

Meeting Summary
Bonita Peak Community Advisory Group
January 26, 2023, 6:30—8:30 PM
Via Computer Conferencing and
In Person at Durango Reclamation Facility
Santa Rita Park

CAG members in attendance: Peter Butler, Chara Ragland, Parker Newby, Justin Elkins Ty Churchwell, Terry Morris, Helen Mary Johnson, Susan Livenick, Anthony Edwards, Marcel Gaztambide, Charlie Smith, and Russ Anderson.

Also in attendance: Melissa May, Scott Roberts, Ruben Schafer, James Livenick, Meg Broughton, Dave Palmer, Mark Rudolph, plus 18 people online

Introductions and Announcements

Joy Jenkins has been appointed the new project manager for BPMD for EPA. Joy was the temporary project manager for a couple of months previously when Christina was on assignment elsewhere. Christina has moved into a new role where she will be supervising all Superfund project managers in Region 8 including Joy.

Marcel announces he is not seeking reappointment to the CAG because of time commitments, but has thoroughly enjoyed working with the CAG members and hopes to remain engaged with the group.

Peter invited Sara Burch, who took Marcel's position at SJCA, to ride the train with him to sample a few weeks ago. Then Parker and Ty skied from Silverton down the tracks to the other CAG sampling site, just ahead of a major snowstorm.

After the last meeting in December, Peter decided to put in a request for about \$9k to the Southwestern Water Conservation District (SWCD) to update the ARSG database containing surface water quality data collected in the Animas Basin since 1991. The main goal is to put all the data from numerous different entities into the same format for ease of analysis. Currently, most of the data pre-2016 has already been formatted and is in the database. The project would also update analyses of data for the upper basin gages (and the Bakers Bridge location) which needs to be done before any water quality goals can be devised. With data from the gages, both loads and concentrations can be determined. The data goes into Excel spreadsheets, so it is easy for people to use. It will eventually go on the CAG's website.

CAG Animas Canyon Sampling

The aluminum water quality standard used by Colorado does not very accurately reflect the toxicity of aluminum to aquatic life, particularly at pH's below 7.0. EPA has developed an aluminum criterium which States can use as an aluminum standard or something similar to it. While the criterium is an improvement over the current state standard, it still doesn't appear to reflect the toxicity effects people are seeing in streams. A scientific paper has suggested that EPA's criterium overstates toxicity because not all the aluminum in a stream is bioavailable to aquatic life. To better approximate bioavailability, the paper suggests using a higher pH (4.0) in the lab to extract aluminum from a sample. Then the bonds adhering the aluminum to clay will not dissolve. The clay bound aluminum is thought to be not bioavailable to aquatic life.

A state-wide work group has been working on this issue, and Scott Roberts at MSI and Peter have been involved. There is statewide interest in testing the bioavailable method. Scott got our local lab to agree to process the samples in the manner as described in the paper. The first few samples that the CAG has collected show bioavailable aluminum concentrations to be 15%-25% lower than total aluminum samples. The lab process is not very expensive, but to use the EPA criterium, dissolved organic carbon (DOC) must be collected and that is more expensive to process.

Review of Last Year's Activities in BPMD and Description of this Coming Year's Activities

After an introduction from Joy, different EPA project managers reviewed work that had been conducted by EPA over the past year. James discussed activities at Operating Unit 3 (OU3), which is the Gladstone-Sunnyside Mine area. EPA was unable to secure a drilling rig to drill into the Sunnyside Mine pool through Lake Emma this year. They do expect the drilling will happen this coming summer. James thanked Terry and Peter for walking around Lake Emma and discussing the site with EPA and its contractors.

EPA tested the stream reach near the Grand Mogul up in Ross Basin. There was suspicion that it was a losing reach and was contributing to the groundwater below Bonita Peak. Turns out it is a gaining reach instead. Similarly, infiltration studies at Lake Emma ended up showing that water does not infiltrate the lake bottom easily, so it may not be a big source for groundwater recharge.

James also discussed work around the fluvial tailings upstream of Howardsville and the tailings impounded at the Howardsville Mill itself. EPA contractors have drilled a number of wells to characterize the tailings and should put out a report on their findings soon.

Jessica Duggan discussed OU2 (the Mayflower Tailings impoundments). In April and October, EPA sampled the wells Sunnyside Gold Corp. (SGC) had sunk. The Sitewide Mine Waste repository work will start this summer on tailings pond #4. The Phase I design is complete and out for bid. There will be more details discussed at the March

CAG meeting. Jessica also discussed the IROD work that had been completed this last field season. (Details are in the powerpoint presentation that will go on the CAG website.) In addition, annual bulkhead inspections throughout the BPMD were done.

Meg Broughton talked about a Feb 2022 ice dam release in Cement Creek that discolored the water. The response system alerting downstream communities worked well. The Gladstone treatment plant is doing what it is supposed to do. She also noted that community involvement work EPA is doing with the CAG, BPMD Planning Group, and Southern Ute Indian Tribe.

