

¹² Date of Report: 09/16/2024**BURNED-AREA REPORT****PART I - TYPE OF REQUEST****A. Type of Report**

- ☒ 1. Funding request for estimated emergency stabilization funds
☐ 2. No Treatment Recommendation

B. Type of Action

- ☒ 1. Initial Request (Best estimate of funds needed to complete eligible stabilization measures)
☐ 2. Interim Request #_____
☐ Updating the initial funding request based on more accurate site data or design analysis

PART II - BURNED-AREA DESCRIPTION**A. Fire Name: Pioneer****B. Fire Number: WA-SES-000173****C. State: Washington****D. County: Chelan****E. Region: Pacific Northwest (6)****F. Forest: Okanogan Wenatchee (17)****G. District: Chelan Ranger District****H. Fire Incident Job Code: PN RZ79 (1522)****I. Date Fire Started: 06/08/2024****J: Date Fire Contained: estimated 10/31/24****K. Suppression Cost: \$100,000,000 as of 9/13/24****L. Fire Suppression Damages Repaired with Suppression Funds (estimates):**

1. Fireline repaired (miles): Dozer 30.1
2. Other (Road as line): 87

M. Watershed Numbers:*Table 1: Acres Burned by Watershed*

HUC12 #	Watershed Name	Total Acres	Acres Burned	% Watershed Burned
170200090206	Bear Creek-Lake Chelan	35,576	8,130	23%
170200090113	Boulder Creek	11,155	431	4%

¹ *Different soil burn severity maps were used by the NPS and the USFS. Differences in the high/moderate category was 2%. All USFS analysis occurred only on USFS lands using the USFS soil burn severity map.

170200090114	Cabin Creek-Stehekin River	22,610	8	0%
170200090201	Devore Creek-Lake Chelan	37,031	9,816	27%
170200090202	Fish Creek	17,373	11,028	63%
170200090207	Lone Fir Creek-Lake Chelan	32,037	2,627	8%
170200090205	Prince Creek	23,069	6,979	30%
170200090112	Rainbow Creek	9,841	3	0%

N. Total Acres Burned:

Table 2: Total Acres Burned by Ownership

OWNERSHIP	ACRES
NFS	30,142
NATIONAL PARK SERVICE	8,208
STATE	0
PRIVATE	651
TOTAL	39,001

O. Vegetation Types: Grassland, shrub-steppe and open dry-forest

The Pioneer Fire covers a landscape with considerable relief, ranging from 1,100 feet at Lake Chelan to Old Maid Peak at 7,800 ft. The south-facing slopes at the lowest elevations are open grass and shrub lands with scattered Ponderosa pine and Douglas-fir, with denser stands on the north slopes. Riparian areas are dominated by hardwood shrubs and trees, including bigleaf maple, aspen, and black cottonwood. Mixed conifer stands dominate the middle elevations with large patches of lodgepole pine in previously burned areas. The higher elevations have subalpine fir and Englemann spruce forests, with whitebark pine on the highest, most exposed slopes and ridges. Region 6 listed sensitive plants that are known to occur in the burned area are *Pellaea brachyptera* (PEBR3 – Sierra cliff brake), *Spiranthes porrifolia* (SPP07) – western ladies tresses) and the federally listed *Pinus albicaulis* (PIAL- whitebark pine).

P. Dominant Soils

Major geologic forces that shaped much of the landscape in the Pioneer fire area include volcanism, glaciation, landslides, and fluvial/alluvial processes. Parent materials are composed of volcanic ash and pumice, glacial till, igneous (granitic) and metamorphic (gneiss) rock formations. Sedimentary formations exist in the fire area to a lesser extent. Most of the soils in the Pioneer Fire area have high rock content and in many places rock outcrops exist with little to no fine fraction soil present. Please see the Pioneer BAER Geology report for a more detailed discussion of the geology found in the area.

Several soil texture types are found in the Pioneer fire perimeter, but sandy loam and silt loam textured soils are by far the dominant texture class. Mixed volcanic ash soils are present in the Pioneer fire perimeter as are Andisols, Spodosols, Entisols and Inceptisols. Erosion potential is generally high in the Pioneer fire perimeter due to soils being derived of volcanic ash with pumice or igneous/metamorphic parent materials that are readily broken down by weathering processes and occurring on steep slopes (>30%). Vegetation cover is key in protecting these soil types from excessive erosion.

