

Saving the Source: Connecting with our Forest Headwaters

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Making the Water Quality Connections
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Introduction and Thank You

I'd like to thank you for inviting me to speak to you tonight, and would especially like to thank the sponsors of this conference: Colorado Watershed Network, Colorado Watershed Assembly, Colorado Riparian Association, Colorado Lake & Reservoir Management Association, and AWARE Colorado for all the work you do within your respective organizations. The availability of clean water, and associated issues of watershed protection and restoration, public education, and advocacy that you work on are extremely important. This evening, I would like to focus on the importance of the role of forested headwaters in protecting the source of our water.

Forests to Faucets: A Call to Action

As residents of a headwaters state, you probably know that here in Colorado and throughout the West, most of the water that people use flows from forested headwaters. National Forests supply over two-thirds of the total annual runoff, and over 70 percent of the public surface water systems in Colorado. When we turn on our faucets, we tap into our forests – so our water supply and quality depend on the health of our forests and their streams and watersheds.

This fact was at the heart of the birth of national forests and the conservation movement back in 1891. Many think the national forests were pristine back then, however, it was concern about degraded watersheds – watersheds in poor condition because of forest fires, over grazing, and mining impacts - that led to the setting aside of the first national forests. Securing reliable flows of clean water was one of the primary purposes of the new-born Forest Service at the turn of last century.

We find evidence of these concerns in places other than the Forest Service Organic Act.

In March of 1900, the following words appeared in an article in Scientific American: “The setting aside of the Medicine Bow forest reservation recently by the general government was due to the efforts of certain farmers of Northern Colorado, the purpose being to preserve the forests as a shelter for the snows falling in the timber belts, and thereby prevent their too sudden melting and a consequent waste of water by excessive floods.”

And on June 16, 1915, the City of Grand Junction, in order to protect the water supply of the city, signed an agreement with the Forest Service to pay for a Forest Service employee to patrol the watershed to enforce existing regulations (which by the way included the guidance that “all dead bodies of horses, cattle, mules or other animals in said area shall be burned or buried in the manner provided by the regulations of the National Forest.’)

And although the City of Grand Junction hasn’t offered to pay the salary of any Forest Service employees lately, they are still proud of the source of their water supply, and continue to take a keen interest in the management of the national forest system lands in the watershed. (From the City’s web site: “The City cooperates with many governmental and private property owners on the Grand Mesa watersheds. The US Forest Service, State of Colorado water commissioners, Kannah Creek ranchers, Grand Mesa reservoir owners, Powderhorn Ski area are just some of the entities that are important partners in preserving water quality, eliminating noxious weeds, and protecting the City’s water rights.”)

In a sense, history is repeating itself today as we in the Forest Service again recognize water as one of the greatest values of national forests. Conserving watersheds is a vital part of our mission. But now the stakes are even higher as climate change and urbanization put growing strain on a finite water resource..... and an increasingly urbanized public often has little awareness of where their water actually comes from.

At the same time, we find our forested watersheds in a condition that is less than healthy. Altered fire regimes, forests weakened by drought and insects, climate change, and a growing wildland urban interface currently present us with challenges that can’t be ignored.

On the Front Range, we've certainly all seen the results of these conditions. Fires like Buffalo Creek and Hayman resulted in significant impacts to municipal water supplies, and the costs of cleanup have been tremendous. At the same time, these fires have been a huge wake up call.....reminding us of the costs of inaction when faced with significant forest health issues.

Working Together to Solve Problems through Partnerships

This new century brings an era of forest stewardship with a focus on ecosystems and restoration, one in which our guiding principle is an ethic of outcomes on the land. The future of the national forests hinges on how well and how convincingly we put this ethic into practice in our decisions, actions, and relationships. One of our primary goals must be to sustain the function of our forest headwaters as the water source for rural and urban people of the West.

Healthy forests that are more resilient to wildfires have been our highest regional priority for several years. We are working closely with our partners in the Front Range and the High Country and seek to expand that agenda through the Front Range Fuels Treatment Partnership, and the Northern Bark Beetle Cooperative. In August, we met with the Colorado State Forest Service, the Pinchot Institute, and seven Front Range water providers to jointly address protection of critical watersheds from severe wildfires.

Different vegetation types present different challenges: in Ponderosa Pine, altered fire regimes are of most concern, whereas in Lodgepole the impacts of the bark beetle epidemic are paramount. In the Spruce Fir zone at the highest elevations, we have more concerns about the impacts of climate change on the snow zone which is the natural reservoir for much of our water supply.

