

Date of Report: 11/01/12

**BURNED-AREA REPORT**  
(Reference FSH 2509.13)**PART I - TYPE OF REQUEST**

## A. Type of Report

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

## B. Type of Action

- ☒ 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: Moose Creek Wilderness Fires

B. Fire Numbers:	Vista	ID-NPF-000357
	Ditch	ID-NPF-000288
	Pettibone	ID-NPF-000290
	Moose Ridge	ID-NPF-000369
	Trout Peak	ID-NPF-000565
	Square Rock	ID-NPF-000426
	Three Links	ID-NPF-000227
	Blacktail	ID-NPF-000223
	Shasta Lake	ID-NPF-000497
	Moe	ID-NPF-000412

C. State: IDD. County: IdahoE. Region: 01F. Forest: Nez PerceG. District: Moose Creek Ranger DistrictH. Fire Incident Job Code: P1G52V (Vista), P1G42D (Ditch), P1EKT5 (all others)I. Date Fire Started: 7/28/12 Ditch, Pettibone; 8/8/12 Vista; 8/16/2012 Moose Ridge; 8/21/2012 Square Rock, Three Links, Blacktail, Moe; 9/2/2012 Trout Peak; 9/3/2012 Shasta LakeJ. Date Fire Contained: 10/25/2012K. Suppression Cost: as of 10/16/2012: Vista \$413,416.00, Ditch \$629,405, P1EKT5 – unknownL. Fire Suppression Damages Repaired with Suppression Funds: na

M. Watershed Numbers:

<b>Watershed Number</b>	<b>Watershed Name</b>	<b>Acres Burned</b>
<b>170603010701</b>	Goat Creek	5261.0
<b>170603010604</b>	Paradise Creek	5121.4
<b>170603010605</b>	Middle Bear Creek	5066.3
<b>170603010703</b>	Elk Creek-Selway River	4476.4
<b>170603020202</b>	Meeker Creek-Selway River	4244.9
<b>170603020203</b>	Three Links Creek	3805.6
<b>170603020111</b>	Outlet Moose Creek	3616.8
<b>170603010607</b>	Lower Bear Creek	2827.9
<b>170603010606</b>	Lower Cub Creek	2721.0
<b>170603010702</b>	Ditch Creek	2603.8
<b>170603010503</b>	Lower Running Creek	2279.8
<b>170603020201</b>	Marten Creek	1662.5
<b>170603020110</b>	Lower East Fork Moose Creek	1516.2
<b>170603010704</b>	Pettibone Creek	1505.4
<b>170603010705</b>	Dog Creek-Selway River	1252.4
<b>170603010502</b>	Eagle Creek	893.4
<b>170603020108</b>	Rhoda Creek	584.9
<b>170603010603</b>	Upper Cub Creek	403.7
<b>170603020109</b>	Lower North Fork Moose Creek	218.7
<b>170603020109</b>	Lower North Fork Moose Creek	218.2
<b>170603030505</b>	Boulder Creek	64.1
<b>170603010602</b>	Upper Bear Creek	1.0

N. Total Acres Burned (as of 10/17/2012):

NFS: 50,413    Other Federal (BLM): 0    State: 0    Private: 10

O. Vegetation Types: Common forest types include open ponderosa pine and Douglas-fir forests, mixed conifer stands of grand fir, Douglas-fir, and Western Larch, and western redcedar and grand fir in moister climates. Lower elevation, non-forest vegetation includes Idaho fescue, bluebunch wheatgrass, hackberry, hawthorn, and more mesic shrubs. Whitebark pine occurs at high elevations.

P. Dominant Soils: The dominant soils are Andic, Lithic and Typic Dystrochrepts and Andic and Vitrandic Cryochrepts. The soils are shallow to very deep, with textures ranging from silt loams to extremely gravelly sandy loams and loamy sands and have a volcanic ash influenced surface layer. The primary landforms found are breaklands, glaciated mountain slopes and ridges, and unglaciated mountain slopes and ridges.

Breaklands are very steep, deeply eroded landscape setting which is typically composed of stream or structural breaks. Parent materials are a mixed Mazama volcanic ashcap of variable thickness underlain by highly weathered granitics of the Idaho Batholith.

