Date of Report: July 13, 2020

# **BURNED-AREA REPORT**

# **PART I - TYPE OF REQUEST**



# A. Type of Report

- ☐ 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: Poeville Road B. Fire Number: NV-TMFX-030352

C. State: NV D. County: Washoe

E. Region: 04 - Intermountain F. Forest: 17 - Humboldt-Toiyabe National

**Forest** 

G. District: Carson (17)

H. Fire Incident Job Code: 1502 PNM7TR20

I. Date Fire Started: Friday, June 26, 2020 J. Date Fire Contained: Monday, July 6, 2020

K. Suppression Cost: 1.1 million

L. Fire Suppression Damages Repaired with Suppression Funds (estimates):

1. Fireline repaired (miles): 9.09 miles of dozerline.

2. Other (identify): Click here to enter text.

#### M. Watershed Numbers:

Table 1: Acres Burned by Watershed

HUC#	Watershed Name	Total Acres	Acres Burned	% of Watershed Burned
1808600	Lemmon Valley	61,857	2,880	4.7
160501020505	Hunter Creek	28,617	76	0.26
160501020506	Peavine Creek	28,421	18	0.06

#### N. Total Acres Burned:

Table 2: Total Acres Burned by Ownership

OWNERSHIP	ACRES
NFS	2,512.6
TMWA	3.4
CITY OF RENO	19.8
PRIVATE	439.1
TOTAL	2974.9

- O. Vegetation Types: Mountain brush including manzanita and sagebrush, Mountain Mahogany
- **P. Dominant Soils:** Generally the soils have a sandy loam texture. On gentle slopes, the surface rock content is relatively low and much higher on steeper slopes. Post fire, there is little soil cover on the soil surface. In the Moderate Soil Burn Severity, what cover remained was removed by dramatic dust devils. The Low Soil Burn Severity did not have much soil cover prior to the fire due to low productivity, shallower soils. The primary soils are:

Map Unit Name	Acres	Percent
Indiano-Koontz-Flex association	489	16
Indiano gravelly loam, warm, 15 to 30 percent slopes	423	14
Wedekind gravelly loam, 15 to 30 percent slopes	347	11
Burnborough-Ticino-Softscrabble association	283	9
Flex very gravelly sandy loam, 30 to 50 percent slopes	248	8

Q. Geologic Types: The fire area is dominated by the Peavine Sequence, a Mesozoic assemblage of metavolcanic rock consisting of rhyolitic pyroclastics and flows, dacite, andesite and lahar breccias. Field observations of exposed monzonite intrusive volcanics were also seen within the fire area. Past mining was active and still ongoing particularly at the Paymaster Mine immediately north of the fire. Debris Flow potential was assessed with both on-site observations and USGS Debris Flow Modeling. On-site observations revealed scoured channels particularly downstream of canyon outlets. The amount of debris scoured from the channels would represent a significant amount of material transported to unmaintained culverts associated with the railroad grade. Large fragment debris flow deposits were identified at the mouth of at least one canyon and could be transported further downstream during a large event on a burned area. USGS modeling indicates a high probability of debris flows throughout the fire area. The railroad grade, located downstream from Federally managed lands, will prevent debris flows from impacting values downstream of the grade but debris flows will increase the risk of culvert plugging and water impoundment. In a high precipitation event, impoundment behind the railroad grade could risk overtopping and failure. Human debris within the floodplain in a few channels does elevate the risk of culvert plugging. High risk areas identified are:

- Forest service roads and trails crossing channels
- Seneca Road
- Seneca Neighborhood
- Golden Valley Road Neighborhood
- N. Virginia Street crossings (flooding risk)
- Particular concern is property owners with debris in floodplain that will plug N. Virginia Street culvert at Kennedy Drive

### R. Miles of Stream Channels by Order or Class:

Table 3: Miles of Stream Channels by Order or Class

STREAM TYPE	MILES OF STREAM
PERENNIAL	
INTERMITTENT	9.3
<b>EPHEMERAL</b>	
OTHER (DEFINE)	

### S. Transportation System:

Trails: National Forest (miles): 13.99 (includes 7.07 miles motorized trail)

Roads: National Forest (miles): 32 Other (miles): 0.35

This includes the NFS roads/trails that are on private within the fire but not non-fs roads on private.

