Date of Report: September 19, 2023

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: Ridge Creek

B. Fire Number: ID-IPF-000447

C. State: Idaho

D. County: Kootenai

E. Region: Northern

F. Forest: Idaho Panhandle

G. District: Coeur d'Alene River Ranger District

H. Fire Incident Job Code: P1QG9D (0104)

I. Date Fire Started: 08/03/2023

J. Date Fire Contained: 10/31/2023 (ICS-209)

K. Suppression Cost: $24,000,000 (ICS-209)

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

1. **Fireline repaired** (miles)**:**
2. **Other** (identify)**:**

M. Watershed Numbers:

Table 1: Acres Burned by Watershed

HUC #	Watershed Name	Total Acres	Acres Burned	% of Watershed Burned
170103010601	Iron Ck-NF Coeur d'Alene River		425	2
170103050101	Hayden Creek		3,237	18
170103050301	Sage Creek		127	<1

N. Total Acres Burned: Acre values used to complete the BAER assessment were derived from the initial BARC imagery dated 08/27/2003. The BARC perimeter excluded roughly 107 acres of unburned lands in the northeast area that are included in the fire suppression perimeter (Fire Suppression Acres: 4,474).

Table 2: Total Acres Burned by Ownership

OWNERSHIP	ACRES
NFS	4,367
OTHER FEDERAL (list acres by agency)	-
STATE	-
PRIVATE	-
TOTAL	4,367

O. Vegetation Types: The dominant vegetation type of the burned area was warm-moist forest (72%) with western hemlock, grand fir and Douglas-fir being the dominant overstory species. Northern aspects in the burned area had greater closed canopy conditions with larger, more mature trees compared to southern aspects with more open canopy and young regeneration conditions. Southern aspects also had presence of shrubs, mainly ninebark.

P. Dominant Soils: Dominant soils included the Bouldercreek family formed by weakly weathered metasedimentary belt geology on northern aspects, the Bouldercreek-Ahrs family formed by weakly weathered metasedimentary belt geology on the southern aspects, and the Ahrs family rock outcrops (Typic Vitrixerands) also formed by weakly weathered metasedimentary belt geology. The Bouldercreek component covered 46% of the burned area with the Ahrs component covering 11% of the burned area while other minor components were found throughout the burned area. These soils have silt loam and sandy loam surface textures with ashy over loamy-skeletal particle size classes.

Q. Geologic Types: Geology of the area is dominated by metasedimentary belt formations (73%) formed of meta-argillites in the Early Middle Protozoic period.

R. Miles of Stream Channels by Order or Class:

Table 3: Miles of Stream Channels by Order or Class

STREAM TYPE	MILES OF STREAM
PERENNIAL	9.0
INTERMITTENT	3.6
EPHEMERAL	-
OTHER (define)	-

S. Transportation System:

Roads *National Forest (miles): 35.6* *Other (miles):*
Trails: *National Forest (miles):* 4.2 *Other (miles):*

PART III - WATERSHED CONDITION

A. Burn Severity (acres):

Table 4: Burn Severity Acres by Ownership

Soil Burn Severity	NFS	Other Federal (List Agency)	State	Private	Total	% within the Fire Perimeter
Unburned	658	-	-	-	658	15
Low	1,759	-	-	-	1,759	40
Moderate	1,717	-	-	-	1,717	40
High	233	-	-	-	233	5
Total	4,367	-	-	-	4,367	

B. Water-Repellent Soil (acres)**:** 1,948 (45%)
Background hydrophobicity is present throughout the burned area. Low and unburned soils (2,442 acres, 55% of the burned area) are expected to exhibit low to medium water repellency. Moderate and high burn severities (1,948 ac, 45% of the burned area) exhibit high water repellency.

C. Soil Erosion Hazard Rating:

Table 5: Soil Erosion Hazard (acres)

Soil Erosion Hazard	Acres	Percent
Low	2,388	55
Moderate	1,721	39
High	257	6

D. Erosion Potential: Pre-fire: 3.3 lbs/ac/yr; Post-fire: 1,120 lbs/ac/yr

E. Sediment Potential: Pre-fire: 150 lbs/ac/yr; Post-fire: 1,180 lbs/ac/yr

F. Estimated Vegetative Recovery Period (years): Understory vegetation recovery is expected to return to pre-fire ground cover conditions within 1-3 years for low and moderate SBS. In areas of High SBS and some higher end moderate SBS are expected to take up to 5 years to recover pre-fire groundcover conditions.

