



**USDA Forest Service Watershed Condition Framework
FY2011 TRANSITION WATERSHED RESTORATION ACTION PLAN
Mad River Ranger District, Six Rivers National Forest**

1. Summary

- a. **Watershed Name and HUC:** Upper Mad River (contains two 6th-field watersheds: Lost Creek – Mad River, 180101020201 and Blue Slide Creek – Mad River, 180101020202).
- b. **General Location:** Coast Range of northwestern California, south of the town of Ruth, about 50 miles southeast of Eureka.
- c. **Total Watershed Area:** 56,905 acres; **NFS area within watershed:** 95%.
- d. **Watershed Characterization:**
 - **General Physiography:** Steep, forested terrain that is bisected by numerous streams. Valley bottoms are wider, with fewer steep inner gorges than surrounding watersheds. Mainstem channels store large volumes of sediment, but channel bottoms are still dominated by cobble, boulder, and bedrock substrate.
Land Use: Land use is predominantly mixed-use forest (Matrix). There is timber harvesting, grazing, local firewood gathering, and the area is heavily used by recreational hunters during deer season.
 - **General Overview of Concerns:** The key problems with the Upper Mad River watershed are excess sediment production and departure from the desired fire condition class. The entire Mad River is 303d listed as impaired for sediment and a TMDL was issued in 2007. Stream temperature is less of a problem here than nearby drainages because much of the mainstem goes completely dry during the hottest part of the year. Because this watershed supplies water for most residents of Humboldt County, there is a need to minimize sediment production to the reservoir and prevent catastrophic fires in the uplands of the watershed.
 - **Important Ecological Values:** This watershed is the catchment for the Humboldt Bay Municipal Water District and provides water to the majority of Humboldt County including the towns of Blue Lake, McKinleyville, Arcata and Eureka. The watershed also contains a few acres of critical habitat for the Northern Spotted Owl.
 - **Current Condition Class:** _1.8 & 1.9_ **Target Condition Class:** 1.7

e. Key Watershed Issues

1) Attributes/Indicators within FS control to affect

ATTRIBUTES /INDICATOR	REASON FOR RATING
6.1	<i>Sediment production from roads. The watershed has a road density of 3.6 miles per square mile. To achieve functioning at risk, density would need to drop below 2.4 miles per square mile, which would require decommissioning 108 miles (33%) of roads. Such an effort is unlikely, although road density can still be reduced to beneficial effect.</i>
8.1	<i>Fire condition class is 3 (impaired) due to decades of fire suppression. Risk of stand replacing fire is high.</i>
6.2	<i>Road maintenance: currently less than 75% of roads and water crossings are well maintained.</i>
6.4	<i>Many roads are on unstable landforms or rock types subject to mass wasting.</i>
11.1	<i>More than 10% of the watershed has established populations of invasive species and the risk of spread is significant.</i>
6.3	<i>Proximity to water: More than 25% of road length is located within 100 meters of streams.</i>

2) Attributes/Indicators that require other parties to address

ATTRIBUTES /INDICATOR	REASON FOR RATING
1.1	<i>Entire Mad River Watershed is listed as sediment impaired. The Upper Mad watershed is approximately 19% of the entire basin.</i>

2. Watershed Characteristics and Conditions

a. General Context/Overview of the Watershed: The Upper Mad River Watershed is in the Coast Range of Northwestern California and is characterized by steep, forested mountains and a dense drainage network. Geology consists mainly of greywacke sandstone of the Franciscan Formation, but also includes some highly erosive areas of South Fork Mountain schist. Vegetation is primarily mixed conifer forest, dominated by Douglas-fir with high elevation true fir and pine, but also has many grassy glades and oak woodlands. The climate is Mediterranean, with hot, dry summers and cool, wet winters. Snow is common above 3,000 feet. This produces a dramatic yearly hydrograph with floods in the winter and many channels going dry in late summer. Landslides are common, and are a major source of sediment to channels. When streams have water in them they support a healthy population of rainbow trout. Due to the dam and reservoir downstream, anadromous fish no longer have access to the Upper Mad, although the Upper Mad is an important source of clean, cold water to anadromous fish downstream, including Coho salmon.

b. Watershed Conditions: Overall, the condition of the watershed is good. Upland conditions reflect decades of fire suppression and fuel accumulations, but watershed processes are

functioning normally at this time. This watershed has less landsliding and mass wasting than adjacent watersheds. Riparian conditions are excellent where terrain permits vegetation growth near stream channels. Some stream reaches, particularly along the mainstem rivers, have bedrock banks that limit the growth of riparian vegetation, but where vegetation is established it contains an appropriate composition and age distribution of species. In-channel habitat is good for most of the year and supports healthy populations of native rainbow trout and western pond turtle. Most streams, including the mainstem Mad River, are intermittent and go dry for several months in late summer. The purpose of this Restoration Action Plan is to preserve the current condition of the watershed to provide high-quality water to municipal users downstream.

3. Restoration Goals, Objectives, and Opportunities

a. Goal Identification and Desired Condition The goal of the Restoration Action Plan is to maintain and improve the watershed as a source of clean water to the Humboldt Bay Municipal Water District. This will be accomplished primarily through road upgrades and decommissioning, and upland fuels treatments.

b. Objectives

- i.** Alignment with National, Regional, or Forest Priorities: Some road and fuel treatments will be accomplished under the Beaverslide Timber Sale and Fuel Treatment Project and the Kelsey Peak Timber Sale and Fuelbreak Project, which have completed NEPA documents.
- ii.** Alignment with State or local goals: This watershed is 303d listed for excess sediment. Sediment reductions from road treatments will help meet the goals of the TMDL.

c. Opportunities

- i.** Partnership Involvement: Under a current participating agreement with the Six Rivers National Forest, work crews from the Bridgeville Community Center or the Hayfork Watershed Research and Training Center (WRTC) would be employed to assist in burning operations. It may also be possible to partnership with the Wild Turkey Federation, the Mule Deer Foundation, and the Round Valley Tribe.

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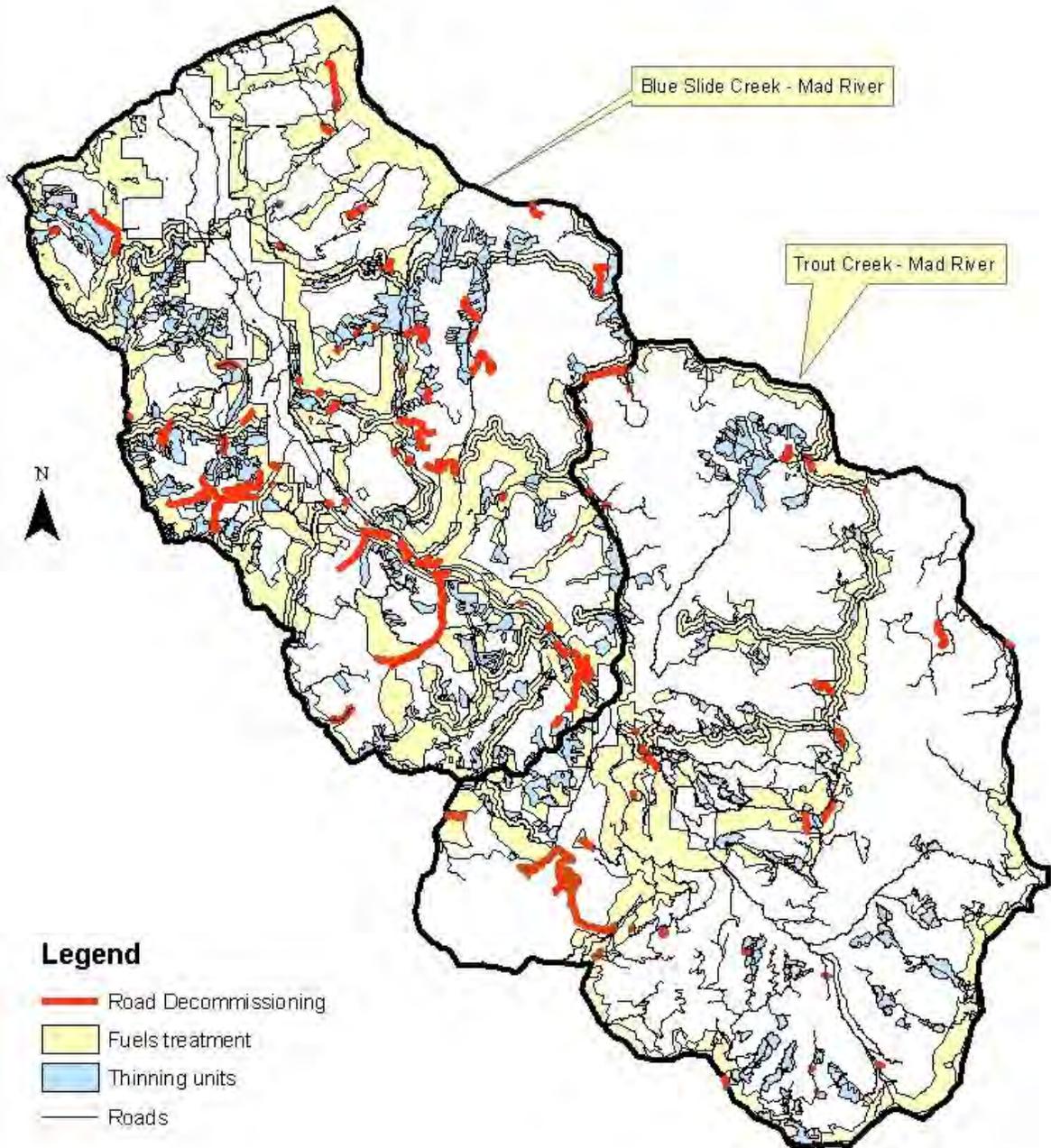
ii. Outcomes/Output
a) Performance Measure Accomplishment

Blue Slide Creek		Lost Creek	
Performance Measure Accomplishment	Acres/Miles	Performance Measure Accomplishment	Acres/Miles
S&W-RSRC-IMP	3400.1	S&W-RSRC-IMP	1431.3
S&W-RSRC-MTCE	198	S&W-RSRC-MTCE	198
FOR-VEG-IMP	10774	FOR-VEG-IMP	6018
FP-FUELS-ALL	14307	FP-FUELS-ALL	8170
FP-FUELS-NON-WUI	1566	FP-FUELS-NON-WUI	2993
FP-FUELS-WUI	9126	FP-FUELS-WUI	2522
FP-FUELS-WUI-STWD	3530	FP-FUELS-WUI-STWD	492
HBT-ENH-STRM	46 acres; 9 miles	HBT-ENH-STRM	16 acres; 4.5 miles
HBT-ENH-TERR	15404	HBT-ENH-TERR	9191.5
HBT-ENH-TERR-STWD	5924	HBT-ENH-TERR-STWD	1846
INVPLT-NXWD-FED-AC		INVPLT-NXWD-FED-AC	
NFS-LND-TVL-MGMT-PLN	25028	NFS-LND-TVL-MGMT-PLN	28590
RD-DECOM	51.4	RD-DECOM	36.3
RD-DECOM-STWD		RD-DECOM-STWD	
RD-HC-IMP		RD-HC-IMP	
RD-HC-MAINT	199	RD-HC-MAINT	173
RD-PC-IMP		RD-PC-IMP	
RD-PC-MAINT		RD-PC-MAINT	
RG-STRU-IMP		RG-STRU-IMP	
TMBR-VOL-SLD		TMBR-VOL-SLD	
TMBR-VOL-SLD-STWD		TMBR-VOL-SLD-STWD	

b) Socioeconomic Considerations: . A work crew of about 10 persons from either the Bridgeville Community Center or the WRTC would be utilized about 5 days a year to work on the Mad Ridge Fuelbreak Maintenance Underburn. These are local non-profit organizations in which the USFS provides both training and educational opportunities. Both of these organizations have worked on numerous projects on the Six Rivers National Forest and are expected to work on other projects in the watershed. The WRTC is currently assisting with project design in the Kelsey Peak project area. All restoration projects would include a component of employing local people, either through participating agreements or stand-alone contracts.

