GRIZZLY FLATS COMMUNITY WILDFIRE PROTECTION PLAN REVIEW and UPDATE

MARCH 2012

Prepared by:

Grizzly Flats Fire Safe Council

Signature Page

The agencies listed below have reviewed this 2012 Review and Update of the Grizzly Flats Community Wildfire Protection Plan (**CWPP**) and by their signature acknowledge and approve its content. This document constitutes the Grizzly Flats 2012 CWPP as a single document.

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Robert Gill Pioneer Fire Protection District	Title	Date
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Approved and adopted by a vote of the Grizzly Flats Fire Safe Council, March 3, 2012.

Preface

Grizzly Flats was identified in the Federal Register as a Community at Risk and is the location of one of seven Healthy Forest Initiative Environmental Assessment Demonstration Projects in the United States. The Last Chance Fuel Reduction Project (**LCFRP**) is one of the national projects which is located on National Forest lands adjacent to Grizzly Flats and was selected because of heavy fuel loading and topography. Past fire history indicates a high likelihood of a major fire threatening Grizzly Flats.

The community of Grizzly Flats is located in a Wildland Urban Interface (**WUI**). In 2002, the Grizzly Flats community residents came together to discuss living in the heart of a high fire hazard area. In an effort to prevent or minimize a catastrophic wildland fire to their community, they became organized with a collective focused effort and designated a volunteer group of people, who in turn created the <u>Grizzly Flats Fire Safe Council</u> (**GFFSC**) in 2004. The GFFSC, under the guidance of the El Dorado County Fire Safe Council (**EDCFSC**), GFFSC's parent organization, and the requirements of CAL FIRE, created its first <u>Community Wildfire Protection</u> <u>Plan</u> (**CWPP**) in 2006. The CWPP defines the community's priorities for the protection of the community's assets from wildfire.

Once this CWPP update document has been approved by the listed Agencies, the <u>2006 Grizzly Flats CWPP</u> shall be appended to it and together they shall be the <u>2012 Grizzly Flats CWPP</u> as a single document.

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Completed GFFSC 2006 CWPP Fuel Treatment Projects

Since 2006, the GFFSC has worked diligently and with focus to encircle the Grizzly Flats community with a continuous shaded fuel break. The Council has been able to accomplish all of its fire prevention goals. The completed 2006 CWPP Projects are listed below.

Project No.	Project Type	Grant Funding	GFFSC Funding Match	Start Date	Completion Date	CWPP	Treatment Method	Treated Acres
GF-1	Primary Evacuation Route	\$234,731	\$42,919	8-2007	11-2008	Yes	Hand Treatment	128
GF-2	Fuels Treatment, School	N/A	Yes		8-2006	Yes	Hand Treatment	1
GF-3	Secondary Evacuation Route	Incl. in GF-1	Incl. in GF-1	8-2007	11-2008	Yes	Hand Treatment	Incl. in GF-1
GF-4	Fuels Treatment	\$211,341 (incl'g. Prop. 40: \$80,000)	\$18,000	8-2007	6-2008	Yes	Mastication	100
GF-5	Fuels Treatment	\$363,693	\$76,484	10- 2009	5-2010	Yes	Mastication	190
GF-6/7	Fuels Treatment	\$338,150	\$56,000	7-2011	10-2011	Yes	Mastication	160
	Totals =	\$1,147,915	\$193,403 (16.8%)					579

Table #1 --- Summary of Completed GFFSC 2006 CWPP Fuel Treatment Projects

Purpose of Review and Update

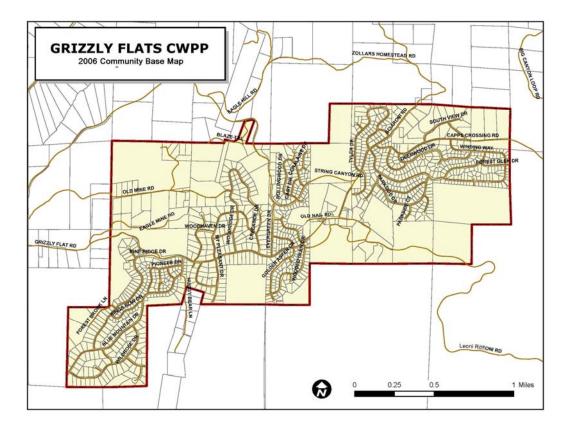
The purpose of this review is to determine (1) if the specific plan of the CWPP has been met, as set forth in the 2006 CWPP, (2) establish future fire protection needs, and (3) establish a plan for maintenance of those already-treated areas so that the Shaded Fuel Breaks and Evacuation Route can be maintained for the continued safety of the community of Grizzly Flats.

