River Watch Items for the April 2026 UWP Board Meeting

- River Watch items of interest April 2026
  - April 2026 sampling was completed on April 5th (Dallas Creek and CR24). Potters Ranch and Ridgway Town sites were sampled on April 1st, and Cow Creek and Below Reservoir sites were sampled on April 2nd.
  - No streamflow measurements were taken during our April River Watch sampling. The Global Flow Meter was returned from repair on April 9th. CWCB is also expected to provide a flow meter to our RiverCorps member this month, so one of the two meters can be used to collect flow measurements later this month.
  - River Watch sent an email describing their overburdened situation with analyzing metal samples; too many samples, too few people to analyze them, and a budget that hasn't changed much over the last decade. The situation has apparently developed due to groups joining River Watch to take advantage of the lower lab costs. As a result, RW has stopped adding new groups and is proposing a pricing structure for lab analysis for groups that sample more than two sites. [*An initial proposal is to charge $150 - $300 for each 12-month site beyond the first two.*] The RW goal is to acquire enough additional funding to be able to hire a second person to perform sample analysis. Note that the two site limit does not apply to UWP, since we haven't had ulterior motives for why we added sites over the last several years. I'm not averse to cutting back some of our sites, particularly some of the TMDL sites we have added in the upper part of the watershed. Also, the TMDL sites were added for the benefit of WQCD, so if charges are forthcoming perhaps a small grant from WQCD should be requested.

- Precipitation and Streamflow:
  - Table 1 shows Snow Water Equivalent (SWE) data for the Gunnison Basin and two SNOTEL sites in the Uncompahgre Watershed through April 9th, 2026. The Gunnison Basin as well as both SNOTEL sites were at the zero percentile of SWE accumulation for April 9th. The 2026 SWE history for the Idarado SNOTEL is shown by the black line in Figure 1. SWE peaked on about March 15th compared to the median date of April 7th. Snowmelt began on March 17th and complete snowmelt occurred on March 28th, compared to the median zero snow date of May 17th.

Table 1. Snow Water Equivalent (SWE) data for the Gunnison Basin and the Idarado SNOTEL and the Red Mountain SNOTEL as of April 9th, 2026.

Date	Gunnison SWE 15 site avg (in)	Gunnison % of Median	Percentile Ranking	Idarado SWE (in)	Idarado % of Median	Percentile Ranking	Red Mtn SWE (in)	Red Mtn % of Median	Percentile Ranking
11/12/25	0.3	16		0.0	0		0.7	25	
11/24/25	1.3	50		1.0	48		1.7	39	
12/08/25	2.8	72		2.2	69		3.8	63	
01/09/26	4.6	65		3.6	64		5.5	53	
02/06/26	5.4	56	4	4.5	55	7	6.7	48	2
03/08/26	8.5	64	4	6.8	61	0	10.2	57	2
04/09/26	2.7	17	0	0.0	0	0	6.0	25	0

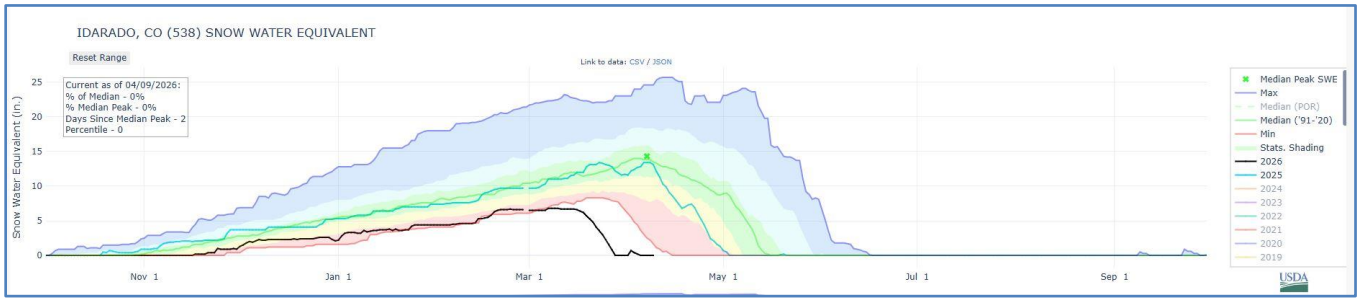

Figure 1. Water year histories of SWE at the Idarado SNOTEL site. Black line is WY2026, green line is WY2025 and the red line is the previously observed minimum. Green "x" is the median peak in SWE on April 7th.

