Date of Report and Type: Initial 11/8/2017

#### **BURNED-AREA REPORT**

(Reference FSH 2509.13)

### **PART I - TYPE OF REQUEST**

### A. Type of Report

- □ 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
  - $\square$  Status of accomplishments to date
- ☐ 3. Final Report (Following completion of work)

#### **PART II - BURNED-AREA DESCRIPTION**

A. Fire Name: Strawberry Creek

B. Fire Number: MT-FNF-000666

C. State: Montana

**D.** County:Flathead, Teton and Pondera

E. Region:01 - Northern

- F. Forest: 10-Flathead; 15-Helena-Lewis and Clark
- G. District: Spotted Bear and Rocky Mountain
- H. Fire Incident Job Code:P1LB0V (0110)

I. Date Fire Started 08/24/2017

J. Date Fire Contained: 10/18/2017

- K. Suppression Cost:\$1,500,000
- •
- L. Fire Suppression Damages Repaired with Suppression Funds (estimates):
  - 1. Dozer Fireline repaired (miles): None completed yet
  - 2. Excavator Fireline repaired (miles): None completed yet
  - 3. Other (identify):

### M. Watershed Numbers:

Table 1: Acres Burned by Watershed

HUC #	Watershed Name	Total Acres	Acres Burned	% of Watershed Burned
170102070101	Strawberry Creek	17,308	6,201	35
170102070104	Cox Creek	12,420	511	4
100302010201	North Badger	38,364	442	1
100302010601	Middle Fork Birch Creek	8,507	4,769	56
100302010602	South Fork Birch Cr	16,425	2,071	13

HUC#	Watershed Name	Total Acres	Acres Burned	% of Watershed Burned
100302010603	North Fork Birch Cr	22,933	5,798	25
100302010604	Upper Birch Cr	23,454	1,028	4
100302010502	Sheep Cr	31,169	185	0.6

#### N. Total Acres Burned:

Table 3: Total Acres Burned by Ownership

OWNERSHIP	ACRES
NFS	18,432.9
BLM	32.3
STATE	2,473.7
PRIVATE	47.4
TOTAL	20,986.5

- **O. Vegetation Types**: Douglas fir, lodgepole pine, sub alpine spruce, and areas of grassland/sagebrush vegetative communities.
- P. Dominant Soils: The dominate soils are classified at the family level as Typic/Andic/Cryochrepts with surface textures of cobbly/very gravelly sandy loams/loams. Surface rock ranges in cover from 15 to 70 percent and in size from gravels to cobbles. The high elevation and steep slopes across much of the fire has bare bedrock with soils developing on protected aspects and lower elevations. The landtypes within the designated wilderness have been mapped, but data is not currently available. Soil types and attributes in this analysis were inferred from adjacent Land Type Association units (LTA) and the Lewis and Clark National Forest Soil Survey Data (SSURGO).

Table 4: Dominant soil map units within the Strawberry Fire.

Landtype	Map unit name	Acres in Burn	Percent of Burn	Hydrologic Soil Group	Soil Material Erodibility**
25	Andic Cryochrepts	45	>1.0	-	-
71	Typic and Andic Cryochrepts	190	1.6	-	-
202	Rockland	73	>1.0	-	-
25C	Andic Cryochrepts	128	1.1	-	-
Wilderness	Unavailable	11185	96.2	-	-
	Tota	al 11620*	100%		

<sup>\*</sup>acreage discrepancy is likely a result of GIS mapping efforts

- **Q. Geologic Types**: Geology across the Strawberry Fire is limestone, sandstone, and shale. Landforms are mountain high relief ridges and with slopes averaging 35 to 60 percent.
- R. Miles of Stream Channels by Order or Class:

Table 5: Miles of Stream Channels by Order or Class

STREAM TYPE	MILES OF STREAM
PERRENIAL	26
INTERMITTENT/EPHEMERAL	58

#### S. Transportation System:

**Trails:** National Forest (miles): 5.4 (FNF) 12.9 (HLF) Other (miles): 0 **Roads:** National Forest (miles): 0 Other (miles):

