River Watch Items for the May 2024 UWP Board Meeting

- River Watch items of interest:
  - The six lower River Watch sites were successfully sampled in April (5th – 7th) and May (3rd, 5th, and 6th). April and May metals samples will be shipped to CPW on May 7th.
  - A set of pH, alkalinity and hardness unknowns were analyzed on May 7th with results sent to River Watch with the metals shipment.
  - High flow nutrient samples will be collected at 11 sites in June.
  - We have selected three new sites for the upcoming TMDL. These will be on Sneffels Creek below Atlas Mill (Segment COGUUN05_E), at the lower end of Governor Basin (Segment COGUUN05_C), and on Mineral Creek (Segment COGUUN08_A) just above its confluence with the Uncompahgre River. We expect to start sampling these sites in June, bringing our total number of sites to 14 in the upper Uncompahgre watershed.
- Snowpack, Precipitation and Streamflow:
  - As of May 4th, for the 2024 Water Year, the 15 Gunnison Basin SNOTEL sites had an average of 8.5 inches of SWE: 73% of the basin median and down from 98% in March. In the Uncompahgre watershed the Idarado SNOTEL at 9,812 ft had lost nearly all its SWE on May 4th. This is about two weeks earlier than the median date for the complete loss of snowpack. The Red Mtn Pass SNOTEL at 11,080 ft had 19.5 inches of SWE on May 4th, 85% of the median. At Red Mtn Pass SWE had peaked at 21.8 inches on April 11th, then dropped to 18.5 inches by April 26th before adding an inch of SWE before the end of May. The median date for complete snowmelt at Red Mtn Pass is June 11th.
  - Between 1 January and 7 April 2024 streamflow on the Uncompahgre River at the USGS gauge near Ridgway was below median values, then several peaks greater than median flow (up to 270 cfs) occurred between 7 and 28 April. These peaks corresponded to the loss of snow at Idarado and Red Mtn Pass. Flow then dropped to below median values after April 28th.
  - A time series of discharge for Dallas Creek is shown in Figure 1. The creek experienced another of its very low spring streamflow periods, compared to median flows, starting at the beginning of April. Although interrupted by some increases up to 20-30 cfs, streamflow dropped as low as 2 cfs between 6 April and 4 May. On May 4th discharge was about 4 cfs compared to the median of about 40 cfs. Over the same period Cow Creek was also generally below its average flow, ending on May 4th at 8.6 cfs, compared to its average of nearly 100 cfs.

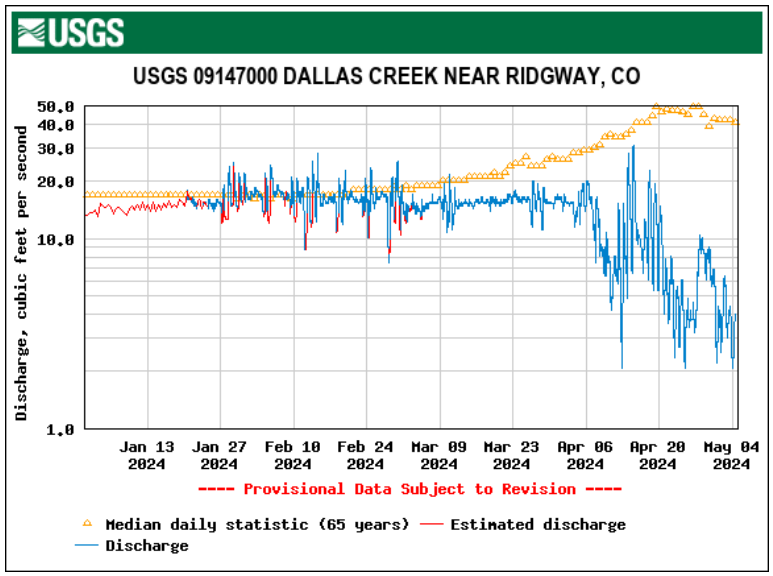

Figure 1. Discharge graph (blue line) from the USGS gauge on Dallas Creek from 1 January to 4 May 2024. Triangles show median discharge values.

- Storage in Ridgway Reservoir peaked at about 68,000 acre-feet on April 18th, then dropped to 62,000 acre-feet on May 4th. The median storage on May 4th is 57,680 acre-feet. Although the drop in storage began later than normal this year, the release rate is higher than normal for May 4th. Streamflow at the gauge below the reservoir is at 400 cfs, which is 100 cfs greater than the median.