G. Estimated Hydrologic Response: The expected post-fire watershed responses are: 1) accelerated soil erosion and increased overland flow on moderately steep and steep slopes within the burned area, 2) increased streamflows and higher peak flows and 3) increased sediment delivery to streams within and downstream of the fire. These responses are most likely to occur during storm events between now and winter, over winter due to rain-on-snow events and into next spring and summer with high-intensity thunderstorms. The overall risk for these watershed responses will decrease over time as vegetation reestablishes (providing ground cover and increase surface roughness) and soil hydrophobicity decreases (increased infiltration capacity of the soils).

Hydrologic response is assessed by comparing estimates for post-fire streamflows from changed watershed conditions to pre-fire or intact forest streamflows, using hydrologic design features that represent local climate and streamflow data. Post-fire streamflow analysis was completed on four watersheds comparing two different methods. The estimates are best viewed as the relative change in streamflows based on soil burn severity classes and the size and orientation of the drainage basins. The results returned substantial increases in post-fire runoff, ranging from 67% to 1,183%. The complete analysis and discussion can be viewed in the Ridge Creek Fire Hydrology Resource Assessment.

PART V - SUMMARY OF ANALYSIS

Introduction/Background: The human-caused Ridge Creek Fire started on the afternoon of August 3rd, roughly 3.5 miles northeast of Hayden Lake, Idaho on the Coeur d'Alene Ranger District, Idaho Panhandle National Forest. The fire spread rapidly to the east and north, burning approximately 1,100 acres in the Hayden Creek drainage in the first 24 hours. Over the next 3 days, active fire behavior burned an additional 1,250 acres. Cool, moist weather from August 7th to Aug 9th moderated fire behavior and slowed fire growth. An extended period of warm to hot and dry weather increased fire behavior and growth until August 29th when precipitation measured from 1.5 to 1.8 inches of fell across the fire.

There are two predominant vegetation types (fuel models) in the fire area, with their arrangement or patterns primarily a function of aspect and elevation. A grass/shrub understory with open overstory across exposed slopes occupy drier west and south aspects; a diverse shrub, timber litter understory in closed canopy stands on sheltered slopes having moist, north and east aspects. Fire behavior specialists noted the initial fire spread was driven mostly by the grass/shrub communities, with more modest fire behavior in the closed timber stands. The compact fuel layer, sheltering from wind, and higher fine fuel moisture in closed timber contrasts strongly with the "fluffier" and drier ground fuels on the more exposed sites. Fire spread rates and flame lengths for grass/shrub vegetation were double that of the closed timber fuels.

When effects from the cool, moist weather conditions subsided, hot, dry weather contributed to increased fire behavior with group torching and long-range spotting observed up to 1 mile. The fire burned into open-growing subalpine fir at higher elevations in the Hayden Creek drainage up to Chilco Mountain. Fire activity was primarily torching and spotting with ground fire being a subsequent re-burn, characteristic of this vegetation type. In more closed canopy conditions (north side of Chilco Mountain) fire behavior became more moderate, as slope and wind are not aligned, with higher fuel moisture and higher crown base. After August 20th, there was minor increase in acreage with interior burning.

The USFS BAER team began its assessment of the burn scar on September 7th. Soil Burn Severity (SBS) mapping was accomplished by ground truthing and adjusting an initial Burned Area Reflectance Classification

(BARC) map using methods described in RMRS-GTR-24. This resulted in a field validated SBS map (Figure #). The two vegetation types supported very different fire behavior; when combined with weather and fire progression help interpret post-fire conditions, such as patterns for resulting SBS. Additional field reconnaissance and identification of threats to human life and safety, NFS transportation system, recreation features, soils, water quality, native vegetation communities and cultural resources was completed by the BAER survey team.