The original 2006 CWPP specifically sought to:

- Provide the residents with an external evacuation route that would improve the current situation.
- Treat fuels along collector roads in such a manner so they can be used as evacuation routes.
- Provide a greater degree of fire safety to the school and the Grizzly Flats Community Services District (GFCSD).
- Provide Shaded Fuel Breaks on the south, west and northern flanks of the subdivision.
- Provide a chipper program which allows the community to better plan disposal efforts.
- Work with the Pioneer Fire Protection District (PFPD) to build a stronger Defensible Space Program (includes LE-38) resulting in fire safe clearance on individual lots.
- Lay the foundation for greater supportive efforts between the Grizzly Flats Fire Safe Council (GFFSC) and the GFCSD to provide water supplies to the community, including water needed for fire suppression purposes.

2006 CWPP Planning Area Boundary

The original planning area for the 2006 CWPP is the same as the GFCSD boundary.



Map #1 --- 2006 CWPP Planning Area Boundary

Completed Projects and Completed Goals

Grizzly Flats 1 (GF-1), Page 35, 2006 CWPP

The object of the treatment was to reduce fuels along the primary evacuation route road into Grizzly Flats for safe ingress and egress. This project was located on private properties along Grizzly Flat Road and String Canyon Road from Cole's Station to the intersection of String Canyon Road and Sciaroni Road.

GF-1 and GF-3 were combined into the Evacuation Route Project. Roadside treatment did not extend as far as Cole's Station as proposed, but did treat to Caldor Road. Treatment, of course, relies on permission of the property owner.

Grizzly Flats 2 (GF-2), Page 37, 2006 CWPP

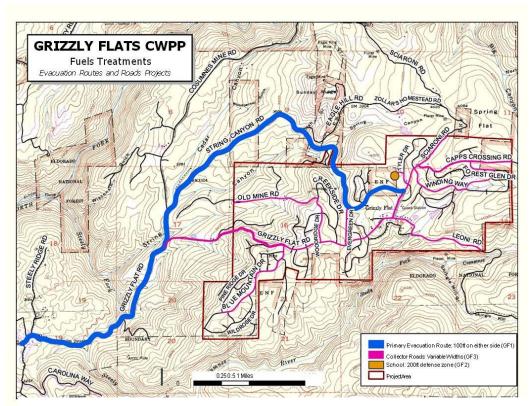
The object of the treatment was to make Walt Tyler School (formerly known as Grizzly Pines School) a potential safe area ("Shelter in Place") if evacuation of the school is not possible. This was work the GFFSC volunteers did as contributed work in support of defensible space and structure protection, as well as clearing the Community Service District's property.

This project was accomplished with volunteer labor and completed in mid-summer, 2006.

Grizzly Flats 3 (GF-3), Page 39, 2006 CWPP

This project was to reduce fuels along the secondary evacuation route roads within Grizzly Flats for safe ingress and egress. The roads all abut private properties, requiring permission from the various property owners involved in the project. GF-1 and GF-3 were combined into the Evacuation Route Project.

This project was bid and completed in November, 2008.



Map #2 --- GF-1, GF-2 and GF-3 Projects

Grizzly Flats Shaded Fuel Break 4 (GF-4), Page 42, 2006 CWPP

This project was all on private property. Located on the western side of the community, it was deemed an important priority given the wind patterns along the canyons of the Steely Fork of the Cosumnes River, and tied into the efforts previously completed by the United States Forest Service (USFS) on the Last Chance Fuel Reduction Project in the Eldorado National Forest.

This project was bid and completed in June, 2008 (see Map #3).

Grizzly Flats Shaded Fuel Break 5 (GF-5), Page 44, 2006 CWPP

This project connected to GF-4 on the northwesterly side of the community. It provides continued fire protection as it was the next step in the development of the Shaded Fuel Break Projects, which encircle the community, as set forth in the 2006 CWPP.

This project was bid and completed in May, 2010 (see Map #3).

Grizzly Flats Shaded Fuel Breaks 6 and 7 (GF-6/7), Pages 46-48, 2006 CWPP

GF-6 and GF-7 (GF-6/7) were combined and completed at the same time. The GF-6/7 project is contiguous with GF-5. With the completion of GF-6/7 fuel break, the Shaded Fuel Break Projects, proposed in the 2006 CWPP, were finished. The original proposed mapped area for GF-6/7 was amended due to a lack of property owner participation and a small area in GF-7 which will be treated by the USFS

This project was bid and completed in October, 2011 (see Map #3).

Provide Chipper Program

The EDCFSC provides a Chipping Program through grant funding. The GFFSC supports and promotes this program with advertising via the GFFSC's Newsletter and posters. This program assists in the reduction of fire fuels in the community.

