Date of Report: July 7, 2021

BURNED-AREA REPORT

PART I - TYPE OF REQUEST

A. Type of Report

☒ 1. Funding request for estimated emergency stabilization funds

☐ 2. No Treatment Recommendation

B. Type of Action

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

☐ 2. Interim Request #___

☐ Updating the initial funding request based on more accurate site data or design analysis

PART II - BURNED-AREA DESCRIPTION

A. Fire Name: Bennion Creek

B. Fire Number: UT-MLF-000115

C. State: UT

D. County: Utah and Carbon

E. Region: 4 - Intermountain

F. Forest: Manti-La Sal

G. District: Ferron-Price

H. Fire Incident Job Code: P4 N17L (0410)

I. Date Fire Started: June 4, 2021

J. Date Fire Contained: July 21, 2021

K. Suppression Cost: $6,578,625 (July 3, 2021)

L. Fire Suppression Damages Repaired with Suppression Funds (estimates):

1. **Fireline repaired (miles): 6.73 (on NFS lands)**
2. **Other (identify): N/A**

M. Watershed Numbers:

Table 1: Acres Burned by Watershed

HUC #	Watershed Name	Total Acres	Acres Burned	% of Watershed Burned
160202020101	Starvation Creek	25,425	8,399	33%
140600070205	Pontown Creek – Fish Creek	17,064	2	<1%
140600070204	Dry Valley – Lost Creek	11,333	18	<1%

N. Total Acres Burned:

Table 2: Total Acres Burned by Ownership

OWNERSHIP	ACRES
NFS	5,282

OWNERSHIP	ACRES
OTHER FEDERAL (LIST AGENCY AND ACRES)	BLM: 64
STATE	1,636
PRIVATE	1,437
TOTAL	**8,419**

O. Vegetation Types: Gambel oak, quaking aspen, mixed conifer forest, and sage-steppe along with live oak on the drier sites.

P. Dominant Soils: Typic Palecryolls (42%), Typic Argicryolls (15%), Pachic Argicryolls (14%), Typic Argixerolls (12%), smectitic Pachic Argicryolls (3%).

Q. Geologic Types: The forest service boundary line parallels a north trending fault which separates the montane portion of the fire from low hills and plateau areas (Witkind and Weiss 1991, Figure 1). The fault marks the stark transition where mountainous terrain begins abruptly. The fault separates a convergence of the North Horn Formation (Kkn) to the west, Castlegate to the east, and Blackhawk (Kbh) that slivers out to the south that encompasses the lower portions of Kelly and Starvation Creek (Figure 1). A fault runs along lower Starvation Creek that hems in the Castlegate sandstone. The stark changes in valley shape directly correlate to these changes in bedrock formation.

A general trend developed where the bedrock dips to the west and slightly north at 16 degrees forming escarpments that define the canyons in Bennion Creek, Kelly Creek and upper Starvation Creek. The escarpments align with warm facing slopes creating dry difficult drying conditions. Whereas on north to west facing slopes the bedrock dips allow for the deeper aggregation of slope material and dendritic drainage with concave draws. This composition affects watershed development and erosion. The deep mantled areas have more storage with more slope material while the escarpment sides shed water efficiently and quickly. The North Horn sedimentary rock formation in particular is known for instability from slumps and landslides in general (Witkind and Weiss 1991). These mantled slopes would be the most prone to slump and failure in reaction to the fire.

R. Miles of Stream Channels by Order or Class:

Table 3: Miles of Stream Channels by Order or Class

STREAM TYPE	MILES OF STREAM
PERRENIAL	10
INTERMITTENT	22
EPHEMERAL	
OTHER (DEFINE)	<0.1 (Artificial Path)

S. Transportation System:
Trails: *National Forest (miles):* 1.42 *Other (miles):*
Roads: *National Forest (miles):* 1.04 *Other (miles):*

PART III - WATERSHED CONDITION

A. Burn Severity (acres):

Table 4: Burn Severity Acres by Ownership

Soil Burn Severity	NFS	Other Federal (BLM)	State	Private	Total	% within the Fire Perimeter
Unburned	818	9	108	389	1,325	16
Low	1,553	47	1,083	728	3,412	41
Moderate	2,410	8	442	313	3,173	38
High	500	0	2	7	509	6