Glaciated mountain slopes and ridges occur in a high elevation broad ridgetop position which is typically composed of weakly expressed glaciated slopes and basins that were formed by ice cap glaciers, minor valley glaciers, and strong periglacial frost shattering. Parent materials are a complex of frost shattered residuum and colluvium, intermixed with glacial till derived from moderately weathered granite.

Mountain slopes and ridges occur in a moderately sloping mountain slope and ridge landscape setting, which is typically composed of moderately to highly dissected mountain slopes and ridgetops. Parent materials are a surface layer of Mazama volcanic ash underlain by highly weathered granitics of the Idaho Batholith.

Q. Geologic Types: Dominant rock types include Cretaceous granitic rocks of the Idaho Batholith, other granitics of the Eocene, and alluvial deposits.

R. Miles of Stream Channels by Order or Class:

National Forest

1<sup>st</sup> order 109.2 miles, 2<sup>nd</sup> order 20.5 miles, 3<sup>rd</sup> order 14.7 miles, 4<sup>th</sup> order 9.1 miles, 5<sup>th</sup> order 8.3 miles, 6<sup>th</sup> order 3.7 miles

S. Transportation System

Trails: National Forest 67.1 miles

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

A. Burn Severity (acres): 37,817 (low) 10,085 (moderate) 2,521 (high)

B. Water-Repellent Soil (acres): 8000

C. Soil Erosion Hazard Rating (acres): 2198 (low) 27564 (moderate) 14,029 (high)

D. Erosion Potential:

Sub-Watershed (or specific values at risk to match peak flow modeling)	Watershed Acreage within Fire (sq.mi.)	Percent of Burned Watershed with High and Moderate Soil Burn Severity	Pre-Fire Background Sediment (tons/acre)	Post-Fire Yield <sup>B</sup> (tons/acre)	Total Sed. Delivered (tons)	Change in Sediment Yield (compared to pre-fire) (multiplier)
Seminole Ranch	0.73	Assumed 25%	0.0	4.1	1915	40
Bear Creek Arch Site	24.3	Assumed 25%	0.01	0.38	5840	38
Ditch Creek	1.91	Assumed 25%	0.8	4.27	5220	5.3
Shearer Airstrip	0.10	Assumed 25%	1	15	960	15
Shearer Guard station	8.31	Assumed 25%	0.01	1.2	6380	120

<sup>B</sup> – Based on Rock:Clime, ERMIT Erosion Risk Management Tool. Post-fire erosion is modeled as the amount of erosion produced by a 10-year storm event occurring within the first year following the fire. Background erosion is considered the amount of erosion produced by a 10-year storm event with full vegetation (Disturbed WEPP). Moderate and high burn severities are combined and modeled as high. Unburned and low burn severities are combined and modeled as low.

E. Sediment Potential<sup>1</sup>: 495 yd<sup>3</sup>/mi<sup>2</sup>

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

A. Estimated Vegetative Recovery Period, (years):	<u>2-4 grass/shrubs 20-50 conifers</u>
B. Design Chance of Success, (percent):	<u>70</u>
C. Equivalent Design Recurrence Interval, (years):	<u>10</u>
D. Design Storm Duration, (hours):	<u>1 hr</u>
E. Design Storm Magnitude, (inches):	<u>1.06 (1hr)</u>
F. Design Flow, (cubic feet / second/ square mile):	<u>Vista – 33.5, Pettibone – 27, Ditch - 31</u>
G. Estimated Reduction in Infiltration, (percent):	<u>60</u>
H. Adjusted Design Flow, (cfs per square mile):	<u>Vista – 41.5, Pettibone – 32, Ditch - 44</u>

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

##### **A. Describe Critical Values/Resources and Threats:**

The primary values at risk resulting from the Moose Creek Wilderness Fires are infrastructure (trails), water quality, native fisheries for ESA-listed species, native vegetation communities, and heritage sites.