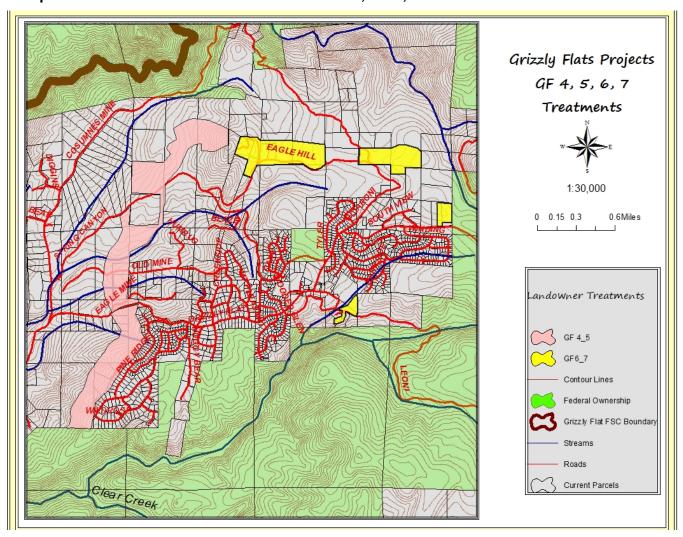
Work With Pioneer Fire Protection District to Build Stronger Defensible Space

The GFFSC has an inspection program which is manned by trained volunteers from the community. They have worked with the PFPD in performing inspections. Additionally, the GFFSC created and mailed to all property owners in the Grizzly Flats community a Wildland Fire Awareness article providing information on defensible space. The PFPD has participated in GFFSC workshops for educating the community about defensible space techniques (Appendix #1).

Lay A Foundation For Greater Support Between the GFFSC and the GFCSD

A member of the GFCSD Board of Directors serves on the Fire Safe Council. The council receives monthly reports on the status of the GFCSD. The GFFSC is supportive of the GFCSD's to line the reservoir and secure additional water for the community. Additionally, the GFFSC has implemented an "Adopt A Hydrant" program which ensures the fire hydrants are free from snow in the winter and accessible year-round.

Completed 2006 CWPP Shaded Fuel Breaks - GF-4, GF-5, and GF-6/7

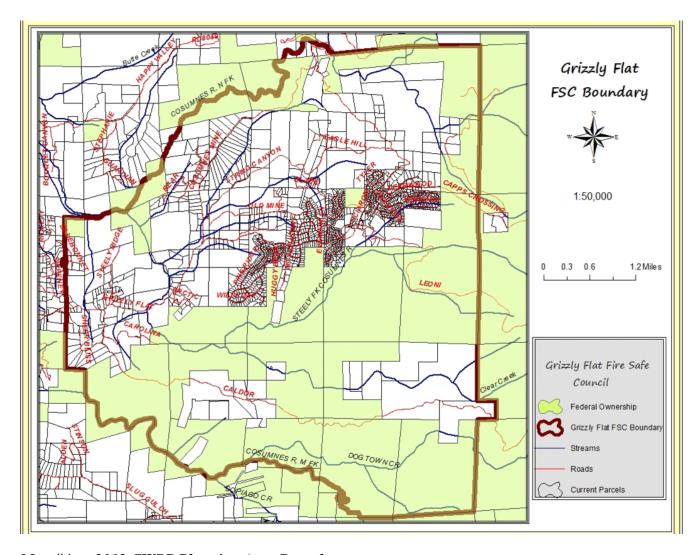


Map #3 --- Completed 2006 CWPP Shaded Fuel Breaks

Amendment #1 - 2012 CWPP Planning Area Boundary

The original boundary of the Grizzly Flats Fire Safe Council and project areas is primarily the same as the Grizzly Flats Community Services District.

On March 1, 2008 additional areas were added. Due to interest in the GFFSC and their fuel reduction projects, residents outside of the original council planning area boundary asked to be included in the Grizzly Flats Community Base Map. These entities were Leoni Meadows and an area identified as Westerly Neighbors.



Map #4 --- 2012 CWPP Planning Area Boundary

Amendment #2 - Shaded Fuel Break Project

Grizzly Flats Shaded Fuel Break 8 (GF-8)

This project abuts land west of GF-4 and is best described in the following map (Map #5). The project was made available with funding left over after the completion of GF-6/7. The GFFSC received permission from the California Fire Safe Council to utilize these funds to complete GF-8.

Since a fire event will most likely come from a southwesterly direction, due to the prevailing winds out of the Steely Fork of the Cosumnes River, the 150 acres of GF-8 Project has added a deeper level of fire protection to the community.

GF-8 Contracted Scope of Work

PROJECT LOCATION

The project area is near a rural residential development located on a ridge top bordered by the US Forest Service on the east and south and active timber production to the west and north. Elevation ranges from 3,500 to 4,000 feet. There are no watercourses more significant than a Class III within the project area designated for this grant with the exception of Steely Fork located on the western boundary of the project.

