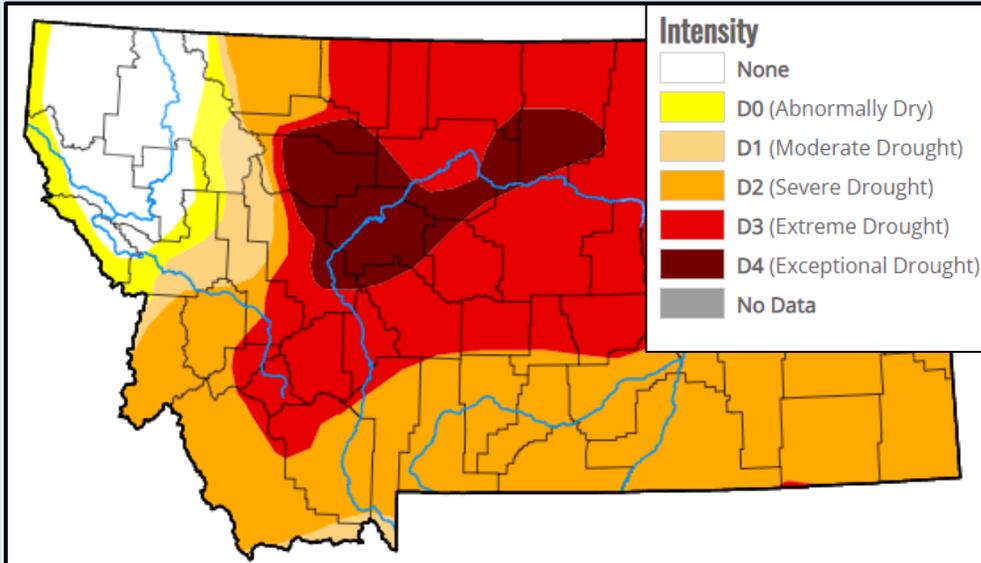


# Upper Yellowstone River Watershed Current Basin Conditions - 1/26/2022

## U.S. Drought Monitor

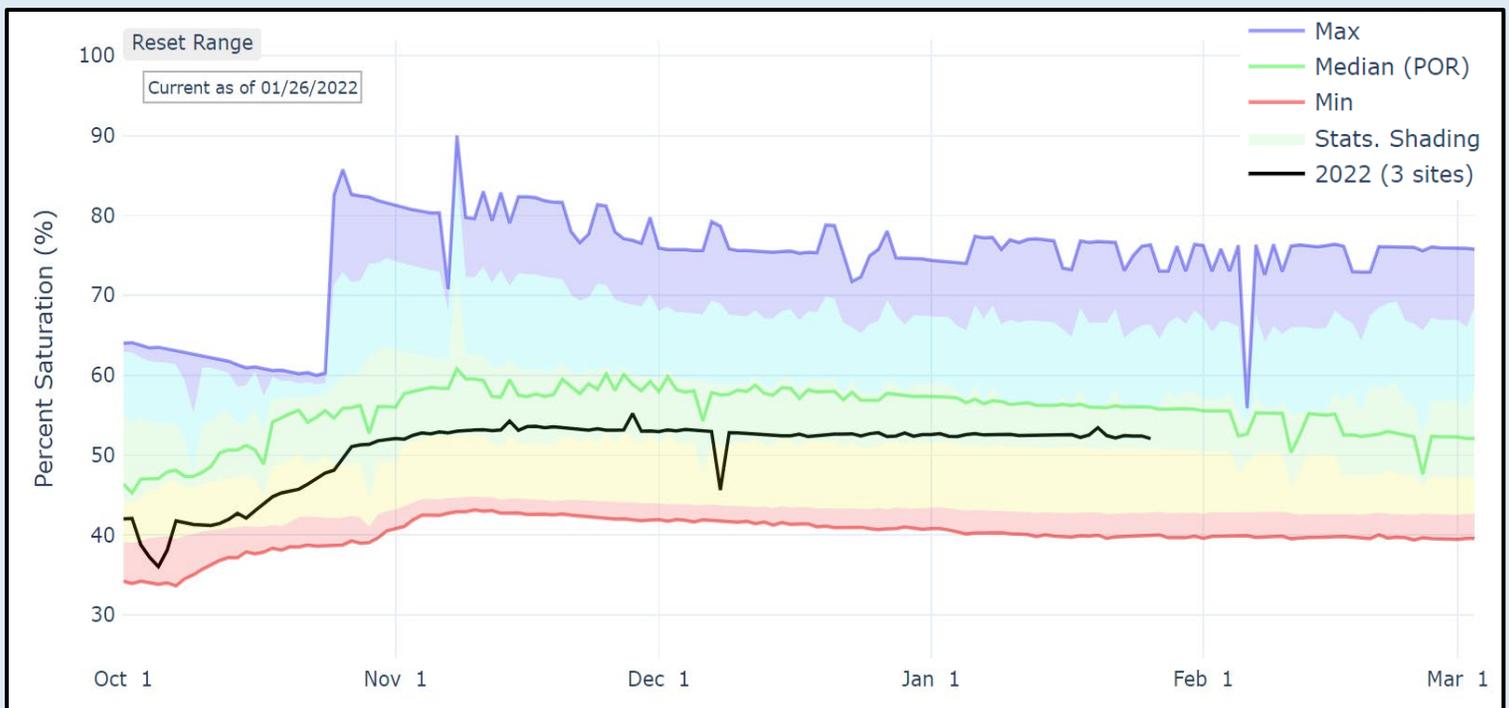


Data from the US Drought Monitor. <https://droughtmonitor.unl.edu/>

Currently, the entire Upper Yellowstone watershed (MT & WY) remains in D2 – Severe Drought. Without improvement in soil moisture and snowpack, drought conditions are expected to worsen. Significant spring rain, as seen in previous years, could also improve drought conditions.