# **PART III - WATERSHED CONDITION**

# A. Burn Severity (acres):

Table 4: Burn Severity Acres by Ownership

Soil Burn Severity	NFS	Other Federal (List Agency)	State/Local	Private	Total	% within the Fire Perimeter
Unburned	100		1.4	36	137.4	4.6
Low	846		12.6	164	1024	34.3
Moderate	1564		6	242	1812	61
High	3		0	0.3	3.3	0.1
Total	2513		20	442		

- **B.** Water-Repellent Soil (acres): Surprisingly, water repellent soils were not observed in the fire area. This will allow for soil infiltration on smaller storms but there is less significant benefit during high intensity convective storms.
- **C. Soil Erosion Hazard Rating:** Erosion Modelling using WEPP-ERMiT is used to estimate erosion in lieu of Erosion Hazard Rating.
- **D. Erosion Potential:** The topography, soil properties and Soil Burn Severity within the Poeville Fire are not likely to result in high erosion rates. The slopes are gentle, the soil texture is coarse with little water repellency, and the soil burn severity is low and moderate. Erosion Potential was modelled using WEPP-ERMiT for a 2 year and 10 year erosion event:

Erosion Potential: 2 year event – 0.1 tons/acre 10 year event – 2.0 tons/acre

Even though the Poeville Fire will not likely result in high erosion rates from hillslopes, the increased runoff from even one in ten year storm events will likely lead to damage to Forest Service road and trail infrastructure.

- **E. Sediment Potential:** The sources of potential sediment will be dominated by unauthorized routes and channel scour (including artificial drainage patterns caused by roads and trails) from high flow with a lesser input from hillslope erosion. The magnitude is unknown but likely to overwhelm off forest culverts (road and railroad) and debris basins resulting in surface street flooding during particularly large precipitation events.
- **F.** Estimated Vegetative Recovery Period (years): 1-3 years for hillslope herbaceous components, 5-10 years for shrub components
- **G.** Estimated Hydrologic Response (brief description): The Wildcat storm run-off model was run for the watershed above Kiowa Pond and Cottonwood Dam. A 10 yr-30 min storm was used. Results indicated that no run-off was generated for this storm on the unburned watershed and only minimal runoff, approximately 3.6 cfs, would occur on the burned watershed. This is runoff generated in channel flow at the pour point which is Kiowa pond. Although this modeled flow does not indicate an emergency for the dam at Kiowa Pond, the generation of any runoff at all compared to the unburned condition indicates that drainage features, including artificial flow paths created by roads and trails, will be subject to a greater degree of overland flow (both in terms of frequency and magnitude) than they were prior to the fire.

# **PART V - SUMMARY OF ANALYSIS**

# **Introduction/ Background**

The Poeville Fire burned 2,975 acres within the Humboldt-Toiyabe National Forest, Carson Ranger District on the east side of Peavine Mountain in northwest Reno, Nevada. Eight structures were destroyed, including one home. The fire started on June 26, 2020 and was contained on July 6, 2020, affecting NFS lands, private, and County land. There are no extensive areas of high soil burn severity. The area consisted mostly of moderate (61%) and low (34%) soil burn severity. Even though there's limited high soil burn severity, it's still expected for an increased watershed response and sediment/ ash deliverables, ultamitely impacting Forest Service road and trail infrastructure. The fire is almost entirely within the Lemmon Valley watershed. The area is characterized by numerous small, intermittent channels that drain east into the adjacent neighborhoods. There are no perennial streams within the fire perimeter. The flow patterns on NFS lands are disrupted by numerous roads and trails. The channels downstream of the forest boundary are impacted by the railroad grade and culverts, and neighborhood roads. Generally, the soils have a sandy loam surface texture. On gentle slopes, the surface rock content is relatively low and much higher on steeper slopes. The soils are primarily derived from metavolcanics with a small component derived from alluvial fan terraces.

