



Board Minutes – June 18, 2019

Attendees

Chris Smith (with proxy for Sean Cronin)
Kathy Peterson
Chuck Oppermann (arrived 3:48)
Jessie Olson
Yana Sorokin
Deb Hummel
Glenn Patterson
Sue Schaffler
Jim Bryant
Mark Schuenemann
Julie Trumpler
Monica Bortolini
Lauren Duncan, Trout Unlimited
Ken Lenarcic (with proxy for Colleen Williams)
Audrey Buckley, Boulder County
Gabe

Welcome and Introductions

Chris S called the meeting to order at 2:05, and led a round of introductions.

Public comments on items not on the agenda

(None)

Left Hand Watershed News

Glenn expressed concern that when CDPHE discontinues temporary treatment of the Big Five Tunnel discharge, we might see water quality issues despite actions they plan to take to maintain water quality such as lowering the head, adding chemicals, etc. He posed the question that if the treatment plant does help, can the Watershed Center advocate for more money in the project to keep it running.

Sue suggested using TAG process to recommend a long term temporary treatment plant in the project.

Chris S mentioned CDPHE is hoping to avoid having to use treatment plants in perpetuity at mine sites.

Glenn added that the main question is, as they adjust the head will they be able to get the water quality to the appropriate levels?

Chris S mentioned the cost of trucking sludge is very expensive.

Gabe called attention to the lag between when samples are collected and when results are reported, noted that this is an opportunity to address this/get ahead of it. He suggested it would be helpful to have a robust monitoring program to keep tabs on the water quality situation, and for LHWC to have a chance to review plans and results of the monitoring program. If LHWC is involved in some of this monitoring, we could get quicker turnaround on lab analyses by using the ALS commercial lab. Perhaps the TAG could help arrange some funding for monitoring. Glenn could check with CDPHE on what their monitoring plan is, and help design a complementary monitoring program around theirs. We should aim to have sufficient monitoring in place prior to discontinuing their treatment system.

Trout Unlimited Presentation

Lauren Duncan gave a presentation on TU's Western Water and Habitat Program. She now lives in Rollinsville. She is on the national TU staff, and serves as the Abandoned Mines Project Manager for TU for Colorado and a little of Wyoming. There are over 500,000 abandoned mines in the western U.S. Most of their emphasis is on federal (USFS and BLM) lands. They focus on streams that exceed state water quality standards due to legacy mining activities. Funding comes from grants, federal and state agency partnerships, and some private sources, including mining companies. They do oversight as well as start-to-finish restoration projects. In FY 2016 they had \$1.2 million in restoration projects and they expect to have a similar size program each year.

One example is the Santiago Mine above Georgetown in the Leavenworth Creek Watershed. Goals are to protect water quality for drinking water for Georgetown, for habitat for trout, boreal toads, and other species, and recreation. They also pay attention to preserving the heritage of the mining area and protecting safety of visitors. Specific goals included sediment reduction, reduction of exposure pathways, re-establishment of native vegetation, tailings reclamation, and controlling surface flow over 3.66 acres of tailings. Revegetation required raising the pH of the soil as well as the water. In 4 separate tailings areas, they diverted sheet flow into ditches to dry out the soil enough for equipment to work, removed some tailings to an offsite repository, did in-situ phytostabilization with crushed limestone, biochar, composted organic material, and clean fill to improve the soil, and controlled surface flow through the tailings. They wound up with new soil 2.5 feet deep. In the colder environment, the lime took longer than expected to release, but by the second season soil and water pH values were in the acceptable range. They planted DRMS blend of grasses, ground covers, etc, specific for Colorado. They fertilized with composted chicken manure.

Lauren listed 8 other projects in Colorado, and there are more. TU has a new agreement with Boulder Ranger District of ARNF, along with some private partners, to continue restoring mines in the Boulder Ranger District. They look forward to collaborating with LHWC and other volunteer groups on some of these projects.

