

Project Summary

The goal of this project is to minimize destruction to the City of Auburn from wildfire; preserve our natural and cultural resources, enhance our watershed, support wildlife habitat, and maintain recreational opportunities to the pristine American River Canyon and Auburn State Recreation Area.

This project is the implementation of a Shaded Fuel Break; a strategically placed fuels project of thinning and removal of flammable vegetation by hand. The objective is to treat 60 acres within a 24 month period so lands can be maintained to keep viable fire safety measures for our community. This is a collaborative project with the City of Auburn, U. S. Bureau of Reclamation, California State Parks, Cal Fire, The Greater Auburn Area Fire Safe Council, and several citizen groups organized for wildfire prevention.

Outcomes will provide wildfire safety to the community, esthetic views and samples of well maintained wildland urban interface lands, a greater producing watershed, a diverse ecological system, and an example of a multi agency collaborative project.

Environmental Setting

The project is on U. S. Bureau of Reclamation lands used for recreation. These lands are non-developed, open wildlands managed by California State Parks as part of the Auburn State Recreation Area. The only "improvements" are trails used for recreation including the historic Western States Trail. This project requires change to dense vegetation by way of reduction, no other alterations or changes to the environment will occur.

The project placement will be from mid slope to top slope locations in the canyon terrain. Fuels to be treated are Oak, Conifer, Pine, Manzanita, Buck brush, Poison Oak, Ceanothus, Scotch Broom, Blackberry, and annual grasses.

The project at its furthest is 2200 feet above the American River, at its closest, 1460 feet above.

Project Description

The Auburn City Fire Department (AFD) works aggressively with landowners to address fuel management programs in an attempt to reduce loss of life, property, and natural resources due to wildfire. An added level of protection is the application of a Shaded Fuel Break in strategic locations throughout the American River Canyon adjacent to the City of Auburn. The initial application of a Shaded Fuel Break will eliminate many years of dense fuel growth and will provide the opportunity for the stakeholders to maintain such a project without the sense of being overwhelmed.

The intent of the Shaded Fuel Break is to provide protection through removal of flammable fuels prior to a wildfire as so to lessen fire intensity in an effort to allow fire resources an increased probability of success during fire suppression activities. The Shaded Fuel Break is a carefully planned thinning of dense vegetation in an area approximately 300 feet wide where fuels have been modified so fire does not easily move from the ground into the overhead tree canopy. Actual fuel break widths will be dependant upon the fuels and

topography in any given area. The Shaded Fuel Break creates a buffer between improved development and the open wildland.

This project is within what is known as the American River Canyon Shaded Fuel Break and consists of approximately 60 acres of public lands directly adjacent to the City of Auburn. The project area is a “very high fire” risk area because of the proximity of residential, commercial, recreational, and natural resources, known as Wildland Urban Interface (WUI).

The prescription used for this project is the American River Canyon Shaded Fuel Break prescription as used by the City of Auburn, Auburn State Recreation Area (ASRA), Cal Fire areas of responsibility, and on U. S. Bureau of Reclamation project lands. This prescription was developed by Cal Fire, U. S. Bureau of Reclamation, California State Parks, and Auburn City Fire Department. It is approved and recognized by the Bureau of Land Management and United States Forest Service.

Vegetation will be removed by hand; cutting and sawing, using hand saws, shears, and chainsaws. Cut materials will be hauled by hand, stacked in piles, and chipped with a mechanical chipper. Chipped materials will be scattered within the project area and left on site for natural decomposition. Although the prescription allows for pile burning this project has been planned with the chipping component to 1) avoid smoke issues from pile burning, 2) create a more complete project by cutting and chipping when in the same area(s), and 3) avoid additional crew time and “manpower” just for burning. Burning may be used in some cases to eliminate invasive plant species rather than chipping and possibly broadcast seedlings and expand such species.

Machinery that will be used are rubber tracked chippers and will operate from existing un-improved roads and trails to access project areas.

