

Date of Report: 10/18/2019

BURNED-AREA REPORT – Short Form

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: Fishhawk

B. Fire Number: WYSHF000449

C. State: WY

D. County: Park

E. Region: 02

F. Forest: Shoshone NF

G. District: Wapiti

H. Fire Incident Job Code: P2MQM519

I. Date Fire Started: 8/21/2019

J. Date Fire Contained: 9/26/2019

K. Suppression Cost: \$2,000,000

L. Fire Suppression Damages Repaired with Suppression Funds (estimates): 0

1. Fireline repaired (miles): 0
 2. Other (identify): 0

M. Watershed Numbers:

Table 1: Acres Burned by Watershed

HUC #	Watershed Name	Total Acres	Acres Burned	% of Watershed Burned

N. Total Acres Burned:*Table 2: Total Acres Burned by Ownership*

OWNERSHIP	ACRES
NFS	14261.76
OTHER FEDERAL (LIST AGENCY AND ACRES)	0
STATE	0
PRIVATE	0
TOTAL	0

O. Vegetation Types: Click here to enter text.**P. Dominant Soils:** Click here to enter text.**Q. Geologic Types:** Click here to enter text.**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	
INTERMITTENT	
EPHEMERAL	
OTHER	
(DEFINE)	

S. Transportation System:**Trails:** National Forest (miles):

Other (miles):

Roads: National Forest (miles):

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	4851.8	0	0	0	4851.8	34.02
Low	6999.4	0	0	0	6999.4	49.1
Moderate	2373.2	0	0	0	2373.2	16.6
High	37.36	0	0	0	37.36	.26
Total	14261.76	0	0	0	14261.76	

B. Water-Repellent Soil (acres): Click here to enter text.**C. Soil Erosion Hazard Rating:** Click here to enter text.**D. Erosion Potential:** Click here to enter text. **Sediment Potential:** Click here to enter text.**F. Estimated Vegetative Recovery Period (years):** Click here to enter text.**G. Estimated Hydrologic Response (brief description):** Click here to enter text.

PART V - SUMMARY OF ANALYSIS

Introduction/Background

The Fishhawk Fire started in late August by lightning strike in the Washakie Wilderness south of the North Fork of the Shoshone River in the Fishhawk Creek drainage or vicinity. It was not detected until early September when fuel moisture, winds, and relative humidity combined to accelerate growth dramatically. The vast majority of acres burned were completed in just a few days. The fire remained within the Washakie Wilderness. There were no suppression actions on the ground due to the steep and inaccessible terrain coupled with weather conditions. Cool temperatures and wet weather in early September limited additional growth. Between ignition and the initial BAER assessment, the fire had received approximately four inches of precipitation in separate events. The area is composed primarily of volcanically derived soils. Fire damage susceptibility is rated as highly susceptible based on known soils data. However, field reconnaissance demonstrated little to no hydrophobicity and live fine roots approximately ¼ - ½ inch below the soil surface, even in areas that appeared moderate to severe above ground. Regrowth was already occurring and despite the large rain events, evidence of erosive events was limited. Prior to the fire, the Fishhawk drainage and surrounding area supported an intact native mixed conifer forest with almost no invasive species component. On the east side of the fire perimeter, the fire did burn into the Sheep Mesa Research Natural Area.

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):

Human life and safety values at risk include safety for recreation residence occupants in the Kitty Creek drainage and the Buffalo Bill Boy Scout Camp, and recreational users of the Fishhawk and Kitty Creek Trails. The recreation residence group and the Boy Scout Camp occupants are unlikely to encounter damage or loss at those locations and the magnitude of consequences is minor. Risk comes from erosive events but is very limited by topography. Risk to the public on system trails comes from hazard trees on or near the trails. Reconnaissance showed approximately 40 hazard trees across the trail in the first mile within the perimeter. The estimate can likely be applied throughout the fire and the length of the trail (~ 6 miles). Risk is already minimized by administrative closure to keep the public from encountering the risk.

2. Property (P):

Property values at risk within the Fishhawk Fire perimeter include the Fishhawk and Kitty Creek Trails. Properties downstream include the recreation residences in Kitty Creek, the Buffalo Bill Boy Scout Camp, water systems, powerlines, and the North Fork Highway. The properties downstream from the fire perimeter are located in areas that would not likely be affected by debris flows due to topography. Probability of damage is unlikely and magnitude of consequences is minor for these properties as well as for the Kitty Creek Trail due to the limited area of interaction. The Fishhawk Trail runs through the drainage bottom all the way through the fire. Probability of damage is possible with moderate consequences yielding an intermediate risk rating. Due to the predominantly low and moderate burn severity ratings across the fire and information from a short reconnaissance hike, no treatment actions are recommended beyond administrative measures to limit access for hazard trees.