This project entails removing un-merchantable sized trees and brush to create a modified shaded fuel break. No ground disturbing equipment (i.e. bulldozer or excavator pushing soil) will be utilized. The shaded fuel break will be constructed using a combination of treatments including mechanical, hand crews utilizing hand tools, and chipping. The type of treatment will depend on topographic variables, vegetation cover, and abilities of the contractor.

The preferred fuel reduction treatment is mechanical mastication with hand limbing of residual trees to 8 feet above the ground. The fuel break will be constructed using a combination of treatments described below.

The objective of the treatment is to reduce surface and ladder fuels and to protect resources from a wildfire.

PRESCRIPTION / TREATMENT

The GF-8 shaded fuel break will be constructed as a linear feature 200 to 500 feet wide on the north and south side of Grizzly Flat Road, for a total of 220 acres, with possibly more acres as landowners sign agreements. Shaded Fuel Breaks are generally constructed using a combination of the treatments described below. The object of the treatment is to reduce fuels in high surface fuel areas to protect structures from wildfire. Permission has not been granted from all the private landowners at this point so the actual project layout is not complete and the size of the project may be reduced depending on the private landowners' responses.

Mastication: The use of rubber tired or tracked vehicles to cut, chip, and scatter all shrubs and small trees up to 10" diameter at breast height, 41/2 feet above the ground on the uphill side (dbh). Trees should be spaced approximately 20 feet between the boles. The exception to this spacing is along the south side 200 feet above the Grizzly Flat Road were the spacing will be 10 feet between the tree crowns to prevent a crown fire. Trees in order of importance and to be retained on site if possible: 1) Sugar Pine, 2) Dogwood, 3) Ponderosa Pine, 4) Doug Fir, 5) Black Oak, 6) Cedar and 7) White fir. Retention of these trees is important but meeting the spacing requirements is still the important consideration. All trees not removed will be limbed up in the project area up to 8 feet above the ground surface. Brush cover should be reduced by creating a mosaic of treated and untreated shrubs. Openings between shrubs should be twice the height of the shrubs and 70%-90% of the shrubs should be treated. Brush that is treated should be cut to the maximum of 6 inches in height. No individual pieces of cut material should be greater than 4 feet long. All masticated stumps should be cut to within

6 inches of the ground. No debris should average more than 6 inches in depth over the entire project area. All cut vegetation will be kept within the unit boundaries. Any cut vegetation falling into ditches, roads, road banks, trails, adjacent units or adjacent parcels not within the project boundaries shall be immediately removed.

Hand Thin: Hand thinning, chipping and pile burning should be accomplished using a hand crew with chainsaws. The contractor will be required to cut material up to 8"dbh with 20'x20' spacing between leave trees. All brush species will be cut. All uncut trees will be limbed up to8 feet above the ground and limbed material treated by chipping or piling for burning. Trees in order of importance and to be retained on site if possible: 1) Sugar Pine, 2) Dogwood, 3) Ponderosa Pine, 4) Doug Fir, 5) Black Oak, 6) Cedar and 7) White fir. Retention of these trees is important but meeting the spacing requirements is still the important consideration.

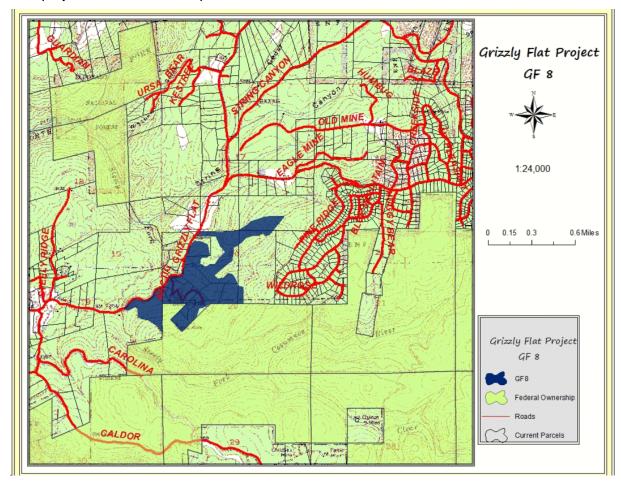
Chipping: Chipping is the preferred method of disposal of hand cut material and will be used as an alternative to burning near homes and where access permits the chipper to be brought close to the cutting area. The chips will remain on site and be spread so that they are no deeper than 6 inches.

IDENTIFICATION OF PROTECTED SPECIES OR OTHER CRITICAL RESOURCES

With all environmentally sensitive areas, identification and avoidance during project implementation is important. Should any sensitive resources be found during project implementation, the area should be avoided until the appropriate agencies review the area in question

All environmental documents, biological evaluation and archeological findings, and Forest Practice Rules will be adhered to by the contractor.

