FS-2500-8 (6/06) Date of Report: September 22, 2017

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: Goat Creek and Sliderock

B. Fire Number: MT-LNF-001463

C. State: Montana

D. County: Granite

E. Region: 01 - Northern

F. Forest: 16 - Lolo

G. District: Missoula

H. Fire Incident Job Code: P1K7XL17 (0116)

I. Date Fire Started: 7/19/17 - Goat Creek

7/13/17 - Sliderock

J. Date Fire Contained: 90% as of 9/21/17

- K. Suppression Cost: \$36,300,000 as of 9/21/17 for entire Sapphire Complex. IMT unable to provide cost by fire.
- L. Fire Suppression Damages Repaired with Suppression Funds: Not reported by IMT.

M. Watershed Number:

HUC 12 Name	HUC 12 Number	Total Acres	Acres Burned
Brewster Creek	170102021304	11,813	3,013
Kitchen Gulch-Rock Creek	170102021306	22,445	6,056
Harvey Creek	170102021402	25,339	191

N. Total Acres Burned:

NFS (9,082) Other Federal (0)

State (0)

Private (163)

- O. Vegetation Types: Vegetation types vary from open, grasslands on south and west facing slopes to dense timber. Rock outcrops are common throughout the Rock Creek drainage in both timbered and open, grassland areas. Mature lodgepole is the main component of the overstory vegetation with an understory of grouse whortleberry (Pinus contorta/Vaccinum scoparium) in higher elevations. Douglas fir intermixes on southern and western slopes in lower elevations. Engelmann spruce and Ponderosa pine become present along stream bottoms and shadier aspects along with aspen, cottonwoods, willows, and other riparian vegetation. Elevations range from approximately 3,700 feet along the west side of the fire at the bottom of Rock Creek to nearly 6,600 feet along the east side of the fire three miles away.
- P. Dominant Soils: There are 26 landtypes contained within the Goat and Sliderock fire perimeters. These landtypes share many characteristics, including: weak soil development dominated by Inceptisol soil families; loam or silt loam soil textures frequently influenced by volcanic loess; rocky, well-drained slopes predominantly ranging between 25 and 60%; metasedimentary parent material; moderate to severe erosion hazard; and dry, open-grown forest vegetative communities. Soil depth and productivity are strongly influenced by topographic factors such as hillslope position and aspect. Two hundred and thirty three acres are classified as landslide prone. However, these areas infrequently overlap with areas of high or moderate burn severity.
- Q. Geologic Types: The Goat Creek and Sliderock Creek fires occurred in the upper elevations Sapphire mountain range, south of highway 90 and bordered on the West by Rock Creek. This range is characterized by steep and moderate relief mountain slopes formed from Belt Supergroup metasedimentary siltites, argillites, and quartzites. Geologic setting consists of mountain slopes comprised dominantly of colluvium and residuum, mountain ridges, and rocky outcrops. Minor extents of rolling hills and stream breaklands also occur.
- R. Miles of Stream Channels by Order or Class:

Perennial: 13 Intermittent/Ephemeral: 15

S. Transportation System (miles)

Roads: 13.9 miles Maintenance Level 2 on Goat Creek

20.1 miles Non-System on Goat Creek

4.8 miles Maintenance Level 2 on Sliderock

2.1 miles Non-System on Sliderock

Trails: 0.4 Miles Motorized

4.1 Miles Non-Motorized

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 4,694 low 1,131 moderate 116 high 3,304 unburned

B. Water-Repellent Soil (acres): 1,247

C. Soil Erosion Hazard Rating on NFS Lands (acres):

Erosion Hazard Class	Goat Creek Pre-fire Erosion Hazard	Sliderock Pre-fire Erosion Hazard
Very Severe	6,551	476

Severe	354	1
Moderate	1,195	331
Slight	114	0
Not Rated	115	109

D. Erosion Potential: Ranges from 0 to 13.5 tons/acre, 0.68 tons/acre average within perimeter

E. Sediment Potential: 321.9 cubic yards per square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period (years): 1-3 years grass, 10-15 years shrubs,

