Date of Report: 07/26/2019

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: Skull Flat

B. Fire Number: UT-FIF-190067

C. State: Utah

D. County: Beaver

E. Region: 4

F. Forest: Fishlake National Forest

G. District: Beaver

H. Fire Incident Job Code: P4MB3G19 (0408)

I. Date Fire Started: June 18, 2019

J. Date Fire Contained: Anticipated 10/1/2019

K. Suppression Cost: $1,581,600 as of July 24, 2019.

L. Fire Suppression Damages Repaired with Suppression Funds
1. **Fireline waterbarred (miles)**: 2.1 miles
2. **Fireline seeded (miles):** 0 miles of fireline seeded but drop points and staging areas were reseeded for approximately 5 acres.
3. **Other (identify):**

M. Watershed Number: 160300070207 Johnson Hollow Beaver River (1,497 acres), 160300070204 East Fork Iant Creek-Beaver River (129 acres). (HUC6)

N. Total Acres Burned: 1,630 Acres (final fire perimeter) National Forest System (100%)

O. Vegetation Types: Mountain Mahogany (287 acres), Mixed Conifer—Ponderosa/White Fir/Douglas Fir (64 acres), Aspen—Seral/Stable (1250 acres), Perennial Grasses (23 acres), Spruce-Fir (1 acre).

P. Dominant Soils: Tmv-Miocene Volcanic rocks-undivided. Much of the area consists of loamy and clayey soils derived from igneous rocks such as latite, andesite and basalt; other areas have sandy soils formed from acidic igneous rocks called volcanic tuff and rhyolite. While the remaining areas were developed in mixed sediments of alluvium and colluvium. Severely burned soils formed from latite, andesite or basalt are subject to flooding hazards and debris flows; severely burned soils formed in volcanic tuff or rhyolite are subject to flooding hazards and mudslides.

Soil Map Symbol:
112 Mixed Volcanics (colluvium), Argic Pachic Cryoborolls/ Mollic Cryoboralfs --4% of fire perimeter
126 Mixed Alluvium, Argic Pachic Cryoborolls--7% of fire perimeter
195 Quartzite-volcanics, benches and canyon walls, Mollic Cryoboralfs—19% of fire perimeter
122 (Lithic Cryoborolls), 131 and 132 (Mollic Cryoboralfs), 165 (Mollic Cryoboralfs/ montmorillonitic Mollic Cryoboralfs), 208 (montomorillonitic Argic Cryoborolls); Mixed Volcanics benches, hillsides and mountain sides-70% of fire perimeter

Q. Geologic Types: Tmv - Miocene volcanic rocks, undivided (1,620 acres),

R. Miles of Stream Channels: Perennial – 2.9 miles; Intermittent – 1.3 miles

S. Transportation System
Trails: 4.0 miles **Roads:** .01 miles

PART III - WATERSHED CONDITION

A. Burn Severity: U**nburned** – 115 acres (7%); **low** – (41%); **moderate –** 389 acres (24%); **high –** 458 acres (28%)

B. Water-Repellent Soil (acres): 652 (40%)

C. Soil Erosion Hazard Rating (acres): Low 987, Moderate 212, High 427

D. Erosion Potential: 3.2 tons/acre

E. Sediment Potential: 1,504 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years):	5
B. Design Chance of Success, (percent):	70%
C. Equivalent Design Recurrence Interval, (years):	10
D. Design Storm Duration, (hours):	1.0
E. Design Storm Magnitude, (inches):	1.41
F. Design Flow, (cubic feet / second/ square mile):	11.0
G. Estimated Reduction in Infiltration, (percent):	50%

H. Adjusted Design Flow, (cfs per square mile): 23.0

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats:

SKULL FLAT WILDFIRE

BAER / CRITICAL VALUES-AT-RISK SUMMARY TABLE

The lightning caused Skull Flat Fire was discovered June 18, 2019 in the South Fork of Baker Canyon. With previous fuels treatments to the west and northeast of the fire and the Twitchell Fire burn scar to the north, fire managers opted to allow fire to return to the ecosystem where possible and where it was safe to do so. The safest way to implement the decision required line construction along ridgelines and then burning off the vegetation between the fireline and main fire. There are still areas with interior heat and minor runs and flare-ups will continue until a season ending weather event occurs on the fire. The northwest facing slopes mainly consiting of mixed conifer burned the hottest and water repellent soils are present on these slopes. Field work by the BAER team has identified the following critical values and level of associated risk to loss or damage:

- Human life and safety for forest users – High Risk
- Human life and safety for users on State Highway 153 – Very High Risk
- Forest road infrastructure FR-122 FR-470– High Risk
- Municipal Water Supply Lines – Very High Risk
- State Highway 153 – Intermediate Risk
- Forest trail infrastructure – Very High Risk
- Livestock improvements – Low Risk
- Municipal Water Quality and Availability – High Risk
- Agricultural Water Quality and Availability – Low
- USGS stream gauge – Low
- NOAA weather station – Low
- Soil productivity – Very High Risk
- Hydrologic function – Very High Risk
- Native or naturalized plant communities – High Risk
- Cultural and heritage resources – Low Risk

HUMAN LIFE AND SAFETY

Human Life and Safety on NFS lands.

Users of NFS Transportation System (Roads and Trails) –FR 470 and FR 122 access the burn area and are downstream from the fire burn scar. South Baker Canyon is narrow with the stream located two feet below the road base in several areas. There are a few dispersed camping sites on these roads. Access to the top end of the fire is possible on a network of roads that start off of State Highway 153 at Merchant Valley. Recreationists, ranchers, Beaver City water system administrators, and big game hunters are potential users of the road and trail network. It is possible that someone is on the road or trail system when a rain event occurs with potential for major consequences associated with flash flooding or a tree strike within and downstream from the burn area – Possible Probability of Damage or Loss / Major Consequences… **HIGH RISK**

Human Life and Safety on lands other than NFS.

Users of State Road 153 – While not technically a critical BAER value as per FSM 2523.1, the possibility of ash and/or debris plugging the culvert on highway 153 and sending water and debris over the road is likely, with potential for major consequences for human health and safety through a vehicle accident. – Likely Probability of Damage or Loss/ Major Consequences… **VERY HIGH RISK**

PROPERTY

Buildings, water systems, utility systems, road and trail prisms, residences, ponds, dams, wells or other significant investments on NFS lands.

Forest Roads 122 and 470 –The lower end of FR122 below the confluence of North and South Baker Canyons is at risk to washout due to the road being connected to the stream channel in several locations. FR 470 which follows South Baker Canyon drainage has more opportunities for washouts and some were occurring during the assessment. The road crosses the stream in several places with less than a foot of rise needed from the stream to come out of the channel and run down the road. The water line from municipal springs runs down the road and is likely to be damaged by a flood event. - Likely Probability of Damage or Loss / Moderate Consequences… **HIGH RISK**

Municipal Water Supply Lines – The water supply line is buried in the roadbed on FR470 in South Baker Canyon. As mentioned in the previous paragraph, it is likely that this road will wash out and the pipeline will be exposed and potentially broken which would contaminate the water supply and potentially plug the pipeline with ash and other debris. Likely Probability of Damage or Loss / Major Consequences… **VERY HIGH RISK**

Forest Trails – 2.5 miles of non-motorized trails are at risk from debris flows and accelerated erosion rates associated with rain events on high burn severity areas of the fire upslope from the trail network. Loss of trail tread and user access is very likely with moderate consequences. Effects to trail surfaces from erosion will remain for 2 to 4 years until soils stabilize. – Very Likely Probability of Damage or Loss / Moderate Consequences… **VERY HIGH RISK**

Livestock management improvements (spring exclosures, boundary, allotment, and pasture fences, cattle guards) – Approximately 0.6 miles of livestock management fences are within the burn perimeter which are subject to damage and loss from flooding and burned vegetation falling on the lines . - Very Likely Probability of Damage or Loss / Minor Consequences… **LOW RISK**

NOAA Weather Station and USGS Stream Gauge – Downstream on the Beaver River, on NFS lands, the USGS and NOAA have a stream gauge and weather station adjacent to each other. The fact that the river is wide at this location and the Beaver River has experienced high flows in the past with no apparent damage to either improvement there appears to be low risk associated with these improvements - Unlikely Probability of Damage or Loss / Minor Consequences… **VERY LOW RISK**

