

# ARSG MEETING

## Meeting Summary for January 20 2011

Attendees: Peter Butler, Kirstin Brown, John Ferguson, Tom Schillaci, Craig Gander, Chuck Wanner, Steve Fearn, Ty Churchwell, Buck Skillen, Ken Portz, Kay Zillich, Doug Ramsey.  
Participating by phone: Bill Whiteside, Todd Hennis, Chester Anderson.

### ANNOUNCEMENTS:

- DRMS put together a list of potential abandoned mine projects it would like to implement for funding through the Water Pollution Control Revolving Loan Fund. The request for funding was for design only. No Animas River site was on the list. This is an effort to test the waters for this potential funding source for projects.
- ARSG did not submit an NPS 319 application this year. The San Juan and Gunnison basins will be given higher priority for projects over the next couple of years. WQCD has expressed reluctance in using 319 funds for projects in the Upper Animas Basin, because the positive impact of a 319 project would be completely overwhelmed by the large metal loading from the untreated discharges around Gladstone. Peter pointed out that a 319 project high in the Animas drainage above Silverton would make sense, because it could improve the impaired fishery in segment 3a which is above the confluence with Cement Creek.
- This meeting was held at the Durango Public Lands Center which enabled us to have Internet access and a speakerphone. There was some discussion as to if a speakerphone could be used and would be useful in Silverton. There would be costs involved; ARSG doesn't own a speakerphone and doesn't have a phone line in Silverton. There is also no phone jack in our usual meeting place, although there are phone lines in the building. It might be possible to meet in the BLM building in Silverton, but the meeting space is small. People also expressed that face-to-face discussions were really much more productive than phone conversations. Overall the group felt that the advantages of having speaker phone capability were not worth the costs. The issue can always be revisited in the future.
- The WQCC has made a number of scheduling changes. The Issues Formulation hearing for the San Juan/Gunnison basins was moved from November 2011 in Gunnison to February 2012 in Denver. The San Juan/Gunnison Rulemaking Hearing has been moved from June 2012 to September 2012 in Durango.
- DRMS is purchasing a new pH/conductivity meter for use in the Animas Basin and DRMS has a Hydrolab which includes a DO meter which will be based in Lake City but can be brought over to the Animas.

### OLD BUSINESS

Review our web sites: Since we had Internet access, Bill took the people in the room on a tour of the new website. There is a great deal of information like who we are and what is our mission, a bibliography, access to data, meeting summaries, recent news, etc. Bill has done a fine job with this site and people were very impressed. [www.animasriverstakeholders.org](http://www.animasriverstakeholders.org)

Maintaining BOR participation: Bill is still talking with the Bureau of Reclamation about their continued participation in taking water quality samples every other month at the four gages around Silverton. Budget cuts to the BOR plus personnel changes (Stan Powers recently retired) may jeopardize this crucial program. We also learned that USGS has been taking integrated width/depth samples at the

gages four times annually for several years. This is not data we have in our data base. We will look at this data and compare it to the grab samples we've been taking.

Good Samaritan: Not much to report on Good Samaritan legislation. Peter mentioned that someone contacted him about a potentially different approach. It would involve a change in CERCLA as opposed to the Clean Water Act. CERCLA would be amended to allow for long-term Removal Actions which is essentially the approach BLM and Forest Service are now using. The advantage of the approach is that it could provide clear regulatory protection under both CERCLA and CWA. It would probably mean that government agencies would be responsible for Good Sam projects not private parties. Overall, there are a number of questions that would need to be answered before this approach could move forward. It's unknown if any legislators are contemplating this path.

Gladstone strategies: There was not much discussion on strategies for addressing the big discharges around Gladstone. Hopefully, in the next few months EPA will have analyzed its data and we will learn more about what their thoughts are. Adding the four main Gladstone discharges together (American Tunnel, Red & Bonita, Gold King, and Mogul), this is probably the largest mining discharge in the state that is not permitted or is not a designated Superfund site. Kirsten Brown with DRMS and Kay Zillich with BLM said they were interested in doing some modeling of the underground workings around Gladstone. Todd Hennis responded that any hydrologic modeling would not be useful if it did not include connections between the Gold King workings and the Sunnyside workings from either drill holes or a borehole. Todd added that the solution to the issues in Gladstone was to hold Sunnyside Gold accountable for causing the problem and that someone should go after them for fraud for not disclosing and grouting the connections between the workings. Bill responded that ARSG has always avoided assigning blame in its work and if anyone was going to take legal action against a major mining company for fraud, they better have some good proof. While there may be fracture zones between the workings, ARSG has never seen any evidence that there are direct, human-made connections.

## **New Business**

Macro-invertebrate report: Chester Anderson of BUGS consulting walked the group through a Powerpoint presentation. ARSG had BUGS sample macro-invertebrate populations along the entire length of the Animas from its headwaters to its confluence with the San Juan in 1996 and 1997 to establish a baseline. Chester compared this data and other data taken by other agencies in the 1990's to data ARSG hired him to take more recently. The more recent data show fewer macro-invertebrates, less diversity of macro-invertebrates, and a higher proportion of metal tolerant macro-invertebrates since the Gladstone discharges reached their current levels and water treatment at Gladstone was terminated. Chester also said that CDPHE is now keeping a macro-invertebrate database and that the metrics they use for analysis are very similar to what BUGS has been using. He thought it would be prudent to move his data into the state's database and estimated it might cost about \$2K to \$5K to do so.

Analysis of water quality data at Baker's Bridge and CC48: There was no more discussion on the Baker's Bridge data other than what was reported at November's meeting; namely that water quality has gotten worse over the last five years than it has been since the early 1990's when data was first collected regularly. Zinc, lead, cadmium, and iron standards are all being violated. Peter showed a graph of zinc loading at CC48 generated from the model Bob Owens made for ARSG several years ago. The model was designed to minimize the influence of hydrological cycles that we may see in water quality from year to year. It essentially shows an expected condition for a typical hydrologic pattern. Any water concentrations that are substantially different than the expected condition demonstrates an actual change in concentration that is not attributed to hydrologic changes. The graph shows a 300 lb/day increase in zinc loading at CC48 in 2007 from the expected condition. (The model has not been updated since 2007.) The four large discharges around Gladstone add about 180 lb/day that was not part of the expected condition (because the discharges had been much less and the

Sunnyside Gold treatment plant was in operation). Thus, potentially there may be a large zinc load coming from other new sources such as seeps and springs in the Gladstone area as a result of the higher water table created by the bulkheads in the American Tunnel.

Potential Repository for Mayday tailings: BLM interned tailings at the Mayday site a number of years ago. Apparently, there were more tailings than anticipated and more material than the retainer wall and liner were designed for. As a result, there are structural problems with the wall and the liner, and BLM may have to remove some of the tailings. They are looking for ideas as to where that material might be moved.

An Iron Oxide Recovery Process: Bill briefly discussed a company in the East that is taking iron oxides recovered from old coal mining properties and is marketing them for coloring concrete. Certainly any market use of recovered metals from old mine sites could be useful for any treatment of abandoned mines.

Bill Whiteside expressed that Blue Sky Technologies is still very interested in working with ARSG if we move forward with any active treatment of sites.