

**HFQLG
Project Evaluation Form**

Project Name: Slapjack DFPZ and Hampshire Creek Riparian Restoration
Project Type: Underburn to create DFPZ and Road Decommissioning

Forest: Plumas

Ranger District: Feather River Ranger District

Date: 23 Sept 2008

Attendance: 19 people

Agency: none

Public: Tony Murphy, local resident of Challenge; Frank Stewart, County Forester and QLG; Brian Wayland, Sierra Pacific Industries

USFS: Karen Hayden, Feather River District Ranger; Deirdre Cherry, Fuels Technician; Eric Murphy, Sale Preparation; Linda Morehouse-Braxton, Assistant Public Service; Dave Wood, HFQLG Implementation Team Leader; Colin Dillingham, HFQLG Monitoring Team Leader; Renee Wimer, HFQLG Public Affairs Officer (detailer); Linda Kanski, HFQLG Management Analyst; Mary Marek, Feather River RD Silviculturist; Rick Case, District Fuels Management Officer; Linnea Hanson, Ecosystem Manager; Kelly Whitsett, District Hydrologist; Oswaldo Angulo, Hydrologist; John Yembu, GIS Volunteer from Cameroon, West Africa; Angela Dillingham, Plumas NF Partnership Coordinator; Kevin McPhee, Fuels Officer.

Slapjack underburn DFPZ Project and Hampshire Creek Restoration & Road Decommissioning Project - completed by U.S. Forest Service personnel.

Type of Treatment:

Slapjack Project consists of mechanical thinning timber sales, mastication units, chainsaw thinning and underburn units. Thus far, only a few underburn units have been completed. Two Units were reviewed today. The Slapjack project will be a Defensible Fuel Profile Zone (DFPZ) implemented under 2004 Framework objectives when completed. Two stewardship contracts and one service contract will complete project implementation. All three contracts have been awarded; the two stewardships contracts are on hold due to litigation. The service contract work is in compliance with the 2001 framework and will proceed as currently planned.

Hampshire Creek Restoration Project consisted of temporary road reconstruction (planned for decommissioning after the timber sale); culvert replacement; turtle basking/nesting habitat improvement; tree removal in meadow and road decommissioning.

Discussion Topics:

The group introduced themselves at the Challenge Work Center and District Ranger Karen Hayden gave an introduction of the Slapjack Project and Hampshire Creek Restoration Project. Karen Hayden then presented an update of HFQLG projects and the recent fires on the Feather River Ranger District.

The first stop was at the Pike County Lookout with an overview of Slapjack DFPZ units 18sb and 18b. The group then proceeded to drive into unit 18b to get a better view of the effects of the underburn (Figure 1). Slapjack DFPZ Unit 18b was an underburn that reduced the surface fuels to below 5 tons per acre, which met the HFQLG DFPZ objectives for surface fuel loading. To prevent crown fire initiation, the HFQLG FEIS, Appendix J, recommends managing ladder fuels and crown base height at a sufficient level to prevent crown fire initiation. The underburn raised the live crown base height in some areas, but Rick Case said that there were still too many ladder fuels in portions of the units and a second treatment would be desirable. Some areas burned at too high a humidity and the burn did not consume enough ladder fuels.

Slapjack unit 18b did not reduce the canopy, and the stand does not meet DFPZ objectives of 40% canopy. During a project review with industry, there was a request to delete some of the cable units because it would have made the Slapjack project uneconomical. Set up costs are too great to remove small diameter understory trees. Therefore, canopy reduction objectives could not be met. The DFPZ could be used with wild fires at or below the 90% range when a running crown fire would not be expected.



Figure 1. Slapjack Unit 18b; shows results of underburn.

