River Watch Items for the May 2023 UWP Board Meeting

- River Watch items of interest:
  - Samples from our six main River Watch sites will be collected and analyzed between the 6th and 10th of May 2023. High flow nutrient samples will be collected at Cow Creek, Dallas Creek and at the Uncompahgre site below the reservoir. Based on the remaining SWE at the higher SNOTEL sites (see Figure 1), high flow nutrient samples at the other three Uncompahgre sites will be collected in June.
  - Three potential River Watchers responded to Tanya's request for summer assistants and we will try to incorporate them into our June, July and August schedules.
  - My revised water quality report based on 2019-2022 River Watch data was completed and forwarded to Ashley and Amanda for review.

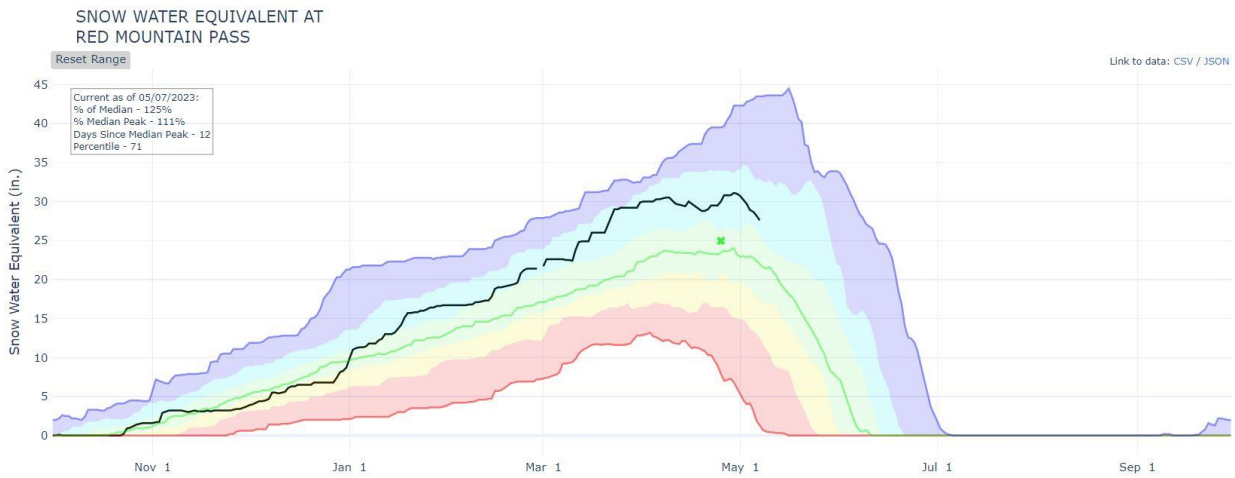

Figure 1. Graph showing SWE curves for Red Mtn Pass. Black line is the curve for 2023. Green is the median curve.

- Precipitation, streamflow, and reservoir storage:
  - The Gunnison Basin still had significant SWE as of May 7th; 183% (19.2 inches) of the median for the date. The peak SWE was 25.2 inches on April 7th. For the Uncompahgre watershed, the Idarado SNOTEL has lost considerable SWE, down to 5.9 inches, but this was 141% of the median. At the higher Red Mtn Pass site shown in Figure 1, the peak SWE of 31.0 inches occurred on April 30th, and SWE had dropped by less than 3 inches, to 27.6 inches on May 7th. This was 125% of the median.
  - Figure 2 shows the streamflow graph at the USGS gauge near Ridgway from April 7th through May 7th. The graph indicates runoff began during a warm period at the beginning of April, then flow decreased to below the median by about April 22nd. Flow increased again with warmer weather and reached a peak of more than 400 cfs, much greater than the median, on May 4th. Flow then tapered off to near the median of 200 cfs by the end of the period on May 7th.
  - At Ridgway Reservoir releases continued to exceed inflow and storage dropped to about 52,500 acre-ft, which was 91% of the median storage on May 8th.

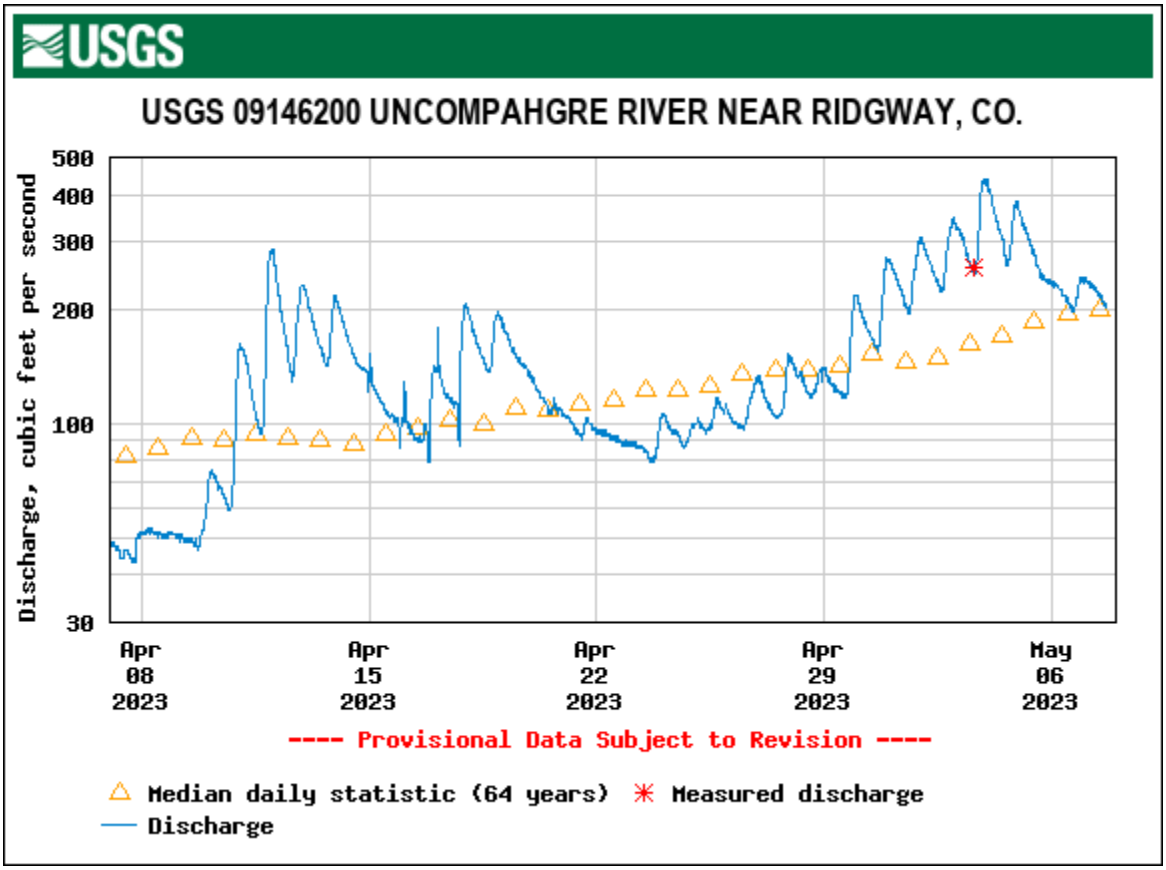

Figure 2. Streamflow graph for the USGS gauge near Ridgway. Period shown is 7 April to 7 May 2023. Triangles indicate median values. Red asterisk shows a manual validation measurement.