

**Dolores Watershed Resilient Forest (DWRF) Collaborative
Stakeholders Meeting
January 9, 2019
dwrfcollaborative.org**

Present: Duncan Rose (Trout Unlimited), Jimbo Buickerood (San Juan Citizens Alliance), Rich Landreth (Water Treatment Plant Superintendent, City Of Cortez), Floyd Cook and Steve Garchar (Dolores County Commissioners), Amanda Brenner-Cannon (Montezuma County Coordinator, Wildfire Adapted Partnership), Anthony Culpepper (Project Manager/Researcher, Mountain Studies Institute), Bill Baker (Retired Ecologist), Eric Janes (Private Scientific Consultant), Bruce Short (Retired, U.S. Forest Service), Mike Pasquin, (Emergency Manager, Montezuma County), Steve Underwood, (Underwood Forestry); Thurman Wilson (Retired, U.S. Forest Service); Danny Margoles (DWRF Coordinator), and Gail Binkly (Meeting Recorder).

Updates

- Mike said the Montezuma County commissioners are concerned about how drought is affecting local farmers and ranchers and are looking for a way to provide the agricultural community some tax relief. Mike said he welcomes ideas about coping with drought impacts and will bring those suggestions back to the commissioners in a few weeks.

Danny suggested they keep in mind the concept of payment for ecological services, which is a way of providing incentives to landowners in exchange for managing their land to provide some sort of ecological benefit.

Anthony said people in the Pagosa area are looking at environmental bonding and there may be a meeting soon to discuss it. The idea is for a community to create a bond mechanism for environmental remediation work and pay it back with tax money or fees over time. He said it is very complex.

- Anthony said he has been able to work on visualizing the HVRA (Highly Valued Resources and Assets) model for DWRF and is looking at next steps to move the data forward.

In response to a request for clarification of HVRA, Thurman said DWRF adopted the framework from the public-lands agencies. Danny said the goal is to identify wildfire risk, probability and intensity coupled with assets in order to identify treatment priorities – areas of highest risk that need to be treated first or in different ways. Thinning is not always the outcome. The Forest Service is conducting its own HVRA assessment.

- Danny said there have been two Coordinating Committee meetings since the last DWRF stakeholder meeting. He presented copies of his draft 2019 Work Plan and said he will email it to the group. His work plan is based around three primary goals for DWRF. The fourth and final goal is to maintain a sustainable organization.

Danny said his biggest priority under Goal 1 is completing the Watershed Wildfire Protection Plan and HVRA assessment. DWRF will be working with MSI on this effort. Under Goal 2, his top priority is to reconvene the Timber Industry Working Group and get treatments implemented on the ground.

Danny said the Coordinating Committee has been moving forward on the DWRF strategic-planning and organizational-structure effort, which will be funded by the WaterSMART grant from the Bureau of Reclamation. The committee is putting forth an RFQ for a facilitator to lead the effort to develop a structure and a multi-year plan for DWRF and possibly a long-term funding plan. The committee hopes to have the RFQ published by the end of this week and wants to hire a facilitator as soon as possible. Duncan, Mike Preston, and Derek Padilla will be overseeing the WaterSMART grant and RFPs, but the grant is administered by the Dolores Water Conservancy District. Danny said there will probably be a half-day or day-long stakeholder meeting to develop a clear direction for DWRF once the facilitator has been hired

Steve voiced a concern about making sure that work on the ground can take place this season. He said he was a wildland firefighter for 30 years. When he came to Colorado, firefighters used to call it the “asbestos state” because the only wildfires were small ones and it was believed that Colorado’s forests would never suffer catastrophic blazes. Then came the 1994 wildfire on Storm King Mountain near Glenwood Springs that killed 14 firefighters. Now fires are increasing in number and intensity across the state. Steve said it is good to build a structure for DWRF, but it is critical to make sure concrete actions take place on the ground, or forests will go up in smoke. The key issue is removing timber next summer and working to protect the watershed for the next 20 years. He said there are dead trees all over the county and the need for action is urgent.