Q. Geology

Within the burn perimeter of the Pioneer Fire the dominate lithology is the Skagit Gneiss, and small amounts of the Lake Juanita luecogneiss at the eastern edge of the fire. The protolith of the Skagit Gneiss is a Cretaceous aged tonalite which is an igneous rock with a felsic (low iron) composition containing hornblend and biotite. This tonalite was metamorphosed during mountain building events and is now classified as a gneiss which is a metamorphic rock that has been folded under pressure and high heat. Throughout the burn perimeter are numerous mafic dikes that are younger than the local lithology. Younger (Quaternary Units) within the burned area consist of alluvial, colluvial, and glacial deposits.

R. Mass Wasting Potential

In pre-fire conditions, due to the steep slopes of the rocky, glacially eroded valleys, shallow landslides, debris flows, and rockfalls/dry ravel are recurrent geohazards. In post-fire conditions, an increase in the probability of debris flows is likely due to the effects of the burn on soils leading to decreased infiltration and increased runoff during storms, the removal of a protective ground cover and diminished root strength caused by fire, and the naturally over-steepened slopes within the area. Shallow translational landslides may increase due to loss of vegetation on the naturally over-steepened slopes, increasing slope instability; however, an increase in deep-seated landslides due to the impacts from the fire is not anticipated. Dry ravel may also increase in post fire conditions due to the increase in soil erosion potential and loss of effective ground cover. The USGS Debris Flow Model estimated that shorter-duration, high-intensity rainstorms (a 15-minute rainfall intensity of 24mm/hour for this assessment) tend to trigger debris flows. The majority of the estimated basins within the fire have a moderate combined hazard for debris flow. Specific channels and basins within Prince Creek, Cascade Creek, Fish Creek, and East Fork Fish Creek drainages were modeled to have a high combined hazard for debris flows. Three of these catchments (Fish Creek, Cascade Creek, and Prince Creek) have campgrounds on the debris fan surfaces near the lakeshore, all of which are at some level of risk of potential inundation from flooding or debris flows.

S. Miles of Stream Channels by Order or Class:

Table 3: Miles of Stream Channels by Order or Class

Stream Type	Miles of Stream
Perennial	81.3
Intermittent	32.8
Ephemeral	0.0

T. Transportation System:

Trails: National Forest (miles): 44.2

Other (miles):

NFS Trails

Soil Burn Severity	Miles	Percent
High	3.2	7%
Moderate	16.1	36%
Low	20.6	47%
Very Low or Unburned	4.3	10%
Total	44.2	100%

Roads: *National Forest (miles):* N/A *Other (miles):*

PART III - WATERSHED CONDITION**A. Burn Severity (acres):***Table 4: Burn Severity Acres by Ownership*

Soil Burn Severity	NFS	NPS	State	Private	Total	Within Fire Perimeter
Unburned	2,767	1,521	0	9	4,297	11%
Low	16,040	3,323	0	427	19,790	51%
Moderate	8,958	2,658	0	201	11,817	30%
High	2,377	706	0	14	3,097	8%
Total	30,142	8,208	0	651	39,001	100%

*Different soil burn severity maps were used by the NPS and the USFS. Differences in the high/moderate category was 2%. All USFS analysis occurred only on USFS lands using the USFS soil burn severity map.

B. Water-Repellent Soil (acres):

Fire-induced or altered hydrophobicity occurred on approximately 24% of soils (100% of severely burned soil and 50% of moderately burned soil) or around 9,200 acres.

C. Soil Erosion Hazard Rating:

3,360 acres of low (9%); 21,150 acres of moderate (54%); 11,860 acres of high (30%); 2,650 acres very high (7%). Methodology for calculating soil erosion hazard ratings can be found in Appendix A of the soil report.

D. Erosion Potential (tons/acre): 40 tons/acre**E. Sediment Potential:** 17,000 tons/year

Erosion and sediment potential are average estimates from model runs and are generally considered higher than expected. In the event of a high-intensity rain event, rapid snow melt, or a rain-on-snow event then we would expect to see a watershed response similar to the higher numbers displayed above.

F. Estimated Vegetative Recovery Period (years): Estimated recovery of vegetation (sufficient to provide effective ground cover to significantly reduce hillslope runoff and erosion to levels closer to pre-fire conditions) is 3-5 years. Natural recovery of trees will take several decades.