#### PART III - WATERSHED CONDITION

<sup>\*\*</sup> LTA Hazard Rating - Nesser 1998

# A. Burn Intensity (acres):

Table 6: Burn Intensity Acres by Ownership

Soil Burn Intensity	NFS FH	NFS HLF	BLM	State	Private	Total	% within the Fire Perimeter
Low	1,357		6	115	6	1,494	7
Moderate	4,025		7	436	3	4,486	22
High	8,463		0	845	2	9,328	45
Unburned	5,586		25	1,079	35	5,586	27
Total	20,987		32	2,473	47	20,987	100

- **B.** Water-Repellent Soil (acres): 5249 (high) + 2253 (moderate) = 7502 acres.
- C. Soil Erosion Hazard Rating:
- **D. Erosion Potential** (tons/acre): 6720 cubic yards per square mile for the first two years after the fire. 6720 cubic yards per square mile for the first two years after the fire.
- E. Sediment Potential(cubic yards/square mile): 3360 yds<sup>3</sup>/mi<sup>2</sup>

The sediment delivery potential based on the ERMiT reports higher values than what historic flows show in the area based on past monitoring of wildland fires (Skyland, Elbow Pass, Red Shale, for example). The history of fire in this area is common and the geology, soils, vegetation seem to be able to handle pulses of sediment delivery with normal variation post wildland fire events.

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

- A. Estimated Vegetative Recovery Period (years): 1-3 grass, 20-25 shrubs, 20-50 conifers
- B. Design Chance of Success (percent): 80
- C. Equivalent Design Recurrence Interval (years): 5
- **D. Design Storm Duration** (hours): 6 hr.
- E. Design Storm Magnitude (inches): 1.5 in
- **F. Design Flow** (cubic feet / second/ square mile): 5 cfs/mi<sup>2</sup>
- G. Estimated Reduction in Infiltration (percent): 30
- **H. Adjusted Design Flow** (cfs per square mile): 70 cfs/mi<sup>2</sup>

# **PART V - SUMMARY OF ANALYSIS**

### Introduction/Background:

The Strawberry Creek Fire was a lightning caused ignition that was first detected on August 24, 2017. The fire burned approximately 20,894 acres and was contained on October 18, 2017. The burned area is located along the Continental Divide on the Spotted Bear (Flathead NF) and Rocky Mountain Ranger Districts of the Helena-Lewis and Clark National Forest, approximately 37 Miles northwest Choteau, MT. The burn Intensity (SBS) map shows that approximately 67% of the burned area experienced high or moderate burn Intensity. The rest of the areas within the fire perimeter were either low burn Intensity or unburned. Increased post fire soil erosion and runoff are likely to occur within and downstream of the moderate and high burn Intensity 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 fire. 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 Intensity 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 Flathead and Helena-Lewis and Clark National Forest was compiled by the BAER team during the assessment kickoff meeting. 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.

Table 7. Critical value iviatrix						
Probability of	Magni	tude of Consequences				
Damage or Loss	Major	Moderate				
		RISK				
Very Likely	Very High (trails)	Very High				
Likely	Very High	High				

High (weeds)

Intermediate

Table 7: Critical Value Matrix

Possible

Unlikely

## 1. Human Life and Safety (HLS):

a. Very high risk to travelers along routes (trails) within and downstream of the burn scar due to an increased threat of flooding and debris flows from contiguous areas of high and moderate burn Intensity in watershed source areas. The probability of damage or loss is likely and the magnitude of consequences is major. (Treatments: T02)

Intermediate

Low

Minor

Low

Low

Low

**Very Low** 

 Very high risk to travelers along routes (trails) within and downslope from hillslopes burned at a moderate to high Intensity due to an increased threat of falling trees, rocks, and other debris. The probability of damage or loss is likely and the magnitude of consequences is major. (Treatments: T02)

#### 2. Property (P):

a. Very high risk to trail infrastructure throughout the burn scar due to an increased post-fire watershed response to precipitation and runoff events that is expected to result in the loss of control of water, overwhelming of existing drainage features and erosion of the trail prism. The burned area contains approximately 17.5 miles of trails at risk; 5.1 on the Flathead and 12.4 miles on the Helena and Lewis and Clark. The probability of damage or loss is likely and the magnitude of consequences is major. (Treatments: T02)

### 3. Natural Resources (NR):

a. High risk to native plant communities due to the threat from the spread of noxious weeds and invasive plant species. Known noxious weed and invasive plant populations (spotted knapweed, Dalmatian toadflax, yellow toadflax, Canada thistle, musk thistle, bull thistle, common mullen, St. Johnswort and houndstongue) exist within and immediately adjacent to the burned area. The highest risk species to spread include spotted knapweed and Dalmation toadflax. The probability of damage or loss is likely and the magnitude of consequences is moderate. Treatments (T01)

b. Intermediate risk to bull trout habitat downstream due to potential sedimentation. The probability of damage or loss is possible and the magnitude of consequences is low to moderate. No treatment is recommended at this time.