Property at Risk off NFS Lands

State Highway 153 downstream from NFS lands – There is potential to impact highway 153 if the culvert plugs and sends water over the road or scours out the roadbase under the highway. – Possible Probability of Damage or Loss / Intermediate Consequences… **HIGH RISK**

NATURAL RESOURCES

Soil Productivity - Potential loss of soil due to post fire runoff events. Following the wildfire, erosive conditions exist due to the burning of ground cover, coarse woody debris and soil subsurface organic material. Loss of topsoil negatively affects ecological function for:

- native seed bank and native species recovery
- root growth and soil stability

With BARC imagery and on the ground assessments and verification the BAER team concluded that 52% of this incident burned at moderate to high severity. Approximately 458 acres were mapped as high burn severity and 389 acres burned at moderate severity. The lack of ground cover and hydrophobic soils will likely increase surface runoff, flooding, and erosion during typical summer monsoon rain events. – Very Likely Probability of Damage or Loss/ Moderate Consequences… **VERY HIGH RISK**

Hydrologic function on burned NFS lands – An adverse change to hydrologic function is expected due to contiguous areas burned at moderate and high severity. According to ERMIT model runs, 3.2 tons per acre of sediment delivery is possible during the first year following the fire.- Very Likely Probability of Damage or Loss/ Moderate Consequences … **VERY HIGH RISK**

Native or naturalized plant communities on NFS land where invasive species or noxious weeds are absent or present in only minor amounts - The naturalized plant community that existed prior to the fire contained a mix of native and non-native grass species. The mixed conifer, oak, and mahogany dominated areas of the fire had a minimal herbaceous understory. Opportunities for reseeding from existing populations of grasses and forbs are limited in these areas which were also the areas that burned at high and moderate intensities. The majority of the fire area is currently **noxious weed free**. There is a very high risk of cheatgrass spread into the burn because of the inherent dry nature of the area and surrounding proliferation of cheatgrass in untreated areas near the fire. The aggressive nature of this invasive species adds to the high potential to spread further into the fire area especially where pre-burn vegetation understory was limited. Also, it is possible that equipment used during suppression activities transported noxious and/or invasive weed species into the area. Areas that were prepped for contingency lines, roads, parking areas, drop points and spike camps are areas of primary concern for introduction. The adjacent populations of noxious weeds have a high potential to spread further into the fire area. - Very Likely Probability of Damage or Loss / Moderate Consequences …**VERY HIGH RISK**

CULTURAL AND HERITAGE RESOURCES

Cultural resources on NFS lands which are listed on or potentially eligible for the National Register of Historic Places. – A review of Forest Service databases indicated there were no known Class I (Eligible) resources, no known Class II (Unevaluated) resources, and one Class III (Ineligible) resources within the Area of Potential Effect. The structure is in an area of low burn severity and no treatments are recommended for protection. - Possible Probability of Damage or Loss / Minor Consequences… **LOW**

C. Probability of Completing Emergency Stabilization Treatments Prior to a Storm Damaging Event:

Land	**70 %**	**Channel**	**NA**	**Roads / Trails**	**85 %**	**Protection / Safety**	**90 %**

D. Probability of Treatment Success: (on NFS lands)

Treatment Types:	← Years After Treatment →		
	1	3	5
Land Treatments (seeding and mulching)	75%	80%	85%
Channel Treatments (None)	NA	NA	NA
Road / Trail Treatments (drainage)	85 %	85 %	85 %
Protection / Safety Treatments (signs)	90 %	90 %	90 %

E. The Cost of Taking No - Action: $ 202,300

Monetary analysis of the cost of taking no action considered loss of and effects to; road and trail infrastructure, conversion of native or naturalized plant communities to invasive/noxious weedy species, and replacement and loss of use costs for key infrastructure associated with the water system for Beaver City. Further effects were considered to human life and safety and possible property damage while on NFS lands. While still extremely valuable, monetary values were not considered in the cost of taking no action, for hydrologic function, soil productivity, off forest infrastructure, and human life and safety on state roads. Cost estimates were obtained through consultation with Forest Service engineers, hydrologists, soil scientists, botanists, ecologists, and include repair/reconstruction costs and where appropriate replacement costs.

