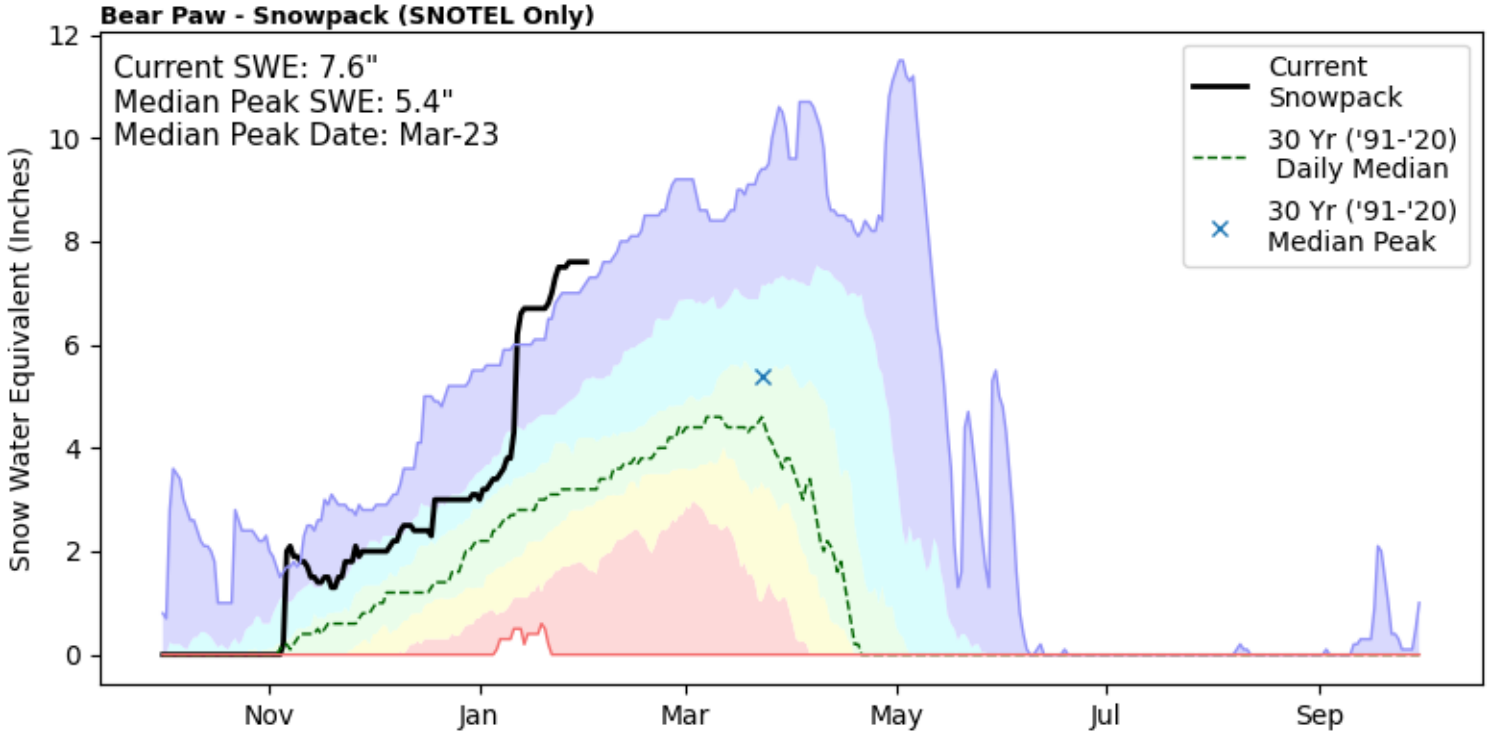


Basin Overview

Bear Paw

Precipitation in January was well above normal at 381%, which brings the seasonal accumulation (October-January) to 160% of median. The snowpack in the Bear Paw is well above normal at 228% of median, compared to 31% at this time last year.





Appendix

Water Supply Forecast Information

Most of the annual streamflow in the Western United States originates as snowfall that has accumulated high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are combined with snowpack data to prepare runoff forecasts.