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Upper Mad River Restoration Action Plan



d. Specific Project Activities (Essential Projects)

Essential Project #1: Upper Mad Road Upgrades and Decommissioning

Attribute/Indicator Addressed: 1.1, 3.1, 6.1, 6.2, and 6.3

Project Description: A complete road inventory was accomplished in 2010. This information will be analyzed in a transportation plan for the Upper Mad River Watershed. Once roads appropriate for decommissioning have been identified, the remaining roads will be examined to determine opportunities for road upgrades and/or stormproofing. The ultimate goal is that all roads in the watershed would be decommissioned or be able to withstand the 100-year storm event. It is estimated that approximately 50 miles would be decommissioned, about 30 culverts would be upgraded, and about 360 critical rolling dips would be installed, although actual quantities are unknown until a Transportation Analysis is completed.

Partners Involvement: Inventory work was completed through a participating agreement with the Redwood Community Action Agency (RCAA). They may also be able to help us with site surveys and project design. Another potential partner is the Hayfork Watershed Research and Training Center (WRTC).

Performance Measure Accomplishment:

Blue Slide Creek		Lost Creek	
Performance Measure Accomplishment	Acres/Miles	Performance Measure Accomplishment	Acres/Miles
S&W-RSRC-IMP	196	S&W-RSRC-IMP	196
<i>S&W-RSRC-MTCE</i>	198	<i>S&W-RSRC-MTCE</i>	198
HBT-ENH-STRM	1 mile	HBT-ENH-STRM	1 mile
HBT-ENH-TERR	980	HBT-ENH-TERR	980
HBT-ENH-TERR-STWD		HBT-ENH-TERR-STWD	
INVPLT-NXWD-FED-AC		INVPLT-NXWD-FED-AC	
NFS-LND-TVL-MGMT-PLN	25028	NFS-LND-TVL-MGMT-PLN	28590
RD-DECOM	28 miles	RD-DECOM	28 miles
RD-DECOM-STWD		RD-DECOM-STWD	
RD-HC-IMP		RD-HC-IMP	
RD-HC-MAINT		RD-HC-MAINT	
RD-PC-IMP		RD-PC-IMP	
RD-PC-MAINT	95 miles	RD-PC-MAINT	95 miles

Job Creation or Stabilization: Completion of planning would be carried out by USFS planning personnel. Site specific surveys and design specifications could be accomplished through partnerships with RCAA or the Hayfork WRTC. Implementation of road closures would be conducted through a contract with local operators.

Monitoring: Some monitoring would be accomplished through the Best Management Practices Evaluation Program.

Timeline: Inventory was completed in 2010. A Transportation Analysis will be accomplished in 2012, followed by NEPA in 2013. Contract preparation and project implementation could begin in 2014.

Estimated costs and associated Budget Line Item:

Costs:

	Planning	Design	Implementation	Project Monitoring
FS Contribution	\$ 43,975.00	\$5,300.00	\$ 1,414,550.00	
Partner Contribution (both in kind and \$)				
Total	\$ 43,975.00	\$5,300.00	\$ 1,414,550.00	

Timelines and Project Scheduling:

FY	Task	FS Cost	Partner cost
12	Transportation Analysis	\$ 17,925.00	
13	NEPA (probably an EA)	\$ 26,050.00	
14+	Project Design and Implementation	\$ 1,414,550.00	
Total		\$ 1,458,525.00	

Essential Project #2: Upper Mad River Unauthorized Route Decommissioning

Attribute/Indicator Addressed: 1.1, 6.1, and 6.3

Project Description: 124 miles of unauthorized routes were identified under Travel Management sub-part B. Many of these routes lead to dispersed campsites, often near water, and many are contributing sediment to streams. This project would restore the routes to a hydrologically maintenance-free condition and close them to vehicle use. It is likely that the NEPA for this work could be accomplished under the Upper Mad Road Upgrades and Decommissioning Project.

Partners Involvement: Possible partnerships with Redwood Community Action Agency, Hayfork Watershed Center, or the Round Valley Tribe.

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Performance Measure Accomplishment:

Blue Slide Creek		Lost Creek	
Performance Measure Accomplishment	Acres/Miles	Performance Measure Accomplishment	Acres/Miles
S&W-RSRC-IMP	93.1	S&W-RSRC-IMP	33.6
HBT-ENH-STRM	46	HBT-ENH-STRM	16
HBT-ENH-TERR	66.5	HBT-ENH-TERR	24
INVPLT-NXWD-FED-AC		INVPLT-NXWD-FED-AC	
RD-DECOM	13.3 miles	RD-DECOM	4.8 miles
RD-DECOM-STWD		RD-DECOM-STWD	

Job Creation or Stabilization: Completion of planning would be carried out by USFS planning personnel. Site specific surveys and design specifications could be accomplished through partnerships with RCAA or the Hayfork WRTC. Implementation of road closures would be conducted through a contract with local operators.

Monitoring: Some monitoring would be accomplished through the Best Management Practices Evaluation Program.

Timeline: Inventory was completed in 2010. A Transportation Analysis will be accomplished in 2012, followed by NEPA in 2013. Contract preparation and project implementation could begin in 2014.

Estimated costs and associated Budget Line Item: Total cost = \$37,200.

Costs:

	Planning	Design	Implementation	Project Monitoring
FS Contribution		\$ 300.00	\$ 37,200.00	
Partner Contribution (both in kind and \$)		\$ -	-	
Total		\$ 300.00	\$ 37,200.00	

Timelines and Project Scheduling:

FY	Task	FS Cost	Partner cost
14	Project design and implementation	\$ 37,500.00	
Total		\$ 37,500.00	

Essential Project #3: Clover Gulch Hazard Fuel Reduction Project

Project: This project involved understory/jackpot burning of about 576 acres in the Clover Gulch area to reduce potential of catastrophic, stand replacing wildfires by targeting fuels generally less than 3 inches diameter. The Decision Memo for the Clover Gulch Hazard Fuel Reduction Project was signed Sept 28, 1998.

Current Status: All understory burning has been completed; much of the 3 inch or less diameter ground fuels were consumed and some of the small understory brush and small trees less than 3 inches have died as a result of the burn. Maintenance understory/jackpot burning needs to be accomplished within the next 5 years. Some of the project area overlaps the Little Gulch Timber Sale area, which should be completed by FY 12. A Supplemental Information Report to implement maintenance burning activities should be the only planning document required.

Attribute/Indicator Addressed: 8.1 – Fire Condition Class

Project Description: Maintenance understory burning of about 576 acres in the Clover Gulch area to reduce hazardous fuels.

Partners Involvement: Wild Turkey Federation and/or Mule Deer Foundation (supplies, monitoring; Bridgeville Community Center (assistance with burning operations).

Performance Measure Accomplishment:

Blue Slide Creek		Lost Creek	
Performance Measure Accomplishment	Acres/Miles	Performance Measure Accomplishment	Acres/Miles
S&W-RSRC-IMP		S&W-RSRC-IMP	139
S&W-RSRC-MTCE		S&W-RSRC-MTCE	
FOR-VEG-IMP		FOR-VEG-IMP	551
FP-FUELS-ALL	0	FP-FUELS-ALL	551
FP-FUELS-NON-WUI	0	FP-FUELS-NON-WUI	0
FP-FUELS-WUI	0	FP-FUELS-WUI	551
FP-FUELS-WUI-STWD		FP-FUELS-WUI-STWD	
HBT-ENH-TERR		HBT-ENH-TERR	
HBT-ENH-TERR-STWD		HBT-ENH-TERR-STWD	
INVPLT-NXWD-FED-AC		INVPLT-NXWD-FED-AC	
RG-STRU-IMP		RG-STRU-IMP	

Job Creation or Stabilization: Planning and design would be carried out by USFS planning personnel. Most of implementation would be carried out by USFS fire personnel. The USFS

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would fund the Bridgeville Community Center for a 10 person crew to assist in understory burning (about 10 days per burning season).

Monitoring: Most of the cost associated with monitoring is included under “Implementation”, and would occur before and during burning operations (i.e., weather, fire behavior, and fuel consumption). Post project monitoring would typically occur the next growing season and may even be long term over a period of several years (i.e. vegetative response, mortality, duff consumption, and scorch height). Monitoring would be done in cooperation with the Wild Turkey Federation and/or the Mule Deer Foundation.

Timeline: Starting in 2013 and continuing for four years.

Estimated costs and associated Budget Line Item: WFHF - \$141,720

Costs:

	Planning	Design	Implementation	Monitoring
FS Contribution	\$16,520	\$11,200	\$112,500	\$1,500
Partner Contribution (both in kind and \$)			\$ 17,000	\$ 500
Totals	\$16,520	\$11,200	\$129,500	\$2,000

Timelines and Project Scheduling:

FY	Task	WFHF	Partner funds	Totals
13	Begin NEPA (SIR), begin design work	\$15,190		\$15,190
14	Complete NEPA and design work, begin implementation	\$50,030	\$9,000	\$59,030
15	Continue implementation and monitoring	\$38,250	\$4,000	\$42,250
16	Complete implementation and monitoring	\$38,250	\$4,500	\$42,750
	Totals	\$141,720	\$17,500	\$159,220

Essential Project #4: Mad Ridge Fuelbreak Maintenance Understory Burn

Attribute/Indicator Addressed: 8.1 – Fire Condition Class

Project Description: Maintenance understory burning of 306 acres of an existing fuelbreak that provides for public and firefighter protection. The project area serves as the western boundary of the Beaverslide Timber Sale and Fuel Treatment Project area. The fuels corridors in the

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Beaverslide project will function as lateral fuelbreaks to Mad Ridge. It should take about 4 years to complete the maintenance underburn at about 50 to 100 acres per year.

