USDA-FOREST SERVICE

Date of Report: 4/23/2008

BURNED-AREA REPORT

(Reference FSH 2509.13)

PART I - TYPE OF REQUEST

A. Type of Report	
[] 1. Funding request for estimated emerging[] 2. Accomplishment Report[x] 3. No Treatment Recommendation	gency stabilization funds
B. Type of Action	
[] 1. Initial Request (Best estimate of fund	ds needed to complete eligible stabilization measures)
[] 2. Interim Report #	st based on more accurate site data or design analysis
[] 3. Final Report (Following completion	of work)
PART II - BL	JRNED-AREA DESCRIPTION
A. Fire Name <u>:Pepper Fire</u>	B. Fire Number:_NM-LNF-006
C. State: New Mexico	D. County: Otero
E. Region <u>: 03</u>	F. Forest: Lincoln National Forest
G. District: Sacramento	H. Fire Incident Job Code: P3D5KH
I. Date Fire Started: April 16, 2008	J. Date Fire Contained: April 21,2008
K. Suppression Cost: \$796,500	
L. Fire Suppression Damages Repaired with Some 1. Fireline waterbarred (miles): 4.8 2. Fireline seeded (miles): 0 3. Other (identify):	• •
M. Watershed Number: 130600100202 (Middle	e Agua Chiquita), and 130600100401 (Perk Canyon)
N. Total Acres Burned: <u>640</u> NFS Acres (413) Other Federal () Stat	re () Private ()
O. Vegetation Types: Mixed conifer	
P. Dominant Soils <u>: Pachic Udic Argiborolls, Li</u> soils are shallow and have some high erosion p	thic Eutroboralfs and Lithic Argiborolls - cobbly loam type but otential.

Q. Geologic Types: San Andreas limestone with interbedded dolomite

R.	Miles of Stream Channels by Order or Class:	
1 st	order - 1.8 miles	
S.	Transportation System	
	Trails: 0.0 miles Roads: 4.06 miles	
	PART III - WATERSHED CO	ONDITION
A.	Burn Severity (acres): <u>240</u> (low) <u>380</u> (moderate) <u>20</u>	<u>0</u> (high)
В.	Water-Repellent Soil (acres): 4	
C.	Soil Erosion Hazard Rating (acres): 90 (low) 500 (moderate) 50	(high)
D.	Erosion Potential: 10 tons/acre	
E.	Sediment Potential: 4,500 cubic yards / square mile	
	PART IV - HYDROLOGIC DESIG	GN FACTORS
A.	Estimated Vegetative Recovery Period, (years):	_5
В.	Design Chance of Success, (percent):	85 (no treatment)
C.	Equivalent Design Recurrence Interval, (years):	<u>2</u>
D.	Design Storm Duration, (hours):	<u>1hr</u>
E.	Design Storm Magnitude, (inches):	<u>1.2 in</u>
F.	Design Flow, (cubic feet / second/ square mile):	0.3
G.	Estimated Reduction in Infiltration, (percent):	20%
Н.	Adjusted Design Flow, (cfs per square mile):	0.5
	PARTV - SUMMARY OF A	NAI VSIS

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats:

The Pepper fire began on April 16, 2008 near the end of Hoosier Canyon road (FR5659) in the Agua Chiquita watershed. With the southwesterly prevailing wind and extreme dry condition the fire spread upslope several hundred feet and continued to burn over into the Perk Canyon watershed. Total acreage burned is approximately 640 acres with approximately 40 acres burned in the Agua Chiquita watershed. Elevation of the burned area ranges from 7800 to 8600 feet.

Due to the small size of the fire, the lack of large stand replacing burns (e.g. intense burn), the general isolation of the fire's location, slopes of 20 to 30 percent, upper subwatershed location, ephemeral channels, sparse population downstream where several houses dot along the 8 mile stretch with the majority of them located 7 to 8 miles downstream, and the relative distance to the Perk Canyon stream channel from 35 to 400 feet with one house sitting approximately 35 feet from the channel about 8 miles downstream are reasons to deemed this to be a low risk post-wildfire impact to life, property, and natural and cultural resources. Distance from the Perk Canyon channel from FR171 ranges from 80 to 600 feet where most of the channel meanders through the open alluvial valley of the Perk Canyon watershed. There are no resource concerns in archaeology, soils, hydrology and wildlife based on reports from resource specialists. There is no need to implement any post-fire BAER mitigation efforts.

