GReenwood Creek Watershed Project_{Newsletter}

"Roads and Fish" Video

South Coast Productions, with producer/editor Tom Wolsky and cameraperson Beth Corwin, has been selected to produce "Roads and Fish," an educational video about the impact of rural roads on our threatened fisheries and what people can do about it. Location shooting in Greenwood Creek watershed is scheduled for late spring.

Tom Wolsky is a former editorial producer for ABC News in New York and London, and currently heads the Mendocino R.O.P. video education program. Beth Corwin is a freelance photographer for many television news shows. Their company, South Coast Productions, maintains professional studio facilities in Elk. The script was written by professional television writer Bob Dolman.

With the recent federal listing of the Coho Salmon as a threatened species, efforts to improve fish habitat in places like Greenwood Creek have become critically important. One big problem for fish is the dirt that our roads produce, that gets into the streams, smothering salmon eggs and filling pools where young fish need to hide and rest. road work. Potential grant funders advised, however, that here are advised before the winter rains began, and would have to wait until next year. Help was offered by the Northwest Emergency Assistant Program (NEAP), which funds fishery restoration projects that employ displaced salmon fishers. NEAP provided

Landowners and others can do a lot with a simple tools such as hoes and shovels to reduce such impacts and prevent expensive road failures. The video, which is funded by the California Department of Fish and Game and the U.S. Forest Service, will illustrate simple road maintenance techniques and good road-building principles. \Box

Building a Bridge

A mong the accomplishments of the Greenwood Creek Watershed Project in 1997, the most dramatic was the flatcar bridge installation at Sky Ranch Estates near the headwaters of Greenwood Creek. Such a project didn't seem possible back in summer 1997. In fact, it didn't seem possible up to the very day that the bridge was delivered in October. Yet things kept happening to *make* it possible.

First, Louisiana Pacific's Tom Schultz offered the Project a \$10,000 donation in road excavation work for Maple Basin Road, an L-P haul road. With this donation, the Project sought matching grants to replace the failing culvert on the Sky Ranch Estates fire road with a flatcar bridge, and other road work. Potential grant funders advised, however, that big road projects could not be organized before the winter rains began, and would have to wait until next year.

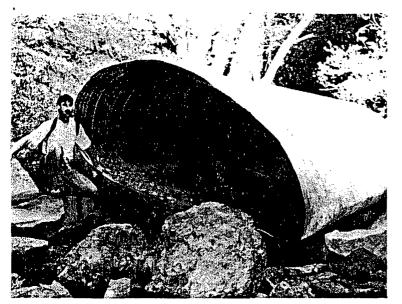
Help was offered by the Northwest Emergency Assistance Program (NEAP), which funds fishery restoration projects that employ displaced salmon fishers. NEAP provided workers, part of the cost of a flatcar bridge and help with permits. The U.S. Fish and Wildlife Partners for Wildlife program and local donors provided additional funding. Next problem: Where to find a flatcar bridge at that busy time of year, and when were the El Niño rains going to start?

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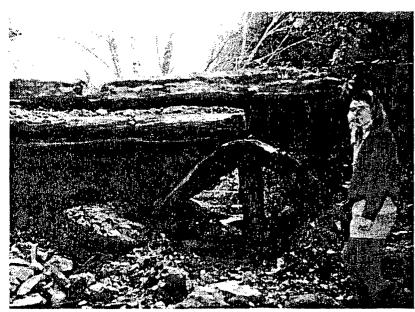
The Sky Ranch Estates flatcar bridge in temporary position over Greenwood Creek. The bridge was purchased and installed in a cooperative effort to reduce sediment impacts on the Greenwood Creek fishery. Louisiana Pacific donated the concrete abutments. L-P's roads contractor Ed Curti did the work (see p. 2-3), which was funded by Sky Ranch Estates, the Northwest Emergency Assistance Plan (NEAP) and the U.S. Fish and Wildlife Service, with organizational support from the U.S. Forest Service and For the Sake of the Salmon.





Left: The Sky Ranch Estates culvert on the main stem of Greenwood Creek, discovered by Jesse Russell (in the photo) and Dave Gurney during the 1996 Road Survey. The culvert had blown out several years in a row, sending tons of sediment into the Creek. The Sky Ranch Estates Association was required to keep the road open for fire and rescue access and couldn't afford the more permanent solution of a bridge. When NEAP funds became available to the Project in fall 1997, a solution was formulated.

Photo by Dave Gurney, published in the Mendocino Beacon.



In summer 1997, Sky Ranch had to re-install the old culvert to keep the fire road open, while the Project sought funding and permits for a flatcar bridge.