F. The Cost of the Selected Alternative: $ 53,887 (including loss)

Values-At-Risk: See VAR Spreadsheet

G. Skills Represented on Burned-Area Survey Team:

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

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H. Treatment Narratives: Describe the emergency treatments, where and how they will be applied-and, what they are intended to do. This information helps to determine qualifiying treatments for the appropriate funding authorities. For seeding treatments include species, application rates and species selection rationale.

LAND TREATMENTS

Broadcast Seeding

Findings
The initial assessment of the burned area and its surrounding landscape identified risks to the **Native or naturalized plant communities on NFS land where invasive species or noxious weeds are absent or present in only minor amounts**. Soil stabilization and invasive/noxious weed exclusion are the main objectives of the proposed treatment.

Risk 1- Threat of expanding infestations of noxious weeds:
The adjacent landscape, as well as trail corridors within the fire, contain undesirable plant species. There is a high probability of rapid invasion and/or expansion of noxious weeds and other invasive, undesirable species in and around the burned area. The main concern would be from the lower elevation to the west and north. Because of the proximity to existing populations of invasive species and the potential for noxious weed vectors into the burn the entire area is prone to infestation. Burn areas on this part of the Fishlake National Forest are highly susceptible to Cheatgrass invasion if left untreated. Recent publications have shown that seeding with perennial bunchgrasses has been successful at competitively excluding Cheatgrass (JFSP Project ID: 15-2-01-22).
The restoration that would be recommended if the burn area is converted to an undesirable annual grass system is similar to the treatments the BAER team is requesting post fire. However, the cost to restore this system, once Cheatgrass is established, exceeds the proposed post fire treatment because of the added cost to chemically remove it. That cost is estimated to be approximately $35,000 more than the seeding proposed below.

Fig 1. Cheatgrass established post fire in the Twitchell Burn elevation 8500'. These areas were not seeded.

Risk 2 – Soil Erosion and loss: Utilization of cereal grains and perennial grasses will stabilize hillslopes and augment revegetation where seed sources are limited due to the pre-burn conditions of a limited understory. The Forest has experienced success with stabilizing hillslopes with past seeding treatments i.e. Sawmill and Clay Springs fires with perennial grass seed mixes.

Monitoring data from past BAER seeding treatments on the Forest, both qualitative and quantitative, supports the recommendation of seeding as an effective year 1 treatment for soil stabilization and noxious weed prevention.

- Year 1 results on the Sawmill BAER reseeding. Seeded in April of 2010, first reading in June of 2010 – 31% ground cover. Second reading July of 2010 – 53% ground cover. In 2011 the plots recorded 65% ground cover all from an increase in vegetation and litter (Tait 2015)
- Year 1 results on the Clay Springs BAER reseeding. Seeded in the fall of 2013 with native and non-native grasses. Qualitative estimates of 50-70% ground cover observed.

Proposed Treatments

For these reasons, we propose a seeding of 15 lbs. per acre with a combination seed mix of native grass and cereal grain species that are intended to supplement the post fire response of the existing plant species and compete well with noxious weeds. The seeding will take place by means of an aerially broadcast.seed mix. This seeding, should counter the potential establishment, and spread of noxious weeds and invasive species. The burned area is somewhat free of noxious weeds, specifically in the mixed conifer area of the fire but there is a presence of cheatgrass within the understory of the curleaf mahogany stands within the burn as witnessed when ground truthing the burned area. The area is also on the receiving edge of noxious weeds coming in from all directions, specifically the west and north which are the lower elevations. The burn area will require use of an early detection/rapid response strategy with the noxious weed program for several years.

The recommended seed mix is "of species known to be effective for erosion control, adapted to the target area and compatible with future management objectives". (FSH 2509.13,20 p. 13) The seed mix consists of native species and cereal grain to help restore ecosystem function by reducing erosion with the early germinating cereal grains and protecting against the invasion of noxious weeds through the establishment of native grasses. The seed list also contains species that compete very well with cheatgrass and when established hold their own against weedy invaders.