Partners Involvement: The Bridgeville Community Center or WRTC would assist with burning operations by way of existing participating agreements.

Performance Measure Accomplishment:

Blue Slide Creek		Lost Creek	
Performance Measure Accomplishment	Acres/Miles	Performance Measure Accomplishment	Acres/Miles
S&W-RSRC-IMP		S&W-RSRC-IMP	
<i>S&W-RSRC-MTCE</i>		<i>S&W-RSRC-MTCE</i>	
FOR-VEG-IMP	306	FOR-VEG-IMP	
FP-FUELS-ALL	306	FP-FUELS-ALL	
FP-FUELS-NON-WUI		FP-FUELS-NON-WUI	
FP-FUELS-WUI	306	FP-FUELS-WUI	
FP-FUELS-WUI-STWD	306	FP-FUELS-WUI-STWD	
HBT-ENH-STRM		HBT-ENH-STRM	
HBT-ENH-TERR	306	HBT-ENH-TERR	
HBT-ENH-TERR-STWD	306	HBT-ENH-TERR-STWD	
INVPLT-NXWD-FED-AC		INVPLT-NXWD-FED-AC	

Job Creation or Stabilization: Planning and design would be carried out by USFS planning personnel. Most of implementation would be carried out by USFS fire personnel. The USFS would fund the Bridgeville Community Center for a 10 person crew to assist in understory burning (about 10 days per burning season).

Monitoring: Most monitoring is embedded in the implementation costs because so much of it occurs just before and during burning operations (i.e. weather, fire behavior, and fuel consumption). Post burn monitoring typically occurs the next growing season and even longer to evaluate factors such as vegetative response, mortality, duff consumption, and scorch height.

Timeline: Starting in October 2013 and continuing for 4 years.

Estimated costs and associated Budget Line Item: WFHF10: \$ 91,840

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Costs:

	Planning	Design	Implementation	Project Monitoring
FS Contribution		\$ 2800	\$ 88,240	\$ 800
Partner Contribution (both in kind and \$)			\$ 8,000	
Total		\$ 2800	\$ 96,240	\$ 800

Timelines and Project Scheduling:

FY	Task	FS Cost	Partner cost	Totals
13	Design and begin implementation	\$ 25,060	\$ 2,000	\$ 27,060
14	Continue implementation	\$ 22,260	\$ 2,000	\$ 24,260
15	Continue implementation	\$ 22,260	\$ 2,000	\$ 24,260
16	Continue implementation	\$ 22,260	\$ 2,000	\$ 24,260
	Totals	\$ 91,840	\$ 8,000	\$99,840

Essential Project #5: Upland Fuel Treatments

Attribute/Indicator Addressed: 8.1 – Fire Condition Class

Project Description: Understory/jackpot burning of approximately 11,460 acres to reduce potential of catastrophic, stand replacing wildfires by targeting fuels generally less than 3 inches diameter. Project areas would be proximate to roads, ridges, and/or communities.

Partners Involvement: Wild Turkey Federation and/or Mule Deer Foundation (supplies, monitoring; Bridgeville Community Center (assistance with burning operations).

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Performance Measure Accomplishment:

Blue Slide Creek		Lost Creek	
Performance Measure Accomplishment	Acres/Miles	Performance Measure Accomplishment	Acres/Miles
S&W-RSRC-IMP	1842	S&W-RSRC-IMP	687
S&W-RSRC-MTCE		S&W-RSRC-MTCE	
FOR-VEG-IMP	7044	FOR-VEG-IMP	4415
FP-FUELS-ALL	7044	FP-FUELS-ALL	4415
FP-FUELS-NON-WUI	660	FP-FUELS-NON-WUI	2691
FP-FUELS-WUI	6384	FP-FUELS-WUI	1724
FP-FUELS-WUI-STWD		FP-FUELS-WUI-STWD	
HBT-ENH-TERR	7044	HBT-ENH-TERR	4415
HBT-ENH-TERR-STWD		HBT-ENH-TERR-STWD	
INVPLT-NXWD-FED-AC		INVPLT-NXWD-FED-AC	
RG-STRU-IMP		RG-STRU-IMP	

Job Creation or Stabilization: Planning and design would be carried out by USFS planning personnel. Most of implementation would be carried out by USFS fire personnel. The USFS would fund the Bridgeville Community Center for a 10 person crew to assist in understory burning (about 10 days per burning season).

Monitoring: Most of the cost associated with monitoring is included under “Implementation”, and would occur before and during burning operations (i.e., weather, fire behavior, and fuel consumption). Post project monitoring would typically occur the next growing season and may even be long term over a period of several years (i.e. vegetative response, mortality, duff consumption, and scorch height). Monitoring would be done in cooperation with the Wild Turkey Federation and/or the Mule Deer Foundation.

Timeline: Starting in 2020 and continuing for 10 years.

Estimated costs and associated Budget Line Item: Total cost = \$ 1,748,050.

Costs:

	Planning	Design	Implementation	Project Monitoring
FS Contribution	\$ 26,050.00		\$ 17,190,000.00	
Partner Contribution (both in kind and \$)				
Total	\$ 26,050.00		\$ 17,190,000.00	

Timelines and Project Scheduling:

FY	Task	FS Cost	Partner cost
20	NEPA	\$ 26,050.00	
21-30	Pile or jackpot burning	\$ 17,190,000.00	\$1,172,800
Total		\$ 17,216,050.00	

Essential Project #6: Beaverslide Timber Sale and Fuel Treatment Project

Overview: This project would involve 2,293 acres of low thinning, 1,476 acres of fuel treatment corridors of which 328 acres are within thinning units and 1,148 acres are outside thinning units, 89 acres of fuel mastication, 1,028 acres of prescribed burning in stand-alone fuel treatment units, 63 miles of system road maintenance or improvements, and 8.22 miles of system road and unauthorized route decommissioning.

Current Status: NEPA is complete with the Record of Decision signed on April 8, 2011. The thinning units have been split into three projects (1) Lucky Timber Sale, awarded on July 29, 2011, (2) Smith Peak IRTC, currently undergoing contract review prior to advertisement, and (3) Beaverslide IRSC, currently undergoing sale and contract preparation. Road maintenance or improvements would occur in conjunction with the Smith Peak IRTC and Beaverslide IRSC. Construction of fuel treatment corridors within thinning units would be done as part of the Smith Peak IRTC and Beaverslide IRSC. Construction of fuel treatment corridors outside of thinning units would be done under a stewardship agreement with the Hayfork Watershed Research and Training Center. Mastication may be done by service contract or stewardship agreement and prescribed burning would be done in-house. Road and unauthorized route decommissioning would be done by service contract.

Sub-Project #1: Lucky Timber Sale

Attribute/Indicator Addressed: 8.1 – Fire Condition Class,

Project Description: Low thinning, or thinning from below, would occur on approximately 52 acres. The focus of using a low thinning treatment is the removal of trees primarily from the lower crown classes in order to favor those in the upper crown classes and retain the largest trees with the best crowns. These trees are generally at or above the average canopy height and have the best opportunity to take advantage of onsite resources to maintain or increase growth. Treatments are designed to maintain the existing native species diversity, including hardwoods, in the units being treated. Low thinning serves to improve stand structure, species composition, and resiliency to disturbance such as drought, insects, disease, and wildfire. Low thing improves fuel condition classes by breaking up the horizontal and vertical continuity of canopy fuel, as well as reducing the amount of existing and harvest generated fuel on the ground via the yarding of tops, piling of fuel and burning.

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Partners Involvement: The Bridgeville Community Center or WRTC may assist with burning operations by way of existing participating agreements.

Performance Measure Accomplishment:

Blue Slide Creek		Lost Creek	
Performance Measure Accomplishment	Acres/Miles	Performance Measure Accomplishment	Acres/Miles
S&W-RSRC-IMP	5.3	S&W-RSRC-IMP	
S&W-RSRC-MTCE		S&W-RSRC-MTCE	
FOR-VEG-IMP	52	FOR-VEG-IMP	
FP-FUELS-ALL	52	FP-FUELS-ALL	
FP-FUELS-NON-WUI		FP-FUELS-NON-WUI	
FP-FUELS-WUI	52	FP-FUELS-WUI	
FP-FUELS-WUI-STWD		FP-FUELS-WUI-STWD	
HBT-ENH-STRM		HBT-ENH-STRM	
HBT-ENH-TERR	52	HBT-ENH-TERR	
HBT-ENH-TERR-STWD		HBT-ENH-TERR-STWD	
TMBR-VOL-SLD	1422	TMBR-VOL-SLD	
TMBR-VOL-SLD-STWD		TMBR-VOL-SLD-STWD	

Job Creation or Stabilization: Thinning operations would be conducted by local logging companies contracted by the timber purchaser with USFS sale administration oversight. Most of the burning would be done by USFS fire personnel with assistance from Bridgeville Community Center or WRTC fire crews.

Monitoring: Most of the monitoring and associated cost is included under “implementation” and would occur before and during operations. Implementation monitoring would be done by USFS personnel to ensure that timber operations are conducted according to the specifications outlined in the timber sale contract and during burning operations. Post project monitoring would typically occur the next growing season and may even be long term over a period of several years (i.e. post treatment fuel loading, vegetative response, and mortality).

Timeline: Starting in October 2011 and continuing for 5 years.

