

Date of Report: 2-23-05

**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 #3  
    ☐ Updating the initial funding request based on more accurate site data or design analysis. ☐ Status of accomplishments to date  
☒ 3. Final Report (Following completion of work)

**PART II - BURNED-AREA DESCRIPTION**A. Fire Name: BearB. Fire Number: CA-SHF-1893C. State: CalifD. County: ShastaE. Region: 05F. Forest: Shasta-TrinityG. District: Shasta LakeH. Date Fire Started: 8/11/04I. Date Fire Contained: 8/17/04J. Suppression Cost: 9.2 M

K. Fire Suppression Damages Repaired with Suppression Funds

1. Fireline waterbarred (miles): 12  
2. Fireline seeded (miles): 8  
3. Other (identify):

L. Watershed Number: 18020003120, 180201010M. Total Acres Burned: 10,484

NFS Acres(3515 ) Other Federal ( ) State ( ) Private (6969 )

N. Vegetation Types: Ponderosa Pine/mixed conifer/hardwood, foothill mixed chaparrel,  
Lower montane mixed chaparrel, oak woodland, seasonally wey meadow and riparian.

O. Dominant Soils: Holland, Nunes, Millsholm, Goulding, Marpa.P. Geologic Types: Pit formation, meta-andesites-dacites

Q. Miles of Stream Channels by Order or Class: 38 miles of intermittent, 90 miles of ephemeral

R. Transportation System

Trails: 8 miles      Roads: 20 miles

### **PART III - WATERSHED CONDITION**

A. Burn Severity (acres): 6,834 (65%) (low) 3,281 (315) (moderate) 395 (4%) (high)

B. Water-Repellent Soil (acres): 290

C. Soil Erosion Hazard Rating (acres):  
760 (low) 6,931 (moderate) 2754 (high)

D. Erosion Potential: 9.5 tons/acre

E. Sediment Potential: 4,090 cubic yards / square mile

### **PART IV - HYDROLOGIC DESIGN FACTORS**

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

B. Design Chance of Success, (percent): n/a

C. Equivalent Design Recurrence Interval, (years): 10

D. Design Storm Duration, (hours): 24

E. Design Storm Magnitude, (inches): 7.64

F. Design Flow, (cubic feet / second/ square mile): 252

G. Estimated Reduction in Infiltration, (percent): 25

H. Adjusted Design Flow, (cfs per square mile): 315

### **PART V - SUMMARY OF ANALYSIS**

A. Describe Watershed Emergency:

Background: The Bear Fire started on Wednesday August 11 burning a total of 10,484 acres with containment occurring on Tuesday August 17 at 0800. The fire started on private lands burning approximately 80 homes and proceeding to burn onto National Forest Lands down to the shore of Shasta Lake. The portion of the burn on National Forest Lands is within the Shasta Lake National Recreation Area. Approximately 3515 acres burned on National Forest Land. The BAER Team worked closely with the local NRCS office to assess the entire fire area as the area contains mixed ownership. Much of the fire area re-burned the area burned by the 1999 Jones fire. The grass, shrubs along with the knobcone pine re-established vigorously after the Jones Fire. Many of the small trees burned in the Jones fire subsequently fell down and were completely burned

during the Bear fire. Most of the vegetation in the intermittent and ephemeral stream channels that burned in the Jones fire also burned in the Bear fire.

#### **Threats to Human Life and Property:**

- Forest Road 33N86, leading to Jones Valley boat ramp, Forest Road 33N13, leading to Jones Valley Marina, and an unnamed service road off of 33N13. - There is an increased threat of flooding, hazard trees, and plugged culverts along these roads. The fire mostly burned with moderate severity with a few of the drainages burning at high severity. These roads are contained within the Shasta Lake National Recreation area, access a user fee boat ramp on Shasta Lake and receive a high amount of use year round. Due to recent rain storms at the end of September 04 accelerated erosion causing excessive rilling and sedimentation of culverts has occurred above FR 33N86 from the upper Jones Valley Campground to the Jones Valley boat ramp. Excessive rilling from this first storm has set the stage for continued erosion and sedimentation of culverts which threatens one of the main recreational roads on Lake Shasta. Culvert replacement procedures prescribed in the initial BAER Report have not been completed (contracts were awarded November 1<sup>st</sup>).
- Klikapudi trail. Four out of five bridges burned creating a hazard for hikers, runners and bicyclists along this trail. The multiple use trail within the Shasta Lake National Recreation area receives year round high use (approximately 40,000 visitor use days) and is by far the most popular trail in the national recreation area. In addition, hazard trees pose a risk for recreationists.
- Jones Valley Campground: There is an increased risk of flooding in the campground. There is a 48" culvert that drains into the campground with 36" & 24" culverts throughout the campground, leading to a potential flooding situation. Four plastic culverts throughout the campground burned leading to a potentially hazardous situation of campsite and campground road collapse. Several hazard trees were identified also.