Soil Burn Severity	NFS	Other Federal (BLM)	State	Private	Total	% within the Fire Perimeter
Total	5,282	64	1,636	1,437	8,419	100

B. Water-Repellent Soil (acres): 3,681

C. Soil Erosion Hazard Rating: Low: 3,531; Moderate: 1,508; High: 1,239

D. Erosion Potential: Erosion in the fire centered on high and moderate burn severity slopes where steep, existing soil mantel, and especially on south to southeast slopes. Given that year to year thunderstorms are common, some level of soil erosion is expected. Surface erosion will generate as sheet, rill, and gullies. Mixed conifer forest as well as the upper reaches of south slopes, and along the base of rock outcrop where water concentrates are most likely for soil erosion.

Mass erosion that results in landslide and debris flow is also expected. These events would mirror what has taken place in Cole Hollow, the wildfire that burned just to the north in 2018. The Bennion fire has similar unstable geology in the upper watersheds, steep slopes, and has prevalent moderate and high soil burn severity condition on side slopes. Furthermore, monsoonal storms are common and of sufficient storm intensity (2yr) to trigger debris flows. The most likely event would be a debris flow in the central channels over the near term of 3 to 5 years as these watersheds stabilize. The USGS debris flow model showed that all drainages within the fire perimeter south of Bennion Creek drainage have very high (80-100%) to high (60-80%) probability for debris flow. Bennion Creek itself has the upper quarter part of the watershed that did not burn; however, most of the lower drainage and side channels have high to very high risk for triggering debris flow.

Debris flows range from a bulked sediment flow with entrained rock and debris and grade down to hyper concentrated flow of mud and water. Theses flows may be fed from runoff concentrating in upper catchments but normally propagate with material in central channels. They follow channel paths and can avulse where channel grade changes, normally fanning out by size of material.

E. Sediment Potential: The potential for sediment to Bennion Creek and Starvation Creek is very high given the proximity of moderate and high soil burn severity slopes adjacent to these drainages. Water will erode and deposit hillslope sediment that is likely to reach Bennion Creek. However, sediment transmission into Starvation Creek is less direct and will depend on storm intensity. Initial ashflow was observed that reached Starvation Creek from a moderately intense thunderstorm.

F. Estimated Vegetative Recovery Period (years): 3-5 years for Gambel oak and quaking aspen; 3-5 years for mixed conifer with herbland stabilizing and 20-25 years for forest species to take hold.

G. Estimated Hydrologic Response (brief description): The primary watershed responses of the Bennion Creek fire are expected to include: 1) an initial flush of ash and debris, 2) rill and gully erosion on steep slopes within the burned area, and 3) potential flash floods and debris flows during short duration, high intensity precipitation events. The steepness of the topography, combined with the loss of vegetation and groundcover, will likely create increased overland flow and erosion during storm events. Fairly common rain events could now trigger floods or debris flows with high sediment volumes. These responses are expected to be most pronounced during the first 1- 3 years after the fire and will become less evident as vegetation and soil-hydrologic function recover.

Post-fire runoff modeling was conducted on five analysis watersheds across the Bennion Creek fire. The Water Erosion Prediction Project – Postfire Erosion Prediction (WEPP-PEP) model was used to estimate pre and post-fire peak flows for 2, 5, and 10-year return intervals. These increased peak-flows are expected to occur in response to short duration, high intensity summer and fall thunderstorms. Kelly Canyon, Starvation Creek, and Sugar House 1 are predicted to see increases in magnitude of approximately 3-7 times greater than pre-fire conditions for the 2-year event, while Bennion Creek and Sugar House 2 are predicted to see increases in magnitude of approximately 2-3 times greater than pre-fire conditions for the 2-year event. In addition to the modeled water runoff, some degree of flow and

sediment bulking is likely to occur, which could also lead to debris flows in the area. Post fire flooding and debris flows could threaten critical values on National Forest System (NFS) land, such as property and road infrastructure, as well as human life and safety.