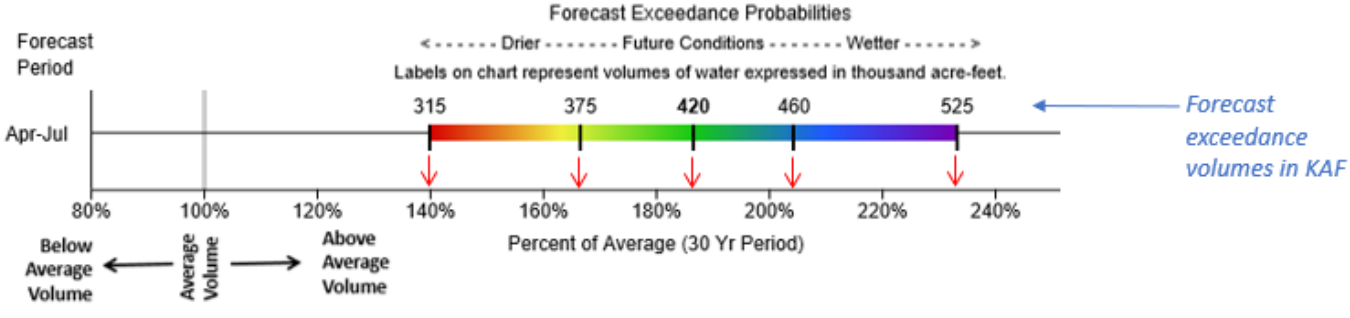
Forecast uncertainty originates from two sources: (1) uncertainty of future hydrologic and climatic conditions, and (2) error in the forecasting procedure. To express the uncertainty in the most probable forecast, four additional forecasts are provided. The actual streamflow can be expected to exceed the most probable forecast 50% of the time. Similarly, the actual streamflow volume can be expected to exceed the 90% forecast volume 90% of the time. The same is true for the 70%, 30%, and 10% forecasts. Generally, the 90% and 70% forecasts reflect drier than normal hydrologic and climatic conditions in the coming months; the 30% and 10% forecasts reflect wetter than normal conditions. As the forecast season progresses, a greater portion of the future hydrologic and climatic uncertainty will become known, and the additional forecasts will move closer to the most probable forecasts.

Interpreting Water Supply Forecast Charts

Typically, the Natural Resources Conservation Service (NRCS) has presented streamflow forecasts as a table format showing the five exceedance probabilities compared to the 30-year average as follows:

	Forecast Exceedance Probabilities for Risk Assessment Chance that actual volume will exceed forecast						
Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
APR-JUL	315	375	420	187%	460	525	225

The Forecast Chart provides a visual alternative to the table. The forecast range is represented by a colored bar. Vertical lines on the bar signify the five forecast exceedances. Below is an example. The numbers above the forecast bar are the five exceedance probability volumes in thousand acre-feet (KAF). Each exceedance forecasts percent of median can be estimated by looking at the horizontal axis. The gray line centered above 100% on the horizontal axis represents the 1991-2020 historical median streamflow for the forecast period.



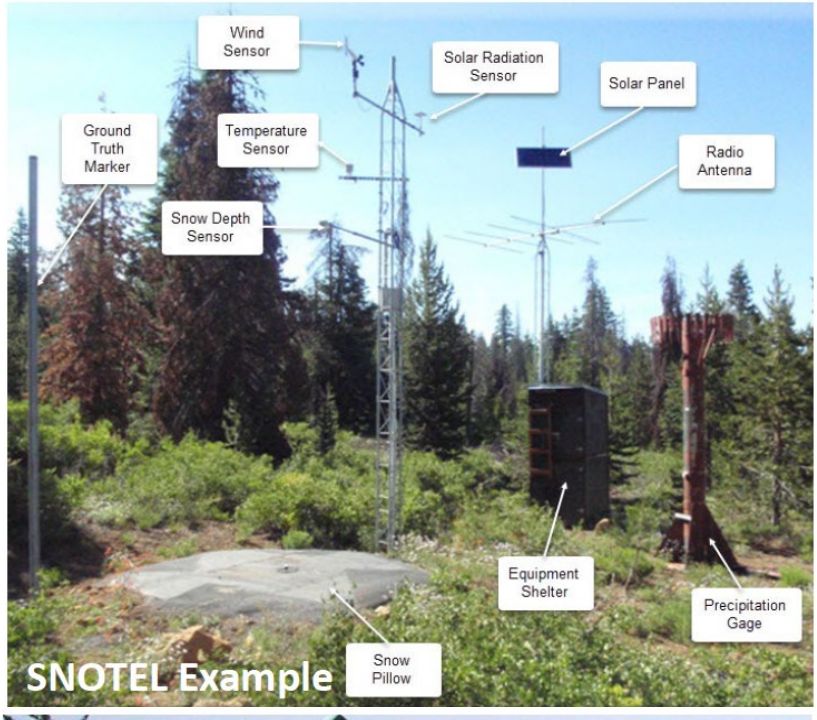
In the example, the entire forecast bar is shifted right of the gray line indicating a forecast for above normal streamflow. The 50% exceedance is represented by the black line in the green portion of the colored bar. This represents a forecast volume of 420KAF which is ~185% of average. If drier than normal future conditions occur the 70% exceedance forecast may be more likely (375KAF or ~165% of average). If future conditions turn wetter than normal, the 30% exceedance forecast may be more likely (460KAF or ~205% of average). Water users are encouraged to consider the range of forecast exceedances instead of relying solely only on the 50% forecast.