All work will be performed by California Department of Corrections and Rehabilitation (CDCR) personnel and contracted vendor crews. CDCR personnel typically work in crews of 10-15 with an assigned supervisor, a Cal Fire Captain. Private vendors will be used primarily for specialized equipment such as track chippers and rig hauling. Typically a vendor crew size is 4-6 personnel and includes operators and a supervisor. The CDCR crews will focus on actual hand work; cutting and hauling, while private vendor crews operate chippers and specialized equipment. The intent of this combination of crew diversity and equipment use is to conduct fuels reduction in the most cost effective and efficient way while at the same time ensure a quality and complete project. Overall project coordination and project oversight will be performed by AFD personnel, specifically the officer assigned to Vegetation Management Programs. In addition, State Parks, U.S. Bureau of Reclamation, and Cal Fire (resource management), will assist in project oversight, monitor project status, collaborate with AFD personnel, and be available as subject matter experts (SME's) as needed.

Funding for this project is focused on the actual ground work to be performed. Minimal direct costs include carsonite markers to mark the project area and

portable sanitation facilities for personnel performing on the project site. Portable sanitation facilities are submitted for purchase. After obtaining “rental” quotations, it was determined that by purchasing rather than renting, a savings of up to 50% of costs would occur. In addition, the collaborative agencies have the abilities to maintain and service such facilities with resources already in place. This would eliminate the need to contract for vendor services to maintain “rental” facilities. Minimal funding for administrative costs is requested for administration of the grant by the Fire Chief.

Project coordination performed by AFD will be “in-kind” and all costs will be covered by AFD.

AFD has an agreement with Cal Fire as a local agency supporting the mission of Cal Fire enabling AFD the use of CDCR hand crews at a significantly reduced rate.

California State Parks, Cal Fire; Forestry & Fire Protection, and U. S. Bureau of Reclamation have committed specialized resources such as environmental, cultural, and wildlife experts during project construction as their collaborative commitment and “in-kind” to this project. The Greater Auburn Area Fire Safe Council will continue to support this project as part of the larger “Project Canyon Safe” program by promoting education through meetings and publications.

SNC PROJECT COSTS

PROJECT BUDGET CATEGORIES	TOTAL SNC FUNDING
Section One- Direct Costs; Contractors to Perform Ground Work, Specialized Equipment Use, Includes Cal Fire CDRC Crews	\$135,330.00
Section Two- Indirect Costs; Boundary Markers for Project Identification and portable sanitation facilities	\$6,200.00
Section Three- Administrative Costs: AFD Grant Administration	\$5,160.00
SNC GRANT TOTAL	\$146,690.00

Although this proposed project is part of the larger American River Canyon Shaded Fuel Break project, funding for future maintenance and enhancement continues to be developed through citizen organizations and funding activities that include other grant opportunities, donations, and fund drives. The main intent is to financially sustain any project into the future. The funding received from SNC for this project will be sufficient to implement the initial project treatment and ease the burden for future maintenance.

As stated prior the goal of the project is to minimize destruction to the City of Auburn from wildfire; preserve our natural and cultural resources, enhance our watershed, support wildlife habitat, and maintain recreational opportunities to the pristine American River Canyon and Auburn State Recreation Area.

Workplan and Schedule

There are five (5) parts that create a workplan for this project. They include the following: Project field assessment for environmental, habitat, or cultural resources; Preparation of crews and vendor personnel in treatment application, mitigation measures, safety practices, and emergency procedures; Actual implementation of ground work; Coordination, oversight, monitoring project work, and collaboration with agency stakeholders; Document, report, administer grant, and serve as point of contact for all information regarding the project. These five areas have been incorporated into a workplan and schedule serving as the timeline for the project.