Left: Vivien Bolin (Shadoh) of NEAP views the rickety, propped up culvert on an inspection visit.

Funding was obtained from Sky Ranch Estates, NEAP (the salmon fishers fund) and the U.S. Fish and Wildlife Service Partners for Wildlife program. Louisiana Pacific's contractor Ed Curti was hired to do the heavy equipment work. Skip Gibbs of Ukiah delivered a 44 ft. flatcar bridge. Northern Aggregates delivered riprap. State and federal permits were issued. All of these things happened in a matter of weeks. Right: Ed Curti's excavator removes the old culvert, with the new flatcar bridge (lower right) ready to be put in place.





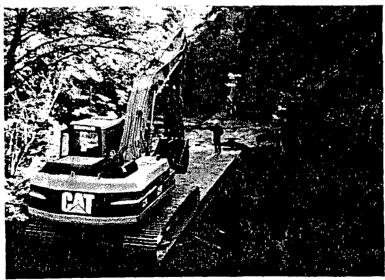
Building a Bridge



Above: The flatcar bridge was delivered and temporarily placed over the Creek, with the old culvert still in place (in the background), about to be excavated.

Right: The old culvert was removed and cast aside. A mountain of dirt was removed with it and carefully taken away from the stream channel. With other large old culverts littering the road and stream, we got to calling it "The culvert graveyard."





Left: With work nearly completed, L-P's Ed Curti guides his excavator across the newly installed bridge.

The site was grass seeded and straw mulched by Project workers and was closely monitoried in November and December. The channel is now flowing beautifully under the bridge and scouring out fish pools.

Building a Bridge, cont'd from p. 1

The Sky Ranch Estates culvert blow-out was one of many road erosion/stream sedimentation problems documented by Project field workers Dave Gurney, Jesse Russell, Michael Oliveira and Sal Eggleston, in 1996 (see photo, p. 2, and map, p. 5). The big Sky Ranch culvert was blowing out every year during heavy floods, sending tons of sediment into Greenwood Creek. There are lots of other road problems on the surveyed roads in Greenwood Creek watershed--including an eroded, unvegetated stream bank on Maple Basin Road where fish fingerlings were seen in a puddle in the road in spring 1997. The Sky Ranch culvert was the worst as to sediment impacts. Sky Ranch is required to keep the road open for fire and rescue access, but couldn't afford a bridge.

NEAP advisors Michael Maahs and Curtis Ihle visited the potential work sites, along with the California Department of Fish and Game's Weldon Jones, Project consultant Dr. Fred Euphrat, L-P's Tom Schultz and Russ Shively, Kirk Handley of Sky Ranch Estates and several other landowners. All of the experts agreed that flatcar bridges were needed for Maple Basin Road, at Sky Ranch Estates, Russian Gulch, Simmonds Gulch (the fish fingerlings), and at Patricia De Vlieg's and Michael Barnett's driveway. NEAP agreed to provide part of the cost of a flatcar bridge for Sky Ranch Estates, the most critically needed bridge.

It was now September 29, two weeks before the generally mandated end of road work in the forest on October 15. It is idition to a bridge, a contractor and riprap, permits were needed from both the California Department of Fish and Game *and* the National Marine Fisheries Service (due to the presence of a recently listed threatened species, the Coho salmon, in Greenwood Creek).

All of this was impossible, in two weeks' time.

Yet it happened. NEAP advisors helped with the permits. Sky Ranch Estates donated \$2,000. L-P contractor Ed Curti was available to do the work at the bridge site, and at another site where L-P was donating Mr. Curti's services (Simmonds Gulch, see p. 6-7). The U.S. Fish and Wildlife Partners for Wildlife program came through with the final needed funding. Skip Gibbs in Ukiah came through with a 44 ft. steel flatcar bridge and arranged for its delivery, despite injuries and illnesses that week in the company's work crew. The next big question was the weather. El Niño rains were predicted. Our permits could be used until November 15 *if* it didn't rain.

Every day leading up to the delivery of the bridge was a big "if." The final decision was made to go ahead with it-the day before the planned installation. The enormous bridge came lumbering down Maple Basin Road on an enormous truck. *The Mendocino Beacon* sent a reporter (whose subsequent photo and article appeared in three local publications). South Coast Productions (which had just been hired to produce the "Roads and Fish" video--see p. 1) came out on location to videotape this memorable watershed event, which represented the cooperative effort of so many people.