An analysis of post-fire debris flow threats in response to a range of rainfall intensities was conducted by the USGS. A design storm with a peak 15-minute rainfall intensity of 36 millimeters per hour (mm/hr) was selected to display the results, which is comparable to a 2 year precipitation event over the mid elevations of these watersheds (NOAA Atlas 14). The probability of debris flows initiating in the burned areas of Bennion Creek ranges from 20-40% in areas with low to moderate soil burn severity, and up to 80-100% in areas with high soil burn severity. Sugar House 1, Sugar House 2, and Kelly Canyon analysis watersheds all have debris flow probabilities of 80-100%, as a greater portion of those analysis watersheds burned at high and moderate severity. The Starvation Creek analysis watershed has a 60-80% probability of debris flows, and is where the proposed road treatments on (NFS) land are located. Debris flows and post fire flooding initiating on NFS land will also pose a risk to downstream private land, property, and human life and safety.

PART V - SUMMARY OF ANALYSIS

Introduction/Background

The Bennion Creek Fire started on the Ferron Ranger District of the Manti-La Sal NF on Friday, June 4, around 1530 from a lightning strike. The location of the fire's origin, the Bennion Creek watershed, and its activity quickly caused the evacuation of a church camp. The fire grew approximately 1,200 acres a day between June 9 and 15, expanding to the south and east of ignition. The fire then experienced minimal daily growth until June 19, but full containment is not expected until July 21.

The Forest Service BAER team arrived at the fire on June 27. Soil burn severity mapping of the burn scar was accomplished using two methods. The initial map was produced using burned area reflectance classification (BARC) imagery acquired from the Sentinel-2 satellite and processed by the Forest Service Geospatial Technology and Applications Center in Salt Lake City, Utah. The imagery was perfectly clear and was well matched to a pre-fire satellite image to produce an excellent BARC. Field validation of the BARC map was conducted by soil scientists and hydrologists using the methods outlined in RMRS-GTR-24, resulting in a final field validated soil burn severity map.

There are threats to multiple off-forest values due to the Bennion Creek Fire. These include:

- Starvation Spring Road (Utah County)
- Bennion Creek and Sugarhouse Recreation properties (Church of Jesus Christ of Latter-day Saints)
- Access roads to the church camps in Bennion Creek and Kelly Canyons
- Private property (home and pond) east of Starvation Springs Road

The Forest Service BAER team shared its modeled results with the Utah Post-Wildfire Team (Kathy Holder) as the coordinating body to respond to emergency threats due to the effects of the wildfire.

The remainder of this report will focus on threats to Critical BAER values as identified in FSM 2523 – Emergency Stabilization – Burned Area Emergency Response

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

Table 5: Critical Value Matrix

Probability of Damage or Loss	**Magnitude of Consequences**		
	Major	Moderate	Minor
	RISK		
Very Likely	**Very High**	**Very High**	**Low**
Likely	**Very High**	**High**	**Low**
Possible	**High**	**Intermediate**	**Low**
Unlikely	**Intermediate**	**Low**	**Very Low**

1. Human Life and Safety (HLS):

a. Human life and safety of Forest visitors and employees traveling on the Starvation Spring Road in the burn scar is threatened due to the potential for injury or loss of life from hazard tree strikes, falling rocks, flash floods, debris flows, and other burned area hazards. The probability of damage or loss is **possible** as the road travels through and below the burned area. The magnitude of consequence is **major** since an overhead hazard strike, entrapment in a flood or debris flow, or motorized vehicle collision with downed trees could result in serious injury or loss of life. The risk level is **high**. See treatment P1a.

b. Human life and safety of Forest visitors and employees traveling on other system roads or trails (Bear Ridge Road and Bennion trail) in the burned areas are minimially threatened due to the potential for injury or loss of life from various fire-resulting hazards. The probability of damage or loss is **unlikely** as the remaining roads and trail are either ridgeline oriented or pass through mostly unburned islands within the fire perimeter. The magnitude of consequence is **major** since an overhead hazard strike, entrapment in a flood or debris flow could result in serious injury or loss of life. The risk level is **intermediate**, so no treatments are recommended.