SNC PROJECT WORK PLAN AND SCHEDULE

DETAILED PROJECT TASKS	TIMELINE
Environmental assessment of project area by AFD, State Parks, and BOR. (Additional review for wildlife habitat, endangered species, and cultural resources) Develop mitigation measures as required	Months 1-2
Establish operations plan: times of work (daylight hours) work locations, and resource needs AFD, Cal Fire, State Parks, and BOR	Months 1-2
Mark and flag project area; project boundaries, hazards, mitigation areas, access locations AFD, Cal Fire State Parks	Months 2-3
Coordinate with Cal Fire and CDCR crews project location, treatment prescription, expectations; work/safety/mitigation procedures, conduct training, and review emergency procedures AFD, Cal Fire	Months 2-4
Secure vendor/contractor for specialized equipment and chipping equipment AFD	Months 2-4
Coordinate with vendor/contractor project location, treatment prescription, expectations; work/safety/mitigation procedures, working with CDCR crew rules, and emergency procedures AFD, Cal Fire	Months 2-5
6 Month Progress Report Due	Months 1-6
Greater Auburn Area Fire Safe Council to conduct public awareness events regarding the project, distribute materials and conduct neighborhood meetings State Parks to sign and post areas where trails exist notifying trail users of project implementation prior to start of work	Months 2-3

DETAILED PROJECT TASKS	TIMELINE
Ground work implemented by Cal Fire CDRC Crews and vendor/contractor Schedule coordinated by AFD May be some restrictions due to: crew availability, high fire danger, greater than normal precipitation, wildlife habitat nesting season, special events; Tevis, Western States 100 Mile, Confluence festival, and as determined Coordination by AFD includes; oversight, monitoring, mapping, photo taking, collaboration with stakeholders, AFD	Months 3-24
Carsonite Markers placed at boundaries of completed project areas 100-200 feet apart GAAFSC, AFD, State Parks	Months 3-24
6 Month Progress Reports Due	Months 7-12 Months 13-18
Grant administration; payment receipt, invoice processing, report/record keeping Fire Chief	Months 1-24+
6 Month Progress Report Final project report- performance measures evaluated Before, during, and after project photos, PR/Media events; site visits, tours AFD Project Completion	Months 19-24 Months 3-24+ Month 24

Restrictions, Technical/Environmental Documents and Agreements

This project is categorically exempt from CEQA under the Notice of Exemption (NOE) filed by the City of Auburn as listed under State Clearing House number: 2011058011. Because this is a collaborative project and part of a larger scale project covering many areas and jurisdictions, California State Parks and U.S. Bureau of Reclamation have performed environmental assessments; CEQA and NEPA, to fulfill internal agency requirements. California State Parks has a NOE on file pertaining to this project while U.S. Bureau of Reclamation has completed the Categorical Exclusion Checklist resulting in an Exclusion Category: C. 4; "allowable minor construction activities". Even with completed assessments, each agency has the ability and retains the right to conduct additional assessments at anytime during the project period. Typically the U.S. Bureau of Reclamation will have an area assessment performed by U.S. Fish & Wildlife prior to start of work in the event there are any last minute wildlife habitat concerns. State Parks will typically conduct field reviews using agency biologists for any wildlife concerns, primarily during bird species nesting season. The AFD will utilize Community Development Department and Cal Fire forester personnel to assess "heritage" tree concerns in the project areas as well. Each agency fully understands that whatever additional personnel costs associated with such reviews will be the responsibility of that agency and is an agency "contribution" to the success of the project.

Since this project involves stakeholders at every level; local, state, and federal, a set of Mitigation Measures and Conditions have been developed by all agencies collaboratively to be used on the American River Canyon Shaded Fuel Break and will be applied to this project.

There are no agency permits at any level required to implement the prescription for this project.

The authority for AFD to conduct fuels treatment on U.S. Bureau of Reclamation lands is derived from the Memorandum Of Understanding (MOU) between the U.S. Bureau of Reclamation and Auburn City Fire Department. This MOU was a result of the need to reduce the risk of wildfire to the Auburn community and natural resources and the inability of the U.S. Bureau of Reclamation to implement and sustain fuel reduction projects. Since implementing the MOU several projects have been conducted on U.S. Bureau of Reclamation lands under the coordination of AFD using volunteer labor, private vendors, and CDCR crews.

Organizational Capacity

The Auburn City Fire Department is a combination organization with full time personnel augmented by volunteer personnel serving on a “call-back” basis. Administration and program delivery for the department is coordinated through full time staff. For this project the fuels management officer will be assigned to coordinate and oversee project activities; the Fire Chief will oversee all aspects of the grant administration. The organization has knowledgeable and experienced personnel in the area of fuels reduction since this is an integral part of our mission and existing in the WUI. Knowledge has been obtained by way of formal training/education through various programs offered by State and Federal training agencies specific to fuels and healthy forests. Experience has been gained through the cooperative working relationship with Cal Fire, State Parks, Bureau of Land Management, and U. S. Bureau of Reclamation in the development of the prescription and many past project implementations over several years. There are a number of SME’s within the state and federal stakeholder agencies in forestry, cultural, archeological, and environmental fields that are available to assist AFD when and as needed during any phase of project implementation.