Appendix

Monitoring Station Overview

SNOTEL

The NRCS operates an extensive, automated data collection network called SNOTEL (short for Snow Telemetry). SNOTEL sites are designed to operate unattended in remote mountain locations. Data are collected and transmitted hourly and available on the internet. Daily data (midnight values) are quality checked by NRCS hydrologists on at least a weekly basis. SNOTEL sites provide snowpack water content data via a pressure-sensing snow pillow. Other data include snow depth, water year precipitation accumulation, air temperature with daily maximums, minimums, and averages. The earliest NRCS SNOTEL sites have data back to the mid-1970s.



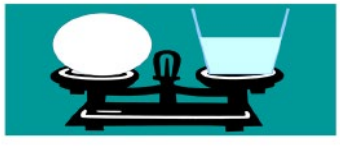
Snow Course

Snow courses are measurement transects where snow tubes are used by snow surveyors during the winter season to determine the depth and water content of the snowpack. Hollow snow tubes are used to vertically core the snowpack. The tubes are then weighed to determine the water content of the snow. Generally, snow courses are situated in meadows or forest openings protected from the wind. A snow course measurement is the average of a number of sample points, typically 5 or 10. Snow courses are measured on a monthly basis typically between January 1 and June 1. Snow courses provide a longer record than SNOTEL. The earliest snow courses in the Montana have data back to the 1920s.

Snow Water Equivalent (SWE)

Sometimes also called snow water content, this is the amount of water contained within the snowpack. It can be thought of as the depth of water (in inches) that would result if you melted the snowpack. For example, if a snowpack containing 12 inches of SWE melted instantaneously, there would be a puddle of water 12 inches deep on the ground.

SWE measurements made by snow pillows or snow tubes rely on the fact that water weighs the same whether it is liquid or frozen.