A. Describe Critical Values/Resources and Threats (narrative)**:** The following information summarizes threats to Forest Service Critical BAER values consistent with direction in FSM 2523 – Emergency Stabilization – Burned Area Emergency Response. The SBS data, hydrologic modeling, and the results of the USGS Post-Fire Debris Flow Hazard Assessment were used to inform the resource analysis and risk assessment of BAER critical values. The risks to critical BAER values from post-fire conditions were determined using the BAER Critical Value Matrix (Table #). Recommended response actions are recommended where unacceptable risk to a critical BAER value has been identified.

Table 6: 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. *Forest visitors traveling on open system trails and roads or camping in dispersed areas* – **High risk** (possible, major) to life and safety from potential flooding, debris flows, hazard trees, and rock fall. Roads and trails within the fire perimeter receive heavy use which increase the likelihood for users to be injured by post-fire hazards. Additionally, routes may be blocked by flooding or debris causing entrapment. Treatments S1a and S1b are recommended.
2. **Property (P):**
   a. *Road Prisms, Drainage Control Structures and Other Road Infrastructure* – **High risk** (likely, moderate) to road prisms, drainage control structures, and other road infrastructure. The threat to road infrastructure is primarily increased runoff because of decreased infiltration, reduced canopy and ground cover in moderate and high SBS areas. Roads recommended for treatment are Maintenance Level (ML) 2 (suitable for high-clearance vehicles) or ML3 roads (suitable for passenger vehicles) that are open to the public. The open roads include several routes critical for access to the BPA transmission line towers. Treatments R1, R2a, R3 and R5 are recommended.
   b. *Stream Crossing Culverts on NFSR 406* – **Very high** risk (likely, moderate) is expected to two (2) stream crossing culverts on NFSR 406 (ML3, open yearlong). The threat to the stream crossings and road prism is an expected increase in stream flow from moderate and high SBS areas due to the loss of organic soil cover, elevated inherent erosion hazard and potential for debris flows. Post-fire analysis estimates increased stream flows ranging from 800 to 1,700% of pre-fire levels. See treatment R13.
   c. *Stream Crossing Culvert on NFSR 1530* - **High risk** (likely, moderate) is expected to a stream crossing culvert on NFSR 1530 (ML3, open yearlong). The threat to the stream crossing and road prism is an expected increase in stream flow from moderate and high SBS areas due to the loss of organic soil cover, elevated inherent erosion hazard and potential for debris flows. Post-fire analysis estimates increased stream flows ranging from 700 to 1,700% of pre-fire levels. See treatment R12.
   d. *Chilco Trail* – **Very high risk** (very likely, moderate) of damage or loss of trail prism. The threat of erosion and deposition from burned areas along or upslope of trail is very likely given loss of ground cover in moderate and high SBS areas. Treatment T1 is recommended.
3. **Natural Resources (NR):**
   a. *Native or Naturalized Plant Communities* – **Very high risk** (very likely, moderate) from invasive species or other weeds. There are known infestations of houndstongue, dalmation toadflax, canada thistle, bull thistle, yellow toadflax, St. Johnswort, common tansy, meadow hawkweed, orange

hawkweed, oxeye daisy, rush skeletonweed, spotted knapweed, and sulphur cinquefoil within the burn perimeter. Suppression activities caused soil disturbance in areas where invasion of noxious plants is expected to occur. Additionally, a lack of a functional weed wash station during the first week of the fire increases the possibility of invasive species spread. Areas within the perimeter that experienced moderate to high soil burn severity are also at risk of invasion by non-natives due to loss or reduction of organic horizon and potential loss of native seed bed. Non-native invasion has long-term effects on existing, intact native plant communities. Treatments P1a and P1b are recommended.

b. *Soil Productivity* – **Low** risk (very likely, minor). Minor magnitude of consequences is summarized as such: post-fire erosion rates are tolerable or exceed soil loss tolerance in small or isolated areas, the area should naturally stabilize over the short term (< 3 years). This is expected to result in limited, localized, and recoverable damage to soils:
   - soils will lose a minor fraction of the A-horizon or soil organic matter and nutrient capital;
   - loss of surface soil and seed bank will not inhibit natural vegetation recovery in large areas;
   - soil will continue to support short-term and long-term growth of potential natural vegetation;
   - soils will continue to support soil-dependent ecosystem services.