- Discharge at the USGS gauge on the Uncompahgre River near Ridgway for the 2026 Water Year through April 9th is shown in Figure 2. From late October through most of March discharge generally followed the median discharge curve until discharge from snowmelt began on about March 16th (vertical dashed line in Figure 2). The peak in the discharge curve on March 27th was near the date shown in Figure 1 when snowmelt was complete at the Idarado SNOTEL.

Figure 2. Hydrograph for the USGS gauge near Ridgway, CO, October 1st, 2025 through April 9th, 2026. Gray line is the median discharge. Hatched areas are ice affected periods and red dots represent estimated discharge. Vertical dashed line shows date when runoff from snowmelt began on about March 16th.

- Discharge at the USGS gauge on Dallas Creek from February 1st through April 9th is shown in Figure 3. Discharge began falling below the median curve on about March 12th (vertical dashed line in Figure 3), possibly when upstream irrigation diversions began. Discharge then decreased steadily down to 0.63 cfs on March 31st. Discharge fell below the 9 cfs winter instream flow limit on March 24th and remained below 9 cfs after March 27th. Through April 9th, when discharge was 3.1 cfs (median of 33.6 cfs), discharge had been below 9 cfs for about 16 days.
- Ridgway Reservoir storage was still slowly increasing as of April 9th, reaching 74,560 acre-feet, about 3,500 acre-feet above the storage on March 7th. The median storage curve starts decreasing on about April 1st, so current storage exceeds the median of 62,780 acre-feet by 11,780 acre-feet.

- Metal concentration changes from Red Mtn Creek at Idarado to Ridgway Reservoir (Part 2)

  At the request of a board member some additional dissolved and total metal concentration profiles are provided using RW data from 2010. The RW report at the March Watershed Health Working Group displayed several profiles for trace metals that are harmful to aquatic life. In this report the same set of seven sites, extending from Idarado on Red Mtn Creek down to CR24 on the Uncompahgre River below Ridgway, are used. Locations are shown on the maps in Figures 10 and 11. Instead of trace metals, in this report profiles of the major chemistry elements calcium, magnesium and sodium are described.

  Figures 4 and 5 show pH and dissolved and total profiles of calcium concentrations in June 2010 (Figure 4) and October (Figure 5). Note that the June data represents concentrations at relatively high flow and

