

**COMMUNITY CONSERVATION PLAN:
MEADOW VIEW ESTATES SUBDIVISION PILOT PROJECT**

2008 FEB - 7 PM 4:19
BOARD OF SUPERVISORS
EL DORADO COUNTY

PURPOSE

The purpose of this project is to design and implement a community conservation plan, as a pilot project, in a sub-watershed of the Tahoe Basin. The primary conservation plan objectives are 1) to reduce fuel by providing defensible space around structures and thinning the forest; 2) to implement Best Management Practices (BMPs) to infiltrate storm water runoff and prevent soil erosion; 3) to conserve water, particularly that used for irrigation; and 4) to manage the spread of invasive weeds and exotic species. In the course of implementing the pilot project, the contractor will coordinate with the agencies that currently regulate, manage land, or provide assistance to these efforts.

The primary agencies that provide technical assistance to private homeowners are focusing resources in the Meadow View Estates Subdivision. The programs are currently supported by a Proposition 40 grant awarded by the Lahontan Regional Water Quality Control Board (Lahontan) and administered by the Tahoe Resource Conservation District (TRCD). Furthermore, some of the public land managers are focusing efforts in this area to support the private property assistance efforts. This concentrated effort in one area is an opportunity to evaluate components of the program for integration and efficiency, sustainable funding sources and funding levels, public outreach, technical assistance and enforcement.

PILOT PROJECT

The pilot project is located in El Dorado County within the Angora Watershed. The majority of runoff drains to Angora Creek. The developed portion of this sub-watershed primarily consists of residential uses and roads. The residential area is referred to as the Meadow View Estates Residential Subdivision, and the primary roads are Lake Tahoe Boulevard., Upper Truckee Road, and View Circle. The residential subdivision is surrounded by U.S. Forest Service (USFS) and California Department of Parks and Recreation (State Parks) lands. California Tahoe Conservancy (Conservancy) and USFS own and manage urban parcels dispersed throughout the area.

The project goal is to design a conservation plan that provides contiguous and primarily native habitat, water conservation and water quality measures, healthy forests, and undisturbed soils. Public and private property improvements will be coordinated and designed to allow plan implementation seamlessly across property lines. The plan will be designed to off-set the impacts of existing disturbances, including impervious areas (roads, houses, driveways), the historical suppression of fire, and disturbed stream environment zone (SEZ).

The conservation plan will strengthen neighborhoods by providing property owners an opportunity to get to know one another through participation in the project. A project objective is to form a community group that will help coordinate the private property improvement requirements by educating their neighbors and encouraging participation. Ideally, this group would sustain itself and serve as a permanent organization to support other programs and requirements such as bear-proof trash containers and source separated recycling.

BACKGROUND

El Dorado County recently completed the Angora Creek restoration project. The County built Phase 1 and 2 of the Angora soil erosion control project several years ago and is in the later design stages for Phase 3a and 3b. County staff members have collected data documenting the existing conditions of the sub-watershed and have developed project alternatives. The Lake Valley Fire District is targeting this neighborhood and is providing technical assistance and labor at reduced costs to help property owners

comply with defensible space requirements to reduce fire risk. A volunteer-based Fire Safe Council, consisting of residents, has been formed but is currently not active.

The TRCD prioritizes their technical assistance programs to areas with Environmental Improvement Program (EIP) projects in the planning and implementation stages. This area has been prioritized to provide assistance for BMPs, site assessments and implementation, the removal of invasive weeds, and use of native and adaptive plants. TRCD is beginning a program to provide assistance for implementing water conservation measures, and will also prioritize the Angora Creed watershed project area for this new program.

The Conservancy has prioritized efforts to treat its urban parcels and larger tracts of land for fuels reduction in this area. USFS and State Parks have conducted some forest treatment in the area. State Parks is currently designing alternatives to potentially re-configure the Lake Tahoe Golf Course to restore the adjacent reach of the Upper Truckee River.

SCOPE OF WORK

This proposal includes five major tasks, which are described below.