Glenn asked about draining adits and ponds, and how work aimed at them might run into issues pertaining to liability for pollution. They have redirected adit drainage away from surface water and into places such as wetlands where it can undergo some natural treatment prior to reaching a stream. We do have to be careful about assuming liability, and hope that Good Samaritan legislation will move forward to protect groups such as ours from liability.

Lauren asked whether we have concerns about certain sites in our watershed. Jessie asked Lauren if she could provide us with a copy of her map of sites, which we could use to help prioritize sites. This map has layers that include mine sites, drinking water sources, critical habitat, trout habitat, and other issues that can help to prioritize sites.

Approval of Minutes

Kathy moved, Sue seconded, to approve the minutes from the May 21 meeting; the motion carried unanimously.

Follow up from Board Retreat

Jessie mentioned that Kathy, Yana, and Jessie met on June 17 to work on streamlining the mission and goals statements. They arrived at several options for new wording, presented in the separate handout on Mission and Goals Discussion.

The group discussed the various options.

Jessie suggests working on it a bit more considering the feedback, and revisiting in July.

Projects Update

Deb reported that the Catch the Hatch project began on June 15 with about 30 volunteers. They had two trainings with about 15 volunteers each, and are getting direction from an entomologist at CU. They are tracking the emergence of a particular mayfly over a period of a month or so, as well as monitoring both larvae and adults of other species in relation to time, flow, and temperature. Data are collected, reported, and shared via the My Watershed app and CitSci.org. We are also documenting when high flow occurs, when dry-up occurs, monitoring depth and temperature in prime fish pools, observing live and dead fish, and doing pebble counts. Gabe, who has been participating, commented that the events led by Deb were great examples of citizens and scientists coming together to share information.

Jessie reported on a several potential new projects:

1. Jim Krick of the City of Longmont suggested that the Watershed Center might apply to collaborate with the City on a creek assessment project involving Left Hand Creek and 13 other creeks. This might involve partnering with Watershed Science and Design, led by Katie Jagt. This project appears to be in keeping with the criteria discussed during the strategic planning workshop. The consensus of the board was to proceed with preparation of the proposal.
2. Chris Sturm of CWCB asked whether the Watershed Center might be interested in monitoring and overseeing installation of beaver dam analog structures in the Estes Park area. These are like willow wattles that help to moderate flood flows and capture some sediment. We would work with Flywater to install them during Fall 2019, and then we would monitor their effectiveness. This project also appears to be in keeping with the criteria. Sue moved, Monica seconded, to approve proceeding with this project. The motion carried unanimously.

Jessie also mentioned that Niwot Rock'n'Rails is taking place on July 18, and she is interested in volunteers to help represent the Watershed Center.

As an update on the Boulder County buy-out program, Jessie mentioned that the County has two properties, one below Streamcrest and one on James Creek near Jamestown, that were part of the FEMA buy-out program. One lot would require permission from the Greenbriar to access. The County would like to transfer these properties to other ownership, or possibly offer us a long-term license to use the land while they own it. At the May meeting we appointed a committee to meet with the County and view the properties next week. Ken urged us to review the FEMA guidelines on potential uses of the properties, and to be careful about neighbors who might want to make their own use of them. Jamestown has received several and is using one as a community garden. They cannot be used as parking lots or for storage.

Jessie also reviewed a handout (#2 in the packet) on scaling our adaptive management plan so that it could be applied to other creeks such as Boulder Creek. Watershed Center staff has been talking with Sean Cronin about how this could be integrated into the Stream Management Plan he and others are working on.

We used this approach to track benthic macroinvertebrate communities during 2016 and 2018. We found impairment in the upper sections due to mining activities, consistent habitat quality in middle sections, and impairment in upper plains sections due to periodic lack of flow, and impairment in the lower plains sections (below Kauvar) due to poor water quality issues from return flows.

Chris commented that this plan helps to provide a useful real-world application for the somewhat nebulous term of adaptive management.

Adjournment

The meeting was adjourned at 4:25 pm.