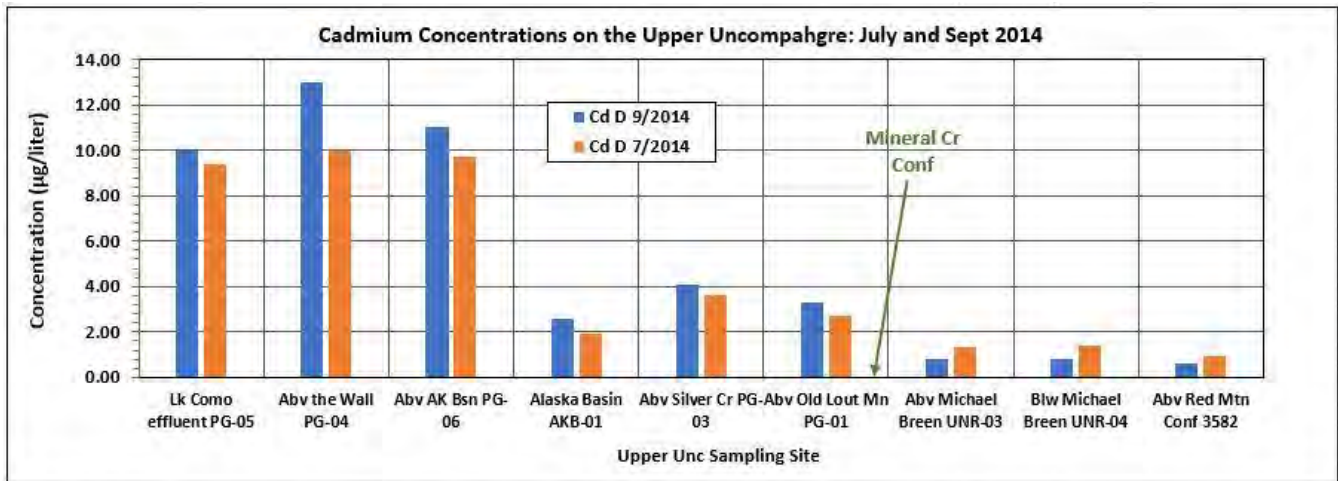


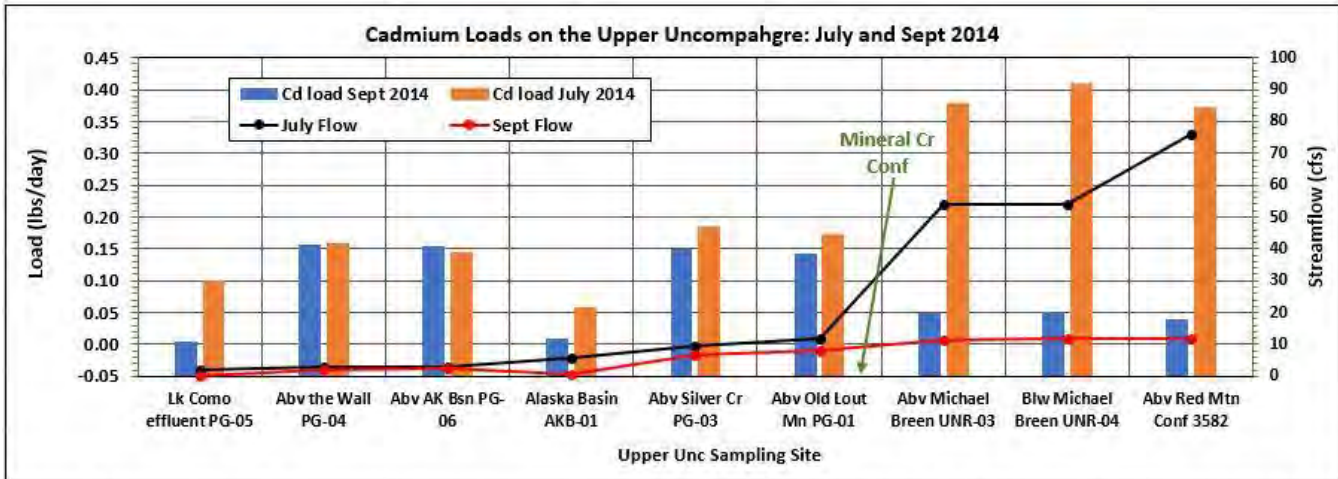
River Watch Items for February 2021 UWP Board Meeting

- UWP River Watch volunteers completed water quality sampling and testing at our six sites on February 1st, 2nd, and 6th 2021. As with January sampling no streamflow data was available at the USGS gauge near Ridgway or Cow Creek (both showed icing). The USGS gauge near Ouray varied from 20 to 30 cfs over the 30 days prior to sampling, which was similar to the median flow for the period. The gauge below the reservoir was showing 36 cfs through January and early February, while the 19-year median is 50 cfs.
- Snowpack and precipitation update. The Gunnison Basin is at 73% of the 30-year median snowpack. The south part of the basin is doing better with Ironton, Idarado and Red Mtn Pass at 88-91% of median snowpack. The early part of the water year was dry, so total precipitation at Red Mtn Pass is only 69% of the median.
- Abe Proffitt, coordinator for the USFS Blue Lakes visitor impact study, contacted Project 7 in Montrose regarding analysis of water samples for E. Coli, and they have agreed to do the analysis.
- Update on our 10 February meeting with River Watch and CDPHE regarding the TDML project for the Uncompahgre Basin.
- In updating water quality data collected in the watershed from 2018 through 2020 I discovered that CDPHE had collected samples at the same site used by River Watch on Dallas Creek (below Pleasant Valley Creek at the bridge on CR24). Three samples were collected between 9/17/19 and 6/18/20. In addition, CDPHE collected seven samples on Alkali Creek at Hiway 550 (Alkali Cr flows into Ridgway Reservoir just below 550) over roughly the same period. I will show the data from these samples next month.

Two graphs showing how cadmium concentrations (top) and loads (bottom) changed from Lake Como to the confluence of the Uncompahgre with Red Mountain Creek. Data were from July and September 2014.



Bar graph of cadmium concentrations on the upper Uncompahgre from Lake Como to Site 3582 above the Red Mtn Creek confluence. Samples were taken in July 2014 (orange bars) and September 2014 (blue bars), except Site 3582 where concentrations are 17-year averages for July and September. All sites are on the Uncompahgre River except Site AKB-01. The point where Mineral Creek joins the Uncompahgre is shown by the green arrow. The very high Cd concentrations just below Lake Como were apparently diluted as water from tributaries entered the river, resulting in a gradual decrease in Cd concentration down to Site 3582. The six higher sites had greater Cd concentrations in September (lower flow) while the lowest three sites had higher concentrations in July during the higher runoff period.



Bar graph of cadmium loads (lbs/day) on the upper Uncompahgre from Lake Como to Site 3582 above the Red Mtn Creek confluence. Loads were calculated from streamflow and Cd concentration measurements taken in July 2014 (orange bars) and September 2014 (blue bars), except Site 3582 where values are 17-year averages for July and September. Streamflow values are shown by the black (July) and red (September) lines. All sites are on the Uncompahgre River except Site AKB-01. The point where Mineral Creek joins the Uncompahgre is shown by the green arrow. The upstream to downstream pattern for loads in July is nearly reversed from that of concentrations, where despite the very high Cd concentrations below Lake Como, loads are much lower than downstream loads below the confluence with Mineral Creek where flow markedly increases during this month of high runoff. In September when flow only increases slightly upstream to downstream, loads decrease with concentrations.