Date of Report: 09/12/2018

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

[ ] 1. Initial Request (Best estimate of funds needed to complete eligible stabilization measures)

[ ] 2. Interim Report #
[X] 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: Mesa Fire

B. Fire Number: 000270

C. State: Idaho

D. County: Adams

E. Region: 4- Intermountain

F. Forest: Payette

G. District: Council

H. Fire Incident Job Code: P4L1TG18

I. Date Fire Started: 7/26/2018

J. Date Fire Contained: 8/25/2018

K. Suppression Cost: $ XXXX

L. Fire Suppression Damages Repaired with Suppression Funds

1. **Fireline waterbarred (miles)**: Fire line will be repaired by recontouring and spreading berms and organic material back across line
2. **Fireline seeded (miles):** All dozer line wil lbe seeded with exception of areas in open, scabby areas where seed source is natural and determined to be sufficient without added seed.
3. **Other (identify):** Approximately 48 miles of dozer line (22.1 on NFS lands, 20 on private, 1.1 on state, and 4.3 on BLM) are currently being repaired; repair has just begun and will be ongoing for the next several weeks. Approximately 5 miles of handline will be repaired as well- berms will be pulled back and organic material scattered across line.

M. Watershed Number: 1705012402 (Weiser River-Beaver Creek); 1705012404 (Middle Fork Weiser River); 1705012406 (Rush Creek-Weiser River)

Subwatersher number (6th code)	**Subwatershed Name**	**Percent burned (% high sev)**
170501240603	Jackson Creek-Weiser River	%12 (0.01%)
170501240601	Cottonwood Creek	%55 (6%)
170501240402	Jungle Cr- Middle Fork Weiser River	%0.4 (0.10%)
170501240403	Mica Creek- Middle Fork Weiser River	%42 (2%)
170501240404	Little Fall Cr- Middle Fork Weiser River	%50 (0.08%)
170501240703	Grays Creek	%27 (0.01%)
Note: No treatments are proposed in italicized subwatersheds due to a combination of low acres in high severity, mosaic nature of moderate and low severity burn, and, after field visits and analysis, no identified values at risk.		

N. Total Acres Burned:
[16,560] NFS Acres [1,619] Other Federal [1,570] State [14,970] Private

O. Vegetation Types: Douglas-fir/ninebark; Douglas-fir/snowberry;Ponderosa pine/Bluebunch wheat grass; Mountain Big Sagebrush; Bluebunch wheatgrass/ Idaho Fescue

Habitat Types	Sum of High Severity Acres
1 Dry Ponderosa Pine/Xeric Douglas-fir	1418.45
2 Warm Dry Douglas-fir/Moist Ponderosa Pine	5608.22
4 Cool Dry Douglas-Fir	7.35
5 Dry Grand fir	2706.64
6 Cool moist Grand fir	2443.70
7 Warm Dry Subalpine Fir	289.46
8 Warm Moist Subalpine Fir	1.56
9 Hydric Subalpine Fir	58.37
98 Rock & Barren	380.91
99 Non-Forest	21816.92
Grand Total	**34731.57**

P. Dominant Soils: Loam textures overall, ranging from loam to fine sandy loams. Dominant classifications: Lithic and Typic Cryoborolls, loamy skeletal, mixed; Lithic Argiborolls, loamy skeletal mixed; Typic Cryochrepts, fine, loamy, mixed

Q. Geologic Types: Predominately Columbia River Basalts. Minor area of instrusive Idaho Batholith granitics and metamorphosed gneiss and shcist in far east portion of fire in lower Boulder and Cabin Creek catchments.

R. Miles of Stream Channels by Order or Class: 53.8 miles perennial 95.5 miles intermittent

S. Transportation System

Trails: 6.28 **miles** **Roads:** 65.8 **miles**

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 14,856 **(low)** 15,222 **(moderate)** 1,078 **(high)**

B. Water-Repellent Soil (acres): Using the water drop penetration time test (WDPT), water repellency was determined to be nonexistent (WDPT values of 0-10 sec) to weak (WDPT values of 11-40 sec) on most burnedareas, including many areas with high soil burn severity. Limited strong water repellency (WDPT values >40 sec.) was observed on some high soil burn severity areas and it is estimated that approximately 250 acres of strongly water repellent soils exist in some areas with high soil burn severity.