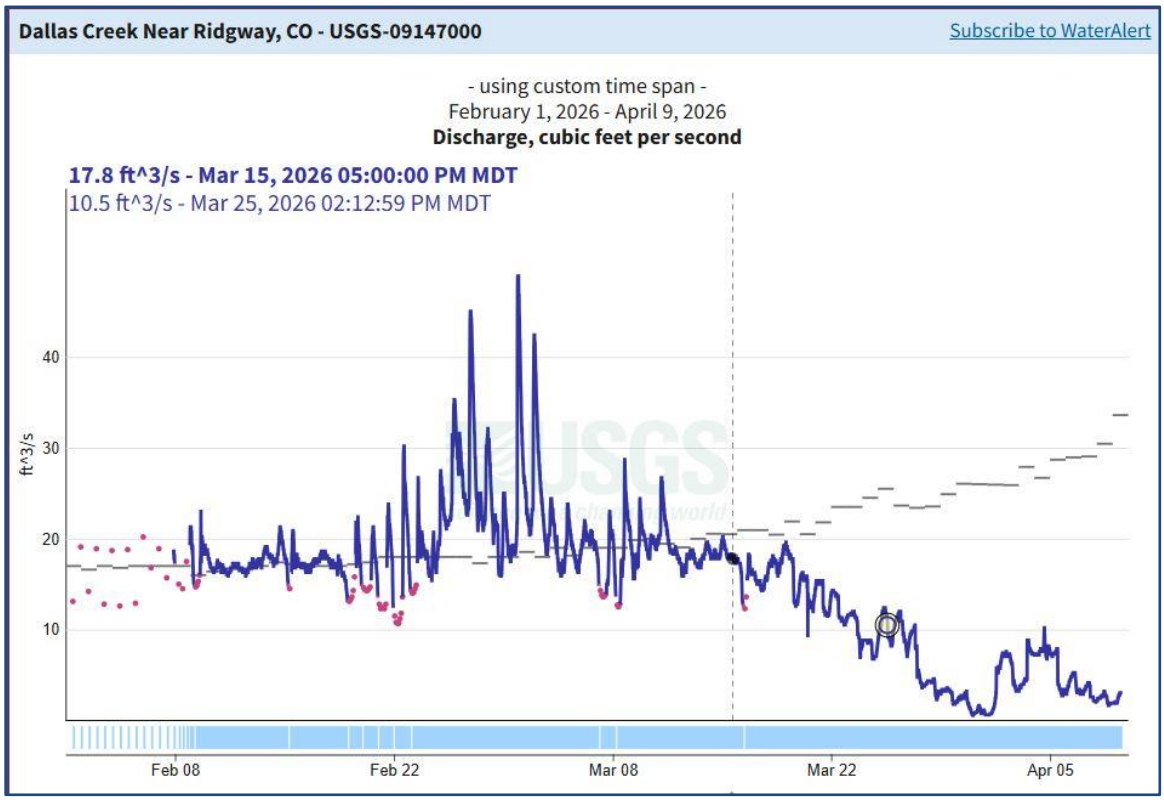

Figure 3. As in Figure 2, except showing a hydrograph for the USGS Gauge on Dallas Creek from February 1st through April 9th, 2026.

October data represents concentrations at low flow. Both June and October data indicate that calcium was in a dissolved state at all sampling sites. The October data indicate that calcium concentrations were 3 – 5 times greater than June concentrations at and above the KOA site. Below the KOA site October concentrations were about 1.5 – 2 times greater than June concentrations. In June the highest calcium concentrations were found at the lowest two sites on the Uncompahgre River, while in October the highest calcium concentrations were found at the highest sites on Red Mtn Creek. The large increase in calcium concentration between the KOA site and Potters site in June was not noted in October. However, there were increases in calcium below Potters in June and October. Since calcium is a major contributor to water hardness, an increase in hardness (not shown) was also noted in June below KOA, and hardness peaks were also found with the highest calcium concentrations.

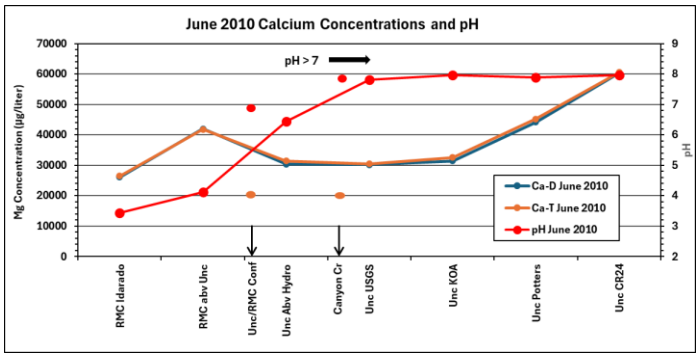

Figure 4. Profiles of concentrations of dissolved and total calcium, and pH, from samples collected in June 2010. River Watch site locations are shown in Figures 1 and 2.

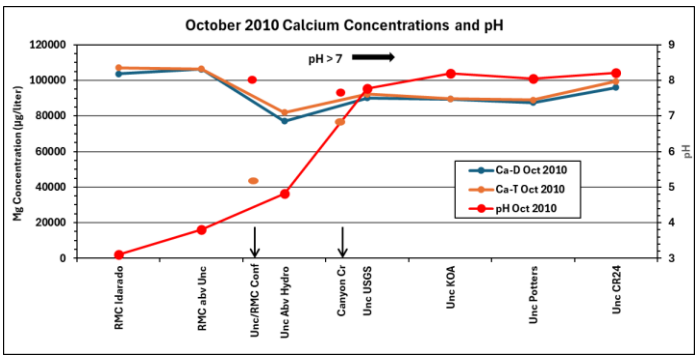

Figure 5. As in Figure 4, except showing profiles of calcium for October 2010.

Figures 6 and 7 show the profiles of dissolved and total concentrations of magnesium. There is an indication at some sites, particularly USGS and KOA in October, that some calcium remained undissolved. As with calcium,

magnesium concentrations in October were much higher than in June; roughly 2.5 to 3.5 times greater. One distinct difference between the calcium and magnesium profiles is the very sharp increase in magnesium concentration between Potters and CR24 in both June and October. In both months the magnesium concentration at CR24 was about 2.5 times higher than the concentration at Potters. One possible source of the additional magnesium is the discharge from Orvis Hot Springs which advertises magnesium rich waters.

