

Date of Report:

BURNED-AREA REPORT

(Reference FSH 2509.13)

PART I - TYPE OF REQUEST

A. Type of Report

- ☒ 1. Funding request for estimated WFSU-SULT funds
☐ 2. Accomplishment Report
☐ 3. No Treatment Recommendation

B. Type of Action

- ☐ 1. Initial Request (Best estimate of funds needed to complete eligible rehabilitation measures)
☒ 2. Interim Report # 1
 ☒ Updating the initial funding request based on more accurate site data or design analysis
 The narrative for Interim # 1 is shown in green and italic font
 ☐ Status of accomplishments to date
☐ 3. Final Report (Following completion of work)

PART II - BURNED-AREA DESCRIPTIONA. Fire Name: Boulder Complex
(Boulder and Hungry Fires)B. Fire Number: CA-PNF-371C. State: CaliforniaD. County: PlumasE. Region: 05F. Forest: PlumasG. District: Mount HoughH. Fire Incident Job Code: P5CR6CI. Date Fire Started: June 25, 2006J. Date Fire Controlled: Estimated July 12, 2006K. Suppression Cost: \$3,200,000

L. Fire Suppression Damages Repaired with Suppression Funds

1. Fireline waterbarred (miles): Total-6.1 miles Boulder-1.6 miles Hungry-4.5 miles
2. Fireline seeded (miles):
3. Other (identify):

M. Watershed Number: 1802012201N. Total Acres Burned: Total-3432 (Boulder-2920 Hungry-512)

NFS Acres(Boulder-2920 Hungry-505) Other Federal () State () Private (Hungry-7)

O. Vegetation Types: Mixed conifer consisting of mostly Yellow Pine, along with Sierran Mixed Conifer, manzanita, service berry, mountain snowberry, and meic forbs in the riparian areas. Several drainages contain Aspen, Lodgepole, willow or alder.

P. Dominant Soils: Toem and Cagwin Series

Q. Geologic Types: Granodiorite

R. Miles of Stream Channels by Order or Class: Total miles=44.5

Boulder- Total=39.6 miles (ephemeral=31.1 miles, intermittent=7.1 miles, perennial=1.4 miles)

Hungry- Total=4.9 miles (ephemeral=4.5 miles, intermittent=0.4 miles)

S. Transportation System

Trails: miles Roads: Total miles=5.0 (Boulder- Total=4.2 miles and Hungry- Total=0.8 miles)

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 1347 (low) 1436 (moderate) 649 (high)

Boulder (1074 low, 1278 moderate, 567 high) and Hungry (273 low, 158 moderate, 82 high)

B. Water-Repellent Soil (acres): 649

C. Soil Erosion Hazard Rating (acres):

0 (low) 1347 (moderate) 1436 (high) 649 (very high)

D. Erosion Potential: 35 tons/acre

E. Sediment Potential: 805 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 5

B. Design Chance of Success, (percent): 80

C. Equivalent Design Recurrence Interval, (years): 25

D. Design Storm Duration, (hours): 24

E. Design Storm Magnitude, (inches): X

F. Design Flow, (cubic feet / second/ square mile): 84

G. Estimated Reduction in Infiltration, (percent): 4

H. Adjusted Design Flow, (cfs per square mile): 94

PART V - SUMMARY OF ANALYSIS

A. Describe Watershed Emergency:

Overview

On June 25th, 2006, a series of lightning fires occurred in the vicinity of Antelope Lake, located on the Mt. Hough Ranger District of the Plumas National Forest. The Boulder Complex consisted of twelve fires, two of which were greater than 500 acres in size. The BAER assessment concentrated on the two larger fires; Boulder fire (2929 acres) and the Hungry fire (512 acres).

Watershed Emergency

An emergency has been created by two large fires that burned in steep erosive decomposed granitic soils. Soil cover was consumed on 60% of the soil surface with water repellency extending to 4 inches into the soil over 20% of the area above Antelope Lake, a critical watershed for water resources and recreation.

Concern for soil and water quality impacts within the Boulder Fire were rated high by the assessing hydrologist and soil scientist. Their assessment was based on amount of hydrophobic soils and the intensity at which the vegetation burned above Antelope Lake. Antelope Lake is part of the State Water Project as such one of the beneficial uses is water supply to the State of California. The lake also attracts many recreationists for camping, fishing, boating and water contact sports. Impacts to soils from erosional loss will impact soil productivity as a result vegetation regeneration and reestablishment of a conifer forest are negatively affected.

