

Section 4: Proposed Project Costs

Proposed projects costs reported by different agencies in the Carson Range vary by treatment (Table 3). Accurate comparisons among communities are difficult because of variations in the condition of individual treatment areas and accounting methods, and because the sequence of implementing treatments affects costs. The most detailed projected cost estimates are found in the individual plans from which this comprehensive plan is tiered.

Implementation Costs

In general, implementation costs in the Carson Range are lower compared to those reported by Fire Safe Councils or individuals in nearby communities (as of 2007). This is a result of established programs, known operators, and reduced haul distances. It also represents collaborative efforts, innovative treatment methodologies, and community partnerships that work with local agencies to accomplish fuel reduction work in the Carson Range.

Table 3. Implementation costs in the Carson Range and adjacent communities

Treatment	Cost/Acre in Different Sierra Nevada Communities (2007 Costs)					
	Carson Range	Lake Tahoe Basin	Foresthill FSC	El Dorado County FSC	Plumas County FSC	Truckee
Mechanical thinning	\$350–\$3,500	\$1,000–3,500	\$1,250		\$600–\$2,300	\$500
Hand thinning	\$350–\$2,500	\$650–\$3,500	\$1,300*	\$1,425	\$750–\$900*	
Chipping	\$50–\$700	\$200–\$700	\$1,100			
Mastication	\$550–\$950	\$700–\$1,500			\$700–\$1,300	\$700–\$1,400
Pile burning	\$300–\$1500	\$300–\$700				
Broadcast burning	\$400–\$900	\$400–\$1500				
Animal Based	\$200-\$350					
Community Biomass	\$100-\$1000					

* hand thinning and pile burning

Although costs per acre can be lower, hand thinning is not necessarily less expensive than mechanical thinning because it may also require pile burning or chipping to remove all of the harvested material. Additionally, *hand*-removed material is generally limited to small trees and sufficient numbers of trees may not be removed to achieve forest health and/or fuels reduction objectives. Mitigation measures associated with environmental compliance, lack of road access, steep topography, operating near residential areas, and areas with high recreational use, a limited operating season, and coordination between multiple agencies add significant cost to treatments. Treatments in urban lots, parcels, or steeper slopes are generally more expensive than those in other areas.

Planning Costs

Treatment costs in Table 3 represent implementation costs; they do not include costs for project planning (surveys and project design), environmental compliance, final project layout, contracting, or monitoring. Accurate costs for these items are difficult to establish because agencies track these costs differently. The Nevada Tahoe Resource Team estimates that planning costs for their projects range from \$700 to \$1,500 per acre. These costs are considered similar for Nevada Division of State Parks, Carson City, and Washoe County. Cost estimates for project planning, compliance, and final layout on National Forest System lands in the Carson Range range between \$100 and \$300 an acre. The Washoe Tribe estimates planning costs from \$150 to \$300 an acre.

Total Costs of the Proposed Projects

Note that all implementation and planning cost estimates in this plan represent the best-known data at the time of this writing. Market forces and inflation can obviously affect project costs over time. In addition, because specific prescriptions and treatment methodologies have not been determined for all projects, projected cost estimates must rely on average cost-per-acre ranges. Costs were estimated based on current contract rates and average price per acre for each involved agency. In addition, maintenance treatments were estimated on a project basis. A summary of these costs, by implementing agency or jurisdiction is displayed in Table 4.

Given the wide range of variables and estimates, this comprehensive plan projects that total plan implementation cost will range between \$89,000,000 and \$149,000,000 over all jurisdictions, with annual expenditures ranging between \$7,600,000 and \$16,500,000 (based on variation in acres treated by year).

Table 4. Ten-year projected costs for first and second entry/maintenance treatments

First Entry – 48,681 acres, Second entry/Maintenance 18,112 acres			
Jurisdiction	Cost Types	Projected Costs (Low)	Projected Costs (High)
Carson City	Planning Costs	\$229,643	\$382,738
	Implementation Costs	\$577,341	\$962,236
	<i>Total Costs</i>	<i>\$806,984</i>	<i>\$1,344,973</i>
USDA Forest Service	Planning Costs	\$7,875,355	\$13,125,592
	Implementation Costs	\$50,224,270	\$83,707,117
	<i>Total Costs</i>	<i>\$58,099,626</i>	<i>\$96,832,710</i>
Private Lands (CWPP)	Planning Costs	\$4,994,515	\$8,324,192
	Implementation Costs	\$12,843,039	\$21,405,064
	<i>Total Costs</i>	<i>\$17,837,554</i>	<i>\$29,729,256</i>
City of Reno	Planning Costs	\$690,439	\$1,150,732
	Implementation Costs	\$2,796,279	\$4,660,466
	<i>Total Costs</i>	<i>\$3,486,719</i>	<i>\$5,811,198</i>
Nevada Division of State Parks	Planning Costs	\$1,461,606	\$2,436,010
	Implementation Costs	\$3,893,223	\$6,488,704
	<i>Total Costs</i>	<i>\$5,354,829</i>	<i>\$8,924,714</i>
Washoe County	Planning Costs	\$193,112	\$321,854
	Implementation Costs	\$689,686	\$1,149,477
	<i>Total Costs</i>	<i>\$882,798</i>	<i>\$1,471,331</i>
Washoe Tribe	Planning Costs	\$42,716	\$71,194
	Implementation Costs	\$112,336	\$187,227
	<i>Total Costs</i>	<i>\$155,053</i>	<i>\$258,421</i>
Whittell Forest - UNR	Planning Costs	\$558,741	\$931,235
	Implementation Costs	\$1,955,593	\$3,259,322
	<i>Total Costs</i>	<i>\$2,514,334</i>	<i>\$4,190,557</i>
Total Planning Costs		\$16,046,128	\$26,743,547
Total Implementation Costs		\$73,091,768	\$121,819,614
Total Costs		\$89,137,896	\$148,563,160