   As such, no post-fire treatment is recommended for this BAER Critical Value.

c. *Hydrologic Function* - **Low** risk (very likely, minor) is expected to hydrologic function. Threats to hydrologic function include decreased infiltration, reduced canopy and ground cover. Impacts to watershed processes that regulate hydrologic function are expected within moderate and high SBS areas. The recommended response action is natural recovery.

d. *Water Quality Hayden Creek – 303(d)-listed Waterbody (Temperature)* - **Low** risk (likely, minor) is expected to stream temperature in Hayden Creek. Threats to stream temperature downstream of the burned area include increased runoff across forest roads, hillslope and streambank erosion, and subsequent sediment delivery to streams. Increased runoff and sediment inputs may cause channel widening and aggrading which can increase water temperatures. The recommended road treatments discussed below would reduce road-related effects and dampen the overall effect. For burned hillslopes and streambanks that may erode as a result of post-fire flows, the recommended response action is natural recovery.

4. Cultural and Heritage Resources:

a. Risk assessment for six known properties listed on the National Register of Historic Places Cultural and Heritage Resources has not been completed at this time.

B. Emergency Treatment Objectives: Implement response actions that: minimize loss of life or injury to forest visitors by raising awareness of post-fire hazards throughout the burned area, minimize post-fire damage to NFS roads and trails, and minimize the establishment and spread of invasive plants and noxious weeds.

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

Land: 90%
Channel: N/A
Roads/Trails: 80%
Protection/Safety: 90%

D. Probability of Treatment Success

Table 7: Probability of Treatment Success

	1 year after treatment	***3 years after treatment***	***5 years after treatment***
Land	70%	80%	80%
Channel	N/A	N/A	N/A
Roads/Trails	80%	90%	90%
Protection/Safety	80%	70%	60%

E. Cost of No-Action (Including Loss)**: $188,700** The cost of no action for roads treatments was calculated at $157,500 assuming $35,000 construction per mile. The cost to rebuild a mile of erosion-damaged trail would cost approximately $8,000, for a total loss of approximately $31,200. It is difficult to quantify the cost of no

action to human life and safety, native plant communities, or cultural and historic resources, although the value of each is certainly far in excess of the funds requested.

F. Cost of Selected Alternative (Including Loss)**: $167,066** As a gross estimate, the cost is the funding request ($129,326) plus the loss (0.2*$188,700=$37,740). Loss estimate only includes monetary values (roads and trails).

G. Skills Represented on Burned-Area Survey Team:

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

Team Leader: Terry Hardy
Email: thardy83642@gmail.com; **Phone(s)** 208-991-7251

Team Leader: Kelsey Martin (trainee)
Email: kelsey.martin@usda.gov; **Phone(s)** 406-791-7729

Forest BAER Coordinator: Carly Gibson
Email: carly.gibson@usda.gov; **Phone(s):** 406-925-2586

Team Members:

Table 8: BAER Team Members by Skill

Skill	Team Member Name
Team Lead(s)	Terry Hardy, Kelsey Martin
Soils	Phil Schwartz, Sean Buhler
Hydrology	Chris Robinson
Engineering	Geoff Moore
GIS	Joan Louie, Amy Thompson, Rachel Corley
Archaeology	
Weeds	Jeremy Kleinsmith, Frank Dyar
Recreation	Jedediah Friedman, Ian Cotter, Anthony Benedetti
Other	

H. Treatment Narratives: The following narratives summarize the response actions recommended to decrease risks to BAER Critical Values. It is important to note that these treatments are not designed to eliminate risk. They are designed to reduce risk to an acceptable level, per FSM 2523.1 - Exhibit 02. Detailed specifications, cost estimates, and maps identifying the spatial location for the treatments are in the BAER Assessment project record. The documents can be obtained by contacting the Forest BAER Coordinator.

All treatment costs were estimated based on the assumption that off-forest Agency personnel or contract crews would be implementing the authorized treatments without the use of local unit NFSE salary funding. If personnel from the local unit are identified for implementation, current BAER salary and expense guidance regarding the use of H-codes would be adhered to. Project costs represent the best estimate of the BAER assessment team and may be adjusted with authorization of interim funding requests to reflect current market values at the time of contracting and implementation.

