

Government Creek #1 & #2 Monitoring Report

UT 024 2823 JM RA43 & RA65

May, 18 2003

The objective of the Government Creek hazardous fuels reduction project was to increase the canopy spacing of juniper on 30-55% of the 2,119 acre project area. Areas of 10-500 acres would remain untreated with interspersed treated areas greater than 50 acres. The juniper stands would be thinned to increase average crown spacing to approximately 30-60 feet; some patches of less than five acres would have complete juniper removal. Seeding would occur in all treated areas by an ATV mounted broadcaster seeder. The expected result would allow understory (grass/forbs/browse) to increase in relative composition to 20-40%.

An environmental brush cutter (bullhog) was used to implement the project by selecting older age classes of juniper and quickly tearing/chopping the trees the ground level without disturbing root material. The bullhog was on the site for 45 days, but only used for about 35 days due to mechanical problems and maintenance /repair work. Total operating hours for the bullhog was near 300. The two rotating operators from the Cedar City Field Office did a wonderful job of meeting our objectives and worked about 10 hours per day, seven days a week. The bullhog averaged 4 acres per hour over the entire project area. In certain areas, the bullhog was able to complete 4.5 acres/hour, while other areas were lower at 3.5 acres/hour. Specific project costs will not be known for another month or so due to the time required for all expenditures to be reported in MIS. Initial estimates show that the project may cost about \$42,000, or \$37.00 per treated acre.

The data from the 10 monitoring sites shows the average canopy spacing for the entire project area increased from 20 feet to 46 feet, due to treatment. The specific data for each site is shown in the following attachments. Since the objective was to increase canopy spacing to 30-60 feet, the project was a success by meeting this objective.

After collecting coordinate data using GPS/GIS technology, we determined that we treated 1,148 acres of the 2,119 acre project area for total of 54%. Using the same data, we determined that the untreated patch sizes range from 10-452 acres, the thinned patches are greater than 50 acres, and the seven complete removal patches are less than 5 acres each. Since the objective was to treat 30-50% of the total project area and limit the patch sizes to the pre-determined acreages, the project was a success by meeting these objectives.

Although the long-term effects on understory relative composition changes will not be known for a few years, we believe that the thinning and seeding will ultimately accomplish the resource objectives as well.

Brook Chadwick – SLFO Fuels Specialist

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