Resource Area	Attribute	Objective	Source of Objective	Objective achieved?	Comments
Fuels	DFPZ construction	Reduce canopy cover to prevent crown fire spread	HFQLG EIS, Appendix J	No	Poor economics of cable yarding (unit 18b) prevented removal of larger trees.
Fuels	DFPZ construction	Reduce surface fuel loading to less than 5 tons/acre,	HFQLG EIS, Appendix J	Yes	Surface fuels reduced to meet objectives, maintenance underburn likely needed in 3-5 years.
Fuels	DFPZ construction	Reduce ladder fuels and increase crown base height to prevent crown fire initiation	HFQLG EIS, Appendix J	Partial	Ladder fuels reduced, but not sufficiently. Additional work required to meet ladder fuel objectives.
Hydrology/ Fisheries	Hampshire Creek Stream Restoration	Repair “shotgun” outlet on culvert, to reduce erosion	NEPA document	Yes	Culvert replaced and should reduce erosion, and additionally allow for fish passage.
Wildlife	Western Pond Turtle Habitat	Retain and improve existing nesting/basking habitat	NEPA document	Yes	Hampshire Creek project improved basking and nesting areas by reducing canopy and improving soil heating.

The tour continued on to the Hampshire Creek Meadow Restoration and Road Decommissioning Project area.

A culvert was replaced adjacent to the Soper-Wheeler Gate on a tributary to Hampshire Creek. The original culvert was undersized, and the “shotgun” outlet was causing scour and erosion in the creek. Fish passage was also restricted due to the size and elevation of the original culvert. The replaced culvert was sized to allow for

much greater flow, decreased scour from plunging water, and greater opportunity for fish passage. After the project was completed, fish were found in the pool immediately downstream of the culvert.

The site of the meadow restoration was a collaborative effort that included specialists from Hydrology, Wildlife and Botany. Kelly Whitsett, Feather River Hydrologist explained that the goal was to restore the forest meadow to a healthy functioning wetland. Western pond turtles and an undescribed species of sedge (*Carex species nova*) were found in the meadow. A road bisected the meadow and impeded the flow of water across the wetland. The erosive clay road surface was a large source of sediment to the wetland. The outer edges of the wetland began to dry out, allowing trees to encroach into the watershed. The meadow area has been restored to allow flow in certain areas across the road. The road was decommissioned but remains in place as a nesting site for the Western Pond Turtle.



Figure 2. Clay soil extends from the decommissioned road into the meadow providing nesting habitat for the turtle.

Shortcomings and Successes:

Slapjack Unit 18b underburn project met surface fuel objectives, partially met ladder fuel objectives, but did not reduce the canopy cover to meet reduced canopy cover objectives. The economics of cable yarding prevented meeting the canopy reduction objectives. A follow-up underburn is anticipated to be needed to reduce the fuel loading as the small diameter trees killed in the underburn begin to fall (2-5 years).

The Hampshire Creek restoration project successfully eliminated a major sediment source (1.5 miles of road decommissioning) to the meadow and riparian system

Notes prepared by: /s/ Colin Dillingham Date: 29 Sept 2008
HFQLG Monitoring Team Leader

Reviewed by: /s/ Karen Hayden Date: 4 November 2008
Feather River District Ranger

Appendix 1. Monitoring Field Trip Agenda and Handout

HFQLG MONITORING FIELD TRIP AGENDA

Slapjack Project

Feather River Ranger District

September 23, 2008

- 0900** **Meet at Challenge Work Center**
- 0900-0930** **Introduction (Karen Hayden)**
- 0930-1030** **Project Update (Karen Hayden)**
- 1030-1045** **Travel to Unit 18**
- 1045-1115** **Underburn Unit 18 (Rick Case)**

Under the original proposed action, Unit 18 was prescribed a thinning treatment with cable yarding and a follow-up underburn. The volume was determined to be uneconomical for cable logging. The final treatment prescribed to this unit was an underburn only, to reduce the surface and ladder fuels. A total of 145 acres were burned on April 10, May 2, and May 8, 2008 (Figure 1).



Figure 1: Prescribed Burning in Treatment Unit 18

- 1115-1145 Slapjack Service Contract Update (Eric Murphy)**
- 1145-1230 Travel to Hampshire Creek Meadow**
- 1230-1300 Lunch in Meadow**
- 1300-1400 Hampshire Creek Meadow Restoration Project (Kelly Whitsett)**

This meadow is habitat for the Western Pond Turtle (a sensitive species), Rainbow Trout, and a rare plant that was a new location for this area.