Slopes within the burn area range from gentle to moderate steepness. The burned area is expected to produce erosion and sedimentation along concentratted flow paths within and below the fire, likely impacting Forest Service road and trail infrastructure. The risk of flooding and erosional events will increase as a result of the fire, creating hazardous conditions within and downstream of the burn area. Because there is little to no ground cover in areas of moderate soil burn severity (i.e., >60% of the burned area), runoff efficiency will be increased and is expected to produce more runoff more frequently. These responses are expected to be greatest in initial storm events, and will become less evident as vegetation is reestablished, providing ground cover, increasing surface roughness, and stabilizing and improving the infiltration capacity of the soils. Being an arid environment, the vegetation is not robust and consists primarily of annual grasses and desert shrubs. With the lower productivity, the vegetation does not provide heavy fuels, therefore, the soils do not burn with high soil burn severity. Given the vulnerability of the area to invasive annuals, several invasive and noxious plant species are known to occur within the fire, specifically Category A and B species which pose a greater threat to the ecosystem than others. Invasive weeds are very effective at occupying disturbed soil and displacing native plants and habitat. In addition to invasives, there are 140 acres of critical habitat for Webber's ivesia (Ivesia webberi) witin the burn area. Prior to the fire, the critical habitat was being managed for small invasions of medusahead (Taeniatherum caput-medusae) and barbed goatgrass (Aegilops triuncialis), directionally adjacent to the habitat. Dozer lines were installed through both the critical habitat and the barbed goatgrass and medusahead infestations.

This is a heavily recreated area and the roads and trails provide Forest management access as well as hunting and recreation opportunities, and the area is classified by the Nevada Department of Wildlife (NDOW) as a critical winter range mule deer habitat. Lastly, the area that burned in the fire is known through historical records and archaeological investigation to contain abundant historical era cultural resources and prehistoric resources, in addition to the presence of Traditional Cultural Properties (TCPs) to the Washoe Tribe of Nevada and California and the Reno-Sparks Indian Colony. Consequently, there is a requirement to conduct cultural monitoring. It would not be necessary if a Programmatic Agreement (PA) was in place with the Nevada State Historic Preservation Office (SHPO). Cultural monitoring costs are included as a separate line item in treatments requiring it.

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

Table 5: Critical Value Matrix

Probability of	Magnitude of Consequences					
Damage or Loss	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			

**Probability of Damage or Loss:** The following descriptions provide a framework to estimate the relative probability that damage or loss would occur within 1 to 3 years (depending on the resource):

- Very likely. Nearly certain occurrences (90% 100%)
- Likely, Likely occurrence (50% 89%)
- Possible. Possible occurrence (10% 49%)
- Unlikely. Unlikely occurrence (0% 9%)

#### **Magnitude of Consequences:**

- Major. Loss of life or injury to humans; substantial property damage; damage to critical natural or cultural resources
- Moderate. Injury or illness to humans; moderate property damage; damage to critical natural or cultural resources resulting in considerable or long-term effects.
- Minor. Property damage is limited in economic value and/or too few investments; damage to critical natural or cultural resources resulting in minimal, recoverable or localized effects.

Several critical values were identified as being at risk. They include human life and safety, property (i.e., roads, motorized trail networks and non-motorized trail networks), natural resources (i.e., native/naturalized plant communities and T&E species), and cultural resources. The threats to these resources are discussed below and in the BAER-FS Critical Value Table. Only those threats that have a high or very high risk level associated with them were brought forward for treatment proposals.