Task 1. Project Initiation, Scoping, and Coordination

The purpose of this task is to initiate the contract and obtain remaining background information from El Dorado County, TRCD, Natural Resources Conservation Service (NRCS), Nevada Fire Safe Council, Lake Valley Fire District, Conservancy, USFS, State Parks, Tahoe Regional Planning Agency (TRPA), and Lahontan.

Contractor will attend project initiation meetings with El Dorado County, Conservancy, TRCD, and TRPA staff and any other pertinent agency staff. The purpose of the meetings will be to discuss and prepare a list of any additional information needs, a directory of involved parties, the project schedule, and confirm procedures for gathering project data. Contractor will establish the process for regular communication with El Dorado County, Conservancy, TRCD, and TRPA staff and any other lead agencies. Contractor shall prepare meeting notes summarizing issues, decisions, and actions discussed at the meetings. This task assumes that project lead will prepare required materials for discussion at the team initiation meeting with input by Contractor.

Contractor will compile a mailing list for use in distributing notices of the project, as appropriate, from information provided by El Dorado County, TRCD, other agencies, and its own data sources. The list will include agency representatives, property owners, residents, interested members of the public, and interest groups. Contractor shall submit the mailing list to the lead agencies for review and approval. Contractor will periodically update the mailing list as interested parties are identified during the performance of this work. Contractor will maintain an electronic copy of the mailing list for the duration of the contract.

Within two weeks of the initiation meeting, the Contractor shall submit a detailed Project Schedule.

This task also includes a team site visit to walk the pilot project area and adjacent affected areas. The site visit will include representatives of the lead agencies and key members of the Contractor team, including those with expertise in erosion control, BMP implementation, forestry, biological resources, and land use.

TASK 1 SUMMARY

Deliverables:	One electronic copy of Project Schedule One electronic copy of the Draft Mailing List One electronic copy of the Draft Mailing List One electronic copy of the Final Mailing List One full day site visit with staff of lead agencies Up to four project initiation meetings with lead agency representatives to initiate project and review the preliminary alternatives Maintain and update mailing list, as needed
Cost:	\$5,630

Task 2. Community Conservation Plan Design

Contractor will compile data to represent the area's existing conditions of the project area, from information provided by El Dorado County, TRCD, Forest Service, Conservancy, Lake Valley Fire District, California State Parks and other appropriate agencies. The contractor will develop a map of the area that will include, at a minimum, Stream Environment Zones, property ownership, soil types and characteristics, topography, native and non-native species, storm water drainage and other infrastructure.

Contractor will indicate the progress each agency and program has made within the project area by including planned and implemented site improvements, both on private and public lands. Information will include completed site assessments or property evaluations detailing measures to be taken to meet program requirements, properties with improvements installed and properties that have been certified by the regulatory agencies. This task also involves documenting planned and installed improvements on public properties. For example, storm water improvements installed by the County as part of the Angora Erosion Control Project Phases 1 and 2, and the preferred alternative for Phases 3a and 3b, will be included. Fuels management projects within the pilot residential area and in the public lands surrounding the residential area will also be noted on the map.

Contractor will design a conservation plan based on the existing conditions and the proposed site improvements documented on the map described above. The task includes a conceptual design that encompasses the entire sub-watershed. Resources will be prioritized for the "hot spot areas" – those areas that are causing the greatest environmental damage to the overall health of the watershed but through restoration can provide the greatest benefit. These areas typically include disturbances to environmentally sensitive areas, along steep slopes, heavily compacted soils due to vehicle parking, and parcels that are over-built (more than 30 percent of the parcel consist of impervious area).

The contractor may propose modifications to the Angora Phases 3a and 3b preferred alternative, as well as conceptual alternatives for future EIP projects in the area. The NRCS' new soils survey will be evaluated and specific BMPs will be recommended for high and very low infiltration rates. The contractor will work with NRCS and TRCD staff to compile a menu of BMPs for the properties with different soil types and characteristics. The task also includes an assessment of the overall potential benefit to the area from implementation of the conservation plan. This assessment will use existing data to estimate qualitative measures and quantitative measures, if available, to estimate potential impacts.