#### **Threats to Water Quality:**

- Shasta Lake: There will be an increase in ash, sediment and debris from the fire area entering Shasta Lake. The Team evaluated the risk of increase sediment to fish habitat, spawning potential and recreational uses. The Team concluded that increases in ash, sediment and debris entering the lake would not constitute an emergency situation, therefore no treatments are recommended (see hydrology report for additional details). Due to the threat of road fill failure resulting from culvert plugging potential the threat to water quality has become more imminent.

#### **Threats to Ecosystem Stability:**

- Noxious/Invasive weeds – There is a high risk of invasion of noxious/invasive weeds in the fire area. Known species to occur throughout the fire area include star thistle (*centaurea solstitialis*), and annual grasses including Cheatgrass (*Bromus tectorum*). Other invasive weeds that occur in the area include; oatgrass, bromes, dogtail grass, filaree and hedge parsley.

Uncleaned heavy equipment was used to construct fire suppression lines along with numerous trips by heavy equipment and engines into the fire area. Star thistle is especially problematic throughout the fire area. The meadow in Klikapudi creek is almost entirely composed of star thistle and acts as a seed source for the rest of the trail. In addition, the Backbone road (3W02) contains star thistle populations which could easily be spread by equipment and vehicles.

Fire suppression lines may act as corridors carrying noxious weeds and invasive plants in to uninfested wildland areas. Uncleaned heavy equipment was used to construct fire suppression lines, along with numerous trips by heavy equipment and engines into the fire area can lead to new infestations. Following fire, soil nutrient conditions are more favored toward noxious weeds and invasive species, thus promoting their introduction over native species. The vegetation report contains additional information.

- TES species: Bald Eagle: The fire burned one (1) active nest within the fire area. There are four (4) nests total within the fire area. The Team determined that an emergency does exist regarding bald eagle nesting habitat.

#### Threats to Soil Productivity:

- Invasive/noxious weeds will increase from off road vehicle incursions and are the biggest threats to soil/site productivity in the fire area. The Team observed many off-highway vehicles (OHV) and vehicle tracks in the fire area while completing survey work. Disturbance could slow native plant recovery, increase the spread of noxious/invasive weeds and decrease soil fertility. Approximately 4% acres of the Bear fire burned at high severity. The majority of this is on Private lands in the Painter Creek Watershed. Productive Holland soils occur within the Klikapudi and Wildcat Watersheds and are sensitive to erosion which could degrade their productivity. The majority of soils within the fire area contain a very gravelly surface which will mulch and protect the soil surface (see the soils report for additional details) Moderate burn severity areas are also susceptible to accelerated erosion, potentially decreasing productivity. The first rains of the season have resulted in severe erosion on slopes that experienced high intensity burning, although these soils did not appear to be hydrophobic at the time of assessment they displayed such characteristics during the heavy precipitation events of early October. Further soil erosion will occur if no cover is provided for the slopes.

#### B. Emergency Treatment Objectives:

- Prevent the loss of life and risk to human safety.
- Reduce the risk to loss of property.
- Reduce the risk of degradation to ecosystem function and soil productivity.

Treatments designed to reduce the risk of potential adverse effects of the fire include:

1. Enhancement of culvert function on Forest Roads 33N13 and 33N86.
2. Straw mulching above forest road 33N86.
3. Felling of Hazard trees along high use areas.
4. Prevention and treatment of Noxious weeds in Klikapudi Meadow and dozer lines.
5. Hazard sign placement
6. Patrolling and fencing to limit illegal OHV use.
7. Drainage features on the Klikapudi Trail.
8. Temporary blocks to allow native vegetative recovery.
9. Thinning to protect eagle nesting tree.
10. Flood protection of three (3) campsites.