The Hungry fire is located on a ridge west of Antelope Lake, between Middle Creek and Hungry Creek. Burn severity for most of the fire was rated low to moderate, with some areas of high severity on the ridge top. Drainage density is very low, with no perennial streams located closer than 900 feet from the burned area. Two intermittent streams cross road 27N06/26N54 through culverts.

In 2001, the Stream fire occurred on the west side of Antelope Lake, directly across from the area burned in the Boulder Fire. In the five years since that fire, vegetative recovery has been slow and consists mostly of grass and some brush species. The Stream Fire area was not salvage logged, so there are many standing dead trees. Ground cover on this fire has been sufficient to mitigate most of the erosion of the granitic soils. Vegetative response on this fire was used for the Boulder Complex analysis.

It is **critical** that all land and channel emergency treatments are accomplished prior to late summer thunderstorms. These storms on a biannual average produce 1.3 inches of rain in six hours or 3 inches in a 24-hour period. Intense rain storms on the fire area will generate surface erosion and movement of soil and ash into the stream system and the lake.

Resource Impacts

Soils

Field reconnaissance of the Boulder Creek Fires was conducted between July 7th and 8th, 2004. Field transverse were conducted from the upper portions of the high burn severity to the bottom of the drainages. Other transects were conducted in the moderate burn severity areas and only visual inspections were conducted in low burn severity areas. The main focus of the investigations, were the high and moderate burn severity areas.

Five map units are located in this fire and are listed in **Table 1**. Erosion Hazard Rating (EHR) values were created for each map unit with burn intensity values factored in. Burn intensity, soil cover, aspect and slope, soil organic matter, soil descriptions, duff layer, and hydrophobicity were evaluated at each location. Soils are mostly moderately deep to deep.

Table 1. Boulder Ck. Fires Soil Map Units and Erosion Hazard Ratings with fire effects.

Map Unit	Name	EHR (burn soil)
108	Bullnell-Etchen-Boomtown families complex, 10-50 percent slopes	H
109	Cagwin-Toem families complex, 30 to 70 percent slopes	H
120	Chaix-Wapi families complex, 30 to 50 percent	H
121	Chaix-Wapi families complex, 50 to 70 percent	H
270	Toem-Cagwin families complex, 2 to 55 percent slopes	VH

The Boulder creek complex fires consumed 3,432 acres of which 649 acres had high soil burn intensity and were water repellant, 1,436 acres of moderate, and 1,347 acres of low to unburned soil burn intensities. This equates to 60% of the area with little or no vegetative cover and 40% with adequate cover.

Soil organic matter was only consumed on the surface and soil organic matter destruction did not usually extend past 1 inch into the soil in the high burn intensity areas. Water repellency extended to 4 inches in the high burn severity areas. In the high burn severity areas some resident seeds were consumed but in moderate and low burn severity areas they were present along with roots.

Hydrophobicity or water repellency was observed in the high and moderate burn intensity areas where dense conifer stands, is considered a significant factor and significantly alter the erosion hazard ratings (Soil Intreps. 1999 & SQS, 1995). In areas of conifers and with cobbly soils, the surface layer was stained black and beaded by organic compounds only on the surface.

Dry ravel was observed in the inner gorges and was most pronounced in the high burn severity areas along Lost Creek.

Cover was not adequate for erosion control in the high burn severity areas due to loss of cover, water repellency, and little cover recruitment possibilities. In the hot burn areas with less cover seed source was less and erosion will be accelerated for the first year till natural vegetation reoccupies these areas in 2 to 5 years. These areas are in the Lost Creek and Antelope Creek drainages. In other drainages either they did not burn hot enough for treatments or no suitable ground exists for treatment.

Hydrophobicity was on the soil surface and down to 4 inch in most areas and on the most part it was fairly continuous across the landscape in hot burned areas. Lost Creek was the most impacted area where about 1.5 miles of stream hillslopes, cover was destroyed by the fire. Antelope Creek was impacted in timbered hillslopes areas of about 1 mile. Stream sediments erosion will be elevated and head-cutting will be pronounced causing down stream sedimentation and habitat destruction.

The condition of the high soil burn severity areas is a total lack of cover, which is especially pronounced in the Lost Creek watershed and the middle portion of Antelope Creek watershed. Given the importance of Antelope Lake to watershed and recreation, the burn intensity in the lower watershed, priority should be given to this watershed for soil stabilization rehabilitation work. With the steep inner gorges of Lost and Antelope Creeks, buffer strip helmulching should be done to capture hillslope erosion along with streambank mulching and instream structures. Roadside mechanical mulching should be done to protect road side hillslopes and cutbanks.