B. **Emergency Treatment Objectives:** 1. Fire Area Visitors: Limit the likelihood of injury to NFS land users due to burned area hazards; 2. Authorized Motorized and Non-Motorized Routes: Prevent or limit the damage to roads and trails that would be caused by increased runoff efficiency, and decrease sediment generated by these roads and trails; 3. Native Plant community: Prevent the development of new infestations and the expansion of existing; 4. Mitigate the loss of designated critical habitat for Webber's ivesia from the very high likelihood of expansion of invasive annual grasses due to suppression activities; and 5. Prevent or limit the loss of cultural resources due to looting, vandalism, or erosion.

C. Probability of Completing Treatment Prior to Damaging Storm or Event: Land 90 Channel N/A

Roads/ Trails 90 Protection/ Safety 100

### D. Probability of Treatment Success

Table 6: Probability of Treatment Success

	1 year after treatment	3 years after treatment	5 years after treatment
Land	70	80	90
Channel	N/A	N/A	N/A
Roads/Trails	70	75	85
Protection/Safety	80	90	95

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

• Invasive Plants – It is difficult to place monetary value on the loss of 140 acres of critical Webber's ivesia habitat; however, it would be a loss of half of the habitat on Peavine Mountain. Furthermore, although not a critical value per BAER policy, it is difficult to place monetary value on critical mule deer winter range. If the proposed BAER treatment is not funded, it is expected that new non-native invasive annual grasses and noxious weeds will spread throughout the burned area. The expected consequences include: diminishing the quality of a TESP species critical habitat, further loss of native/naturalized plant communities, decreasing the crucial wildlife habitat for mule deer, and decreasing the recreation value.

A conservative prediction would be that if the fire scar is left to recover naturally with no chemical treatment intervention, the native and naturalized plant community would experience a loss of at least 50% to noxious weeds. This would exponentially increase the cost in subsequent years to treat the new infestations if small satellite populations are not controlled in year one. Failure to address the potential spread of noxious weeds found within the Poeville Fire perimeter could lead to the native plant community converting to noxious weeds, including annual grasslands in 3-5 years. If the entire 2,975 acres of burned area converted to invasive plants, the initial cost to treat the area would be \$1,041,250, based on the current contracting rate.

- Roads With 32 miles of roads, an estimated 15% loss of roads and trails due to overland flow
  damage during and after rainstorms would result in 4.8 miles of road damage. At that point, the cost of
  repair would be equivalent to constructing roads from scratch. At \$41,000/mile for roads, the total
  expected loss would be \$196,800. This cost estimate includes bringing in material to build up the
  washed out sections and construction costs. The cost of the lost value of the roads to project
  management, fire suppression, and recreation is not included in this estimate.
- Trails With 14 miles of trails, an estimated 15% loss of roads and trails due to overland flow damage during and after rainstorms would result in 2.1 miles of trail damage. At that point, cost repair would be equivalent to constructing trails from scratch. At \$30,000/mile for trails, the total expected loss would be \$63,000.
- Human Health and Safety The value of lives lost or lives impacted by injury due to unexpectedly
  washed out trails or roads cannot be estimated.
- Cultural Resources Prehistoric and historic cultural values are irreplaceable if lost and often irreparable when damaged. These values are priceless and the cost loss or damage cannot be estimated.
- Other Unmeasurable Items Loss/alteration of soil productivity and decrease in forage production due to lost soil productivity or native species for wildlife.

# F. Cost of Selected Alternative (Including Loss):

#### Land Treatments

• Invasive Plants – \$11,916 for the early detection survey of 306 acres and herbicide treatment proposal of 40 acres.

#### **Channel Treatments**

None proposed.

#### Road and Trails Treatments

- Roads \$142,873 for emergency road and motorized trail treatments on 10.86 miles of the 32 total
  miles. This is a 27% savings compared to reconstructing roads after damage based on estimates
  provided above.
- Trails \$38,352 for emergency trail treatments on 9.3 miles of the 14 total miles. This is a 36% savings compared to reconstructing roads after damage based on estimates provided above.