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

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

#### D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land	95	100	100
Channel	85	95	100
Roads	85	95	100

Other	90	100	100

E. Cost of No-Action (Including Loss): **\$1.5 M**

F. Cost of Selected Alternative (Including Loss): **\$979,669**

G. Skills Represented on Burned-Area Survey Team:

<input checked="" type="checkbox"/> Hydrology	<input checked="" type="checkbox"/> Soils	<input checked="" type="checkbox"/> Geology	<input type="checkbox"/> Range	<input type="checkbox"/>
<input checked="" type="checkbox"/> Forestry	<input checked="" type="checkbox"/> Wildlife	<input type="checkbox"/> Fire Mgmt.	<input 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	

Team Leader: Todd Ellsworth, Inyo N.F./Darrel Ranken, S-T N.F.

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#### H. Treatment Narrative:

The following are proposed emergency treatments for the Bear Fire. These treatments were developed based on BAER objectives, team recommendations or proven, effective treatments, line officer/agency administrator input, as well as interagency BAER team effort and discussion. Due to high values at risk, multiple treatments may occur in the same area to address the same emergency situation, thereby improving the overall effectiveness of mitigating the emergency. Preventative treatments are targeted at the high severity burn areas. Control treatments are targeted at areas downstream from high and moderate severity areas, as well as at specific high value at risk sites. Treatments with low probability of success were eliminated by use of a preliminary least cost plus risk analysis to refine treatments.

##### Land Treatments:

#### 1. *Natural Vegetative Recovery.*

##### Objective

This no cost treatment of allowing the on-site vegetative material sprout or germinate to reduce emergency conditions throughout the fire area.

##### Methods

Observe natural vegetative recovery during the first growing season.

##### **Accomplishments as of February, 2005**

**Natural recovery is on-going across the fire area. The Forest Soil Scientist and Unit Hydrologist continue to monitor selected areas that are not revegetating as quickly as the rest of the fire area.**

#### 2. *Hillslope mulching.*

##### Objective

This treatment of heli-mulching to treat emergency hillslope erosion and sedimentation conditions above forest road 33N86.

#### Methods

Helicopter straw mulching of 2 tons/acre over a 350 acre area.

Cost: \$245,000 for 350 acres.

#### **Accomplishments as of February, 2005**

**Heli-mulching was completed on 210 acres at a cost of \$519/acre (\$190,000 expended) during December of 2004. The treatment area was smaller than originally estimated.**

### 3. *Fencing – Clikapudi Meadow and OHV access points off of Backbone Ridge Road*

#### Objective

The primary objective is to limit OHV incursion into Clikapudi Meadow. Clikapudi Meadow contains star thistle and heritage resources. The meadow also contains an erosive soil. The BAER team observed OHV incursions into the meadow causing displacement and rutting during the assessment. Fencing known access points off of Backbone Ridge road should help to minimize unauthorized use. This treatment will compliment the signing and OHV patrol also proposed.

#### Methods

Install a wire fence, (2) strands, approximately 1400 feet on three sides of Clikapudi Meadow. Place 1500 ft. of temporary wire fence, (2) strands, along known access points off of Backbone Ridge Road. The fence would be temporary in nature and at a minimum standard to protect the meadow and discourage unauthorized OHV use.

Cost: \$6,090 for 2900 feet

#### **Accomplishments as of February, 2005**

**The fencing was accomplished as planned with a lower unit cost than originally estimated.**

### 4. *Straw Mulch – Clikapudi Meadow*

#### Objective

This treatment has multiple objectives. The first objective is to retard the spread of star thistle from this known infestation spot. The second objective is to protect heritage resource sites and soil productivity from accelerated runoff coming down and eroding the meadow. The soils in this meadow are considered erosive and star thistle makes a poor erosion control species.

#### Methods

Place certified weed free straw approximately 3-4in thick over approximately 5 acres. This treatment will be completed in conjunction with hand seeding of cereal and native grasses.

