Dolores River Dialogue
3/23/10 Meeting Summary

Web Site: http://ocs.fortlewis.edu/drd
Find the DRD's reports, meeting summaries, Power Points, news and more.

"Dolores River Dialogue"
Tuesday, March 23, 2010
AGENDA

1) Introductions
2) Review of Agenda and Outcomes for the day
3) Revamping the Structure of the DRD
4) Lower Dolores Plan Working Group
5) DRD Science Information Sheets
6) Panel: *Highlighted Science Initiatives and Questions on the Lower Dolores*. Panelists:

Native Fish of the Lower Dolores River: Status, Trends, and Recommendations Dan Kowalski, Area Aquatic Biologist, CDOW, Montrose Office

Dolores River Restoration Partnership
Peter Mueller, North San Juans Project Director, The Nature Conservancy

319 Watershed Study
Brooke Childrey, AmeriCorps/VISTA

Recent Findings Re: Salinity
Rob Anderson, DRD Science Committee

Revamping the Structure of the DRD

Background / Issues: The DRD has been a formally organized coalition since 2004. Over the years, the DRD has accomplished a lot, namely conducting and coordinating major science initiatives and convening the Lower Dolores Plan Working Group, as well as serving as an ongoing forum for dialogue about flows, riparian ecology, geomorphology, and the fisheries.

Over the years, the DRD—Technical Committee emerged as the key hub for DRD activities.
In November of 2009, a DRD-Technical Committee held a retreat. At that time, several ideas and actions emerged:

1) The DRD structure needed to be revamped to make better progress on working towards the DRD's purpose statement (see box on pp. 3).
2) A process for evaluating do-able alternatives around the purpose statement should be developed and used.
3) The group recommitted to the DRD mission.

Towards this end, recommendations were made around improving the DRD structure, and were presented by Don Schwindt of the DWCD and Meghan Maloney of the SJCA (representatives of the two groups who originally started the DRD). The recommendations were approved by consensus of the DRD and are as follows:

1) A new organizational chart will be used (see page 2).
2) A DRD Steering Committee will be formed made up of six organizations with one representative each with appointed alternates.
3) The full DRD will be made up of a set group of interests but the public is invited to the meetings and time will be on the agenda for public comments throughout the meeting.
4) A new "Framework" will be used to talk about options for meeting the purpose statement (see page 3). The exact process for using the Framework will be refined by the Steering Committee.
5) The Steering Committee operates on consensus. The larger DRD will aim for consensus but a super majority voting mechanism will be used when consensus cannot be reached.
6) The full DRD will meet twice a year.

Dolores River Dialogue Stakeholders & Community

DRD Stakeholder Members

- Bureau of Reclamation
- Colorado Divisions of Water Resources
- Colorado Division of Natural Resources
- Colorado Division of Wildlife
- Colorado Water Conservation Board
- Dolores County
- Dolores Public Lands Office (USFS/BLM)
- Dolores River Action Group (local private boaters)
- Dolores River Coalition (*)
- Dolores Water Conservancy District
- Federal Army Corps of Engineers
- Montezuma County
- Montezuma Valley Irrigation Company
- San Juan Citizens Alliance
- San Juan Public Lands Center
- The Nature Conservancy
- US Fish and Wildlife Service
- Ute Mountain Ute Tribe

Dolores River Dialogue Steering Committee

Standing Members: Bureau of Reclamation, CDOW, DWCD, MVIC, and the San Juan Citizens' Alliance (*), and The Nature Conservancy -- 1 Rep. and 1 Alternate/Each

(The Steering Committee can engage with more players as needed.)

COMMUNICATION

Spill Committee
Convened by BofR
Reps: CDOW, Agriculture, SJCA, DPLO, rafter, DWCD, BofR
Not a DRD Committee
Gives input to annual spill management
Can consider ideas from

Biology Committee
Convened by BoR and Chaired by CDOW
Reps: TU, CDOW, USFWS, DPLO & Bof R
Determines how fish pool used
Not a DRD Committee
Can consider ideas from

Framework Process

Hydrology Committee

Science Committee

These communities will have open membership including technical experts, staff, stakeholders and contractors as the topics and project call for.