C. Soil Erosion Hazard Rating (acres)(note: only FS lands, 9025 acres, have available data: 1945 **(low)** 15,760 **(moderate)** 1,320 **(high)**

D. Erosion Potential:

4-8.5 tons/acre (on unburned slopes, using BOISED natural sediment rates for dominant landtype of representative hillslopes)

4.9-10.6 tons/acre in high severity burned areas (based on assumption of 25% increase in sediment potential in 1st year following fire

E. Sediment Potential: 4.5 tons/acre (using ERMiT model for 1st year following fire)

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 2-4

B. Design Chance of Success, (percent): 80%

C. Equivalent Design Recurrence Interval, (years): 10-year storm

D. Design Storm Duration, (hours): 24

E. Design Storm Magnitude, (inches): 2.9

F. Design Flow, (cubic feet / second/ square mile): 41 prefire

G. Estimated Reduction in Infiltration, (percent): 20%

H. Adjusted Design Flow, (cfs based on 20% bulking factor): 49 postfire for highest severity

PART V - SUMMARY OF ANALYSIS

Background: On July 26,2018, a vehicle incident started the Mesa Fire along Highway 95, just south of Council, Idaho. Within a few days, the fire had grown and a Type 2 Incident Management Team took control of suppression efforts. Land ownership affected by the fire includes: NFS lands, BLM lands, State lands, and private land and property. This BAER Report only addresses threats and treatments located on NFS lands; however, ongoing coordination is happening between the BLM and FS, and information has been sent to the Idaho Department of Lands and the Adams County Emergency Manager, as well as the NRCS and National Weather Service. Private residences downstream of the Cottonwood Creek drainage, which burned at the highest severity, are being considered in coordination with the Weather Service and in considering BAER treatments above on FS lands.


Above: Examples of burn severity in the Cottonwood Creek and Wood Gulch drainages.

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

Value Life, Property, and Safety

Threats to private residences:

(High Risk)

1) One private residence (two structures, a house and a shop) were destroyed during the second burn period of the Mesa Fire, when the fire made its largest run. This residence is being rebuilt at this time, and with the Cottonwood drainage burn severity above (see table in previous section), this property is a concern in terms of risk from increased peak flows, as it is located in the confined drainage, just above the floodplain and at the foot of slopes that also burned at high and moderate severity (private property) There are other private residences further downstream, but these are out in flatter topography, where the creek

has a chance to dissipate higher flows and stream power will be decreased. None of the structures are built directly adjancent to the stream. A National Weather Service hydrologist is engaged with the BAER team and addressing this risk to private property.

The Cottonwood Creek watershed contains moderately to strongly dissected Mountain Slope Lands and oversteepened Canyon Lands, mostly with *high* inherent erosion hazard ratings. Approximately 30 percent of the subwatershed burned with *moderate* to *high* severity. Risks from post fire response to this residence is **HIGH,** due to the location on the alluvial fan. **The private landowner and resident have been notified about the risk.**

Value-Native or Naturalized Plant Communities

Threats to Ecosystem Integrity from Noxious Weeds and Livestock Grazing

(High Risk)

1) The expansion of invasive non-native plants into fire-disturbed areas from nearby source areas poses a significant threat to the integrity of the native plant communities and ecosystem processes. This threat is greatest along the roads in or adjacent to burned areas where noxious and invasive plants currently exist. State of Idaho listed noxious weeds include rush skeletonweed, Canada thistle, houndstongue, spotted knapweed, Scotch thistle, field bindweed. Invasive non-listed weeds include Bull thistle, common mullein, common tansy, Sulphur cinquefoil and St. Johnswort. Invasive grasses at lower elevations include medusahead and cheat grass, with potential for ventenata.

2) The threat of noxious weed expansion is also great within the burned area in the southern portion of Mill Creek – Council Mountain CFLRP (FEIS/ROD 2012). The timber harvest and thinned units in MCCM were inventoried for noxious and invasive plants in 2017. These units were primarily to the southwest of Cookhouse Gulch in Wood Gulch area and north of Cottonwood Creek. At the time of the surveys, invasive and noxious weeds were well established primarily along skid trails and around burn piles within the units. The invasion or expansion of noxious weeds is likely to alter soil stability, nutrient cycling, wildlife habitat and fire regimes with consequences for long-term ecological diversity and stability.


Above: Thistle and rush skeleton weed beginning to establish post-fire

3) Continued livestock grazing would have an immediate adverse effect on range condition, both short-term and long-term. Cattle that were pushed out of the fire area immediately returned. Research has shown that bluebunch wheat grass and Idaho fescue should receive rest post-fire. Continued grazing this fall and next season would also contribute to noxious weed expansion into the burned area. Cattle have been removed for the season (other than being allowed to move through the area on the way off the allotment) and should be exculded for at least one full season unless field visits by the Forest botanist, soil scientist, and range specialist decide otherwise in the late spring 2019. Vegetation needs to recover to help prevent the spread of noxious weeds and new weed infestations.