2. **Property (P):**The Starvation Spring Road (0009) is at risk due to increased threat of flash flooding and debris flows. The probability of damage or loss is **likely** because it winds through moderate and high burn severity with most the subwatershed above it burned. The magnitude of consequence is **moderate** because a loss to the road would cause substantial property damage. The risk level is **high.** Treatments are recommended. See treatments RT1a, RT1b, and RT2.

b. Bear Ridge Road (0008) and Bennion Trail (5366) also intersect the burned area. While they may experience some flash flooding or debris flows, the probability is **unlikely** due to their location and the lack of burned area surrounding the assets. No treatments are recommended.

3. **Natural Resources (NR):**Soil productivity and hydrologic function within the Bennion Creek Fire burned area are threatened by increased runoff and erosion. While a proportion of eroded soil will remain on the hillslope, delivery of eroded soil to stream channels could occur. The probability of damage is **likely** due to the consumption of ground cover by the fire in moderate and high severity burn areas. However, the magnitude of consequence is **minor** in this fire, and any soil damage is expected to be recoverable and localized. Because of this, the risk is **low,** and no treatments are recommended.

b. There is an increased risk to native or naturalized plant communities on NFS lands from invasive species and other weeds. Specialists have identified musk thistle, bindweed, white top, hounds tongue, dyers wode, and Canada thistle as possible weed species that will likely take root in newly disturbed areas within or adjacent the burned area. The probability of damage to native or naturalized plant communities is **very likely** due to multiple factors: 1) newly disturbed areas are highly prone to weed invasion; 2) there were no weed mitigation tactics in place during fire suppression; and 3) there is moderate or high severity adjacent to road corridors that experience high use. The magnitude of consequence from this damage is **moderate** because there will be long-term effects of weed invasion to existing intact native plan communities. The risk is **very high**. Treatments are recommended. See treatments L1a and L1b.

4. **Cultural and Heritage Resources:**The BAER team determined no threat existed to any cultural and heritage resources because of the fire.

B. Emergency Treatment Objectives: Raise awareness of post-fire hazards throughout the burned area, minimize post-fire damage to NFS trails and NFS road infrastructure, restrict access to NFS roads with untreated threats that pose unacceptable risks to human life and safety, minimize the spread of noxious

weeds in areas disturbed by fire suppression activities; minimize the spread of noxious weeds in burned areas.

C. Probability of Completing Treatment Prior to Damaging Storm or Event:
Land: 80%
Channel: N/A
Roads/Trails: 75%
Protection/Safety: 95%

D. Probability of Treatment Success

Table 6: Probability of Treatment Success

	1 year after treatment	*3 years after treatment*	*5 years after treatment*
Land	85%	90%	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): $138,000

F. Cost of Selected Alternative (Including Loss): $71,038

G. Skills Represented on Burned-Area Survey Team:

☒ Soils ☒ Hydrology ☒ Engineering ☒ GIS ☒ Archaeology
☒ Weeds ☐ Recreation ☐ Fisheries ☒ Wildlife
☐ Other:

Team Leader: Brendan Waterman
Email: brendan.waterman@usda.gov **Phone(s):** 385-377-4338
Team Leader: Jess Clark (Trainee)
Email: jess.clark@usda.gov **Phone(s):** 801-975-3769

Forest BAER Coordinator: Matt Meccariello
Email: matthew.meccariello@usda.gov **Phone(s):** 435-650-4807

Team Members: *Table 7: BAER Team Members by Skill*

Skill	Team Member Name
Team Lead(s)	Brenden Waterman, Jess Clark (t)
Soils	Vince Archer
Hydrology	Mark Muir, Jim Anderson (t)
Engineering	Daniel Luke
GIS	Brock Fausett (t)
Archaeology	Charmain Thompson
Weeds	Mark Chamberlain, Connor Benson (t)
Recreation	
Other	

H. Treatment Narrative:

Land Treatments:

L1a. EDRR BAER: Surveys for new or expanding invasive plant/noxious weed infestations associated with the Bennion wildfire and eradication treatments will be conducted during summer

2021 and spring 2022 in areas of native plant communities with little to no noxious/invasive plant species present prior to the fire. Survey efforts may be coordinated with other federal, state, or local agencies/partners. Surveys will be completed within one year of fire containment. Survey, monitoring or treatment activities that extend beyond the first year will be accomplished through non-BAER funding sources.

