Lonesome Complex-Middle Fork Fire

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Burned Area Emergency Response (BAER) Team
Initial Request
For Funding

Rogue-Siskyou and Fremont-Winema National Forests
Crater Lake National Park
Prospect, Oregon

October 14, 2008

USDA-FOREST SERVICE FS-2500-8 (6/06)

Date of Report: 10/14/08

BURNED-AREA REPORT
(Reference FSH 2509.13)

PART I - TYPE OF REQUEST

A. Type of Report

[X] 1. Funding request for estimated emergency stabilization funds
[ ] 2. Accomplishment Report
[ ] 3. No Treatment Recommendation

B. Type of Action

(X] 1. Initial Request (Best estimate of funds needed to complete eligible stabilization measures)

[ ] 2. Interim Report #____
[ ] 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:Lonesome Complex-Middle Fork Fire B. Fire Number:OR-RRF-008229

C. State: OR D. County: Jackson/Klamath

E. Region:06 F. Forest: ROR-SIS, FRE-WIN

G. District:High Cascades, Klamath H. Fire Incident Job Code:

I. Date Fire Started:08/16/2008 J. Date Fire Contained: 10/12/008

K. Suppression Cost: 18,189,300 (10/06/2008)

L. Fire Suppression Damages Repaired with Suppression Funds
1. Fireline waterbarred (miles):
2. Fireline seeded (miles):
3. Other (identify):

M. Watershed Number: 5th Field: South Fork Rogue River (1710030702)

6th Field Watersheds-
Imnaha Creek (171003070202)
Red Blanket Creek (171003070204)
Upper Middle Fork Rogue River (171003070203)

N. Total Acres Burned: 21,125 ac
NFS Acres(18,569 ac ROR-SIS; 539ac FRE-WIN) Other Federal (2,017 Crater Lake NP) State ( ) Private ( )

O. Vegetation Types: White Fir series (lower elevations), Red Fir series (higher elev), Mountain Hemlock (upper elev) series. Elevations generally range from 3500 to 6800 feet. Lesser amounts of shrublands, dry meadows, wet meadows with riparian areas, ponds and springs interspersed.
Some tree species that occur within these communities include: Douglas-fir, white fir, Shasta red fir, mountain hemlock, big-leaf maple, sugar pine, western white pine, lodgepole pine, and ponderosa pine. Shrubs include: chinquapin, dwarf Oregon grape, baldhip rose, creeping snowberry, Oregon boxwood, ocean spray, hazel, thin-leaved huckleberry, pinemat manzanita, and trailing blackberry. Forbs include: prince's pine, star flower, Hooker's fairybells, Queen's cup bead lily, white-flowered hawkweed, rattlesnake plantain, sedges, western false Solomon's seal, twinflower, trillium, pathfinder, and several ferns.

P. Dominant Soils: Shallow to moderately deep ridgetop and upper sideslopes comprised of volcanic ash-dominated soils with loams and sandy loam textures that have high to moderate infiltration rates. Subsurface soils generally comprised with 25 to greater than 60 percent coarse fragments. Some deep, coarse-textured soils along footslopes, debris fans and glacial moraines. Soils are mostly stable, with exception of ephemeral and 1st order streams on steeper, glacially-carved mountain sideslopes of Middle Fork Rogue River and Red Blanket creek.

Q. Geologic Types: High Cascades Physiographic Province – Igneous units - Major rock types and surficial deposits include glacial till, pyroclastic material, andesitic rock, and basalt. The dominant geomorphology of

the Middle Fork canyon is the result of glacial scouring that has produced a wide, U-shaped valley containing a valley floor slope of less than 4%. Landforms in this canyon type include lateral and terminal moraines, alluvial terraces, and floodplains (Rosgen 1996).

R. Miles of Stream Channels by Order: **Order 1** – est. 25 mi; **Order 2** – est. 5 mi; **Order 3** – est. 9.0 mi;

S. Transportation System

Trails: est .25 miles Roads: est. 4.0 miles

PART III - WATERSHED CONDITION

A. Burn Severity(acres):est. **12,000** (57% low or unburned) est **6,000** (28% moderate) est **3,125** (15% high)
Note: Soil burn severity was roughly delineated on a 10/08/08 reconnaissance flight and fire size (21,000 acres) was taken from the 10/08/08 IAP Report. BARC satellite imagery was unsuccessful on 10/02 and 10/10 due to extensive cloud cover over the fire perimeter. Next available BARC image on 10/18.