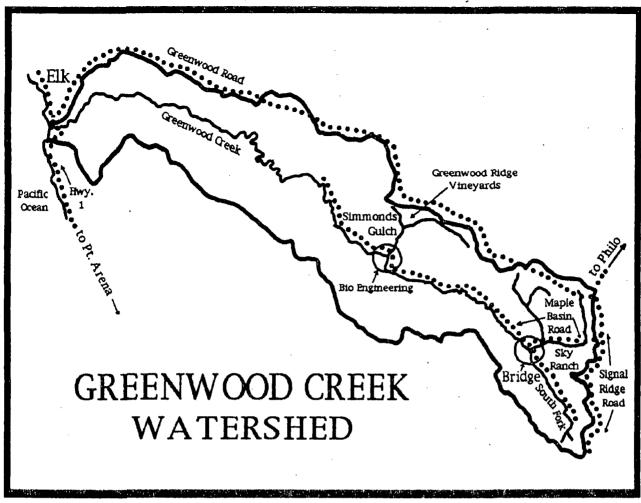
The bridge quickly became a symbol Despite a long history of conflict between L-P and the local community over timber harvesting, despite tensions over recent L-P

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A meeting at the Maple Basin Road gate, of Louisiana Pacific and Project personnel and several landowners, for a walk-through inspection of potential road erosion control work sites. The restoration work that was done by L-P and Project crew required the close cooperation of many people and agencies.





Map by Steve Acker

This map of Greenwood Creek watershed shows the restoration work sites in Fall 1997. In addition to the flatcar bridge installation at the intersection of Maple Basin Road and Sky Ranch Estates South Fork Road, and the biogengineering work in Simmonds Gulch also on Maple Basin Road, the Project did extensive waterbarring on Sky Ranch Estates and other road systems. The major problem in this part of the watershed is that old, unpaved logging roads

Building a Bridge, cont'd from p. 4

plans, and despite the impossible logistics, we had proven what the cooperative spirit can do. We had built *several* bridges.

Meanwhile, the Project hired a full-time crew consisting of four salmon fishers--John Reed, Gisele Reaney, Robert Escola and Bryan Lowe--and Project team leader Jesse Russell, to design and implement a bio-engineering project down the road at Simmonds Gulch where a salmon spawning stream was being impacted by a badly eroding stream bank, and to do other road work such as waterbarring the fragile Sky Ranch fire road system with hand tools.

The bio-engineering project involved the use of a willow baffle, anchoring of a rootwad, willow and alder plantings and careful placement of riprap, to re-vegetate the stream bank, improve fish habitat, and nudge the Creek a bit to the

Donations are welcome!

Make checks payable to the Greenwood Watershed Association. GWA is a member of the Redwood Coast Watersheds Alliance, a California non-profit, public benefit corporation. south away from the road and the eroding north bank. (See photos, p. 6-7.) L-P provided all the excavation and riprap placement at this site, working in close cooperation with the Project team. The willow baffle and the rootwad have already created a new deep fish pool. Come spring, we expect to see the site completely transformed with fast-growing willows and spritely alders.

Volunteers needed

The Project will be doing additional small-scale road erosion control in March/April (waterbarring and drainage clearance) on several road systems, in conjunction with location shooting of the "Roads and Fish" video. Volunteers are needed to assist with this work. Call (707) 877-3405 for information.

It's now early March and the El Niño rains have come in full force. Time to get out your hoe and shovel and join the Greenwood Creek road maintenance crew!

Saving the roads means saving the <u>fish!</u>





Left: Curtis Ihle of NEAP and Project worker Jesse Russell inspect the "rocked ford" at Simmonds Gulch on Maple Basin Road, a salmonid stream crossing suffering from continual stream bank erosion and lack of vegetation. Salmonid fingerlings were seen in this puddle in the road in spring 1997.



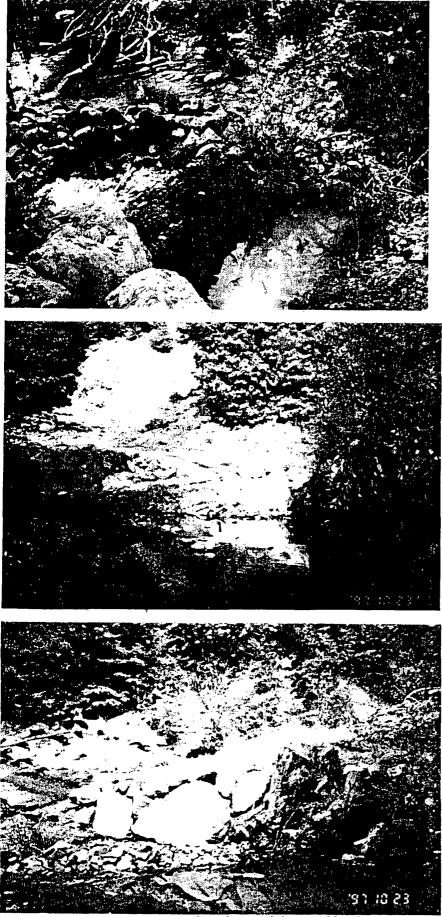
Bioengineering was prescribed by Project consultant Dr. Fred Euphrat, CDF&G's Weldon Jones, and NEAP's Curtis Ihle and Michael Maahs. Louisiana Pacific provided riprap and excavator. *Right:* Project workers John Reed and Jesse Russell supplement L-P's riprap placement with rock chinking and prepare to anchor the rootwad. Numerous willows were planted in and around the riprap. A watering system was installed for willow and alder plantings, since the weather remained unseasonably dry.