This project was bid and completed in December, 2011.



Map #5 --- GF-8 Fuels Treatment Project

New Fuels Treatment Areas – Treat Missed Areas of Prior Projects

Grizzly Flats 9 (GF-9), Evacuation Route Treatments – Untreated Areas of GF-1 and GF-3

When the GF-1 and GF-3 Evacuation Route fuel treatment work was coordinated, not all the designed treatment work was done. Several of the property owners would not provide the required permission to do treatment work on their land. The work described and proposed in GF-9 is to re-contact those previously non-participating property owners with a second attempt to treat the missing sections of the primary and collector evacuation routes. Written permission will be required to complete this work.

GF-9 Scope of Work

PRESCRIPTION / TREATMENT

Hand Thin: Hand thinning and chipping shall be accomplished using a hand crew with chainsaws cutting material up to 6" dbh with 20'x20' spacing between leave trees, unless otherwise designated by the landowner. Leave trees shall be limbed up to 8 feet. All brush shall be cut unless otherwise designated by the landowner. All dead and down material greater than 3 inches in diameter shall be left for fire wood. All cut material and down material less than 3 inches in diameter shall be chipped.

Chipping: Chipping redistributes forest vegetation that is cut by mechanical and hand thinning. The chips may be removed from the site to be converted to energy or scattered throughout the project area at a depth no greater than 6 inches.

TREATMENT LOCATIONS

Primary Evacuation Route Fuels Treatment (Former 2006 CWPP Project GF-1)

Project shall treat brush and small trees (less than 6" inches in diameter) for 30 feet from edge of pavement on both sides of String Canyon Road and Grizzly Flat Road, from Sciaroni Road to Caldor Road. Trees shall be pruned up to 8 feet.

Collector Evacuation Route Roads Fuels Treatment (Former 2006 CWPP Project GF-3)

Project shall treat brush and small trees (less than 6 inches in diameter). Trees shall be pruned up to 8 feet.

The evacuations route fuels treatment locations are listed in the following chart. The Primary Evacuation Route, except for Logan's Grade, and the Collector Evacuation Route Roads may overlap the 100 foot fuels required treatment area of the California Public Resource Code, Section 4291. This project is expected to ensure some fuels treatment will occur in a timely manner once homeowner agreements are obtained.

Prior Project Locations	Primary or Collector	Roadside Clearing Distance From Edge of Pavement (ft)	Acres	Evacuation Route Roads (See Map #2)
GF-1	Primary	30'	40	String Canyon Road
	•	20'	4.0	Grizzly Flat Road (Caldor Road to String Canyon Road)
		20'	1.3	Woodridge Drive (Grizzly Flat Road to Old Mine Road)
		20'	1	Tyler Road (Sciaroni Road to Walt Tyler School)
		20'	3.1	Sciaroni Road (String Canyon Road to GFCSD)
GF-3	Collector	30'	2	Sciaroni Road (Grizzly Flat Road to String Canyon Road)
Gr-3	Collector	20'	3.8	Old Mine Road (address 5250 to Creekside Drive)
		20'	4.7	Leoni Road (Grizzly Flat Road to Wooded Glen Drive)
		20'	1.2	Grizzly Flat Road (Community Cemetery to Leoni Road)
		20'	4.8	Grizzly Flat Road (Blue Mountain Road to Community Cemetery)
		30'	15	Grizzly Flat Road [Logan's Grade] (Blue Mountain Road to Eagle Mine Road)
		30'	4	Grizzly Flat Road [Logan's Grade] (Eagle Mine Road to String Canyon Road)
		20'	4	Blue Mountain Drive (Pine Ridge Drive to Grizzly Flat Road)
		20'	1.7	Evergreen Drive
		20'	0.75	Creekside Drive and Wooddridge Drive (Old Mine Road to Grizzly Flat Road)
		30'	4.4	Capps Crossing Road (National Forest Boundary to Sciaroni Road)
		20'	7.5	Winding Way (Meadow Glen Drive to Capps Crossing and Meadow Glen Drive to Sciaroni Road)

Table #2 --- GF-9 Project: Evacuation Route Roads

The GF-9 project will depend upon grant funding availability. No environmental documents will be necessary as all were previously provided with the GF-1 and GF-3 project documents.