20-50 years conifers

B. Design Chance of Success (percent): 50-90%, depending on site and

treatment

C. Equivalent Design Recurrence Interval (years): 25-year post-fire

D. Design Storm Duration (hours): 24 hours

E. Design Storm Magnitude (inches): 2.8 inches

F. Design Flow (cubic feet / second / square mile): 25 cfs/mi² across Sapphire Complex

G. Estimated Reduction in Infiltration (percent): 13%

H. Adjusted Design Flow (cfs per square mile): 147 cfs/mi² across Sapphire Complex

PART V - SUMMARY OF ANALYSIS

Introduction/Background:

The Goat Creek and Sliderock Fires were lightning caused ignitions that were first detected on July 13 and 19th, 2017. The fires were managed as part of the Sapphire Complex, which also included the Little Hogback Fire. The Goat Creek Fire has burned approximately 8,330 acres to date. The Sliderock Fire has burned approximately 917 acres to date. The larger Sapphire complex was 90% contained as of September 21, 2017. The burned areas are located in the John Long Mountains on the Missoula Ranger District of the Lolo National Forest, approximately 25 Miles Southeast of Missoula. The soil burn severity (SBS) map shows that the fires burned in a mosaic fashion, with only 13% of the area experiencing high and moderate soil burn severity. The rest of the areas within the fire perimeter were either low soil burn severity or unburned. Increased post fire soil erosion and runoff are likely to occur within and downstream of the moderate and high soil burn severity areas and may result in localized flooding, scouring and/or deposition of materials.

Long duration (6+ hour), high intensity storms are the precipitation events of primary concern. Based on historic precipitation patterns, these types of events are likely to occur in the spring

months following the fires. The risk of flooding and erosional events has increased as a result of the fire, creating hazardous conditions within and downstream of the burned area.

Recovery of pre-fire slope stability and watershed hydrologic response is dependent on many factors and typically occurs within 3-5 years following the fire. Recovery of high burn severity areas is slower because little or no vegetative ground cover remains, the potential for needle cast is low and soils may be impacted by fire effects.

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

A list of values important to the Lolo National Forest was compiled by the BAER team during the assessment kickoff meeting. The BAER team subsequently evaluated this list of values through field assessment and associated analysis to determine the critical BAER values (FSM 2523.1 – Exhibit 01) that may be treated within the BAER program. The risk (FSM 2523.1 – Exhibit 02) to these critical values has been assessed by the BAER team and is described below. A list of treatment numbers has been included below each critical value description to ensure tracking between values and treatments.

1. Human Life and Safety (HLS)

a. **High risk** to **forest visitors and workers** along roads, along trails, at parking areas, and at trailheads within and downslope of the burn scars due to an increased threat of flooding, debris flows, falling trees, and falling debris. Probability of damage or loss is possible, magnitude of consequences is major. (*Treatments:T04*)

2. Property (P):

- a. **High risk** to **road infrastructure** on the Brewster Creek Road (NFSR 308) due to the increased watershed response to precipitation events on areas of moderate and high soil burn severity and the resultant increased runoff. This increased runoff is expected to result in the loss of control of water, overwhelming of road drainage structures, and damage to the road prism. Probability of damage or loss is likely, magnitude of consequences is moderate. (*Treatments: T02, T03*)
- b. Intermediate risk to the remaining road infrastructure within and downslope of the burn scars due to the increased watershed response to precipitation events on areas of moderate and high soil burn severity and the resultant increased runoff. Probability of damage or loss is possible, magnitude is moderate. No BAER treatments are recommended.
- c. Intermediate risk to the Spring Creek spring development due to the potential for damage to the diversion structure following storm events. Probability of damage or loss is possible, magnitude is moderate. Permittee is advised to monitor the point of diversion following high runoff events No BAER treatments are recommended.
- d. Intermediate risk to the mine facilities associated with unpatented claims within the Sliderock burn scar due to the threat of falling trees and sedimentation damage to the development following high runoff events. Probability of damage or loss is possible, magnitude is moderate. No BAER treatments are recommended.
- e. Low risk to the Babcock and John Long trails within and downslope of the burn scar due to the potential for localized trail prism erosion from increased watershed response to precipitation events and increased runoff. These are low standard trails that generally lack constructed drainage features. Probability of damage or loss is possible, magnitude is minor. No BAER treatments are recommended.

