

Headwaters News

Western Perspective:

A new kind of watershed restoration partnership



Engaging the hearts, minds, and wallets of downstream water users to support upstream watershed health

By: Matt Clifford
Policy Director
Carpe Diem West
for Headwaters News
Jan. 27, 2011

If you're a city dweller, you're probably accustomed to getting a notice in the mail from time to time explaining that your monthly water bill is going to go up a bit. Often, the increase will be tied to the cost of maintaining infrastructure such as pipes, treatment plants, pressure stations and storage reservoirs.

But what if you got a notice explaining that your bill was being increased to pay the cost of fixing and maintaining the upstream watershed that produced your water in the first place? Across the West, an increasing number of water users are getting exactly that. And it's a trend that's likely to continue.

The source of most of the West's drinking water lies in watersheds on public lands managed by agencies such as the U.S. Forest Service. Every day these watersheds do an enormous amount of valuable work, basically for free: they collect, purify, store, and deliver clean water for downstream use. These same functions, when performed by built infrastructure, cost many millions of dollars.

But just like man-made systems, watersheds don't do these jobs very well if they're allowed to fall into disrepair. And sadly, that's what's happened to many watersheds across the West – they're under stress from eroding road networks, loss of riparian

vegetation, unwise development, and – in certain forest types – increased fire risk due to past logging, grazing, and fire suppression. Scientists tell us that the warming climate is already placing exacerbating many of these problems, putting even more pressure on damaged watersheds.

A natural place to look for help in fixing municipal watersheds is the Forest Service, whose job is, in the words of the 1897 Organic Act, “to secure favorable conditions of water flows” for downstream use. But while the Forest Service undertakes many restoration projects every year, it has consistently lacked funds to implement more than a fraction of the tree thinning, road removal, prescribed burning, riparian fencing and other restoration measures needed on the 192 million acres of National Forest System lands.

Faced with these realities, an increasing number of Western cities are partnering with the Forest Service, using their ratepayer base as a source of funds to help pay for the management and restoration of their municipal watersheds. This trend is the subject of a new report: [*User Contribution Programs: Linking Upstream Watershed Health to the Hearts, Minds & Wallets of Downstream Water Users*](#) by the nonprofit Carpe Diem West, a network of western water leaders working on innovative responses to climate change. The report highlights some leading examples of programs through which cities and utilities – and even private resorts – are collecting fees and voluntary contributions from their customers and using them to fund watershed restoration in partnership with the Forest Service.

An early adopter of this approach was the Colorado utility Denver Water, which got a wake-up call about watershed health in 2002. In June of that year, an intense rainstorm that struck a vulnerable watershed in the wake of the massive Hayman Fire dumped over a million cubic yards of sediment into a key reservoir, forcing ratepayers to incur over \$30 million in dredging costs. After that event, the utility and Forest Service jointly developed a watershed management plan including \$32 million of restoration work in six key watersheds over five years, to be equally funded by both parties.

On the other side of the Rockies, the concept of paying for watershed management is nothing new for residents of Salt Lake City, which has been managing its four municipal supply watersheds on the Wasatch Front for more than a century. Beginning with a visit by Chief Forester Gifford Pinchot in 1905, the city has exercised joint jurisdiction with the Forest Service over activities in the watersheds, which provide some 60 percent of the city's water. After suffering some serious water quality declines in the 1950s and 60s, the city has taken a much more active management role in recent years. Salt Lake Public Utilities now involves itself in significant land-use decisions in the watersheds, and uses a 50-cent monthly surcharge on every water bill to fund a land acquisition program aimed at reducing water quality impacts originating from inholdings within the city's source watersheds.

Smaller cities are developing programs as well. Santa Fe is partnering with the Forest Service on a management plan for the Santa Fe River watershed, where on-the-ground work got under way last year. And cities like Phoenix and Ashland, Ore., are developing voluntary fee programs with the help of the National Forest Foundation.

Cities and towns are not the only beneficiaries of public land water that are investing in watershed health. Resorts like Snowbird in Utah, Vail in Colorado, and the Lake Creek Lodge near Sisters, Ore., have voluntary fee programs in place, brokered by the nonprofit National Forest Foundation. Vail's program is helping to fund \$4 million of restoration work on 115,000 acres in four South Platte watersheds damaged by the Hayman Fire.

So what's the future of these programs? Could they, as some have suggested, usher in the next generation of public land restoration in the west? That depends on a number of things. First there's the question of scale. It's one thing to develop and fund a watershed restoration program where you can focus the pocketbooks of several million people on six high-mountain watersheds, as in Denver. But the many smaller cities around the West are never going to have that kind of financial muscle, and raising restoration funds for the vast acreages of public land that are *not* within municipal watersheds will require tapping some of the many kinds of users who benefit from the water produced by Forest Service lands, but do not get a regular bill for their water use.

Then there's the question of content. To be effective, many watershed restoration plans are going to have to address controversial issues like bark beetles, fire management, road removal, and grazing (to name a few). Even if the money is there, past experience in Western public resource issues tells us that watershed plans will have to develop broad political support in order to be successful.

Finally, there's the issue of ratepayer willingness to pay. Although the actual amount of rate surcharges for watershed programs has been quite small, at least in the larger cities, in the current political climate there is growing political opposition to increased fees of *any* kind. While some anecdotal evidence suggests that ratepayers are willing to pay for watershed health when the case is made to them, it is also true that many municipal watershed managers do not have the resources to conduct sophisticated public outreach.

Exactly how much can be accomplished with user contribution programs remains to be seen. But their potential is huge. Consider, for example, that the vast majority of the drinking water of the 26 million people who rely on the Colorado River – people in southwestern cities like Los Angeles, Phoenix, and Las Vegas – originates on public land. That's a lot of economic muscle. If those ratepayers come to realize the benefits they are getting from public watersheds – and can be convinced to invest in the health of those watersheds – their dollars could go a long way toward securing the landscape-scale restoration that is sorely needed on much of our public land in the West.

Matt Clifford is the policy director for Carpe Diem West, a nonprofit organization that engages a board-based network of experts, advocates, decision makers and scientists to address the unprecedented impacts the growing climate crisis is having on water in the American West.