Land Treatments:

P1a-b. Early detection/rapid response (EDRR): EDRR surveys will focus on areas of unimpaired native plant communities that burned at high or moderate soil burn severity and are adjacent to known state-listed noxious weeds, as well as areas disturbed by suppression activities. EDRR will be used to minimize the potential for new noxious weed infestations and ensure the natural recovery of native perennial grasses and forbs. Heavy

equipment used for suppression activities travelled through areas of known weed populations to unaffected areas, which has substantially increased the risk of noxious weed spread in these disturbed areas. If new weed populations are found they would be promptly treated to minimize the potential to spread and resulting degradation of native plant communities. Chemical treatment of new and existing noxious weed infestations will reduce the likelihood of spread to disturbed areas and help re-establish high-quality wildlife and habitat within the burn. Forest service employees will document the NNIS exact location and prioritize treatment based on the Idaho State and IPNF noxious and invasive plant list priorities. EDRR treatments will be conducted via backpack sprayer, UTV or truck mounted systems. The invasive species of concern in this area are houndstongue, dalmation toadflax, canada thistle, bull thistle, yellow toadflax, St. Johnswort, common tansy, meadow hawkweed, orange hawkweed, oxeye daisy, rush skeletonweed, spotted knapweed, and sulphur cinquefoil.

Plant Treatment Summary	Unit	Unit Cost	# of Units	Cost Estimate
P1a – Invasives EDRR	Acres	$61.45	172	$10,570
P1b – Invasives EDRR Suppression	Acres	$70.00	163	$11,410
			Total Cost	**$21,980**

Channel Treatments: None Recommended

Roads and Trail Treatments:

R1. Storm Proofing (storm proofing existing drainage features)**:** This treatment includes a suite of actions that are implemented based on site-specific conditions and usually not along every mile of road or site having high risk. Culvert cleaning involves cleanout of catchment basins (inlets and outlets) and is needed to reduce the probability for a culvert to plug with sediment and debris. Reinforcing the catch basin with small rock headwalls ensures the longevity of the treatment by mitigating the risk of erosion from the road cut slope filling the catch basin. Ditch Cleaning is used to remove debris that deflects water flow out of the ditch and also to ensure the flow reaches the outflow structure. Road Template Reshaping grades road surfaces to minimize channelized water flow down the roadway, to shed the increased flows quickly before additional road surface erosion occurs. This will be accomplished by a combination of in-sloping, reestablishment of roadway crown, and removal of berm where water will drain off the road surface.

R2a. Armored Rolling Drainage Dip: Rolling dips are placed on road segments in or downslope of high and moderate SBS hillslopes where accelerated sediment and increased overland flow create threats to infrastructure. Rolling dips or armored crossings are used where existing road drainage is inadequate to handle increased runoff, sediment and debris associated with the effects of the fire. This treatment may be implemented in connection with other road drainage improvement measures. Roadway dips modify the road drainage by altering the template and allowing surface flows to frequently disperse across the road.

R3. Storm Inspection and Response: Conduct patrols throughout the burned area road system following substantial precipitation events. Patrols will monitor and assess the functionality of key drainage structures and road segments and identify any damage needing repair. Patrol team members will be trained in clearing obstruction from culverts, drainage dips, and other features to maintain flow conveyance. They will also watch for road washouts, rutting and other surface erosion issues. Damage encountered beyond the capability of patrol teams to immediately repair will be documented and reported for follow-up maintenance.

R5. Critical Dip: A critical dip is installed and armored with culverts left in place. Treatment design involves removing fill material from over the pipe, grade a rolling dip and armoring (rip rap) the dip crossing the road surface and fill slope. Should culvert failure or overtopped occur, this treatment is intended to prevent stream diversion and keep water flow in the natural channel should the culvert become plugged, decreasing likelihood for erosion of road fill and reducing adverse effects to water quality while maintaining access once storm runoff diminishes. This response action is implemented in combination with treatments R1 and R3.

R13: Fill Slope Stabilization: The treatment is intended to decrease risk for loss of road template from a compromised road embankment. Treatment design involves a site assessment, procurement of riprap material, vegetation removal, excavation of key-in trenches, placement and compaction of riprap.