Estimated costs and associated Budget Line Item: Total cost – \$ 33,200
 NFTM -- \$15,000 BDBD -- \$4,000
 WFHF – \$7,100 WFPR -- \$7,100

Costs:

	Planning	Design	Implementation	Project Monitoring
FS Contribution			\$29,560	
Partner Contribution (both in kind and \$)			\$3,640	
Total			\$33,200	

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Timelines and Project Scheduling:

FY	Task	FS Cost	Partner cost
12 - 13	Timber sale contract implementation	\$15,000	
14 - 16	Pile or jackpot burning	\$14,560	\$3,640
Total		\$29,560	\$3,640

Sub-Project #2: Smith Peak IRTC

Attribute/Indicator Addressed: 8.1 – Fire Condition Class, 6.2 – Road Maintenance

Project Description: Low thinning, or thinning from below, would occur on approximately 1,208 acres. In addition to low thinning, submerchantable material (generally less than 8” dbh) would be removed on approximately 97 acres of fuel treatment corridors overlapping the thinning units. The focus of using a low thinning treatment is the removal of trees primarily from the lower crown classes in order to favor those in the upper crown classes and retain the largest trees with the best crowns. These trees are generally at or above the average canopy height and have the best opportunity to take advantage of onsite resources to maintain or increase growth. Treatments are designed to maintain the existing native species diversity, including hardwoods, in the units being treated. Low thinning serves to improve stand structure, species composition, and resiliency to disturbance such as drought, insects, disease, and wildfire. Low thinning improves fuel condition classes by breaking up the horizontal and vertical continuity of canopy fuel, as well as reducing the amount of existing and harvest generated fuel on the ground via the yarding of tops, piling of fuel and burning.

Road maintenance and improvements would occur on approximately 35 miles of existing system roads needed for the project. System roads would require light to heavy maintenance such as brushing, blading, spot rocking, slump repair, or culvert repair or replacement prior to operations.

Partners Involvement: The Bridgeville Community Center or WRTC may assist with burning operations by way of existing participating agreements.

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Mad River Ranger District, Six Rivers National Forest

Performance Measure Accomplishment:

Blue Slide Creek		Lost Creek	
Performance Measure Accomplishment	Acres/Miles	Performance Measure Accomplishment	Acres/Miles
S&W-RSRC-IMP	56	S&W-RSRC-IMP	
S&W-RSRC-MTCE		S&W-RSRC-MTCE	
FOR-VEG-IMP	1208	FOR-VEG-IMP	
FP-FUELS-ALL	1208	FP-FUELS-ALL	
FP-FUELS-NON-WUI		FP-FUELS-NON-WUI	
FP-FUELS-WUI	1208	FP-FUELS-WUI	
FP-FUELS-WUI-STWD	1208	FP-FUELS-WUI-STWD	
HBT-ENH-STRM		HBT-ENH-STRM	
HBT-ENH-TERR	1208	HBT-ENH-TERR	
HBT-ENH-TERR-STWD	1208	HBT-ENH-TERR-STWD	
RD-HC-IMP		RD-HC-IMP	
RD-HC-MAINT	35 miles	RD-HC-MAINT	
RD-PC-IMP		RD-PC-IMP	
RD-PC-MAINT		RD-PC-MAINT	
RG-STRU-IMP		RG-STRU-IMP	
TMBR-VOL-SLD	9228	TMBR-VOL-SLD	
TMBR-VOL-SLD-STWD	9228	TMBR-VOL-SLD-STWD	

Job Creation or Stabilization: Integrated resource timber contract preparation would be carried out by USFS personnel. Thinning operations and road maintenance/improvements would be conducted by local logging companies contracted by the timber purchaser with USFS sale administration oversight. Most of the burning would be done by USFS fire personnel with assistance from Bridgeville Community Center or WRTC fire crews.

Monitoring: Most of the monitoring and associated cost is included under “implementation” and would occur before and during operations. Implementation monitoring would be done by USFS personnel to ensure that timber operations and road maintenance work are conducted according to the specifications outlined in the IRTC and during burning operations. Post project monitoring would typically occur the next growing season and may even be long term over a period of several years (i.e. post treatment fuel loading, vegetative response, and mortality).

Timeline: Starting in October 2011 and continuing for 9 years.

Estimated costs and associated Budget Line Item: Total cost – \$ 466,050
 NFTM -- \$43,250 WFHF – \$211,400
 WFPR -- \$211,400

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Costs:

	Planning	Design	Implementation	Project Monitoring
FS Contribution			\$381,490	
Partner Contribution (both in kind and \$)			\$84,560	
Total			\$466,050	

Timelines and Project Scheduling:

FY	Task	FS Cost	Partner cost
12	Finish IRTC contract preparation	\$3,250	
12 - 17	IRTC contract implementation	\$40,000	
17 - 20	Pile or jackpot burning	\$338,240	\$84,560
Total		\$381,490	\$84,560

Sub-Project #3: Beaverslide IRSC

Attribute/Indicator Addressed: 8.1 – Fire Condition Class, 6.2 – Road Maintenance

Project Description: Low thinning, or thinning from below, would occur on approximately 1,033 acres. In addition to low thinning, submerchantable material (generally less than 8” dbh) would be removed on approximately 231 acres of fuel treatment corridors overlapping the thinning units. The focus of using a low thinning treatment is the removal of trees primarily from the lower crown classes in order to favor those in the upper crown classes and retain the largest trees with the best crowns. These trees are generally at or above the average canopy height and have the best opportunity to take advantage of onsite resources to maintain or increase growth. Treatments are designed to maintain the existing native species diversity, including hardwoods, in the units being treated. Low thinning serves to improve stand structure, species composition, and resiliency to disturbance such as drought, insects, disease, and wildfire. Low thinning improves fuel condition classes by breaking up the horizontal and vertical continuity of canopy fuel, as well as reducing the amount of existing and harvest generated fuel on the ground via the yarding of tops, piling of fuel and burning.

Road maintenance and improvements would occur on approximately 28 miles of existing system roads needed for the project. System roads would require light to heavy maintenance such as brushing, blading, spot rocking, slump repair, or culvert repair or replacement prior to operations.

Partners Involvement: The Bridgeville Community Center or WRTC may assist with burning operations by way of existing participating agreements.

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Performance Measure Accomplishment:

Blue Slide Creek		Lost Creek	
Performance Measure Accomplishment	Acres/Miles	Performance Measure Accomplishment	Acres/Miles
S&W-RSRC-IMP	96	S&W-RSRC-IMP	10
S&W-RSRC-MTCE		S&W-RSRC-MTCE	
FOR-VEG-IMP	788	FOR-VEG-IMP	245
FP-FUELS-ALL	788	FP-FUELS-ALL	245
FP-FUELS-NON-WUI	326	FP-FUELS-NON-WUI	
FP-FUELS-WUI	462	FP-FUELS-WUI	245
FP-FUELS-WUI-STWD	462	FP-FUELS-WUI-STWD	245
HBT-ENH-STRM		HBT-ENH-STRM	
HBT-ENH-TERR	788	HBT-ENH-TERR	245
HBT-ENH-TERR-STWD	788	HBT-ENH-TERR-STWD	245
INVPLT-NXWD-FED-AC		INVPLT-NXWD-FED-AC	
RD-HC-IMP		RD-HC-IMP	
RD-HC-MAINT	25 miles	RD-HC-MAINT	3 miles
TMBR-VOL-SLD	TBD	TMBR-VOL-SLD	TBD
TMBR-VOL-SLD-STWD	TBD	TMBR-VOL-SLD-STWD	TBD

Job Creation or Stabilization: Integrated resource service contract preparation would be carried out by USFS personnel. Thinning operations and road maintenance/improvements would be conducted by local logging companies contracted by the timber purchaser with USFS sale administration oversight. Most of the burning would be done by USFS fire personnel with assistance from Bridgeville Community Center or WRTC fire crews.

Monitoring: Most of the monitoring and associated cost is included under “implementation” and would occur before and during operations. Implementation monitoring would be done by USFS personnel to ensure that timber operations and road maintenance work are conducted according to the specifications outlined in the IRSC and during burning operations. Post project monitoring would typically occur the next growing season and may even be long term over a period of several years (i.e. post treatment fuel loading, vegetative response, and mortality).

Timeline: Starting in October 2011 and continuing for 9 years.

Estimated costs and associated Budget Line Item: Total cost – \$ 436,550
 NFTM -- \$75,000 WFHF – \$180,775
 WFPR -- \$180,775

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Costs:

	Planning	Design	Implementation	Project Monitoring
FS Contribution			\$364,240	
Partner Contribution (both in kind and \$)			\$72,310	
Total			\$436,550	

Timelines and Project Scheduling:

FY	Task	FS Cost	Partner cost
12	Finish IRSC field work and contract preparation	\$30,000	
12 - 17	IRSC contract implementation	\$45,000	
17 - 20	Pile or jackpot burning	\$289,240	\$72,310
Total		\$364,240	\$72,310

Sub-Project #4: Fuel Treatment Corridors Outside of Thinning Units

Attribute/Indicator Addressed: 8.1 – Fire Condition Class

Project Description: Fuel treatment corridors would be constructed on 1,477 acres along the following high-use roads: county road 501, and NFS roads 02S12, 03S05, 03S13, 03S39, 03S39R, 27N16, 27N34, 27N34D. Fuel treatment corridors would generally be 300 feet in width on each side of the road. Actual widths may vary based on environmental features such as topography, vegetation distribution, and recent fire history. Fuel treatments within fuel treatment corridors may consist of thinning of trees 8 inches dbh and smaller, cutting of understory vegetation, tree pruning, chipping, mastication of brush, lopping/scattering of fuel, and jackpot burning, hand or grapple piling of fuel and burning of piles. Fuel treatment corridors would reduce fuel loading along roads to allow fire suppression resources a defensive line from which to fight fires and decrease the potential for detrimental wildfire effects to the overall project area and communities in the vicinity of Ruth.

Partners Involvement: The WRTC has expressed interest in implementing the project via a stewardship agreement. The Bridgeville Community Center or WRTC may assist with burning operations by way of existing participating agreements.

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Performance Measure Accomplishment:

Blue Slide Creek		Lost Creek	
Performance Measure Accomplishment	Acres/Miles	Performance Measure Accomplishment	Acres/Miles
S&W-RSRC-IMP	362	S&W-RSRC-IMP	27
S&W-RSRC-MTCE		S&W-RSRC-MTCE	
FOR-VEG-IMP		FOR-VEG-IMP	
FP-FUELS-ALL	1313	FP-FUELS-ALL	164
FP-FUELS-NON-WUI	324	FP-FUELS-NON-WUI	70
FP-FUELS-WUI	989	FP-FUELS-WUI	94
FP-FUELS-WUI-STWD	989	FP-FUELS-WUI-STWD	94
HBT-ENH-TERR	1313	HBT-ENH-TERR	164
HBT-ENH-TERR-STWD	1313	HBT-ENH-TERR-STWD	164

Job Creation or Stabilization: Completion of corridor layout, boundary designation, and GPSing would be carried out by USFS personnel. Stewardship agreement preparation would be carried out by USFS personnel. Implementation may be conducted by the WRTC with USFS oversight. Most of the burning would be done by USFS fire personnel with assistance from Bridgeville Community Center or WRTC fire crews.