Treatment Method & Other Items of Cost	Cost / Acre (\$)	Acres	Line Item Cost (\$)
Hand Cut and Chip	2,000	99.25	198,500
Project Management			1,500
Environmental Documents			0
	Total Esti	mated Cost =	200,000

Table #3 --- GF-9 Estimated Project Cost

Grizzly Flats 10 (GF-10), Missing Shaded Fuel Break Sections

As a part of the 2006 CWPP GF-5 and GF-6/7 Shaded Fuel Break planning and coordination, much effort and time was spent obtaining individual private property owner permission to do the Shaded Fuel Break treatments. Despite the extra ordinary efforts to coordinate with the property owners for their permission to treat, there were some property owners who chose not participate.

There are approximately 50 acres of untreated private property in GF-5 and GF 6/7 as a result of the non-participating property owners.

It is speculated these property owners, now that they have seen the GF-5 and GF-6/7 finished projects, will recognized the fire prevention value for not only themselves but also for the community and be agreeable to participate in this GF-10 fuel reduction project.

The project will depend upon grant funding availability. No environmental documents will be necessary as all were previously provided with the GF-5 and GF-6/7 project documents.

Treatment Method & Other Items of Cost	Cost / Acre (\$)	Acres	Line Item Cost (\$)
Hand Cut and Chip	1,600	50	80,000
Project Management			4,000
Environmental Documents			0
	Total Esti	mated Cost =	84,000

Table #4 --- GF-10 Estimated Project Cost

Grizzly Flats 11 (GF-11), Shaded Fuel Break Maintenance - Completed Projects

The 2006 CWPP recommends a 5 to 7 year maintenance schedule of the created Shaded Fuel Breaks. This recommendation needs to be recognized and implemented, understanding that the time frames may vary due to weather and growth of the understory.

This work, while required, is not expected to be extensive. The work will, however, need to be completed in accordance with the original GF-4 and GF-5 project Scopes of Work. A site review of each property shall be done to evaluate the maintenance needs and costs for the project.

This is an important project for maintaining the long term fire prevention and safety of the community.

The project will depend upon grant funding availability. No environmental documents will be necessary as all were previously provided with the GF-4 and GF-5 project documents.

Treatment Method & Other Items of Cost	Cost / Acre (\$)	Acres	Line Item Cost (\$)
Hand Cut and Chip	300	50	15,000
Project Management			4,000
Environmental Documents			0
	Total Esti	mated Cost =	19,000

Table #5 --- GF-11 Estimated Project Cost

New Fuels Treatment Areas – Shaded Fuel Breaks

<u>Grizzly Flats 12 (GF-12) - Fuels Reduction Project To Enhance Community Fire</u> Protection

GF-12 Scope of Work

PROJECT DESCRIPTION

The GF-12 Shaded Fuel Break will be constructed as a linear feature 200 to 500 feet wide on the south side of the Grizzly Flats' old town site (Map #6) and will contain a total of 75 acres. Shaded Fuel Breaks are generally constructed using a combination of the treatments described below. The object of the treatment is to reduce fuels in high surface fuel areas to protect structures from wildfire. Permission has not been requested from the private landowners as of the preparation of this document, so the actual project layout is not complete and the size of the project may be changed depending on the private landowners' responses.

PRESCRIPTION / TREATMENT

Mastication: The use of rubber tired or tracked vehicles to cut, chip, and scatter all shrubs and small trees up to 10" diameter at breast height (dbh), 4 1/2 feet above the ground on the uphill side, on site. Trees shall be spaced approximately 20 feet between the boles. Trees in order of importance and to be retained on site if possible: 1) Sugar Pine, 2) Dogwood, 3) Ponderosa Pine, 4) Doug Fir, 5) Black Oak, 6) Cedar and 7) White Fir. Retention of these trees is important, but meeting the spacing requirements is of a greater importance. All trees not removed shall be limbed up to 8 feet above the ground surface.

Brush cover shall be reduced by creating a mosaic of treated and untreated shrubs. Openings between shrubs shall be twice the height of the shrubs and 50-70% of the shrubs shall be treated. Brush that is treated shall be cut to the maximum of 6 inches in height. No individual pieces of cut material shall be greater than 4 feet long. All masticated stumps shall be cut to within 6 inches of the ground. No debris shall average more than 6 inches in depth over the entire project area. All cut vegetation shall be kept within the unit boundaries. Any cut vegetation falling into ditches, roads, road banks, trails, or adjacent units shall immediately be removed.

Hand Thin: Hand thinning and pile burning shall be accomplished using a hand crew with chainsaws. The contractor shall cut material up to 10" dbh with 20'x20' spacing between leave trees. All brush species shall be cut. All uncut trees shall be limbed up to 8 feet above the ground and limbed material treated by chipping or piling for burning. Trees in order of importance and to be retained on site if possible: 1) Sugar Pine, 2) Dogwood, 3) Ponderosa Pine, 4) Doug Fir, 5) Black Oak, 6) Cedar and 7) White Fir. Retention of these trees is important but meeting the spacing requirements is of a greater importance.