Lower Dolores Plan Working Group

This Working Group has an appointed membership.

(*) The San Juan Citizens Alliance represents the Dolores River Coalition on the Steering Committee.
(**) Members of the Dolores River Coalition include:
San Juan Citizens Alliance, The Wilderness Society and The Wilderness Support Center, Colorado Environmental Coalition, Colorado Mountain Club, Center for Native Ecosystems, Colorado Trout Unlimited, American Whitewater, Western Colorado Congress, Sheep Mountain Alliance, Dolores River Action Group, Citizens For Accountability and Responsibility, Environmental Defense, Uncompahgre Valley Association, San Miguel Watershed, Colorado River Outfitters Association, Grand Canyon Trust, Friends of Living Rivers/River Keeper, Southern Utah Wilderness Alliance, and Utah Rivers Council.

New DRD Organizational Chart — 3/10

DRD Structure - Continued

Dolores River Dialogue
Purpose Statement

The DRD is a coalition of diverse interests, whose purpose is to explore management opportunities, build support for and take action to improve the ecological conditions downstream of McPhee Reservoir while honoring water rights, protecting agricultural and municipal water supplies, and continued enjoyment of rafting and fishing.

DRD Input and Discussion:

- Do not leave major entities out of the process if any action(s) affect them such as the counties. There was agreement that involvement from all affected parties is crucial.
- Several comments were made that this new structure makes things much more clear and understandable.
- If the Steering Committee needs to add additional players, it can.
- It is crucial the Steering Committee keeps everyone informed. Communication is **essential.**
- Proposals and projects will be vetted by Steering Committee but the larger DRD is as importance and relevant as ever.
- The membership and roles of the Steering Committee includes**:** DWCD, BoR, CDOW, MVIC, SJCA (also represents the Dolores River Coalition) and The Nature Conservancy. Each entity will appoint a representative and an alternate. The Steering Committee's roles and tasks are:

  - ⇒ Reports to the DRD and serves as a clearing-house for all DRD activities
  - ⇒ Guides the *Framework* process; Vets ideas and moves efforts forward; Develops recommendations to take to the DRD; Is a place where consensus is "hammered out" in great detail; Frames opportunities for the larger DRD; Takes recommendations to the DRD using detail work coming in from Hydrology and Science Committees
  - ⇒ Keeps the DRD from getting out ahead of the member groups
  - ⇒ Is not a final decision maker
  - ⇒ Ensures funding oversight
  - ⇒ Oversees the Science and Hydrology Committees
  - ⇒ Selects contractors and/or other staff
  - ⇒ Organizes work - Develops annual goals, work plan, objectives and measurements for progress and monitoring of each and reviews requests for projects
  - ⇒ Ensures credibility and outside review of science efforts
  - ⇒ Continual communication with the DRD and committees; Listens at all levels; Works together to keep the diverse coalition of interests working in a positive direction; Uses a "can do" attitude; Stays flexible
  - ⇒ Can include other players as may be necessary.

VERY IMPORTANT: A document was presented ahead of time and at the meeting, and, is on the Web site for more detail: It provides a great deal of background and detail about the restructuring effort and is entitled:

Looking Back and Going Forward
The Dolores River Dialogue -- Governance Structure Recommendations

For more information on this agenda item, contact the DRD facilitator, Marsha Porter-Norton at 970-247-8306 or email: porternorton@animas.net

Dolores River Dialogue
Framework Proposal Outline for
Considering Actions to Improve the Downstream Environment

Names of Person(s) Developing this Proposal:_____
_____
Main Contact Person's Phone Number, Cell and Email: _____
_____
Date:_____

Please complete a proposal that addresses the questions below. Please be concise and attach any maps, hydrographs or supporting documentation.