Infrastructure: Due to fire effects, modest snowmelt and rain events are likely to cause extensive erosion and mass movement on steep hillslopes throughout the burned area. Additionally, reduced canopy interception, combined with lack of groundcover and hydrophobicity will cause increased runoff response compared to pre-fire conditions. Thus, streams in and downstream of the burned area are likely to generate higher stormflows in the first few years following the fire. Larger flow events in part are a function of increased surface runoff from bare hillslopes. Furthermore, burned and exposed soils are more susceptible to entrainment and transport to stream channels. This combination of increased runoff and greater susceptibility to erosion threatens transportation infrastructure.

In the Moose Creek Wilderness Fires, 66.14 miles of trail were affected by fire. These trails are non-motorized Wilderness trails. Use of the trails varies from light to moderate. The use period for trails in this area can occur year-round through with heaviest use from May-October. Trails are used by both outfitted and non-outfitted public. Trail maintenance is conducted annually on most of the trails in the affected area using Forest Service, contract, and volunteer crews. Trails within the area were in good shape prior to the Moose Creek Wilderness Fires.

Water quality: The streams in the burned area generally maintain good water quality. Erosion from steep burned hillslopes would compromise water quality through transport and deposition of fine sediment in important fishery streams. The elevated erosion and potential failures from trails also compromise water quality. Treatments to improve trail drainage to withstand post-fire events will provide protection for water quality as well.

Fisheries: Fish species that could be affected by the fires include 2 ESA-listed fish species (Snake River steelhead trout and Columbia River bull trout) and 5 Region 1 sensitive aquatic species (spring chinook salmon, westslope cutthroat trout, interior redband trout, Pacific lamprey, and Western pearlshell mussel).

Snowy River Steelhead Trout in the Selway River basin are listed as a threatened species under the Endangered Species Act. Steelhead trout are widely distributed in the Selway , with nearly all accessible tributaries and the upper reaches of the mainstem river supporting spawning and rearing. The Selway River basin has been identified as supporting an important and genetically unique population of B-run

steelhead trout, and their conservation is an important component of species recovery in the Clearwater basin. Key spawning and rearing areas in streams possibly affected by the fires include East Moose Creek, North Moose Creek, Bear Creek and tributaries (Cub and Paradise Creeks), Running Creek, and Pettibone Creek.

Columbia River Bull Trout in the Selway River basin are listed as a threatened species under the Endangered Species Act and are also widely distributed in the Selway River. Distribution of key spawning and rearing areas, however, is patchy, occurring in a few areas rather than many. The Selway River is occupied by both fluvial and resident bull trout. Known key spawning and rearing areas in stream potentially affected by the fire are located in Rhoda Creek, Eagle Creek, and possibly the higher elevation reaches in Cub Creek.

Spring Chinook Salmon are a Region 1 sensitive species. Salmon are found in the mainstem of the Selway River and the lower reaches of many of its larger tributaries, including Moose Creek, Running Creek, East Fork Moose Creek, North Fork Moose Creek, Rhoda Creek, and others. Key spawning and rearing areas in streams potentially affected by the fire include all these streams. The Bear Creek watershed may be particularly important to salmon production in the Selway, as it contains high quality spawning habitat. The Bear watershed has been burned repeatedly since 1987, and areas immediately adjacent to important spawning reaches have been re-burned, resulting in large slope failures delivering materials into these reaches.

Westslope Cutthroat Trout are a Region 1 sensitive species. Westslope cutthroat trout are the most widely distributed salmonid species in the Selway basin. They are found through the mainstem and most tributaries, and include both fluvial and resident populations. Resident populations have been identified at the headwaters of many tributaries, and some of these populations are isolated from the river by physical barriers (e.g. waterfalls). Genetic analysis of resident cutthroat in the Selway basin was completed in the early to mid 2000s, and high genetic divergence was documented, indicating that isolated resident populations were genetically different from each other and fluvial cutthroat in the mainstem river.

Key spawning and rearing areas are found in all watersheds affected by the fire.

Interior Redband Trout are a Region 1 sensitive species, although in Idaho are the same species as anadromous steelhead trout and occur sympatrically. Redband trout are described as the resident form of anadromous steelhead, but only the anadromous form is listed under the ESA.