Value- Life and Property

Threat to Safety and the Forest Road #50199 Infrastructure

The fire burned several critical road infrastructure water management and erosion control components. It is crucial that these structures be stabilized, removed, replaced or repaired to prevent future costly damages to the road system, such as total loss of the road prism as a result of a culvert failure or landslide. In addition, as discussed above, a private residence along Cottonwood Creek immediately below the Forest Boundary and in the contiguous high and moderate severity Cottonwood Creek burn could be damaged by the stream power and debris generated from a culvert or fill failure of the FS Road. The following is a short summary of the damage and associated critical values and specific threats:

Undersized Culverts on Perennial Streams:

Risk is High.

One undersized culvert was identified on perennial streams. This included a 36” CMP on Wood Gulch, with moderate- to high-severity burning

The threat associated with undersized culverts is loss of access to Forest and private inholdings, as well as increased sediment loads associated with pipe “blowouts”. The threat associated with undersized culverts on perennial streams is obviously greatest, as these cannot easily be crossed in any season in the event of a washout, and there is more threat to fisheries; Cottonwood, North Fork Cottonwood, Warm Springs, Bar, Boulder, Cabin, Fall and Grays Creeks are fish-bearing streams containing native redband trout.

Undersized Culverts on Intermittent Streams:

Risk is High.

14 culverts that pass intermittent streams across the 50199 road were identified. All of these culverts are at high risk of failure due to the proximity to moderate and high severity burn above the crossings.

Undersized Crossdrain Culverts:

Risk is High.

Numerous cross drain culverts were found that are at high risk of failure due to increased flows and sedimentation post fire.

Safety Concerns from Falling Debris:

Risk is High.
It is expected that rollout and debris will continue to fall onto the road, inslope ditches, culvert inlet, and cutslopes throughout the winter, requiring removal of these hazards in the spring and at least through summer 2019. The fire on steep slopes has already caused rocks, debris ,and burnt snags to fall onto the road, inslope ditches, culvert inlets, and cutslopes. Removal of debris will protect public safety and maintain drainage features.

Road User Safety Concern

Risk is High.
Cottonwood Road will be closed at two locations, and a signs will be needed to explain to the public the hazards and the need for closure; this sign should remain in place even after road is reopened as a caution to the public.

Threats to NFS Trails

Risk is High.

Significant portions of two National Forest System (NFS) trails exist within the burned area: Trail 332, Sheep Creek, and Trail 203, “Warm Springs.” The lowest section (approximately 0.25 mi.) of Trail 332 lies on private land with an existing easement, consisting of a 10 ft. right of way and 0.16 acre parking area. In addition, the fire affected very small sections of NFS Trails 209 and 518 (0.11 and 0.14 mi., respectively). All 1.68 mi. of Trail 203 and 4.35 mi. of Trail 332 lie within the burned area.

Trail 332: This trail is a single track trail open to pedestrian, equestrian, bicycle, and motorcycle traffic. This trail includes the easement/private land section of 332. Approximately 500 ft. of this easement section is vulnerable to fairly severe erosion due to the suboptimal (fall line) trail alignment and existing erosion issues. Because rerouting this section is not an option due to land ownership and the existing easement right-of-way, past efforts have attempted to use wood check steps to address erosion. But trail users (particularly on motor bikes) have tended to ride around these creating a significant, erosive ditch in several places. Moreover the number of

check steps is not adequate given the trail pitch. With the loss of vegetation on adjacent land in this location significant erosion can be expected.

Other sections of Trail 332 generally lack drainage features though the grade and trail alignment are closer to standards, the trail is generally quite steep overall. This necessitates measures to address drainage and avoid erosion issues.

Failure to address the impacts of the Mesa Fire are likely to render portions these NFS trails impassable and unusable to both grazing permittees and the recreating public, as logs and debris block the trail and gullies and tread failures impede travel. This is also likely to create safety hazards for those attempting to use the trails, resulting in a dispersal of use from the trail prism, thereby amplifying the soil and erosion impacts created by cross-country travel and promoting the creation of unmanaged travel routes in the area. Future attempts to restore these trails to USFS standards will be disproportionately expensive if the preventative measures are not taken to reduce the effects expected from post fire events.