Costs: \$ 8,435

#### **Accomplishments as of February, 2005**

**The straw mulching was accomplished as planned with a lower unit cost than originally estimated.**

5. *Hand Seeding – Clikapudi Meadow*

Objectives

This treatment has multiple objectives. The first objective is to retard the spread of star thistle from this known infestation spot. The second objective is to protect heritage resource sites and soil productivity from accelerated runoff coming down and eroding the meadow. The soils in this meadow are considered erosive and star thistle makes a poor erosion control species.

Methods

Hand spread seed before the straw mulch is applied. Species include Blue wildrye, Bicolor Lupine, and Cereal barley. Application rate would be approximately 15 lbs./acre.

Costs: \$800

**Accomplishments as of February, 2005**

**Hand seeding was accomplished for nearly the original estimated cost.**

5. *Noxious weed assessment*

Objective

To assess and spot treat new noxious weed (mostly star thistle) infestations on dozer lines. Early treatment will ensure the noxious weeds don't infest a new area.

Methods

Walk 3 miles of dozer lines on federal lands physically pulling star thistle from the ground. Dispose of them in a plastic bags. This treatment should be completed several times during the growing season to ensure all plants are treated.

Costs: \$2500

**Accomplishments as of February, 2005**

**This treatment will be accomplished during the growing season.**

7. *Campsite flood protection – Lower Jones Valley Campground*

Objective

Protection of campsites 4, 7 and 8 from overland flow resulting from flood flows overtopping the channel through the campground and the existing culverts. Flood flows could damage exist campsite facilities.

Methods

Install sandbag flood protection structures at campsites to protect from flooding.

Costs: \$400

**Accomplishments as of February, 2005**

**Only 8 of the 70 sandbags that were planned were actually needed for the intended purpose.**

8. *Nest tree protection*

Objective

A tree that contains a bald eagle nest was scorched along with all the surrounding vegetation. The fuel loading adjacent to the tree is high and is at high risk of completing burning the tree.

Methods

Fell the understory vegetation, pile and burn away from the nest tree.

Costs: \$13,750

**Accomplishments as of February, 2005**

**This task was completed for \$1,250 more than was originally estimated.**

**Channel Treatments**

1. *Straw wattles*

Objective

Stop downcutting of an ephemeral drainage into Clikapudi Meadow. Burn Severity was moderate above this drainage. Soils are considered erosive with slight downcutting already present. This treatment will help prevent accelerated runoff reaching the meadow and downcutting.

Method

Place two (2) straw wattles into a small ephemeral drainage above Clikapudi Meadow.

Costs: \$276

**Accomplishments as of February, 2005**

**This treatment was implemented as planned.**

2. *Straw bale Check Dams*

Objective

To prevent further downcutting of three (3) ephemeral drainages, tributaries to Clikapudi Creek. Burn Severities were moderate above these drainages and they contain erosive soils.

Methods

Place three (3), five (5) bales each, check dams across the drainages. Keying the bales into the banks to ensure success and stability.

Costs: \$5031

**Accomplishments as of February, 2005**

**This treatment was completed on two sites for a much lower cost than estimated because it was done by Forest Service personnel in one afternoon.**

Roads and Trail Treatments:

1. *Culvert Replacement on Jones Valley Road and Jones Valley Marina Road:* Many of the existing culverts in the burned area will be subjected to increased runoff, sediment loads and debris from the burned watersheds. Many of the culverts are currently clogged with sediment, ash and debris and



should be cleaned out prior to storm runoff. The Jones Valley Marina Road contains many culverts that were fitted with plastic pipes that received damage due to the fire. In the initial BAER assessment 10 culverts in this condition were identified and were thought to be repairable. Subsequent closer inspection has determined that these culverts cannot be fixed and will have to be replaced with new culverts, some of which will be upsized to account for expected increased flows from the fire area. Seven other culverts were also located that need replacement. Most of the 17 culvert replacements can be accomplished using a tunnel boring machine that allows for a new culvert to be inserted within the fill without removing the fill and the old culvert. This technique allows the road to stay open, eliminates the risk of having large fills bared to potential erosion, and is much cheaper than normal excavation of the fills.