Monitoring: Most of the monitoring and associated cost is included under “implementation” and would occur before and during operations. Implementation monitoring would be done by USFS personnel to ensure that layout, boundary designation, GPS, and implementation according to the specifications outlined in participating agreements or stewardship agreements. Post project monitoring would typically occur the next growing season and may even be long term over a period of several years (i.e. post treatment fuel loading, vegetative response, and mortality).

Timeline: Starting in October 2011 and continuing for 10 years.

Estimated costs and associated Budget Line Item: Total cost – \$ 1,229,420
WFHF - \$1,028,520 WFPR – \$200,900

Costs:

	Planning	Design	Implementation	Project Monitoring
FS Contribution		30,000	\$960,640	
Partner Contribution (both in kind and \$)			\$238,780	
Total		\$30,000	\$1,199,420	

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Timelines and Project Scheduling:

FY	Task	FS Cost	Partner cost
12	Complete layout, boundary designation and GPS	\$30,000	
13	Stewardship agreement preparation	\$5,500	
13 - 18	Stewardship agreement implementation	\$633,700	\$158,420
18 - 21	Jackpot or pile burning	\$321,440	\$80,360
Total		\$990,640	\$238,780

Sub-Project #5: Fuel Mastication

Attribute/Indicator Addressed: 8.1 – Fire Condition Class

Project Description: Fuel would be masticated in three units adjacent to private land totaling approximately 89 acres. Low ground-pressure mechanical equipment (similar to a mowing machine) would be used to cut live vegetation. Material would be masticated up to approximately 4 to 6 inches above the ground surface.

Partners Involvement: The WRTC has expressed interest in implementing the project via a stewardship agreement.

Performance Measure Accomplishment:

Blue Slide Creek		Lost Creek	
Performance Measure Accomplishment	Acres/Miles	Performance Measure Accomplishment	Acres/Miles
S&W-RSRC-IMP		S&W-RSRC-IMP	
<i>S&W-RSRC-MTCE</i>		<i>S&W-RSRC-MTCE</i>	
FOR-VEG-IMP	89	FOR-VEG-IMP	
FP-FUELS-ALL	89	FP-FUELS-ALL	
FP-FUELS-NON-WUI		FP-FUELS-NON-WUI	
FP-FUELS-WUI	89	FP-FUELS-WUI	
FP-FUELS-WUI-STWD	89	FP-FUELS-WUI-STWD	
HBT-ENH-STRM		HBT-ENH-STRM	
HBT-ENH-TERR	89	HBT-ENH-TERR	
HBT-ENH-TERR-STWD	89	HBT-ENH-TERR-STWD	
INVPLT-NXWD-FED-AC		INVPLT-NXWD-FED-AC	

Job Creation or Stabilization: Unit layout, boundary designation, and GPSing would be carried out by USFS personnel. Stewardship agreement preparation would be carried out by USFS personnel. Implementation may be conducted by the WRTC with USFS oversight.

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Monitoring: Most of the monitoring and associated cost is included under “implementation” and would occur before and during operations. Implementation monitoring would be done by USFS personnel to ensure that layout, boundary designation, GPS, and implementation follow the specifications outlined in NEPA and participating agreements or stewardship agreements. Post project monitoring would typically occur the next growing season and may even be long term over a period of several years (i.e. post treatment fuel loading, vegetative response, and mortality).

Timeline: Starting in June 2012 and continuing for 1 year.

Estimated costs and associated Budget Line Item: Total cost – \$48,500 WFHF -- \$48,500

Costs:

	Planning	Design	Implementation	Project Monitoring
FS Contribution			\$39,600	
Partner Contribution (both in kind and \$)			\$8,900	
Total			\$48,500	

Timelines and Project Scheduling:

FY	Task	FS Cost	Partner cost
12	Complete layout, boundary designation and GPS	\$2,000	
13	Stewardship agreement preparation	\$2,000	
13	Stewardship agreement implementation	\$35,600	\$8,900
Total		\$39,600	\$8,900

Sub-Project #5: Prescribed Burning in Stand Alone Fuel Treatment Units

Attribute/Indicator Addressed: 8.1 – Fire Condition Class

Project Description: Jackpot burning of fuel concentrations would occur in 13 units totaling approximately 1,117 acres.

Partners Involvement: The Bridgeville Community Center or WRTC may assist with burning operations by way of existing participating agreements.

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Performance Measure Accomplishment:

Blue Slide Creek		Lost Creek	
Performance Measure Accomplishment	Acres/Miles	Performance Measure Accomplishment	Acres/Miles
S&W-RSRC-IMP	327	S&W-RSRC-IMP	151
S&W-RSRC-MTCE		S&W-RSRC-MTCE	
FOR-VEG-IMP		FOR-VEG-IMP	
FP-FUELS-ALL	732	FP-FUELS-ALL	385
FP-FUELS-NON-WUI	582	FP-FUELS-NON-WUI	232
FP-FUELS-WUI	150	FP-FUELS-WUI	153
FP-FUELS-WUI-STWD		FP-FUELS-WUI-STWD	
HBT-ENH-TERR	732	HBT-ENH-TERR	385
HBT-ENH-TERR-STWD	732	HBT-ENH-TERR-STWD	385
INVPLT-NXWD-FED-AC		INVPLT-NXWD-FED-AC	
RG-STRU-IMP		RG-STRU-IMP	

Job Creation or Stabilization: Unit design would be carried out by USFS fire personnel. Most of the burning would be done by USFS fire personnel with assistance from Bridgeville Community Center or WRTC fire crews.

Monitoring: Most of the monitoring and associated cost is included under “implementation” and would occur before and during burning operations (i.e. weather, fire behavior, and fuel consumption). Post project monitoring would typically occur the next growing season and may even be long term over a period of several years (i.e. post treatment fuel loading, vegetative response, and mortality).

Timeline: Starting in October 2013 and continuing for 3 years.

Estimated costs and associated Budget Line Item: Total cost – \$374,800
WFHF -- \$230,880 WFPR – 143,920

Costs:

	Planning	Design	Implementation	Project Monitoring
FS Contribution		\$15,000	\$287,840	
Partner Contribution (both in kind and \$)			\$71,960	
Total		\$15,000	\$359,800	

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Timelines and Project Scheduling:

FY	Task	FS Cost	Partner cost
14	Unit design	\$15,000	
14 - 17	Jackpot burning	\$287,840	\$71,960
Total		\$302,840	\$71,960

Sub-Project #7: System Road and Unauthorized Route Decommissioning

Attribute/Indicator Addressed: 6.1 – Road Density, 6.2 – Road Maintenance, 6.3 – Proximity to Water.

Project Description: Approximately 7.35 miles of NFS roads and 0.87 miles of unauthorized routes would be decommissioned upon completion of thinning and fuel treatment activities. All or portions of the following NFS roads would be decommissioned and removed from the NF transportation system: 02S12C (0.75 mi.), 03S05C (0.14 mi.), 03S51 (1.45 mi.), 03S51A (0.58 mi.), 03S51B (0.33 mi.), 03S51C (0.16 mi.), 03S53A (0.50 mi.), 03S53B (0.07 mi.), 03S55 (0.58 mi.), 03S39J (0.48 mi.), 03S39S (0.24 mi.), 27N02A (1.11 mi.), 27N18 (0.66 mi.), and 27N42 (0.35 mi.). Two unauthorized routes intersecting 03S51 would also be decommissioned. Decommissioning would generally involve one or more of the following activities: (1) subsoiling or out-sloping the road surface; (2) removing drainage structures such as culverts; (3) installing water bars where needed; (4) mulching with native materials (slash) or certified weed free straw; and; (5) placing earth or log mound barriers to prevent vehicle traffic.

Partners Involvement: Possible partnerships with Redwood Community Action Agency, Hayfork Watershed Center, or the Round Valley Tribe.

Performance Measure Accomplishment:

Blue Slide Creek		Lost Creek	
Performance Measure Accomplishment	Acres/Miles	Performance Measure Accomplishment	Acres/Miles
S&W-RSRC-IMP	41.3	S&W-RSRC-IMP	24.5
HBT-ENH-STRM	5.9 miles	HBT-ENH-STRM	3.5 miles
HBT-ENH-TERR	29.5	HBT-ENH-TERR	17.5
INVPLT-NXWD-FED-AC		INVPLT-NXWD-FED-AC	
RD-DECOM	5.9 miles	RD-DECOM	3.5 miles
RD-DECOM-STWD		RD-DECOM-STWD	

Job Creation or Stabilization: Completion of planning and design would be carried out by USFS planning personnel. Implementation of road closures would be conducted through a contract with local operators.

Monitoring: Some monitoring would be accomplished through the Best Management Practices Evaluation Program.

Timeline: Starting in 2021 and continuing for 2 years.

Estimated costs and associated Budget Line Item: Total cost – \$110,192.

Costs:

	Planning	Design	Implementation	Project Monitoring
FS Contribution		\$ 2,464.00	\$ 110,192.00	
Partner Contribution (both in kind and \$)				
Total		\$ 2,464.00	\$ 110,192.00	

Timelines and Project Scheduling:

FY	Task	FS Cost	Partner cost
21	Design & Implementation	\$ 110,192.00	
Total		\$ 110,192.00	

Essential Project #7: Kelsey Peak Timber Sale and Fuel Reduction Project

Overview: This project would involve 1,810 acres of low thinning, 2,540 acres of fuelbreak corridors, 62 miles of system road maintenance or improvements, and 4.24 miles of system road closures.

Current Status: This project is currently in the NEPA phase. The Draft EIS was submitted for public review and comment in FY2010. The Final EIS is currently being edited and should be released to the public in November 2011 with the Record of Decision signed in December 2011. No decisions have been made as to how to package the project for implementation. Project will probably be split into 2 or more integrated resource timber or service contracts (IRTC, IRSC) for the thinning and road maintenance, a stewardship agreement for the fuelbreak corridors, and a service contract for the road closures.

Sub-Project #1: Low Thinning and System Road Maintenance/Improvements

Attribute/Indicator Addressed: 8.1 – Fire Condition Class, 6.2 – Road Maintenance

Project Description: Low thinning, or thinning from below, would occur on approximately 1,807 acres. The focus of using a low thinning treatment is the removal of trees primarily from the lower

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crown classes in order to favor those in the upper crown classes and retain the largest trees with the best crowns. These trees are generally at or above the average canopy height and have the best opportunity to take advantage of onsite resources to maintain or increase growth. Treatments are designed to maintain the existing native species diversity, including hardwoods, in the units being treated. Low thinning serves to improve stand structure, species composition, and resiliency to disturbance such as drought, insects, disease, and wildfire. Low thinning improves fuel condition classes by breaking up the horizontal and vertical continuity of canopy fuel, as well as reducing the amount of existing and harvest generated fuel on the ground via the yarding of tops, piling of fuel and burning.