Vegetation

A search of the district data base, files and GIS system showed that no Plumas National Forest Sensitive Plants were documented from within the fire area.

There are the following weeds near the fires we know of Canada thistle (*Cirsium arvense*), spotted knapweed (*Centaurea maculosa*), Scotch broom (*Cytisus scoparius*), and an unverified report of yellow starthistle (*Centaurea solstitialis*). There are several other invasive species such as Bull thistle, Cheat grass, and woolly mullien that we do not track and typically do not try to eradicate. The greatest threat is the spotted knapweed (*Centaurea maculosa*),

Heritage Resources

Known heritage resources were evaluated for post-fire threats, and none of the sites were at risk.

Aquatic, Riparian and Terrestrial Habitats

Antelope and Lost Creeks are not fish bearing. No Mountain Yellow-legged Frog occupied habitat in Boulder Creek or Lone Rock Creek was affected by the Boulder Fire Complex.

The Boulder Complex did not burn in the two active bald eagle nest territories at Antelope Lake; only in the one inactive nesting territory.

B. Emergency Treatment Objectives:

- The primary objective of the proposed emergency rehabilitation is to take prompt actions deemed reasonable and necessary to effectively protect, reduce or minimize significant threats to property and prevent unacceptable resource degradation

The objectives of the emergency treatments are to maintain channel stability while reducing soil erosion and deposition into the stream system and Antelope Lake. Soil deposition will reduce storage capacity in the lake while ash deposits may add sufficient nitrogen and phosphorous to cause a local algae bloom. Channel stability needs to be maintained to limit fire induced accelerated headcut migration; reduce accelerated streambank erosion caused by loss of vegetation and limit channel downcutting.

Burn severity from the lakeshore upslope to road 27N41, which is the main road in the burned area adjacent to the lake, is high. This is evident by the number of standing dead trees devoid of foliage and the amount of hydrophobic soils present. Slopes are gentle (0-10%) adjacent to the lake, with 20% slopes below the road. The lake shore has abundant wetland areas, with sedges and other hydrophytes vegetation. Upslope and east of road 27N41, in a fuel treatment project or Defensible Fuel Profile Zone (DFPZ) fire intensity was significantly reduced.

From the fuel treatment area upslope to roads 27N46/27N60, the upper fire perimeter, burn intensity was moderate to high. Slopes in the upper area of the fire are about 30-50% with rock outcrops.

Stream density is low with one perennial stream, Antelope Creek, and one intermittent stream, Lost Creek. In high precipitation years, the latter may have water year round. Road culverts on these streams are oversized and are of sufficient size to pass the expected increases in peak flow.

The West Fork and main stem of Lost Creek flow directly into Antelope Lake. Both channels are incised with nonvegetated, moderately steep banks. The main stem of Lost Creek has one rock headcut structure that should undergo a small amount of maintenance to insure it will capture the predicted increase in sediment.

Antelope Creek has an extensive green meadow area that extends above and below road 27N41. The main conduit of soil and ash is via the channel systems that flow into the lake. Burned areas around the shoreline have gentle slope and high hydrophobicity. Some surface erosion will occur but should be trapped by the riparian vegetation.

Except for one culvert, road drainage from 24N71 does not contribute flow to the lake.

Land Treatments:

The upper channel of Antelope Creek as well as the main stem of Lost Creek have steep slopes with high soil hydrophobicity. Ground cover was consumed by the fire. Because of the intensity of the fire there is no recruitment potential for ground cover. Mulching slopes above the stream will add ground cover to reduce surface erosion. Since the area is remote with steep slopes, helicopter mulching is recommended.

Channel Treatments:

Emergency treatments are needed to reduce the potential for accelerated streambank erosion, trap sediment in the channels and reduce surface erosion of soil and ash into the stream systems.