Overview of the Proposal:

- What is the specific proposal and how would it be implemented? Details and/or brief examples are helpful.
- What is the geographic area of focus including which DRD reach or reaches that would be involved?
- Who are the partners involved? Please describe their roles and responsibilities. Do you propose a role(s) for the DRD? If so, please be specific.
- What is a proposed timeline for implementing this proposal?
- Are there communication plans or agreements that need to be in place among key entities to make this proposal work? If so, please describe.
- If implemented, how would "success" be defined and monitored?
- Why do you believe this proposal is "do-able"?

Costs

- How much would this proposal cost (please provide a basis for the estimate)?
- What source(s) of funding are proposed?
- Would you be requesting any money or resources from the DRD?

Ecology and Science

- Please describe the anticipated ecological benefits (note: these might be from comparable situations elsewhere). Please be specific about any anticipated outcomes for: native fish, trout, riparian health, river mechanics and/or other.
- Please describe any key technical or scientific assumptions you are making including an overview of scientific information relating to the proposal.
- Are there any anticipated unintended or negative ecological consequences or costs?

Economic and Social

- What are the anticipated economic and/or social benefits and outcomes?

Hydrology

- Would the proposal affect water supplies in the reservoir and water rights in the Dolores drainage? If so, describe.
- Would the proposal affect operations of McPhee Dam? If so, describe.
- Would the proposal affect the hydrology downstream of the reservoir? If so, describe.

Sideboard/Constraints

- What are the current sideboards (i.e., constraints) and/or challenges that would need to be addressed (e.g., operational, contractual, legal, political, or other).

Other Questions

- Are there additional questions that need to be answered to "flesh out" this proposal?
- What is not known at the current time? Can it be known?
- Is there anything else you would like to share?

There is no deadline for submitting proposals through the DRD. When completed, please submit eight copies of this proposal and any attachments to the Dolores River Dialogue - Steering Committee through the facilitator, Marsha Porter-Norton: porternorton@animas.net - 970-247-8306. The process by which the proposal will be evaluated by the DRD-Steering Committee and the full DRD is on the Web site or available by request.

Lower Dolores Plan Working Group

The Power Point for this presentation is on the Web site or is available by request.

One reason there has not been a full DRD meeting for awhile is that the Lower Dolores Plan Working Group has been in full gear since December of 2008. Made of up of 51 members representing a broad spectrum of interests, the group has met 12 times, gone on three field trips, arrived at 15 consensus recommendations and importantly, found a recommended alternative to the "preliminarily suitable" status for the Wild and Scenic River designation. The alternative was reached by a consensus of the group at its March 2010 meeting. The recommendation is to develop legislation at the federal level that would establish some type of area (such as a Special Management Area) and would protect the Outstandingly Remarkable Values while also honoring property and water rights including agriculture. Details are being worked out by an appointed Sub Committee and the larger Group will review their work from April to June, 2010.

A copy of all of the group's recommendations to date are on the Web site and have to do with USFS/BLM management issues related to: cultural resources, scenery, campgrounds, rafting, recreation, etc.

The Working Group will submit a final report to the Dolores Public Lands Office (DPLO -USFS/BLM) by June 30, 2010. The DPLO will then initiate a formal Environmental Assessment process and it is expected that a new management plan for the area will be done by Fall of 2011.

The legislation effort will continue on past the Working Group phase but members will stay involved with the drafting and review.

Marsha Porter-Norton, the DRD and Lower Dolores Working Group facilitator, thanked everyone involved and handed out the group's draft recommendations to date emphasizing that the final report will show the group's final work. She also thanked everyone for the time they are putting into this substantial effort. See the next page for the Working Group members, Alternates and Staff.

