

# Hydrologic Forecast Tenmile Creek

CONDITIONS 05/25/2020

Lewis & Clark County Water Quality Protection District

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## SUMMARY

Tenmile Creek reached nearly 300 CFS last week in response to precipitation throughout the region. Snowpack at Frohner Meadows SNOTEL site is gone, and higher elevations in the region are maintaining snow at close to normal seasonal levels. With above average temperatures and no significant precipitation forecast over the next week, expect loss of higher elevation snowpack and uniformly dropping stream levels from last week's peak.

Residents should keep track of weather patterns for increasing temperature and precipitation events which could change streamflows quickly, causing small creeks such as Tenmile Creek and Silver Creek to rise rapidly.

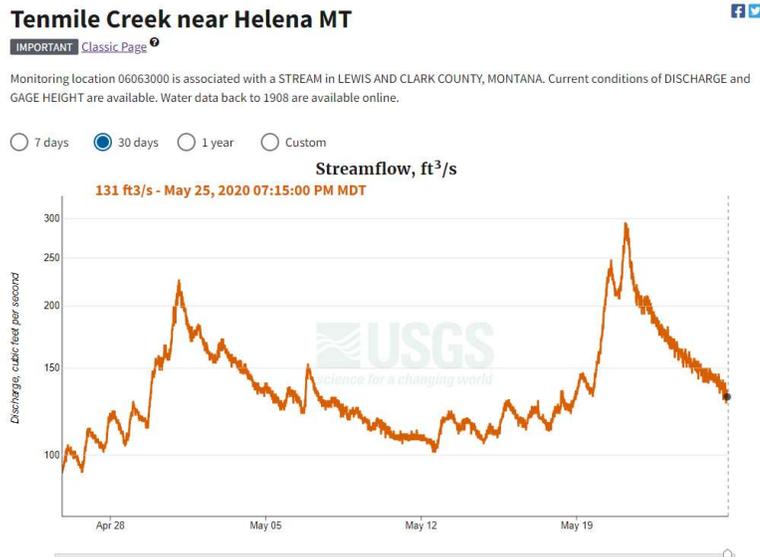
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The following data and information are used to evaluate hydrologic conditions in the Tenmile Creek drainage.

1. **Streamflow** measured at Williams St USGS Stream Gauging Station west of the city of Helena.  
<https://waterdata.usgs.gov/monitoring-location/06063000>
  2. **Snowpack** snow water equivalent (SWE) at the SNOTEL Stations Frohner Meadows, Rocker Peak, Nevada Ridge.  
<https://www.nwrfc.noaa.gov/snow/snowplot.cgi?FRHM8>  
<https://www.nwrfc.noaa.gov/snow/snowplot.cgi?RKPM8>  
<https://www.nwrfc.noaa.gov/snow/snowplot.cgi?NVRM8>
  3. Short-term Helena 5-day weather (**precipitation and temperature**) projection from the National Weather Service.  
<https://forecast.weather.gov/MapClick.php?lat=46.5924&lon=-112.0403#.XpoTqkZKjBQ>
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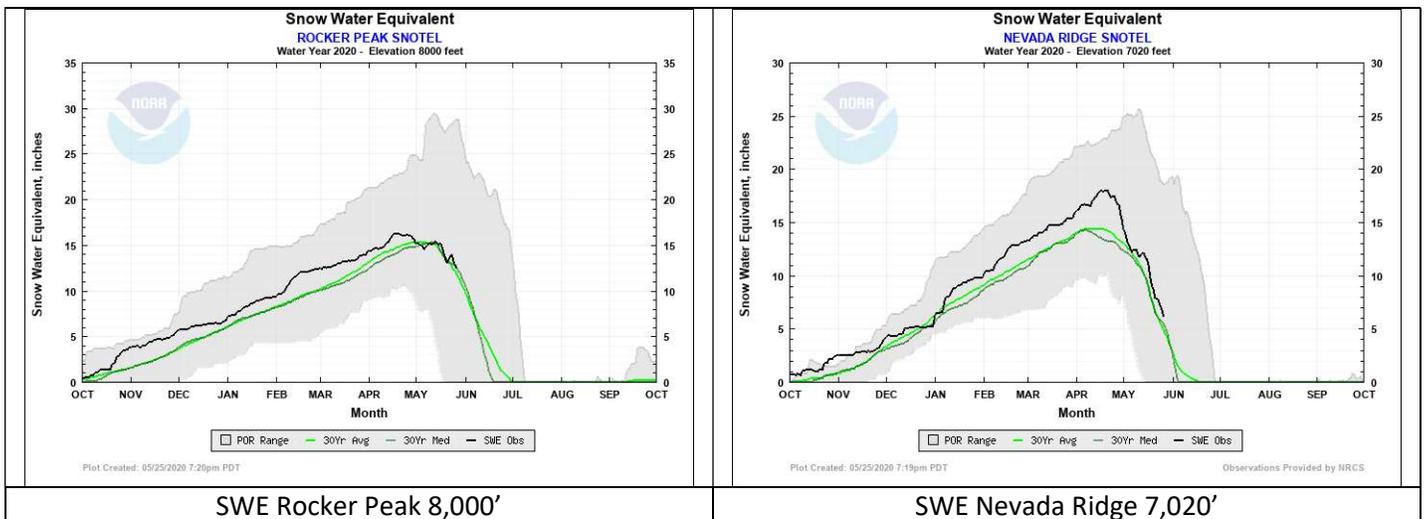
## 1. STREAMFLOW

