

**Red Clover (Genesee) Hazardous Fuels Reduction project
05-DG-11051150-005**

**Revised Final Report and Closeout
December 31, 2007**

General

Plumas County Fire Safe Council (PCFSC) and Plumas Corporation carried out this private lands project at the request of the Red Clover Creek Recreation Association (the homeowners group). The project is adjacent to National Forest lands and was originally planned for 117 acres of multiple parcels, owners and ownerships. The primary grant was PL 106-393: Secure Rural Schools- Title II funds (\$88,832) along with an expected local match of \$43,868. The expected match included \$15,000 in Secure Rural Schools Title III funds from the Plumas County Board of Supervisors for planning and the remainder in chip and sawlog revenues. Total costs were anticipated to be \$132,700. The Title II contract was executed on 1/11/05 and continued to 9/30/06. Some minor hand work was carried out in October and November of 2007 using remaining project product revenues

Results

Fuels reduction work took place in 2006 and 2007. There were three stages to the work. Approximately 40 % of the work was accomplished in the spring and 55 % in the fall of 2006. Additional hand work on additional acres took place in 2007. Eighteen parcel owners had treatment on their acreages. This was the greatest number of landowners on any Plumas Fire Safe Council project to date. Twenty four parcels were treated. There were 73.2 forested acres treated. Treated acres were less than those originally plotted because original acres included all acreage within the target parcels, including non-forested areas. An additional parcel with 19 forested acres joined the project during the project term. Fuels now meet PCFSC standards on a total of 142 acres in the Red Clover area.

A total of \$ 147,490.23 was expensed (all costs including planning) to the project (including matching funds). \$2,014.89 per treated acre was spent on the project. The entire \$ 88,832 in Title II grant funds were expensed. All \$15,000 in Title III planning funds were expensed. A total of \$ 28,868 was anticipated in revenues from sale of wood chips and small logs. A total of \$ 43,658.23 was actually received from those revenues. Total revenues were \$147, 490.23.

RPF solicitation

The RPF was chosen after a project specific solicitation in 8/03. Wayland Resource Management was chosen in 9/03.

Fuels Reduction Timeline

The County issued an encroachment permit for the project on 9/27/05. The NEPA decision notice was signed by the District Ranger on 3/13/06. The CDF *Emergency Exemption* was executed on 3/1/06. The project 'Prospectus' for bidders was sent out but the four bids submitted contained no bids within the project budget. The Licensed Timber Operator - 'Treetoppers' began work on the project in March, 2006, after negotiations. A new and modified permit was received from CDF since the one issued on 3/1/06 expired at 6/30/06.

All timber and fuels reduction cutting work was completed by the Secure Schools contract termination on 9/30/06. All finalizing of the CDF permit requirements was not complete by 9/30/06. Additional cleanup work was carried out in early October after a 10/5/06 CDF inspection. CDF's inspection on 10/23/06 resulted in all work being approved by CDF and the Final Completion Inspection issued by CDF on 11/30/06. An additional six acres on an adjacent parcel (within the original project area but untreated due to ownership issues) and approximately 3 acres on a parcel previously mechanically thinned were treated under a short term employment contract, by hand, during October and November of 2007. No revenues were produced as part of this hand thinning work.

Contractor Costs

Licensed Timber Operators (Contractors) (2) expensed \$123,259.60 on the project and \$4,682.04 was additionally expensed for the short term employment contract for hand thinning noted above. This totaled \$ 127,941.64 and was 86 % of all project costs. The per-acre cost of \$1,748 was higher than anticipated but within costs previously experienced. \$113,500 had been originally budgeted for the actual on- the- ground hazardous fuels reduction work.

Forester Costs

Red Clover, as with other Fire Safe Council fuels reduction projects, used the services of a registered professional forester (RPF), in this case Wayland Resource Management. The RPF was retained in 9/03 after a solicitation. Total RPF costs were \$15,690.25. This equates to less than 11 % of total project costs or \$233.48 per acre. \$15,000 had been budgeted for this purpose.

Administration Costs

Administration, as with other Fire Safe Council fuels reduction projects, was carried out by Plumas Corporation. Total administration costs including, monitoring, were \$ 3,547.74. This equates to \$ 48.46 per acre or 2 % of project costs. \$4,200 had been budgeted for administrative costs on the project.