Working Group 9/09 Field Trip

For more information on this agenda item, contact the DRD facilitator, Marsha Porter-Norton at 970-247-8306 or email: porternorton@animas.net

Members

Chester	Anderson	B.U.G.S. Consulting
Terra	Anderson	Senator Bennet's Local Office
Linda	Bassi	Colorado Water Conservation Board (CWCB)
Steve	Beverlin	Dolores Public Lands Office
Ann	Brown	Senator Bennet's Local Office
Chris	Burkett	City of Cortez
Randy	Carver	Montezuma Valley Irrigation Company
Wanda	Cason	Senator Mark Udall's local office
Steve	Chappell	BOCC Montezuma County
Scott	Clow	Ute Mountain Ute Indian Tribe
Clint	Cressler	interested citizen/OHV user
Cole	Crocker-Bedford	property owner
James	Dietrich	Montezuma County
Carolyn	Dunmire	Recreational boater
Nathan	Fey	American Whitewater
Jim	Fisher	Dolores Water Conservancy District
Lynn	Gardner	Montezuma Valley Irrigation Company
Rick	Gersch	Town of Dove Creek
Art	Goodtimes	San Miguel County Commissioner
Vern	Harrell	Bureau of Reclamation
Al	Heaton	Livestock/grazers/property owner
Shauna	Jensen	Dolores Public Lands Office
Amber	Kelley	Dolores River Coalition
Julie	Kibel	Dolores County Commissioner
Gerald	Koppenhafer	BOCC Montezuma County
Ted	Kowalski	Colorado Water Conservation Board (CWCB)
Tony or Peggy	Littlejohn	Rocky Mountain Canoe Club
Andy	Logan	Mining/Minerals/Oil & Gas
Brian	Magee	Colorado Division of Wildlife
Joe	Mahaffey	Dolores Water Conservancy District
Meghan	Maloney	San Juan Citizens Alliance
Joan	May	San Miguel County Commissioner
Karel	Miller	property owner
Rebecca	Mitchell	Colo. Water Conserv. Board
Peter	Mueller	The Nature Conservancy
Ann	Oliver	DRD Science Coordinator
Mike	Preston	Dolores Water Conservancy District
Larrie	Rule	BOCC Montezuma County
David	Schneck	San Miguel County
Don	Schwindt	Dolores Water Conservancy District
Leslie	Sesler	Natural History/Science/Archeology
Jim	Siscoe	Dolores River Science Committee
Bruce	Smart	Dolores Water Conservancy District
Dale	Smith	Recreational fishing
Doug	Stowe	Dolores County Commissioner
Rowdy	Suckla	Livestock/grazers/property owner
Steve	Trudeau	Dolores Water Conservancy District
David	Vackar	Trout Unlimited
John	Whitney	Representative Salazar's Local Office
Jeff	Widen	Wilderness Support Center
Ernie	Williams	Dolores County Commissioner

Staff

Marsha	Porter-Norton	Facilitator
Kathy	Sherer	Project Assistant
Gail	Binkly	Recorder
Gina	Espeland	Logistics/Grant Admin, DWCD
Brooke	Childrey	AmeriCorps/VISTA Volunteer

Lower Dolores Plan Working Group

Members, Alternates and Staff

Alternates

David Graf	Colorado Division of Wildlife
Jon Callender	Mining/Minerals/Oil & Gas
Mely Whiting	Trout Unlimited
Bill Kees	American Whitewater
John Sanderson	The Nature Conservancy

DRD Science *Information Sheets*: Riparian Health

Brooke Childrey is an AmeriCorps/VISTA Volunteer who's placement is with the Dolores River Dialogue. She is producing, with the Science Committee, a series of *Information Sheets* that provide detailed science information in a format that is concise and easy to understand. Her first one was released at the DRD meeting and is on "Riparian Health" and is on the Web site http://ocs.fortlewis.edu/drd/resources (go to the bottom of the page). *The Information Sheet* states that "Riparian ecology is the study of the vegetative corridor along a stream. Riparian communities are largely determined by an independent on river flows and channel dynamics." The document:

⇒ discusses why it's an important topic for the DRD;
⇒ relays information about unusual riparian plan communities in the area;
⇒ presents the DRD's goals and key science questions;
⇒ reports on the status of riparian health in the area; &
⇒ presents efforts by other groups including the Dolores River Restoration Partnership.