Detection surveys and eradication treatments will be conducted on NFS lands on the Manti-La Sal National Forest that have moderate to severe fire effects and are susceptible to infestation by invasive plant species. These areas were identified from Soil Burn Severity maps, site visits and proximity to other weed populations and vector sources such roads and trails. Burned areas with a moderate or high SBS on NFS lands that are adjacent to known weed populations and/or motorized travel corridors have been prioritized for EDRR treatment. There is a potential for weed infestation to occur in other areas of moderate and high SBS throughout the burn scar, however the overall risk is lower given the distance from known vectors such as existing infestations and designated motorized travel corridors.

EDRR activities will be conducted at identified locations at an intensity/frequency necessary to identify the occurrence/spread of weed infestations, with a focus on species that are listed under the Utah Noxious Weed Act. Surveys will be conducted on foot, horseback, or vehicle (UTV/truck), as appropriate. Specific information (e.g., species, location, size, photos) regarding identified infestations will be collected and added to the appropriate database of record.

Timely surveys will allow for new or expanding weed infestations to be identified, and proper measures implemented for eradication/control to protect native plant communities where invasive plants are currently absent or present in minor amounts. The sage communities and mixed conifer communities along Bear Creek Road, mixed conifer in upper Starvation Creek that burned at moderate and high severity and the burned riparian corridor contiguous with the private land are most at-risk from the introduction and spread of noxious/invasive plants.

Implementation personnel will survey and treat any newly detected invasive plants or noxious weeds immediately upon detection. The estimated cost per acre is based on the assumption that much of the targeted acreage will only require a brief survey and not an eradication treatment.

Item	UOM	Unit Cost	# of Units	Total Cost
L1a EDRR – BAER	acre	$54	185	$9,990

L1b. Early Detection Rapid Response (EDRR) Suppression: Surveys and treatment for new or expanding invasive plant and noxious weed infestations associated with fire suppression activities will be conducted by during Summer 2021 and Spring 2022. EDRR activities that extend beyond the first year will be accomplished through non-BAER funding sources. EDRR Suppression efforts will only occur along areas that were disturbed by unmitigated suppression activities and suppression rehab, including areas of handline construction, heli-spots, safety zones, spike camps. These areas were delineated by the BAER Weeds Specialist using suppression disturbance lines and points provided by the IMT. If an effort to accurately capture the actual size of the on the ground disturbance, the points and lines were buffered into polygons that most accurately represent the actual disturbed area. The buffer assigned to the GIS line and point features varied by feature type. For example, the rehabilitated handlines are assumed to have a 5’ total disturbance width.

Item	UOM	Unit Cost	# of Units	Total Cost
L1b EDRR – Suppression	acre	$200	15	$2,995

Channel Treatments: None recommended

Roads and Trail Treatments:

RT1a. Road Drainage – storm proofing existing features: Increased post-fire runoff and erosion from burned watersheds above NFS roads within and below the burnscar is expected to overwhelm the existing road drainage features and result in culvert plugging, culvert over-topping, erosion of fill slopes, and deposition of debris on the NFS roads. These roads are critical for USFS administrative access, forest recreation, and private property access. These routes represent a significant financial investment of NFS funds.

Implementation of the recommended treatments will decrease the risk to human life and safety and protect the NFS road infrastructure investments. The potential monetary cost to repair roads that would be damaged by post-fire events if left untreated significantly exceeds the cost of the treatments as the ML 2 roads are valued at $75,000 per mile.

The item to be implemented is to clean out and upgrade existing armored water bar installations in areas that are downstream or downslope of areas of moderate and/or high SBS. Under the pre-fire runoff regime, the current condition and previous maintenance for the drainage structures on these roads was adequate to accommodate pre-fire runoff. Ongoing maintenance has not been deferred. An emergency funding authorization is needed to support the immediate mobilization of equipment and operators who will prepare the drainage structures for the increased runoff that is a direct result of the burned watershed conditions and the increased response to precipitation events. Emergency storm proofing of high-value drainage features in combination with post-storm inspection and response are appropriate BAER treatments in lieu of more costly structural modification to the NFS road system.