Besides deterioration of trail infrastructure, the presence of Trails 203 and 332 within the burned area is also likely to lead to additional erosion and sediment impacts to water quality and aquatic habitat in Sheep Creek and Warm Springs Creeks if erosion control measures are not implemented on the trails.

Impacts to trails 209 and 518 should be easily addressed through routine trail maintenance.

B. Emergency Treatment Objectives (narrative):

NOXIOUS WEEDS and LIVESTOCK GRAZING

a. Treat the known extent of weed populations within the fire area that are small enough to prevent expansion into adjacent areas of native plant communities within the fire perimeter. The purpose of the treatment is to maintain ecosystem integrity by treating known weed infested sites to prevent invasion within the burned area. By reducing the amount of weed seed in the area and treating new populations, native plant communities can have time to recover with less competition from non-native invasive plants. Rush skeletonweed and invasive thistles are already establishing in rosette stage in parts of the burned area. Depending on fall moisture and warmer temperatures some weeds (namely houndstongue, common mullein, rush skeleton weed and invasive thistles may have well-established growth with nutrients being routed to the root systems before freezing temperatures. This fall (September/October 2018) will be the most efficient time to treat these emerging populations of invasive weeds for maximum efficacy. Further treatment will be needed in late spring/early summer of 2019 to for spring germinating plants and new growth.

b. Exclude livestock grazing for at least one growing season to allow for proper vegetation recovery and to help prevent the spread of noxious weeds and new weed infestations. Livestock will have to move through some areas of the fire this fall on their way home. It will be important to move then through these areas as quickly as possible.

c. Monitor and treat fire lines, bulldozer lines, spike camps, and drop points, and susceptible burned areas for one year to prevent the expansion of State of Idaho listed

noxious weeds including rush skeletonweed, Canada thistle, houndstongue, spotted knapweed, Scotch thistle, field bindweed as well as invasive non-listed weeds include Bull thistle, Common mullein, common tansy, Sulphur cinquefoil and St. Johnswort.

ROADS

1. Road Treatment Objectives: Provide protection from loss of road prism along Forest Road #50199 (Cottonwood Creek Road). Cottonwood Creek Road will remain closed this winter. There is an alternate route to access FS lands east of the drainage, Forest Road 50165.

Exigency road work will be accomplished this fall.

a) Provide safety for users by installing road closure devices and entering burned area signs
b) Grade 50199 roadway to prevent road capture of increased runoff.
c) Clean ditches on 50199 to reduce the potential of cross drainage culverts plugging.
d) Reduce imminent hazards by removing hazardous downfall and rocks along road, in-slope ditch, and cut slopes of Cottonwood Creek Road.
e) Protect road template by installing 12-16 dips below culverts at all minor drainages and a large armored dip below Wood Gulch on the 50199.
f) Protect road template by installing 6-8 dips below culverts at minor drainages and below cross drains on 50591
g) Patrol and monitor the Cottonwood Creek and cabin creek road for expected rollout and removal of material blocking road drainage until winter closes the road and as soon as snow melts in the spring.

TRAILS

1. Trail Objectives: Provide clear and safe passage to emergency treatment sites for both crews and stock support for approved BAER treatments. Remove imminent safety hazards only around treatment sites. Reestablish proper drainage and water management structures to prevent further loss to the Wilderness transportation infrastructure that is expected from post-fire events.

Emergency trail work will be accomplished next spring and early summer prior to mid- and late-summer thunderstorms (excepting that trail burned area warning signs will be places as soon as possible).

h) Provide clear and safe passage for crews and stock along the trails to the BAER treatment sites. Clear trails impacted by fire of trees and rocks, repair drainage, and reconstruct tread only where needed to provide access to emergency treatment sites.

i) Replace and install water diversions structures to accommodate additional runoff and reduce potential for trail washouts prior to the spring runoff. This is particularly important on the 500 ft. section of trail 332 under easement.

j) Monitor effectiveness of emergency treatments after each damage-producing storm events and during the first snowmelt runoff.