The seed purchased will be certified to the variety claimed. Also the mix will be certified that No noxious weed seeds are present. Actual costs may vary depending on availability at time of purchase from successful bidder.

The following table shows the pounds per acre that is used in the seed mix.

	Application-lbs./acre	Cost per pound	Cost/ acre Estimate
Sandberg Bluegrass	1.5	5.68	8.52
Western Wheatgrass	1.5	3.39	5.08
Winter Wheat	10	0.35	3.50
Mountain brome	2	2.29	4.58
Total	15		21.68
514 acres to treat			11,143.52

This seed mix includes the recommendations of District and Forest Specialists. We referred to seed mixes previously used on the Forest and the Intermountain Planting guide, from Utah State University Cooperative extension Service, while designing these seed mixes to achieve the FSM objectives listed above.

The seeding is being pursued as a partnership project with the state of UT. Opportunities to utilize available seed from the state seed warehouse in Ephraim as well as other sources are being considered.

Aerial Seeding Monitoring
Implementation monitoring of the seeding application will include inspections of the seed distribution by known area markers on the ground to verify adequate seed density/sq. ft. With ideal conditions this seed mix would distribute over 40 live seeds per square foot over the burn area.
Adequate winter or spring moisture will be key to the success of the aerial seeding treatment. It will be important to monitor the establishment of seeded species during the 2020 growing season.

Noxious Weed Monitoring and Spot Treatment

The Beaver Ranger District weed crew will implement this strategy in 2020 and 2021 to detect and treat any new infestations of noxious weeds in the burned area. In addition to ensure noxious weed populations do not spread into the burned area, work needs to be completed to monitor, detect, and treat any new weed infestations brought in from the outside perimeter.
The treatment provides for a weed crew to monitor a 20-foot buffered area along the existing trail network within the burn. There are just over 4.1 miles of trails within the burn. In total 15 acres will be monitored and treated as needed.

Storm Patrols

Following large storm events or as reports are received about debris flows on roads and trails Forest staff will patrol the area and address the problem. This may involve equipment use to grade road surfaces for proper drainage and reinforce water-bars. Additionally, staff will make recommendations for interim BAER funding requests that may be needed.

ROAD AND TRAIL TREATMENTS

Road Stabilization

Purpose of Treatment: To protect the road infrastructre from erosion damage by ensuring proper drainage through installing culverts and ditching to direct water off the road surface, installing rolling dips at low crossings, installing waterbars and adequate run out areas to reduce or eliminate the possibility of the road becoming a channel.

General Description: Cleanout culverts at 3 sites where fire affected drainages cross forest system roads. Install waterbars and runout areas on roads that are within or will be directly affected by flood flows below the burned areas. Install rolling dips below stream crossings on South Baker Creek Road to put water that will likely be diverted on the road back into the channel to minimize road gully formation and to maintain municipal water pipelines in the road. These roads are susceptible to increased erosion as they are within the riparian corridor below the fire perimeter and in a few cases the road is functioning as stream banks. Roads will not be altered to a higher improvement maintenance level. Cleanout debris from around forded crossings along SF Baker Creek Road to prevent the road from intercepting the streamflow.

Location (Suitable) Sites: 3 culvert locations are to be cleaned out. One just below the upper most spring that is 0.1 miles below the fire perimeter, one below the confluence with Jimmy Reed Creek and where a dispersed camp site is located (two culverts actually at this site), and one at the junction with Hwy 153. There is about 9 crossings on the SF Baker Creek Road. 7 of these will likely need to have rolling dips installed below the crossings and a couple will need to have some earth work and armoring using rock or

logs from onsite done to build up the bank to keep the road from intercepting the stream due to elevated flows because of the fire. 2 forded crossings intercept at nearly a 90 degree angle and consequently no additional work is needed at these stream crossings.

Trail Stabilization

Purpose of Treatment: Grade dips, and waterbars will divert water off of the trail preventing erosion and debris flows from degrading the trail. These methods will keep the trail from becoming a stream channel and prevent the loss of the trail network. These methods apply to motorized and non-motorized trails.

General Description: Install drainage structures to prevent erosion, mass wasting and mud flows that are predicted to occur, or that have occurred, following the burn. Motorized trails would be treated with a SWECO trail cat/dozer to construct adequate waterbars and grade dips. Non-motorized trails will be treated with handcrews. These measures would reduce the risk to trail infrastructure.