Contractor shall submit the map with existing conditions and a supplemental report to the lead agencies for review and approval. Contractor will incorporate comments provided by the lead agencies and provide a final map and final report. This task includes two site visits with the appropriate agency staff and

technical experts of the contractor's team. The task also includes up to six meetings with agency staff to collect the data to map the existing conditions and planned improvements.

TASK 2 SUMMARY

Deliverables: Two site visits with staff of lead agencies and technical experts of contractor's team
Up to six conservation planning meetings with lead agency representatives to document existing and planned conditions, and assess new design to encompass the entire subwatershed
Five electronic and hard copy of Draft GIS base maps of the Conservation Plan
Five electronic and hard copy of the Draft Conservation Plan Report (10 to 12 pages)
Five electronic and hard copy of Final GIS base maps of the Conservation Plan
Five electronic and hard copy of the Final Conservation Plan Report (10 to 12 pages)

Cost: \$31,830

Task 3. Public Outreach Plan

Contractor will develop a public outreach plan that will be designed to encourage private property owners to become neighborhood leaders of the coalition to implement the community conservation plan. A focus of the coalition would be to assist all neighbors in achieving compliance with defensible space, BMP requirements, and other measures that help improve the overall health of the sub-watershed.

Contractor will coordinate educational outreach to the property owners by developing a clear and straightforward message regarding the various program requirements and the purpose for these requirements. Contractor will work with staff of the County, TRCD, NRCS, Lake Valley Fire District and other relevant agencies to develop a message that clearly conveys the community conservation plan concept. Contractor will conduct two facilitated workshops with the agencies to develop a consolidated message and to get input on the public outreach plan. In addition, contractor will work with the agencies to try to identify one primary point of contact for the technical outreach to property owners in the pilot project area.

Contractor will assist in coordinating a neighborhood barbeque to kick-off the community conservation plan. The neighbors will be invited to spend an evening with their County Supervisor, and management and technical staff from the agencies. The consultant will design and develop an invitation, provide the necessary visual aids to assist the County Supervisor to convey the community conservation plan concept, and attend the event.

Contractor shall submit the draft public outreach plan to the lead agencies for comments. Contractor shall incorporate comments provided by the lead agencies and provide a final public outreach plan to the agencies.

TASK 3 SUMMARY

Deliverables: Two facilitated workshops with lead agencies for input on the public outreach plan
Up to three coordination meetings with the partner agencies to identify key staff persons as the public's primary contacts and to hone the public message
Five electronic and hard copy of Draft Pilot Project Outreach Plan (about 8 to 10 pages)
Five electronic and hard copy of the Final Pilot Project Outreach Plan (about 8 to 10 pages)

Cost: \$10,000

Task 4. Programs Evaluation (OPTIONAL TASK)

Contractor will compile all background information on relevant policies, regulations, technical, and financial programs for fuels management/defensible space, storm water management, water conservation, invasive and exotic weeds, and possibly other pertinent programs. Contractor will compile data and evaluate the programs in terms of their regulatory compliance rate, short and long-term funding base, technical assistance accuracy, and training quality.

Contractor will evaluate the technical and regulatory agencies' current use and potential use of incentives and penalties to encourage the program's participation rates and overall effectiveness. Task includes evaluating the TRPA's existing residential BMP program, the Storm Water Quality Improvement Committee's guidance in the Formulating and Evaluating Alternatives document, the Natural Resources Conservation Service's (NRCS's) new soil survey findings, defensible space requirements and technical assistance, USFS and the States fuels management techniques and policies, as well as the other relevant programs. Contractor will develop recommendations of ways in which to better integrate these programs to facilitate more comprehensive and efficient planning and to improve the programs' overall successes.

