

Coal Creek Watershed Coalition

MEETING AGENDA

Wednesday, April 8, 2009 4:00-5:30PM

Crested Butte Town Hall

Attendance: Anthony Poponi, Scottie Wiley, Harvey Castro, Rosemary Carol, Wendy Brown, Professor Kevin Alexander, Tara Tafi (via teleconference), Amy Weinfurter, Robin Jones, John Hess,

Housekeeping

4:00 A signup sheet was passed around to record attendance.

4:00 – 4:10 Announcements

1) Several upcoming events were noted:

- On April 20, the EPA will be giving a presentation to the Crested Butte Town Council.
- On April 21, the EPA will be giving a presentation to the Board of County Commissioners, and then holding a SMAG meeting in afternoon. A brief SMTAG meeting will follow the SMAG meeting.
- On June 15, the Coal Creek Watershed Coalition (CCWC) and Division of Reclamation, Mining and Safety (DRMS) will address Crested Butte's Town Council.
- On June 16, DRMS will be giving a presentation to the Board of County Commissioners.

2) During May, the CCWC plans to examine the tributaries associate with the fen and Keystone Mine. At the meeting, Wendy, Kevin, Harvey, Robin, Scottie, Tara, Rosemary expressed an interest in participating in this trip. If possible, a brief presentation on fens will be made by Gay Austin beforehand. The date has not been set yet; Rosemary and Robin requested that it take place after the first week of May.

3) Anthony and Amy listened to an Orion Grassroots Network Conference call about major gift campaigns, and can provide notes from the call to anyone interested in this topic.

4) There will be a sampling training in early or mid May, if anyone is interested in learning or refreshing their fieldwork skills. Wendy and Rosemary indicated they might like to attend.

4:10 – 4:15 Approval of Minutes

The approval of minutes from the March 2009 board meeting was tabled until the May 2009 board meeting.

4:10 – 4:15 Additions to the Agenda

Agenda Items

1. Consultant Interview – Buckhorn Geotech - (4:15 – 4:33)

Before beginning the interviews, Anthony shared Steve Renner's reactions to the two firms. He worked with Kari Roberts from Buckhorn Geotech on the Peanut Mine restoration, and found that she was thorough and got things done. They worked on data collection, but not on data analysis. He was not familiar with Schmueser Gordon Meyer (SGM).

Steve Renner had also expressed to Anthony (with supporting comments from Tara) that in their experiences, engineering approaches have less success than natural geomorphic approaches that tackle problems such as erosion at their source. They would prefer that the firm has geologic experience and a solid grasp of how to control things in natural settings. Buckhorn has more geologists on staff though they are not listed in their proposal.

Question Responses: (The following responses were made to questions distributed at the meeting).

Judy Kittson and Kari Roberts represented Buckhorn Geotech in the interview.

1) Judy identified herself as the project manager, who would use her background in storm water management to provide technical support to Kari, who, along with some support from Jeremy Harshman, would conduct the fieldwork for the project. While based in Montrose, Judy planned to visit the site at least three times, and more often if needed.

2) Judy, as well as additional administrative staff and support, will operate from Buckhorn's Montrose office. The full suite of Buckhorn's staff is available to assist in this project but they do not see utilizing them at this point in the project.

3) Outlining her experience with respect to roadway BMPs in a natural setting with seasonal closures, as requested in question 3, Judy explained that she started working on BMPs in the 1990's, with Salt Lake County's storm management plan, which also involved creating guidance manuals and conducting public education. In addition, she attends local conferences and workshops, including Colorado Department of Transportation (CDOT) presentations.

Kari has worked on-site for the Andocite point project to ensure that their contractors install appropriate measures correctly, and monitoring that these measures fit the natural environment.

In response to Tara's question, about their staff's involvement in geomorphic design and whether they plan to utilize the geologists on their staff, Judy referenced source controls as the first area they would explore to determine if they could stop issues like erosion before they become a problem. She recently gave a presentation to Montrose about source controls, and mentioned level spreaders, which keep water spread across the slope. Judy also has past experience working on landfills, which gave her experience with source controls and erosion as well. The geologists are available if needed; they do not have her storm water expertise but did recently help with land stabilization in Telluride. Kari and Jeremy also have backgrounds in geology.

4) Describing their experience working collaboratively with groups like the CCWC and/or their consultants, Judy outlined her work on the Down Valley Park in San Miguel County. She worked with a variety of public interest groups including advocates for running trails, a kayak park, playground, and wetlands along with other consultants including a landscape designer, kayak consultants, and wetland consultant. In the end, the park included a soccer field, baseball field, constructed wetland, perimeter trail, and natural playground. In general, she often works with specialists.

Kari also noted that on almost any given project, she works and communicates with other consultants. Even within the Buckhorn staff, there is lots of internal input from different staff perspectives.

5) Both Judy and Kari are available between April 15 and December 31. Judy mentioned that her site visits will probably be more than what's included in formal scope, and emphasized that she will try to see the area during a rain event. Kari and Jeremy are generally available within a day's notice, but could go up as needed to observe rain events. They mentioned that they were very interested in this project, and would work to meet the budget.

Group discussion:

The group appreciated Judy's unprompted answer about how Buckhorn would handle any additional costs, and how they seemed excited and motivated by the project and subject matter. Good communication skills and flexibility seemed apparent from their interview, and the group agreed it was important to have a firm with someone on site.

2. Consultant Interview – Schmueser Gordon Meyer (SGM) - (4:33 – 4:55)

Jerry Burges represented SGM in the interview. Tyler Harpel was sick and could not attend.