Piling and Pile Burning: All dead and down material greater than 1 inch in diameter and up to 3 inches in diameter shall be piled for burning. Piles shall be constructed compactly beginning with a core of fine fuels and air spaces to facilitate complete combustion. Piles shall be constructed no taller than 5 feet or wider then 6 feet in diameter and located away from trees to prevent damage to the residual trees when piles are burned. Each pile shall be encircled with fire-line to mineral soil and 2 to 3 feet wide. Piles shall be covered with 4'x4' square water resistant paper to cover the fine material in the center of the piles.

Contractor shall obtain all necessary permits for burning, and burn the piles at the direction of the project coordinator after the rainy season has started. Contractor shall have fire suppression equipment on site during the burning and shall provide fire suppression equipment for patrol. As the piles burn down, the contractor shall push the unburned material at the inside of the fire-line into the pile in order to burn all pile residual.

Chipping: Chipping shall be used as an alternative to burning near homes and where access permits a chipper to be brought close to the cutting area. The chips may be removed from the site and converted to energy or other products, or scattered throughout the project area at a depth no greater than 6 inches.

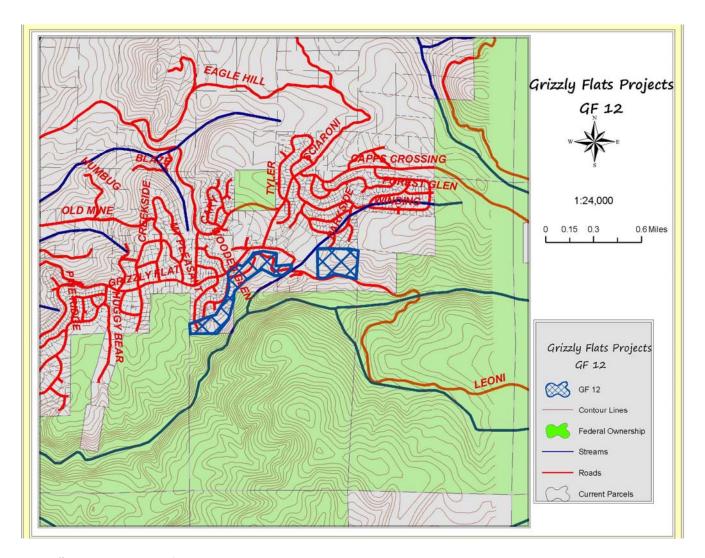
IDENTIFICATION OF PROTECTED SPECIES OR OTHER CRITICAL RESOURCES

With all environmentally sensitive areas, identification and avoidance during project implementation is important. Should any sensitive resources be found during project implementation, the area shall be avoided until the appropriate agencies review the situation.

If burning is chosen, the appropriate permits must be acquired from the El Dorado County Air Pollution Control District and the local CDF and/or Pioneer Fire Protection District.

Treatment Method & Other Items of Cost	Cost / Acre (\$)	Acres	Line Item Cost (\$)
Hand Cut and Chip	1,600	75	120,000
Project Management			13,000
Environmental Documents			10,000
	Total Est	imated Cost =	143,000

Table #6 --- GF-12 Estimated Project Cost



Map #6 --- GF-12 Fuel Treatment Project

<u>Grizzly Flats 13 (GF-13) - Fuels Reduction Project To Enhance Community Fire</u> Protection

GF- 13 Scope of Work

PROJECT DESCRIPTION

The GF-13 Shaded Fuel Break will be constructed as a linear feature 200 to 500 feet wide on the western side of Grizzly Flats (Map #7) for a total of 70 acres. Shaded Fuel Breaks are generally constructed using a combination of the treatments described below. The object of the treatment is to reduce fuels in high surface fuel areas to protect structures from wildfire. Permission has not been granted from the private landowners at this point, so the actual project layout is not complete and the size of the project may be modified depending on the private landowners' responses.

PRESCRIPTION / TREATMENT

Mastication: The use of rubber tired or tracked vehicles to cut, chip, and scatter all shrubs and small trees up to 10" diameter at breast height (dbh), 41/2 feet above the ground on the uphill side, on site. Trees shall be spaced approximately 20 feet between the boles. Trees in order of importance and to be retained on site if possible: 1) Sugar Pine, 2) Dogwood, 3) Ponderosa Pine, 4) Doug Fir, 5) Black Oak, 6) Cedar and 7) White Fir. Retention of these trees is important but meeting the spacing requirements is of a greater importance. All trees not removed shall be limbed up to 8 feet above the ground surface.