Item	Units	Unit Cost	# of Units	Total Cost
RT1a. Road drainage/storm proofing – ML2	mile	$7,009	1	$7,009

RT1b. Road Drainage – new drainage feature: Storm Proofing roads by adding additional drainage features at two locations have been prescribed for roads in and below the Bennion Creek Fire Scar on the Price Ranger District. High to moderate severity burned areas in the canyons along the drainages have greatly increased the potential for flash flooding and debris flows. Loss of water control from drainage structures is a safety and property risk. Treatment will include installing armored waterbars, which will help to control water flow and protect life. During implementation, an engineer or engineering technician should be on site to ensure proper placement and installation. Cooperation with required Forest Service personnel should also be implemented, including but not limited to a Cultural Resource Specialist and Biologist.

Item	Units	Unit Cost	# of Units	Total Cost
RT1b. Road drainage/storm proofing – ML2	mile	$8,129	1	$8,129

RT2. Storm Inspection and Response: Storm inspection and response on Starvation Spring Road keeps drainage features treated under RT1 functional by removing accumulated sediment and debris between or during storm events. Following heavy rains and significant spring snowmelt the inspection will involve identification of drainage hazards such as accumulated debris, sediment, and plugged culverts that are limiting functionality of the road drainage features. The response will use equipment to remove obstructions from culvert inlets, catch basins, dips, lead-off ditches, riprap armor, and other drainage features. Excess material and debris removed from the drainage features will be placed where it cannot re-enter the stream. Problems will be corrected before they worsen or jeopardize the road drainage features. This treatment is used in lieu of more costly structural upgrades, such as culvert upsizing.

Item	Units	Unit Cost	# of Units	Total Cost

RT2. Road Storm Inspection and Response – ML2	mile	$1,900	1	$1,900

Protection/Safety Treatments:

P1a. Burned Area Warning Signs: The purpose of the Burned Area Warning signs is to reduce risks to human life and safety, to inform forest visitors of potential dangers and/or hazards when entering burned areas on NFS lands. Entering burned areas presents a high risk to human and life and safety, with increased threats from post-fire effects such as falling trees, rolling rocks, flash floods, and debris flows. It is necessary to inform the public of burned-area hazards that are a direct result of wildfire; hazards which are substantially different compared to unburned forest setting and with which many forest visitors may be unfamiliar. Burned area warning signs will be installed to inform the public of the possible dangers associated with a burned area on major entry points into the burned area.

Item	Units	Unit Cost	# of Units	Total Cost
P1a. Road Warning Signs (materials and labor)	Sign	$600	4	$2,400

I. Monitoring Narrative: Road drainage treatment effectiveness monitoring will be completed through implementation of storm inspections and response activities in the first year following containment of the fire. Road storm inspection and response will be monitored by assessing the response time to ensure objectives are being met. Trail drainage treatment effectiveness will be monitored by Forest personnel who will patrol trails after spring run-off and precipitation events to ensure existing drainage structures are effective and ready to handle the next precipitation event. EDRR treatments will be monitored by reviewing the size and density of infestations following EDRR treatments. Warning sign treatments will be monitored by Forest personal to ensure that the signs are not being vandalized, damaged, or stolen.

PART VI – EMERGENCY STABILIZATION TREATMENTS AND SOURCE OF FUNDS

Line Items	Units	Unit Cost	# of Units	BAER $	Other $	# of units	Fed $	# of Units	Non Fed $	Total $
A. Land Treatments										
L1b. EDRR-Suppression	acre	200	15	$2,995	$0		$0		$0	$2,995
L1b. EDRR-BAER	acre	54	185	$9,990	$0		$0		$0	$9,990
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Land Treatments				$12,985	$0		$0		$0	$12,985
B. Channel Treatments										
				$0	$0		$0		$0	$0
				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Channel Treatments				$0	$0		$0		$0	$0
C. Road and Trails										
RT1a. Road Drainage	mile	7,009	1	$7,009	$0		$0		$0	$7,009
RT1b. Road Drainage	mile	8,129	1	$8,129	$0		$0		$0	$8,129
RT2. Storm Inspection	mile	1,900	1	$1,900	$0		$0			$1,900
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Road and Trails				$17,038	$0		$0		$0	$17,038
D. Protection/Safety										
P1a. Road Warning Signs	Signs	600	4	$2,400	$0		$0		$0	$2,400
				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Protection/Safety				$2,400	$0		$0		$0	$2,400
E. BAER Evaluation										
Initial Assessment	Report	$24,000	1	---	$0		$0		$0	$0
				$0	$0		$0		$0	$0
Insert new items above this line!				---	$0		$0		$0	$0
Subtotal Evaluation				$0	$0		$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		$0		$0	$0
G. Totals				$32,423	$0		**$0**		**$0**	**$32,423**
Previously approved										
Total for this request				**$32,423**						