# **Protection & Safety Treatments**

Human Health & Safety Signage – \$7,824

Cultural Resources Signage – \$5,128

G.	Skills F	Represented	on	Burned- <i>i</i>	Area S	Survey	Team:
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Soils		⊠ GIS	
	 	- 14 (II III C	

oximes Weeds oximes Recreation oximes Fisheries oximes Wildlife

Team Leader: Brian Hansen
Email: brian.c.hansen@usda.gov Phone(s)775-884-8140

Forest BAER Coordinator: John McCann

**Email:** john.mccann@usda.gov **Phone(s):** 775-355-5339

**Team Members:** Table 7: BAER Team Members by Skill

Skill	Team Member Name
Team Lead(s)	Brian Hansen
Soils	Eric Nicita
Hydrology	Sally Champion / Brendan Waterman
Engineering	Anita Lusty
GIS	Matt Dickinson / Allison Bruner
Archaeology	Kalie Crews
Weeds	Meagan Carter / Courtney Ghiglieri
Recreation	Ty Dayberry
Wildlife	Maureen Easton (consulted)
Botany	Tim Kellison (consulted)

#### H. Treatment Narrative:

#### **Land Treatments:**

#### Invasives:

# **Proposed Action:**

Perform Early Detection Survey within the burn area to prevent loss of native and naturalized plant communities to noxious and invasive weeds known for prolific spread on Peavine Mountain following a wildfire.

Areas to be surveyed:

- 1) 140 acres TESP Critical Habitat (SUPPRESSION REPAIR)
- 2) 106 acres; dozer lines, roads, motorized trails, and spike camp (SUPPRESSION REPAIR)
- 3) 60 acres around existing infestations (BAER)

There is a high risk of spread and introduction of invasive noxious weeds into areas disturbed by fire. Invasive noxious weeds affect the structure and habitat function of plant communities. Forest Service direction is to minimize the establishment of non-native invasive species to prevent unacceptable degradation of the burned area. Focus will be on assessment of roads, dozer lines, spike camps, and drop points is necessary to detect the spread and introduction of weeds in the first year after fire. Assessing the establishment of weeds and treating small outlying populations before they expand will prevent the weeds from competing with the recovery of the native plant community. Target species include barbed goatgrass and medusahead, as well as musk thistle and scotch thistle due to their high rate of spread by prolific seed dispersal via wind. Enough seedbank exists in the soil and will readily germinate, leading to likely expansion with the removal of competing native vegetation. Early Detection surveys will be completed on areas treated in fall 2020 and on areas surrounding existing infestations of noxious weeds. When noxious weeds are identified outside the current mapped infestations, an interim report will be filed to complete the Rapid Response treatment of the EDRR strategy.

There is a 50-89% (upper end) chance that known nearby invasive plants (i.e., barbed goatgrass, medusahead, musk thistle and scotch thistle) and other unknown invasive plants (e.g., species transported in by suppression personnel and equipment) will establish in the burned area or areas disturbed by suppression activities. If initial establishment were to occur and were untreated, subsequent expansion would result in long-term effects to native and naturalized plant communities.

BAER funding for Early Detection Surveys is not requested for all species within the burn area. The local district will EDRR for Canada thistle, perennial pepperweed, bull thistle, and cheatgrass species known to occur within the burn (see discussion). The district has the capacity to manage these species within their normal program of work. The district will be treating the known barbed goatgrass and medusahead infestations leading up to the burn area as part of their normal program of work. Weeds on private lands within the burn area will be district responsibility.

### Summary/Discussion:

There is a high likelihood of spread and introduction of invasive noxious weeds into areas disturbed by the Poeville Fire. Noxious and invasive weeds affect the structure and habitat function of native and naturalized plant communities. Forest Service direction is to minimize the establishment of non-native invasive species to prevent unacceptable degradation of the burned area. Noxious weed populations established in the fire area also threaten all nearby public and private lands. Water quality may also be threatened when noxious weeds displace native riparian and wetland plant species. Many native wetland plants prevent riparian soil erosion while some noxious weeds do not. Assessing the establishment of weeds and treating small outlying populations before they expand will prevent the weeds from competing with the recovery of the native plant community.