Costs: Culvert Replacement: \$435,991

#### **Accomplishments as of February, 2005**

- The final cost to date for the replacement of 17 culverts is \$522,780.57. The original estimate was based on the use of boring machine to replace culverts without removing the fill material. This boring machine was not available to any of the contract bidders in the time frame needed to complete the work. Cost of equipment and time to totally remove the road fills in order to replace the culverts was greater than the original estimate. In addition there were other costs over the Government estimate due to actual quantities used and weather delays. Only one design change was made (installation of an inlet riser).
- Equipment cost was \$371,983. More equipment was used than was originally anticipated to complete this job due to meeting the contract time of 30 working days, which was achieved despite some delays due to weather.
- Labor cost was \$44,433. These costs were very typical for the amount of equipment that was on the job site. Labor required to maintain and monitor erosion control measures for compliance was a big part of this contract.
- Material cost was \$106,364. The cost for the metal pipe was a little more than what we thought it would be; this was due to market conditions that are constantly changing. Other materials such as aggregate, riprap, erosion control, and miscellaneous items reflected actual quantities that were used.

#### **Accomplishments as of May, 2005**

##### **Jones Valley Asphalt Repair & Replacement:**

- Work completed in this phase involved the replacement of asphalt at 17 culvert locations under the culvert replacement contract and also to areas of asphalt that received damaged (unavoidable) during the culvert replacement contract. The estimated cost for this contract was \$175,000. An additional \$83,000 was finally approved for this work through our Interim #4 request for additional BAER funds. The work was completed for \$175,000, the difference between what was approved and the final cost was paid for with appropriated funding from sources other than BAER. This work consisted of pavement of the remainder of the road surface and striping the entire length of the road.

Objective:

Four plastic culverts burned out in the Lower Jones Valley Campground. There is a risk of collapse trapping vehicles and flooding of the campground during a storm event.

Methods

Culverts will be replaced with CMP to ensure longevity.

Costs: \$28,200

**Accomplishments as of February, 2005**

**The campground culverts were replaced at the original estimated cost.**

3. *Drainage Features – Clikapudi Trail*

Objective

To control drainage on Clikapudi trail from the anticipated increased runoff from surrounding hillslopes. This will assist in maintaining trail tread and limit concentrated runoff below the trail

Methods

Place drainage control structures along the 1<sup>st</sup> .5 mile of the Clikapudi trail west of the Jones Valley Marina Road. The 1<sup>st</sup> .5 mile is steep with moderately burned slopes above the trail.

Cost: \$4,940

**Accomplishments as of February, 2005**

**Drainage control structures were completed at the original estimated cost.**

4. *Hazard advisory signs*

Objective

The objective of this treatment is to advise the public of the presence of a burned watershed and associated safety issues.

Methods

Signs should be placed on both Jones Valley Boat Ramp road and Jones Valley Marina road.

Suggested wording:

'WARNING BURNED WATERSHED NEXT \_ MILES – risk from flash floods, and debris.

Costs: \$4,230

**Accomplishments as of February, 2005**

**All planned hazard warning signs were completed and installed at the estimated cost.**

5. *Storm Patrol – Jones Valley and Jones Valley Marina Roads*

Objective

This treatment will decrease the threat that post-burn runoff, sediment and debris will plug culverts, overtopping the road, possibly degrading the road prism and posing a threat to vehicular traffic.

Method

A team of two people will be available and respond as needed with shovels, etc. Patrols will be initiated based on local observations of significant precipitation/runoff events.

Costs: \$2,940

**Accomplishments as of February, 2005**

**Storm patrols have been conducted as planned. Further patrolling will depend on weather conditons.**

*6. OHV signs*

Objective

To inform and educate the public that they are entering a burned area and need to stay on the main roads to facilitate natural vegetative recovery.

Methods

Place 6 signs at highly visible locations throughout the fire area. Signs should be placed at least 4 feet high on sturdy posts to ensure longevity.

Costs: \$4,000

**Accomplishments as of February, 2005**

**All of the OHV hazard warning signs were constructed and installed for the estimated cost.**

**I. Monitoring Narrative:**

**1. Monitor the effectiveness of treatments and no treatments to determine overall effectiveness of BAER rehabilitation efforts.**

Because potential impacts to fisheries, water quality, and soil productivity were not considered to be watershed emergencies no hillslope and minimal channel treatments were recommended. Another reason for not recommending hillslope and channel treatments in the Bear Fire area is that both types of treatments were judged to have minimal benefits in the Jones Fire area. Because no hillslope treatments will be applied in the burn area it will be necessary to monitor the effectiveness of no treatments in order to validate that treatments were not required. Monitoring will consist of four field visits to areas that burned at high severities. The effectiveness of 'no treatment' will be evaluated.