G. Estimated Hydrologic Response: The fire has reduced or eliminated canopy and ground cover and has altered soil structure and caused varying degrees of hydrophobicity across extensive areas within the fire perimeter. These changes will lead to reduced precipitation interception and soil infiltration capacity, as well as elevated runoff compared to pre-fire conditions.

Watershed response will likely include an initial flush of ash and fine sediment, rill and gully erosion in headwater drainages and in small, steeper drainages within the burned area, debris-laden flash floods and debris flows in response to high-intensity rain events, as well as elevated snowmelt peak flows. Preliminary hydrologic modeling indicates flow increases in many headwater channels of >10X the pre-fire flow rates for a given storm. Water quality will be diminished during seasonal peak runoff, as well as after high-intensity summer rains, due to elevated ash, fine sediment, and nutrient loading. Elevated post-fire response will gradually diminish over time as vegetation and groundcover levels recover over the next several years, although some impacts are likely to persist for a decade or longer.

PART V - SUMMARY OF ANALYSIS

Introduction/Background

The Pioneer Fire began on June 8, 2024. The fire perimeter includes roughly 39,000 acres primarily on the Okanogan-Wenatchee National Forest. The fire left a mosaic of fire severity on USFS land, and included some large contiguous areas that burned with moderate to high soil burn severity. The fire has burned almost entirely within the Lake Chelan catchment, on the east side of the lake. Major tributaries with extensive burned area include Fish Creek, Meadow Creek, and Prince Creek.

The BAER assessment was initiated on September 7, 2024. The team assessed critical BAER values for post-fire threats to identify where an emergency exists that warrants treatment, and to identify the most cost-effective treatments to minimize or mitigate post-fire threats. The critical value spreadsheet in the project file summarizes the values assessed and the level of risk to those values.

A. Describe Critical Values/Resources and Threats (narrative):

Table 1: Critical Value Matrix

Probability of Damage or Loss	Magnitude of Consequences		
	Major	Moderate	Minor
	RISK		
Very Likely	Very High	Very High	Low
Likely	Very High	High	Low
Possible	High	Intermediate	Low
Unlikely	Intermediate	Low	Very Low

1. Human Life and Safety (HLS):

Human life and safety were judged to be at risk due to post-fire conditions at numerous points within the burned area. Overnight campers and day-users are at risk from potential flooding, debris flows, as well as falling rocks and hazard trees at all of the developed-recreation sites located on debris fans below burned watersheds, as well as on docks and in the nearshore waters of the lake in these locations. Hikers and backcountry visitors throughout the burned area are also potentially at risk of harm from floods and debris flows in drainage bottoms and at trail-stream crossings. Trail

and backcountry hikers are also at elevated risk of harm from falling rocks and hazard trees due to post-fire conditions. Although there are no designated dispersed campsites in the burned area, dispersed camping does occur, potentially in areas with post-fire hazards such as rockfall, hazard trees, or flooding.

The probability of post-fire threats to life and safety were determined for the above-mentioned sites and trails. Separate ratings were determined for hazard trees and flooding/debris flows to better inform temporary closure treatment recommendations and future decisions about re-opening closed campsites and trails. For both hazard trees and flooding/debris flows, the probability of harm to visitors at the campsites, trails, and facilities listed below ranged from unlikely to likely. In all cases, the magnitude of consequences was considered to be major, resulting in risk ratings of *intermediate* to *very high* (Table 5).

Table 5: Life and safety BAER risk ratings at recreation sites and trails within or downstream of the burned area.

Site/Trail	Threat	BAER risk rating
Moore Point Campground and Day Use Area	Flooding, debris flows	High
Meadow Creek Shelter	Flooding, debris flows	Intermediate
Cascade Creek Campground	Flooding, debris flows	Very High
Prince Creek Campground and Day Use Area	Flooding, debris flows	Intermediate
Meadow Creek Shelter, Cascade Creek and Prince Creek Campgrounds	Hazard trees	High
Permitted recreation residence at Canoe Creek	Flooding, debris flows	High
All trails within burned area	Hazard trees, rock fall	Intermediate
All trails within burned area at stream crossings	Flooding, debris flows	High

Risk to life and safety on some segments of trail was rated *intermediate* or *high* due to the threat of direct impact or loss of egress from falling hazard trees and rocks as well as flash flooding and debris flows include all trail segments within or immediately adjacent to or downslope from areas of low, moderate, or high soil burn severity.