Pacific lamprey are a Region 1 sensitive species that has been documented in the mainstem Selway River. Although suitable habitat for lampreys exists in the lower reaches of many tributaries, it is unlikely the species occurs in areas potentially affected by the fire.

Western Pearlshell Mussel are a Region 1 sensitive species that has been documented in the mainstem Selway River. Although suitable habitat for lampreys exists in the lower reaches of many tributaries, it is unlikely the species occurs in areas potentially affected by the fire.

Risks to Fishery Values – Although fire was widespread across many areas in the Selway basin, there were few areas of high severity, and these areas were discrete, not contiguous, and appeared to be limited to upland areas. No or few acres of riparian areas adjacent to occupied habitat were identified as having burned severely, and it is unlikely that mass failures or debris torrents would be initiated as a result of these fires, although failures and debris torrents are common and natural processes in the Selway basin, even in the absence of fires.

Given the overall lack of human disturbance in the portion of the Selway River affected by fires and lack of anthropogenic barriers, watershed connectivity remains high, and any stream with habitat adversely affected by the fires would still be connected to habitats that are not. It is therefore assumed that fish populations in the Selway maintain their natural resilience to the effects of wildfires, even if wildfires result in site-specific adverse effects.

On a related note, wildfires are part of the natural disturbance regime in watersheds in this area. Although fires may result in short-term adverse effects (e.g. higher stream temperatures, increased sediment delivery), long term effects are generally beneficial, resulting in increased habitat complexity from recruitment of large woody debris and larger bedload materials. There is a wealth of existing information related to both the short term and long term effects of wildfire to streams and fish. One area of concern is Bear Creek because of its recent active fire history and landslides that have delivered fine and coarse sediments into spawning habitat used annually by spring chinook salmon. A re-burn of this area did not occur in 2012, however.



Moderate burn severity along Shissler Trail #450.

Native vegetation/Soil Productivity: Native vegetation communities and soil productivity are at risk from rapid expansion of noxious weeds from existing populations in the burned area. Disturbance may increase the susceptibility of an otherwise intact plant community to weed invasion by increasing the availability of a limited resource (Hobbs 1989). Natural or human caused fires are board scale disturbances that influence the amount of available habitat for weed establishment and may promote invasive weeds (D'Antonio, 2000; Belsky and Gelbard 2000; Pauchard et al. 2003. Recent weed inventories conducted along the Moose Creek Ranger District have identified a number of Idaho noxious and invasive weeds occurring within and adjacent to the Selway Wilderness fires. Inventories have found Spotted knapweed (*Centaurea maculosa*), Canada thistle (*Cirsium arvense*), and Dalmation toadflax (*Linaria dalmatica*) within the fire perimeter.

Most of the previously identified weed infested sites within the fire were either burned or occur adjacent to burned areas. The susceptible habitats within the Selway Wilderness fires contain known infestations of Spotted knapweed, Canada thistle, and Dalmation toadflax. Small spot infestations of spotted knapweed and Canada thistle are scattered along forest trails #529, 526, 523, 633, 512, 642, 522, and 693 which run through the fire perimeter. In addition, there is a small population of Dalmation toadflax at an old outfitter camp just above the Shearer runway that needs to be closely monitored for expansion. Spotted knapweed, Canada thistle, and Dalmation toadflax are invasive weeds that can readily out-compete native plants and dominate disturbed sites. Trails within the fire perimeter are prime corridors for weed dispersal.

Heritage: Nine previously recorded sites eligible for, or potentially eligible for, the National Register of Historic Places are located within the burn areas of the Moose Creek – Selway Wilderness Fires and are classified as critical values. These site types range from fragile rock art to resources with a low

susceptibility to post-fire related damage such as an historic back-country airstrip. Research has shown wildfires have the potential to damage or destroy cultural resources through: (1) direct effects of the fire; (2) fire suppression or rehabilitation activities; and/or (3) erosive soil movement caused by subsequent weather events. These impacts have the potential to adversely affect both built-environmental and archaeological resources. Additionally, wildfires may have an indirect effect to historic properties by increasing the accessibility and visibility of archaeological site locations, making them more susceptible to vandalism/artifact looting, and facilitating unauthorized recreational activity.