This task includes up to eight meetings with the agencies, both individually and as a group, to compile background information, interview key staff and management regarding the program's status. Contractor will make recommendations to improve the programs and policies on an individual basis and in terms of implementing the programs in a comprehensive manner. The detailed analysis and implementation efforts within the pilot project area will serve as a case study to help identify opportunities to better coordinate public outreach, project design and technical assistance. Contractor will conduct research of policies and techniques used in other communities to develop and implement successful conservation plans. Information from other communities will be summarized in the report and used to help make recommendations to Tahoe's existing programs.

Contractor shall submit the draft conservation programs evaluation report to the lead agencies for comments. Contractor shall incorporate comments provided by the lead agencies and provide a final conservation programs evaluation report to the agencies.

TASK 4 SUMMARY	
Deliverables:	Up to eight coordination meetings with lead agencies to collect data and current information about the programs Five electronic and hard copy of Draft Conservation Programs Evaluation Report (about 25 pages) Five electronic and hard copy of the Final Conservation Programs Evaluation Report (about 25 pages)
Cost:	\$25,000

Task 5. Develop a Monitoring Plan

Contractor will evaluate the success of the community conservation plan pilot project by tracking private and public property owner participation. Contractor will develop a monitoring plan to document environmental improvements in the area, including water quality and water conservation, forest health/fire risk, invasive and exotic species, and other identified measures. The plan will include findings and observations made from the project initiation time until the project completion, a two-year timeframe. Contractor will apply quantifiable measures where data is available and qualitative measures elsewhere.

**EDAW INC • COMMUNITY CONSERVATION PLAN:
MEADOW VIEW ESTATES SUBDIVISION PILOT PROJECT**

Contractor will evaluate the constructed Angora Creek restoration project and the Angora Erosion Control projects monitoring plan and data to possibly use the data to estimate the changes in the water quality due to the public and private property improvements. All other available monitoring and baseline data that may be used in evaluating changes in the area will be reviewed and summarized.

The monitoring plan will rely on existing data collected by other agencies and include an appropriate level of analysis. Contractor will photo document the changes made to properties through these programs, by photographing before and after conditions of portions of the sub-watershed and specific parcels. These photographs could be incorporated into the public outreach plan (Task 3) to help property owners visualize the changes to the properties appearances and better understand the potential for aesthetic improvements.

Contractor shall provide a draft copy of the monitoring plan to the lead agencies for review. Contractor shall incorporate comments into the draft plan and then prepare a final monitoring plan.

TASK 5 SUMMARY

Deliverables:	Up to four coordination meetings with the lead agencies to compile data and develop background information for the monitoring plan Five electronic and hard copy of Draft Monitoring Plan (about 20 pages) Five electronic and hard copy of the Final Monitoring Plan (about 20 pages) One electronic and hard copy of the before and after photos
Cost:	\$10,500

TOTAL COST

Tasks 1, 2, 3, and 5	\$60,000; includes \$2,040 in direct costs
Tasks 1-5	\$85,000 (with optional Programs Evaluation task); includes \$2,040 in direct costs

Table 5-3. Acres of fuel hazard projects completed by agency since 2000.

Year	LTBMU	North Lake Tahoe FPD*	California Tahoe Conservancy	California State Parks	Nevada State Parks	Nevada State Lands	Total
Acres							
2000	677	151	102	36	50	12	1,028
2001	691	215	102	56	55	11	1,130
2002	1,260	240	102	80	100	15	1,797
2003	1,254	145	102	53	270	21	1,845
2004	1,918	178	102	91	253	3	2,545
2005	1,913	377		96	101	6	2,493
2006	2,160						2,160
Total	9,873	1,306	510	412	829	68	12,996

* North Lake Tahoe FPD includes projects on federal lands which were also reported by the LTBMU; therefore, the North Lake Tahoe FPD accomplishments were reduced by 42%, the amount of federal land in the fire district.