## Soil moisture

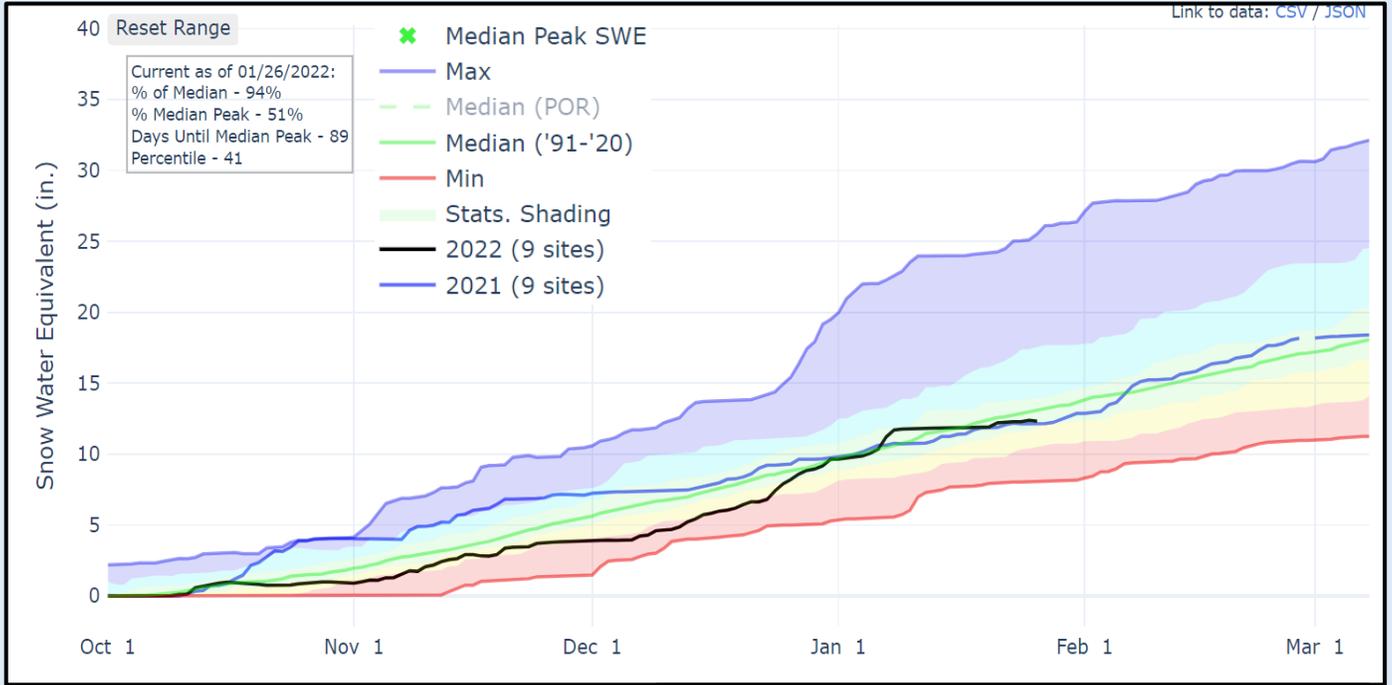
Soil moisture monitoring in the higher elevations indicates current soil moisture conditions are below average. Compared to last year soil moisture conditions are slightly lower. Low soil moisture typically reduces the overall amount of stream runoff in spring. Continued snowfall and spring rain will be needed to improve soil moisture.