Cal Fire CDCR hand crews are well versed in the American River Canyon Shaded Fuel Break prescription and have been applying this treatment to both private and public lands over several years. Private contractors will be evaluated on their knowledge of the prescription, safety work practices, understanding of mitigation measures, past local experience on similar projects, and preferably a small local business. Most local contractors are familiar with the prescription and have performed through other project programs this same application of fuels treatment.

Overall, AFD has coordinated and implemented this same project treatment to approximately 120 acres through various fuel projects. This includes project review with crew personnel, safety briefings, directing crew supervisors, monitoring the project at the field level, implementing mitigation measures as necessary, and collaborating with stakeholders and SME’s.

The primary objective of the Project Coordinator will be to ensure the prescription is applied appropriately and work is performed according to schedule to meet the performance measure of 60 acres treated as prescribed in the scheduled time of 24 months or less.

Cooperation and Community Support

The initial project of an 11 mile Shaded Fuel Break was originally developed through a collaborative effort between the U.S. Bureau of Reclamation, California State Parks, Cal Fire, and the City of Auburn Fire Department. A prescription was developed by the agencies to address the need for fuels reduction while taking into consideration environmental and recreational issues. Each agency has specific areas of interest that include protecting the environment, protecting development, and providing recreational opportunities. The project known as the American River Canyon Shaded Fuel Break was identified and incorporated into several plans of which include: the Auburn State Recreation Area Fire Prevention Plan, The Community Wildfire Protection Plan, The Greater Auburn Area Fire Safe Council Strategic Fire Plan, and the Placer County Local Hazard Mitigation Plan. The collaborative agencies are all in support of this proposed project. Initially, the City of Auburn coordinated implementation on private lands while U. S. Bureau of Reclamation and State Parks coordinated implementation on public lands. Funding for treatment on private lands came from the actual property owners. Funding for public land treatment consisted of agreements coordinated through the federal and state agencies. When such agreements were eliminated in 2009, so was the treatment on public lands of which increases the risk to the City of Auburn and the private treated lands.

In 2010 the City of Auburn and U. S. Bureau of Reclamation entered into a MOU that gives permissions to the city to perform fuels treatment on public lands. The next step was to seek community support in the way of actual ground work and fund raising to implement and maintain the project.

The Greater Auburn Area Fire Safe Council developed the campaign of "Project Canyon Safe". A "grassroots" effort of citizens to take on the implementation and maintenance of the American River Canyon Shaded Fuel Break project on public lands. May 22, 2010 was the first "work day" declared on a specific location within the Shaded Fuel Break. Within a 7 hour period, 9 acres were treated by 114 volunteer individuals, 158 tons were chipped by private contractors donating their time and resources, no injuries occurred, and monetary donations were made to continue the support of the American River Canyon Shaded Fuel Break. On July 9, 2011, the second annual "work day" took place involving 118 volunteers, clearing 4.5 acres in 4 hours, and 119 tons were chipped by vendors donating their time and equipment.

The Foundation "Project Canyon Safe" was established in May 2010 where funds; through donation and fund raising, are deposited and only to be used for project implementation on the Shaded Fuel Break. There has been approximately \$25,000 collected with an additional "up to" \$75,000 matching as a pledge from a private foundation. Such funds are used for chipping services; rental and contracting specialized equipment, contracting for hand work, and other related resources used on fuel reduction projects within the American River Canyon Shaded Fuel Break.