3. Natural Resources (NR):

- a. Very High risk to native plant communities due to the threat from the spread of noxious weeds and invasive plant species. The wildfire created conditions conducive to noxious weeds spread and establishment by reducing competition. exposing bare mineral soil, and creating an environment where fall nutrient availability (water and soil nutrients) goes to the fall growth period for noxious weeds and not native plants which are mostly dormant at this time. The recent fire activity dramatically changed the forest condition in some areas where moderate to high intensity fire occurred. Crown canopy was highly reduced if not eliminated (moderate to high intensity burned areas); as was shrub and forb cover in the understory. These disturbed areas are now highly vulnerable to noxious weed invasion or noxious weed spread from existing infestations or adjacent sources. Areas burned at low intensities are also susceptible to noxious weed invasions because native vegetation was reduced. In noxious weed ecology, any reduction in competition for available nutrients, space, or light is considered an advantage to noxious weeds growth and establishment. Damage to soils and native plant communities is irreversible in most cases and the loss of native plant communities is irretrievable as the native plant communities will not return on their own. In addition to burned areas, areas not burned but disturbed during suppression activities (roads, drop points, heli-spots, etc.) are also now susceptible to the spread of noxious weed and invasive plants. The probability of damage or loss is very likely, magnitude is major. (Treatments: T01)
- b. Intermediate risk to suitable occupied Bull Trout habitat in Brewster Creek due to the increased runoff and threat of sediment delivery from hillslopes in the burned area during precipitation events. The Brewster Creek road also poses a risk to this habitat due to the threat from erosion of the road prism during storm events. The road treatments prescribed above are expected to mitigate the road prism erosion risk. The probability of damage or loss is possible, magnitude is moderate. BAER Treatments to mitigate the hillslope erosion risk are not recommended.
- c. Low risk to critical Bull Trout habitat in Rock Creek due to the increased runoff and threat of sediment delivery from hillslopes in the burned area during precipitation events. The probability of damage or loss is possible, magnitude is minor. BAER Treatments are not recommended.
- d. Low risk to soil productivity and hydrologic function due to the threat of increased erosion and watershed response to precipitation events on areas that experienced moderate and high soil burn severity. The loss of ground cover and presence hydrophobic soils has increased the threat of soil erosion. However, the mosaic burn pattern and lack of large contiguous areas with this condition has reduced the overall threat. The probability of damage or loss is likely, magnitude is minor. BAER Treatments are not recommended.
- e. Very low risk to agricultural supply water in Rock Creek due to increased sedimentation following storm events and potential loss of diversion and conveyance systems. The probability of damage or loss is unlikely, magnitude is minor. BAER Treatments are not recommended.

4. Cultural and Heritage Resources (CHR):

a. Very low risk to known cultural sites that are potentially eligible for the NRHP due to the increased threat of erosion and sedimentation from upslope burned areas. Historic mining sites and railroad grades are located within and downslope of burned areas. Probability of damage or loss is unlikely, magnitude of consequences is minor. BAER Treatments are not recommended.

5. Other non-BAER Values:

There are numerous NFS values that are not BAER Critical Values in addition to non-NFS values potentially at risk from post-fire threats originating primarily on NFS lands. Treatments for these other values have not been identified. Activities to address the non-BAER Critical Values on NFS lands can be considered for discretionary program funding. It is recommended the non-NFS values potentially threatened by post-fire conditions be communicated to the appropriate parties through interagency coordination.

B. Emergency Treatment Objectives:

Mitigate and protect, to the extent possible, threats to personal injury or human life of forest visitors and Forest Service employees by raising awareness through posting hazard warning signs on roads, improving stream crossings, and communicate hazard of flooding, debris flows, and rock fall. Provide safe access to the burned area for personnel implementing authorized BAER response actions and communicate threats to cooperating agencies and community groups.

Protect or minimize damage to NFS investments in roads infrastructure by installing drainage features capable of withstanding potential increased stream flows and/or debris flows. Minimize damage to key NFS travel routes.

Protect or mitigate potential post-fire impacts to critical natural resources within the burned area. Implement treatments that minimize threats to naturalized ecosystems by minimizing the potential for expansion of non-native invasive species (NNIS) into the burned area; minimize expected invasion of NNIS within and adjacent to the area where soils and vegetation was disturbed as a result of fire suppression activities.