## B. Emergency Treatment Objectives:

Roughly one-quarter of the burned area was of moderate to high severity. However, much more the burned area is on steep hillslopes with highly erosive soils. Thus, even low burn severity slopes devoid of overstory canopy or ground cover are at heightened risk of severe erosion and greatly increased runoff. In this landscape, burn severity alone is an inadequate indicator of post-fire erosion and runoff risk.

Emergency treatment objectives are to protect trails susceptible to damage from erosion and elevated runoff within and immediately downstream of the burned area, and to prevent the expansion of noxious weeds in areas burned in the fire, while providing for BAER implementation worker safety.

Drainage on trails will be improved to allow for discharge of elevated runoff in a manner that protects both the travel surface and stream water quality and aquatic habitat. Known populations of noxious weeds will be treated in the first growing season following the fire, allowing for a more robust native vegetation recovery.

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

**Land 70% Channel N/A Roads/Trails 70% Protection/Safety 90%**

## D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Heritage	na	na	na
Weed treatment	50	50	50
Channel	na	na	na
Roads/Trails	70	80	90
Protection/Safety*	90	90	80

## E. Cost of No-Action (Including Loss): >\$5000000

The potential cost of no action includes the failure of and erosion damage and failure of trails as well as entrainment and deposition of trail sediment in important fishery streams. The cost of repairing trails and stream crossings would most likely exceed the cost of the selected alternative. The value of critical habitat for three separate ESA-listed fish species, as well as species of concern, cannot easily be quantified, but would likely far exceed the cost of sediment-mitigation measures proposed here. The value of protecting the ecological integrity and soil productivity of the burned area from noxious weed infestation likely exceeds the cost of weed treatment and monitoring, although this too was not quantified.

## F. Cost of Selected Alternative (Including Loss): ~\$150,000

In accordance with the revised Forest Service manual, the risk matrix below, Exhibit 2 of Interim Directive No.: 2520-2012-1, was used to evaluate the Risk Level for each value identified during the Moose Creek Wilderness Fires BAER assessment. Only treatments that had a risk of Intermediate or above are recommended for BAER authorized treatments.

Probability of Damage or Loss	Magnitude of Consequences		
	Major	Moderate	Minor
	RISK		
Very Likely	Very High <b>heritage</b>	Very High <b>weeds, heritage</b>	Low
Likely	Very High	High <b>trails</b>	Low
Possible	High <b>fisheries</b>	Intermediate <b>soil productivity</b>	Low
Unlikely	Intermediate	Low	Very Low

## G. Skills Represented on Burned-Area Survey Team:

<input checked="" type="checkbox"/> Hydrology	<input checked="" type="checkbox"/> Soils	<input type="checkbox"/> Range	<input checked="" type="checkbox"/> Weeds
<input type="checkbox"/> Forestry	<input type="checkbox"/> Wildlife	<input type="checkbox"/> Fire Mgmt.	<input type="checkbox"/> Engineering
<input type="checkbox"/> Contracting	<input type="checkbox"/> Ecology	<input checked="" type="checkbox"/> Botany	<input checked="" type="checkbox"/> Archaeology
<input checked="" type="checkbox"/> GIS	<input type="checkbox"/> Air Quality	<input type="checkbox"/> Research	<input checked="" type="checkbox"/> Fisheries
<input checked="" type="checkbox"/> Recreation			

Team Leader: Cara Farr

Email: clfarr@fs.fed.us Phone: 208-983-4045

FAX: 208-983-4099

## H. Treatment Narrative:

### Land Treatments:

Areas likely to have new noxious weed spread (areas near already infested sites) will be treated within the burn perimeter to reduce the probability of spread into uninfested burned areas. BAER funding is only available for the first year of the treatments (2013). In 2013, new weed populations will be treated. If subsequent monitoring identifies weeds populations not effectively removed with initial treatment, additional treatment will be planned, and funds requested in an interim request. Other funding sources will be sought in out-years to treat any expansions of noxious weeds. All of this work will be accomplished using ground-based equipment. Treatment will include the following:

- Mix of backpack spraying and hand-pulling, as appropriate, in spring/early summer 2013 before weeds begin to seed
- Using approved herbicides and application techniques based on weed species, topography and environmental factors, in compliance with NPNF Weeds EIS.