After the May 22, 2010 event the GAAFSC and AFD conducted a number of community meetings in an attempt to organize neighborhoods to "adopt" a specific section of the American River Canyon Shaded Fuel Break. There are

approximately 7 organized groups raising funds and performing ground work similar to the May 22 event. Approximately 90 acres have been treated through citizen volunteer efforts on public lands. Sustainability is a concern for citizens and is the incentive to continue ground work and fund raise. By “adopting” a section of the project a sense of ownership and pride is achieved knowing that efforts reduce the risk to the community and the environment of which directly benefits those that participate. (There is a separate document “*Project Canyon Safe*” of which identifies all areas of the American River Shaded Fuel Break, neighborhood “adopted” sections, and status).

Letters of support for this project have been received from: The Greater Auburn Area Fire Safe Council, California State Parks, Cal Fire, U.S. Bureau of Reclamation, City of Auburn Fire Department, Senator LaMalfa, Senator Gaines, and Assembly Member Gaines.

Long-Term Management and Sustainability

Once initial treatment is applied AFD will assume responsibility of the sustainability; maintenance component. This project area is already identified as part of the "Project Canyon Safe" campaign and is included in work projects that maintain the entire American River Canyon Shaded Fuel Break. Future funding sources will include the "Project Canyon Safe" Foundation, volunteer labor, vendor donated labor, donated equipment use, and future funding the U. S. Bureau of Reclamation receives to perform fuels treatment. Currently the U. S. Bureau of Reclamation entered into a multi year contract with the California Conservation Corps to perform fuels management on public lands, primarily maintenance. Priority work areas are those with established projects; initial implementation, of which this project would receive priority for future maintenance. By using the above mentioned methods, sustainability will be achieved using cost effective methods, collaborated efforts, and various resources. AFD will continue to seek grant funding for all areas of the project as well as provide resources for coordination and oversight.

Coordinated by AFD and the Greater Auburn Area Fire Safe Council (GAAFSC), all stakeholders collaborate to address the needs of the American River Canyon Shaded Fuel Break and establish priorities, work projects, and locations on an annual basis.

Input regarding the needs and areas of work on the Shaded Fuel Break come from citizens of the community through the GAAFSC. The GAAFSC will identify funding needs, funding sources, and submit proposed work projects to AFD (this program and process is already in place). AFD will collaborate with stakeholders, manage, and oversee any and all projects applied to public lands to ensure performance measures are achieved.

The American River Canyon Shaded Fuel Break, specifically the proposed project as describe here, is a model program in multiple ways. Some include Federal, State, and Local governmental agencies collaborating together to determine needs, design a project, implement ground work, and contribute in their own ways with the limited resources each has to offer. In addition, the campaign of "Project Canyon Safe" has brought in the element of the community of which can greatly contribute in ways public agencies cannot. Stakeholders in this project are everyone! The partnership is based upon what is best for the community which includes our development and natural resources and allows for innovative ways to achieve desired results.

Performance Measures

Number and Diversity of People Reached

There are two primary interest groups reached through this project: public agencies and citizens.

Citizens will be reached through community meetings and written publications. The number of participants at meetings will be recorded, the number of publications distributed will be recorded, and published articles and media events will identify the approximately total number reached based on the median used i.e.; newspaper circulation, radio broadcast area, etc.

Public agencies include AFD, Cal Fire, State Parks, and U.S. Bureau of Reclamation, all of which have diverse concerns in the development and implementation of the project.

AFD- The protection of life and property to the community.

Cal Fire- The reduction of fuel loading to potentially increase the probability of success during fire suppression activities.

State Parks- Enhancement of the wildlife habitat and recreational opportunities.

U.S. Bureau of Reclamation- Preserving public lands for their intended use.

Each agency will have a role throughout the entire project to ensure their areas of interests are met. As part of the final report upon completion of this project, each agency representative will be asked to submit written documentation on how the project met agency “missions” or “objectives”.

Dollar Value of Resources Leveraged for the Sierra Nevada

A total dollar value of \$121,920.00 is identified as “in-kind” contributions for this proposed project. This means that for every dollar of SNC funding used, an additional \$.80 is contributed to the project. This will be captured and reported through the grant administration process and progress reports.

