

**DOLORES RIVER DIALOGUE  
STEERING COMMITTEE  
Aug. 2, 2011**

**Present:** Randy Carver and Don Magnuson, Montezuma Valley Irrigation Company; Amber Kelley, San Juan Citizens Alliance; Peter Mueller, The Nature Conservancy. Contract staff: Marsha Porter-Norton, facilitator; Ann Oliver, DRD science; Gail Binkly, recorder. Guests: Mike Preston, DWCD manager; Jay Loschert, American Whitewater.

**Agenda:** The agenda was approved with one addition.

**New Sno-Tel site:** Mike said an area on Black Mesa between Fish and Little Fish creeks, in the Groundhog area, was selected for the new site. It was chosen because of its elevation of 11,700 feet, which is much higher than any of the existing Sno-Tels. The Colorado Water Conservation Board has provided its share of the funding and a contract is being developed with the Natural Resources Conservation Service. The NRCS has agreed to handle archaeological clearances and any other NEPA processes that need to be done before installing the Sno-Tel.

Mike said the new Sno-Tel should be installed before winter and it is hoped that data will be received beginning this year. The National Weather Service's Colorado Basin River Forecast Center will not utilize the data for 10 years or more, but the DWCD will use it immediately to help provide a more complete picture and forecast of the runoff, particularly at the end of the snowmelt.

**"A Way Forward" update:** Peter reported that the three native-fish researchers made their presentations to the oversight panel in early June and their executive summary was provided a couple of weeks ago. A final addition to their report is to be released Friday. He said the report is very good and lays the foundation for do-able management opportunities to benefit native fish. The scientists came up with nine different opportunities, many of which are linked to spill management, and the oversight panel has attempted to prioritize those opportunities.

Peter said it was decided to form an implementation team to work on moving ahead with some of the recommended measures, and that team met for the first time last Thursday. It includes representatives of principal entities involved in the management and use of McPhee Reservoir and the Lower Dolores, including the DWCD and MVIC, the Bureau of Reclamation, BLM/San Juan Public Lands Center, Division of Wildlife (now Parks and Wildlife), TNC, SJCA, American Whitewater and Trout Unlimited. These are partners that have a direct responsibility for the outcomes being considered or the impacts that might be felt from the different management opportunities.

Peter said the implementation team has asked the DOW to come up with specific scenarios for altering spills of different sizes to benefit native fish. The three components that must be considered are:

1. What it would look like to include native fish in Project obligations;
2. How spill management would change;
3. Whether there would be impacts to any of the current obligations regarding the dam.

The implementation team talked about the possibility of developing a set of spill profiles over the next six months, and then trying out the guidelines during the 2012 spill (if there is one). After the conclusion of the irrigation season and the 2012 spill, managers can then evaluate:

- Did the measures work?
- Is the right information being collected to evaluate whether these changes in guidelines work?
- If they work, could a process be initiated to institutionalize changes to Project obligations to include native fish?

Peter said the team is focusing on spill guidelines because they have so many implications for benefiting native fish. Changes in spill management could potentially be used to discourage brown trout, improve geomorphic processes and increase native-fish spawning. Peter said the idea is to suppress spring water temperatures to delay native-fish spawning until after the spill to avoid thermal shock for the native-fish larvae. One question to be considered is: If there is a projected surplus, what portion could be utilized to suppress temperature?

Peter noted that the scientists' report described a lack of young native fish in the last 10 years in the river. This could be partly attributable to monitoring techniques, which don't focus on young fish, but it is still believed that native-fish recruitment is poor, so the team is trying to support a successful native-fish spawn.

Peter said there are two distinct opportunities – flushing of smallmouth bass and suppression of temperature – but they require additional fish-pool water. However, it's not just more water that is needed, but more water at a specific time. The team wants to look at these discrete tasks and link them to a lease of water.

Mike said the BOR is actively involved, and Ed Warner of the BOR was present at the implementation team's meeting. One of the principles the team established was that team members do not relinquish their responsibilities to the entities they represent by participating in this effort. Mike said Ed agreed there is much that can be done through flexible, informal means so long as there are no major objections from constituencies to which the BOR is obligated, and that is the impetus for bringing TU and American Whitewater into the discussion. Everybody agrees some formal measures will have to be taken eventually, but it is preferred that the team begin with informal measures until it is known what is desired and what works.

Mike said spill management overlaps with almost every do-able opportunity, so the team will look at that first. DRD will play a key role in keeping constituencies and a broader group of interested people informed about the progress of the effort.

Marsha said people have asked about the role of the DRD now that the implementation team is in place. She recommended the DRD continue doing what it is doing for now. There is always a role for education and for vetting proposals.