B. Water-Repellent Soil (acres): estimated **1.0% to 2%** of high severity area (30 to 60 acres) Field investigations indicate that location of hydrophobicity where large wood completely consumed (intense soil heating of long duration), and resulting in low impact to infiltration rates and overall water transmission. Note that volcanic ash has non-wettable characteristics when dry.

C. Soil Erosion Hazard Rating (acres): Generally low to moderate throughout fire perimeter.
___ (low) ___ (moderate) ___ (high)
NOTE: Unable to obtain burn severity and and GIS reports. Since no erosion control treatments proposed, R6 BAER Coordinator supports no analysis necessary..

D. Erosion Potential: ____ tons/acre
NOTE: Unable to obtain burn severity and GIS reports. There are no erosion control treatments proposed due to cause of fire lightning, located in wilderness. R6 BAER Coordinator supports no analysis necessary.

E. Sediment Potential: ____ cubic yards / square mile

NOTE: Unable to obtain burn severity and GIS infra-red maps. Since no erosion control treatments proposed, R6 BAER Coordinator supports no analysis necessary.

PART IV - HYDROLOGIC DESIGN FACTORS

NOTE: Unable to obtain burn severity and GIS reports. Since no erosion control/water quality treatments proposed, R6 BAER Coordinator supports no analysis needed.

A. Estimated Vegetative Recovery Period, (years): 5-8
The majority of the burned area will recover within 5 years. The areas with low to moderate burn severity should have sufficient understory grasses and shrubs to restore ground cover and infiltration rates. And infiltration may improve the above preburn condition, where overstory limited understory growth. Estimate 6 to 8 years in moderate and high burn severity areas.

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

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

D. Design Storm Duration, (hours): ___

E. Design Storm Magnitude, (inches):

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

G. Estimated Reduction in Infiltration, (percent): 1-2% (of High Severity acres)

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

Footnotes
In the Forks Watershed, precipitation ranges from 45 to 65 inches annually with most of the precipitation occurring between October and March. Precipitation occurs in the form of snow in the higher elevations and rain in the lower elevations. Although precipitation peaks from November to January, runoff peaks from March to June in response to snowmelt from higher elevations. Maximum peak flows are a result of rain-on-snow events within the transient snow zone and are flashy and relatively unpredictable. The transient snow zone occurs between 3,500 and 5,000 feet (USDA, 1998).

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats:

1. ***Critical Natural and Cultural Resources*** **(FSM 2523.2 (including water quality)** –

The following summary describes the conditions that warrant both emergency rehabilitation actions while also addressing other resource/cultural values that do not warrant treatments at this time.

Invasive Plants –Values at risk include the potential spread of existing and potential noxious weeds into the Sky Lakes Wilderness and Crater Lake National Park. Threats exist of known sites spreading within the fire perimeter, and possible introduction of noxious weeds being introduced into the area associated with fire suppression activities. Therefore, **the BAER Team is recommending BAER emergency treatments and monitoring.**

This fire is primarily located within wilderness and national park managed lands and it is important to minimize introduction or spread of non-native invasive species into these lands as well as in non-infested lands outside of these areas within the fire to maintain ecosystem health. A unique threat to biodiversity and wilderness value from this fire is the presence of the Class B noxious weed St Johnswort (*Hypericum perforatum)*. This plant currently infests about 4 miles within and adjacent to the Lonesome Complex-Middle Fork Fire area. The plant profile for St Johnswort from the Oregon State Noxious weed list states that “Infestations spread rapidly on disturbed, well drained sites such as roadways, trails, overgrazed range, and logged areas.” Also, there is much concern that additional open niches provided by the fire will allow St. Johnswort to significantly expand into the fire. St. Johnswort is a perennial that reproduces by seeds or short runners. For the past two years, hand pulling of St. Johnswort has been implemented along Highway 62 within two miles of the national park boundary to prevent movement of this species into Crater Lake National Park. Previous discussions with officials from Crater Lake National Park had expressed concern for movement of this species into the park.