Streamflow on Tenmile Creek over the past 30 days is shown below. Note May 1<sup>st</sup> peak due to warm weather snowmelt/runoff, and recent peak of nearly 300 CFS on May 21<sup>st</sup> from the recent precipitation. Flood discharge is estimated at >400 CFS.



## 2. SNOWPACK (SWE)

SWE at Frohner Meadows (6,000') is gone. The two next-closest regional SNOTEL stations (Rocker Peak to the S at 8,000', Nevada Ridge to the NW at 7,020') show snowpack near or slightly above average for this time of year. See below

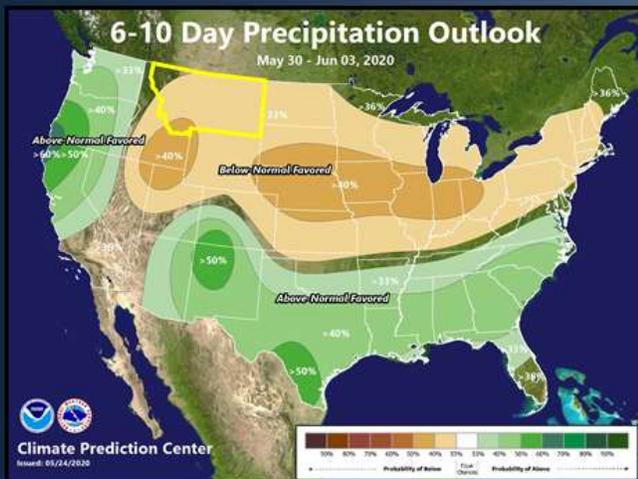


## 3. WEATHER

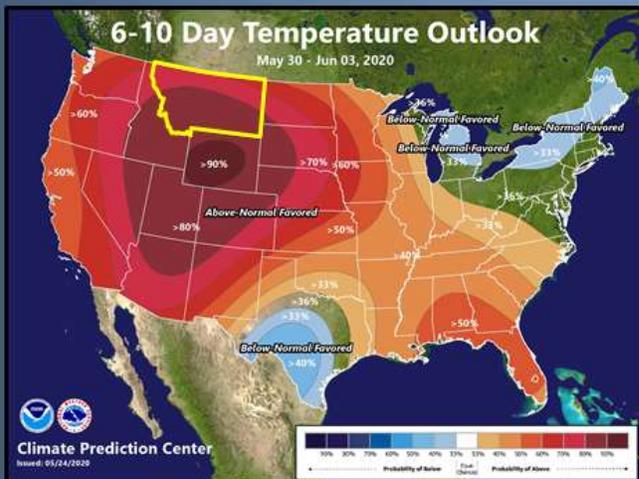
Monday through next Friday... above average temperatures with no significant precipitation is forecast. See 6-10 day outlook from the National Weather Service below.



# 6-10 Day Outlook



- Slightly greater chances for below normal precipitation
- Any precipitation looks to be limited to isolated to scattered showers and thunderstorms



- Very high confidence in above normal temperatures next weekend into early the following week
- High temperatures may approach record highs for some areas

