## WCRC Minutes

## April 7, 2004

**Intro of members**: Leigh Ann Vradenburg, Watershed Coordinator; Zeke Ward, Chairman WCRC; Jeff Graves, CDMG; JB Alexander, Creede; Jim Matush, Creede; Don Dustin, Creede; Les Dobson, USFS; Mark Walker, CDPHE; Jim Mietz, San Luis Valley Resource Conservation and Development; Keith Wier, Resonant Shock; Marvin Reynolds, CSU Cooperative Extension; Jim Herron, CDMG

**Approval of minutes**: Motion to approve the March minutes made by Jim Herron; second made by Jeff Graves. Motion carried.

Additions/corrections to the agenda: A discussion of hydropower possibilities for Creede was added after the Coordinator's Report. A discussion of CDMG's explosives reconnaissance was added after the Coordinator's Report.

**In-Kind:** Forms were provided in hard copy for volunteers to track time and other expenses. Leigh Ann encouraged monthly submission of these forms so that records could be kept current.

**Coordinator's Report:** Leigh Ann read a letter that she and Zeke received from Max Dodson (EPA) thanking them for the tour and presentation of issues in Creede.

Leigh Ann said that she was working on a survey for the Committee to fill out assessing the functioning of the WCRC. She said that questions covered everything from the accuracy of minutes to the funding priorities for the Committee. She wanted to go over the survey with Zeke and then make it available on the website. Zeke suggested that we next develop a survey for the community and other stakeholders in the process to evaluate public knowledge and support in the group's activities.

Leigh Ann said that the Committee was continuing to sample wells for the dye that was injected in January. Gareth Davies had said that the dye is no longer showing up in any of the wells, but Mike Wireman had suggested that we sample for a couple more weeks because spring melt might thaw some of the wells and make the dynamics of the groundwater change.

Leigh Ann requested that if any of the Committee members had spare time and materials, she would like a couple of display boxes for pamphlets and booklets.

Leigh Ann informed the Committee that they had been selected to receive the two Section 319 grants that they had applied for; one for the watershed plan development and one for the

supplemental funding for the Solomon Wetlands intern. Jim Mietz asked when we would be discussing the liability issues for the Solomon. Zeke said that we would wait until the intern's study was done to determine our best course of action.

<u>Explosives</u>: Jeff said that he and Jim Herron had done a survey on Monday to find any other explosives in the Commodore level. They found a couple of sticks and a few blasting caps, and moved them to the Del Monte for future blasting. They plan to destroy the explosives in June with the help of Jay Parker. Pitkin County will be donating Parker's time for this effort. They will also set charges at the blacksmith's shop to dispose of any unseen explosive material.

Hydropower: Jim Mietz said that the San Luis Valley Resource Conservation and Development Council was interested in alternative energy. He was aware of a pre-feasibility study for hydropower in Creede prepared by the University of Colorado at Boulder. He also informed the Committee of the International Center for Appropriate and Sustainable Technology (Golden, CO), which would be interested in doing a feasibility study for alternative energy sources. The RC&D wants to determine the interest of Creede in pursuing a study for hydropower. Zeke said that the Committee had interest in hydropower for a couple of reasons. First, because we believe that at some point we will be treating some volume of water from Nelson Tunnel, hydropower could be used to defray some of the operation and maintenance costs. Second, because we are beginning to develop our watershed plan, alternative sources of energy should be evaluated and incorporated. Motion for the WCRC to express interest in a hydropower feasibility study made by JB Alexander: second made by Jim Herron. Motion carried. Mark asked if the Department of Energy was already involved. Jim Mietz said that once interest was expressed, then a proposal for funding would be sent in. Mark made the Committee aware of the EPA's Brightfield Program, which incorporates the development of alternative energy sources on Brownfields. Zeke suggested that both the City and County could be approached to express an interest in hydropower.