BASIN-WIDE PRIORITIES AND OPERATIONAL PROJECTIONS

Collectively, the CWPPs identified approximately 12,478 acres of individual projects. Staffing levels, funding, and environmental constraints prohibit all of these projects from being completed in one year. Therefore, staff from each fire district prioritized the implementation schedule for each individual project (see Section 4). Those individual fire district priorities were used to prioritize projects around the Basin. It was assumed that each project would take two years to complete; therefore, the fire districts' project priorities were placed into 20 percent increments for the 10-year planning period. The number of project acres predicted to be completed during each two-year period for each fire district is displayed in Table 5-4 and the Basin-wide priorities for those projects is displayed in Figure 5-4.

Table 5-4. Acres of projects projected by 2-year period by fire district.

Period	North Lake Tahoe FPD	Tahoe-Douglas FPD	Lake Valley FPD	South Lake Tahoe FD	Fallen Leaf FD	Meeks Bay FPD	North Tahoe FPD	Total
2007-2008	518	949	732	130	161	149	548	3,187
2009-2010	161	472	582	248	49	187	625	2,324
2011-2012	524	585	651	182	72	28	269	2,311
2013-2014	208	824	354	206	197	76	560	2,425
2015-2016	477	812	322	67	9	64	480	2,231
Total	1,888	3,642	2,641	833	488	504	2,482	12,478

Insert figure 5-4 Distribution of acres treated by the LTBMU, 1999-2005.

Operational Projections

The number of project acres completed from 2000-2006 was combined with the acres identified in the CWPPs and anticipated treatments by the LTBMU and State of Nevada that were not included in the CWPPs (Figure 5-5). CWPP acreage includes all land ownership and it was assumed each CWPP project would be completed in its entirety, as planned. Based on preliminary estimates from the LTBMU’s Stewardship and Fireshed Assessment, they assume they will treat approximately 3,800 acres annually over the next 10 years, which is more than twice the average number of acres they treated annually from 2002-2006. On average, all CWPP projects include 38 percent federal ownership. Therefore, the total number of project acres completed annually by the LTBMU, not included in the CWPPs, during this period was estimated as:

$$\text{LTBMU Project Acres} = 3,800 - (\text{CWPP acres} * 0.38),$$

which totals approximately 33,260 acres for the ten year period. Additionally, the State of Nevada expects to treat an additional 3,100 acres not identified in the CWPPs over the next ten years. It was also assumed that maintenance treatments would be initiated on all project acres in the defense zone eight years after initial treatment, adding an additional 18,100 acres. Maintenance treatments will be required to maintain the effectiveness of the projects in the defense zone and the investment in reducing fuel hazards.

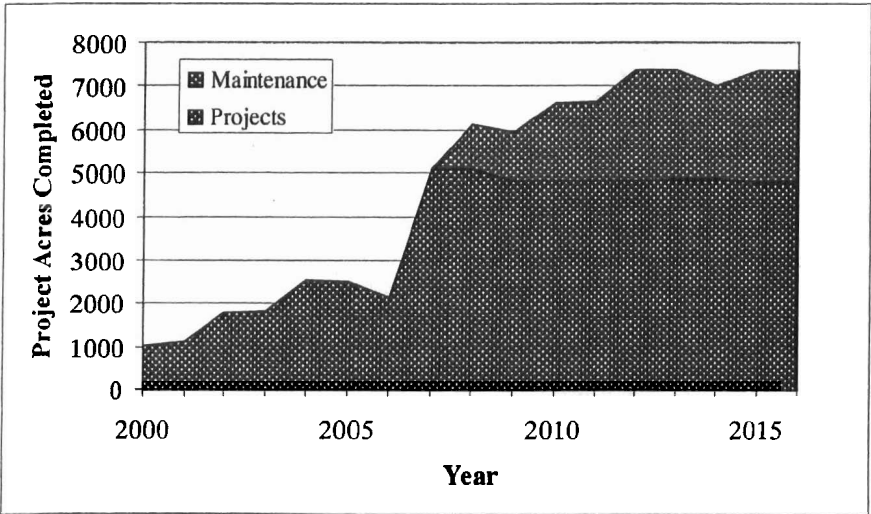


Figure 5-5. Projected acres of projects and maintenance treatments in the Lake Tahoe Basin, 2000-2016.