There were several questions and some discussion on the past summer's activities. Meg mentioned she wanted to update the story map on EPA's website. Several CAG members asked questions and expressed interest in providing input. Peter asked how much material was moved at the North Star which was done as a removal action as opposed to an IROD action. EPA's planning document suggest that 22,000 cubic yards were to be moved, but Peter thought that was too low. Mark said he thought in the end, it amounted to about 50,000 cubic yards. Peter commented that it would help people to have a visual to know how to relate to a number.

Scott Fetchenhier (chairman of the San Juan County Commissioners) asked if samples were taken above and below the North Star to show the project was warranted in terms of metal loading. James said that samples were taken above and below at some of the IROD sites, but not this one. Joy added that there were structural and stability issues related to the mine waste on the streambank and that was part of the driver for this work.

Mark and Kirsten commented on the State's work related the informal camping areas on private land that have lead contamination. (These sites are referred to as campgrounds which is a misnomer.) Mark also briefly discussed work at the Legal Tinder and Amy mines that is funded under an ASARCO settlement. Peter asked how much of the \$4 million settlement is left, to which Mark replied \$3+ million. Anthony asks about what are the next steps for \$3 million. Mark says we need to get to a final point of remedial action and deciding whether an IROD or ROD are done at state or EPA level. There are another 1-5 years of treatability pilots to analyze. David Heinze with Ramboll says they can do another report to the CAG in the fall about these sites.

Becky Joyce asks where is Campground 4. A human health report mentions campgrounds 2, 3 and 4. People are asking if some of the campgrounds around Silverton are safe to camp in (hence the misnomer) and how are these sites going to be remediated? Mark responds that as private land, the sites have always been closed to camping but that has not stopped people from camping in the past. The remediation work he discussed was conducted after data had been gathered for the human health report. Campground 4 has been covered with topsoil and lead levels have been reduced to exposure levels where a 14-day camping threshold would not exceed possible harmful exposure. They also left the site rocky, hummocky, and vegetated so as not to be great place to camp. Becky asks about tourist education and the need for an updated

health report. Mark agrees the health report is not current and that ATSDR needs to come up with a follow up.

Melissa Smeins with BLM reported on their activities. They removed mine waste around the Midway station in Eureka Gulch and did some re-vegetation work. The main concern was potential lead exposure to campers. In the process of their work, they made the site less inviting for camping.

James talked about EPA's main priorities for 2023. They will begin construction on the Mayflower repository. They also are planning infiltration tests on Mayflower ponds 1, 2, and 3 to see if a cap needs to be added to those remediated tailings in the future. Several people note that there is a resident winter elk herd that uses the tops of the Mayflower tailings ponds and ask if EPA has accounted for that. It appears that they were unaware of the elk herd. EPA is continuing their semiannual sampling and plans to update the conceptual site model for the Mayflower area.

Wells will be drilled in Lake Emma. Bench-scale testing will begin for possible in-situ treatment of the Mogul mine pool. The Gladstone treatment plant will continue to operate, and there will be more detailed discussion about future active treatment in February.

At OU1 (the rest of the BPMD not part of OU2 and OU3), the initial characterization is mostly done. Jessica Duggan is working on a technical memo for goals 2 and 3 for CAG to look at. EPA is considering using a polymer coating to seal waste rock in place that will be tested on the Legal Tender by Ramboll contractors. Anthony asks if the surface coating would be permanent or require maintenance? The polymers are non-toxic and clear. How durable they are will be part of the test.

After a short discussion of the upcoming IROD work, Chara asks if this information can be done as a spreadsheet or in the story map so we can see the flow from year to year. Peter says there is a spreadsheet that has some of the information Chara asked for. Megan will send that to Peter, and he will send out the CAG. Joy says to keep in mind that the timeline may be subject to alterations. Peter asks if Kirsten will do a site-by-site overview of IROD sites later in the spring.

Administrative Items

- ✓ Meeting Summaries. Chara motions to approve both. Susan seconds. No one opposed. The summaries are approved.
- ✓ CAG Discussion Time. Both Russ and Anthony ask about getting the EPA materials for the workshop ahead of time. Meg responds that she plans to do so. Susan suggests the CAG meets ahead of the workshop to discuss the materials. Peter says he will try to set up a time.
- ✓ Long-Range Schedule: The main topics for upcoming meetings are the Mayflower repository, drilling in Lake Emma, updating the loading model so people can see

where the loading is happening, and plans for in situ treatment of the Mogul mine pool.

- ✓ Future Agenda Items? *Mayflower Repository, Lake Emma Drilling, Eureka to Howardsville Feasibility Investigations, Macroinvertebrate Data, Remedial Actions for Gladstone, In situ treatment of the Mogul, Feasibility work at the Legal Tender and Amy, etc.*

The CAG goes into executive session to discuss applications for open CAG seats. The CAG appoints three new members, Sara Burch from Durango, Emily Thorn from Silverton and Dave Palmer from Farmington.

8:30 PM

Adjourn