Barbed goatgrass isn't just another cheatgrass infestation, it's the second ever and largest known infestation in the State of Nevada which led to its listing as a Category A species. Many of our partners such as Fish and Wildlife Service, NDA, Nevada Department of Wildlife, BLM, Washoe County, and local weed management groups are interested in the action the Forest Service will take against barbed goatgrass invasion in the State.

### Total Cost of the Proposed Action

Cost for surveying and not treating was not requested during the estimate conversations with contractors. The cost of a survey is estimated from the daily rate for a Forest Service GS-5 (\$151.61/day) and GS-4 (\$113.21/day) biological technician crew (\$265.22/day). The established rate of acres per day surveyed is 35 acres. The local District does not have the capacity to do these surveys. The intent is to estimate the cost needed for a contractor to complete these surveys.

Contract Price	Acres to be Surveyed	Days Estimated to Complete Survey	Targeted Species	Season of Survey	Total
\$265.22/day	60 acres around existing infestations	2	Barbed Goatgrass, Medusahead, Musk and Scotch thistle	Fall 2020 or Spring 2021	\$530
\$265.22/day	140 acres TESP Critical Habitat	4	Barbed Goatgrass, Medusahead, Musk and Scotch thistle	Fall 2020 or Spring 2021	\$1,061
\$265.22/day	105.59 acres; Dozer lines, roads, motorized trails, and spike camp	3	Barbed Goatgrass, Medusahead, Musk and Scotch thistle	Fall 2020 or Spring 2021	\$796
	Total Acres Surveyed: 305.59	Total days of survey:		Total Cost of Survey	\$2,387
Line Item				Unit Cost	Total
COTR				\$431 per day x 10 days	\$4,310
Inspectors				(2) \$241.85 X 5	\$2,419
Vehicle mileag	je**			\$0.60 per mile x 500 miles	\$300
BAER Implem	entation overhead -	- MI&E and trave	el		\$2,500
					Total: \$11,916

<sup>\*</sup>Cost of labor, equipment and herbicide.

# **Channel Treatments: None proposed**

### **Roads and Trail Treatments:**

Based on the condition surveys the Forest is requesting to treat 10.86 miles of roads and full width motorized trails within the fire area. Below is a more detailed description of the routes and the treatment needs identified.

Transportation System Treatments								
Road				Rocked Swale				
Number	Road Name	Dips	Armored Dips	- Cubic Yards	Signs	Cost		
41645	FRAVEL MINE ROAD	19	3		2	\$29,202		
	GOLDEN FLEECE							
41648	MINE ROAD	15	3	60	2	\$37,548		
41664	RALEIGH HEIGHTS	2			2	\$3,432		
41645A	CONNECTOR ROAD	3				\$2,970		
21553	NO NAME	6				\$5,940		
21529	HORIZON HILLS	16				\$15,840		

<sup>\*\* 9</sup> miles out to site, 18 miles round trip. 32 total miles of road within burn area totals 50 miles per day. 5 days per inspector = 10 days and 500 miles total.

21515	PEAVINE CREEK CUTOFF	3				\$2,970	
	MOTORIZED OPEN						
21530	TO ALL	6		10		\$7,991	
21528	STEAD MOTORTRAIL	2				\$1,980	
	Cultural Resource Support for Construction						
	BAER Implementation overhead – MI&E and						
	travel				\$25,000		
	Total Transportation System Treatment						
	Cost \$142,873						

Based on the condition surveys, the Forest is requesting to treat 9.3 miles of trails within the fire area. Some trails will be treated using BAER funding, while some trails will be treated using fire suppression funding. Below is a more detailed description of the routes and funding sources identified.