Of the nine previously recorded sites located in the Moose Creek-Selway Wilderness Fires - three have risk indicators that suggest treatments should be considered in the wilderness. These three sites have the potential to be affected by post-wildfire threats due to changed conditions, and thereby cause "an unnatural loss of wilderness resources". Cultural resources are considered a wilderness resource that are available for scientific study.

Treatment at site one would involve recording/collecting exposed artifacts and documenting adverse effects resulting from increased water yield and debris torrents in the tributary drainage. The objective would be to collect and salvage exposed archaeological data for its scientific value as well as to reduce the visibility of that data to people walking through the site on the main Selway River trail.

The reduced vegetation resulting from the fire at site two will increase the visibility of the site to people on the trail. Treatment at the site would include the movement of on-site forest debris (rocks/logs) to screen the rock art panel from the adjacent trail.

Site three is a lithic scatter site located at the confluence of a major drainage with the Selway River. The location is a popular spot for recreationists given the user created trail through the site. Treatment would



include the formal surface collecting of artifacts exposed by the fire to reduce the visibility of the site to the visiting public.

**Channel Treatments:** No channel treatment prescribed at this time.

**Roads and Trail Treatments:**

This proposal will stabilize fire affected trail tread that are at high risk to damage from the additional runoff and erosion from the post fire conditions. The threats are from increased surface flow and upland slope erosion that will occur within the fire area. These forces will result in erosion to the trail tread and fill-slope. Of the 66 miles of trail in the burn area, 13.6 miles of trail are proposed for treatment as well as a few selected trees that must be cut for access on areas of very steep slopes where walking around downed or leaning trees is not safe.

Trail repair will utilize traditional tools to implement trail stabilization in accordance with the Wilderness Act of 1964. Treatments include the additional cleaning of drainage structures, replacement of damaged drainage structures (waterbars, dips), spot stabilization and outslipping of trail tread, replacement of damaged retaining walls and post of visitor warning signs. Trails in moderate severity are treated with minor tread/erosion control consisting of the installation of drainage dips, while trails in moderate/high severity are treated with moderate tread/erosion control consisting of water bars, check dams, drainage dips, and fillslope repair.

**Protection/Safety Treatments:**

To provide for worker safety during implementation of trail drainage improvements, hazard trees along the trails will be removed in the work areas.

**I. Monitoring Narrative:**

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

Monitoring of trail treatments will occur during and after implementation in 2013 to ensure that treatment objectives are met.

In 2013 all of the likely areas of infestation will be re-surveyed by NP-CNF Weeds staff. Any noxious weed populations not effectively treated during initial treatment efforts will be targeted for additional herbicide application within one year of fire containment. Beyond that time period normal program funds will be used to continue the effort.

## VI (1) P1G52V Vista – Emergency Stabilization Treatments and Source of Funds

Line Items	Units	Unit Cost	NFS Lands		Other \$	Other Lands				All Total \$
			# of Units	BAER \$		# of units	Fed \$	# of Units	Non Fed \$	
<b>A. Land Treatments</b>										
Weed treatment & assessment	acre	430	10	\$4,300						
Heritage site protection & monitoring	each	4000	1	\$4,000						
Subtotal Land Treatments				\$8,300	\$0		\$0		\$0	\$0
<b>B. Channel Treatments</b>										
Subtotal Channel Treat.				\$0	\$0		\$0		\$0	\$0
<b>C. Road and Trails</b>										
Drainage Dip Installation	mile	1,725	13.6	\$23,460						
Trail Fillslope Repair and Drainage Installation	mile	3,450	2.4	\$8,280						
Subtotal Road & Trails				\$31,740	\$0		\$0		\$0	\$0
<b>D. Protection/Safety</b>										
Hazard tree removal (includes very	mile	500	16	\$8,000						
Trail warning signs	each	460	5	\$2,300						
Subtotal Structures				\$10,300	\$0		\$0		\$0	\$0
<b>E. BAER Evaluation</b>										
Assessment				\$0	\$3,300		\$0		\$0	\$0
Subtotal Evaluation				\$0	\$3,300		\$0		\$0	\$0
<b>F. Monitoring</b>										
Trail treatment effectiveness	day	250	5	\$1,250			\$0		\$0	\$0
Subtotal Monitoring				\$1,250	\$0		\$0		\$0	\$0
<b>G. Totals</b>				\$51,590	\$3,300		\$0		\$0	\$0
Previously approved										
Total for this request				\$51,590						