3. Natural Resources (NR):

Values at risk for natural resources include fish habitat, crucial winter range for sheep and elk, and sensitive plant species habitat. Fishhawk Creek and Kitty Creek are tributaries to the North Fork Shoshone River. Fishhawk Creek contains Eastern brook trout, mountain whitefish, rainbow trout, rainbow-cutthroat hybrids, and Yellowstone cutthroat trout (R2S). Kitty Creek contains rainbow trout, mountain whitefish, rainbow-cutthroat hybrids, and Yellowstone cutthroat trout. There are no threatened/endangered fish in these tributaries or the North Fork Shoshone River. The Yellowstone cutthroat trout population in Fishhawk, Kitty Creek, and North Fork Shoshone River

consists mostly of hybridized trout and from a species conservation standpoint, contain limited conservation value. It is possible the Fishhawk fire may result in negative short-term (1-3 years) impacts to the fish community, the consequence of which would be minor. It is unlikely the Fishhawk Fire effects would negatively impact fish populations in Kitty Creek considering the magnitude and intensity of fire in the Kitty Creek drainage. The North Fork Shoshone is a very popular regional fishery that draws thousands of anglers annually; the river is highly accessible/visible from the North Fork Highway where it flows into Buffalo Bill Reservoir. The influence of short-duration, high-intensity thunderstorms and Absaroka volcanics frequently results in events that adversely influences angling, especially during the summer months. It is possible the Fishhawk Fire may result in turbidity spikes in Fishhawk Creek, Kitty Creek, the North Fork Shoshone and Buffalo Bill reservoir (especially for 2020) if runoff mobilizes ash and sediment. This would result in reduced angling opportunities; the magnitude of which is considered minor. Despite shallow, drier soils, the area is not likely to suffer a post fire non-native plant species invasion and should stabilize relatively quickly due to intact root systems, low weed presence, and no ground suppression activities. Forage value for native ungulates should not be diminished in quality or quantity in the long term. Damage from invasive species is unlikely and the magnitude of consequences is moderate, which yields a low risk rating. No treatment actions are recommended.

4. **Cultural and Heritage Resources:** After review of the boundary of the 2019 Fishhawk Fire overlain on the Site Probability Model for cultural properties with the Shoshone National Forest, it is the determination of the SNF Heritage Program Manager that the probability of damage or loss is possible. The model demonstrates that the highest potential (>71 % likely present) for cultural properties within the boundary of the fire is 3.3% of the total acres for the Fishhawk Fire. The relative steepness of much of the terrain precludes the potential for cultural sites. Based on this, the magnitude of consequences of unrecorded sites is considered minor. Utilizing the Critical Values Matrix the potential risk of impact to cultural properties as a result of this fire is low.

B. Emergency Treatment Objectives: Click here to enter text.

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

Land Click here to enter text.

Channel Click here to enter text.

Roads/Trails Click here to enter text.

Protection/Safety Click here to enter text.

D. Probability of Treatment Success

Table 6: Probability of Treatment Success

	1 year after treatment	3 years after treatment	5 years after treatment
Land			
Channel			
Roads/Trails			
Protection/Safety			

E. Cost of No-Action (Including Loss): Click here to enter text.

F. Cost of Selected Alternative (Including Loss): Click here to enter text.

G. Skills Represented on Burned-Area Survey Team:

- | | | | | |
|---|--|---|---|---|
| <input checked="" type="checkbox"/> Soils | <input checked="" type="checkbox"/> Hydrology | <input checked="" type="checkbox"/> Engineering | <input checked="" type="checkbox"/> GIS | <input checked="" type="checkbox"/> Archaeology |
| <input checked="" type="checkbox"/> Weeds | <input checked="" type="checkbox"/> Recreation | <input checked="" type="checkbox"/> Fisheries | <input type="checkbox"/> Wildlife | |
| <input type="checkbox"/> Other: | | | | |

Team Leader:
Email:Kassy Skeen

Phone(s)307-578-5165

Forest BAER Coordinator:
Email:Kassy Skeen

Phone(s):307-578-5165

Team Members:Table 7: BAER Team Members by Skill

Skill	Team Member Name
Team Lead(s)	Kassy Skeen
Soils	Kassy Skeen
Hydrology	Karri Cary
Engineering	Beau Batista
GIS	Shannon Pils
Archaeology	Kyle Wright
Weeds	Jason Brengle
Recreation	Zach Blain
Other	Shawn Anderson, Fisheries Biologist Jennifer Bayne, Soils Trainee

H. Treatment Narrative:Land Treatments: Click here to enter text.

Channel Treatments: Click here to enter text.**Roads and Trail Treatments:** Click here to enter text.**Protection/Safety Treatments:** Click here to enter text.**I. Monitoring Narrative:** Click here to enter text.

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										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Land Treatments</i>				\$0	\$0		\$0		\$0	\$0
B. Channel Treatments										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Channel Treatments</i>				\$0	\$0		\$0		\$0	\$0
C. Road and Trails										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Road and Trails</i>				\$0	\$0		\$0		\$0	\$0
D. Protection/Safety										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Protection/Safety</i>				\$0	\$0		\$0		\$0	\$0
E. BAER Evaluation										
Initial Assessment	Report			---	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				---	\$0		\$0		\$0	\$0
<i>Subtotal Evaluation</i>				\$0	\$0		\$0		\$0	\$0
F. Monitoring										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Monitoring</i>				\$0	\$0		\$0		\$0	\$0
G. Totals				\$0	\$0		\$0		\$0	\$0
Previously approved										
Total for this request				\$0						

PART VII - APPROVALS


Forest Supervisor

October 28, 2019
Date