

LOWER DOLORES WORKING GROUP FACT SHEET

Meeting #7

July 21, 2009

Field trip to Reach 1 at Bradfield Bridge

Dolores River Dialogue science perspective

Presenter: Ann Oliver

Dolores River Dialogue (DRD) Science Committee

Ann provided an overview of the goals and efforts of the DRD science team. The DRD's Core Science Report is a compilation of information from a considerable number of studies and other sources regarding the Dolores River. Now the DRD science team is working to coordinate the gathering of new information. DRD has four disciplines on which it focuses:

- The trout fishery;
- Native fishes;
- Riparian health;
- Channel health/geomorphology.

Reach 1 extends from McPhee Dam to the Bradfield Bridge. There are some issues in Reach 1 for each of the four disciplines. The dam has had an impact on all four disciplines. Since the dam was built, the base flows in Reach 1 have been lower than in years before the dam, and the spill flows are not as high or as frequent as high flows that took place before McPhee was built.

Reach 1 fishery

Presenter: Jim White

Colorado Division of Wildlife

A coldwater fishery is one that is under 70 degrees Fahrenheit. Jim said about 200 years ago, Reach 1 would have been a warmwater reach and the native bluehead sucker, roundtail chub and flannelmouth sucker would likely have been present. The reason Reach 1 is now a coldwater fishery is the dam, as releases from the reservoir come from its deepest and coldest levels. Downstream, the Dolores River returns to warmwater.

Today there are three trout species present in Reach 1: browns, rainbows and cutthroats. Before the dam, trout probably would not have been present in the river below the town of Dolores. The fishery is catch-and-release only. The river supports a population of wild brown trout, as they are the most tolerant of warmwater and of whirling disease. Rainbows and cutthroats are stocked. The DOW is now stocking a whirling-disease-resistant strain of rainbows in an effort to restore the population of that species. Whirling disease is much more prevalent closer to the dam; the spore load is lower near Bradfield Bridge.

Surveys last year found that the average trout biomass in the river is 27 pounds/acre. The DOW's goal for Reach 1 is 32 pounds of trout biomass.



David Graf/Division of Wildlife
Flannelmouth suckers

The Lower Dolores Management Plan Working Group is working to provide recommendations for updating the Dolores Public Lands Office (Forest Service/BLM) 1990 Dolores River Corridor Management Plan. The Working Group includes diverse stakeholders with many perspectives and interests in the Lower Dolores River Valley. Its goals are to gather information, identify values worthy of protection in the planning area, formulate ideas for protection of the values, and make recommendations to the Dolores Public Lands Office. The Working Group will meet until Fall 2009. Presentations, documents, meeting summaries, agendas and other information related to the Working Group process are posted at <http://ocs.fortlewis.edu/drd/>.

Lower Dolores
Working Group
Members & Alternates

Chester Anderson
Linda Bassi
Steve Beverlin
Ann Brown
Chris Burkett
Jon Callender
Randy Carver
Steve Chappell
Scott Clow
Clint Cressler
Cole Crocker-Bedford
James Dietrich
Carolyn Dunmire
Nathan Fey
Jim Fisher
Lynn Gardner
Rick Gersch
Art Goodtimes
David Graf
Dave Harper
Vern Harrell
Al Heaton
Shauna Jensen
Rick Keck
Amber Kelley
Julie Kibel
Gerald Koppenhafer
Ted Kowalski
Tony & Peggy Littlejohn
Andy Logan
Joe Mahaffey
Meghan Maloney
Karel Miller
Ann Oliver
John Porter
Mike Preston
Larrie Rule
Rick Ryan
David Schneck
Lisa Schwantes
Don Schwindt
Leslie Sesler
Jim Siscoe
Bruce Smart
Dale Smith
Doug Stowe
Rowdy Suckla
Steve Trudeau
David Vackar
Chuck Wanner
Mely Whiting
John Whitney
Ernie Williams

Staff

Marsha Porter-Norton
Kathy Sherer
Gail Binkly
Gina Espeland

Macroinvertebrates in Reach 1

Presenter: Chester Anderson

BUGS Consulting

During the field trip, Chester took samples of macroinvertebrates from the river. He said, in rivers with few human-caused impacts such as the Piedra or Animas, there are about 1,000 individual macroinvertebrates of 30 different species in such samples. Here he found about 10 individuals and not much diversity. The U.S. Environmental Protection Agency has called for federal public-lands agencies and tribes to monitor macroinvertebrates, as they are an indicator of river health.

A major factor in the low macroinvertebrate count in Reach 1 is the dam. It was built with multiple outlet works at different heights, but only the bottom ones are currently used because of the danger of releasing invasive white suckers, predatory walleye, and other non-desirable fish into the river if higher outlet works are used. These fish would have a harmful effect on the native warmwater species.

However, the water from the bottom of the reservoir is anaerobic. Phosphorus that is bound to organics is released as the organics are killed by the lack of oxygen. Thus, the water on the reservoir bottom contains a high amount of phosphates. These, released into the river, trigger the prolific growth of algae, which as it decays removes oxygen from the water, making it less healthy for animals and plants. The algae, called "river snot", is easy to see throughout Reach 1. Around Paradox there is a recovery in the Dolores River and the macroinvertebrate count is quite good.

Reach 1 vegetation

Presenter: Adam Coble

M.S. candidate, Northern Arizona University

Adam is working for the DRD for a year to study the riparian vegetation, particularly cottonwoods and box elders, and how their growth is related to hydrology. He has probed the question of whether cottonwood regeneration has taken place since the dam was built, and has found that such regeneration has indeed occurred. He said Reach 1 sees a considerable amount of regeneration; farther downstream there is less. He is continuing to try to determine during which years there was the most establishment of cottonwoods and box elders, and why.



Marsha Porter-Norton

Members of the Lower Dolores Working Group listen to Jim White of the Colorado Division of Wildlife discuss the Reach 1 fishery.

NO decisions or recommendations were made at this meeting.

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