Weight of frozen water = Weight of liquid water

Snow core inside snow tubes

Appendix

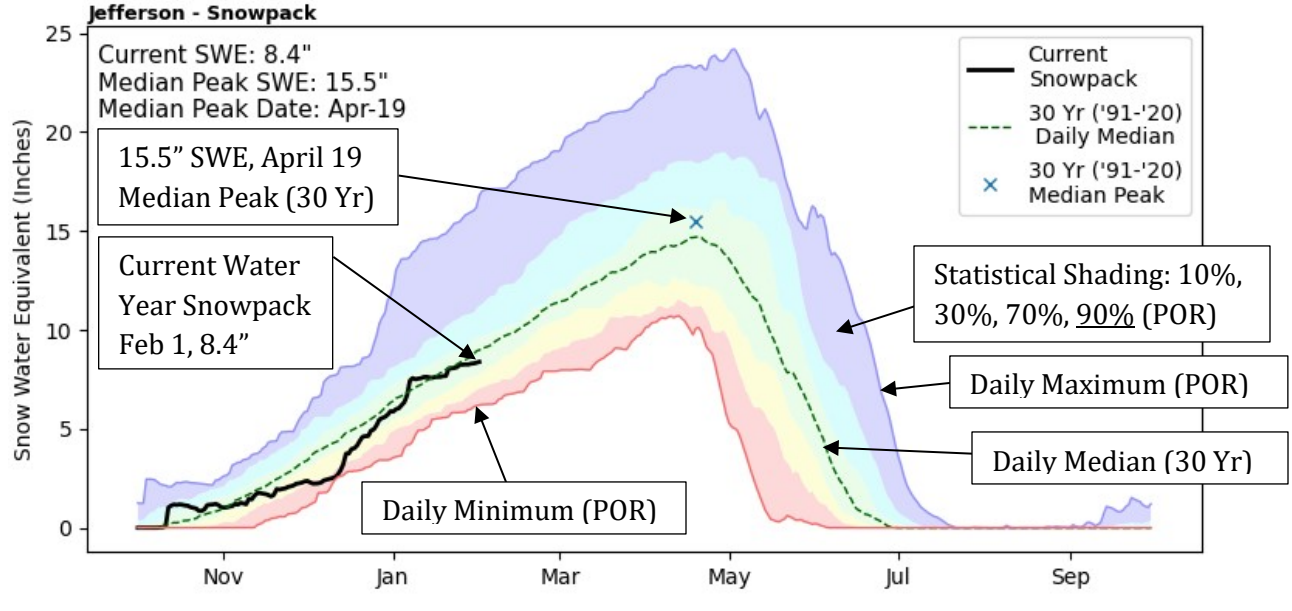
Additional Information

Climatic and Hydrologic Normals

The Snow Survey and Water Supply Forecasting (SSWSF) normals are site-specific measures of central tendency (either the median or average) for a data type, such as snow water equivalent (SWE). The statistics are calculated over a 30-year period and updated each decade, in agreement with World Meteorological Organization (WMO) standards. This 30-year reference period was chosen to characterize the current hydroclimatology at each station. The most recent medians and averages have been updated to include data for the water years 1991-2020. The National Water and Climate Center (NWCC) also provides medians and averages for the 1981-2010 and 1971-2000 reference periods for stations with sufficient data. The normals available from the NWCC include the median and average for SWE, snow depth (snow courses only), precipitation, volumetric streamflow, and reservoir storage. Values are calculated from data collected by NRCS-managed stations and external agencies such as the U.S. Geological Survey (USGS), National Weather Service (NWS), state agencies, and private organizations. Normal is calculated for various durations including daily, month-to-date, semi-monthly, monthly, seasonal, and annual based on the data type. More information is available here: https://www.nrcs.usda.gov/resources/data-and-reports/climatic-and-hydrologic-normals

Interpreting Snowpack Charts

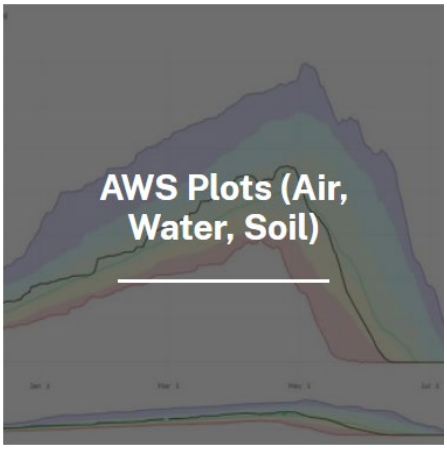
Snowpack charts displayed in this report are created using daily (midnight) snow water equivalent (SWE) values at SNOTEL sites determined to represent the basin. Snow Course data is not included. Plotted lines are the average of each SNOTEL's individual values. For example, the "Current Snowpack" on January 1st is the average all SNOTEL SWE values in that basin for that day. The "30 Yr. ('91-'20) Daily Median" is the average of each SNOTEL's median SWE value for a given day. The upper and lower extent (blue/red lines) show the maximum/minimum daily SWE values, which is determined using the "Current Snowpack" SWE value for all days in the period of record (POR). Snowpack peak SWE dates differ from season to season, as a result the high point on the "30 Yr. ('91-'20) Daily Median" line is not the true median peak SWE. The point "X" is plotted by calculating the median peak date and median peak value independently. Similar charts with other basin definitions are available here: https://nwcc-apps.sc.egov.usda.gov/basin-plots/#mt

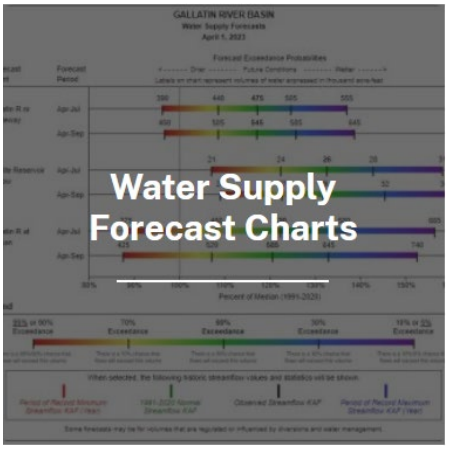


Appendix

Links and Resources

Products and Reports (click image)





Interactive Map Predefined Links

Snow

- Snow Water Equivalent > Daily > Percent of 1991-2020 Median > **Stations** | **Basins**
- Snow Water Equivalent > End of Previous Month (SNOTEL and Snow Course) > Percent of 1991-2020 Median > **Stations** | **Basins**
- Snow Depth > Daily > **Stations**
- Snow Density > End of Previous Month (SNOTEL and Snow Course) > **Stations**

Precipitation

- Month-to-Date > Daily > **Stations**
- Water Year-to-Date > Daily > Percent of 1991-2020 Median > **Stations** | **Basins**
- Previous Month > Percent of 1991-2020 Median > **Stations** | **Basins**
- Previous 3 Months > Percent of 1991-2020 Average > **Stations** | **Basins**