Road maintenance and improvements would occur on approximately 62 miles of existing system roads needed for the project. System roads would require light to heavy maintenance such as brushing, blading, spot rocking, slump repair, or culvert repair or replacement prior to operations.

Partners Involvement: The Hayfork Watershed Research and Training Center (WRTC) recently began layout, boundary designation, and GPSing of thinning units via an existing participating agreement. The Bridgeville Community Center or WRTC may assist with burning operations by way of existing participating agreements.

Performance Measure Accomplishment:

Blue Slide Creek		Lost Creek	
Performance Measure Accomplishment	Acres/Miles	Performance Measure Accomplishment	Acres/Miles
S&W-RSRC-IMP	74	S&W-RSRC-IMP	21
<i>S&W-RSRC-MTCE</i>		<i>S&W-RSRC-MTCE</i>	
FOR-VEG-IMP	1287	FOR-VEG-IMP	520
FP-FUELS-ALL	1287	FP-FUELS-ALL	520
FP-FUELS-NON-WUI	760	FP-FUELS-NON-WUI	506
FP-FUELS-WUI	527	FP-FUELS-WUI	14
FP-FUELS-WUI-STWD	527	FP-FUELS-WUI-STWD	14
HBT-ENH-STRM		HBT-ENH-STRM	
HBT-ENH-TERR	1287	HBT-ENH-TERR	520
HBT-ENH-TERR-STWD		HBT-ENH-TERR-STWD	
INVPLT-NXWD-FED-AC		INVPLT-NXWD-FED-AC	
NFS-LND-TVL-MGMT-PLN		NFS-LND-TVL-MGMT-PLN	
RD-HC-IMP		RD-HC-IMP	
RD-HC-MAINT	44 miles	RD-HC-MAINT	18 miles
RD-PC-IMP		RD-PC-IMP	
RD-PC-MAINT		RD-PC-MAINT	
TMBR-VOL-SLD	TBD	TMBR-VOL-SLD	TBD
TMBR-VOL-SLD-STWD	TBD	TMBR-VOL-SLD-STWD	TBD

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Job Creation or Stabilization: Completion of planning would be carried out by USFS planning personnel. Unit layout, boundary designation, and GPSing will be carried out by the WRTC with USFS oversight. The USFS has provided funding for a 9 person crew for a total of 220 person days. Marking and cruising would be done by one of the contractors under the Northern Province Professional Forestry Services IDIQ contract with USFS oversight. Timber sale contract preparation would be carried out by USFS personnel. Thinning operations and road maintenance/improvements would be conducted by local logging companies contracted by the timber purchaser with USFS sale administration oversight. Most of the burning would be done by USFS fire personnel with assistance from Bridgeville Community Center or WRTC fire crews.

Monitoring: Most of the monitoring and associated cost is included under “implementation” and would occur before and during operations. Implementation monitoring would be done by USFS personnel to ensure that layout, boundary designation, GPS, marking and cruising, timber operations and road maintenance work are conducted according to the specifications outlined in participating agreements or contracts. Post project monitoring would typically occur the next growing season and may even be long term over a period of several years (i.e. post treatment fuel loading, vegetative response, and mortality).

Timeline: Starting in August 2011 and continuing for 10 years.

Estimated costs and associated Budget Line Item: Total cost – \$ 1,222,950
NFTM - \$733,770 WFHF – \$489,180

Costs:

	Planning	Design	Implementation	Project Monitoring
FS Contribution	\$10,000	\$89,960	\$973,580	
Partner Contribution (both in kind and \$)		\$22,760	126,650	
Total	\$10,000	\$112,720	\$1,100,230	

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Timelines and Project Scheduling:

FY	Task	FS Cost	Partner cost
11-12	Complete NEPA	\$10,000	
11 - 12	Layout, boundary designation and GPS	\$89,960	\$22,760
12	Marking and Cruising associated with units to be included in IRTC or IRSC Contract #1	\$158,540	
12	IRTC or IRSC Contract #1 Preparation	\$35,000	
12 - 16	IRTC or IRSC Contract #1 Implementation	\$40,000	
13	Marking and Cruising associated with units to be included in IRTC or IRSC Contract #2	\$158,540	
13	IRTC or IRSC Contract #2 Preparation	\$35,000	
13 - 17	IRTC or IRSC Contract #2 Implementation	\$40,000	
17 - 21	Pile or jackpot burning – all units	\$506,500	\$126,650
Total		\$1,073,540	\$149,410

Sub-Project #2: Fuelbreak Corridors

Attribute/Indicator Addressed: 8.1 – Fire Condition Class

Project Description: Fuelbreak corridors would be constructed on 2,540 acres along the following high-use roads: county road 501 and 524 and NFS roads 02S02, 03S12, 03S30, 03S30E, 1S23, 27N12, 27N13, 27N32, 27N32G, 29N30, and the boundary of the Six Rivers and Shasta-Trinity National Forests. Fuelbreak corridors would generally be 300 feet in width on each side of the road. Actual widths may vary based on environmental features such as topography, vegetation distribution, and recent fire history. Fuel treatments within fuelbreaks may consist of thinning of trees 8 inches dbh and smaller, cutting of understory vegetation, tree pruning, chipping, mastication of brush, lopping/scattering of fuel, and jackpot burning, hand or grapple piling of fuel and burning of piles. Fuelbreaks would reduce fuel loading along roads to allow fire suppression resources a defensive line from which to fight fires and decrease the potential for detrimental wildfire effects to the overall project area and communities in the vicinity of Ruth.

Partners Involvement: The Hayfork Watershed Research and Training Center (WRTC) recently began layout, boundary designation, and GPSing of fuelbreak corridors via an existing participating agreement. The WRTC has expressed interest in implementing the project via a stewardship agreement. The Bridgeville Community Center or WRTC may assist with burning operations by way of existing participating agreements.

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Performance Measure Accomplishment:

Blue Slide Creek		Lost Creek	
Performance Measure Accomplishment	Acres/Miles	Performance Measure Accomplishment	Acres/Miles
S&W-RSRC-IMP	278	S&W-RSRC-IMP	127
S&W-RSRC-MTCE		S&W-RSRC-MTCE	
FOR-VEG-IMP		FOR-VEG-IMP	
FP-FUELS-ALL	1488	FP-FUELS-ALL	1052
FP-FUELS-NON-WUI	849	FP-FUELS-NON-WUI	848
FP-FUELS-WUI	639	FP-FUELS-WUI	204
FP-FUELS-WUI-STWD	639	FP-FUELS-WUI-STWD	204
HBT-ENH-STRM		HBT-ENH-STRM	
HBT-ENH-TERR	1488	HBT-ENH-TERR	1052
HBT-ENH-TERR-STWD	1488	HBT-ENH-TERR-STWD	1052
INVPLT-NXWD-FED-AC		INVPLT-NXWD-FED-AC	

Job Creation or Stabilization: Completion of planning would be carried out by USFS planning personnel. Fuelbreak corridor layout, boundary designation, and GPSing will be carried out by the WRTC with USFS oversight. The USFS has provided funding for a 9 person crew for a total of 305 person days. Stewardship agreement preparation would be carried out by USFS personnel. Implementation may be conducted by the WRTC with USFS oversight. Most of the burning would be done by USFS fire personnel with assistance from Bridgeville Community Center or WRTC fire crews.

Monitoring: Most of the monitoring and associated cost is included under “implementation” and would occur before and during operations. Implementation monitoring would be done by USFS personnel to ensure that layout, boundary designation, GPS, and implementation according to the specifications outlined in participating agreements or stewardship agreements. Post project monitoring would typically occur the next growing season and may even be long term over a period of several years (i.e., post treatment fuel loading, vegetative response, and mortality).

Timeline: Starting in August 2011 and continuing for 10 years.

Estimated costs and associated Budget Line Item: Total cost – \$ 2,464,895
WFHF - \$1,880,695 WFPR – \$584,200

Costs:

	Planning	Design	Implementation	Project Monitoring
FS Contribution	\$10,000	\$127,115	\$1,838,800	
Partner Contribution (both in kind and \$)		\$31,780	\$457,200	
Total	\$10,000	\$158,895	\$2,296,000	

Timelines and Project Scheduling:

FY	Task	FS Cost	Partner cost
11 - 12	Complete NEPA	\$10,000	
11 - 12	Layout, boundary designation and GPS	\$127,115	\$31,780
13	Stewardship agreement preparation	\$10,000	
13 - 18	Stewardship agreement implementation	\$1,244,600	\$311,150
18 - 21	Jackpot or pile burning	\$584,200	\$146,050
Total		\$1,975,915	\$488,980

Sub-Project #3: System Road Closures

Attribute/Indicator Addressed: 6.1 – Road Density, 6.2 – Road Maintenance

Project Description: All or portions of the following system roads would be closed and downgraded to maintenance level I status: 02S02E (0.56 mi.), 03S12H (0.57 mi.), 03S12L (0.22 mi.), 03S30D (0.21 mi.), 03S30G (0.83 mi.), 28N30 (0.68 mi.), 28N30C (0.42 mi.), and 29N30K (0.76 mi.). Roads would remain on the system for possible future use but would be closed to all traffic following project completion. Closure of all roads would include treatments to eliminate erosion, including but not limited to placement of water bars and removal of culverts.

Partners Involvement: Possible partnerships with Redwood Community Action Agency, Hayfork Watershed Center, or the Round Valley Tribe.

Performance Measure Accomplishment:

Blue Slide Creek		Lost Creek	
Performance Measure Accomplishment	Acres/Miles	Performance Measure Accomplishment	Acres/Miles
S&W-RSRC-IMP	29.4	S&W-RSRC-IMP	0
HBT-ENH-STRM	2.1 miles	HBT-ENH-STRM	0
HBT-ENH-TERR	21	HBT-ENH-TERR	0
INVPLT-NXWD-FED-AC		INVPLT-NXWD-FED-AC	
RD-DECOM	4.2 miles	RD-DECOM	0
RD-DECOM-STWD		RD-DECOM-STWD	

Job Creation or Stabilization: Completion of planning and design would be carried out by USFS planning personnel. Implementation of road closures would be conducted through a contract with local operators.

Monitoring: Some monitoring would be accomplished through the Best Management Practices Evaluation Program.

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Timeline: Starting in 2021 and continuing for 1 year.

Estimated costs and associated Budget Line Item: Total cost – \$63,750.