- a. Loose soil on steep, bare channel banks is available to erode directly into the stream and subsequently transported to Antelope Lake. Streambanks to be treated are west Fork Lost Creek and the main stem of Lost Creek from approximately 600 feet above road 27N41 to near the lake need to be mulched. Mulching will provide ground cover to reduce surface erosion and provide sufficient soil stability to allow germination of plants in the seed bed.
- b. Stream channel bottoms will be subject to increased water flows. Properly placed straw bale check dams in the channel bottom can create a stable bottom plus trap eroding material. Construct straw bale check dams in the channel bottoms of west Fork Lost Creek and main stem of Lost Creek will greatly reduce the amount of sediment reaching Antelope Lake.
- c. Channel headcuts are present in the main streams tributary of both Antelope and Lost Creek. With increased hydrologic response resulting from the fire, it is anticipated that these headcuts will migrate upstream. Headcut structures need to be constructed in west Fork Lost, the main stream of Lost Creek and an unnamed stream.
- d. One road culvert from 27N41 transports water toward the lake in a swale that becomes undefined. Increased runoff due to lack of ground cover and high soil hydrophobicity may cause the channel to change form and become downcut. Straw bale check dams need to be placed in the channel to contain sediment and reduce channel enlargement.
- e. A new check dam needs to be constructed on an unnamed stream. The new structure will trap sediment generated by fire effects.

Road Treatments:

Boulder Fire – road treatments will reduce the amount of sediment input into Antelope Lake by cleaning culvert inlets and installing rolling dips of native surface roads.

Hungry Fire – heavily burned slopes above road culverts has the potential to produce woody debris and sediment that may plug the culverts and cause road washouts. A spring draining into the road has the potential to create a gully in the roadbed as a fire effect of denuding slopes above the spring.

Protection/Safety:

- a. Protection – the fire has destroyed the effectiveness of barriers that limited vehicle use. Without the barriers, burned land will be available to off road use resulting in severe disturbance of the bare ground and possibly creating sediment input to the lake.
- b. Safety –
 - Signs- some vehicle safety signs were burned in the fire. To assure public safety burned signs need to be replaced.
 - Toilet- an old facility that has been reported as unused was burned exposing hazardous materials and an open pit. To mitigate the risk to the public the pit needs to be pumped and capped.

C. Probability of Completing Treatment Prior to First Major Damage-Producing Storm:

Land 95 % Channel 95 % Roads 95 % Other 85 %

D. Probability of Treatment Success

Years after Treatment			
	1	3	5

Land			
Channel			
Roads			
Other			

E. Cost of No-Action (Including Loss):

F. Cost of Selected Alternative (Including Loss):

G. Skills Represented on Burned-Area Survey Team:

<input checked="" type="checkbox"/> Hydrology	<input checked="" type="checkbox"/> Soils	<input type="checkbox"/> Geology	<input type="checkbox"/> Range	<input type="checkbox"/>
<input type="checkbox"/> Forestry	<input checked="" type="checkbox"/> Wildlife	<input type="checkbox"/> Fire Mgmt.	<input checked="" type="checkbox"/> Engineering	<input type="checkbox"/>
<input type="checkbox"/> Contracting	<input type="checkbox"/> Ecology	<input checked="" type="checkbox"/> Botany	<input checked="" type="checkbox"/> Archaeology	<input type="checkbox"/>
<input checked="" type="checkbox"/> Fisheries	<input type="checkbox"/> Research	<input type="checkbox"/> Landscape Arch	<input checked="" type="checkbox"/> GIS	

Soils – Brad Rust
Hydrologist – Bob Faust
Hydrologist Trainee – Fred Levitan
Botany Trainee – Terry Miller
Archeology Trainee – Matt Padilla
GIS Trainee – John Lundquist
Gary Rotta – Wildlife Support
Tina Hopkins – Fish Support
Peggy Gustafson – Public Services Support

Team Leader: Annetta M. Mankins, Shasta-Trinity NF Trainee Barbara Drake, Plumas NF

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H. Treatment Narrative:

Land Treatments

- a. Helimulching of 77 acres along Antelope and its tributaries and 57 acres along the main stem and west Fork of Lost Creek is recommended. Treatment length is approximately 3000 feet on Antelope Creek, 3000 feet on the west Fork of Antelope Creek and 7500 feet on the east Fork of Antelope Creek. Treatment length along the west Fork Lost Creek is approximately 6000 feet and 4000 feet along the main stem Lost Creek about 4000 feet. Mulch should be applied at a rate of two tons per acre. Apply mulch above the channel high water line for 100 feet on each side of the channel.
- b. Boulders will be placed in the high burn severity/very high erosion hazard rated area on Forest Service road 27N41. The boulders will be placed on the south edge of the road as an erosion control protection measure to prohibit traffic from off road vehicles.