Look for future *Information Sheets* on the fisheries and other science topics!

Science Updates and Panel

A series of speakers gave information about science efforts, findings and recommendations. These presenters covered efforts led both by the DRD (Rob Anderson and Brooke Childrey) and other entities (Dan Kowalski and Peter Mueller).

Dan Kowalski, CDOW, *Native Fish on the Lower Dolores: Status, Trends and Recommendations*

Dan Kowalski, an area aquatic biologist with the Colorado Division of Wildlife started the afternoon session. Through Power Point slides, with discussion, he covered the following topics on Native Fish:

⇒ The five species found in the Dolores River, with their federal and/or state status (i.e., Federally Threatened, State Threatened, State Species of Special Concern, State BLM Sensitive Species or No Formal Listing). Also presented were three Federally Endangered species native to the Colorado River but not confirmed as being present or occurring on the Dolores River.
⇒ Results of the most recent fish sampling for most reaches of the Dolores River below McPhee Reservoir including the percentage of total fish caught that were native (versus non native).
⇒ Population trends for three native fish species by reach of the river including Pyramid, Big Gyp, Slickrock and Gateway.
⇒ A table comparing the biomass and percentage of native fish composition, as well as characteristics of the channel and hydrograph alteration, between the Big Gyp Reach of the Dolores and reaches sampled on other rivers (Yampa, Gunnison, Colorado and San Miguel). For the sampling period 2002-2006, the Dolores had the lowest biomass and percentage of native composition among all the rivers.
⇒ Several tables were shown comparing the biomass, percentage of native species composition, and average fish length, as well as channel, hydrograph and/or watershed characteristics between the Big Gyp Reach of the Dolores and reaches sampled on other rivers. Dan said CDOW has concluded that the Dolores had the lowest biomass and percentage of native composition compared to Colorado, Gunnison, and Yampa in 2002-2006; less than 1/3 the native fish/mile than the San Miguel in 2008, and the smallest fish in 2007 compared to the Gunnison and the San Miguel in 2008.
⇒ An overview of native fish habitat/minimum flow investigations on the Dolores River with more detailed summary of the most recent (2002-2006) study and conclusions.

Find Dan's Power Point on the Web site.
Contact information:
Dan.Kowalski@state.co.us or
970-252-6017

Native Fish— CDOW Recommendations and Conclusions (cont.)

Ann Oliver, the DRD Science Coordinator had provided Dan a list of questions ahead of time. What follows are those questions with Dan's answers bulleted:

What is known about the status of the 3 natives and the roundtail in particular in the Dolores River? What about the Four Endangered fish?

-Native fish have declined significantly and are barely viable above the San Miguel

-Endangered fish have been functionally extirpated from the river since the 1980's

Is there data on trends? For what time period?

-Good data on trends from 1986-Present, pre-dam data only spot sampling

What is the strength of the data - how much certainty/uncertainty is associated?

-Varies with each data set, sampling is generally CPUE population indices or minimum counts so measures of precision are not possible or necessary

-High amount of certainty about conclusions due to magnitude of decline, current condition of fish population, and corroboration with habitat modeling studies

What do we know about the reasons for the trends?

-Lack of habitat due to insufficient flow is the reason for native fish declines

What key data gaps exist with respect to native fish?

-Age/growth information, spawning ecology of natives, aquatic invertebrate data, temperature and nutrient issues, smallmouth bass age/grown and ecology

-Data gaps are academically interesting but not necessary for management decisions

What do we know about the flow needs for the native fish?