In addition to known present noxious weed infestations, two other Class B noxious weeds currently not found may have been introduced into the fire perimeter, including the Sky Lakes Wilderness and Crater Lake National Park. Yellow starthistle and purple loostrife infested the helibase, vehicles and heavy equipment that were used before mitigation measures were put into place. Land disturbed by wildfire is especially susceptible to noxious weed invasion due to less vegetative competition, abundant nutrients released, and abundant sunlight. Extensive acreage of disturbed areas (helispots, drop points, trails, roads, hand and dozer lines) exist within the fire perimeter may have become infested.

Yellow starthistle, purple loosestrife and St. Johnswort are all on list "B" of the Oregon Department of Agriculture Noxious Weed Control Program. List B is defined as "weeds of economic importance which are regionally abundant but which may have limited distribution in some counties". All of these species are included in the bio-control program but availability and control effectiveness are variable for these species. Yellow starthistle and purple loosestrife are both also on the "T" list (targeted for prevention and control).

Wilderness Resource Values – Values at risk that were identified include scenic, aesthetic and wilderness experience. Threats to the Sky Lakes Wilderness are impacts associated with the fire, suppression activities and possible BAER treatments on these wilderness values. A substantial portion (>80%) of the 21,175 acre Lonesome Complex-Middle Fork Fire burned within the northwestern-most section of Sky Lakes Wilderness, designated as wilderness by Congress in 1984. Although no wilderness fire plan has been approved for Sky Lakes Wilderness, the current Rogue River – Siskiyou National Forest Land and Resource Management Plan calls for "fire to be allowed – so far as practical -- to play its natural role" within the wilderness; this would include allowing (again, so far as is practical) the results of the fire to play themselves out without human interference. **No burned-area emergency situations related to the wilderness resource itself have resulted from the Lonesome Complex-Middle Fork Fire. No large scale erosion-control (for example, terracing, seeding, spreading of hay) have been recommended by BAER team members for implementation within Sky Lakes Wilderness, and none are appropriate.**

Cultural Resources – Values at risk include isolated prehistoric artifacts and three historic structures within the fire perimeter. Threats associated with the fire are potential hazard trees and damage to artifacts and structures. Based on the BAER Team's field survey and analysis, **no emergency BAER treatments are needed to protect these structures and sites as a result of the fire.**

- Isolated prehistoric artifacts of obsidian and crypto-crystalline silicate have been found in four locations within the fire perimeter. These lithic scatters are NOT eligible to the National Register of Historic Places.
- Three historic structures, eligible to the National Register of Historic Places, are located within or near the fire perimeter. These include the following: Bessie Creek Trail Shelter, Solace Cabin, and Honeymoon Cabin. Firelines were dug around all three structures, and Solace and Honeymoon cabins were wrapped with structure protection materials. A pumper truck kept Bessie Shelter wet during a nearby burn-out operation. All three structures survived the fire with no damage. On the ground investigations by the BAER team resulted in NO potential hazard trees (due to fire) within 100 feet that posed a threat to these structures.

Site Productivity – Values at risk include loss of soil productivity due to fire intensity, erosion and other detrimental conditions. . Based upon the soil resource information gathered and field investigations, it is not anticipated that there is an imminent threat to values at risk that would warrant emergency stabilization actions directed towards the soil resource. **No emergency BAER treatments are being proposed to address this resource value due to potential threats associated with the fire.**

The inherent soil productivity is moderate to high in the Lonesome Complex-Middle Fork Fire area. Soils are derived from hard basalt, pumice and volcanic ash. Throughout the majority of the fire area, soil stabilities are generally high, soil erosion potentials are very slight to slight, and sediment yield potentials are low. Soils throughout the fire area have high to moderate infiltration rates. Expected sediment sizes would be sands and silts. Low soil stabilities are primarily associated with steeper, glacially carved walls along the major drainages of Middle Fork, Rogue River and Red Blanket Canyon, which also contain varying amounts of rock outcrops and talus. These slopes have moderate soil erosion potential and moderate to high sediment yield potential. Mass movement is typically ravel, occasional debris slides and avalanches, and rock fall. One north-facing slope in Red Blanket Canyon has naturally very severe soil erosion potential and high sediment yield potential, with mass movement involving sloughing, slumping, channel scouring, raveling and debris avalanches (landtype unit 5).