**2. Monitor debris inflow to Shasta Lake from tributaries and reservoir shoreline to assess treatment needs.**

During the first winter following the Bear Fire there will be an increased potential for the accumulation of debris in Shasta Lake. Winter storms could wash small debris downstream to the reservoir. Dead trees on the shoreline could fall into the reservoir and be suspended when reservoir levels rise in the spring. Once suspended, large floating debris in the lake could be hazardous to boaters. Treatments to prevent debris suspension in Shasta Lake include the installation of floating booms in coves that receive debris and the removal of large debris that enters the lake from the shoreline. It is not possible to accurately budget for these treatments do to the uncertainty of how much debris will enter the lake and reservoir elevations that will be

needed to determine boom lengths. Monitoring funds are requested for patrolling the reservoir shoreline and inlets to assess the need for debris control measures in response to winter storms.

**Costs: \$1,000 for both parts of this monitoring request.**

**Accomplishments as of February, 2005:**

**Part 1 has been done for three visits for a cost of \$400, one visit for this evaluation remains. Debris flow monitoring has been accomplished for a cost of \$500.**

## Part VI – Emergency Rehabilitation Treatments and Source of Funds by Land Ownership

			Planned			Accomplished			
		Unit	# of	WFSU		# of	Unit	Actual	Difference
Line Items	Units	Cost	Units	SULT \$		Units	Cost	Cost	
A. Land Treatments									
Fencing	ft	2.1	2900	\$6,090		2900	\$1.63	\$4,727	\$1,363
Heli-mulch	ac	700	350	\$245,000		210	\$519.05	\$109,001	\$136,000
Straw mulch	ac	1687	5	\$8,435		5	\$1,100.00	\$5,500	\$2,935
Hand seeding	ac	160	5	\$800		5	\$162.60	\$813	-\$13
NX weeds	ea	2500	1	\$2,500		to be accomplished			\$2,500
sand bags	ea	5.7	70	\$400		8	\$5.70	\$46	\$354
eagle nest	ea	13750	1	\$13,750		1	\$15,000.00	\$15,000	-\$1,250
Subtotal Land Treatments				\$276,975				\$135,086	\$141,889
B. Channel Treatments									
Straw wattles	ea	138	2	\$276		2	\$138.00	\$276	\$0
straw bales checks	ea	1677	3	\$5,031		2	\$256.00	\$512	\$4,519
Subtotal Channel Treat.				\$5,307				\$788	\$4,519
C. Road and Trails									
Culvert replacement	ea	25646.5	17	\$435,991		17	\$30,751.82	\$522,781	-\$86,790
Road Resurfacing	ea	83,000	1	\$83,000		1	\$83,000.00	\$83,000	\$0
4 culverts	ea	7050	4	\$28,200		4	\$7,050.00	\$28,200	\$0
drainage -clikapudi	mi	9880	0.5	\$4,940		1	\$9,880.00	\$4,940	\$0
Hazard signs	ea	604	7	\$4,230		7	\$604.00	\$4,228	\$2
Storm patrol	ea	2940	1	\$2,940		1	\$2,940.00	\$2,940	\$0
OHV signs	ea	605	6	\$3,630		6	\$605.00	\$3,630	\$0
Subtotal Road & Trails				\$562,931				\$649,719	-\$86,788
D. Structures									
Subtotal Structures				\$0					
E. BAER Evaluation									
Team	ea	30300	1	\$30,300		1	\$30,300.00	\$30,300	\$0
Subtotal Evaluation				\$30,300				\$30,300	\$0
F. Monitoring									
No treatment & Debris	ea	1000	1	\$1,000		1	\$1,000.00	\$900	\$100
Subtotal Monitoring				\$1,000					\$100
G. Totals				\$876,513				\$815,893	\$59,720

## PART VII - APPROVALS

1. /s/ J. Sharon Heywood  
Forest Supervisor (signature)

11 Mar 05  
Date

2. \_\_\_\_\_  
Regional Forester (signature)

\_\_\_\_\_  
Date