Brush cover shall be reduced by creating a mosaic of treated and untreated shrubs. Openings between shrubs shall be twice the height of the shrubs and 50-70% of the shrubs shall be treated. Brush that is treated shall be cut to the maximum of 6 inches in height. No individual pieces of cut material shall be greater than 4 feet long. All masticated stumps shall be cut to within 6 inches of the ground. No debris shall average more than 6 inches in depth over the entire project area. All cut vegetation shall be kept within the unit boundaries. Any cut vegetation falling into ditches, roads, road banks, trails, or adjacent units shall immediately be removed.

Hand Thin: Hand thinning and pile burning shall be accomplished using a hand crew with chainsaws. The contractor shall cut material up to 10" dbh with 20'x20' spacing between leave trees. All brush species shall be cut. All uncut trees shall be limbed up to 8 feet above the ground and limbed material treated by chipping or piling for burning. Trees in order of importance and to be retained on site if possible: 1) Sugar Pine, 2) Dogwood, 3) Ponderosa Pine, 4) Doug Fir, 5) Black Oak, 6) Cedar and 7) White Fir. Retention of these trees is important but meeting the spacing requirements is of a greater importance. All trees not removed will be limbed to 8 feet above the ground surface

Piling and Pile Burning: All dead and down material greater than 1 inch in diameter and up to 3 inches in diameter shall be piled for burning. Piles shall be constructed compactly beginning with a core of fine fuels and air spaces to facilitate complete combustion. Piles shall be constructed no taller than 5 feet or wider then 6 feet in diameter and located away from trees to prevent damage to the residual trees when piles are burned. Each pile shall be encircled with fire-line to mineral soil and 2 to 3 feet wide. Piles shall be covered with 4'x4' square water resistant paper to cover the fine material in the center of the piles.

Contractor shall obtain all necessary permits for burning, and burn the piles at the direction of the project coordinator after the rainy season has started. Contractor shall have fire suppression equipment on site during the burning and shall provide fire suppression equipment for patrol. As the piles burn down, the contractor shall push the unburned material at the inside of the fire-line into the pile in order to burn all pile residual.

Chipping: Chipping shall be used as an alternative to burning near homes and where access permits a chipper to be brought close to the cutting area. The chips may be removed from the site to be converted to energy or other products, or scattered throughout the project area at a depth no greater than 6 inches.

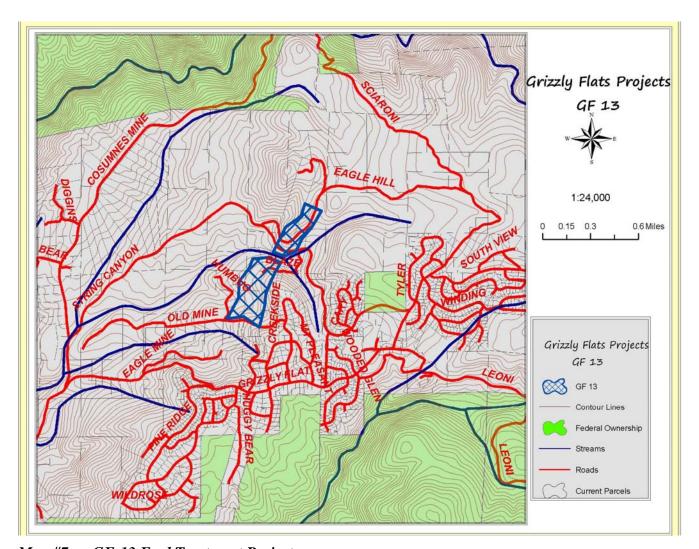
IDENTIFICATION OF PROTECTED SPECIES OR OTHER CRITICAL RESOURCES

With all environmentally sensitive areas, identification and avoidance during project implementation is important. Should any sensitive resources be found during project implementation, the area shall be avoided until the appropriate agencies review the situation.

If burning is chosen, the appropriate permits must be acquired from the El Dorado County Air Pollution Control District and the local CDF and/or Pioneer Fire Protection District.

Treatment Method & Other Items of Cost	Cost / Acre (\$)	Acres	Line Item Cost (\$)
Hand Cut and Chip	1,600	70	112,000
Project Management			12,000
Environmental Documents			10,000
	Total Est	imated Cost =	134,000

Table #7 --- GF-13 Estimated Project Cost



Map #7 --- GF-13 Fuel Treatment Project

Plan Monitoring and Update Procedures

This plan was developed by the Grizzly Flats Fire Safe Council to provide the Grizzly Flats community with methods to reduce the threat from a wildfire. The GFFSC is responsible for updating and implementing this 2012 CWPP. This 2012 CWPP shall be reviewed annually prior to grant submittals, to assure the plan is up to date and still applies to the community, in compliance with the 2006 CWPP, Section X (page 51). Project implementation is up to the GFFSC, with inputs from community members.

This document shall be a living document where new projects are added and others deleted as conditions and situations change.