Evaluate authorized BAER treatments and existing infrastructure to determine effectiveness in post-fire flow conditions. Monitor weeds for effectiveness of BAER treatments and to identify need for future treatments.

Assist cooperators, other local, State, and Federal agencies with the interpretation of the assessment findings to identify and address potential post-fire impacts to communities and residences, domestic water supplies, public utilities (including power lines, roads, and other infrastructure).

C. Probability of Completing Treatment Prior to Damaging Storm or Event: Land 80 % Channel -- % Roads/Trails 70 % Protection/Safety 90 %

D. Probability of Treatment Success

Tractment	Years after Treatment					
Treatment	1	3	5			
Land	80	80	90			
Channel	NA	NA	NA			
Roads/Trails	80	90	90			
Protection/Safety 90 80 70						
Initially, visitors will heed the warning signs. Complacency is expected after the initial year unless there is a damaging event.						

E. Cost of No-Action (Including Loss): (\$24,000 for replacement cost of threatened road infrastructure) + (\$33,842 for IMV of Plant Community lost) = \$57,842

F. Cost of Selected Alternative (Including Loss): (\$12,550 of roads treatments) + (Roads loss assumed at 30% due to threat of treatments not being implemented before damage or being ineffective = \$3,765) + (Weeds EDRR cost of \$32,150) + (Weeds EDRR Loss of 5% =\$1,608) + (Warning Signs costs of \$2,920) = \$52,993

G. Skills Represented on Burned-Area Survey Team:

[✓] Hydrology	[√] Soils	[] Geology	[] Range	[] HAZMAT/Mineral
[] Forestry	[] Wildlife	[] Fire Mgmt.	[✓] Engineering	[]PIO
[] Contracting	[] Ecology	[✓] Botany	[] Archaeology	[] Liaison
[] Fisheries	[] Recreation	[✓] GIS	[] Landscape Arch	

Team Leader: Brendan Waterman

Email: bwaterman@fs.fed.us

Phone: 801-999-2175

Team Members:

Cait Woods – Engineering Megan McGinnis – Soils Becca Lloyd - Hydrology Karen Stockman – Botany/Weeds

H. Treatment Narrative:

(Describe the emergency treatments, where and how they will be applied, and what they are intended to do. This information helps to determine qualifying treatments for the appropriate funding authorities. For seeding treatments, include species, application rates and species selection rationale.)

Land Treatments:

T01 - Early Detection & Rapid Response

General Description of Treatment: As part of the BAER treatment efforts for invasive weeds control, both ground and aerial treatments are necessary within and immediately outside of the fire perimeter to successfully prevent the spread of noxious weeds throughout the burned areas. Aerial treatments would be the priority since most of the burned area is roadless and not accessible by road.

Suitable Sites: Ground based treatments would occur along hand lines, dozer lines, contingency lines, roads within and along the fire perimeter as well as known weed-free areas within the burned area. Aerial treatments would occur on approximately 225 acres of burned south facing aspects of the Goat Creek fire. See BAER treatment map for specific locations

Design/Construction Specifications: Ground based treatments would be completed using backpack and truck mounted sprayers. Herbicide chemical utilized will be dependent on the

species identified. Aerial treatments will utilize an herbicide mix containing: 5 ounces Aminopyralid; 2 ounces Imazapic, surfactant; drift agent.

Purpose of Treatment: The purposes of the ground based treatments are 1) to prevent known noxious weed infestations from spreading and/or increasing in density, 2) to detect and rapidly respond (spot treat) to known and new infestations associated with fire suppression/fire effects, 3) to prevent potential new infestations resulting from BAER actions, and 4) preserve native plant communities, wildlife habitat, soil and hydrological resources

The intent of the aerial application of herbicide is to interrupt the invasion of non-native grasses and spotted knapweed which can contribute to the continuity of fuels for future wildfires and decrease the fire return interval significantly. The spotted knapweed increases in abundance and density after fire due to lack of competition and exposure on mineral soil. The increase results in higher fuel loads and fuel continuity due to the rigorous biomass produced by these species compared to native vegetation. Since the native grasses and forbs are slower to reestablish after fire due to their normal life-cycle, the increased fire frequency fueled by cheatgrass eventually eliminates most of the native grasses and forbs found on the open slopes within the burned areas because as a winter annual, cheatgrass and spotted knapweed are able to establish earlier in the growing season than most native grasses and forb species.