Randy asked about the consequences of mistakes. If the reservoir fails to fill one year because water was used to help native fish, how would that be mitigated? Mike agreed that risk is a very pertinent issue and said the implementation team had a substantial discussion about it. Mike is pressing for specific spill-management proposals from the DOW so he can have them examined by DWCD engineer Ken Curtis, who will then present them to the DWCD board. Right now,

reservoir managers have been using 50,000 acre-feet as a threshold for “fill and spill”. When water exceeds that threshold, there is less risk, most of it involving the number of rafting days. Mike said the key question is what can be accomplished between 25,000 and 50,000 acre-feet. The implementation team plans to develop criteria for what to do under these circumstances.

Randy asked whether a number has been established for flows needed in July, August and September to have a healthy stream. He said farmers can see a substantial difference in the size of their hay crop depending on how much water is available, and MVIC’s shareholders will need specific answers about flows. Farmers need to know that they have a guaranteed amount of water for a certain amount of days. Randy said if farmers don’t see a definite benefit to a lease or any of these other tools, they will not support these measures.

Mike said it’s difficult to set specific numbers about flows, and Ann agreed. She said there is a hypothesis, based on data and modeling, that if the amount of water in the river is increased, there will be increased native-fish productivity. The hydrograph shows a steep curve: A small increase in base flow might produce a large response in fish biomass. This is not yet proven but the only way to prove it is to try it. Ann said in July, August and September, additional water would not be needed to help native-fish reproduction but for survival. She said working on several fronts – reproduction, survival and predator control – will probably be most beneficial for native fish, although nothing is certain. Ann said the flexibility lies not in trying to accomplish everything you can accomplish, but in understanding what your priorities are and figuring out which ones you can accomplish in a given year. The discussions will continue because this is a learning-by-doing approach.

Mike said the implementation team received a \$50,000 purchase order from the CWCB to support this process and is trying to figure out how best to use it. One of the key elements needed is monitoring. The team has committed to producing an implementation plan and a monitoring and evaluation plan before June 30, 2012.

Mike said it will be important to be clear and honest about the benefits and risks of these opportunities. A great deal of education will have to be done.

Randy and Mike said there is a perception among many long-time local residents that a key stratagem is being overlooked. The locals say that, years ago, the river used to dry up in the summer, yet native fish survived. Mike said Al Heaton has told him that when he was young, when the river dried up, the kids would go downriver to swim and would see pools teeming with native fish. The locals wonder why the fish pool can’t be managed to “stockpile” some water for a pulse or temperature-modification flows in spring, followed by very low flows in the summer. They believe the current perennial flows and the need to keep water cold for the trout fishery are part of the problem. Mike said the long-time residents see this possibility as having been dismissed out of hand.

Amber said she understood from the researchers’ report that sedimentation following the dam’s installation has eliminated the deep pools needed for the native fish to survive such dry periods. Peter recommended asking Al where he used to swim and seeing what the conditions are like there now.

Ann said this is a legitimate question, but there is a flip side to seeing pools teeming with native fish. Today there are new non-native species in the river. If all the fish were gathered in pools, smallmouth bass and other predators would be there as well. Density is not always a good thing.

Peter said right now there appears to be no native-fish age class from zero to 10 years. He said the researchers said it was the periodic spawning conditions that allowed class recruitment and survival over time, and the periods when native fish lived in pools were not when young fish were being recruited. The flushing flows to create deep pools no longer occur and there are new predators that put native fish in jeopardy if they are concentrated together. He said if a 3-in-10-year lease could be used to create two years of successful native-fish recruitment every five or 10 years, that would be enormously beneficial.

Marsha said one of the reasons this effort is compelling is because locals are trying to do management through learning by doing. Concern over a possible endangered-species listing is bringing diverse people to the table. There is now a collected body of work and scientific data that wasn't available before. A lot of money has been raised for this effort. There is risk involved, just as there is in farming, but the risks of doing nothing are also substantial. She asked whether the locals' concern about their fish-management hypothesis being ignored precludes their supporting the efforts to help native fish.

Mike said locals are on board with the effort but they still believe a hypothesis is missing regarding flexibility in the base flow. Ann said it is a valid point to look for flexibility in the fish-pool water.

Marsha asked whether it would be beneficial to have a meeting with a larger group. Randy said MaryLou Smith of the Colorado Water Institute is going to come help MVIC with some of its meetings and it would be good for some of the DRD-SC members to attend one of those meetings.

Mike said going to the public is a good idea but first the implementation plan needs to be developed. Regarding the locals' concerns, he said what the farmers are really asking is: Could the base pool be managed differently? Mike suggested Chester Anderson of BUGS Consulting could search the literature regarding the issue.