Costs:

	Planning	Design	Implementation	Project Monitoring
FS Contribution	\$10,000	\$ 2,464.00	\$ 63,750.00	
Partner Contribution (both in kind and \$)				
Total		\$ 2,464.00	\$ 63,750.00	

Timelines and Project Scheduling:

FY	Task	FS Cost	Partner cost
21	Implementation	\$ 66,214.00	
Total			

Essential Project #8: Little Doe and Low Gulch Timber Sale Project

Overview: This project includes 839 acres of low thinning, and 57 miles of system road maintenance or improvements.

Current Status: NEPA was completed in 2007. The project was split into two timber sales: (1) Lost Creek, awarded on July 8, 2008 and scheduled to end on September 30, 2011, and (2) Little Gulch, awarded on September 19, 2008 and scheduled to end March 31, 2014. Road maintenance or improvements occurs in conjunction with both sales. Treatment of existing and activity generated fuels will occur after harvest operations are complete.

Sub-Project #1: Lost Creek Timber Sale

Attribute/Indicator Addressed: 8.1 – Fire Condition Class, 6.2 – Road Maintenance

Project Description: Low thinning, or thinning from below, would occur on approximately 57 acres. The focus of using a low thinning treatment is the removal of trees primarily from the lower crown classes in order to favor those in the upper crown classes and retain the largest trees with the best crowns. These trees are generally at or above the average canopy height and have the best opportunity to take advantage of onsite resources to maintain or increase growth. Treatments are designed to maintain the existing native species diversity, including hardwoods, in the units being treated. Low thinning serves to improve stand structure, species composition, and resiliency to

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disturbance such as drought, insects, disease, and wildfire. Low thinning improves fuel condition classes by breaking up the horizontal and vertical continuity of canopy fuel, as well as reducing the amount of existing and harvest generated fuel on the ground via the yarding of tops, piling of fuel and burning.

Road maintenance and improvements would occur on approximately 4 miles of existing system roads needed for the project. System roads would require light to heavy maintenance such as brushing, blading, spot rocking, slump repair, or culvert repair or replacement prior to operations.

Partners Involvement: The Bridgeville Community Center or WRTC may assist with burning operations by way of existing participating agreements.

Performance Measure Accomplishment:

Blue Slide Creek		Lost Creek	
Performance Measure Accomplishment	Acres/Miles	Performance Measure Accomplishment	Acres/Miles
S&W-RSRC-IMP		S&W-RSRC-IMP	0.2
S&W-RSRC-MTCE		S&W-RSRC-MTCE	
FOR-VEG-IMP		FOR-VEG-IMP	57
FP-FUELS-ALL		FP-FUELS-ALL	57
FP-FUELS-NON-WUI		FP-FUELS-NON-WUI	57
FP-FUELS-WUI		FP-FUELS-WUI	
FP-FUELS-WUI-STWD		FP-FUELS-WUI-STWD	
HBT-ENH-STRM		HBT-ENH-STRM	
HBT-ENH-TERR		HBT-ENH-TERR	57
HBT-ENH-TERR-STWD		HBT-ENH-TERR-STWD	
RD-HC-MAINT		RD-HC-MAINT	4 miles
TMBR-VOL-SLD		TMBR-VOL-SLD	717
TMBR-VOL-SLD-STWD		TMBR-VOL-SLD-STWD	

Job Creation or Stabilization: Thinning operations conducted by local logging companies contracted by the timber purchaser are almost complete. Most of the burning would be done by USFS fire personnel with assistance from Bridgeville Community Center or WRTC fire crews.

Monitoring: Most of the monitoring and associated cost is included under “implementation” and would occur before and during burning operations (i.e. weather, fire behavior, and fuel consumption. Post project monitoring would typically occur the next growing season and may even be long term over a period of several years (i.e. post treatment fuel loading, vegetative response, and mortality).

Timeline: Starting in October 2013 and continuing for 1 year.

Estimated costs and associated Budget Line Item: Total cost – \$ 33,200

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BDBD -- \$9,563 WFHF -- \$14,669
WFPR -- \$8,968

Costs:

	Planning	Design	Implementation	Project Monitoring
FS Contribution			\$22,800	
Partner Contribution (both in kind and \$)			\$5,700	
Total			\$33,200	

Timelines and Project Scheduling:

FY	Task	FS Cost	Partner cost
13 - 14	Pile or jackpot burning	\$22,800	\$5,700
Total		\$22,800	\$5,700

Sub-Project #2: Little Gulch Timber Sale

Attribute/Indicator Addressed: 8.1 – Fire Condition Class, 6.2 – Road Maintenance

Project Description: Low thinning, or thinning from below, would occur on approximately 781 acres. The focus of using a low thinning treatment is the removal of trees primarily from the lower crown classes in order to favor those in the upper crown classes and retain the largest trees with the best crowns. These trees are generally at or above the average canopy height and have the best opportunity to take advantage of onsite resources to maintain or increase growth. Treatments are designed to maintain the existing native species diversity, including hardwoods, in the units being treated. Low thinning serves to improve stand structure, species composition, and resiliency to disturbance such as drought, insects, disease, and wildfire. Low thinning improves fuel condition classes by breaking up the horizontal and vertical continuity of canopy fuel, as well as reducing the amount of existing and harvest generated fuel on the ground via the yarding of tops, piling of fuel and burning.

Road maintenance and improvements would occur on approximately 53 miles of existing system roads needed for the project. System roads would require light to heavy maintenance such as brushing, blading, spot rocking, slump repair, or culvert repair or replacement prior to operations.

Partners Involvement: The Bridgeville Community Center or WRTC may assist with burning operations by way of existing participating agreements.

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Performance Measure Accomplishment:

Blue Slide Creek		Lost Creek	
Performance Measure Accomplishment	Acres/Miles	Performance Measure Accomplishment	Acres/Miles
S&W-RSRC-IMP		S&W-RSRC-IMP	15
S&W-RSRC-MTCE		S&W-RSRC-MTCE	
FOR-VEG-IMP		FOR-VEG-IMP	781
FP-FUELS-ALL		FP-FUELS-ALL	781
FP-FUELS-NON-WUI		FP-FUELS-NON-WUI	
FP-FUELS-WUI		FP-FUELS-WUI	
FP-FUELS-WUI-STWD		FP-FUELS-WUI-STWD	
HBT-ENH-STRM		HBT-ENH-STRM	
HBT-ENH-TERR		HBT-ENH-TERR	781
HBT-ENH-TERR-STWD		HBT-ENH-TERR-STWD	
RD-HC-MAINT		RD-HC-MAINT	53 miles
TMBR-VOL-SLD		TMBR-VOL-SLD	11,124
TMBR-VOL-SLD-STWD		TMBR-VOL-SLD-STWD	

Job Creation or Stabilization: Thinning operations and road maintenance/improvements would be conducted by local logging companies contracted by the timber purchaser with USFS sale administration oversight. Most of the burning would be done by USFS fire personnel with assistance from Bridgeville Community Center or WRTC fire crews.

Monitoring: Most of the monitoring and associated cost is included under “implementation” and would occur before and during operations. Implementation monitoring would be done by USFS personnel to ensure that timber operations and road maintenance work are conducted according to the specifications outlined in the timber sale contract and during burning operations. Post project monitoring would typically occur the next growing season and may even be long term over a period of several years (i.e. post treatment fuel loading, vegetative response, and mortality).

Timeline: Starting in October 2011 and continuing for 6 years.

Estimated costs and associated Budget Line Item: Total cost – \$ 419,500
 NFTM -- \$29,000 BDBD – \$108,670
 WFHF -- \$179,965 WFPR -- \$101,865

Costs:

	Planning	Design	Implementation	Project Monitoring
FS Contribution			\$341,400	
Partner Contribution (both in kind and \$)			\$78,100	
Total			\$419,500	

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Timelines and Project Scheduling:

FY	Task	FS Cost	Partner cost
12 - 14	Continue timber sale contract implementation	\$29,000	
15 - 17	Pile or jackpot burning	\$312,400	\$78,100
Total		\$341,400	\$78,100

e. Costs:

	Planning	Design	Implementation	Project Monitoring
FS Contribution	\$116,545	\$286,603	\$17,216,050	\$2,300
Partner Contribution (both in kind and \$)		\$54,540	\$1,172,800	\$500
Total	\$116,545	\$341,143	\$18,388,850	\$2,800

f. Timelines and Project Scheduling

FY	Task	FS Cost	Partner cost
12	Lucky Timber sale contract implementation	\$7,500	
12	Smith Peak – Finish IRTC contract preparation	\$3,250	
12	Smith Peak – IRTC contract implementation	\$8,000	
12	Beaverslide – Finish IRSC field work and contract preparation	\$30,000	
12	Beaverslide – IRSC contract implementation	\$9,000	
12	Beaverslide Fuel Treatment Corridors – Complete layout, boundary designation and GPS	\$30,000	
12	Beaverslide Fuel Mastication – Complete layout, boundary designation, and GPS	\$2,000	
12	Kelsey Peak Thinning & Road Maintenance – Complete NEPA	\$10,000	
12	Kelsey Peak Thinning & Road Maintenance – Complete layout, boundary designation & GPS	\$89,960	\$22,760
12	Kelsey Peak Thinning & Road Maintenance – Marking and cruising with units to be included in IRTC or IRSC Contract #1	\$158,540	
12	Kelsey Peak Thinning & Road Maintenance – IRTC or IRSC Contract #1 preparation	\$35,000	
12	Kelsey Peak Thinning & Road Maintenance – IRTC or IRSC Contract#1 Implementation	\$8,000	
12	Kelsey Peak Fuelbreak Corridors – Complete NEPA	\$10,000	