Overall, the fire produced a light and moderate burn severity scattered over the landscape in a mosaic pattern, with patches of high severity burn surrounded by low, moderate, and unburned vegetation. The majority of high severity burn areas tended to be on slightly convex surfaces on high elevation glacial pluck and scoured

areas, hanging valleys and high elevation, broad glaciated basins, and flat to gently rolling till and ground moraine surfaces. Due to the topography of these areas, very slight to slight erosion potential, unburned vegetation buffers, and distance from stream systems, these high severity burn areas are not expected to have any measurable negative effects to the values at risk.

Water Quality – Values at risk include high water quality for aquatic habitat in Middle Fork Rogue River, wilderness lakes (Grass and Ivern), domestic water sources/municipal watersheds. Based upon BAER Team's investigations, no significant threats to these values were determined. **No emergency BAER treatments are being recommended to protect these resource values since threats associated with the fire do not appear to be significant.**

Water quality in the fire perimeter and downstream is high, and is critical for many uses including aquatic habitat, recreation and aesthetics, and downstream municipal/domestic supply. Sediment and ash are possible water quality concerns.

- Aquatic Habitat (Streams) -*Potential* values-at-risk are negative effects to native trout species primarily through the potential of increased sedimentation to the Middle Fork Rogue River and Red Blanket Creek. Fish habitat in these streams, according to Level II Hankin and Reeves surveys, is very good. Increases in turbidity and suspended solids can have negative effects on the physiology and behavior of salmonids as well as on their habitats. Examples of physiological effects include gill trauma, increased blood sugars, and osmotic imbalances. Behavioral effects can include avoidance, changes in foraging ability, responses to predation risk, and territoriality. Habitat effects include changes to spawning and rearing habitats (Bash et al., 2001). The Middle Fork Rogue River contains a small population of rainbow trout (*Oncorhynchus mykiss*), cutthroat trout (*Oncorhynchus clarki*), and introduced, non-native brook trout (*Salvelinus fontinalis*). Large woody debris, habitat depth, and cobble substrate provide cover for fish. Clean and well-sorted gravel is located in small pockets and around LWD which provides spawning habitat for resident trout. Channel substrate contains very low amounts of fine sediment and is not embedded. Red Blanket creek contains populations of rainbow trout and introduced, non-native brook trout.
- Water quality at Grass Lake and Lake Ivern in the Sky Lakes Wilderness. These lakes were used as a dipping source for helicopter buckets during fire suppression efforts. Algae blooms are a possible water quality concern.
- Domestic Water Sources, Municipal Watersheds. Maintaining water quality is a potential concern if any domestic water sources/municipal watersheds could be affected by the fire.

2. ***Threats to Human Life, Safety and Property*** –

The following summary describes the conditions that warrant both emergency rehabilitation actions while also addressing other resource/cultural values that do not warrant treatments at this time.

Trails – A threat to hiker and stock safety exists due to deteriorated trail conditions resulting from high burn severity trail segments. These highly impacted segments experienced high burn intensity, loss of vegetation, loss of trail surfacing, and potential for increased erosion and sedimentation. **Because of these safety and resource concerns, BAER treatments are being proposed on about 8.3 miles of trail.**

There are approximately 25 miles of trail within the fire perimeter. The values at risk include hiker and stock safety and potential erosion and sedimentation. These identified trail segments are heavily used by both

hikers and stock, and are located within the popular Sky Lakes Wilderness that also provides access to Crater Lake National Park. These impacted trail segments experienced serious trail damage that has resulted in significant tread damage. These trail segments are located within or directly downslope of the steeper slopes in high burn severity areas. These segments have the potential for serious erosion, additional sloughing of trail cuts and fills, and additional loss of trees and other vegetation. Numerous underlying root systems have burned, creating holes and total collapse of trail surface, often on steep slopes. Extensive numbers of downed trees are located in these areas.

These trails are heavily used by both hikers and horse use. The presence of fire-killed trees (and the well-documented increased likelihood of fire-killed trees for wind-throw) throughout many sections of the Lonesome Complex-Middle Fork Fire burned area present a safety hazard to wilderness visitors and their animals. The risk would be highest along wilderness trails and at traditional camping/stock-tethering areas such as near Solace Meadow. These trails have become fairly entrenched by heavy use. Earthen drainage structures are expected to be ineffective due to slope ravel filling drainage structures. Hence, trails are expected to intercept surface runoff triggering severe gully development. Emergency drainage construction in the trail will reduce the risk of gully development and reduce the risk of sediment being delivered from main line trails.