PART VII - APPROVALS

1. RYAN NEHL Digitally signed by RYAN NEHL Date: 2021.07.19 10:27:37 -06'00'

Forest Supervisor Date

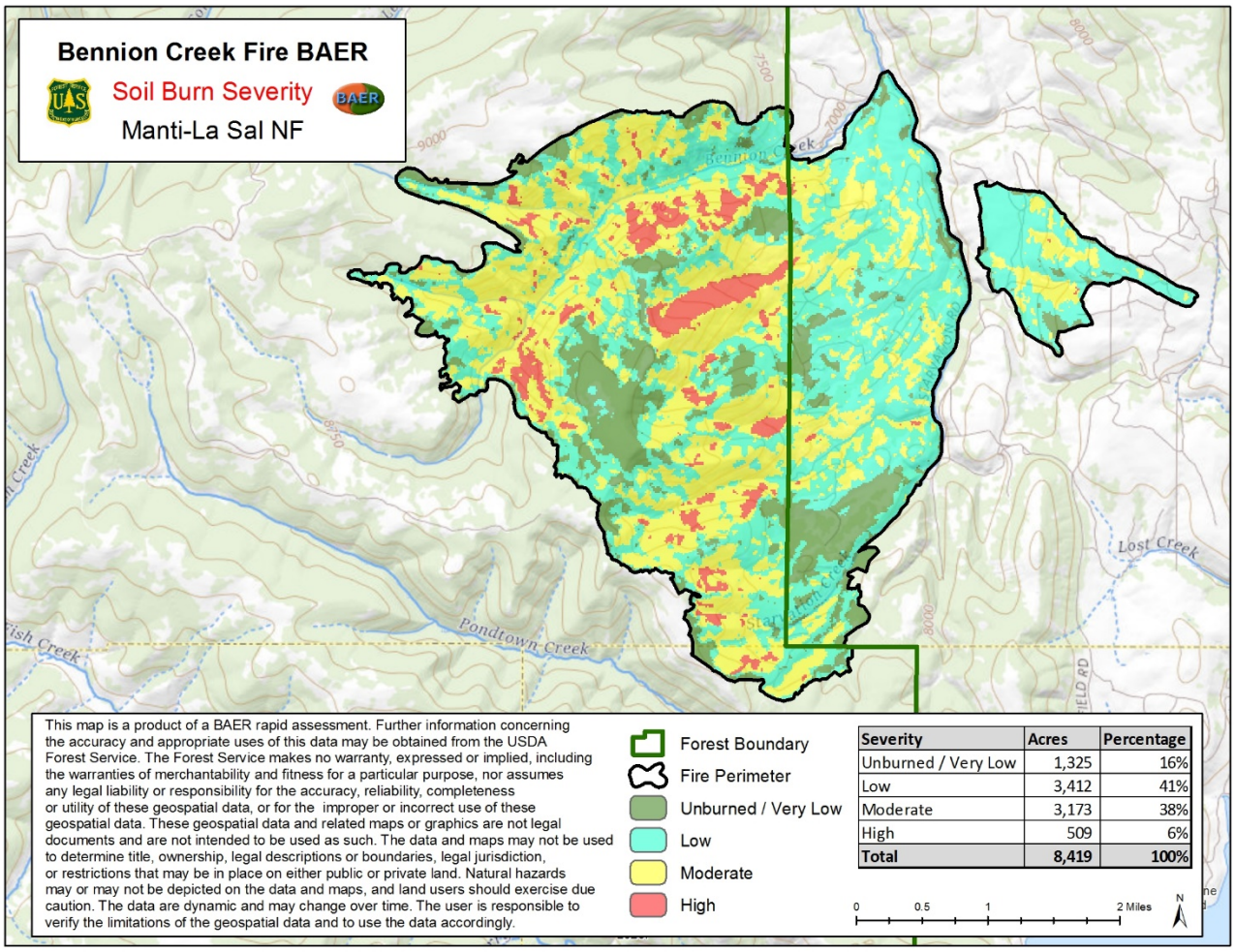

