

Meeting Summary
Bonita Peak Community Advisory Group
Feb. 23, 2023, 6:00—8:00 PM
Via Computer Conferencing

CAG members in attendance: Peter Butler, Chara Ragland, Emily Thorn, Sara Burch, Ty Churchwell, Terry Morris, Helen Mary Johnson, Susan Livenick, Anthony Edwards, Charlie Smith, and Russ Anderson. Not Attending: Dave Palmer, Brian Devine, Justin Elkins, and Parker Newby.

Also in attendance: Tom Schillaci, Roy Smith, Lisa Merrill, Athena Jones, Kirstin Brown, Ryan Bennett, Melissa Smeins, Mark Rudolph, Emma Buccambuso, Mely Whiting, Christina Progress, Tanner Banks, Nate Rock, Scott Roberts, Meg Broughton, David Heinze, Athena Jones

Introductions and Announcements

Because of a big snow storm, there was no afternoon workshop discussion to review. Also, tonight's meeting was conducted over Zoom instead of in person.

Peter welcomed three new CAG members Emily Thorn, Sara Burch and Dave Palmer. Dave was out of the country and couldn't attend.

Peter is looking for people to help out with water sampling in March. Parker is out of the country and will not be around to help.

The Southwestern Water Conservation District is hosting their 39th annual water conference in Ignacio on March 31st. The title is "Seeking Common Ground in Crisis". Much of the conference will revolve around the shortage of water in the Colorado River Basin. For more information, go to the District's website. There will be no remote option.

Peter and Scott Roberts gave a presentation on sampling in the Animas Canyon and bioavailable aluminum to the aluminum sub-group of the Colorado Water Quality Forum via Zoom. The Forum is the main stakeholder discussion group for all statewide water quality issues.

Several CAG members volunteered to look at the EPA StoryMap that Meg Broughton wants to revamp. Susan has been spearheading the effort with Parker, Chara, and Helen Mary all contributing. Peter would like to send out their comments to the CAG and finalize at the March meeting. Meg asked about moving forward with a meeting with the small group that had been tentatively discussed. Peter thought that might still be

useful. Susan said she thought the StoryMap is a really valuable tool for those not in the CAG.

Review of Afternoon Workshop Discussion on the Need for a Treatment Plant for Mine Drainage

Since there was no afternoon workshop for review, Peter gave a presentation very similar to the one he gave the aluminum sub-group. He showed the locations where the CAG samples, below each of the major tributaries to the Animas River in the canyon - Elk Creek, Needle Creek, and Cascade Creek. The sample site below Needle Creek is about four miles downstream from the confluence, but there are no named tributaries in that stretch. That same site is about a three quarter mile above Cascade Creek and just above Teft Spur.

Peter showed graphs of hazard quotients from monthly samples collected over the last 3.5 years below the confluence with Cascade Creek for three metals (zinc, iron, and aluminum) not meeting Table Value Standards (TVS). In this case, TVS is a concentration of a contaminant that is not toxic to 95% of the aquatic species that could be present. For many metals, TVS applies only the dissolved fraction of the metal and is dependent on hardness. The actual standard is an equation where hardness is plugged in to get the protective metal concentration. The lower the hardness, the lower the protective standard concentration. A hazard quotient is the metal concentration of the sample, divided by TVS, given the hardness found in that sample. So, a hazard quotient less than one means the standard is being met, and above one, it is not. A hazard quotient of two means the sample concentration is twice the standard.

For zinc, the highest hazard quotients at Cascade occur in the early part of runoff, mid-March to mid-May. For iron and aluminum, the highest hazard quotients occur a little earlier, February – March. This is not a time period when EPA does much sampling.

Peter compared water quality conditions in the canyon for two time periods, 1999-2003 and 2017-2021. During the first time period, Sunnyside Gold treated the residual water coming out of the American Tunnel after installing bulkheads (#1 in 1996, #2 and #3 in 2001 & 2002) and treated all of Cement Creek above the South Fork at Gladstone during low flow. Treating Cement Creek at this location includes capturing the drainage from the Grand Mogul, Mogul, Red & Bonita, Gold King, American Tunnel and several less significant mines. During the second time period, EPA treated the drainage from the Gold King mine only.