The needs on the ground to make forests more resistant to fires, insects, and disease, and more resilient to major disturbances, are far greater than the resources that are currently available. Through working together in partnerships we can begin to fill that gap, and focus our existing resources on our highest priorities.

In addition to our work on healthy forests, we also hope to increase investment in specific watershed restoration projects: projects that disconnect roads from streams and restore plant cover on eroding slopes; restore woody plants on damaged stream banks and riparian areas; continue cleanup of the impacts from abandoned mines; and restoration of function to wetlands and meadows.

We have demonstrated how working together we can tackle some of these important restoration needs. Examples that some of you may be familiar with or have worked on include:

Trees for Trout – South Platte – Pike National Forest

In the South Platte drainage of the PSICC, the Trees for Trout project last year garnered the Regional Forester's Caring for the Land Stewardship Award. Work was coordinated by the South Park Wetlands Focus Area Committee - a local group comprised of over thirty partners including Forest Service, other federal agencies, state, county and private entities. Snags from the Hayman fire were used to benefit trout populations and wetland enhancement. The first trees were topped in 2004 and placed in the South Platte River and Tarryall Creek. The project has accomplished a variety of stream and fisheries habitat objectives, and continues to build on its initial success.

Rio Grande – Willow Creek

The Rio Grande Forest started working formally with the Willow Creek Reclamation Committee in 1998 to clean up abandoned mine sites that are contaminating Willow Creek which flows through the town of Creede. The Committee, which includes a wide variety of public and private interests was formed as an alternative to EPA designation of the Willow Creek Watershed as a Superfund site. After several years of data collection, the first combined project with the committee was implemented in 2003, and work continues to this day. These photos are from the Midwest Mine site, one of the sites reclaimed through this partnership.

Arapaho and Roosevelt - Left Hand Canyon

Over the past three years, the Boulder District of the ARNF has partnered with Wildlands Restoration Volunteers, Trail Ridge Runners, James Creek Watershed Initiative, Americorps Volunteers, and Walsh Environmental Services, to complete the first three phases of an award-winning restoration project that is reversing the impacts of years of unmanaged recreation. This project has benefited hundreds of acres of forest habitat as well as downstream water quality and fish habitat. Work on the Left Hand Canyon Restoration Project continues as volunteers work to close and restore spur roads through revegetation and erosion prevention structures. .

Partnerships and volunteers are vital to accomplishing projects like these, and it's through organizations like those represented here today that we are able to move forward successfully. In 2006, volunteers did over 60,000 hours of work valued at over \$1.1 million on the Arapaho Roosevelt National Forest alone. Last week, in recognition of National Public Lands Day, 100,000 volunteers worked on hundreds of public land projects across the state, and the country. Not only does this type of volunteer work help get the job done, it also serves an important educational role in reconnecting people to the land.

Chief's Priorities: What's Old is new Again

The importance of forest and water issues reaches far beyond the State of Colorado. In a recent speech, the Chief of the Forest Service, Gail Kimbell outlined three themes that are paramount in people's minds across the country in relation to national forests. They are

- **climate change,**
- **water, and**
- **the connection of children to forests and the out of doors.**

These themes echo some of what I've shared with you tonight:

- The importance of forests to our water supply and water quality;
- The urgency of dealing with climate change and other related issues such as fires, and insect outbreaks, that threaten the health of our forests;
- The importance of educating people about the link between the forest and the faucet. What better way to do that than through educating our children.

As the Chief said, "our most important resource in this country is not forests, vital as they are. It is not water, although life itself would cease to exist without it. It is people." The challenges of climate change, forest health, and water supply and water quality concerns will not be resolved in a few years. "It will take generations. Today's children – and theirs – will need to be able to take the baton and finish the race. For that they will need a full understanding of why forests are so valuable, along with a strong land ethic. It is our imperative to give them both."

I firmly believe that through dialog at conferences like this one, and through working together on important watershed education and restoration projects, we will continue to move forward to accomplish this important task.

Conclusion

I don't have to convince this audience that each watershed is a dynamic system that receives, stores, filters, and yields water to streams, and to see each stream is a unit from its source to its mouth. When we make the connection that the output of our faucets depends on the health of our forests, we are reminded of the urgency of restoring the health of our forests and watersheds. Together we can make that happen.

Thank You.