Hazard Trees Along Forest Roads – Values at risk are public safety and property (vehicles) along forest road segments located within and adjacent to the fire perimeter. About 3 miles of road exist that pose possible threats of future burned trees falling onto the roadways. These roads had moderate to high burn severity that have dead/dying trees within 150 feet of open maintenance level 2 roads, that provide access to popular trailheads. **Based on BAER Team assessment, recommendation is for developing safety signage for the public at high use forest road junctions.**

Pacific Power Infrastructure –Value at risk initially identified a water diversion for irrigation owned and operated by Pacific Power Company. The threat identified was potential sedimentation and large inputs of large woody debris associated with fire impacts in high severity areas in the Middle Fork Rogue River drainage. This diversion structure is located approximately five to six miles downstream of the edge of the fire area. During aerial reconnaissance of the fire area and surrounding resources, the BAER Team felt that no significant risk of large pulses of sediment into the Middle Fork and downstream to this infrastructure is likely. **No emergency BAER treatments are being recommended to protect this property.**

B. Emergency Treatment Objectives:

The primary objective of the proposed treatments is to provide for safety and access for BAER implementation teams and the public. Public safety will focus on pedestrians, vehicle occupants, trail stock and other recreational users along about 8.3 miles of trail and 3.0 miles of forest roads. The non-structural land treatments proposed for weed control and monitoring helps to maintain site productivity and ecosystem function by inhibiting weed establishment and spread. This is done by Integrated Weed Management that will be treated by hand removal methods. An invasive plant monitoring treatment will be applied to survey for any new populations on FS and NPS lands. Monitoring will also be used to assess the effectiveness of weed treatments on lands where weeds are controlled. Threats to public safety will be identified through hazard tree assessment, warning signs and trail work designed to improve safety.

C. Probability of Completing Treatment Prior to Damaging Storm or Event:

Land **90** % Channel **NA** % Roads/Trails **90** % Protection/Safety **90** %

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land	80	75	75
Channel	NA	NA	NA
Roads/Trails	90	90	90
Protection/Safety	90	90	90

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

F. Cost of Selected Alternative (Including Loss): **$**

G. Skills Represented on Burned-Area Survey Team:

[X] Hydrology	[X] Soils	[ ] Geology	[ ] Range	[X] Recreation/Wilderness
[ ] Forestry	[X] Wildlife	[ ] Fire Mgmt.	[ ] Engineering	[ ]
[ ] Contracting	[ ] Ecology	[X] Botany	[X] Cultural	[ ]
[X] Fisheries	[ ] Research	[ ] Landscape Arch	[X] GIS	

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H. **Treatment Narrative:**

Overall Goal of Proposed BAER Treatments**:** To provide for safe public travel and use by the public and for BAER implementation treatments, and to control and reduce the spread of noxious weed populations (thereby enhancing native plant recovery).

Land Treatments

Purpose – To discourage the rapid spread of noxious weeds and encourage natural vegetation recovery

Treatment #1 Noxious Weed Treatments: To reduce the post-fire potential for significant invasive plant population increases in the burned area and hence to encourage recovery of natural vegetation. Hand pulls St. Johnswort along infested roads immediately adjacent to and within the fire in FY2009. Treatment of St. Johnswort in this area of the forest was assessed by the Environmental Assessment for Integrated Noxious Weed Management on the Rogue River National Forest of May, 1999. This BAER treatment will be monitored in 2010 to assess the effectiveness of the treatment and to determine if additional treatment is required.

Treatment Objective - To eradicate St. Johnswort along roads where this plant may increase in burned areas. Roads include: 3795300, 3795500, 3795520, 3795600, 6205, 6205200, and 6215830. A total of 10.5 acres is targeted for treatment in 2009 before Oct. 10, 2009. Monitoring will occur in 2010 to determine success of the treatments.

Treatment description – Crews will hand pull and remove St. Johnswort along 4 miles of roads within the fire perimeter.

Treatment #2 Monitoring for introduction of noxious weeds: Monitor sites in 2009 where invasive species may have been introduced within the fire area.

Objective – Monitor sites where introduction of noxious weeds may have occurred. These sites include: roads (within and adjacent to the fire), helispots, drop points, dozer lines and spike camps.