Resource at risk would be FR171 (Perk Canyon road) at the drainage junction of Gage canyon that connects to Perk Canyon near the southeastern section of Pepper fire. The drainage of Gage canyon opens up into a large, open grassy area over a distance of 300 feet. The ephemeral channel of Gage canyon disappears (i.e. no longer a defined channel) as it flows into the open grassy 1+ acre area above the road and 2 acres below it. It is expected that the deposition of debris flow containing ash, sediment and some minor woody debris will likely litter across the grassy area and onto Perk Canyon road up to 120 feet across covering a portion of the road bend. Heavier and more intense rainstorm may scour some of the road necessitating a quick road repair work.

Closure of Perk Canyon (FS171) may be necessary for road repair and/or clean-up and closure of road for public safety. If given advanced warning with enough time on approaching thunderstorm in the area of the Pepper fire road closure of FS171 may be necessary for public safety.

B. Emergency Treatment Objectives:

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

Land __ % Channel __ % Roads/Trails __ % Protection/Safety __ %

D. Probability of Treatment Success

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

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

Cost of no action may include labor and equipment cost to clean up of ashflow and small debris across FR171 road (Perk Canyon road) which may amount to a few thousand dollars for a single day's work. FR171 road is a dirt and gravel road. But in the case of a higher intensity rainstorm event a section of the road may get eroded out and would require a quick repair. The road is level with the surrounding area. There is no culvert. There is not a defined channel that crosses road 171. It would be expected that materials from the fire will spread out and deposit ash, sediment and maybe some small woody debris from to 20 to 120 feet along length of the roadway.

F. (Cost of Selected A	Alternative (Incl	uding Loss) <u>:</u>				
G.	Skills Represente	d on Burned-Ar	ea Survey Team:				
	[] Forestry [] Contracting	[x] Wildlife	[] Geology [] Fire Mgmt. [] Botany [] Landscape Arch	[] Engineering [x] Archaeology	[] [] []		
Tea	ım Leader <u>: Mike N</u>	<u>McConnell</u>					
Ema	ail: msmcconnell	@fs.fed.us	Phone	<u> 575 434-7251</u>		FAX <u>:</u>	
Н.	Treatment Narrat	tive:					
	Land Treatment	<u>s</u> :					
	None						
	Channel Treatm	nents:					
	None						
	Roads and Trail	Treatments:					
	None						
	Protection/Safety Treatments:						
I. N	lonitoring Narrat	ive:					

Part VI – Emergency Stabilization Treatments and Source of Funds Interim #

			NFS La	nds		8		Other L	ands		All
		Unit	# of		Other	Š	# of	Fed	# of	Non Fed	Total
Line Items	Units	Cost	Units	BAER\$		Š	units	\$	Units	\$	\$
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A. Land Treatments				•	•	X		40			Φ.
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				\$0	\$0	7		\$0		\$0	\$0
				\$0	\$0			\$0		\$0	\$0
Insert new items above this line!				\$0	\$0			\$0		\$0	\$0
Subtotal Land Treatments				\$0	\$0	Ø		\$0		\$0	\$0
B. Channel Treatment	ts					X			•		
				\$0	\$0	X		\$0		\$0	\$0
				\$0	\$0	X		\$0		\$0	\$0
				\$0	\$0	X		\$0		\$0	\$0
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Subtotal Channel Treat.				\$0	\$0	X		\$0		\$0	\$0
C. Road and Trails					•	Š					
				\$0	\$0	Ø		\$0		\$0	\$0
				\$0	\$0			\$0		\$0	\$0
				\$0	\$0			\$0		\$0	\$0
Insert new items above this line!				\$0	\$0	7		\$0		\$0	\$0
Subtotal Road & Trails				\$0	\$0			\$0		\$0	\$0
D. Protection/Safety				Ψ	Ψυ	X		Ψ		Ψ	Ψ
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Subtotal Structures				\$0 \$0	\$0 \$0			\$0		\$0	\$0
E. BAER Evaluation				ΨΟ	2000			ΨΟ		ΨΟ	Ψ
L. DALK Evaluation					2000	Š		\$0		\$0	\$0
lannat anno itaman aharra thin linal					\$0	X		\$0		\$0	\$0
Insert new items above this line!					\$0 \$0	~		\$0 \$0		\$0	\$0
Subtotal Evaluation					ΦО	8		φU		ΦU	\$ U
F. Monitoring				φ ₀	<u></u>	8				ф <u>О</u>	<u></u>
				\$0 \$0	\$0			\$0 ©0		\$0 \$0	\$0 \$0
Insert new items above this line!				\$0 \$0	\$0 \$0			\$0		\$0	\$0 \$0
Subtotal Monitoring				\$0	\$0	8		\$0		\$0	\$0
G. Totals				\$0	\$0	×		\$0		\$0	\$0
Previously approved						X					
Total for this request				\$0		X					

PART VII - APPROVALS

1.	/s/Jacque Buchanan	_4/25/08			
	Forest Supervisor (signature)	Date			
2.					

Regional Forester (signature)

Date