Date of Report: August 7, 2019

#### **BURNED-AREA REPORT**

### PART I - TYPE OF REQUEST

#### A. Type of Report

- ☐ 1. Funding request for estimated emergency stabilization funds

## 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: Hart

B. Fire Number: AZ-COF-000716

C. State: AZ

D. County: Coconino

E. Region: 3

F. Forest: Coconino National Forest

G. District: Mogollon Rim

H. Fire Incident Job Code: P3MFR2

I. Date Fire Started: July 12, 2019

J. Date Fire Contained: contained 8/1/19

K. Suppression Cost: \$310,000

L. Fire Suppression Damages Repaired with Suppression Funds (estimates): 1.18 miles of fireline

#### M. Watershed Numbers:

Table 1: Acres Burned by Watershed

HUC#	Watershed Name	Total Acres	Acres Burned	% of Watershed Burned	
150200080311	Barbershop Canyon	13,423.6	4,129.3	31	
150200080311	Bear Canyon	14,595.4	707.9	5	
150200080403	East Clear Creek- Clear Creek	39,178.5	154.6	<1	

#### N. Total Acres Burned:

Table 2: Total Acres Burned by Ownership

OWNERSHIP	ACRES	
NFS	4,991.	8
OTHER FEDERAL (LIST		0
AGENCY AND ACRES)		

OWNERSHIP	ACRES
STATE	0
PRIVATE	0
TOTAL	4,991.8

- O. Vegetation Types: Ponderosa pine, Gambel oak, screwleaf muhly (3,045 ac.); Douglas fir (1,358 ac.); ponderosa pine, Gambel oak (577 ac.); bluegrass, Arizona fescue (9 ac.); White fir, Douglas fir, ponderosa pine, Gambel oak (577 ac.),
- P. Dominant Soils: Typic Haplustalfs (5,352 ac.), Typic Argiborolls (4,848 ac.), Typic Paleboralfs (2,273 ac.), Typic Dystrochrepts (1,667 ac.), Typic Glossoboralfs (1,182 ac.), Udic Argiborolls (734 ac.), Cumulic Haploborolls (437 ac.), Eutric Glossoboralfs (167 ac.), Glossic Eutroboralfs (123 ac.), Pachic Argiborolls (2 ac.)
- Q. Geologic Types: Gray to tan cherty limestone of the Kaibab and Torroweap formations and underlying white to tan fine-grained Coconino Sandstone (4,991.8 ac.)
- R. Miles of Stream Channels by Order or Class:

Table 3: Miles of Stream Channels by Order or Class

STREAM TYPE	MILES OF STREAM
FIRST ORDER	11.8
SECOND ORDER	1.6

S. Transportation System:

**Trails:** National Forest (miles): 2.1 Other (miles): **Roads:** National Forest (miles): 36.5 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
Unknown (cloud cover)	815	0	0	0	815	16.3
Very low or unburned	1,457	0	0	0	1,457	29.2
Low	2,547	0	0	0	and the second as a	51.0
Moderate	171	0	0	0	171	3.4
High	1	0	0	0	1	0.02
Total	4,991	0	0	0	4,991	

- B. Water-Repellent Soil (acres): Approximately 172 ac. Moderate and high soil burn severities exhibit greater than 15 seconds for water to infiltrate.
- C. Soil Erosion Hazard Rating: Slight (9,016.15 ac.), Moderate (3,050.27 ac.), Severe (4,723.70 ac.)
- D. Erosion Potential: 2.9 tons per acre per year. Significantly below soil tolerance loss thresholds. Sediment Potential: 1,467 cu. yds. per sq. mi.
- F. Estimated Vegetative Recovery Period (years): 1-3 years
- **G.** Estimated Hydrologic Response (brief description): Two HUC-6 watersheds (Barbershop Canyon and Bear Canyon) were analyzed for soil burn severity impacts and predicted impacts to surface runoff hydrology.

Bear Canyon was further analyzed at the sub-watershed level, since its fire impacts were contained within Houston Draw. See table below for results. Combined high and moderate soil burn severity was 1% or less in each location. Due to the low impacts to the soils from the fire, there are little to no anticipated increases in surface runoff hydrology from the pre-fire conditions.