Thinning Volumes and Revenues

The final RAC application estimated [dated 6/1/04, based upon a partial cruise of the project area by an RPF prior to the application] that 267 Bone Dry Tons (BDT) of chips and 68.5 Thousand Board Feet (MBF) of sawlogs would be removed from the area as part of the thinning. The actual results were that 410 BDTs and 64.47 MBF were taken from the site. An additional amount (unquantified) of chips was blown onto the site. There was additional small material (smaller trees) thinned than was anticipated. Revenues from sale of fiber were anticipated at \$28,868 versus actual revenues of \$43,658. Revenues from all sale of material were 151 % of that anticipated. The actual amount of chips delivered versus the upfront estimate of chips delivered to the electric generators (410 BDT v. 267 BDT) was 153 %. This accounted for the increased dollar revenues of the match.

Lessons Learned

A variety of insights are described here to guide future projects:

- The large number of property owners (18) resulted in a significant amount of on-site landowner consultation (before, during and after thinning operations) by the RPF and the LTO. This resulted in some inefficiencies and safety problems. This could be better covered by an agreed upon protocol from the beginning of the thinning work. This activity increased LTO costs as well as planning and project administration costs from the RPF.
- A local resident with significant forestry experience was hired by the RPF to work with property owners and to implement the initial tree mark (under RPF supervision). The trees to be left unharvested were marked at the base (in a uniform cardinal direction) and otherwise unmarked. This marking method was intended to decrease the negative visual aesthetics of painted trees. Unfortunately, the marking needs of the LTO were visually slightly different than that employed in the actual mark. Consequently, delays resulted when the LTO had to leave the machine to check the mark. This could have been resolved by a better understood tree mark protocol. This protocol on marking (including distances between trees, tree sizes, stream zones, paint color, mark height, mistletoe tree treatment, etc.) should be developed on each specific project and committed to writing by the RPF for the benefit of the actual marker, the landowner, the regulators and the LTO.
- There were two CDF permits requested and issued for the project. (“Emergency” and “LaMalfa”). This resulted in a variety of problems. The first problem was initially caused by the short duration of the emergency fuel hazard reduction exemption (120 days). The heavy rains in the spring of 2006, limited the area (wet ground) and timing (limited operations in rain and snow) of the thinning and it was not able to be fully accomplished between 3/1/06 and 6/30/06. A new type of permit (LaMalfa) was necessary since the exemption could not be simply renewed (according to regulation). The new permit was prepared, submitted and used (with consequent planning costs all around) to complete the project.
- The LaMalfa permit has a smaller tree size limitation (24” dbh versus 30” for the emergency exemption). The RPF did not make this change in the mark on the

- ground. This caused two types of problems. One, the RPF was cited by CDF for cutting trees (numbering < 6) which were allowed within the original permit but not in the subsequent permit. This change, however, did not negatively affect the project revenues, since those were exceeded even with the reduced dbh permitted.
- The two permits necessitated cleanups and closeouts for each. This caused increased costs to the RPF, LTO and CDF.
 - The close-in nature of the thinning work to residences and outbuildings caused a high proportion of the work to be done by directional falling and hand crews versus the more efficient mechanical falling method. The large number of residences and driveways also necessitated additional cleanup activities. These activities and methods served to increase costs.
 - Certain Red Clover property owners expressed their beliefs that the end product on the ground, as well as the processes, were not what they had understood from the project initiation. The lesson is that PCFSC outreach efforts, instructions to RPFs, and bid proposals to LTOs must be more precise in discussing methods of thinning. These prior understandings should include equipment type/timing, interaction with operators, landowner responsibilities, LTO 'cleanup' expectations, project duration, weather, log decks, RPF role, CDF role, the anticipated 'look' of the land after thinning, etc. These discussions should be in addition to tree sizes, revenues, yield tax and the other matters previously discussed prior to project initiation.
 - Direct RPF communication with the many property owners was challenging. A method of communicating during the project with all landowners at once should be developed and used on future multiple owner projects. Emails and/or a list serve seem to be the best methods.

Financial

Under grant # 05-DG-11051150-005, PCFSC has incurred total implementation expenses of \$ 132,490.23 under the primary Title II grant. PCFSC has also expensed \$15,000 in Title III matching funds. All Title II grant funds (\$88,832) have been invoiced to USFS and paid. Revenues from sales have amounted to \$ 43,658.23. Total revenues attributable to the Title II grant are \$132,490.23. All final billings been received and paid.

12/28/07