

Restoration of Hope Valley meadow in the works



Preservation of Hope Valley meadow in Alpine County has been assured. Photo/Provided

By Anne Knowles

The restoration of Alpine County's Hope Valley meadow has been a long time coming.

Within a year, work to restore a 400-acre portion of the 1,600-acre meadow, which includes three miles of the West Fork Carson River, should be complete.

That project, which is just the start of a long-term healing process, has been in the planning stages for five years. But everyone involved in the undertaking will tell you it all started more than a century ago.

"There had been heavy grazing there, sheep and cattle, since the Emigrant Trail days," said Julie Fair, project manager with American Rivers in Nevada City. Her group is taking the

lead on the restoration effort.

As a result, vegetation was nearly eliminated, causing erosion and incision that left some banks as much as 10 to 12 feet higher than the river and creeks, upending the overall ecosystem.

The meadow hasn't been grazed for 20 years and during that time Friends of Hope Valley, a citizen's group founded in 1985 to stop the installation of a power line in the valley, has been planting willows to stabilize the river's banks.

Before that, the group was instrumental in saving the meadow from development.

In the early 1990s, ranchers in the area were planning to sell their land, possibly to a condo developer.

Friends of Hope Valley teamed up with the Trust for Public Lands, a 43-year-old organization that works to protect lands, to stop it.



There was a time when this area south of Lake Tahoe was slated to be paved.
Photo/Provided

“We walked the halls of Congress and in 1992 we got \$23 million to purchase the land,” Debbie Waldear, president, Friends of Hope Valley, told *Lake Tahoe News*.

The meadow was then turned over to the U.S. Forest Service and the California Department of Fish and Wildlife, which manage it now.

“Since then we’ve been the watch dog of the area. We prevented some logging and we’ve been doing restoration work everywhere,” Waldear said.

Now, American Rivers, in conjunction with its partners, is building on that work.

In 2011, it did an initial assessment of the meadow and, at the same time, the Alpine Watershed Group established its Hope Valley Meadows Stewards Program to collect data on the meadow in preparation for the restoration.

“Our goal is to protect water quality and the integrity of the meadow,” Shane Fryer, watershed coordinator for the Alpine Watershed Group, said. For the watershed group, the goals are to drop water temperature, lower the alkaline content and extend the river’s flow season past August.

“It’s an important water source for Carson Valley,” Fryer said.

After the initial assessment, Waterway Consulting Inc. in Santa Cruz and River Run Consulting Inc. in Cedarville did a more detailed plan.

From that, American Rivers determined the project should use a more “light-handed approach,” to the restoration, according to Fair.

A popular technique to quickly raise the water table is to do what she called pond and plug.

“You put in a series of berms in the channel and it raises the water table without damming it,” she told *Lake Tahoe News*. “It mimics what beavers do.”

It also creates ugly ponds, which eventually fill in with sediment. But it's costly and causes more disturbances to the watershed.

"So we decided to focus on stabilizing the banks rather than raising the water table rapidly," said Fair.

To do that, American Rivers is using several methods, including additional vegetation planting and excavating sod from high banks to essentially bring the meadow back down to the water.

"It's a pilot in one part and if we had all the money in the world, we'd do that everywhere. It would create a wet meadow right away. We'll see if we want to do more of it," she said.

Another technique is using logs to stabilize the banks.

"You put in logs with roots still attached and lay them out with the root wad in the water and stabilize with other logs and willows," Fair said. "The root wads will push flows away from the banks, create a buffer and as flows meander it creates a great fish habitat."

The log crib structure was the first phase of the project, completed last month by Habitat Restoration Sciences Inc., an engineering firm that works throughout California.

"We had a short window because of the permits," Fair said.

The overall project, which is costing about \$750,000 to construct, has required four permits.

"Permitting is a bottleneck. Some permits haven't been streamlined for restoration and you have to meet the same criteria as development projects," said Fair.

But no delay came from any protest to the permits.

"Throughout developing the designs we worked with the Alpine

Watershed Group, the Friends of Hope Valley and had public meetings,” Fair said. “I think that was critical to the process. Everyone was engaged and it reflected what the community wanted.”



Beavers are good and bad when it comes to restoration. Photo/Provided

If any controversy remains, it’s over beavers, which are thriving there and have created more than 70 dams in the area at last count.

Everyone agrees they’re a mixed blessing, doing some of the restoration work, but some see the animals as more hindrance than help.

The beaver use the willows for dam making, reducing the vegetation, and the pools they create can heat up the water, said Fryer.

“Is this a beneficial use? The Forest Service will decide, they have management authority on this issue,” said Fryer. “We think the beaver should be managed where they’re a detriment and encouraged where they help.”

The remainder of the Hope Valley meadow restoration project is scheduled to be completed over a six to eight week period next summer.