For the first time period, fish and macroinvertebrate populations and diversity were much better. They dropped way off later in the 2000's when there was no treatment occurring and have come back a little bit once the Gold King started to be treated. Metal concentrations at A72, at the head of the canyon near Silverton, were lower in the earlier time period, especially during low flow time periods. Interestingly, while zinc concentrations were lower in the earlier time period, the hazard quotients for both time

periods are nearly the same because of higher hardness in the later time period. It is unknown why hardness was higher in the more recent time period. Both iron concentrations and hazard quotients were quite a bit lower during the earlier time period. Aluminum concentrations were also lower although there isn't a lot of data for the earlier time period. It is possible that iron and aluminum play a larger role in inhibiting aquatic life in the canyon than previously thought. A high percentage of the iron and most of the aluminum is thought to come from natural sources.

BLM Purchase of Transbasin Water Right at Top of Burrows Gulch

Roy Smith with BLM described efforts by BLM to purchase a transbasin water right that diverts water from near the top of Burrows Gulch, above Animas Forks, to the Uncompahgre Basin. BLM's interest is to keep more water in the Animas Basin for improving water quality and fens and wetlands along the stream. It would also facilitate remediation of some BPMD sites that the diversion ditch runs through. Some of the ditch embankments are built out of mine waste.

The water right has a 1956 priority date and can divert up to 11 cfs, although that may only happen during spring runoff. BLM would acquire the water right, ditch infrastructure and facilities, and easements under which the ditch operates. The ditch is about 1000 feet long and crosses three mining claims and BLM land.

Funding has been requested from BLMs Abandoned Mine Land Program and Land and Water Conservation Fund - \$175k. The total funding needed is a bit less than \$300k. They are working on the Environmental Site Assessment (hazmat, potential liabilities) as part of the NEPA analysis. BLM still needs to approve the title. When all of this is complete, they will have a public notice of the Proposed Decision and protest period and have Record of Decision and closing. The hope is complete the purchase this coming summer.

After the purchase, BLM will close the diversion structure reclaim the ditch route, and direct all flows back into Burrows Creek. They plan to lease the water right to Colorado Water Conservation Board for instream use. This will prevent a new junior water right from being established using the ditch. There may be some challenges to leasing the water for instream use because improving water quality is not considered a beneficial use. Roy, Mely Whiting, an attorney with Trout Unlimited, and Charlie all discussed potential options and possible pitfalls of getting the instream flow designation. Trout Unlimited has been working with BLM for several years trying to facilitate the purchase.

Ty asks what can the CAG do to help with finalizing the purchase and getting the instream flow designation. Roy responds that there will be several opportunities for public comment and letters from the CAG would be helpful.

Emily asks about plans to monitor the wetlands that may benefit from the purchase. Roy says he likes that suggestion but has not focused on the science end. Perhaps

Melissa and Lisa of BLM can take that back as a proposal. Peter also points out that Emily has that expertise in wetland monitoring. Helen Mary notes that the monitoring could be a good opportunity for a graduate thesis.

Administrative Items

- ✓ Meeting Summary. Ty motions to approve the January meeting summary and Chara seconds. No one objects and the summary is approved.
- ✓ Election of Officers for the Coming Year. Currently Peter is the Chair, Russ is the Vice-Chair and Ty is the Secretary/Treasurer. Peter asks if there are any nominations for chair. Charlie makes a motion to keep all three positions as they are. Anthony seconds. Helen Mary asks if the current people are all comfortable with staying in their respective positions. The answer is affirmative, and all CAG members present approve the motion.
- ✓ March Meeting – Mayflower #4 Repository. Meg says that informing the CAG about the construction of the repository is important, but EPA wants to confer with the Town of Silverton about logistics first. Athena says that the broad community outreach in Silverton is being figured out. So, it is likely that the repository discussion will happen at the April CAG meeting. Peter says the big logistical detail is truck traffic – where will the material come from and will it all travel down the middle of Silverton. Once the contract has been awarded to a contractor, EPA will be able to discuss.
- ✓ Cancelled workshop. There was discussion about when to reschedule the workshop. The normal CAG meeting day, March 23, is during Durango spring break and following week would be Silverton spring break. It is also possible to have the workshop and the CAG meeting on separate days. People discuss preferences, and Peter says he'll have to get back to people as to what the best option may be.
- ✓ CAG Discussion Time. Peter suggests that the CAG look at the draft EPA materials for the workshop and get together over Zoom to discuss them next week.
- ✓ Long-Range Schedule
- ✓ Future Agenda Items? *Macroinvertebrate Data, Prioritization of Mine Sites for Goals 2 & 3, Remedial Actions for Gladstone, etc.*

8:00 PM - Adjourn