## Old Business:

WCRC Lab/hatchery lease: Leigh Ann said that in response to a motion from the March meeting, she met with Brent Woodward of the Division of Wildlife to discuss the lease between the City and the DOW for the hatchery buildings. She discussed with Brent the changes to the lease that were proposed by the City in 2001. In reference to those, Brent had said that the DOW could not lease out their well and water rights; however, the City was free to use the water and well. Brent had also said that the lease could not be changed to prevent the DOW from taking back the property unless the City defaulted on the agreement. Leigh Ann had expressed the City's concern that they would put time and money into rehabilitating the building only to lose it all. Brent had said that it might be addressed in the agreement by saying that the DOW would reimburse the City for improvements, minus depreciation. JB indicated that the City was interested in taking their request to a higher position in the DOW or state government. Jim Herron suggested that they talk to Russell George, who was the former head of the DOW and is now the head of the Department of Natural Resources. Leigh Ann expressed concern that such an approach might be offensive to the local DOW and hurt their relationship with the Committee. Marvin suggested that Leigh Ann talk to Brent again and see if he would be supportive of us getting an opinion from a higher office. Zeke also suggested that we find out if they have any planned uses for the property. Leigh Ann said that she thought that it would be best if she, Brent, and Ben Gibbons (Creede lawyer) work on this to minimize the confusion, and that is what she would suggest to the City at the Council meeting on the 13<sup>th</sup>. Don Dustin said that he had made a detailed list of the items that we would need for a bare bones laboratory. The list totaled about \$47,000. Leigh Ann said that she would distribute the list to the Committee and any other parties that might have access to such equipment. JB suggested that we approach colleges for any equipment that they are looking to get rid of. JB said that he is still trying to get a general contractor to give a rough estimate of what it will take to renovate the hatchery.

Nelson Tunnel dewatering options: Jim Herron summarized the TAC discussions and the CDMG report regarding the dewatering options. He said that the primary area that they were interested in accessing was around the Amethyst shaft. The preferred option would be to dewater at the Del Monte Winze because it is the only place that would totally dewater the Amethyst area. They propose to use a hydraulic pump run off of a diesel engine. Exhaust could be vented up the Del Monte raise. The water should be piped in a 6" pipe to the West Drift. The West Drift was previously decided upon as the settling area as opposed to construction of a pond outside of the mine. Decisions remain regarding the chemical additive that will be used to raise the pH. With three bulkheads in the West Drift, there will be about 13 hours of settling time. The water will then be piped to the outside of the mine. Jim H. suggested that we first do a pilot study and get the major infrastructure in place. This study will allow evaluation of the volume of water that we are dealing with and the system design, including exhaust, pumps, and calculations. The water will not be drained in the pilot study. The estimated cost for the pilot is \$35,000. Les suggested that we run it by the owner of the mine. Zeke noted that the only loss in the pilot study is the rental of the pumps. Jim H. said that we might put some lime in the Drift prior to pumping. He noted that another advantage of the pilot would be that we might be able to pump enough to allow access to the hospital decline and evaluate if any water is coming in through the Happy Thought. Zeke asked if we are close enough with our calculations to proceed. Mark asked if there were any risks. Jim H. said that the risks were minimal. Leigh Ann noted that this would take the remainder of the underground budget. Zeke said that hopefully our findings would provide justification for pursuing more funding. Motion to proceed with the pilot made by JB Alexander; second made by Don Dustin. Motion carried. Jim H. said that we need more bench scale tests and we need to confirm where the exhaust is going to go. Zeke asked if we could get the design on paper, conduct the bench tests, and incorporate the materials handling efforts by the next meeting.