## VI (2) P1G42D Pettibone – Emergency Stabilization Treatments and Source of Funds

Line Items	Units	Unit Cost	NFS Lands		Other \$	Other Lands				All
			# of Units	BAER \$		# of units	Fed \$	# of Units	Non Fed \$	Total \$
<b>A. Land Treatments</b>										
Weed treatment & assessment	acre	430	10	\$4,300						
Heritage site protection & monitoring	each	4000	1	\$4,000						
Subtotal Land Treatments				\$8,300	\$0		\$0		\$0	\$0
<b>B. Channel Treatments</b>										
Subtotal Channel Treat.				\$0	\$0		\$0		\$0	\$0
<b>C. Road and Trails</b>										
Drainage Dip Installation	mile	1,725	13.6	\$23,460						
Trail Fillslope Repair and Drainage Installation	mile	3,450	2.4	\$8,280						
Subtotal Road & Trails				\$31,740	\$0		\$0		\$0	\$0
<b>D. Protection/Safety</b>										
Hazard tree removal	mile	500	16	\$8,000						
Trail warning signs	each	460	5	\$2,300						
Subtotal Structures				\$10,300	\$0		\$0		\$0	\$0
<b>E. BAER Evaluation</b>										
Assessment				\$0	\$3,300		\$0		\$0	\$0
Subtotal Evaluation				\$0	\$3,300		\$0		\$0	\$0
<b>F. Monitoring</b>										
Trail treatment effectiveness	day	250	5	\$1,250			\$0		\$0	\$0
Subtotal Monitoring				\$1,250	\$0		\$0		\$0	\$0
<b>G. Totals</b>				\$51,590	\$3,300		\$0		\$0	\$0
Previously approved										
Total for this request				\$51,590						

### VI (3) P1EKT5 Other Fires – Emergency Stabilization Treatments and Source of Funds

			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											
Weed treatment & assessment	acre	430	10	\$4,300							
Heritage site protection & monitoring	each	4000	1	\$4,000							
Subtotal Land Treatments				\$8,300	\$0			\$0		\$0	\$0
B. Channel Treatments											
Subtotal Channel Treat.				\$0	\$0			\$0		\$0	\$0
C. Road and Trails											
Drainage Dip Installation	mile	1,725	13.6	\$23,460							
Trail Fillslope Repair and Drainage Installation	mile	3,450	2.4	\$8,280							
Subtotal Road & Trails				\$31,740	\$0			\$0		\$0	\$0
D. Protection/Safety											
Hazard tree removal	mile	500	16	\$8,000							
Trail warning signs	each	460	5	\$2,300							
Subtotal Structures				\$10,300	\$0			\$0		\$0	\$0
E. BAER Evaluation											
Assessment				\$0	\$3,300			\$0		\$0	\$0
Subtotal Evaluation				\$0	\$3,300			\$0		\$0	\$0
F. Monitoring											
Trail treatment effectiveness	day	250	5	\$1,250				\$0		\$0	\$0
Subtotal Monitoring				\$1,250	\$0			\$0		\$0	\$0
G. Totals				\$51,590	\$3,300			\$0		\$0	\$0
Previously approved											
Total for this request				\$51,590							

**PART VII - APPROVALS**

1. /s/ Rick Brazell 11 / 01 /2012  
Rick Brazell, Nez Perce-Clearwater NF Forest Supervisor Date
  
2. / /2012  
Faye Krueger, Region 1 Regional Forester Date