Matching Fund Source	Description	Amount
Auburn City Fire Department	Wage, Benefits, and supplies for Project Coordinator	\$16,700.00
Cal Fire- CDCR Hand Crews	CDCR Hand Crews to perform ground work; reduced rate	\$104,720.00
Auburn City Fire Department	Misc. supplies; flagging, fuel, office supplies, photos	\$200.00
Greater Auburn Area Fire Safe Council	Fire Safe Council members volunteering time to distribute handout materials and conduct neighborhood meetings	\$300.00

Number and Type of Jobs Created

No new or temporary jobs will be created as a result of this project. However, there is a component that provides opportunity for private contractors to perform work. It is the desire of AFD to seek local contractors that are familiar with similar type projects, have a compassion for doing such work, and are interactive in the community. This may stimulate economic prosperity at the local level to some degree.

Number of New, Improved, or Preserved Economic Activities

The project area is primarily used for recreational purposes; hiking, biking, running, and horseback riding. The Auburn State Recreation Area (ASRA) is used by individuals and organizations alike and is host to several world known events that attract interest from all over the world. This project will preserve and enhance recreational use and continue to stimulate economic activity at the local level as well as regionally. During the project implementation, State Parks will be asked to best obtain use in numbers for recreational activity within the project area. This will provide some insight as to numbers utilizing the area for recreation of which has an impact on the economy in the immediate area.

Acres of Land Improved or Restored

A total of 60 acres is targeted for fuels treatment in this project in an effort to reduce the risk of catastrophic wildfire to the Auburn community. The 60 acres to be treated have been identified as priority treatment based on the Very High Fire Hazard Severity Zone designation by Cal Fire; Department of Forestry and Fire Protection through the Fire and Resource Assessment Program (FRAP) and as adopted locally under AB 337 by the City of Auburn.

The reporting value will be the actual number of acres treated upon completion of the project. For documentation purposes and data collection, the following will also be recorded: trees per acre removed, percentage of tree canopy created, and tonnage of "chipped" materials (a calculated measurement, not a weighted measurement).

Although the proposed project will enhance wildlife habitat and enhance watershed value, it is difficult to describe a performance measurement in this area. However, this project may serve and will be made available as a study area to any organization interested in obtaining such measurable results through study or research.

Acres Treated	Priority Rating¹	Source of Prioritization²	Purpose
60	High	Cal Fire, FRAP	Risk Reduction of Wildfire

¹ As defined in the Local Hazard Mitigation Plan, Community Wildfire Protection Plan, and Greater Auburn Area Fire Safe Council Strategic Plan

² As referenced in the Local Hazard Mitigation Plan, Community Wildfire Protection Plan, and Greater Auburn Area Fire Safe Council Strategic Plan

Benefit Analysis

Although not a true performance measurement, analyzing the project for benefits identifies the importance in a different manner. The following are some direct benefits:

Benefit Cost Analysis- Values at Risk

There is an estimated \$81,790,242.00 in structure valuation in the immediate Very High Fire Hazard Severity Zone of where the project is proposed. With the funding request of \$146,690.00, the benefit of every SNC dollar will provide protection for \$557.00 worth of value at risk or a 1:557 ratio.

(Source: 2010 Local Hazard Mitigation Plan)

Enhanced Watershed

Although an in-depth analysis has not been performed for this project regarding watershed, using non scientific theory that if 40% of the vegetation were removed roughly 40% additional precipitation would be directed into the watershed instead of being absorbed by dense vegetation in a given area. This could ultimately add to the watershed value as greater producing.

Potential Elimination of Silt and Erosion

It is well known that catastrophic wildfire leaves an area very prone to erosion which can lead to landslide, siltation in the watershed system, and cause damage to improvements. As it is very difficult to determine exact impacts, there is a benefit of preventing wildfire damage that may ultimately prevent long term effects on watershed use albeit for drinking, agriculture, or recreation.

Greenhouse Gas Effects- Smoke Pollutants

Similar to a benefit cost analysis, but without the ability to put a dollar amount on such impacts, the air pollutants from a wildfire can impact the economy, the ecology system, and may create long term health issues for residents. If you recall a few years ago due to wildfires in the Foresthill area, the Tevis Cup Ride and the Western States 100 Mile events were cancelled, not because of fire danger, but due to smoke. Not only was this a recognized health issue, but created an economic impact to our area.