Location (Suitable) Sites: Locate drainage structures along 3.0 miles of non-motorized within the fire perimeter that are adjacent to or will be influenced by overland flows off of water repellant soils. (see Trail Treatments Map).

PROTECTION AND SAFETY MEASURES

Road and Trail Burned Area Warning Signs

Purpose of Treatment: The purpose of the BURNED-AREA signs is to warn the public of potential hazards resulting from the effects of the fire, such as rolling rocks, falling trees, road washouts, and flash floods.

General Description: This treatment is for the installation of burned-area warning signs and no camping signs. Burned-area signs consist of a warning to the public identifying of the possible dangers associated with a burned-area. It shall contain language listing items to be aware of when entering a burn area such as falling trees and limbs, rolling rocks, and flash floods.

Location (Suitable) Sites: These signs shall be installed at all entries into the fire perimeter and at dispersed camping spots on FR122 and Forest Admin Road 470. The location of these signs shall be along roads and trails that access the burned area (7 signs in total). All signs will be placed facing the direction of travel entering the burn area.

Implementation Monitoring:

Determine if the following proposed treatments were implemented as outlined in the BAER report:

- **Broadcast Seeding:** Are the seed mixtures applied to the intended sites with the proper rates of application?
- **Explanatory Signs:** Are the signs installed at the designated locations with the intended messages? Are the signs clear and legible? Was the installation timely? Did costs approximate budgeted allocations?
- **Road and Trail:** Are drainage structures installed correctly? Were culverts cleaned and are grade dips and water bars functioning properly?

I. Effectiveness 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.

Interim Evaluations

The Implementation Team Leader will conduct periodic evaluations with the District and Forest / Implementation Team to assess implementation progress, effectiveness monitoring and to determine if parameters measured and sampling frequency meet the planned objectives. The BAER team understands that monitoring funds could be available for effectiveness monitoring in years 2 and 3 provided that the Fishlake National Forest submits interim reports to request additional funding and provided that the Forest documents and shares their findings.

Monitoring Reports

The overall results will be presented in a detailed summary report during 2019. This report will be submitted to the Forest Supervisor, District Rangers, the Regional Office and all cooperating agencies and other interested parties.

Annual Financial Requirements

Report cost of monitoring by year.

Part VI – Emergency Stabilization Treatments and Source of Funds

A. Land Treatments										
Seed Purchase	acres	37	514	$19,064	$0		$0		$0	$19,064
Aerial Application	acres	20	514	$10,280	$0		$0		$0	$10,280
Weed Treatment-ac	acres	295.5	20	$5,910	$0		$0		$0	$5,910
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Land Treatments				$35,254	$0		$0		$0	$35,254
B. Channel Treatments										
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Channel Treat.				$0	$0		$0		$0	$0
C. Road and Trails										
Trail Drainage-mile	mile	1553	3	$4,659	$0		$0		$0	$4,659
Road Drainage - mile	mile	5625	1.6	$9,000	$0		$0		$0	$9,000
Warning Signs	each	282	7	$1,974	$0		$0		$0	$1,974
		0	0	$0			$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Road & Trails				$15,633	$0		$0		$0	$15,633
D. Protection/Safety										
	0	0	0	$0	$0		$0		$0	$0
Storm Patrol	Job	3000	1	$3,000	$0		$0		$0	$3,000
				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Structures				$3,000	$0		$0		$0	$3,000
E. BAER Evaluation										
Asess. & Report	1	10,000	1	$10,000			$0		$0	$10,000
Insert new items above this line!				---	$0		$0		$0	$0
Subtotal Evaluation				$10,000	$0		$0		$0	$10,000
F. Monitoring										
monitoring plan	Job	0	0	$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Monitoring				$0	$0		$0		$0	$0
G. Totals				$53,887	$0		**$0**		**$0**	**$53,887**
Previously approved										
Total for this request				**$53,887**						

PART VII - APPROVALS

1. */s/* 08/02/19
   Forest Supervisor (signature) Date

2. /s/Nora Rasure 8/14/2019
   Regional Forester (signature) Date