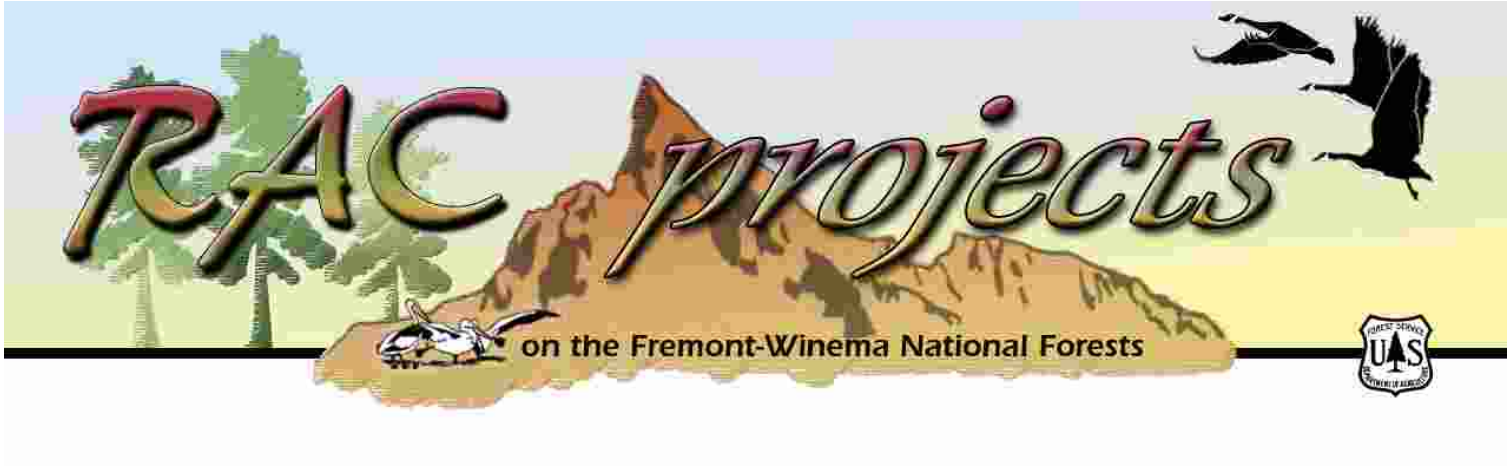

Rainbow Creek Road Obliteration WK-13-601

Klamath Ranger District Klamath Falls, Oregon
Contractor: *Kornish Forest Contracting*
Contract #: *53-04U3-409DB*
Job Code #:*RSR620*
Title II Dollars: *$3,500*
Federal Appropriated Dollars: *$3,791*
Workers Employed: *2*
Total Local workers: *2*
Total Worker Days: *4*
Total Local Worker Days: *4*
Accomplishment (Based in Acres, Miles, Structures): *10 acres lake water quality improvement, 1 stream mile benefited (brook trout spawning)*

How was this project completed? *The Klamath Ranger District proposed to obliterate the existing road surface with a medium excavator. It was necessary to close the road prior to the initiation of the project for public safety. A load of large rock was hauled in to prevent camping along the creek during the period of planned work. This large rock was later incorporated into the road fill at the intersection of the obliterated road and the main road system to assure stability of the open road system.*
At a point, about one-third of the way down the road segment, the stream channel had been constricted by construction of an old earthen dam (historic water chance). Stream channel constriction was increasing stream velocity, resulting in increased channel scour and erosion. The large earthen dam was removed and the historic floodplain dimensions (bankfull elevation and channel width) were restored.
The road prism itself was ripped with an excavator utilizing a bucket with opposable thumb. The use of a bucket and thumb allowed for the placement of boulders when encounter, as well as placement of large down wood pieces.
Concurrent with the subsoiling of the road prism, existing, down woody material along either side of the road prism was pulled onto the obliterated road surface to prevent surface erosion and creating ideal sites for conifer regeneration (lodgepole/white fir) which should occur rapidly.

The Forest Service Contracting Officer's Representative (COR) worked alongside the contractor keeping equipment time, photographing the work, and mulching the road surface with native grass hay. This native grass contained a large volume of seed and is expected to both reduce surface erosion directly, as well as result in some initial seeding of the restored road surface.

Monitoring: how will this be tracked? *Monitoring of similar projects has shown a decrease in fine sediment delivery to streams near obliterated roads of greater than 90% in the first year following project implementation.*

1. Within a few days of the project being completed two District Fish Biologists visited the site (Sept. 21, 2006). Photographs were taken documenting the completed work and it was concluded that the major sources of fine sediment have been mitigated to a large degree, but more benefit will occur after reestablishment of the sedge

community along the rehabilitated stream section, and conifer/brush establish on the road surface. The site will be revisited in 2007 as soon as snow is gone, and again mid to late-summer to document the degree of revegetation occurring.

2. It was determined and documented in the photo history that the channel constriction in Rainbow Creek has been removed and the stream channel dimensions returned to those "natural" for the stream type. The site will be revisited in 2007 by the District hydrologist to assure that the project has not resulted in any adverse channel changes.

3. It was determined (and documented with photos) that the road surface was adequately mitigated and no new sources of fine sediment have been created as a result of the project. The road surface was mulched with fine grass hay straw and large down wood during implementation. Hillslope gradient to the adjacent stream is low and there are no new avenues for sediment to move into the creek.

4. The project was completed in late September, too late for any significant level of revegetation. The site has been visited by two light snowfalls already this fall. The site will be revisited early next spring by the District fish biologist and hydrologist and again mid to late-summer to document whether adequate revegetation is occurring. If the answer is nom corrective action will be prescribed (likely some form of reseeding or planting of established conifer).

For further information contact: *Neil Anderson (COR,), Fisheries Biologist, Klamath Ranger District, Fremont-Winema National Forests, 2819 Dahlia St. Klamath Falls, OR 97601 at nianderson@fs.fed.us or (541) 883-6731.*

Road Intersection Close Prior to Obliteration

Road Intersection after Obliteration

Stream Channel and Landing – Before

Stream Channel and Landing – After

Excavator Pulling Road Fill

Completing Road Obliteration

Completed Road Segment

Completed Road Segment