- c. Intermediate 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 burn Intensity. The loss of ground cover and presence of hydrophobic soils will result in increased soil erosion during runoff producing events. The probability of damage or loss is possible and the magnitude of consequences is moderate. BAER treatments are not recommended.
- d. Intermediate risk to Lynx habitat throughout the burn scar due to the consumption of multiforest structure and subsequent loss of habitat. The probability of damage or loss is possible and the magnitude of consequences is moderate. BAER treatments are not recommended.

### 4. Cultural and Heritage Resources:

- a. The bulk of the fire area is located in the Bob Marshall Wilderness Complex and in the Badger-Two Medicine Traditional Cultural District. The area has very little previous survey coverage and the known heritage sites are along National Forest System Trails. A record search on the Flathead National Forest (FNF) did not identify any known sites inside of or within one mile of the burn area on the portion of the fire on the FNF. On the Helena-Lewis and Clark National Forest, there are a total of three known heritage sites within or adjacent to the burn area (Table 2). None of these sites rate very high on the BAER risk rating table and no erosion control treatment is recommended for these sites.
- b. Low risk to NRHP eligible cultural resources present within the burn scar at slope positions that are less susceptible to increased post-fire erosion and looting. The probability of damage or loss is unlikely and the magnitude of consequences is moderate. BAER treatments are not recommended for these sites.

#### 5. Other non-BAER Values:

a. 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:

Protect or minimize damage to NFS investments in trail 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 native and naturalized ecosystems by minimizing the potential for expansion of non-native invasive species (NNIS) into the most susceptible otherwise pristine natural communities that burned within high and moderate severity.

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.

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

Land 80% Roads/Trails 70% Channel N/A Protection/Safety 80%

## D. Probability of Treatment Success

Table 8: Probability of Treatment Success

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

**E. Cost of No-Action (Including Loss):** (Replacement cost of trails = \$15,000\*17.5 miles) + (Weed costs = 3\*\$15,025) = \$307,575

F. Cost of Selected Alternative (Including Loss): (Trails treatment = \$72,624) + (Trails loss = .3*\$72,624)	+
(Weeds BAER treatment cost = \$15,025) + (Implementation coordination/consultation = \$1,800) =	
\$113,944Skills Represented on Burned-Area Survey Team:	

	□ Botany	□ Ecology	☐ Economist	
	☐ Forestry	⊠ GIS		⊠ Range
□ Recreation	Soils		☐ Wildlife	

Team Leader: Wayne Green

Email:wgreen@fs.fed.us Phone:406-791-7740

Forest BAER Coordinator: Wayne Green

Email:wgreen@fs.fed.us Phone:406-791-7740

#### **Core Team Members:**

Table 9: BAER Team Members by Skill

Team Member Name
Wayne Green
Mark Bodily
Jason Oltrogge
Jacob Noland
George Liknes
Kelsey McCartney
Kate Condon
lan Bardwell
Jonathan LeBlanc

#### H. Treatment Narrative:

**Land Treatments:** 

# T01 - Early Detection and Rapid Response

**General Description:** 

Invasive plants and weed assessments will be conducted in FY2018 for Early Detection and Rapid Response (EDRR) on any new infestation within areas burned at high and moderate burn severity. Treatments will occur at proper phenology of each species to ensure maximum control.

Because noxious weeds are scattered throughout the burn area, there is a high risk for new infestations within the fire perimeter to become established due to the disturbance caused by the wildfire and the suppression equipment used to fight the fire. There are known infestations of spotted knapweed, Dalmatian toadflax, yellow toadflax, Canada thistle, musk thistle, bull thistle, common mullen, St. Johnswort and houndstongue within the burn perimeter.

Assess 444 acres of Helena-Lewis and Clark National Forest Service land within the Fire for new infestations of noxious weeds. Invasive and noxious weed assessments from FY2017 will establish baseline data to be tracked through the Spotted Bear and Rocky Mountain Front Ranger Districts GIS databases and will be used to determine the priority, amount and intensity of control for new infestations of noxious weeds located within the burn area for FY2018. Spotted knapweed, Dalmatian toadflax and yellow toadflax are the primary species of concern to invade the burn.