Hampshire Creek was dammed for use in a sawmill. This area was heavily logged. Due to the dam and logging, the water table rose, conifers could not grow back in, and a wet meadow formed. Later, a native clay road was built through the center of the meadow. The road was approximately two miles long with no constructed waterbars. Through time the road became severely rutted and clay sediment deposited into the meadow and started filling the meadow in, allowing conifers to grow back in and lower the water table (see Figure 2).



Figure 2: Before Picture - Meadow and Road Condition Prior to Restoration

The following restoration activities occurred in October 2007:

- 1) Reconstruction (added waterbars) on portion 20N25 needed for timber sale (this road will be decommissioned after the timber sale).
- 2) Replaced culvert stream crossing next to Soper Wheeler Gate on tributary to Hampshire Creek, allowing for fish passage. The culvert was undersized and scouring the stream channel.
- 3) In meadow, removed conifers and alders up to 15 inch dbh around turtle ponds.
- 4) Removed encroaching conifers along the edge of road 20N25d.
- 5) Removed an abandoned car that was in the creek.
- 6) Decommissioned 20N25 from culvert stream crossing to boundary of the timber sale. This included removing three culverts, reshaping the channel at culvert locations, smoothing ruts, uncompacting road surface (Figure 3A), adding waterbars, and straw mulch along stream banks.
- 7) Decommissioned Non-System Roads entering into the closed portion of 20N25. This including removing one culvert, smoothing ruts, adding waterbars, uncompacting road surface and an old landing, and straw mulch on streambanks.
- 8) In the Upper Meadow, removed encroaching conifers and put stream into original channel.
- 9) Blocked both ends of 20N25 with rock/log barriers to prevent motorized use (Figure 3B).

Total accomplishments include 0.4 miles of reconstruction, 1.5 miles of road decommissioning, and 5 acres of meadow habitat restoration (Figure 4).



Figure 3A: Ripping Road Surface to Uncompact Soil

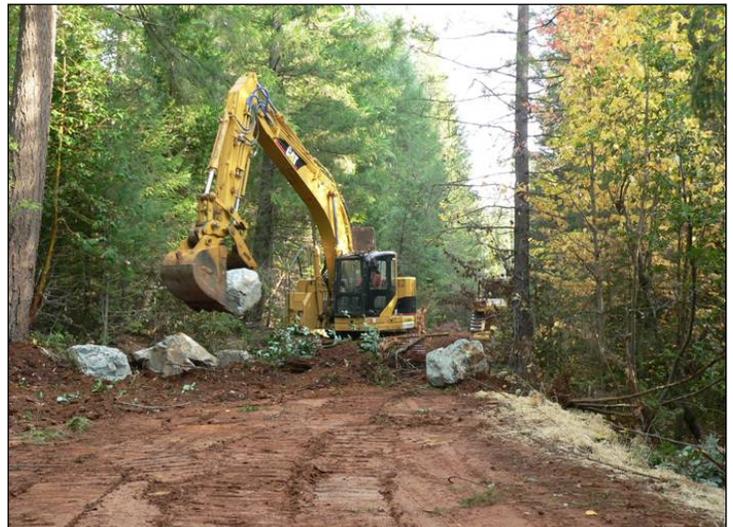


Figure 3B: Excavator Operator Placing Rock Barrier

This project was an interdisciplinary project that included botany, wildlife, aquatics, hydrology, and archeology. Partnerships included Soper Wheeler, Herger-Feinstein Quincy Library Group, and State OHV Commission. Funding sources were Herger-Feinstein Quincy Library Group and State OHV Commission. Total project costs were around \$30,000.



Figure 4: After Picture of Road and Meadow Taken in May 2008

1400-1430

Wrap Up (All)

HFQLG Monitoring Field Trip Map

September 23, 2008

Hampshire Creek Meadow

Treatment Unit 18

Challenge Work Center