System Trails in the Poeville Fire Perimeter						
Trail Name / #	Use	Mileage				
Bobsled (21104)	Multi Use: non OHV	0.8				
Colpo Canyon (21103)	Multi Use: non OHV	0.6				
Linges Loop (21105)	Multi Use: non OHV	0.7				
Mahogany Forest (21147)	Multi Use: non OHV	2.5				
Over Easy (21149)	Multi Use: non OHV	0.4				
Scrub Brush (21107)	Multi Use: non OHV	0.6				
Three Trees (21102)	Multi Use: non OHV	0.4				
Total Recall (21115)	Multi Use: non OHV	3.3				
Total Trails Miles 9.3						

# RESPONSE ACTION COST ESTIMATE

Personnel Services- Force Account	Cost
Grade @ Cost/day x # of Days (Based on 10hr days)	
GS-11 (Rec Staff) @ \$440/day x 1 Day	\$440
GS-07 (Crew Leader) @ \$360/day x 1 Day	\$360
GS-05 (Crew Member) @ \$300/day x 5 Days X 3 Crew Members	\$4,500
GS-04 (Crew Member) @ \$250/day x 5 Days X 2 Crew Members	\$2,500
Total Cost of Personnel	\$7,800

Travel Cost and Material and Supplies Equipment @ rate x miles x # of Days	Cost
Fleet Vehicle (4x4 Crew Cab) @ \$0.42 x 160 miles x 5 Days	\$336
Fleet Vehicle (4x4 Crew Cab) @ \$0.42 x 160 miles x 1 Days	\$67
Saw Equipment – fuel, oil, tools, sharpening	\$300
Total Travel Cost	\$703

Total Costs + 10% for unexpected variables	\$9,353

Total Trails Cost	Cost
Response Action Cost Estimate	\$9,353
Cultural Monitor	\$3,972
BAER Implementation overhead – MI&E and travel	\$25,000
Total Travel Cost	\$38,352

# **Protection/Safety Treatments:**

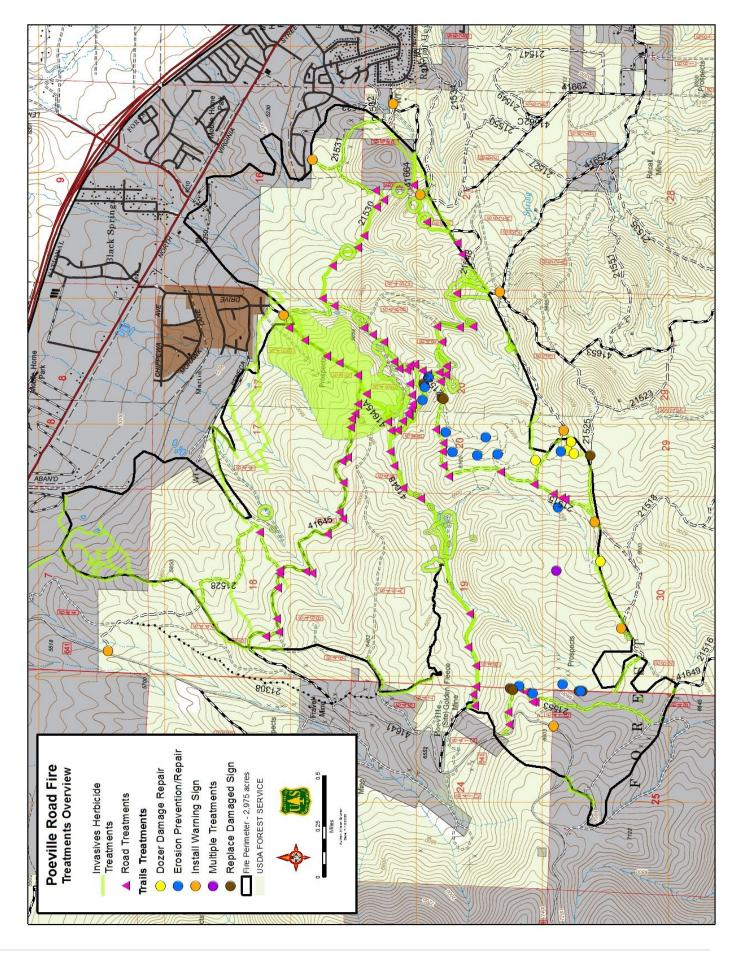
There are three previously recorded cultural resources in the Poeville Fire area at risk from looting and an unknown number of unrecorded cultural resources. Placing signs at high use areas and locally known historic sites is expected to mitigate potential adverse effects to cultural resources.

