## Volunteers, Forest Service rebuild Eustache Creek

by PERRY BACKUS of the Missoulian



A track hoe and a handful of dedicated people are hard at work this summer attempting to fix the problems left behind by years of mining on Eustache Creek in the Ninemile Valley.

> Photo by MICHAEL GALLACHER /Missoulian

NINEMILE - Seventy years ago, desperate men turned the earth upside down underneath tiny Eustache Creek in the headwaters of the Ninemile Valley looking for a bit of gold.

There was a depression on back then and men needed the work. No one gave much thought about what the long-term consequences might be for the stream or the critters that counted on it.

When they were done, a 1.3-mile stretch of creek was overturned. Huge piles of overburden were everywhere. In some places, the creek simply disappeared into the mess left behind only to reappear a few dozen yards downstream.

This summer, an excavator - piloted by an operator with a deft touch - is working to put the creek back together again thanks to an effort fueled by volunteers and some determined U.S. Forest Service employees.

"They used huge buckets to move all this earth," said Rob Roberts, Trout Unlimited's Western field representative. "Now it's taking an excavator to undo what an excavator did so many years ago."

Since the first of August, Doug Gull of Superior has been carefully edging his huge excavator down along the narrow canyon to spread out piles of overburden and build a new channel for Eustache Creek.

"To watch what he's able to accomplish with the excavator is to watch an artist at work," said Traci Sylte, Lolo National Forest civil engineer and hydrologist.

"There's a huge difference between knowing how to operate an excavator and being able to run one to do stream restoration work."

On this day, Gull is working to build a structure brand new to the world of stream restoration.

Just on the upward edge of a 100-foot section of creek that for decades has dove underground through the loose cobbles left behind by the placer mining operation, Gull and crew are installing a large impermeable plastic sheet across a trench dug down to bedrock.

Their plan is to create an underground dam that will force the creek back to the surface through this dewatered section. It's an idea hatched at the Montana Bureau of Mines in Butte, and it's already worked a number of times in Eustache Creek.

"Using these groundwater retention sills, we've been able to put water back into a dry section of the stream for the probably the first time in 70 or 80 years," said Sylte. "We've been able to see it happen while we're standing there. This technology will likely have applications in other places as well."

Across the West, most of the money for mine reclamation ends up addressing projects with water quality or toxicity issues. Placer mining projects like Eustache Creek have often been ignored up until now.

About three years ago, when Trout Unlimited created its Abandoned Mine Reclamation Volunteers, Forest Service rebuild Eustache Creek

About that same time, Roberts met with members of the Missoula-based Westslope Chapter of Trout Unlimited, and asked if they might be interested in lending a hand. Its members were anxious to help.

"Our membership has always been interested in moving rock and getting dirty in conservation efforts," said Gary Fee, the chapter's volunteer coordinator. "This project was right in our backyard. It was one we wanted to take on."

Over the last two years, volunteers from the chapter have helped out in a variety of ways, running the gamut from gathering data to collecting willow and dogwood cuttings. Later on this year, they'll spread seed and straw to help reduce erosion. Next spring, they'll be back to plant a variety of native plants.

By the time the project is completed, Fee said, somewhere between 30 and 40 volunteers will have gotten their hands dirty helping out.

"It's a good feeling to know that we've been able to make a difference," he said.

Trout Unlimited also chipped in \$40,000 to help pay for the estimated \$150,000 to \$200,000 project, Roberts said. Another \$15,000 came from a National Forest Foundation grant.

The hope is the Eustache Creek project will be the springboard for future efforts to improve Ninemile Creek and its headwaters.

Trout Unlimited and the Forest Service already have their eye just downstream on St. Louis Creek where an open pit mine threatens the drainage with heavy metals. Further downstream, there's potential for more mine reclamation work on the 141-acre Housum Placer area on private land.

"There's plenty of work left to do that will benefit the whole upper Ninemile area," said Scott Spaulding, the Ninemile Ranger District fisheries biologist.

The clean, clear waters are capable of supporting bull trout and westslope cutthroats, both important native species. Spaulding has found small numbers of bull trout in Devil's Creek, the nearby tributary that comes together with Eustache to create Ninemile Creek. Westslopes already swim in Eustache.

Spaulding's been happy to see the kind of support generated for this project.

"Without the volunteers, we wouldn't have been able to gather a lot of pre-project data that's really important in being able to monitor something like this," he said. "It's also generated a lot of local support."

The experience the volunteers gained will likely come in handy in years to come.

"It takes time to put together projects like this one," Spaulding said. "It took us four years to put this one together. That experience, support and enthusiasm that we've started here will go a long ways in helping us out in the future." port and enthusiasm that we've started here will go a long ways in helping us out in the future."

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