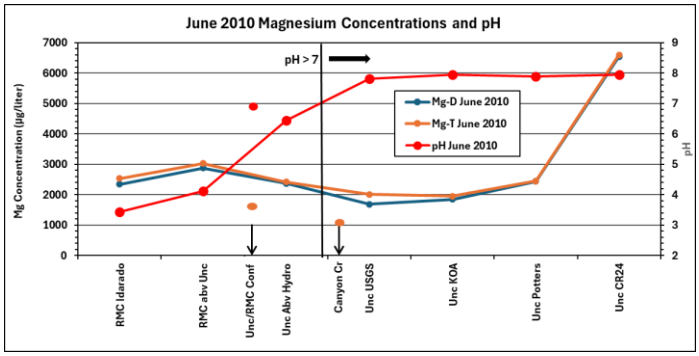

Figure 6. As in Figure 4, except showing June 2010 dissolved and total concentration profiles for magnesium.

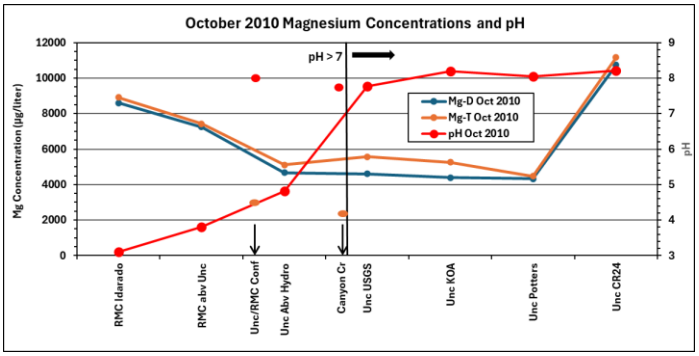

Figure 7. As in Figure 5, except showing October 2010 dissolved and total concentration profiles for magnesium.

The final set of profiles is for sodium, found in Figures 8 and 9. As with calcium, sodium was in a dissolved state at all sites for both June and October. October concentrations were 2 – 4 times higher than June concentrations. June and October profiles were similar between Idarado and Abv Hydro. Then, the concentration increase between Abv Hydro and USGS was much greater in October (~ 3 times) compared to June (~ 2 times). The concentration increase between Potters and CR24 was somewhat greater in June (~ 2.9 times) compared to October (~2.3 times).

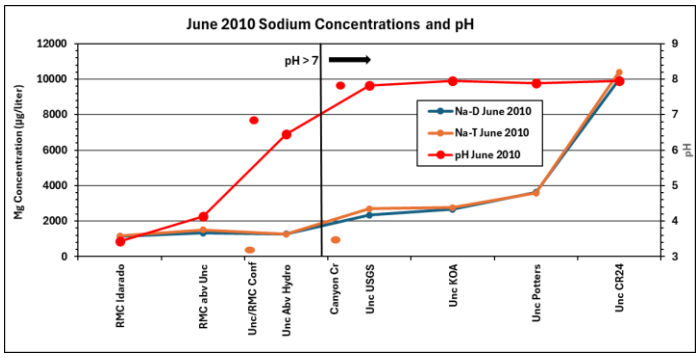

Figure 8. As in Figure 4, except showing June 2010 dissolved and total concentration profiles of sodium.

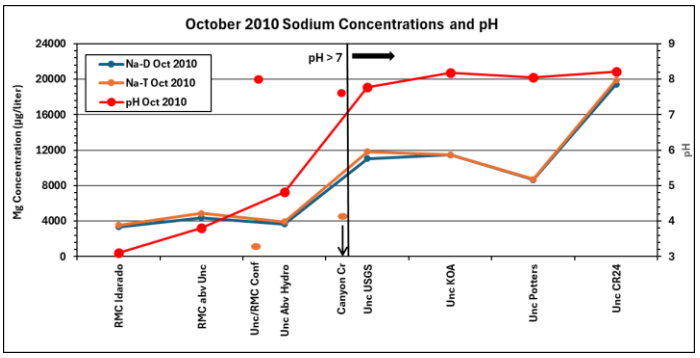

Figure 9. As in Figure 5, except showing October 2010 dissolved and total concentration profiles for sodium.