Question Responses:

- 1) The SGM staff for this project will include Jerry as the office manager and primary contact, and Tyler Harpel, who works on flood plains and storm drainage, as the lead field investigator.
- 2) For support staff, SGM may use Warren Swanson of their Glenwood office in addition to Tyler and Jerry, depending on how the water quality tests shake out, as Warren has experience with water resources and water quality.
- 3) Outlining his experience with respect to roadway BMPS in a natural setting with seasonal closures, as requested in question 3, Jerry noted his 14 years working with the National Park Service on a number of roads closed in the winter (including gravel, dirt and private roads). Tyler has done field investigation in Salida and Buena Vista on projects that include storm water management on paved roads with lots of disturbance. Tyler has also worked on developing storm water management and BMPs for private developments in Taylor Canyon.
- 4) Jerry did not identify much personal experience working collaboratively with groups like the CCWC and/or their consultants. SGM discussed the RFP in their office and decided that they would like to be involved because of their involvement in the community and their use of Kebler Pass Road. They are working with environmental projects as in Buena Vista and Salida, and envision their work for this project to include creating BMPs that use natural features, are aesthetically pleasing, and are durable.
- 5) Since SGM's office is in Crested Butte, Tyler and Jerry would be available fairly rapidly between April 15 and December 31, within a day's notice or a few hours notice if an emergency arose. In response to a follow-up question about whether Tyler will be in

Buena Vista and Salida often, Jerry responded that those projects were well into construction, past the initial meeting stage, so that Tyler would not be there too often.

In response to a question about SGM's experience with geomorphic design, Jerry again referenced his point about creating BMPs that are durable and fit the environment, and gave the example of using plants and vegetation to slow erosion and slope failure. In regards to this example, he also highlighted the need to monitor vegetation to ensure that it takes root and accomplishes its purpose.

In response to a question about the cost for any additional site visits or work, Jerry noted SGM's billing rates included in their BMP. He explained that he would work as hard as possible to stay within the CCWC's budget and mentioned several cases where SGM had done pro bono work.

Group Discussion of Both Firms (4:55-5:13)

There was consensus that both firms had presented very strong cases, and were closely ranked since both Buckhorn and SGM demonstrated that they could offer experienced staff, strong administrative support, and experience with geomorphic design. Rodney and John worked with Tyler on the annexation, and thought that he seemed capable and knowledgeable about storm water management. Steve Renner likewise had a positive experience working with Kari on the Peanut Mine reclamation. After some discussion, which took into account their comparative grasp of geomorphic design, experience with storm water issues, and their examples of relevant experience, a vote of 6 to 5 supported SGM for this project. Anthony inquired to make sure those voting for Buckhorn found the decision to go with SGM acceptable and all parties concurred.

3. Macroinvertebrate Discussion Part II – Wendy Brown (5:13-5:41)

Wendy Brown continued her presentation on Coal Creek macroinvertebrates from the March 2009 board meeting (presentation materials were distributed at the meeting). After outlining the sample sites and the flows across January 2005 to July 2008, Wendy presented an overview of her sampling results from August of 2006 to 2008. The sample site at Butte Avenue Bridge (also known as sample site Coal 00) had notably high percentages of deformed midge larvae. It was also pointed out that the flow rates decrease at the Butte Avenue Bridge, possibly allowing sediments and contaminants to settle out into the sediment. Rodney added that within one or two months the town plans to install a separator, which will filter floatables, hydrocarbons, and sediments from the town's storm water runoff before it reaches Coal Creek. This could contribute to changes in the water quality and macroinvertebrate health of this section of Coal Creek.

The data also showed that the year of 2006 contained the highest percentages of deformed midge larvae. Additionally, the site below the Y to Irwin (Coal 25) had the most severe deformities. Runoff from the Forest Queen Mine could offer an explanation for this finding. Wendy noted that more data from a very clean creek, such as Copper Creek near Gothic, was necessary to establish a reliable background value for deformities. She also noted that her sample sizes were very small and ideally they would be larger. Generally, a 2-3% of insects showing a deformity is not uncommon. Deformity percentages of 10% or higher, however, begin to be unusual. Most midges have a life span of one year, but some survive for two; their survival reflects the events of an entire year. Sampling in May or June might show a high percentage of deformities, as bugs that have survived the winter will have had a longer period of exposure.

Deformed midges have several implications for the rest of their site. Usually, they indicate high levels of lead, cadmium, and/or zinc in the sediment. One study conducted in Belgium noted that while most contaminated sites produce deformed midges, reducing reproductive ability and survival, at one site that had been contaminated for approximately 200 years, midges seemed to have adapted to their polluted habitat. This study suggests that deformities impair the midges' survival. Additionally, some deformities appear to hinder the midges' ability to feed themselves and to limit their growth and size, which in turn could limit fecundity. However, more work examining the effect of deformities on the ability of macroinvertebrates to survive and reproduce needs to be done. Since midges form the base of a food chain, deformities which have an impact on macroinvertebrates' survival or reproductive ability could also decrease the food sources of other organisms. Bioaccumulation of metals as larger organisms feed on insects that have consumed the midges) could also negatively impact other species.

Wendy recommended adding the a site near the fen to the monitoring plan, as well as finding data on deformation rates in midge larvae from a clean local stream such as Copper Creek. Data on density has been collected but has yet to be processed; when it is, the results could be helpful to this study.

4. Travel Management Plan (5:15 – 5:20)

This item was tabled for later discussion.

5. Coordinator Review (5:20 – 5:25)

The coordinator review, scheduled for 3:30-4:00 before the meeting, was not attended. Some of the attendees of the past review suggested the reviews may have been moved to an annual, rather than semi-annual, basis. Depending on whether or not the review times have been changed, the coordinator review may be rescheduled.

6. Additional Agenda Items (5:25 – 5:30)

Adjourn - Next Meeting Date: May 13, 2009 at 4PM