HUC#	Watershed Name	Watershed Acres	High & Moderate Soil Burn Severity Acres		
150200080304	Barbershop Canyon	13,413	169 (1.3%)	1,919 (14.3%)	
150200080302	Bear Canyon	14,584	2 (0.0%)	556 (3.8%)	
	Sub-watersheds				
	Houston Draw	2,165	2 (0.1%)	556 (25.7%)	

#### PART V - SUMMARY OF ANALYSIS

## Introduction/Background

No BAER Emergency. This was a managed fire with limited moderate (171 ac.) and high (1 ac.) burn severity.

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

Table 5: Critical Value Matrix

Probability of	Magnitude of Consequences							
Damage or Loss	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. Click here to enter text.
- 2. Property (P):Click here to enter text.
- 3. Natural Resources (NR): Click here to enter text.
- 4. Cultural and Heritage Resources: Click here to enter text.
- B. Emergency Treatment Objectives: N/A No emergency

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

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

F. Cost of Select Area Survey Tea	ted Alternative (Includi m:	ing Loss): Click he	ere to enter text.	Skills Represented on E	3urned-
⊠ Soils		□ Engineering	⊠ GIS	☐ Archaeology	
☐ Weeds ☐ Other:	☐ Recreation	☐ Fisheries	□ Wildlife	_ / wonderlogy	
Team Lead					
Email: mica	ah.kiesow@usda.gov; cl	hristopher.macdon	ald@usda.gov	Phone(s) 928-637-5652	<u> </u>
Email: chris	R Coordinator: stopher.macdonald@use bers:Table 7: BAER Team I	Members by Skill			
	Skill	Team Member	Name		
	Team Lead(s)	Christopher Mad	Donald, Micah K	iesow	
	Soils	Rory Steinke (Al	D), Thomas Gian	ıbra	
	Hydrology	Thomas Runyon	ı, Edwin Bone		
	Engineering	Sean Untalan			
	GIS	Ralph Falsetto,	Alex Heeren		
	Archaeology				
	Weeds	Debra Crisp			
	Recreation	Patrick McGerve	eV		

# H. Treatment Narrative:Land Treatments: None recommended

Channel Treatments: None recommendedRoads and Trail Treatments: None recommendedProtection/Safety Treatments: None recommendedI. Monitoring Narrative: Click here to enter text.

USDA FOREST SERVICE FS-2500-8 (3/19)

# PART VI - EMERGENCY STABILIZATION TREATMENTS AND SOURCE OF FUNDS

			NFS Lar	nds			Other L	ands		All
		Unit	# of		Other	# o	Fed	# of	Non Fed	Total
Line Items	Units	Cost	Units	BAER\$	\$	unit	\$	Units	\$	\$
							T			
A. Land Treatments										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
Insert new items above this	line!			\$0	\$0		\$0		\$0	\$0
Subtotal Land Treatments				\$0	\$0		\$0		\$0	\$(
B. Channel Treatments									E	
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0	3	\$0	\$0 \$0
Insert new items above this	line!			\$0	\$0		\$0	-	\$0	\$0
Subtotal Channel Treatment	s			\$0	\$0		\$0		\$0	\$0
C. Road and Trails										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
Insert new items above this	line!			\$0	\$0	8	\$0		\$0	\$0
Subtotal Road and Trails				\$0	\$0		\$0		\$0	\$0
D. Protection/Safety										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
Insert new items above this	line!			\$0	\$0		\$0		\$0	\$0
Subtotal Protection/Safety				\$0	\$0		\$0		\$0	\$0
E. BAER Evaluation										
Initial Assessment	Report	\$8,000	1	\$8,000.00	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
Insert new items above this	line!				\$0		\$0		\$0	\$0
Subtotal Evaluation				\$8,000	\$0		\$0		\$0	\$0
F. Monitoring						8				
				\$0	\$0		\$0		· \$0	\$0
				\$0	\$0		\$0		\$0	\$0 \$0
Insert new items above this	line!		1	\$0	\$0		\$0		\$0	\$0
Subtotal Monitoring				\$0	\$0		\$0		\$0	\$0
G. Totals				\$8,000	\$0		\$0		\$0	\$0
Previously approved										
Total for this request		L		\$8,000						

**PART VII - APPROVALS** 

1. Turne Supervisor S/8/19
Forest Supervisor Date