Road Treatment Summary	Road Number	Total Units	Estimated Cost
R1 - Storm Proofing	406 – 0.6 miles 437 – 1.8 miles 437Q – 0.5 miles 1530 – 1.3 miles 1530A – 0.4 miles	4.5 miles	$30,357
R2a - Armored Rolling Drainage Dip	437 – 5 sites 1530 – 9 sites 1530A – 2 sites	16 sites	$29,840
R3 - Storm Inspection and Response	406 – 3.3 miles 437 – 7.4 miles 437Q – 0.7 miles 1530 – 2.0 miles 1530A – 0.6 miles	9.5 miles	$ 11,100
R5 - Armored Critical Dip	437 – 1 site 1530 – 2 site	3 sites	$7,650
R13 - Fill Slope Stabilization	437 – 1 site 406 – 2 sites	3 sites	$7,714
		Total	**$86,661**

T1. Trail Drainage Stabilization: Trail storm-proofing involves cleaning or armoring existing drainage structures to remove accumulated sediment and adding drainage structures to provide capacity for elevated post-fire runoff. Maintenance and repair of drainage structures would occur along portions of Chilco Trail that fall within or down slope of areas moderate to high soil burn severity. Implementing this treatment will decrease the risk of unacceptable loss of trail prism. Proper and adequate drainage for post-fire runoff will reduce flow interception and prevent the trail prism and tread from significantly eroding. Preventing the loss of trail prism is more cost effective than rebuilding destroyed trail prisms.

Trail Treatment Summary	Unit	Unit Cost	# of Units Treated	Total Cost
T1 – Trail Drainage Stabilization	Miles	$4,556	3.9	$17,768

<u>Protection/Safety Treatments</u>:

S1a. Road Hazard Signs: This treatment will install burned area warning signs at key road entry points to caution forest users of burned area hazards.

S1b: Trail/Recreation Hazard Signs: This treatment will install burned-area warning signs at trailheads that access the fire perimeter (Chilco Mountain and Hells Canyon trails) to caution forest users of burned area hazards.

Hazard Sign Treatment Summary	Unit	Unit Cost	# of Units	Total Cost
S1a – Road Hazard Signs	Each	$712.50	4	$2,850
S1b – Trail Hazard Signs	Each	$16.75	4	$67
			Total	**$2,917**

I. **Monitoring Narrative:** Forest personnel will periodically inspect hazard warning signs for vandalism. Road and trail drainage stabilization treatments will be monitored through implementation of the storm inspection and response plan. EDRR treatments will be monitored during follow-up early detection surveys to ensure new weed infestation or expansion of existing infestations is minimized. No additional funding is requested for monitoring.

PART VI – EMERGENCY STABILIZATION TREATMENTS AND SOURCE OF FUNDS

			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										
P1a. Invasives EDRR	acres	61.5	172	$10,570	$0		$0		$0	$10,570
P1b. Invasives EDRR Suppre	acres	70.0	163	$11,410	$0		$0		$0	$11,410
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Land Treatments				$21,980	$0		$0		$0	$21,980
B. Channel Treatments										
N/A				$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										
R1. Storm Proofing	miles	6,746	4.5	$30,357	$0		$0		$0	$30,357
R2a. Armored Rolling Dip	site	1,865	16.0	$29,840	$0		$0		$0	$29,840
R3. Storm Inspection & Res	miles	1,168	9.5	$11,100	$0		$0		$0	$11,100
R5. Armored Critical Dip	site	2,550	3.0	$7,650	$0		$0		$0	$7,650
R13. Fill Slope Stabilization	site	2,571	3.0	$7,714	$0		$0		$0	$7,714
T1. Trail Drainage Stabilizati	miles	4,556	3.9	$17,768	$0		$0		$0	$17,768
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Road and Trails				$104,429	$0		$0		$0	$104,429
D. Protection/Safety										
S1a. Hazard Warning - Road	each	713	4	$2,850	$0		$0		$0	$2,850
S2a. Hazard Warning - Trails	each	17	4	$67	$0		$0		$0	$67
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Protection/Safety				$2,917	$0		$0		$0	$2,917
E. BAER Evaluation										
Initial Assessment	Report			---	$0		$0		$0	$38,647
				$0	$0		$0		$0	$0
Insert new items above this line!				---	$0		$0		$0	$0
Subtotal Evaluation				$0	$0		$0		$0	$38,647
F. Monitoring										
N/A				$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				$129,326	$0		**$0**		**$0**	**$167,973**
Previously approved										
Total for this request				**$129,326**						