The priority areas proposed for noxious weed/invasive species monitoring and EDRR are very susceptible to invasion due to fire suppression activities and existing populations of noxious weeds are now adjacent to non-infested areas that are devoid of surface vegetation. A program of early detection and rapid response to control new infestations is cost effective because it helps to prevent new weed and invasive species invasions from becoming large and too expensive to control.

No weeds treatments are requested for the Flathead National Forest.

#### **Location/Suitable Sites:**

Assess areas that have a high potential for weed/invasive species establishment. Critical areas include trails that cross moderate to high burn severity areas. The locations of highest concern are adjacent areas to trails where weeds may move from these vectors onto bared soil areas within the fire perimeter.

Treatment will occur on 89 acres of inventoried noxious weeds that are within the area of high to moderate soil Intensity.

### **Design/Construction Specifications:**

Conduct short-term monitoring in FY2018 using early detection and rapid response (EDRR) assessment/monitoring of noxious weed plant species infestations within the burned area. Monitoring will be done with crews able to treat infestations located during monitoring.

Inventory/assessment, map new noxious weed infestations within burned area using GPS technology and upload into the Helena-Lewis & Clark NF GIS Noxious Weeds database.

Chemical treatments using pack horses and backpack spray units will be used on any noxious weeds located within the fire on public lands.

#### **Purpose of Treatment:**

This treatment is necessary to prevent the establishment and to control the spread of new noxious weeds species into the burned area. EDRR will be used to prevent new noxious weed infestations from becoming established and to ensure the natural recovery of the native perennial grasses and forbs is not affected by the establishment of noxious weeds. This treatment will also ensure the ecological indicators (Soil Stability, Hydrologic Function, and Biotic Integrity) are functioning properly during the natural recovery period on lands administered by the FS. Chemical treatment of

new and existing noxious weed infestations will reduce the likelihood of their spread to disturbed areas and help to re-establish high quality wildlife habitat within the burn.

The fire is a disturbance that provides a receptive avenue for the spread of noxious weeds. Noxious weeds and non-native invasive species are a concern for biodiversity. Weed invasion is a potentially threatening process leading to competition and habitat modification. Plant communities and native species likely to be at greatest risk from weed invasion are those which occupy weed-prone habitats that have experienced moderate to high burn severity.. This treatment mitigates this risk by allowing for an early means of detecting new noxious weed occurrences and a quick response for control.

Table 10: T01 - Weeds EDRR Treatment Types and Cost

TREATMENT DESCRIPTION	TARGET WEED SPECIES	PRESCRIPTION	ESTIMATED ACRES	COST PER ACRE	COST	TIMING
EDRR - SUPPRESSION IMPACTS	spotted knapweed, Dalmatian toadflax and yellow toadflax	Monitor resources, Treat target weeds species upon detection	30	\$120 – Includes: IDIQ Contract for inventory and misc Treatments, Pack horse and packer	\$3,600	FY18
EDRR – IN HIGH PRIORTY NATURAL COMMUNITIES	spotted knapweed, Dalmatian toadflax and yellow toadflax	Herbicide application by contract crew on moderate and high SBS sites where weeds are known to be present in minor amounts	89	\$155 – Includes: IDIQ costs plus chemicals	\$13,795	FY18

**Channel Treatments:** None proposed

**Roads and Trail Treatments:** 

#### T02 – Trail Drainage Restoration /Tread Stabilization

#### **General Description:**

Treatment would provide immediate protection to the trail system. Trails may capture increased surface runoff caused by the lack of effective ground cover to inhibit excessive flow. Flows will intercept system trails and cause severe tread erosion and initiation of soil rutting adjacent to the trails. The trail system would be improved to withstand increased runoff, protecting property, workers and users.

#### Location/Suitable Sites:

Trails located within the fire perimeter include 5.1 miles on the Flathead and 12.4 miles on the Helena Lewis and Clark NF within the moderate to high burn Intensity. 17.5 miles of trail would be treated. The managed uses for these trail systems are Hiker and Pack and Saddle. Priority trails to be worked on include those that are within or below moderate to high burn severity slopes and those with sustained steep grades that have inadequate drainage. Refer to BAER Treatment Map for specific locations.