For all of the profiles pH was not a factor over the range of pHs measured in these samples. Except for several October magnesium samples, all other samples were in a dissolved state. It is not clear why two of the magnesium samples at adjacent sites below Ouray were partially undissolved. The low flow concentrations of all the metals were much higher than the high flow concentrations, where the lower June concentrations were likely due to dilution from snowmelt runoff with very low concentrations of the three metals. The variations in the profiles between June and October could be due to source differences as flow decreases, for example the impact of groundwater sources being much greater at low flow than high flow. It would be interesting to know what causes the large increase in concentration of all the metals between Potters and CR24.

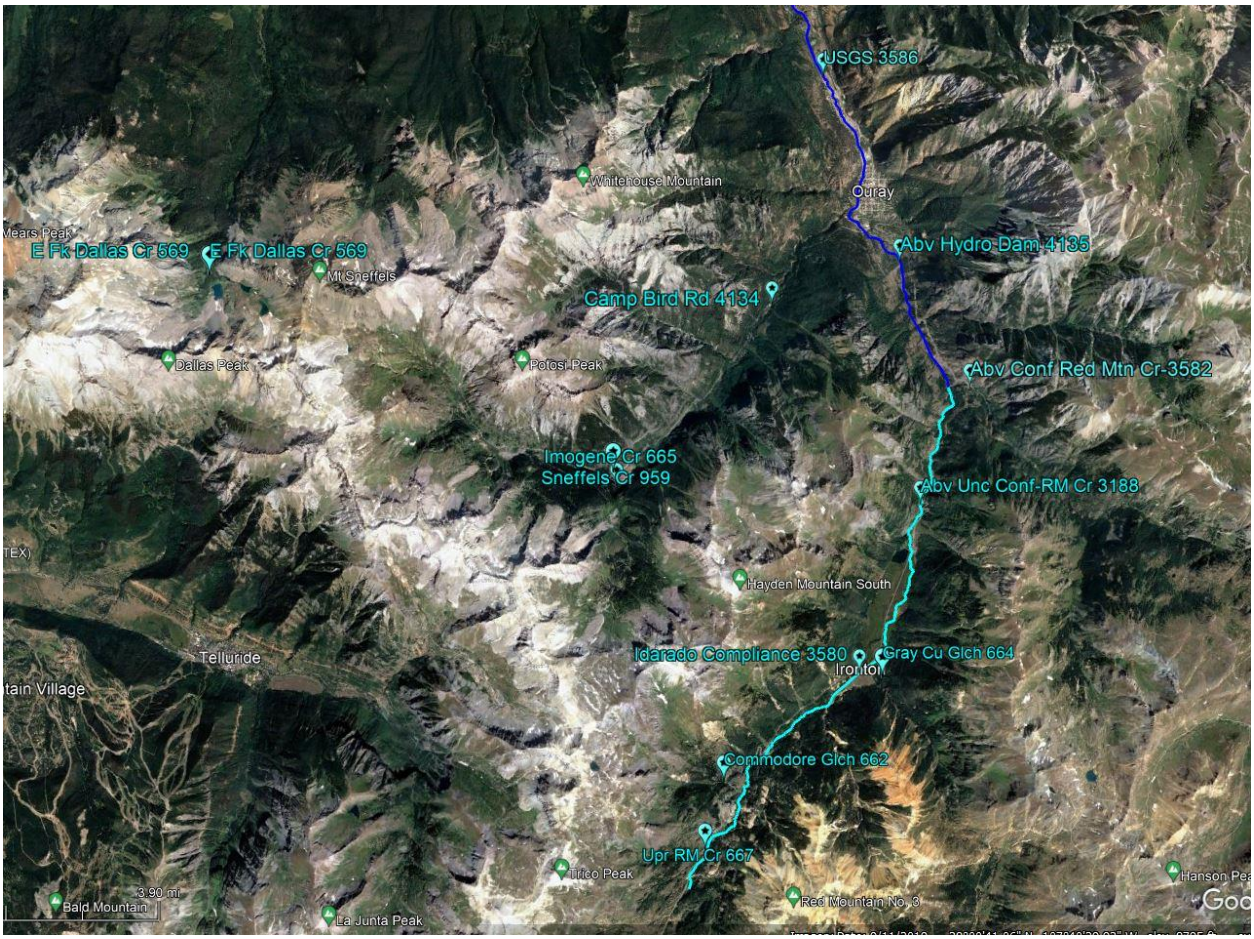

Figure 10. Map showing River Watch sites in the upper Uncompahgre Watershed. Sites used in this report are 3580, 3188, 4135 and 3586. Light blue line is Red Mtn Creek and dark blue line is the Uncompahgre River.

