

Date of Report: August 9, 2005

BURNED-AREA REPORT

(Reference FSH 2509.13)

PART I - TYPE OF REQUEST**A. Type of Report**

- ☒ 1. Funding request for estimated WFSU-SULT funds
- ☐ 2. Accomplishment Report
- ☐ 3. No Treatment Recommendation

B. Type of Action

- ☐ 1. Initial Request (Best estimate of funds needed to complete eligible rehabilitation measures)
- ☒ 2. Interim Report
 - ☒ Updating the initial funding request based on more accurate site data or design analysis
 - ☐ Status of accomplishments to date
- ☐ 3. Final Report (Following completion of work)

PART II - BURNED-AREA DESCRIPTIONA. Fire Name: FloridaB. Fire Number: AZ-CNF-000147C. State: ArizonaD. County: Santa Cruz, PimaE. Region: 3F. Forest: CoronadoG. District: NogalesH. Date Fire Started: July 7, 2005I. Date Fire Contained: July 24, 2005J. Suppression Cost: \$8,100,000**K. Fire Suppression Damages Repaired with Suppression Funds**

- 1. Fireline waterbarred (miles): about 80
- 2. Fireline seeded (miles):
- 3. Other (identify): 1800 feet of broken domestic water line replaced

L. Watershed Number: 1505030102, 1505030106, 1505030105, 1505030201, 1505030107M. Total Acres Burned: 23,183

NFS Acres(22,438) Other Federal () State (634) Private (111)

N. Vegetation Types: grassland, mixed juniper-oak woodland, chaparral and mixed coniferO. Dominant Soils: Lithic Ustichrept, Aridic Ustichrept, and Fluvent UstichreptP. Geologic Types: Granite, Rhyolite, and Andesite; minor amount of Limestone

Q. Miles of Stream Channels by Order or Class: 102 miles first order streams, 16 miles second order stream

R. Transportation System

Trails: 33 miles Roads: 28 miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 18,163 (low & unburned) 4,382 (moderate) 638 (high)

B. Water-Repellent Soil (acres): 638

C. Soil Erosion Hazard Rating (acres):
1848 (low) 8066 (moderate) 13269 (high)

D. Erosion Potential: 27 tons/acre

E. Sediment Potential: 12800 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 5

B. Design Chance of Success, (percent): n/a

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

D. Design Storm Duration, (hours): 1

E. Design Storm Magnitude, (inches): 2.31

F. Design Flow, (cubic feet / second/ square mile): 385

G. Estimated Reduction in Infiltration, (percent): 70%

H. Adjusted Design Flow, (cfs per square mile): 658

PART V - SUMMARY OF ANALYSIS

A. Describe Watershed Emergency: The fire area was large but severely burned areas were limited. All severely burned areas, and most moderately burned areas were within coniferous forest zones at the top of the mountain range. All watersheds affected by severely burned areas are only affected at the highest elevations, and no watershed had more than 10% of the area severely burned. Thus, the increase in flood potential to the values at risk due to the fire is limited. Erosion potential is naturally high due to extremely steep slopes. The wilderness resource will not be lost due to flooding or erosion caused by the fire. Cattle may be attracted to the burned area, and burned fences will allow them to make their way into the Wilderness and the Madera Canyon riparian area where natural recovery is desired in the absence of grazing. There is a potential for post-fire hazards such as falling trees, flash floods, and washed out trails that make the burned area dangerous to the recreating public. Recent precipitation events have caused erosion, fallen trees, and a flash flood that brought floatable material (burned logs) into the channel. As of August 9, 2005 there is a need to removed debris from the channel of Madera Canyon Creek in order to reduce the risk of bridges plugging and failing.

There is approximately 3 miles of channel to be cleared. There is also a high likelihood of expansion of Lehmann's lovegrass into the burned area.

Due to scattered nature of the severely burned areas, the fact that the wilderness resource will not be degraded, and the steep, rocky topography no prescriptions to prevent erosion or flooding following the Florida Fire are proposed. However, several projects are proposed to mitigate the public health and safety situation, protect land productivity by preventing a widespread intrusion of Lehmann's lovegrass into native grasslands, and to protect the Madera Canyon riparian and recreation area and Mt. Wrightson Wilderness from unmanaged cattle grazing in order that natural processes may occur.

In addition, there are several private inholdings with improvements including residences, bridges, retaining walls, and water system components that are at risk. Santa Cruz County is working to respond to these issues. There are also improvements associated with special use permits that are at risk.

B. Emergency Treatment Objectives:

Make the area safe for the public
Reduce risk to special use permittted improvements
Protect land productivity

C. Probability of Completing Treatment Prior to First Major Damage-Producing Storm:

Land n/a % Channel n/a% Roads n/a % Other 90 %

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land	N/A	N/A	N/A
Channel	N/A	N/A	N/A
Roads	N/A	N/A	N/A
Other	90%	90%	90%