Data from the USDA-NRCS. <https://www.nrcs.usda.gov/>

# Snowpack – SNOTEL sites

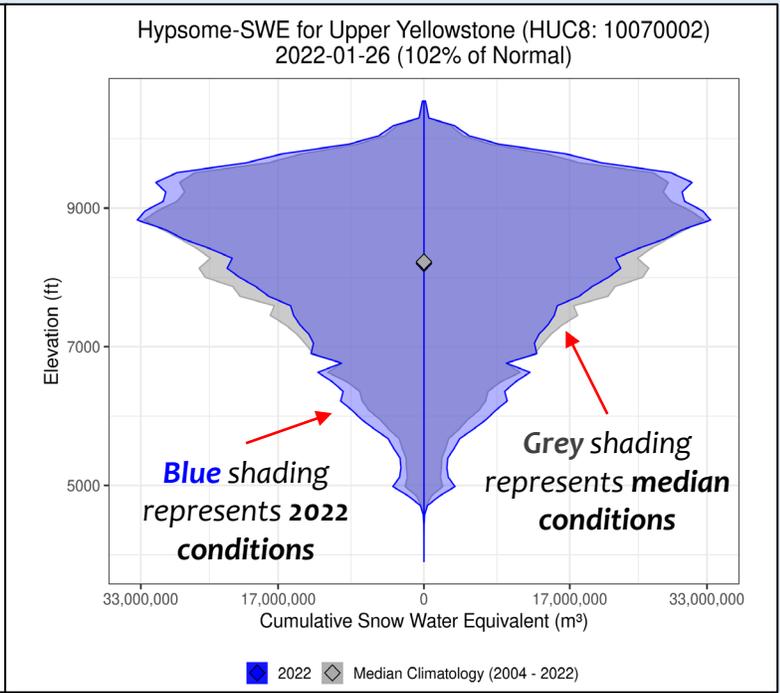
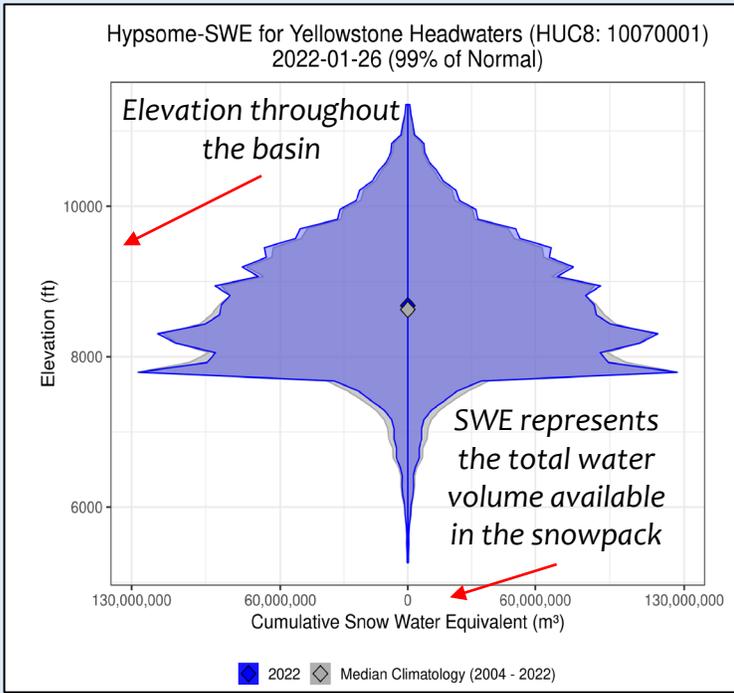
SNOTEL sites in the basin indicate snowpack is currently 92% of the 1991-2020 median. Compared to last year, snowpack conditions are nearly identical. Although snowpack is near average, the timing of snowmelt significantly impacts summer conditions. Warm spring temperatures and rain-on-snow events can quickly reduce even an above average snowpack.



Data from the USDA-NRCS. <https://www.nrcs.usda.gov/>

# Snowpack – Hypsome SWE

Hypsome SWE is a new way of looking at snowpack data developed by the Montana Climate Office. These graphs show elevation on the y-axis and snow water equivalent on the x-axis. Blue represents the current year and grey represents the median. These charts show snowpack in the Upper Yellowstone is near or at average across most elevations. The exception being a below average snow between 7,000 ft and 8,000 ft.



Data from the Montana Climate Office. <https://drought.climate.umt.edu/>