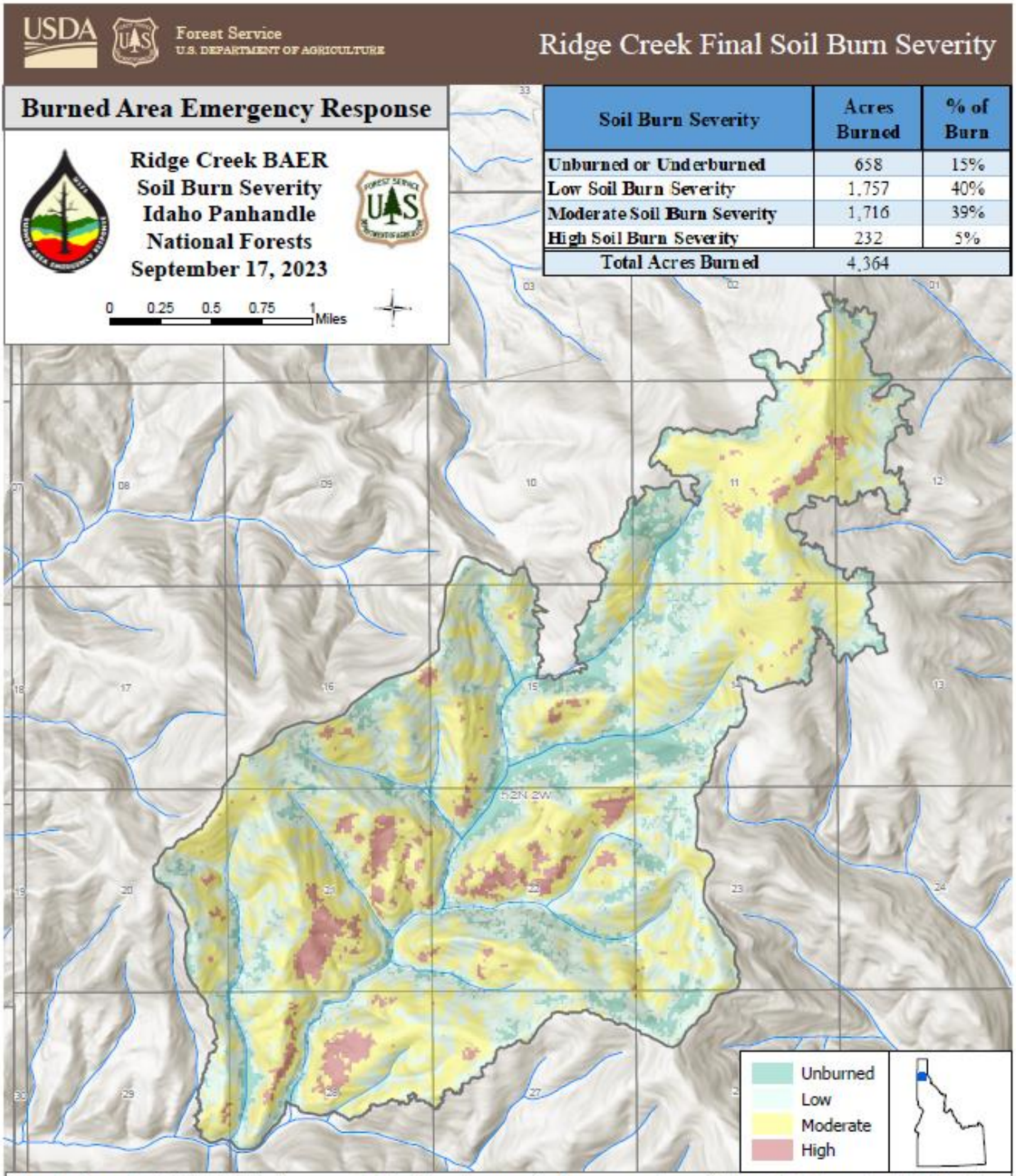
PART VII – APPROVALS

HEATHER DEGEEST Digitally signed by HEATHER DEGEEST Date: 2023.09.25 13:28:10 -07'00'

Forest Supervisor

9/25/2023
Date

APPENDIX – SOIL BURN SEVERITY MAP



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