Developed recreation facilities with a *high* or *very high* risk to human life and safety due to the threat of falling hazard trees and rocks as well as flash flooding and debris flows include Moore Point, Cascade Creek, and Prince Creek campgrounds. The threat of flood or debris flow inundation at Meadow Creek shelter was estimated to be intermediate. In all cases the magnitude of consequences for potential impacts on life and safety was considered to be major.

2. Property (P):

Trail prisms and bridges could be damaged or destroyed due to increased runoff, erosion, flooding, and debris flows on trail sections within and downstream of areas of moderate and high soil burn severity. As discussed above, the three developed campgrounds on debris fans within or just downstream of the burned area are at risk of inundation from flood or debris flows. Infrastructure at risk of damage or loss include outhouses, docks, tables, and fire rings. However, risk ratings for

the campgrounds and related infrastructure were generally intermediate or lower from debris flows, but at *high* risk of damage from falling hazard trees. Risk ratings for trails within and immediately downslope of areas of moderate or high burn severity were rated at *high* risk of damage or loss, as was the Fish Creek trail bridge.

3. **Natural Resources (NR):**

Soil Productivity and Hydrologic Function: While post-fire erosion will have a negative effect on soil productivity and vegetative recovery, burned area soils will likely support the recovery of native vegetation, provided noxious invasive weeds do not proliferate in the burned area. Some aspects of watershed hydrologic function will initially be impaired, particularly in areas of moderate to high soil burn severity. However, hydrophobicity will substantially diminish during fall rains and spring snowmelt in the first year following the fire, and conditions affecting movement and storage of water will gradually recover in the coming years. The probability of loss of soil productivity was estimated to be possible, the magnitude of consequences was estimated to be moderate, leaving an *intermediate* risk level. This level of risk does not compel treatment. Regardless, BAER treatments are generally not recommended for soil productivity as landscape treatments across large expanses of burned area generally do not effectively reduce risk to the resource, and are not cost-effective. Treatments to maintain native plant communities will however contribute towards addressing post-fire impacts on soil productivity. The probability of loss of hydrologic function was estimated to be possible, the magnitude of consequences was estimated to be minor; and the corresponding risk rating to be *low*.

Native or Naturalized Plant Communities: Invasive plant infestations, notably *Crupina vulgaris*, have been documented in certain parts of the burned area near the shore of Lake Chelan, and have the potential to spread from these source areas onto disturbed soils throughout the burned area, especially in areas with moderate to high soil burn severity. The potential for spread of invasive plants is also high in areas disturbed by suppression activities outside of the fire perimeter.

The spread of noxious weeds would adversely affect multiple resources including regionally sensitive native plant communities, the degradation of which in turn affects threatened and endangered species habitat for wildlife and fisheries, as well as soil productivity and hydrologic function. The probability of damage or loss of native plant communities was estimated to be *very likely* and the magnitude of consequence was estimated to be *moderate*; the BAER risk rating is *very high*.

Critical Wildlife TES Habitat or Suitable Occupied Habitat: Okanogan-Wenatchee National Forest wildlife biologists confirmed that there are no critical values at risk due to post-fire conditions in the Pioneer Fire burned area for federally listed wildlife species (wolf, wolverine, lynx, northern spotted owl, ptarmigan). There are no known wolf, lynx, or wolverine dens in the burned area and no known spotted owl nest trees therefore the probability of damage is *unlikely*, the magnitude of consequences is *minor*, and the BAER risk rating is *low*.

Cultural and Heritage Resources: A total of 16 cultural resources within the Pioneer Fire direct and indirect impact area were identified as potential critical values. These include sites either eligible or potentially eligible for listing on the National Register of Historic Places (NRHP), and sites identified by Tribes during consultation. The assessment found that all 16 sites were unaffected by the Pioneer Fire because they were either protected during suppression efforts or submerged under Lake Chelan due to current high lake levels. One pre-contact site is at risk of impacts from recreation use, looting, and vandalism as pressure from temporary campground closures pushes

hikers and campers to utilize nearby undeveloped camp locations. The probability of this occurring is possible and the magnitude of consequences is *major*, resulting in a *high* risk rating.