Describe Treatment Effectiveness Monitoring: Invasive and noxious weed spread will be monitored and treated throughout implementation of the ground base EDRR treatment. If necessary additional aerial monitoring funds may be requested at a later date.

Road and Trail Treatments:

T02 - Armored Critical Dip Installation

General Description: In the event of culvert failure or overtopping erosion will cause damage to the road prism as well as deliver large amounts of sediment to live streams.

Armored Critical Dip – Roadway dips modify the road drainage by altering the template and allowing surface flows to run off the road to prevent any excessive erosion of the surface. The armor consisting of rip rap is placed where runoff could possibly cause erosion to the road surface and fill slope.

Suitable Sites: FSR 308 (Brewster Creek Rd). Refer to BAER treatment map for specific locations.

Design/Construction Specifications: Construct rolling dips per Forest Service and/or BLM standards. Place riprap on the fill slopes where potential runoff can occur if flow was to overtop the roadway from a plugged culvert or excessive runoff.

Describe Purpose of Treatment: The purpose of this treatment is to mitigate additional risk to property and impacts to suitable occupied Bull Trout habitat draining directly into critical Bull Trout habitat. Increased runoff resulting from burned slopes and drainages adjacent to roads will cause damage to the roadway prism and deliver a large amount of sediment to Brewster Creek if existing culverts are overwhelmed. Armored critical dips control the flow path during overtopping and return water to the stream channel in order to minimize property damage, erosion, and sediment delivery.

Describe Treatment Effectiveness Monitoring: Treatment effectiveness will be monitored during implementation of storm inspection and response treatment. See full description below.

Why is the Treatment /Activity Reasonable, within Policy (identify Agency land management plan), and Cost Effective? Road systems are necessary for administrative use, recreation, and other uses and represent a significant financial investment. Implementation of the treatments protects those investments and provides continued access for a variety of uses. The potential monetary cost to repair roads that would be damaged by post fire flows if left untreated significantly exceeds the cost of the treatments.

T03 – Road Storm Inspection and Response

General Description: The patrols are used to identify those road problems such as plugged culverts and washed out roads and to clear, clean, and/or block those roads that have received damage. The storm patrollers shall have access to at least a backhoe that can be used when a drainage culvert is plugged or soon to be plugged, and to repair roads which are exhibiting severe surface erosion.

Suitable Sites: Forest Service Road 308

Design/Construction Specifications: FS personnel will direct the work. Immediately upon receiving heavy rain and during significant spring snowmelt the FS will send out patrols to identify road hazard conditions – obstructions such as rocks, sediment, washouts, and plugged culverts, so the problems can be corrected before they worsen or jeopardize forest road users. The road patrols shall bring in heavy equipment necessary to mechanically remove any obstructions from the roads and culvert inlets and catch basins where necessary. All excess material and debris removed from the drainage system shall be placed outside of the bank-full stream channel where it cannot re-enter the stream.

Purpose of Treatment:

i. What value(s) is (are) mitigated by this treatment? Human Life and Safety (Public Safety of Forest Visitors and administrative personnel), Property (Forest Roads and Bridges), Emergency ingress/egress. Indirectly, debris that is not removed immediately could cause more substantial loss of infrastructure and associated sediment/debris that in turn causes an impact to Water Quality and Riparian areas.

Roads within the fire contain drainage structures that cross streams located in watersheds that have a moderate and high burn severity. These streams now have the potential for increased runoff and debris flows. These increases in flows pose a threat to the existing crossings which may result in plugging culverts or exceeding their maximum flow capacity. If these flows plug drainage structures, the result will likely be additional erosion and debris further down the drainage due to the failures of the fill slopes of the roads.

There is an immediate and future threat to travelers along these roads within the burned area due to the increased potential for rolling and falling rock from burned slopes and increased potential for falling trees, flash floods and mudflows. The post-fire flooding will threaten to interrupt access to visitors, local residents, and Forest Service personnel who are implementing treatments. With the loss of vegetation, normal storm frequencies

and magnitudes can more easily initiate rill and gully erosion on the slopes and it is likely that this runoff will cover the roads or cause washouts. These events make for hazardous access along steep slopes and put the safety of Forest visitors and administrative personnel at risk.