- We have excellent information on flow needs of both native and sport fish, one of the most thoroughly researched subjects with state of the art

Dan then presented the CDOW's recommendations and future plans. Dan said he was speaking on behalf of the CDOW in making these recommendations and observations. Recommendations (taken directly from Dan's Power Point)

A) Increased downstream flows should be first priority

-Fish pool should at least be at the 36,500 AF identified in the 1996 EA with ultimate objective of year round minimum flow of at least 78 cfs

-Current conditions provide less than 43% of the MINIMUM downstream flow needs and protects less than 4% of potential native sucker biomass

B) Spill management is critical with so little water allocated for downstream release

-Start spill April 1 and extend for as long as possible with clock on fish pool off

-With 36,500 af fish pool and a 90 day spill would be 85% of minimum downstream flow needs and would protect about 10% BHS biomass

C) Alternatives for Wild and Scenic Designations

-Any alternative that does not increase downstream releases will NOT protect the fish ORV in Dolores

-Status quo produces less than 5% of potential native fish habitat is only about 43% of necessary minimum flows

D) Protecting flows in the San Miguel River is essential for sustaining viable native fish populations in the Dolores River

-State instream flow protection and/or Wild and Scenic Designation should be explored to protect San Miguel River flows

Future Plans (taken directly from Dan's Power Point):

The CDOW is compiling all Dolores River native fish data into a summary report that will include all historical fish sampling data, current distributions, and population trends. A range-wide status assessment is also underway to evaluate historical distributions, current distribution, and make specific conservation recommendations. Range-wide Conservation Agreement and strategy for Roundtail Chub, Bluehead Sucker, and Flannelmouth Sucker Signatories include Sate of Colorado, BLM, and BOR. Further monitoring efforts on the Dolores will not be a priority for DOW unless conditions for native fish improve. Spill management has not been favorable for fish sampling conditions and fish pool water is way too scarce to used for monitoring.

The DRD discussion included these points:

It appeared to one member of the audience that the Roundtail Chub did well during the drought based on the chart shown. Dan said that is not the conclusion that should be drawn. Some questions about the data came up regarding how it was gathered and the conclusions Dan was drawing from it. Another person commented that the comparison rivers were not fair comparisons because the comparative rivers' flows are much higher. Rivers with similar average flows should be the only rivers compared to the Lower Dolores. One member asked why the CDOW would recommend more water than what was in the river prior to construction of the dam. Dan relayed that the CDOW feels confident that the flow targets in his presentation are what are needed to support native warm water fish.

There was no action taken. This was a presentation to the DRD by the CDOW.

Dolores River Restoration Partnership

For more information, contact Peter Mueller, The Nature Conservancy's North San Juans Project Director at: email: pmueller@tnc.org or 970-708-1368

Peter Mueller with The Nature Conservancy gave a presentation about the Dolores River Restoration Partnership, a collaborative of TNC, the USFS and BLM, two youth corps, and the Tamarisk coalition. The project area is 4,600 miles of watershed from McPhee dam to the Colorado River. Many factors have brought more focus on the Lower Dolores and makes it "ripe" for this type of collaborative, Peter said. These factors are: there is a desire for a healthy native fishery and a recent Seven States Agreement related to the Roundtail Chub, Flannelmouth Sucker and Blue-head Sucker; the existence of unique and rare riparian plan communities; and, this project is a chance to demonstrate conservation on a major scale.

By replacing tamarisk with healthy riparian vegetation, a number of results are expected ranging from an increase in habitat and biodiversity, improved river function around sediment transfer, more native vegetation, water being used more beneficially, reduced fire threat, and the important values in the watershed are strengthened such as: katchina daisy, New Mexico privet, hanging gardens, and the Roundtail Chub fish.

To date, 23 miles of the river have been treated with tamarisk removal along with 191 acres in the watershed, and more acres inventoried. A million dollars has been raised and two conservation corps have been active for 13 weeks with more work projects planned.

Implementation of this project requires careful planning, multi-entity and jurisdictional collaboration, and priority-setting. There is a lot of area to treat and limited resources. Deciding which areas will make the most difference is a key question.

Monitoring is very important in terms of areas where re-growth is occurring; tracking on outcomes such as the emergence of native species; and the effects on ground water, surface flow and hydrology.