B. Emergency Treatment Objectives:

- Reduce the post-fire risks to life and safety through administrative and physical closures of campgrounds, trails, and other sites, site-specific removal of hazard trees in certain areas of focused use or congregation, warning signs, and monitoring.
- Storm-proof and stabilize high-use trails where feasible to protect the property investment and maintain access for administration and the public.
- Promote revegetation of native plant communities and soil stabilization through early detection/rapid response surveys and treatment to minimize the spread of State-listed noxious weeds

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

Land: 90%

Channel: not applicable

Roads/Trails: 70%

Protection/Safety: 90%

D. Probability of Treatment Success

Table 2: Probability of Treatment Success

	1 year after treatment	3 years after treatment	5 years after treatment
Land	90%	80%	60%
Channel	N/A	N/A	N/A
Roads/Trails	70%	80%	85%
Protection/Safety	70%	90%	90%

E. Cost of No-Action (Including Loss): It is difficult to quantify the cost of injury or loss of life, or of the loss of intact native ecosystems. The cost of no action for trail drainage work is roughly five times the cost of the proposed treatments, or roughly \$300,000.

F. Cost of Selected Alternative (Including Loss): \$205,000

G. Skills Represented on Burned-Area Survey Team:

- | | | | | |
|---|--|---|---|---|
| <input checked="" type="checkbox"/> Soils | <input checked="" type="checkbox"/> Hydrology | <input checked="" type="checkbox"/> Engineering | <input checked="" type="checkbox"/> GIS | <input checked="" type="checkbox"/> Archaeology |
| <input checked="" type="checkbox"/> Weeds | <input checked="" type="checkbox"/> Recreation | <input type="checkbox"/> Fisheries | <input type="checkbox"/> Wildlife | |
| <input type="checkbox"/> Other: | | | | |

Team Leader: Dave Callery, Katie Buchan

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Forest BAER Coordinator: Karenth Dworsky

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Team Members:

Table 3: BAER Team Members

Role	Team Member Name
<i>Team Lead(s)</i>	Dave Callery, Katie Buchan (t)
<i>Soils</i>	Luke Cerise
<i>Hydrology</i>	Rae Kursky
<i>Engineering</i>	Ken Bigelow
<i>GIS</i>	David Keenum
<i>Archaeology</i>	Justin Moschelle, Karina Bryan, Amanda Cervantes, Jackie Cordova (t), Julie Tingly (t)
<i>Botany/Invasives</i>	Brigitte Ranne
<i>Recreation</i>	TJ Broom
<i>Other</i>	WA DNR: Kate Mickelson, Nancy Calhoun NWS: Robin Fox

H. Treatment Narrative:

Land Treatments: Early detection/rapid response (EDRR) surveys will focus on areas of unimpaired native plant communities that burned at high or moderate soil burn severity and are adjacent to known state-listed noxious weeds, as well as areas disturbed by suppression activities. EDRR will be used to minimize the potential for new noxious weed infestations and ensure the natural recovery of native perennial grasses and forbs. Heavy equipment used for suppression activities travelled through areas of known weed populations to unaffected areas, which has substantially increased the risk of noxious weed spread in these disturbed areas. If new weed populations are found they would be promptly treated to minimize the potential to spread and resulting degradation of native plant communities. Treatment methods will generally be done using herbicides and backpack sprayers, but will also include hand-pulling where invasives are adjacent to species on the Regional Forester's Sensitive Plant list.

Treatment	Units	Unit Cost	Units (#)	Total Cost
P1a - Invasives EDRR (crupina, scotch broom, PEBR3 and SPPO7)	Acres	\$255 (avg)	392	\$99,960
P1b - Invasives EDRR-Suppression	Acres	\$150	160	\$24,000
TOTAL				\$123,960

Channel Treatments: None proposed

Trail Treatments: Treatments will reduce the risk of damage from elevated post-fire runoff on trails by improving the number and efficiency of drainage features along segments within and below areas of moderate and high SBS. Risk mitigation treatments will be focused on the high-priority, heavily used Lakeshore Trail, whereas needed, BAER-eligible treatments on other trails will be deferred. Although the risk to the Fish Creek bridge was judged to be *high*, no feasible, cost-effective treatment was identified to reduce the risk to an acceptable level.

T1. Trail Drainage Stabilization: Trail segments at risk are those in moderate to high soil burn severity or with slopes above with moderate to high burn severity. Trail segments prioritized for treatment include those with grades above 6%, aligned with the fall-line, or with steep side slope ($\geq 40\%$).

Treatment	Units	Unit Cost	Units (#)	Total Cost
Trail tread and drainage – WCC crews	miles	\$5,263	11.4	\$60,000

Protection/Safety Treatments:

S1b: Trail/Recreation Hazard Signs: This treatment will install burned-area warning signs at trailheads, campgrounds, boat ramps and docks, and on trails intersecting the fire perimeter.