### **Design/Construction Specifications:**

Install waterbars depending on steepness of trail in areas of moderate or high burn Intensity:

- 50 per mile on high to moderate burn Intensity slopes >30%
- 25 per mile on high to moderate burn Intensity slopes 15 to 30%
- 10 per mile on moderate to high burn Intensity slopes 0-15%

Install waterbars in sections of trail that have continuous gradient for a length of greater than 50 feet and are either insloped (cupped) or show evidence of routing water (rills, gullies).

Construct tread retention structures where necessary and downslope of burnt slopes that lost stabilizing vegetation.

Clean existing water bars.

Mitigate hazards from rocks and trees within the trail route that restrict safe access and movement at work sites. If the area poses a large safety risk then the work will be delayed until safety risk is stabilized.

#### **Purpose of Treatment:**

Trails within the fire are located within and downslope of moderate to high burn severity slopes. Predicted increased runoff due to water repellant soils and lack of effective ground cover will be intercepted and captured by trails, leading to severe trail tread erosion that will render the trails unusable or dangerous to use. Hikers and stock parties are the primary users. Additional hazards caused by the fire such as hazard trees and rock fall will create unsafe conditions at trail access points and worksites along the trails to workers.

The fire has burned adjacent slopes above and along the trail routes that will result in runoff that will damage the system substantially enough to prevent future use of the trails. The increased erosional risk to trails can be mitigated with drainage structures, tread stabilization, and scheduled drainage maintenance. The treatments directly mitigate these increased threats in that adequate trail tread drainage will pass accelerated erosional runoff off the tread and prevent tread erosion, and firegenerated hazards such as hazard trees and rock fall will be removed in and around trail work sites.

These treatments would prevent unacceptable erosion and loss of trail investment and minimize contribution of trail derived sediment to streams. Treatments ensure drainage structures are sufficient to divert water effectively given increased runoff and increased sediment movement. Treatments will protect property and watershed values. Treatment will prevent injury and lower risk to workers and users. Hazard tree reduction at work sites will ensure worker safety.

Table 11:T02 - Trail Stabilization Cost Estimate

TREATMENT	FOREST	UNIT	<b>UNIT COST</b>	# OF UNIT	TOTAL COST
TRAIL STABILIZATION	Flathead NF	Mile	\$4,000	5	\$20,000
TRAIL STABILIZATION	Helena- Lewis and Clark NF	Mile	\$4,000	12	\$48,000
HAZARD TREE REMOVAL AT WORK SITES	Flathead NF	Mile	\$1,000	1.5	\$1,500
HAZARD TREE REMOVAL AT WORK SITES	Lewis and Clark NF	Mile	\$1,000	4	\$4,000

Protection/Safety Treatments: None proposed

#### **BAER Evaluation**

# **T03 – Implementation 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.

Table 12: T03-Coordination and Consultation Cost Estimate

TREATMENT	UNIT	UNIT COST	# OF UNIT	TOTAL COST
IMPLEMENTATION TRACKING & REPORTING FOREST BAER COORDINATOR (GS-12)	Days	450	4	\$1,800

### I. Monitoring Narrative:

<u>T01-Early Detection Rapid Response:</u> Treatment sites will be evaluated annually for the next three years to ensure control methods are meeting resource objectives and to inventory for new invaders. Weed specialist/technicians will visit chemically treated sites after treatment; this is especially important for weed populations that are sprayed to ensure efficacy of herbicide application. Initiate follow-up treatments if additional non-native species or new infestations are discovered. Control will be considered successful upon determination that all noxious weeds have been controlled have not spread beyond their pre-fire locations.

<u>T02-Trail Drainage Reconstruction:</u> The drainage improvements will be inspected throughout the year after implementation to monitor the effectiveness of water run-off and the trail drainage condition.

T03-Implementation Coordination: Forest BAER Coordinator will file annual accomplishment report.

