USDA-FOREST SERVICE FS-2500-8 (6/06)

Date of Report: 6/27/2017

BURNED-AREA REPORT
(Reference FSH 2509.13)

PART I - TYPE OF REQUEST

A. Type of Report

[ ]1. Funding request for estimated emergency stabilization funds
[ ] 2. Accomplishment Report
[XX] 3. No Treatment Recommendation

B. Type of Action

[ ] 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

[XX] 3. Final Report (Following completion of work)

PART II - BURNED-AREA DESCRIPTION

A. Fire Name: Bar X Fire

B. Fire Number: AZ-CNF-000563

C. State: AZ

D. County: Graham

E. Region: 03

F. Forest: Coronado NF

G. District: Safford

H. Fire Incident Job Code: P3K2U3

I. Date Fire Started: 6/21/17

J. Date Fire Contained: 6/24/17

K. Suppression Cost: $500,000

L. Fire Suppression Damages Repaired with Suppression Funds
1. Fireline waterbarred (miles): NA
2. Fireline seeded (miles): NA
3. Other (identify): NA

M. Watershed Number: 150502010604 – Martin Wash- Alkali flats
150400050601 – Gilespie Wash

N. Total Acres Burned:
NFS Acres (2784) Other Federal ( ) State ( ) Private ()

O. Vegetation Types: Juniper Shrub Grassland

P. Dominant Soils: Lithic Haplustolls and Typic Argiustolls

Q. Geologic Types: Granite Colluvium and Alluvium

R. Miles of Stream Channels by Order or Class: Perennial (0 mi.), Intermittent (1.6 mi.), Ephemeral (14.6 mi.)

S. Transportation System

Trails: 0 miles Roads: 0 miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 1,000 (Unburned/Very Low) 1,645 (low) 139 (moderate) 0 (high)

B. Water-Repellent Soil (acres): 0

C. Soil Erosion Hazard Rating (acres):
2700 (slight) 64 (moderate) 20 (high)

D. Erosion Potential: < 5 tons/acre

E. Sediment Potential: <10% increase cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 3

B. Design Chance of Success, (percent): > 95%

C. Equivalent Design Recurrence Interval, (years): 25

D. Design Storm Duration, (hours): 1

E. Design Storm Magnitude, (inches): 2.1

F. Design Flow, (cubic feet / second/ square mile): 322 cfs / sq mi

G. Estimated Reduction in Infiltration, (percent): <5

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

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats:

The Bar X fire burned in juniper, shrub and oak woodlands over approximately 2,768 acres of National Forest System land in the southern foothills of Kane Spring Mountain, 28 miles southwest of Safford, AZ. The fire boundary is located on the Safford Ranger District. The fire was caused by lightning and started on June 21. Elevation ranges from approximately 5,000 to 6,500 feet within the burn area. Granitic rock outcrops spans the northern side of the fire area. The vegetation community in the East perimeter is Madrean encinal woodland. The main vegetation are shrub and grass species with some oak (Quercus sp.) and redberry juniper (*Juniperus coahuilensis)* tree species. The shrub species mainly consisted of catclaw mimosa (*Mimosa aculeaticarpa Ortega var. biuncifera*), and Sonoran scrub oak (*Quercus turbinella*). The dominant grass species was

lehmann lovegrass (*Eragrostis Lehmaianna*), an introduced species from Africa, with a mix of grama species (*Bouteloua sp.*).

Eragrostis lehmannia establishes faster than native species after a disturbance and fire increases the germinability of the seed bank (Sumrall, 1991). In addition, spread of exotic African grasses into desert grasslands are significantly higher on grazed versus ungrazed grasslands grasslands (Bock et. Al 2007). Therefore, the componant of the Lehmann lovegrass is expected increase within the burn perimeter.

A field visit was conducted 6/26/17 and based on field observations the burned area reflectance classification (BARC) map was adjusted. The unburned out crops showed low burn severity on the BARC map thus these areas were adjusted to unburned/very low burn severity to reflect actual conditions. Water repellency was tested at several points. Hydrophobicity was minor, occuring only small isolated patches underneath consumed agave plants. Burn effects on vegetation appeared patchy, but recovery potential of all vegetation is expected to be high.