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12	Kelsey Peak Fuelbreak Corridors – Layout, boundary designation, and GPS	\$127,115	\$31,780
12	Little Gulch Timber Sale – contract inspection	\$9,666	
12	Upper Mad Road Decommissioning and Upgrades – Transportation Analysis	\$17,925	
12	Total for FY2012	\$555,956	\$54,540
13	Lucky Timber sale contract implementation	\$7,500	
13	Clover Gulch: Begin NEPA (SIR), begin design work	\$15,190	
13	Smith Peak – IRTC contract implementation	\$8,000	
13	Beaverslide – IRSC contract implementation	\$9,000	
13	Beaverslide Fuel Treatment Corridors – Stewardship agreement preparation	\$5,500	
13	Beaverslide Fuel Treatment Corridors- Stewardship agreement implementation	\$105,617	\$26,403
13	Beaverslide Fuel Mastication – Stewardship agreement preparation	\$2,000	
13	Beaverslide Fuel Mastication – Stewardship agreement implementation	\$35,600	\$8,900
13	Kelsey Peak Thinning & Road Maintenance – IRTC or IRSC Contract#1 Implementation	\$8,000	
13	Kelsey Peak Thinning & Road Maintenance – Marking and cruising associated with units to be included in IRTC or IRSC Contract #2	\$158,540	
13	Kelsey Peak Thinning & Road Maintenance – IRTC or IRSC Contract #2 Preparation	\$35,000	
13	Kelsey Peak Thinning & Road Maintenance – IRTC or IRSC Contract #2 Implementation	\$8,000	
13	Kelsey Peak Fuelbreak Corridors – Stewardship agreement preparation	\$10,000	
13	Kelsey Peak Fuelbreak Corridors – Stewardship agreement implementation	\$207,433	\$51,858
13	Lost Creek Timber Sale – Pile or jackpot burning	\$11,400	\$2,850
13	Little Gulch Timber Sale – contract inspection	\$9,666	
13	Clover Gulch Hazardous Fuel Reduction – Begin NEPA (SIR), begin design work.	\$15,190	
13	Mad Ridge Fuelbreak – Design and begin implementation	\$25,060	\$2,000
13	Upper Mad Road Decommissioning and Upgrades – NEPA	\$26,050	
13	Total for FY2013	\$702,746	\$92,011

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14	Lucky TS – Pile or Jackpot Burning	\$4,853	\$1,213
14	Clover Gulch: Complete NEPA and design work, begin implementation	\$50,030	\$9,000
14	Smith Peak – IRTC contract implementation	\$8,000	
14	Beaverslide – IRSC contract implementation	\$9,000	
14	Beaverslide Fuel Treatment Corridors-Stewardship agreement implementation	\$105,617	\$26,403
14	Beaverslide Prescribed Burning – Unit design	\$15,000	
14	Beaverslide Prescribed Burning	\$71,960	\$17,990
14	Kelsey Peak Thinning & Road Maintenance – IRTC or IRSC Contract#1 Implementation	\$8,000	
14	Kelsey Peak Thinning & Road Maintenance – IRTC or IRSC Contract #2 Implementation	\$8,000	
14	Kelsey Peak Fuelbreak Corridors – Stewardship agreement implementation	\$207,433	\$51,858
14	Lost Creek Timber Sale – Pile or jackpot burning	\$11,400	\$2,850
14	Little Gulch Timber Sale – contract inspection	\$9,666	
14	Clover Gulch Hazardous Fuel Reduction – Complete NEPA and design work, begin implementation	\$50,030	\$9,000
14	Mad Ridge Fuelbreak – Continue implementation	\$22,260	\$2,000
14	Upper Mad Road Decommissioning and Upgrades – Implementation	\$282,910	
14	Unauthorized Route Decommissioning	\$37,500	
14	Total for FY2014	\$901,659	\$120,314
15	Lucky TS – Pile or Jackpot Burning	\$4,853	\$1,213
15	Clover Gulch: Continue implementation and monitoring	\$38,250	\$4,000
15	Smith Peak – IRTC contract implementation	\$8,000	
15	Beaverslide – IRSC contract implementation	\$9,000	
15	Beaverslide Fuel Treatment Corridors-Stewardship agreement implementation	\$105,617	\$26,403
15	Beaverslide Prescribed Burning	\$71,960	\$17,990
15	Kelsey Peak Thinning & Road Maintenance – IRTC or IRSC Contract#1 Implementation	\$8,000	
15	Kelsey Peak Thinning & Road Maintenance – IRTC or IRSC Contract #2 Implementation	\$8,000	
15	Kelsey Peak Fuelbreak Corridors – Stewardship agreement implementation	\$207,433	\$51,858
15	Little Gulch Timber Sale – Pile or jackpot burning	\$104,133	\$26,033

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15	Clover Gulch Hazardous Fuel Reduction – Continue implementation and monitoring	\$38,250	\$42,250
15	Mad Ridge Fuelbreak – Continue implementation	\$22,260	\$2,000
15	Upper Mad Road Decommissioning and Upgrades – Implementation	\$282,910	
15	Total for FY2015	\$908,666	\$171,747
16	Lucky TS – Pile or Jackpot Burning	\$4,853	\$1,213
16	Clover Gulch: Complete implementation and monitoring	\$38,250	\$4,500
16	Smith Peak – IRTC contract implementation	\$8,000	
16	Beaverslide – IRSC contract implementation	\$9,000	
16	Beaverslide Fuel Treatment Corridors-Stewardship agreement implementation	\$105,617	\$26,403
16	Beaverslide Prescribed Burning	\$71,960	\$17,990
16	Kelsey Peak Thinning & Road Maintenance – IRTC or IRSC Contract#1 Implementation	\$8,000	
16	Kelsey Peak Thinning & Road Maintenance – IRTC or IRSC Contract #2 Implementation	\$8,000	
16	Kelsey Peak Fuelbreak Corridors – Stewardship agreement implementation	\$207,433	\$51,858
16	Little Gulch Timber Sale – Pile or jackpot burning	\$104,133	\$26,033
16	Clover Gulch Hazardous Fuel Reduction – Complete implementation and monitoring	\$38,250	\$42,750
16	Mad Ridge Fuelbreak – Continue implementation	\$22,260	\$2,000
16	Upper Mad Road Decommissioning and Upgrades – Implementation	\$282,910	
16	Total for FY2016	\$908,666	\$172,747
17	Smith Peak – IRTC contract implementation	\$8,000	
17	Smith Peak – Pile or jackpot burning	\$112,747	\$28,187
17	Beaverslide – IRSC contract implementation	\$9,000	
17	Beaverslide – Pile or jackpot burning	\$72,310	\$18,078
17	Beaverslide Fuel Treatment Corridors-Stewardship agreement implementation	\$105,617	\$26,403
17	Beaverslide Prescribed Burning	\$71,960	\$17,990
17	Kelsey Peak Thinning & Road Maintenance – IRTC or IRSC Contract #2 Implementation	\$8,000	
17	Kelsey Peak Thinning & Road Maintenance – Pile or jackpot burning	\$101,300	\$25,330

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17	Kelsey Peak Fuelbreak Corridors – Stewardship agreement implementation	\$207,433	\$51,858
17	Little Gulch Timber Sale – Pile or jackpot burning	\$104,133	\$26,033
17	Upper Mad Road Decommissioning and Upgrades – Implementation	\$282,910	
17	Total for FY2017	\$1,083,410	\$193,879
18	Smith Peak – Pile or jackpot burning	\$112,747	\$28,187
18	Beaverslide – Pile or jackpot burning	\$72,310	\$18,078
18	Beaverslide Fuel Treatment Corridors- Stewardship agreement implementation	\$105,617	\$26,403
18	Beaverslide Fuel Treatment Corridors – Pile or jackpot burning	\$80,360	\$20,090
18	Kelsey Peak Thinning & Road Maintenance – Pile or jackpot burning	\$101,300	\$25,330
18	Kelsey Peak Fuelbreak Corridors – Stewardship agreement implementation	\$207,433	\$51,858
18	Kelsey Peak Fuelbreak Corridors – Pile or jackpot burning	\$146,050	\$36,512
18	Upper Mad Road Decommissioning and Upgrades – Implementation	\$282,910	
18	Total for FY2018	\$1,108,727	\$206,458
19	Smith Peak – Pile or jackpot burning	\$112,747	\$28,187
19	Beaverslide – Pile or jackpot burning	\$72,310	\$18,078
19	Beaverslide Fuel Treatment Corridors – Pile or jackpot burning	\$80,360	\$20,090
19	Kelsey Peak Thinning & Road Maintenance – Pile or jackpot burning	\$101,300	\$25,330
19	Kelsey Peak Fuelbreak Corridors – Pile or jackpot burning	\$146,050	\$36,512
19	Total for FY2019	\$512,767	\$128,197
20	Smith Peak – Pile or jackpot burning	\$112,747	\$28,187
20	Beaverslide – Pile or jackpot burning	\$72,310	\$18,078
20	Beaverslide Fuel Treatment Corridors – Pile or jackpot burning	\$80,360	\$20,090

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20	Kelsey Peak Thinning & Road Maintenance – Pile or jackpot burning	\$101,300	\$25,330
20	Kelsey Peak Fuelbreak Corridors – Pile or jackpot burning	\$146,050	\$36,512
20	Upland Fuel Treatments – NEPA	\$1,719,000	\$117,280
21	Beaverslide Fuel Treatment Corridors – Pile or jackpot burning	\$80,360	\$20,090
21	Beaverslide Road Decommissioning	\$110,192	
21	Kelsey Peak Thinning & Road Maintenance – Pile or jackpot burning	\$101,300	\$25,330
21	Kelsey Peak Fuelbreak Corridors – Pile or jackpot burning	\$146,050	\$36,512
21	Kelsey Peak Road Decommissioning – Implementation	\$66,214	
21	Upland Fuel Treatments – Pile or jackpot burning	\$1,719,000	\$117,280
22	Upland Fuel Treatments – Pile or jackpot burning	\$1,719,000	\$117,280
23	Upland Fuel Treatments – Pile or jackpot burning	\$1,719,000	\$117,280
24	Upland Fuel Treatments – Pile or jackpot burning	\$1,719,000	\$117,280
25	Upland Fuel Treatments – Pile or jackpot burning	\$1,719,000	\$117,280
26	Upland Fuel Treatments – Pile or jackpot burning	\$1,719,000	\$117,280
27	Upland Fuel Treatments – Pile or jackpot burning	\$1,719,000	\$117,280
28	Upland Fuel Treatments – Pile or jackpot burning	\$1,719,000	\$117,280
29	Upland Fuel Treatments – Pile or jackpot burning	\$1,719,000	\$117,280
30	Upland Fuel Treatments – Pile or jackpot burning	\$1,719,000	\$117,280

g. Other Partners

Redwood Community Action Agency (RCAA)

4. Restoration Project Monitoring and Evaluation

- a. The forest will monitor:** Most monitoring is embedded in the implementation costs because so much of it occurs just before and during burning operations (i.e. weather, fire behavior, and fuel consumption). Post burn monitoring typically occurs the next growing season and even longer to evaluate factors such as vegetative response, mortality, duff consumption, and scorch height
- b. Monitoring will be done in cooperation with:** Any interested parties or agencies interested in fuelbreak maintenance and effectiveness would be welcome to participate in the monitoring process.

Action Plan Date: October 28, 2011

Reviewing Official and Title: Tyrone Kelley, Forest Supervisor_

Forest Contact Information: Adam Dresser (adresser@fs.fed.us, 707-441-3618)