Figure 1 Final Soil Burn Severity for the Bennion Creek Fire

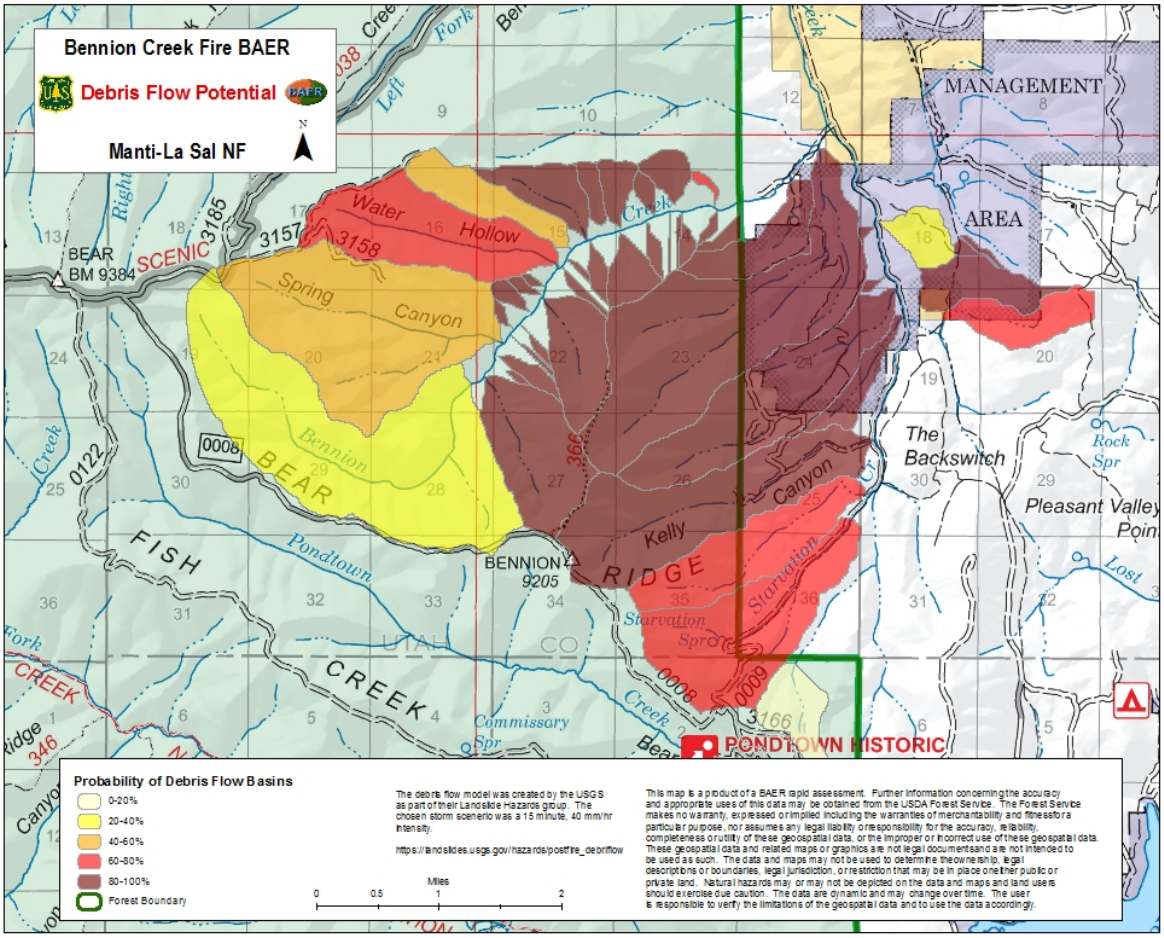

Figure 2 Debris Flow Potential by Basin, from USGS