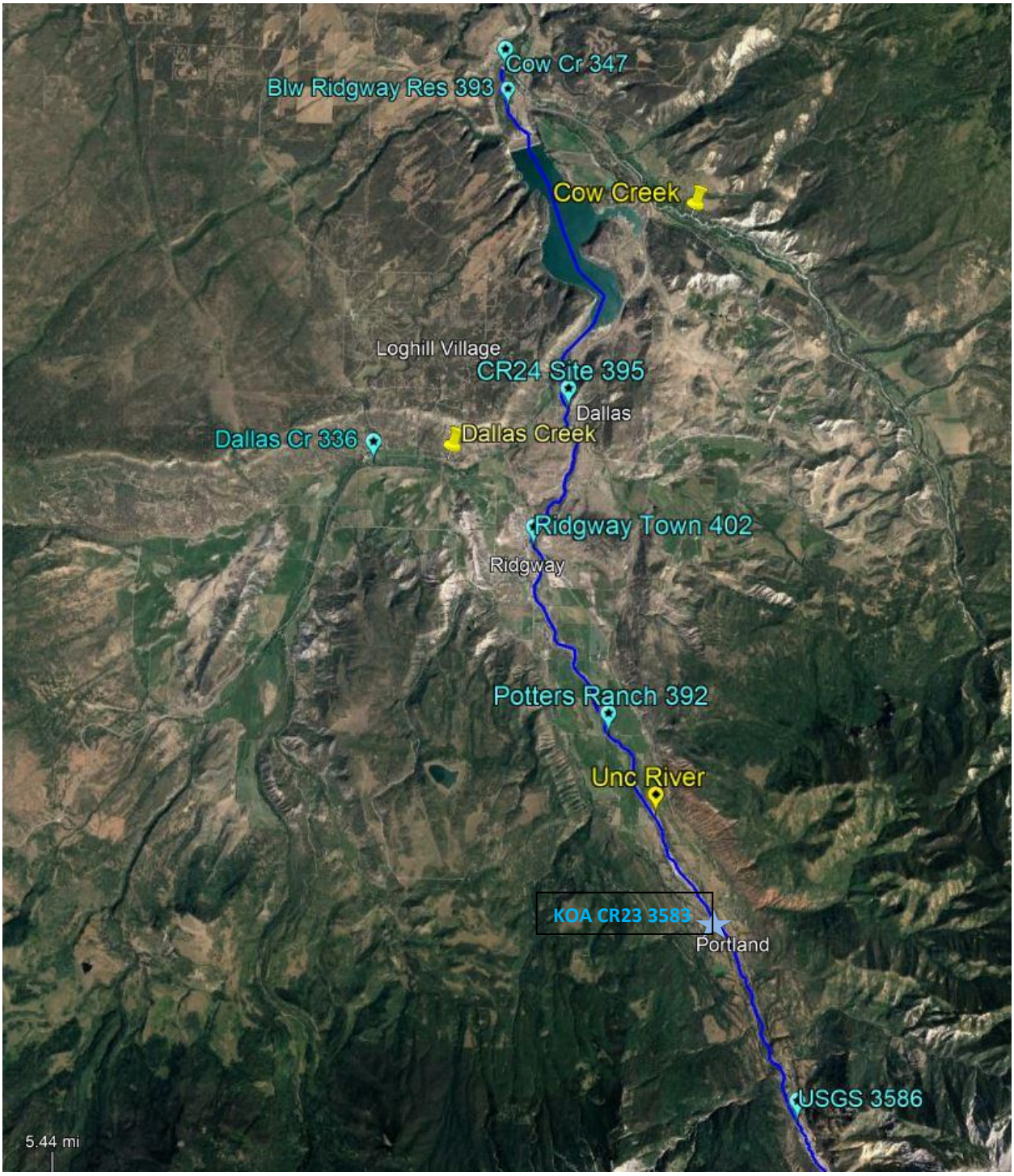

Figure 11. Map showing River Watch sites in the lower part of the Uncompahgre Watershed. Sites used in this report are 3586, 3583, 392, and 395. Dark blue line is the Uncompahgre River.