Treatment	Units	Unit Cost	Units (#)	Total Cost
Signs for campgrounds, trailheads and entry points	sign	\$290	50	\$14,500

S3. Hazard Tree Falling: This treatment will cover the removal of fire-killed trees at risk of falling and damaging campground or other FS infrastructure.

Treatment	Units	Unit Cost	Units (#)	Total Cost
Hazard tree falling at developed rec sites	sites	\$2,000	2	\$4,000

S10. Interagency Coordination: There is private property on debris fans on the lakeshore below the burned area, including several houses, docks, and other infrastructure. Floods and debris flows have the potential to impact people on these properties as well as the structures themselves. Flooding and debris flows will contribute large volumes of large floatable woody material into the lake, presenting navigation hazards to boaters on the lake. Okanogan-Wenatchee National Forest personnel will coordinate with and provide information and coordination assistance to partner agencies with the authorities and funding programs to communicate hazards to landowners, evaluate risk to life and safety, and implement risk mitigation measures on private property. No funding is requested for this activity.

S12. Other Protection and Safety Treatment: The team recommends the temporary closure of Cascade Creek and Moore Point campgrounds due to risk of flooding and debris flows, with the possible temporary relocation of the Moore Point campground to the old orchard area on a higher bench. The team also recommends temporarily limiting stays at the recreation residence located on the Canoe Creek debris fan to daytime (no overnight stays) due to the risk of flooding and debris flows at this location. There is no funding request for this treatment.

I. Monitoring Narrative: Two campgrounds were recommended for temporary administrative closure to overnight occupation due primarily to the high risk of flooding and debris flows, though tree and rockfall are also potential threats. These are popular campsites in an area that experiences heavy use most months of the year, and there will be considerable pressure on the District to reopen them. Monitoring of watershed recovery will occur in order to assist in determining when it is safe to reopen the sites. Additionally, if overnight stays at the recreation residence at Canoe Gulch are limited, monitoring of this catchment will assist decision-makers in when the risk has subsided at this location.

M1: Level I Treatment Effectiveness: This treatment will evaluate watershed recovery in the catchments draining to administratively closed campgrounds to assist Forest personnel in determining when risk has receded to an acceptable level.

Treatment	Units	Unit Cost	Units (#)	Total Cost
Watershed recovery assessment	OT hrs	\$60	50	\$3,000

PART VI – EMERGENCY STABILIZATION TREATMENTS AND SOURCE OF FUNDS

Line Items	Units	Unit Cost	# of Units	BAER \$	Other \$	# of units	Fed \$	# of Units	Non Fed \$	Total \$
A. Land Treatments										
P1a Invasives EDRR	acre	255	392	\$99,960	\$0		\$0		\$0	\$99,960
P1b Suppression EDRR		150	160	\$24,000	\$0		\$0		\$0	\$24,000
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Land Treatments</i>				\$123,960	\$0		\$0		\$0	\$123,960
B. Channel Treatments										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Channel Treatments</i>				\$0	\$0		\$0		\$0	\$0
C. Road and Trails										
T1 Trail drainage improvement	mile	5,263	11.4	\$60,000	\$0		\$0		\$0	\$60,000
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Road and Trails</i>				\$60,000	\$0		\$0		\$0	\$60,000
D. Protection/Safety										
S1b trail warning signs	sign	290	50	\$14,500	\$0		\$0		\$0	\$14,500
S3 hazard tree falling	site	2,000	2	\$4,000	\$0		\$0		\$0	\$4,000
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Protection/Safety</i>				\$18,500	\$0		\$0		\$0	\$18,500
E. BAER Evaluation										
Initial Assessment est.	Report			\$50,000	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				---	\$0		\$0		\$0	\$0
<i>Subtotal Evaluation</i>				\$50,000	\$0		\$0		\$0	\$0
F. Monitoring										
M1 Recovery assessment	site	\$1,000	3	\$3,000	\$0		\$0		\$0	\$3,000
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Monitoring</i>				\$3,000	\$0		\$0		\$0	\$3,000
G. Totals				\$205,460	\$0		\$0		\$0	\$205,460
Previously approved										
Total for this request				\$205,460						

PART VII - APPROVALS

1.
Forest Supervisor

Date