After approximately 2007, the number of total project acres would more than double compared to recent accomplishments. When the number of acres requiring maintenance treatment is added in 2008 there is an additional increase in the number of

project acres treated annually. By 2013 over 7,000 project acres would be treated annually. Cumulatively, the recent accomplishments and projected projects would result in approximately 61,800 acres being treated by 2016.

Projected Acres of Treatments Annually

The average number of acres of each treatment during the next 10 years was estimated by adding:

- the number of acres of each treatment identified in CWPP projects (RCI 2004a, RCI 2004b, C. G. Celio et al. 2004);
- preliminary estimates of treatment acres estimated by the initial LTBMU Stewardship and Fireshed Assessment;
- 3,100 acres by the State of Nevada, assuming half was mechanically treated and broadcast burned and the other half was hand thinned and pile burned; and
- acres of maintenance treatments, assuming most are treated with broadcast burning.

CWPP projects would treat approximately 2,500 acres, annually (Table 5-5). The LTBMU would treat an additional 4,400 acres, Nevada would treat 620 acres and 1,800 acres of previously treated projects would be maintained, for a total of 9,320 acres treated annually.

Table 5-5. Estimated average annual acres treated in the Lake Tahoe Basin, 2007-2016.

Source	Treatment					
	Mechanical Thin	Hand Thin	Pile & Burn	Broadcast Burn	Chip	Mastication
CWPP	551	690	475	485	260	46
LTBMU	1,338	1,223	1,300	535		
Nevada	155	155	155	155		
Maintenance				1,810		
Total	2,044	2,068	1,930	2,985	260	46

Operational Issues

Several operation issues are associated with the increase in the number of acres projected for treatment over the next ten years. These issues and recommendations are described below.

Develop Separate Planning and Scheduling Zones to Schedule Treatments.

The number of acres treated annually is projected to be more than twice what is currently being treated. Thus, individual treatments will have to be carefully scheduled to ensure resources are available at the proper time and location. The fire chiefs have agreed that each fire district should implement projects each year. The LTBMU has approved NEPA

Program Administration

The estimated costs of forming a new organization to plan, implement, and administer the CWPP projects are shown in Table 7-2. These costs represent full funding of the complete organization, which may take a year or two to fully staff. The burdened salary costs include all required federal and state taxes and insurance, health benefits, and a contribution to a qualified retirement plan. The total cost is \$2.981 million annually.

Table 7-2. Estimated annual cost to fully fund a separate organization to implement the CWPP program.

Category	Cost	Burdened Salaries (46%)	Total
Salaries and Contracts			
Executive/Senior Staff	\$208,857	\$96,074	\$304,931
Project Development Team	\$895,069	\$377,232*	\$1,272,301
Community Coordinators	\$96,200	\$44,252	\$140,452
Administrative Support	\$640,339	\$133,555*	\$773,894
Subtotal	\$1,840,465	\$651,113	\$2,491,578
Rent (2,500 ft ²) @ \$2.00/ft ²	\$60,000		\$60,000
Utilities	\$12,000		\$12,000
Training, Travel & Per Diem	\$21,000		\$21,000
Vehicles (15@10,000 mi ea, @\$0.44/mi)	\$66,000		\$66,000
Resource Surveys (1,274 ac @ \$260/ac)	\$331,240		\$331,240
Total	\$2,330,705	\$651,113	\$2,981,818

*Some positions and operating expenses will be through contracts.

While completion of the proposed CWPP program is a highly desirable and ambitious mission, it is recognized that constraints may limit those achievements. Funding limitations, as well as the inability of cooperating agencies to delegate responsibility to a single organization may result in fewer projects being completed as planned. Therefore, the estimated cost of a smaller organization was included. Assuming the new organization was only responsible for implementing 50 percent of the project acreage, the staff would also be reduced and the estimated annual cost would be \$1.64 million (Table 7-3).

SECTION 7: COST ESTIMATES

Table 7-3. Estimated annual cost to fund a smaller organization to implement 50 percent of the CWPP program.