Peter suggested going back to the researchers and asking them why native fish thrived in the past when the river used to run dry. What is different now and could a change of water management help restore the native fish?

Marsha said if the scientists need to address this question head-on, they could be asked to briefly address it in their report. If more scientific inquiry is needed, that would come later.

It was decided that:

- Marsha will organize a call among Kevin, Peter and Mike regarding the report. Gerald Koppenhafer and Al Heaton will be included as well.
- Mike will call Chester and try to arrange a conversation between him and Gerald and Al in order to frame the specific questions to the researchers.
- it might be good to make a field trip to look at water in pools.

Randy said if the answer could be available by Aug. 16, when MVIC is having a meeting, he would appreciate it. He would also like to hear Chester Anderson's thoughts on this subject.

Jay asked whether the implementation team has addressed specific management objectives. Mike said the researchers have been very specific concerning the nine opportunities and the team is starting with those. Jay asked if there are known objectives that the team is attempting to reach with those opportunities. Ann said there is room for greater specificity in the objectives, especially for purposes of monitoring; to assess progress, you need more specificity. However, that can come later. Mike agreed and said such goals will eventually have to be established and made reach-specific, site-specific, etc.

**Slickrock gauge:** Mike presented a sheet showing contributions and expenditures for the Slickrock gauge for 2008-2011. Over those four years, the DWCD has paid an average of 80.45 percent of the costs of operation and maintenance for the gauge. Mike said SJCA has been a consistent contributor of funding and Greater Dolores Action has provided \$500 a year, but other groups contributed in the first year and then faded away. The DWCD board wants the district to be paying about 20 percent of the costs rather than 80 percent and doesn't want him to sign next year's gauge contract with the USGS until funds have been pledged from other entities. O&M for 2012 is expected to be \$16,200, which would mean DWCD would provide approximately \$3,240, leaving \$12,960 to be supplied by other entities. Marsha said this would boil down to four to six entities giving \$2,000 to \$3,000 apiece. Mike said discretionary items are on the DWCD's September meeting agenda and the budget will be decided in October, so he would like to have pledges by then. He said the 80-20 ratio is not absolute but is a guideline.

Ann said the Slickrock gauge is very helpful in figuring out early flows below the dam. Mike said the benefits of the gauge are primarily to science and rafting; it doesn't directly help the DWCD. The gauge was installed once and discontinued because no one paid for it, then reinstated. Mike said he would not want to see that happen again and consistent funding partners are needed.

Jay and Amber said they will take the matter up with their constituencies. Amber will see if GDA can increase its contribution. Marsha said this will be kept on the DRD agenda.

**319 watershed plan:** Ann said Chester Anderson's 319 watershed study should be completed in April 2012. The study was funded by the Colorado Nonpoint Source Program, which receives funding from the EPA. 319 funds are focused on water quality and nonpoint source pollution. Ann provided a worksheet showing the nine components of an EPA watershed-based plan. She said the EPA is most interested in nitrogen, phosphorus and sedimentation. She said Chester has set up a web portal through his business to make the process accessible to the general public.

Mike said this is a contract he administers and he has asked Chester whether he could provide context regarding fish and flows. Chester is well-positioned to consolidate what is known about the corridor and can provide a historic dimension. Mike said Chester is studying the river below the San Miguel confluence as well as above.

**Science Committee report:** Ann said the Big Gypsum report is on the web. It now includes a timeline of ecologically significant events.

**Adding boating interests to the DRD-SC:** Mike said when the restructuring was done it was initially felt that the SJCA, which is part of the Dolores River Coalition, could represent boating interests.

Jay said he appreciates the SJCA but that American Whitewater may be able to speak more precisely for boaters, not just locally but nationally. Because of its length below the dam, the Dolores allows for multi-day trips and is regarded as a national treasure. He said, after the completion of the flow study last year, he thinks American Whitewater could provide much valuable information. He believes more-direct boater representation on the DRD-SC would be useful, but he will continue to be a guest at the meetings if it is decided otherwise.

Randy said it would be good to have boating representation and Peter agreed. Marsha said nothing in the rules precludes adding members to the DRD-SC.

Amber said this is her first DRD-SC meeting. She said there is a compelling reason for rafters to represent themselves, but if they are added to the group, there may be other entities that also then want a seat, and there is benefit in keeping the DRD-SC small.

It was noted that representatives of the BOR, DOW and DWCD were not present for the discussion because Mike had left, so the discussion was tabled.

Marsha said the group might want to consider having another Lower Dolores rafting field trip next year.

**May minutes:** These were approved except for some questions about the listed attendees.

**Next meeting:** The next meeting will be Sept. 6 at 9 a.m.