The purpose of the monitoring is to evaluate the condition of roads and culverts for motorized access and to identify and implement additional work needed to maintain and/or repair damage to road surfaces and flow conveyance structures (culverts, bridges) across roads in order to provide safe access across FS lands. Engineering and District personnel will survey the roads within the fire perimeter after high-intensity summer thunderstorms and spring snow-melt. Survey will inspect road surface condition, ditch erosion, and culverts/inlet basins for capacity to accommodate runoff flows.

ii. How does the treatment relate to damage or changes caused by the fire? Increased runoff resulting from burned slopes and stream channels which are adjacent to roads will likely cause damage to roadway surfaces, drainage structures, or block roads with debris slides. Storm patrol during post fire runoff events provides early discovery of damaging processes and the opportunity to respond with equipment to minimize damage to property and the personnel to secure the scene to protect the public.

Describe Treatment Effectiveness Monitoring: Monitor the storm-patrol response time to ensure objectives are being met. Identify the type of storm event that mobilizes material.

Why is the Treatment /Activity Reasonable, within Policy (identify Agency land management plan), and Cost Effective? Early detection of damaging events reduces monetary loss and the threat to human life and safety. The cost of the treatment is reasonable considering that an average mile of road construction costs \$40,000. In addition, the protection of human life is a critical value and the loss of even one life and/or injury is far more than the cost of the treatment.

Protection/Safety Treatments:

T04 – Warning Signs

General Description: This treatment is for the installation of burned area warning signs on roads and trail access points. Burned area signs warn the public of the possible dangers associated with a burned area on major entry points into the burned area, trails and developed/dispersed recreation sites. They shall contain language specifying threats to be aware of when entering a burned area such as falling trees and limbs, rolling rocks, and flash floods.

Description of Suitable Sites: Refer to BAER Treatment Map for the spatial locations. Warning signs will be installed at major entry points in to burned areas and at trail access points.

Design/Construction Specifications:

1. Burned Area warning signs along the roads shall consist of 0.08" aluminum, sheeted in high intensity Orange with black letters. The WARNING lettering shall be a minimum

of 5 inches in height and all remaining lettering shall be a minimum of 3.5 inches in height.

2. Burned Area warning signs at trail access points shall consist of 0.08" aluminum, Orange with black letters. The WARNING lettering shall be a minimum of 2 inches in height and all remaining lettering shall be a minimum of 1.5 inches in height.

Purpose of Treatment:

i. What value(s) is mitigated by this treatment?

Human Life and Safety. The purpose of the Burned Area signs is to provide safety to the motorists, trail users and campers of upcoming dangers and/or objects.

ii. How does the treatment relate to damage or changes caused by the fire?

The risk to human life and safety is increased by post fire hazards such as falling trees, rolling rocks, and flash floods. Burned area sign installation will inform forest visitors and workers of post fire hazards.

Describe Treatment Effectiveness Monitoring: District personnel will monitor sign condition to ensure that they remain effective over time.

Why is the Treatment /Activity Reasonable, within Policy (identify Agency land management plan), and Cost Effective? The treatment is reasonable since protection of human life is a critical value. Signs shall be designed according to agency standards. Material and installation costs were determined to be the most cost effective way to warn forest visitors and workers of burned area hazards.

T05 BAER Implementation Consultation and Coordination:

Associated activities obligated under ID-FSM2520-2017-1 need to be considered in the BAER funding request when emergency response actions are authorized. These are accumulated tasks above the normal program of work and generally not accounted for in out-year program planning. Because implementation of approved BAER response actions trigger these required tasks and the unit's allocated budget does not account for these obligations, BAER funding is the appropriate authorization to ensure this coordination and consultation is completed.

I. Monitoring Narrative:

Monitoring for individual treatments is described in above treatment narratives.