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

Roads/Trails 80% **Protection/Safety** 95%

D. Probability of Treatment Success

	Years after Treatment		
	1	**3**	**5**
Roads/Trails	75	80	90
Protection/Safety	95	95	95

E. Cost of No-Action (Including Loss): Roads:$268,470; Trails: $141,441

F. Cost of Selected Alternative (Including Loss): Roads: $15,040; Trail $18,078

G. Skills Represented on Burned-Area Survey Team:

[X] Hydrology	**[X] Soils**	**[ ] Geology**	**[X] Range**
[ ] Forestry	**[ ] Wildlife**	**[ ] Fire Mgmt.**	**[X] Engineering**
[ ] Contracting	**[ ] Ecology**	**[X] Botany**	**[X] Archaeology**
[X] Fisheries	**[ ] Research**	**[ ] Landscape Arch**	**[X] GIS**

Team Leader: Melanie Vining

Email: mlvining@fs.fed.us **Phone**: 208-253-0131 **FAX**: 208-253-0109

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.)

TREATMENTS TO PROTECT ECOSYSTEM INTEGRITY FROM NOXIOUS WEEDS

Treat selected burned areas and fire-suppression damaged areas within or adjacent to source weed populations in the fall of 2018, spring of 2019, fall of 2019, to prevent the expansion of State of Idaho listed noxious weeds including rush skeletonweed, Canada thistle, houndstongue, spotted knapweed, Scotch thistle, field bindweed and invasive non-listed weeds including Bull thistle, Common mullein, common tansy, Sulphur cinquefoil and St. Johnswort.

Approximately 108 acres (25 miles of dozer line and 5 miles of handline with a buffer on either side) will be treated as part of EDRR/suppression repair weed mitigation, in addition to various

drop points and spike camps associated with suppression. Approximately 258 acres (30 miles of road and 3 miles of trail) will be treated in order to limit the spread of noxious weeds into native plant communities along this infrastructure within the fire perimeter.

Herbicide spraying will be with UTV-mounted sprayers or back pack sprayers for areas not accessible by vehicle. **For the initial BAER request we will be treating weeds this fall 2018, since recent green up and physiology for dormancy is the most effective time to treatment, and treat again in the late spring/early summer of 2019. If fall 2018 treatment is not possible, more extensive treatment in spring 2019 and possibly fall 2019 will be needed.**

TREATMENT TO PROTECT VEGETATION RECOVERY

Remove livestock grazing from the high soil burn severity areas (Cottonwood Creek, Wood Gulch, Cookhouse Gulch, Arbuckle Basin and portions of the Middle Fork of the Weiser River) for one grazing season, until approximately October 15, 2019. At this time, evaluate vegetation condition and recovery *to see if livestock grazing can resume or if additional rest is needed for another growing season*. The Forest botanist, soil scientist, and Zone range specialist would conduct a field visit in the spring of 2019 to determine this. This would allow native vegetation to recover and help prevent soil erosion and the spread of noxious weeds and new infestations.

ROAD TREATMENTS

1. **Install signage:**

Install closure devices on cottonwood creek road. Install entering burned area signs at 8 locations where major roads enter the burned area. These devices will notifiy the public of the hazards associated with burned areas reducing the potential for harm.

2. **Road Grading and Ditch Cleaning:**

Grade the surface of the 50199 roadway and clean the ditches. Doing this treatment will reduce the likelyhood of the road surface eroding due to the anticipated increased runnoff flowing on the road surface. Cleaning the ditches will allow for the more efficient transportation of the increased runnoff anticipated. Cleaning the ditches will have the secondary effect of decreasing the risk of cross drain culverts plugging during storm events.

3. **Rock Rollout and Fallen Snag Clean up:**

Remove rocks, sediment, and burnt snags that fall onto the road, inslope ditches, culvert inlet, and cutslopes. Use backhoe/loader and dump truck to haul to designated diposal site. This treatment will prevent ditches from plugging and reduce the likelyhood of the roadway catching significant post fire flows.

4. **Install Dips in 50199 and 50591.**

Install rolling dips in the roadway on the 50199 and 50591. These dips will be situated such that they will divert any water that reaches the roadway. They will be installed below small drainages the will experience an increased likelyhood of debris flows or greatly increased runoff. If the culverts located in these drainages are inadequate for the flows or become plugged due to debris the rolling dips will direct the flows off of the roadway. This action will limit any damage to the subject roads to small segments of road rather than long segments reducing the amount of sediment delivered to nearby waters and decrease the cost of any necessary repairs.

5. Monitoring Patrols:

Maintain regular patrol to monitor and remove hazards that will continue to fall onto the road, inslope ditches, culvert inlet, and cutslopes until snow closes the road and as soon as snow melts in the spring. This treatment will ensure that the roadway will have the best possible chance to weather significant storms by ensuring all drainage features are operatable

TRAIL TREATMENTS

1. Remove rocks, debris slides, and burnt snags that have fallen onto or across trails only where needed to access approved BAER treatment sites:

This is to allow safe access for BAER treatment crews and to remove standing snags that pose a safety risk to crewmembers immediately adjacent to treatment sites.