One outcome of the work is using youth from the conservation youth corps to do the work. The youth learn valuable skills for their future, learn to work together and so there are human benefits to this project as well as ecological outcomes.

Peter ended by noting that the Lower Dolores has regional and national significance and is a special place. Restoring native cover to the Dolores' channel will bring new life to the region's plants and animals.

Photo: Colorado Division of Wildlife

319 Study

For more information, contact Chester Anderson with B.U.G.S. Consulting and the DRD Science Committee at: chester.bugsconsult@hughs.net or 970-764-7581.

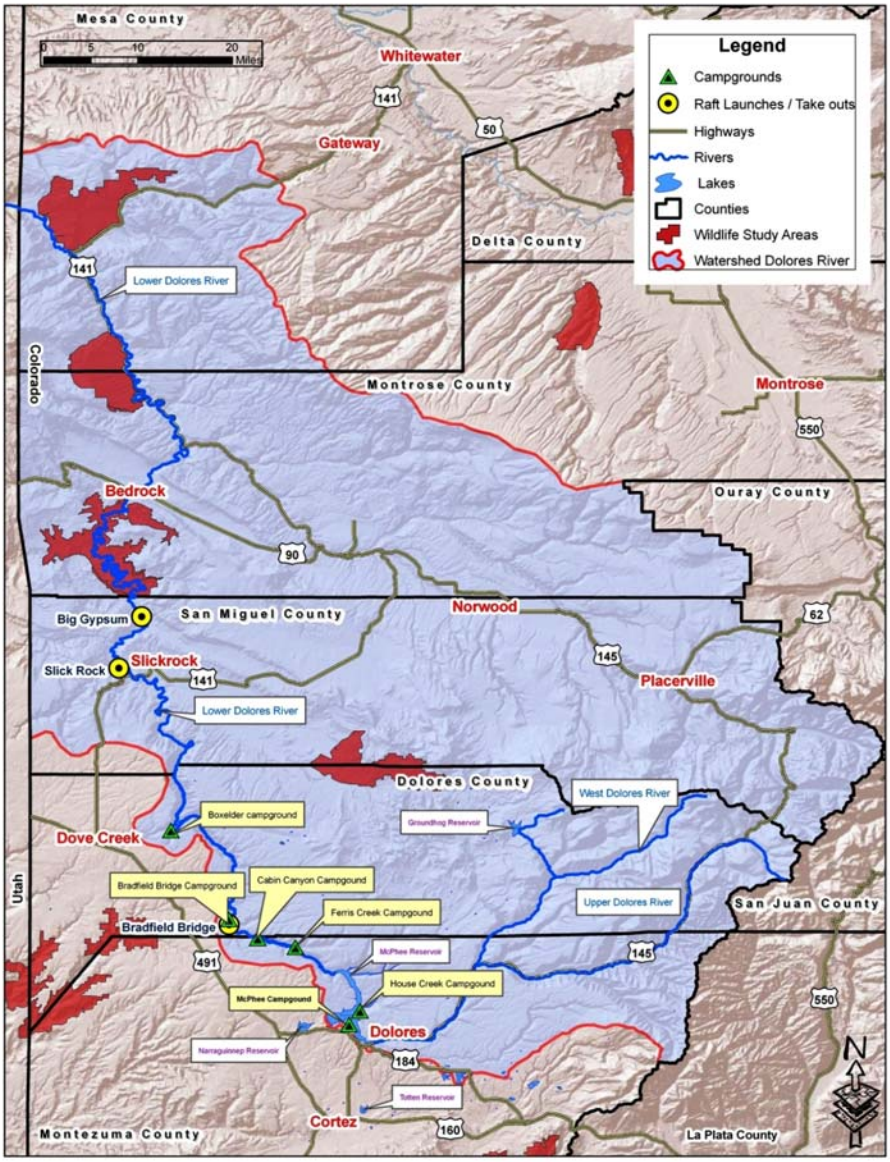
Brooke Childrey, an AmeriaCorps/VISTA volunteer who is placed with the DRD gave a sneak preview of a more in-depth presentation which will occur in the fall on a DRD project called a “319 Watershed Study.” Chester Anderson of B.U.G.S. Consulting is in the process of writing a Non-point Pollution Assessment and Management Plan for the Dolores River Watershed. This stakeholder process is entirely voluntary and non-regulatory. The goal is to protect or improve the water quality on the Dolores River from McPhee Dam downstream to the Utah state line.