FS-2500-8 (6/06)

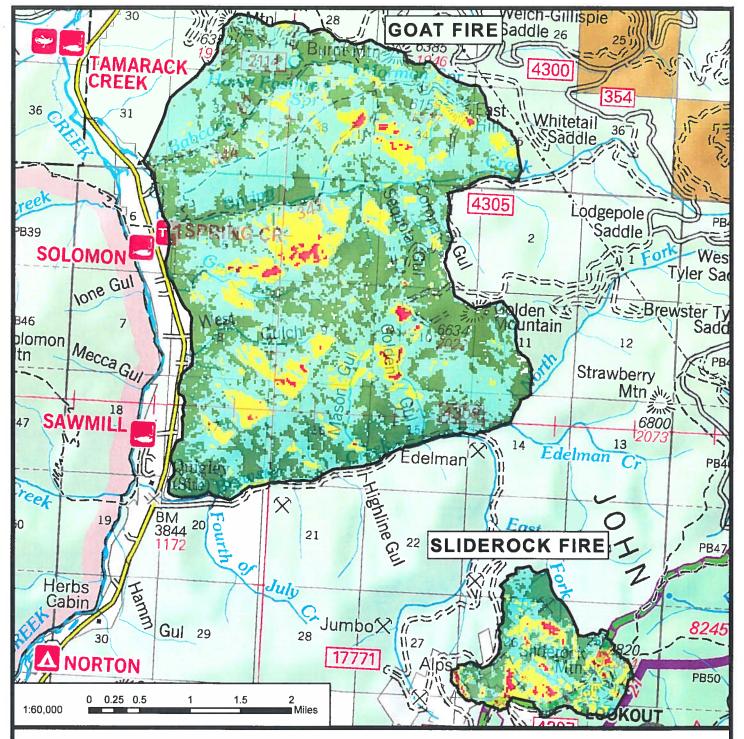
Date of Report: September 22, 2017 Part VI – Emergency Stabilization Treatments and Source of Funds

Interim #

				d Filtre balance and a second						men	fr
	1		NFS Lan	ds				Other La	inds		All
	Ì	Unit	# of		Other		# of	Fed	# of	Non Fed	Total
Line Items	Units	Cost	Units	BAER\$	\$		units	\$	Units	\$	\$
A. Land Treatments								<u></u>	~*************************************		
T01a - EDRR Ground/Truck	acre	65	160	\$10,400	\$0		**************************************	\$0		sol	\$10,400
T01b - EDRR Ground/Hand	days	300	35	\$10,500					***************************************		\$10,500
T01c - EDRR Aerial	acre	50	225	\$11,250							\$11,250
Insert new items above this li	nol			so	\$0		., .	\$0		\$0	\$0
Subtotal Land Treatments	iro:	<u> </u>	L	\$32,150	\$0			\$0 \$0	***************************************	\$0	\$32,150
B. Channel Treatments	1		1	402, 10t	ψU			<u> </u>		201	المحرد المحرد
None	<u> </u>	***************************************		\$0	\$0			\$0	histopeniesskimiter	\$0	\$0
Insert new items above this li	ne!	***************************************		\$0	\$0	1900	MEROCHANICAL PROPERTY AND A P.	\$0		\$0	\$0
Subtotal Channel Treatments			***************************************	\$0	\$0		.	\$0		\$0	\$(
C. Road and Trails	 	 	<u></u>		Sand Sand State of Street, Str			<u> </u>		<u></u>	
T02-Armored Critical Dips	each	2,000	3	\$6,000	\$0			\$0		\$0	\$6,000
T03-Road Storm Inspection a	each	6,550	1	\$6,550	\$0			\$0		\$0	\$6,550
Insert new items above this li	ne!			\$0	\$0			\$0		\$0	\$0
Subtotal Road and Trails				\$12,550	\$0			\$0		\$0	\$12,550
D. Protection/Safety											
T04-Warning Signs	each	365	8	\$2,920	\$0			\$0		\$0	\$2,920
Insert new items above this li	ne!			\$0	\$0			\$0		\$0	\$0
Subtotal Protection/Safety				\$2,920	\$0			\$0		\$0	\$2,920
E. BAER Evaluation											
Initial Assessment	team	\$10,775	1		\$0			\$0		\$0	\$0
T05- Implementation Coordin	days	\$350	3	\$1,050				\$0		\$0	\$1,050
Insert new items above this li	ne!				\$0			\$0		\$0	\$0
Subtotal Evaluation				\$1,050	\$0			\$0		\$0	\$1,050
F. Monitoring		***************************************									
				\$0	\$0			\$0		\$0	\$0
Insert new items above this li	ne!			\$0	\$0			\$0		\$0	\$0
Subtolal Monitoring	~~~~			\$0	\$0			\$0		\$0	\$0
	ļ			CARRESCO VARIO - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -							
G. Totals	<u> </u>			\$48,670	\$0			\$0		\$0	\$48,670
Previously approved					LIPZYWORION MENINALIA LOLLAN						
Total for this request	1			\$48,670							