Description –Individuals will monitor sites where noxious weed introduction may have occurred due to lack of mitigation of noxious weed infestations at the helibase and from other potential introduction from vehicles/heavy equipment.

Channel Treatments: NA

Roads and Trail Treatments

Purpose – To provide for safe pedestrian and motorized vehicle access for the public and to implement BAER treatments

Treatment - Trail Drainage, Tread and Logout: Install drain dips, water bars, check dams and improve trail tread and logout 8.3 miles of trail. Trail work will follow established National Forest trail standards.

Objective- Reduce hazardous situations and the potential for runoff concentration and surface erosion on trails.

Description – Relative to the increased risk posed by wind-thrown trees within the burned area, safety-hazard notification signs should be written, printed, laminated (for long-term use), and posted at all trailheads leading into the northern half of Sky Lakes Wilderness In addition to trailheads located on the Rogue River – Siskiyou National Forest, this signing should also occur at appropriate trailheads on the Fremont-Winema NF-side of the wilderness, as well as, if permitted by the National Park Service, in Crater Lake National Park. There should be no safety-related "snagging"/felling of dead trees anywhere within the wilderness.

(*Note*: The only place where such snagging is potentially permitted – and is permitted only after a "minimum requirement" analysis is conducted and documented – would be at specific sites where wilderness visitors are required, by Forest order, to camp; the only such sites in Sky Lakes Wilderness are situated in the 'high-use' lake basins, and these places are located well to the south of the burned area.)

With the onset of winter, trail work will occur in the spring of 2009 as soon as the area can be accessed. The first year of trail work will address areas of trail sloughing and tread collapsing, along with trail log out. The remaining two years of funding and work will address locations of trail tread that still have erosion or hazardous situations, along with log out.

Protection/Safety Treatments

Purpose – Provide for public safety (and BAER treatments) for pedestrians, vehicle occupants and recreational users along Forest roads near and within the fire perimeter of the Lonesome Complex-Middle Fork Fire area.

Treatment #1 – Hazard Signs and Public Information: Install hazard signs along FSR3795 and other nearby forestroads where high historic public recreation use has occurred in areas where high hazard has been determined. Estimate that 6 signs are be needed.

I. **Monitoring Narrative:**

Implementation monitoring will be completed for all BAER treatments. Specifics of these activities will be outlined in the final BAER report. Cost estimates in Part VI for monitoring is preliminary. Implementation monitoring of other treatments will be done as treatments occur and the costs have been included as part of the treatment costs. Noxious weed monitoring is also included as a separate itemized treatment and the costs are displayed on Part IV. Implementation monitoring of other treatments will be done as treatments occur and the costs have been included as part of the treatment costs.

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

			NFS Lands				Other Lands			All
		Unit	# of		Other	# of	Fed	# of	Non Fed	Total
Line Items	Units	Cost	Units	BAER $	$	units	$	Units	$	$
A. Land Treatments										
Noxious weed treatment	ac	158	11	$1,738	$0		$0		$0	$1,738
Monitor noxious weed treatments	ea	1020	1	$1,020	$0		$0		$0	$1,020
Survey invasive plants	ea	3,100	1	$3,100						$3,100
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Land Treatments				$5,858	$0		$0		$0	$5,858
B. Channel Treatments										
NA				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Channel Treat.				$0	$0		$0		$0	$0
C. Road and Trails										
trail drainage/tread/logout/signs	mi	735	8.3	$6,101	$0		$0		$0	$6,101
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Road & Trails				$6,101	$0		$0		$0	$6,101
D. Protection/Safety										
				$0	$0		$0		$0	$0
				$0	$0		$0		$0	$0
Hazard Tree Signage, Public Info	ea	300	6	$1,800	$0		$0		$0	$1,800
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Structures				$1,800	$0		$0		$0	$1,800
E. BAER Evaluation (est)				$7,000						
				---			$0		$0	$0
Insert new items above this line!				---	$0		$0		$0	$0
Subtotal Evaluation				---	$0		$0		$0	$0
F. Monitoring										
				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Monitoring				$0	$0		$0		$0	$0
G. Totals				$13,759	$0		**$0**		**$0**	**$13,759**
Previously approved										
Total for this request				**$13,759**						

PART VII - APPROVALS

1. /s/ Jon Raby (Acting) — 10/17/08
   Forest Supervisor (signature) — Date

2. _____ — _____
   Regional Forester (signature) — Date