Interim Request #1

Interim Request #1 adds \$114,601 for Land Treatments (Helimulching Treatment). Initial Request planned to use the Plumas National Forest Helicopter (512) and helitack crew to accomplish the Aerial Helimulching Treatment. The Plumas helicopter's first priority during fire season is initial attack. Therefore, a CWN (Call When Needed) helicopter will be ordered along with the Plumas helicopter to complete the Helimulching project in a timely manner. Additional dollars are also needed to cover the cost of improving the helibase and adding personnel to the team for traffic control and helitack positions.

Channel Treatments:

- a. Hand mulching of streambanks on is 2200 feet of west Fork Lost Creek (1/2 acre) and 2200 feet (1 acre) of the main stem of Lost Creek will reduce soil loss. If left untreated 3/16 inch soil loss is predicted, mulching will reduce this soil loss by 90%. Mulching also recommend along two other channels (refer to Hydro spreadsheet).

Streambanks range in height from 6 to 10 feet. Mulching will be by hand from the high water line to one to two feet back from the break in slope above the channel. Straw mulch, preferably rice straw, will need to be certified weed free. Mulching will keep soil in place and allow seed in the seedbed to germination.

- b. Straw bale check dams will trap sediment in the channel plus reduce streambank erosion. Each structure will reduce streambank erosion and trap additional soil loss by 5 yds³. Structures should be placed about 50 feet apart.
- c. Two headcut structures need to be constructed on the west Fork of Lost Creek approximately 600 feet upstream of road 27N41. One headcut is about 12 feet wide by five feet high and the other three feet wide. Predicted increased water flow will aggravate the headcuts and cause them to migrate upstream. Rock and filter cloth will need to be transported to the site. Soil loss is expected to be 5 yds³.
- d. The existing rock headcut on main Lost Creek above road 27N41 needs maintenance to insure increased sediment loads are captured and bank erosion is not accelerated. A small headcut above this structure needs to be fabric lined and rocked. Assure the spillway is adequate to pass increased peak flows. The structure can be constructed using existing surplus on site rock from a previous restoration effort. Predicted soil loss is 2 yds³.

A new channel check dam needs to be constructed approximately 30 feet above an existing metal check dam at the location of a debris dam in the channel. Remove the burned tree so that the new structure will collect existing stored sediment and pass expected increased stream flow.

- e. Another structure is needed in main Lost Creek. Each structure will collect about 3 yds³.

Interim Request #1

Interim Request #1 adds \$23,088 for channel treatments. Initial Request planned to use in-house, Plumas National Forest force account road crew to accomplish some channel treatments. However, this crew is not available due to other commitments, primarily for flood repair work. Therefore, a contractor will be competitively hired to accomplish the work. Interim Request is based upon lowest bid received. This bid is significantly higher than the planned force account costs due to contractor profit and overhead, Davis-Bacon wage requirements, and the lack of contractors available to do work on short notice this late in the field season.

Additionally, it was determined that the volume and size of rock planned for one of the three headcuts to be treated is too small to adequately treat the channel. More rock haul is needed and the larger rock will require excavator-placement rather than hand-placement. These treatment changes for the one headcut drastically increased the average unit cost for the three rock headcut treatments.

Road Treatments

Boulder Fire

- a. Two culverts have a blocked inlet and outlet which will need to be opened to allow for the expected increased runoff.
- b. Install five road dips with rocked dissipaters on 27N19Y to reduce road runoff and trap road sediment. Predicted loss is estimated at 2 yds³.

Hungry Fire

- a. Install inlet bevels on culvert end sections to pass expected increases in sediment and water flow. Remove burned woody material from the road inside ditch to reduce plugging of the ditch and mitigate potential over flow and subsequent runoff on the road surface.
- b. A rolling dip with rock dissipaters needs to be installed below a spring area that flows onto the road surface (27N06) as spring flow will increase with reduced transpiration in the burned area.
- c. A culvert inlet and outlet is blocked by vegetation. The culvert needs to be functioning to transport increased water flow and sediment.

Interim Request #1

Interim Request #1 adds \$14,595 for road treatments. Initial Request planned to use in-house, Plumas National Forest force account road crew to accomplish road treatments. However, this crew is not available due to other commitments, primarily for flood repair work. Therefore, a contractor will be competitively hired to accomplish the work. Interim Request is based upon lowest bid received. This bid is significantly higher than the planned force account costs due to contractor profit and overhead, Davis-Bacon wage requirements, and the lack of contractors available to do work on short notice this late in the field season.