PART VII - APPROVALS Forest Supervisor (signature)

ন Regional Forester (signature)



SOIL BURN SEVERITY

BURNED AREA EMERGENCY RESPONSE (BAER)
Lolo and Beaverhead-Deerlodge National Forests

2017 GOAT FIRE

SOIL BURN SEVERITY ACRES						
High Moderate Low Unburned- Very Low Total						
77	77 900 4,358 3,007 8,3					

2017 SLIDEROCK FIRE

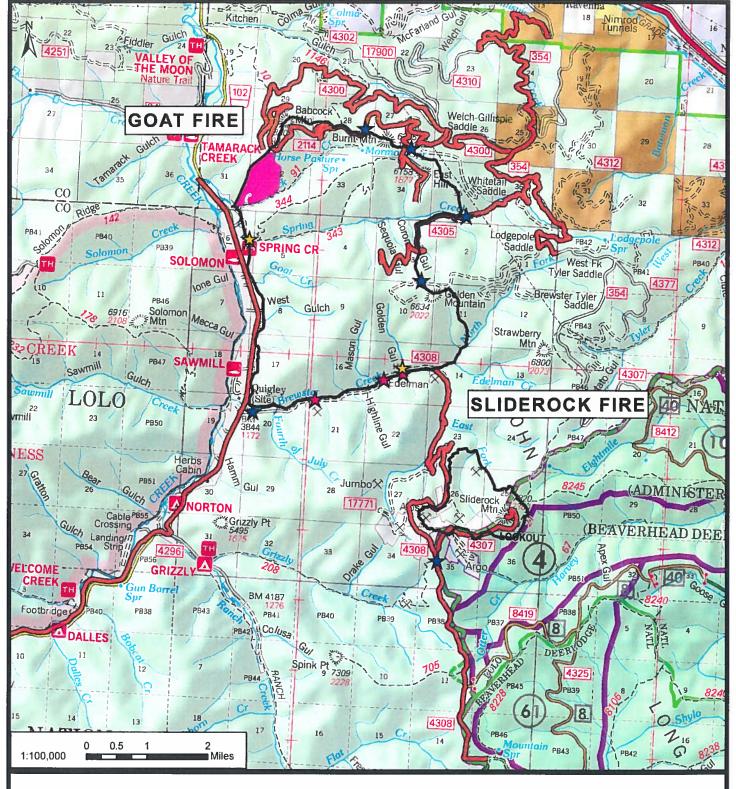
SOIL BURN SEVERITY ACRES							
High Moderate Low Unburned- Very Low Total							
40	233 343 302 918						

This map is a product of a BAER rapid assessment. Further information concerning the accuracy and appropriate uses of this data may be obtained from the USDA Forest Service. The Forest Service makes no warranty, expressed or implied, including the warranties of merchantability and fitness for a particular purpose, nor assumes any legal liability or responsibility for the accuracy, reliability, completeness or utility of these geospatial data, or for the improper or incorrect use of these geospatial data. These geospatial data and related maps or graphics are not legal documents and are not intended to be used as such. The data and maps may not be used to determine title, ownership, legal descriptions or boundaries, legal jurisdiction, or restrictions that may be in place on either public or private land. Natural hazards may or may not be depicted on the data and maps, and land users should exercise due caution. The data are dynamic and may change over time. The user is responsible to verify the limitations of the geospatial data and to use the data accordingly.









GOAT AND SLIDEROCK FIRES - TREATMENTS

BURNED AREA EMERGENCY RESPONSE (BAER) Lolo and Beaverhead-Deerlodge National Forests

Road Treatments



BAER Warning Sign - Road



BAER Warning Sign - Trail



Install Armored Critical Dip

Noxious Weed Treatments



Ground EDRR



Aerial Spraying