Bio-engineering: helping Nature help itself

Left: Willow trenches were excavated by L-P, with guidance from Project workers Jesse Russell and Gisele Reaney, and Vivien Bolin of the NEAP program. Willows were placed in the trenches, and rocks placed on top. The installation has helped to protect the west corner of the coho tributary entry and to move the channel south away from the road.



Left: A closer look at the willow baffle before small rocks and riprap were placed over it, burying the willow roots deep in the channel. This willow baffle has created a dramatic change in the configuration of the stream bank and the road. It is now preventing further erosion of the road, by diverting the channel slightly to the south, so that it is no longer directly hitting the far corner of the tributary entry. Field workers also worked many hours hand placing rock at the site and downstream, to gently move the channel south.



Left: The willow baffle (small rocks, foreground), the new large riprap and a piece of the rootwad (lower right); the new large and medium riprap (left, on the far or west corner of the tributary entry); the tributary itself (Simmonds Gulch creek, aka "the rocked ford") visible as a wet slick in the middle of the picture; Maple Basin Road (which enters from the right behind the large riprap, and continues west) and the main stem of Greenwood Creek where a pool has formed.



Left: A closer view of the large riprap and rootwad, with Maple Basin Road just visible above it, and the "rocked ford" to the left. The new fish pool is also clearly visible in the foreground. Later, the rootwad was securely and permanently anchored to the large riprap. Louisiana Pacific intends to install a flatcar bridge over this fish crossing next year when the road is reopened. By then, the site should be transformed by the fast-growing willows.

A Report from the Project Director:

As detailed elsewhere in this newsletter, several big road erosion problems got fixed this fall--replacement of the Sky Ranch Estates culvert with a flatcar bridge, bio-engineering at to repair an eroding stream bank, extensive waterbarring on several road systems, anchoring of a rootwad in Russian Gulch creek, and additional work by L-P on Maple Basin Road (such as installation of a sediment trap and rolling dips).

The unsung heroes of this work can be seen in the photograph below: Jesse Russell, John Reed, Gisele Reaney, Robert Escola and Bryan Lowe. This wonderful crew did a prodigious amount of work with cheerfulness and enthusiasm, and great skill.

The Watershed Planning Committee subcommittees were also busy: The Video Committee (Dave Gurney, Jesse Russell, Peter Talbert, Fred Euphrat and myself) produced a draft outline for our "Roads and Fish" video script, and reviewed other restoration videos in an effort to choose a style and a direction for *our* video on road maintenance. The Legal Committee (Allan Green, Anna Marie Stenberg, Tom Schultz) helped to hammer out several landowner agreements. The Upper Watershed Outreach Committee (Patricia De Vlieg and Jesse Russell) contacted landowners in the Signal Ridge area, resulting in a new landowner cooperator-who permitted us to survey the north fork of Greenwood Creek.

The full Watershed Planning Committee will be meeting again this spring. If you would like to join, just give me a call at (707) 877-3405, or email me at: pirohuck@mcn.org.

Scott Harris and Herbert Pool of the Department of Fish and Game, Project worker Jesse Russell and I saw a wondrous sight at the Maple Basin waterfall in February: a large Steelhead (or Coho Salmon?) attempting to jump the 15 foot waterfall. What a sight! Three times it tried (or there were three fish). It didn't make it. Maybe it went back down to our bio-engineering site to spawn. These noble and beautiful fish, which are threatened with extinction, deserve an equal effort from us to restore their home and insure their existence forever more. --Mary Pjerrou



The crew: Team leader Jesse Russell and salmon fishers Bryan Lowe, Robert Escola, Gisele Reaney and John Reed, in the Greenwood Beach parking lot in Elk, in December 1997, ready for a hard day's work on Greenwood Creek watershed roads.

Greenwood Creek Watershed Project P.O. Box 90, Elk, CA 95432

(707) 877-3405 www.elksoft.com/gwa

- The bridge at Sky Ranch Estates
- South Coast Productions the "Roads and Fish" video



• Bio-engineering photos!

14 photos and a map!