Low burn severity makes up approximately two thirds of the entire burn area. Less than a third of the area was unburned due to lack of fuels on the rock outcrops. The fire moved quickly through the area, resulting in a mixture of unburned, black ash and concentrations of white ash where shrubs were consumed. Soils beneath the charred litter and grass maintained soil structure and soil aggregate stability. Soil erosion is expected to be slight in the majority of the area due to high percentage of rock outcrops.

The BarX fire has occurred within its natural fire return interval and is expected to maintain and improve vegetation, soil, and wildlife habitat conditions within the fire adapted and dependent ecosystems.

Critical Values Identified
Critical Values identified (FSM 2523.1 Exhibit 01) during the BAER assessment are: Human life and safety, property, natural resources and cultural/heritage resources. The BAER team evaluated the risk to those critical values using the BAER Risk Assessment (FSM 23235.1 Exhibit 02).

No T&E and no designated or proposed critical habitat is present within the fire perimeter.

No critical values were indentified and no unacceptable risks to life, property, natural or cultural resources exist due to low intensity of burn and small amount of area this fire affects. Subsequently no emergency treatments are needed or recommended.

Human Life and Saftey
None

Infrastucture
None

Natural Resources
None

Cultural Resources
None

Critical Habitat
None

B. Emergency Treatment Objectives: Not applicable

C. Probability of Completing Treatment Prior to Damaging Storm or Event: Not applicable

Land ___-___ Channel ___-___ Roads/Trails ___-___ Protection/Safety _-

D. Probability of Treatment Success: Not Applicable

	Years after Treatment		
	1	3	5
Land			
Channel			
Roads/Trails			
Protection/Safety			

E. Cost of No-Action (Including Loss):NA

F. Cost of Selected Alternative (Including Loss): NA

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

Team Leader: Salek Shafiqullah
Email: sshafiqullah@fs.fed.us Phone: 520-388-8377 FAX:

H. **Treatment Narrative:**

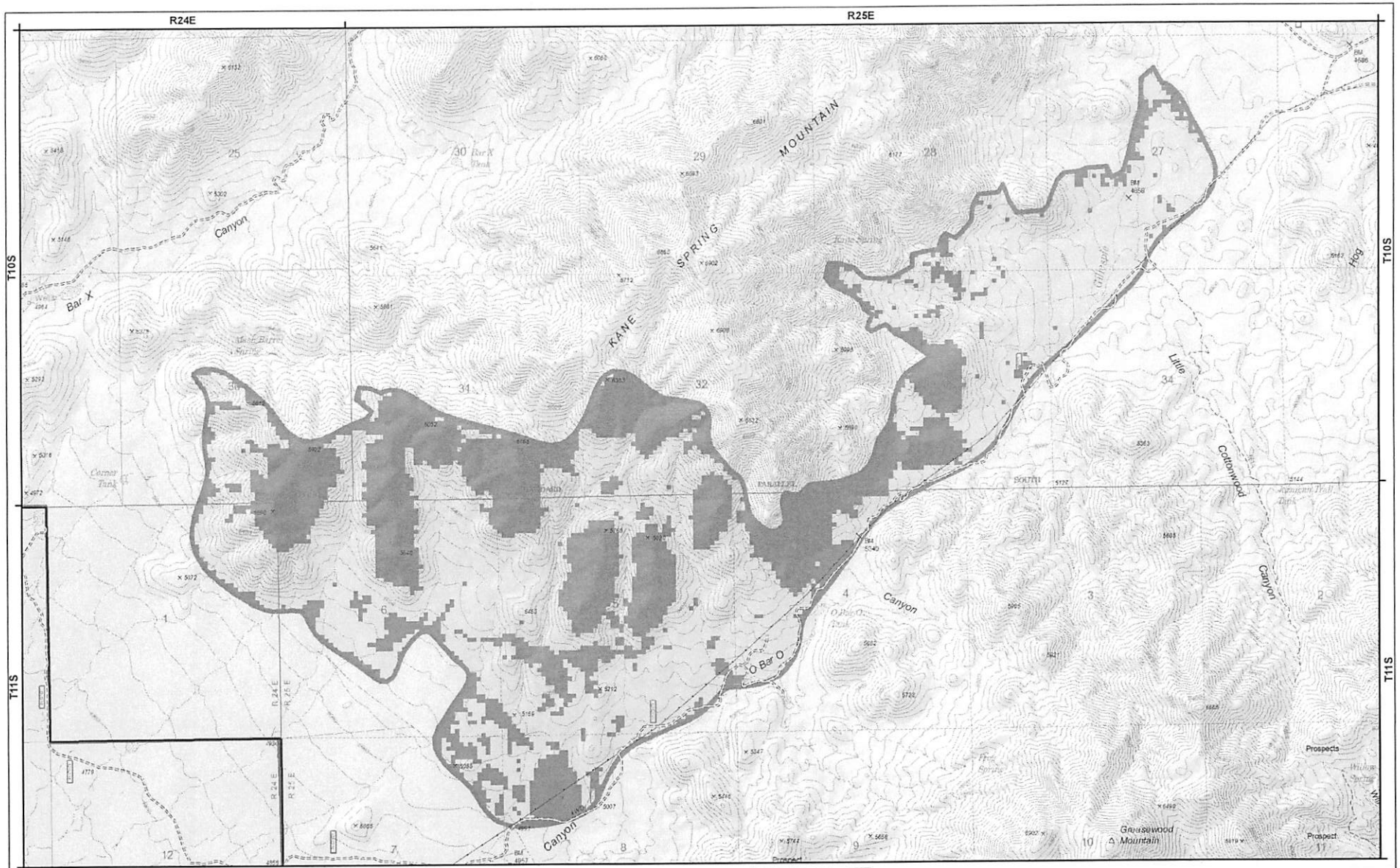
Part VI – Emergency Stabilization Treatments and Source of Funds **Next page**

			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											
					$0	$0		$0		$0	$0
					$0	$0		$0		$0	$0
Subtotal Land Treatments					$0	$0		$0		$0	$0
B. Channel Treatments											
					$0	$0		$0		$0	$0
					$0	$0		$0		$0	$0
					$0	$0		$0		$0	$0
Insert new items above this line!					$0	$0		$0		$0	$0
Subtotal Channel Treat.					$0	$0		$0		$0	$0
C. Road and Trails											
					$0	$0		$0		$0	$0
					$0	$0		$0		$0	$0
					$0	$0		$0		$0	$0
					$0						
Insert new items above this line!					$0	$0		$0		$0	$0
Subtotal Road & Trails					$0	$0		$0		$0	$0
D. Protection/Safety											
					$0	$0		$0		$0	$0
					$0	$0		$0		$0	$0
					$0						
Insert new items above this line!					$0	$0		$0		$0	$0
Subtotal Structures					$0	$0		$0		$0	$0
E. BAER Evaluation											
	$5K			—	$0		$0		$0	$0	
Insert new items above this line!				—	$0		$0		$0	$0	
Subtotal Evaluation				—	$0		$0		$0	$0	
F. Monitoring											
					$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					$0	$0		$0		$0	$0
Previously approved											

PART VII - APPROVALS

1. Kevin L Ackley — Forest Supervisor (signature) — 7/27/2017 — Date

2. _____ — Regional Forester (signature) — _____ — Date



Bar X Fire

Coronado National Forest
Safford Ranger District
Pinaleno

Soil Burn Severity
GIS Acres: 2,784

7/3/2017 2102 pjkt

0 0.5 Miles

Fire Perimeter
Forest Boundary

Soil Burn Severity
Moderate
Low
Very Low-Unburned

Burn Severity	Acres	
Moderate	139	5%
Low	1645	59%
Very Low	1000	36%