#### New Business:

Resonant Shock: Keith Wier discussed his company's method for combining fine materials such as ash or tailings with aggregates and concrete to stabilize metals. The company, Resonant Shock Compaction, LLC, has demonstrated this technology around the world. Stabilization of metals is proven by rigorous TCLP testing of the products. He provided samples of the formed material from mill tailings from a mine in Montana. They used glass as an aggregate in the process to strengthen the product. The product was made up of 85% waste material. He said that their compaction process could be used to make a variety of shapes and sizes of concrete, although thickness of greater than 2 inches was preferred. He said that for certain applications, they could put in rebar for strength. Mark suggested that we could make cribbing for reclamation of the mine sites. Keith said that their product continues to cure and harden over time. He said that if we were interested in evaluating the application of this technology for the Emperious Tailing Pile, he would need to see the composition data for the pile. He could then put together a budget for a pilot to make sure that their method could stabilize the Emperious waste. Zeke said that if the current data we have is not sufficient, we may need to get another core. Jim H, said that we might be able to get a representative sample just using an auger. Zeke said that this would not just be an environmental project, but also an economic development project. Keith said that with a small machine, the Emperious Pile would take a couple of years to process at 100-200

tons/day. He said that a couple of 5 gallon buckets of the material might provide him with the necessary amount to test. Leigh Ann said that she would send him a request for a proposal. She will also send him the lab equipment list generated by Don Dustin.

Organizational workshops: Leigh Ann said that she had received some information from Trees, Water, & People regarding workshops for watershed groups. She said that she was interested in attending a few of them if possible because they could help the Committee. She asked the Committee if they would be interested in a more in-depth evaluation of the needs and issues of the Committee. This would provide a basis for more training and assistance to the whole group. She said that this would be more of a commitment from the members and questioned whether this was something that they felt would be in the interest of the Committee. Zeke said that it is the Committee's interest to do the job correctly and work itself out of a job. Leigh Ann agreed that although there were things that she could learn and bring back to the group, there was not a strong need or commitment to additional organizational development by the other members. Jim H. commented that the WCRC was one of the most organized groups he had worked with.

Creek Clean Up: Leigh Ann said that JB had suggested that the Committee conduct another creek clean up day. JB said that this time they would go further up West Willow Creek. They could also dispose of the materials that remained from where the county burned the piles collected last time. Leigh Ann suggested that they could do a clean up on Earth Day, April 22. Zeke said that they might be better off giving the City and County more preparation time. Leigh Ann said that she would look into setting something up in May.

Re-veg update/proposal: Marvin told the Committee that the re-veg subcommittee had gone out into the field to evaluate survival from the previous year's plantings. The survival was very high for the trees with only a couple of the 30 bristle cone pines dead. It was hard to tell with the shrubs due to the season, but it was evident that some were dead. The schedule for this year includes tree planting on April 26<sup>th</sup>. We will be planting bristle cone and lodgepole pine, and potentially some cottonwood poles. We may also plant some more shrubs if they are available. The plan is to try planting several shrubs in one hole. We will again plant along the walking trail, north of where we ended last year. The grass planting is scheduled for June 29<sup>th</sup>. This year we will be evaluating different types of compost. The site will be near the first year's plantings, just down from the tailings pile. Associated costs for re-veg this year include trees, sun shades, and polymer. Motion to approve up to \$300 for re-veg made by JB Alexander; second made by Jim Herron. Motion carried.

Bills: Leigh Ann informed the Committee that we were getting down to the bottom of the general expense funds from our 319 grant. These funds cover things such as office supplies, the phone bill, and the internet. She asked if it would be appropriate to use funds from our bank account or the El Pomar award. Zeke said that first we should look to use up the remaining funds in the 319 grant by transferring unused balances.

May water sampling: Leigh Ann said that she was trying to schedule a high flow sampling event for May. In particular, we need to sample the sites associated with the reclamation sites. The sampling date will be May 6<sup>th</sup>, the Thursday after the Committee meeting. Motion to organize a May water sampling made by Jim Herron; second made by Jeff Graves. Motion carried.

# Other:

The next meeting will be May 5, 2004.

Meeting Adjourned 5:10 PM

Respectfully Submitted,

Leigh Ann Vradenburg