Streamflow

- Observed (Adjusted Volume) > Previous Month > Percent of 1991-2020 Median > **Stations** | **Basins**
- Forecast (Adjusted Volume) > Most Recent (Available March 1 through June 1) > Percent of 1991-2020 Median > **Stations** | **Basins**

Reservoir Storage

- End of Previous Month > Percent of 1991-2020 Median > **Stations**

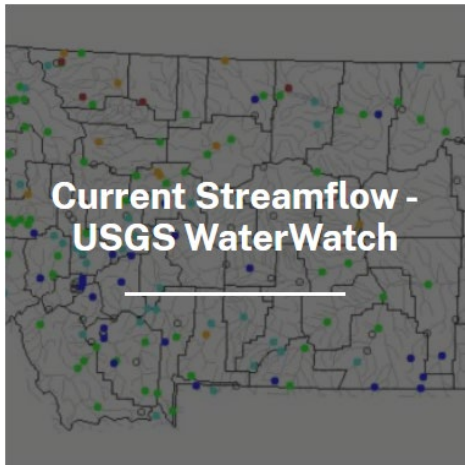
Other

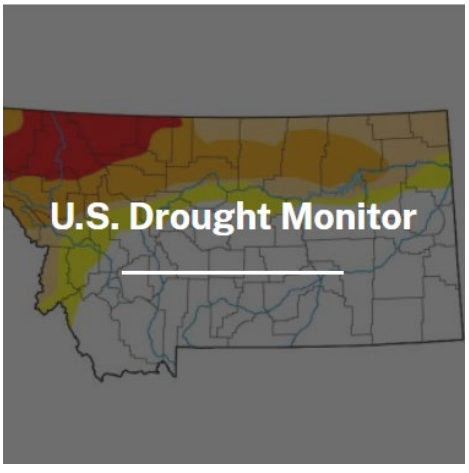
- Snow Water Equivalent > Daily > Compared to POR > **Stations**
- Snow Water Equivalent > End of Previous Month (SNOTEL and Snow Course) > Percentile > **Stations**
- Water Year-to-Date Precipitation > Daily > Compared to POR > **Stations**

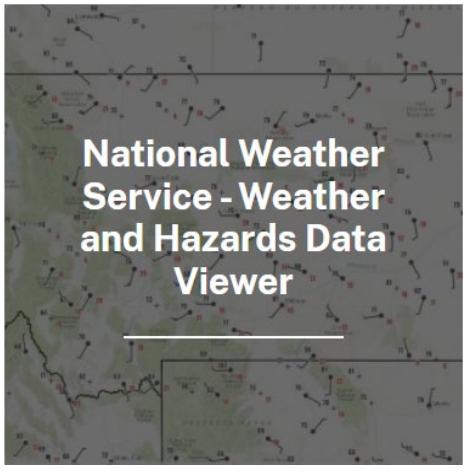
Appendix

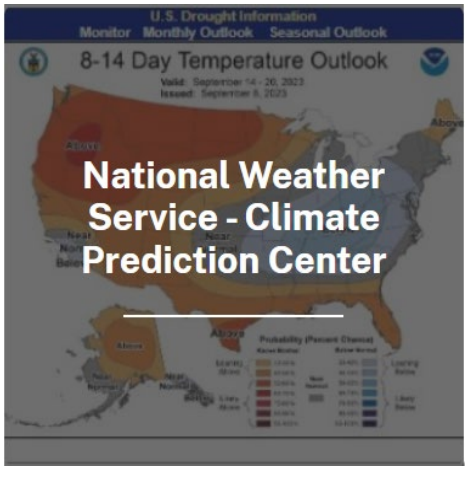
Links and Resources (Continued)

External Agencies (click image)









Additional Drought Information

- U.S. Drought Monitor
- National Integrated Drought System (Drought.gov)
- USDA Drought Portal (News and Resources)
- Farm Services Agency Montana (Information on Programs and Deadlines)
- Farm Services Agency Disaster Assistance Programs
- Montana Department of Natural Resources and Conservation Drought Management

Snow Survey Program FAQ

Frequently Asked Snow Survey Questions - Montana | Natural Resources Conservation Service (usda.gov)

Issued by:

Louis Aspey

Chief (Acting)

Natural Resources Conservation Service

U.S. Department of Agriculture

Released by:

Kyle Tackett

State Conservationist (Acting)

Natural Resources Conservation Service

Bozeman, Montana

Report Created by:

Montana Snow Survey Staff

Bozeman, Montana

mt-nrcs-snow@usda.gov

https://www.nrcs.usda.gov/montana/snow-survey

Montana Water Supply Outlook Report

Natural Resources Conservation Service