E. Cost of No-Action (Including Loss): \$6,150,000 *

F. Cost of Selected Alternative (Including Loss): \$5,334,150 **

G. Skills Represented on Burned-Area Survey Team:

<input checked="" type="checkbox"/> Hydrology	<input checked="" type="checkbox"/> Soils	<input checked="" type="checkbox"/> Geology	<input type="checkbox"/> Range	<input checked="" type="checkbox"/> Wilderness
<input checked="" type="checkbox"/> Forestry	<input checked="" type="checkbox"/> Wildlife	<input type="checkbox"/> Fire Mgmt.	<input checked="" type="checkbox"/> Engineering	<input type="checkbox"/>
<input type="checkbox"/> Contracting	<input type="checkbox"/> Ecology	<input type="checkbox"/> Botany	<input checked="" type="checkbox"/> Archaeology	<input type="checkbox"/>
<input type="checkbox"/> Fisheries	<input type="checkbox"/> Research	<input type="checkbox"/> Landscape Arch	<input type="checkbox"/> GIS	

Team Leader: Robert E. Lefevre

Email: rlefevre@fs.fed.us Phone: (520) 388-8373

FAX: (520) 388-8305

H. Treatment Narrative:

(Describe the emergency treatments, where and how they will be applied, and what they are intended to do. This information helps to determine qualifying treatments for the appropriate funding authorities. For seeding treatments, include species, application rates and species selection rationale.)

Land Treatments: Aerial seed 4043 acres on the north and east sides of the fire with a mix of any combination of the following native species: Sideoats grama (*Bouteloua curtipendula*), Blue grama (*Bouteloua gracilis*), Rothrock grama (*Bouteloua rothrockii*), Green sprangletop (*Leptochloa dubia*), Indian wheat (*Plantago insularis*), Alkali Sacaton (*Sporobolus airoides*), Sand dropseed (*Sporobolus cryptandrus*), and Small-flowered fescue (*Vulpia microstachys*) at a rate of not less than 50 seeds per square foot. These are native, locally collected seed intended to prevent establishment of new large stands of Lehman's lovegrass. The combination of species must be variable because of the difficulty of finding sufficient amounts of any three species to cover the area. Of the 4043 acres proposed for seeding, 3116 acres are outside the Mt. Wrightson Wilderness and 927 acres are within the Mt. Wrightson Wilderness.

Survey and remove noxious weeds from the burned area three times during the next 12 months.

Channel Treatments: [Clear three miles of Madera Canyon Creek channel of debris.](#)

Roads and Trail Treatments: Remove hazard trees and killer trees from along the trail system either by sawing them down, or if that proves too dangerous, blasting them. Patrol trails periodically for the next 12 months to stay on top of the safety situation. Install signs informing visitors of closed areas and that any opened burned area has increased likelihood of falling trees, rolling rocks, eroded trails, and flash floods.

Structures: Reconstruct three miles of burned fence that is needed to keep cattle out of the Madera Canyon riparian area and the Mt. Wrightson Wilderness. Protect the exposed portions of the Madera Homeowner Improvement Association water line and the Florida water system water line from damage due to falling trees or rolling rocks with logs, rocks, or other available natural material. Alert the users of the Florida Experiment Station that Florida Canyon may experience increased flows laden with gravel and ash as well as floating debris such as branches and logs.

I. Monitoring Narrative:

(Describe the monitoring needs, what treatments will be monitored, how they will be monitored, and when monitoring will occur. A detailed monitoring plan must be submitted as a separate document to the Regional BAER coordinator.)

Monitoring for the general fire area including will be done as part of our Forest Plan and Range Allotment monitoring. The seeding project will be monitored by randomly located paced transects conducted at the onset of the monsoon season 2006.

Part VI – Emergency Rehabilitation Treatments and Source of Funds by Land Ownership

Line Items	Units	Unit Cost	NFS Lands		Other \$	Other Lands			All Total \$
			# of	WFSU		# of	Fed	# of	
			Units	SULT \$		units	\$	Units	
A. Land Treatments									
Aerial Seed outside W	acres	45	0	\$0			\$0		\$0
Aerial Seed within W	acres	45	0	\$0			\$0		\$0
Survey and Remove N	each	2500	0	\$0			\$0		\$0
				\$0			\$0		\$0
Subtotal Land Treatments				\$0			\$0		\$0
B. Channel Treatments									
Channel Clearing	miles	7000	3	\$21,000			\$0		\$21,000
				\$0			\$0		\$0
				\$0			\$0		\$0
				\$0			\$0		\$0
Subtotal Channel Treat.				\$21,000			\$0		\$21,000
C. Road and Trails									
Remove Hazard Trees	each	50	0	\$0			\$0		\$0
Warning Signs	each	50	0	\$0			\$0		\$0
Closure Signs	each	100	0	\$0			\$0		\$0
Patrol	each	1200	0	\$0			\$0		\$0
Subtotal Road & Trails				\$0			\$0		\$0
D. Structures									
Fence near Madera Ca	mile	10,000	0	\$0			\$0		\$0
Water line protection	mile	3000	0	\$0			\$0		\$0
				\$0			\$0		\$0
				\$0			\$0		\$0
Subtotal Structures				\$0			\$0		\$0
E. BAER Evaluation									
Team	days	0	0	\$0	\$12,500		\$0		\$0
		0	0	\$0			\$0		\$0
		0	0	\$0					\$0
F. Monitoring	each	\$7,500	0	\$0					\$0
		0	0	\$0					\$0
				\$0			\$0		\$0
Subtotal Monitoring				\$0			\$0		\$0
G. Totals				\$21,000			\$0		\$21,000

PART VII - APPROVALS

1. /s/ Jeanine A. Derby
Forest Supervisor (signature)

8/11/2005
Date

2. /s/ Lucia M. Turner
Regional Forester (signature)

8/15/2005
Date