Personnel Services: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item)	Cost
One GS-11 @ \$304/day x 4 days	\$1,216
One GS-7 @ \$184/day x 4 days	\$736
Materials and Supplies	Cost
Signs, staple gun and staples	\$500
Travel Cost (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item)	Cost
Use Rate of \$0.44/mile @ 400 miles (100 miles/day)	\$176
Total Travel Cost	\$176
BAER Implementation overhead – MI&E and travel	\$2,500
Total Treatment Costs	\$5,128

Purchase and install 10 "entering burned area" warning signs at each portal to the fire area. Inclusive cost (labor, miles, and supplies): \$4,300.

Hazard Warning Signs	Cost
Item @ Cost/Each x Quantity	
Hazard Warning Sign (Road/Trail Heads) @ \$300 x 10	\$3,000
Labor @ \$100 per sign x 10	\$1,000
Cultural Monitor	\$1,324
BAER Implementation overhead – MI&E and travel	\$2,500
Total Cost of Hazard Warning Signs	\$7,824

# I. Monitoring Narrative:



# PART VI - EMERGENCY STABILIZATION TREATMENTS AND SOURCE OF FUNDS

			NFS Lan	ds				Other La	ınds		All
		Unit	# of		Other	#	f of	Fed	# of	Non Fed	Total
Line Items	Units	Cost	Units	BAER \$	\$	uı	nits	\$	Units	\$	\$
A. Land Treatments							•				
EDRR BAER				\$3,888	\$0			\$0		\$0	\$3,888
EDRR Supression				\$8,028	\$0			\$0		\$0	\$8,028
Insert new items above this	line!			\$0	\$0			\$0		\$0	\$0
Subtotal Land Treatments				\$11,916	<b>\$</b> 0			\$0		\$0	\$11,916
B. Channel Treatments			,				-			-	
None proposed				\$0	\$0			\$0		\$0	\$0
				\$0	\$0			\$0		\$0	\$0
Insert new items above this	line!			\$0	\$0			\$0		\$0	\$0
Subtotal Channel Treatment	ts			\$0	<b>\$</b> 0			\$0		<b>\$</b> 0	\$0
C. Road and Trails		,									
Initial Roads Package				\$142,873	\$0			\$0		\$0	\$142,873
Trails - BAER				\$38,352	\$0			\$0		\$0	\$38,352
					\$0			\$0		\$0	\$0
Insert new items above this	line!			\$181,225	<b>\$</b> 0			\$0		<b>\$</b> 0	\$181,225
Subtotal Road and Trails											
D. Protection/Safety				\$0	\$0			\$0		\$0	\$0
Warning Signs				\$7,824	\$0			\$0		\$0	\$7,824
Arch Signs				\$5,128	\$0			\$0		\$0	\$5,128
Insert new items above this	line!			\$12,952	<b>\$</b> 0			\$0		\$0	\$12,952
Subtotal Protection/Safety											
E. BAER Evaluation	Report				\$0			\$0		\$0	\$0
Initial Assessment					\$0			\$0		\$0	\$0
Imp Overhead Cost					\$0			\$0		\$0	\$0
Insert new items above this	line!			\$0	\$0			\$0		\$0	\$0
Subtotal Evaluation											<u> </u>
F. Monitoring				\$0	\$0			\$0		\$0	\$0
					\$0			\$0		\$0	\$0
				\$0	\$0			\$0		\$0	\$0
Insert new items above this	line!			\$0	<b>\$</b> 0			\$0		\$0	\$0
Subtotal Monitoring											
				\$206,093	\$0			\$0		\$0	\$206,093
G. Totals											
Previously approved				\$206,093							

# **PART VII - APPROVALS**

1	
Forest Supervisor	Date