- Danny said DWRF has funds to finish burning about 150 brush piles on 35 acres at Butler Corner north of Dolores.
- Amanda said this winter’s snow has hindered the rapid risk assessment effort in Dolores. It is about one-quarter completed. She is working to prepare defensible-space projects. She said there is a need for more outreach on Granath Mesa north of Dolores and it has been difficult getting dedicated volunteers in that area. She has spent a great deal of time working with communities along the Highway 184 corridor. In answer to a question, she said there are not many homeowners associations in Montezuma County. Instead, landowners may be in property owners associations or informal neighborhood groups. Wildfire Adapted Partnership works with all types of communities.

Steve said a community approach is critical because if one homeowner does a good job clearing defensible space around his home while the owner of the adjacent property does not, the first homeowner is still at risk.

Presentation

Duncan gave a PowerPoint presentation titled, “A Tough Reality: Climate Change, Trout Habitat and the Upper Dolores Watershed,” showing the results of a study by the Dolores River Anglers, a chapter of Trout Unlimited.

He said 2012-13 was a period of severe drought. Dolores River Anglers had just formed, and most of its members had stopped fishing because the drought had placed so much stress on trout populations. Realizing they needed to understand what the future might hold, the Anglers launched a three-year study with Mountain Studies Institute. The analysis involved the work of two scientific consultants and about 2,500 volunteer hours. The core question was: Which stream reaches are likely to have persistent trout populations in the face of climate change? The researchers searched for strongholds in the Upper Dolores watershed that would be likely to survive the climate scenarios projected for the future. They

did not develop an actual plan, but rather an adaptive-management framework for coldwater fisheries into which different plans could fit.

Duncan discussed the mechanisms by which greenhouse gases are warming the earth. He said global weather patterns are changing faster than at any other time in human history. The amount of greenhouse gases in the atmosphere is still increasing, and the ultimate impacts to the climate will depend on when and where the peak level is reached. Right now the planet is on a trajectory toward reaching higher levels faster.

Duncan said an expert was hired to run 72 models regarding future climate in the San Juan Mountains. All 72 models found that average temperatures in the area will steadily increase toward the end of the century; not a single one projected a decreasing temperature. Some of the models predicted less precipitation for the watershed, while others projected an increase in precipitation. However, the models indicated more of the precipitation will occur as rain rather than snow. Snow will fall later in the year and at higher elevations. These changes in precipitation timing and patterns, along with warmer temperatures overall, will likely have the effect of decreasing available water and reducing trout habitat.

Duncan also discussed a number of climate assessments and reports that predict:

- The American Southwest will generally become more arid as time passes, with longer, more frequent, and more intense droughts in the Colorado River Basin. Soil-moisture deficits will accumulate. Sustaining water supplies in parts of the Southwest will present a major challenge.
- Droughts as intense as the 2002 drought will occur two to three years out of every five, and by the end of the century such droughts may be lasting up to 25 years each.
- Precipitation on Colorado's Western Slope may move eastward and higher in elevation.
- The number of days above 90 degrees in the local area will increase from 24 per year in 2018 to 39 in 2040 and 53 in 2100.

Duncan said since 1954, three droughts of more than 52 consecutive weeks have occurred in the Four Corners area and all three took place after 2001. This does not count 2018. In 2018, there were 30 to 45 record-low streamflows that exceeded the lows in 2002.

In 2002, stream-gauge flows at Rico showed a reduction of 45 percent in average daily flows when compared to average daily flows for the past 62 years. Duncan said if there are back-to-back years like 2002, it would be disastrous for local agriculture. Streamflow has an enormous impact on the local area.

Duncan said in the Upper Dolores Watershed, trout strongholds are likely to remain only in large watersheds of moderate gradient at the highest elevations. Trout need water with a minimum depth of 8 to 10 inches.

Duncan said local fisheries will likewise experience major impacts from climate change and managers need to consider the vegetation transition that will take place. The group agreed that they will not be managing the same forests 20 years from now. Oakbrush will likely proliferate and come to dominate what are now ponderosa-pine and piñon-juniper forests.

A question was asked about the usefulness of cloud-seeding. Several people commented that it is inexpensive and may sometimes be helpful, but the results aren't certain. Anthony said there has to be moisture in the air for cloud-seeding to be effective.

Wrap-up

- Duncan's complete PowerPoint will be posted on the DWRF website. Danny will send a link to the group.
- Danny reminded people to enter their volunteer hours on the website.

Next meeting: The next stakeholders meeting will be Wednesday, Feb. 6, at 1:30 p.m., at the DWCD offices.