Protection/Safety:

- 1) Protection
 - a. Replace burned barrier posts in the picnic areas at the end of road 27N20Y. Without barrier posts, the burned area would be exposed to the public for vehicle traffic which would disturb the recovering burned area.
 - b. Replace burned gate fence posts on an unnumbered road that terminates with the Lost Creek boat ramp road. The gate prevents public access to a Forest Service structure. Also, without the gate the public would have access to drive on burned areas. Predicted soil lost is estimated at 3 yds³.
- 2) Signs
Replace eight public safety signs, such as speed limit, rough road, slow, etc.
- 3) Toilet – The vault for the burned outhouse needs to be pumped of hazardous materials and the holes filled in and capped.

Interim Request #1

Interim Request #1 reduces the cost for protection/safety by \$4,410. Contractor's bid is lower than the planned in-house, force account cost for placement of boulder barriers.

H. Monitoring Narrative:

Monitoring for expansion of existing or identification of new populations of noxious weeds within the fire perimeter is requested.

Effectiveness monitoring of treatments is requested for one year.

(Describe the monitoring needs, what treatments will be monitored, how they will be monitored, and when monitoring will occur. A detailed monitoring plan must be submitted as a separate document to the Regional BAER coordinator.)

Part VI – Emergency Stabilization Treatments and Source of Funds
Interim #

Line Items	Units	Unit Cost	# of Units	BAER \$	Other \$	# of units	Fed \$	# of Units	Non Fed \$	Total \$
A. Land Treatments										
heli-mulch	acres	844	293	\$247,292	\$0		\$0		\$0	\$247,292
machine mulch	acres	665	25	\$16,625	\$0		\$0		\$0	\$16,625
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
Subtotal Land Treatments				\$263,917	\$0		\$0		\$0	\$263,917
B. Channel Treatments										
rock headcut	each	8174	3	\$24,522	\$0		\$0		\$0	\$24,522
hand mulch strm bnks	acres	1265	1.5	\$1,898	\$0		\$0		\$0	\$1,898
straw bale chkdams	each	515	15	\$7,725	\$0		\$0		\$0	\$7,725
rock/log checkdams	each	1198	2	\$2,396	\$0		\$0		\$0	\$2,396
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
Subtotal Channel Treat.				\$36,541	\$0		\$0		\$0	\$36,541
C. Road and Trails										
dips (bldr) 19Y&20Y	each	1331	7	\$9,317	\$0		\$0		\$0	\$9,317
dips (hngry) 06	each	1331	1	\$1,331	\$0		\$0		\$0	\$1,331
trash racks	each	2414	2	\$4,828	\$0		\$0		\$0	\$4,828
rock outlet dissipators	each	235	5	\$1,175	\$0		\$0		\$0	\$1,175
culvert end sections	each	1815	2	\$3,630	\$0		\$0		\$0	\$3,630
culvert cleaning	each	413	3	\$1,239	\$0		\$0		\$0	\$1,239
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
Subtotal Road & Trails				\$21,520	\$0		\$0		\$0	\$21,520
D. Protection/Safety										
restroom hole filling	each	500	1	\$500	\$0		\$0		\$0	\$500
replace rd signs/posts	each	670	5	\$3,350	\$0		\$0		\$0	\$3,350
replace wd trf barriers	each	15	50	\$750	\$0		\$0		\$0	\$750
boulder barrier	each	39	210	\$8,190	\$0		\$0		\$0	\$8,190
replace gate posts	each	35	4	\$140	\$0		\$0		\$0	\$140
public safety signs	each	65	10	\$650	\$0		\$0		\$0	\$650
noxious weed survey	each	400	10	\$4,000	\$0		\$0		\$0	\$4,000
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
Subtotal Structures				\$17,580	\$0		\$0		\$0	\$17,580
E. BAER Evaluation										
assessment team	each	21000	1	\$21,000	\$0		\$0		\$0	\$21,000
<i>Insert new items above this line!</i>				---	\$0		\$0		\$0	\$0
Subtotal Evaluation				\$21,000	\$0		\$0		\$0	\$21,000
F. Monitoring										
Monitoring Cost	each	3500	1	\$3,500	\$0		\$0		\$0	\$3,500
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
Subtotal Monitoring				\$3,500	\$0		\$0		\$0	\$3,500
G. Totals				\$364,058	\$0		\$0		\$0	\$364,058
Previously approved				\$204,328						
Total for Interim # 1				\$159,730						

PART VII - APPROVALS

1. /s/ James M. Peña 9/21/06
Forest Supervisor (signature) Date
2. /s/ Thomas L. Tidwell (for) 9/22/06
Regional Forester (signature) Date