USDA FOREST SERVICE

# PART VI - FOREST EMERGENCY STABILIZATION TREATMENTS AND SOURCE OF FUNDS

### **Flathead National Forest**

			NFS Lan	ds				Other La	ands		All
		Unit	# of		Other		# of	Fed	# of	Non Fed	Total
Line Items	Units	Cost	Units	BAER \$	\$		units	\$	Units	\$	\$
						88					
A. Land Treatments											
Insert new items above thi	is line!			\$0	\$0			\$0		\$0	\$0
Subtotal Land Treatments				\$0	\$0			\$0		\$0	\$0
<b>B. Channel Treatments</b>	i										
Insert new items above this	is line!			\$0	\$0			\$0		\$0	\$0
Subtotal Channel Treatme	ents			\$0	\$0			\$0		\$0	\$0
C. Road and Trails											
T02-Trail Stabilization		4,000	5	\$20,000	\$0			\$0		\$0	\$20,000
T02-Hazard Tree Mitigation	)	1,000	2	\$1,500							
Insert new items above this	is line!			\$0	\$0			\$0		\$0	\$0
Subtotal Road and Trails				\$21,500	\$0			\$0		\$0	\$20,000
D. Protection/Safety											
Insert new items above this	is line!			\$0	\$0			\$0		\$0	\$0
Subtotal Protection/Safety	,			\$0	\$0			\$0		\$0	\$0
E. BAER Evaluation											
Initial Assessment	Report				\$0			\$0		\$0	\$0
Implementation Coordination	n	\$450	4	\$1,800	\$0			\$0		\$0	\$0
Insert new items above this	is line!				\$0			\$0		\$0	\$0
Subtotal Evaluation				\$1,800	\$0			\$0		\$0	\$0
F. Monitoring											
				\$0	\$0			\$0		\$0	\$0
				\$0	\$0			\$0		\$0	\$0
Insert new items above this	is line!			\$0	\$0			\$0		\$0	\$0
Subtotal Monitoring				\$0	\$0			\$0		\$0	\$0
						88					
G. Totals				\$23,300	\$0			\$0		\$0	\$20,000
Previously approved											
Total for this request				\$23,300							
						88					
						*					
						8					
						88					

# **PART VII - APPROVALS**

1	/2017			
Chip Weber, Flathead NF Forest Supervisor	Date			
2.	/2017			
Leanne Marten, Region 1 Regional Forester				

# **HELENA - LEWIS AND CLARK NATIONAL FOREST**

			NFS Lan	ds			Other La	ands		All
		Unit	# of		Other	# of	Fed	# of	Non Fed	Total
Line Items	Units	Cost	Units	BAER\$	\$	units	\$	Units	\$	\$
A. Land Treatments										
T01-EDRR Suppression Imp	Acres	120	30	\$3,600	\$0		\$0		\$0	\$3,600
T01-EDRR Natural Plant Co	mmunities	155	89	\$13,795						
Insert new items above this	line!			\$0	\$0		\$0		\$0	\$0
Subtotal Land Treatments				\$17,395	\$0		\$0		<b>\$</b> 0	\$3,600
B. Channel Treatments										
Insert new items above this	line!			\$0	\$0		\$0		\$0	\$0
Subtotal Channel Treatment	S			\$0	\$0		\$0		<b>\$</b> 0	\$0
C. Road and Trails									-	
T02-Train Stabilization	Miles	4,000	12	\$48,000	\$0		\$0		\$0	\$48,000
T02-Hazard Tree Mitigation	Miles	1,000	4	\$4,000	\$0		\$0		\$0	\$4,000
Insert new items above this	line!			\$0	\$0		\$0		\$0	\$0
Subtotal Road and Trails		\$52,000	<b>\$</b> 0		\$0		\$0	\$52,000		
D. Protection/Safety										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
Insert new items above this	line!			\$0	\$0		\$0		\$0	\$0
Subtotal Protection/Safety				\$0	\$0		\$0		\$0	\$0
E. BAER Evaluation			•							
Initial Assessment	Report				\$29,272		\$0		\$0	\$0
Implementation Coordination	1	\$450	4	\$1,800	\$0		\$0		\$0	\$0
Insert new items above this	line!				\$0		\$0		\$0	\$0
Subtotal Evaluation				\$1,800	\$29,272		\$0		\$0	\$0
F. Monitoring										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
Insert new items above this	line!			\$0	\$0		\$0		\$0	\$0
Subtotal Monitoring		\$0	\$0		<b>\$</b> 0		\$0	\$0		
G. Totals				\$71,195	\$29,272		\$0		\$0	\$55,600
Previously approved										
Total for this request				\$71,195						

# PART VII - APPROVALS

1	<u>/2017</u>	
Bill Avey, Helena – Lewis and Clark NF Forest Supervisor	Date	
2.	/2017	
Leanne Marten, Region 1 Regional Forester		Date