1. Stabilize tread and provide for surface drainage:

Control surface water in areas where there is a high likelihood of runoff damage to trails 203 and 332.

Work to stabilize tread and cut and fill slopes and provide proper outsloping will be necessary for proper runoff control. Install drainage structures as necessary to increase the ability to respond to increased runoff patterns. Clean any existing and undamaged drainage structures to ensure capacity to respond to increased runoff patterns. Repair or replace any damaged water drainage structures. Remove down logs, rock fall, and debris that may create hazardous conditions for BAER treatment crews around treatment sites.

The steep 500 ft. section of trail 332 on private land under easement will require more intensive treatment to protect the trail managed by the FS on private land. This will involve installation of approximately 25-30 pressure treated 6x6 8 ft. timbers. These will be graded off the fall line in alternating directions to divert water without channeling it into existing gullies. These gullies to be filled in and mulched/slashed with material from down slope where brush exists along Middle Fork Weiser River Road.

2. Provide for public safety over the long term:

Three warning signs will be installed (with one extra in case of vandalism). These will use the following text:
"Warning: This trail enters a burned area – expect hazards such as falling trees and unstable trail tread" (see photo).

Signs will be placed at the following locations:
- Trailheads for trails 203 and 332 along Middle Fork Weiser River Road
- Trail 203 where it enters the burned area

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.)

Monitor fire lines, bulldozer lines, treatment sites, and susceptible burned areas for three years (one year BAER-funded) to prevent the expansion of rush skeletonweed, Scotch thistle, spotted knapweed, Canada thistle, and houndstongue.

Monitor rangeland for one to three seasons to determine when native vegetation has recovered sufficiently for grazing to be permitted again. Non-BAER.

Monitor effectiveness of road stabilization/drainage measures to determine when objectives are achieved and no additional stabilization is needed to protect life and property from the effects of the fire.

Updated EDRR Information in Blue

Part VI – Emergency Stabilization Treatments and Source of Funds, Update 9/12/2018

			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 Spraying- suppression repair (25 mi dozer lines, 5 mi handline, drop points)	acres	100	108	$10,800						$10,800
Weed Spraying- Protection of native plant communities (30 mi road, 3 mi trail in fire perimeter)	acres	100	258	$25,800	$0		$0		$0	$25,800
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Land Treatments				$36,600	$0		$0		$0	$36,600
B. Channel Treatments										
None proposed				$0	$0		$0		$0	$0
				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Channel Treat.				$0	$0		$0		$0	$0
C. Road and Trails										
Driveable Dips	each	370	13	$5,200	$0		$0		$0	$5,200
Other Surface Drainage Work	each	7840	1	$7,840	$0		$0		$0	$7,840
Storm Patrol	each	1000	2	$2,000	$0		$0		$0	$2,000
ICC Crew for trail rehab	each	6500	1	$13,000	$0		$0		$0	$13,000
Pressure treated 6x6x8	each	28.72	30	$862	$0		$0		$0	$862
Rebar	each	2.6	60	$156	$0		$0		$0	$156
Copper napthanate	each	15	4	$60	$0		$0		$0	$60
Force Account Trail Crew	days	400	10	$4,000	$0				$0	$4,000
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Road & Trails				$33,118	$0		$0		$0	$33,118
D. Protection/Safety										
Trail Warning Signs	each	43.5	4	$174	$0		$0		$0	$174
Road Warning Sign	each	150	1	$150	$0		$0		$0	$150
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Structures				$324	$0		$0		$0	$324
E. BAER Evaluation										
Initial BAER Report	*each*	*1*	*6000*	*$0*	*$6,000*		*$0*		*$0*	*$6,000*
Insert new items above this line!				---	$0		$0		$0	$0
Subtotal Evaluation				---	$6,000		$0		$0	
F. Monitoring										
Noxious Weeds	days	300	10	$3,000			$0		$0	$3,000
Cattle presence in severely burned areas (2019 season)										
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Monitoring				$3,000	$0		$0		$0	$3,000
G. Totals				$73,042	$6,000		**$0**		**$0**	**$73,042**
Previously approved				$36,442						
Total for this request				$36,600						

PART VII - APPROVALS

/s/ Keith B. Lannom

1. _____ _____
Forest Supervisor (signature) Date

2. _____ _____
Regional Forester (signature) Date

Nora B. Rasure