Category	Cost	Burdened Salaries (46%)	Total
Salaries and Contracts			
Senior Staff	\$113,128	\$52,038	\$165,166
Project Development Team	\$459,456	\$188,349*	\$647,805
Community Coordinators	\$96,200	\$44,252	\$140,452
Administrative Support	\$362,034	\$74,535	\$436,569
Subtotal	\$1,030,818	\$170,825	\$1,389,992
Rent (1,200 ft ²) @ \$2.00/ft ²	\$28,800		\$28,800
Utilities	\$8,000		\$8,000
Training, Travel & Per Diem	\$10,000		\$10,000
Vehicles (8@10,000 mi ea, @\$0.44/mi)	\$35,200		\$35,200
Resource Surveys (650 ac @ \$260/ac)	\$169,000		\$169,000
Total	\$1,281,818	\$359,174	\$1,640,992

* some positions and operating expenses will be through contracts

Program Costs

Cost estimates for the program were calculated assuming all projects were implemented and an organization, as proposed by the Nevada Fire Safe Council, was responsible for implementation of the projects. The cost estimate to implement this Plan was calculated using:

- previously published cost estimates for individual projects (RCI 2004a, RCI 2004b, C. G. Celio et al. 2004 [as summarized in Section 4]);
- cost estimates for the City of South Lake Tahoe based on the treatments and costs in Section 4;
- community defensible space treatments, assuming annual costs included \$75,000 for each three-person crew and there would be six crews (Fallen Leaf FD will share with the Lake Valley FPD); \$50,000 was available every five years for equipment upgrades and replacement in each fire district; and \$350,000 was available annually within the Basin for community grants;
- the LTBMU's initial estimate of 33,260 acres at \$2,500 per acre and the State of Nevada's estimate of 3,100 acres at \$2,100 per acre that were not identified in the CWPPs (see Section 5);
- the estimated number of acres that will require maintenance treatments every eight years (see Section 5) at an average cost of \$400.00 per acre treated, with a 25 percent administrative cost;
- full staffing levels for an organization, as described above, and
- a 3 percent annual inflation rate on personnel and project costs.

SECTION 7: COST ESTIMATES

The total estimated costs for the CWPP projects, community defensible space treatments, program leadership, other acres treated by the LTBMU and Nevada, and maintenance treatments are approximately \$217.5 million (Table 7-4).

Table 7-4. Total estimated cost of fuel reduction and forest restoration projects in the Lake Tahoe Basin, 2007-2016.

CWPP	Ownership	Acres	Cost
	Federal	6,552	\$25,280,736
	CA	2,293	\$8,847,486
	NV	75	\$289,386
	Local	1,150	\$4,437,248
	Private	2,408	\$9,291,211
Subtotal		12,478	\$48,146,066
Community Defense Programs			\$9,983,000
Program Leadership/Staffing			\$43,088,587
LTBMU Other Acres		33,260	\$96,972,685
Nevada Other Acres		3,100	\$9,028,750
Maintenance		18,100	\$10,283,842
Total			\$217,502,928

The cost for each land ownership was estimated by dividing the total cost by the proportion of acres owned or administered by an agency or individual.

CWPP project costs will be reduced from approximately \$5.9 to \$4.4 million annually as the number of acres treated declines. Community defensible space treatments will require approximately \$1 million for chipping and to provide community grants (Figure 7-1). These costs may also decline in the future as individual homeowners maintain effective defensible spaces. Program administration by the single organization would be approximately \$3.0 million, initially; those costs should be reduced in the future as the number of acres treated declines. Other projects that were not identified in the CWPPs and implemented by the LTBMU range from approximately \$8.2-\$10.9 million annually and those in Nevada would range from approximately \$800,000-\$1.0 million, annually. Maintenance costs range from approximately \$0.5-\$1.6 million, annually. Average annual costs to implement fuel reduction and forest restoration projects throughout the Lake Tahoe Basin are approximately \$21,750,300 million.