This process is aimed at addressing non-point sources (NPS) of pollution. NPS pollution comes from many diffuse sources, and is often driven by rainfall and snowmelt. As runoff moves, it picks up and carries away natural and human-made pollutants before finally depositing them into lakes, rivers, wetlands, coastal waters, and even under-ground sources of drinking water. Potential sources of NPS in the Dolores River watershed include:

- Temperature modification below McPhee Dam
- Large amounts of sediment contributed from Disappointment Creek
- Uranium mines and processing site tailings
- Degradation of the riparian community

The process for developing the plan includes:

- Research and compile existing information on current land use practices
- Identify potential sources of non-point pollution in the Dolores Watershed
- Review and compile literature and stake-holder information in regards to current wa-ter quality issues
- Participate in on-going Dolores River Dialogue Process
- Participate in Lower Dolores River Manage-ment Plan process
- Contact individuals and organizations that may have a stake in the outcome of the watershed plan
- Focus on downstream areas not covered in the Management Plan Process
- Draft management plan based on DRD, Lower Dolores Working Group, BLM/FS, Tamarisk Restoration and other stakeholder information
- Submit to stakeholders for review and com-ment on the plan stream areas not covered in the Management Plan Process



Graphic:
Dolores River Watershed
BUGS Consulting

A web page is being developed around this process that will provide information on the Dolores River Watershed.

After Brooke gave the above information via a Power Point, she informed everyone that this topic will be on the fall 2010 full DRD meeting agenda.

Potential Barriers to Cottonwoods Regeneration in the Big Gypsum Study Area

The DRD received a grant from the CWCB to conduct studies related to the DRD purpose statement at the Big Gyp site. Rob Anderson is researcher contracted by the DRD to investigate some of the relationships between vegetation establishment, soils and flows at the site. He presented on cottonwoods and some potential barriers to their establishment in the Big Gypsum Study Site. Rob educated everyone on cottonwoods in the Lower Dolores. They are important native habitat. Rob's slides showed:

⇒ An overview of the importance of Riparian Forests and their status in the Southwest
⇒ An overview of some of the reasons that cottonwood forests are declining around the southwest, including invasive species, altered flows and sediment processes due to dams and diversions, poor grazing practices, and physical clearing
⇒ Ideal conditions for cottonwood reproduction by seed: bare, moist soils, low soil salinity, slow groundwater drawdown and high soil moisture
⇒ An overview of tamarisk in the Southwest and the links between tamarisk and high soil salinity, which can be toxic to native bushes and shrubs

Rob went on to his research, which is part of the larger Big Gypsum Study, funded by the CWCB. The goals of his work are to:

- To establish baseline soil salinity data in the BGSA and monitor effects of a 2010 spill
- To establish baseline hydrologic information in the BGSA, especially groundwater drawdown rates and associated soil moisture levels
- To establish permanent cross sections in the BGSA in order to monitor stream migration, changes in channel shape, and changes in riverside vegetation over time

Rob explained the methods he employs to monitor soil salinity, and shared preliminary data from the Big Gypsum Study Site. The next steps on the Big Gyp study include:

- measuring soil salinity post-spill
- installing and monitoring groundwater wells
- quantifying cottonwood recruitment in 2010
- re-measuring cross-sections formation &
- continuing to research relevant studies and monitor potential barriers to cottonwood forests and present those findings to the DRD.

More information, findings and potential recommendations will emerge from the DRD Big Gyp studies in the fall of 2010 and early 2011.