silt loam.

Date of Report:

BURNED-AREA REPORT

(Reference FSH 2509.13)

PART I - TYPE OF REQUEST

A.	Type of Report						
	[x] 1. Funding request for estimated WFSU-[] 2. Accomplishment Report[] 3. No Treatment Recommendation	-SU	LT funds				
В.	3. Type of Action						
	[x] 1. Initial Request (Best estimate of funds	s ne	eded to complete eligible rehabilitation measures)				
	[] 2. Interim Report[] Updating the initial funding request[] Status of accomplishments to date	bas	ed on more accurate site data or design analysis				
	[] 3. Final Report (Following completion of	WOI	rk)				
	<u>PART II - BUR</u>	NE	D-AREA DESCRIPTION				
A.	Fire Name: Freds	В.	Fire Number: CA-LPF 2429				
C.	State: CA	D.	County: Monterey				
E.	Region: 05	F.	Forest: Los Padres				
G.	. District: Monterey						
Н.	Date Fire Started: 9-23-2004	I. [Date Fire Contained: 9-25-2004				
J.	Suppression Cost: 3 million						
K.	 K. Fire Suppression Damages Repaired with Suppression Funds 1. Fireline waterbarred (miles): 3 miles 2. Fireline seeded (miles): 0 3. Other (identify): 0.1 miles dozer line, helibase, 5 helispots 						
L.	Watershed Number: 1806000510						
M.	. Total Acres Burned: 768 NFS Acres(768) Other Federal () State (()	Private ()				
N.	Vegetation Types: Xeric chaparral, oak grassl	<u>and</u>	, coastal sage, mesic chaparral, annual grassland.				
Ο.	. Dominant Soils: Santa Lucia Reliz Assoc., R	ock	outcrop - Xerothant assoc., Gaviota sandy loam, Shedd				

P. Geologic Types: Monterey miocene formation, schist, granitic rocks, Mint canyon, landslide material

Q. Miles of Stream Channels by Order or Class: 1st order = 2 miles, 2nd order = 2 miles
 R. Transportation System
 Trails: 1 miles
 Roads: 0 miles

PART III - WATERSHED CONDITION

- A. Burn Severity (acres): <u>250</u> (low) <u>310</u> (moderate) <u>50</u> (high), (unburned) <u>100</u>
- B. Water-Repellent Soil (acres): 145
- C. Soil Erosion Hazard Rating (acres):

567_ (low) 93_ (moderate) 50_ (high)

- D. Erosion Potential: 13.1 tons/acre/two year period
- E. Sediment Potential: 3800 cubic yards / square mile/two year period

PART IV - HYDROLOGIC DESIGN FACTORS

A.	Estimated Vegetative Recovery Period, (years):	<u>5</u>
В.	Design Chance of Success, (percent):	80
C.	Equivalent Design Recurrence Interval, (years):	<u>10</u>
D.	Design Storm Duration, (hours):	_24
Ε.	Design Storm Magnitude, (inches):	<u>6</u>
F.	Design Flow, (cubic feet / second/ square mile):	27
G.	Estimated Reduction in Infiltration, (percent):	20
Н.	Adjusted Design Flow, (cfs per square mile):	76.4

PART V - SUMMARY OF ANALYSIS

A. Describe Watershed Emergency:

Loss of water control at the mouth of the drainage that burned. This could result in the flooding of at least one house, a Forest Service engine bay, and washing out of a road that accesses several homes and an important recreation area.

- Risk of increased runoff and sedimentation in a channel that floes past a private residence.
- Risk of increased runoff and sedimentation in a channel behind the Arroyo Seco Fire station which may cause water to enter the compound.
- Risk of increased runoff and sedimentation may cause the water to flow out onto the road at the east end of the Arroyo Seco bridge.

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Aerial photo of the Freds Fire looking north. Drainage on the right is unburned.

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Aerial view of the Arroyo Seco Resort. FS engine bay is left center, bridge is just off the photo's left side at the road, and the creek flows along the ridge along top left side of photo.

B. Emergency Treatment Objectives:

Maintain control of the increased flows by facilitating water flow and increasing the channel volume with sand bags near the engine bay and K rails to divert high flows away from the road. NRCS in Salinas (Pedro Ramos @ 831-424-7289) has been contacted and will contact the homeowners at the Arroyo Seco Resort to speak with them about options for controlling possible flooding on private property.

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Shallow channel near the engine bay where sand bagging is proposed.

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Turn in creek at bridge where K rails are proposed. The creek turns hard to the right just before the road, then enters the Arroyo Seco River under the bridge. The original channel went across the road.

C.	Probability of	Completing	Treatment I	Prior to I	First Maior	Damage-F	Producina:	Storm:

D. Probability of Treatment Success

	Years after Treatment					
	1	3	5			
Land						
Channel	80	90	95			
Roads						
Other						

- E. Cost of No-Action (Including Loss): 500,000
- F. Cost of Selected Alternative (Including Loss): 11,042
- G. Skills Represented on Burned-Area Survey Team:

[x] Hydrology	[] Soils	[x] Geology	[] Range	[]

[] Forestry	[x] Wildlife	[x] Fire Mgmt.	[x] Engineering	[]
[] Contracting	[] Ecology	[x] Botany	[x] Archaeology	[]
[x] Fisheries	[] Research	[] Landscape Arch	n [] GIS	

Team Leader: Kevin Cooper

Email: kccooper@fs.fed.us Phone: (805) 925-9538 x216 FAX: (805) 961-5781

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:

Channel Treatments:

- Risk of increased runoff and sedimentation in a channel that flows past a private residence. .
- Risk of increased runoff and sedimentation in a channel behind the Arroyo Seco Fire station that may cause water to enter the compound.
- Risk of increased runoff and sedimentation may cause the water to flow out onto the road at the east end
 of the Arroyo Seco bridge.

Private Homes

Recommended action: Even though we believe it is unlikely that the residence will be damage from sediment and water there is still an increased risk due to the fire. We recommend that the NRCS come out and consult with the owner and determine if the owner needs protection.

Engine Bay

Recommended action: The cut brush located in the channel must be removed. The wire fence that spans the channel should be removed. We are recommending a sand bag wall be built for a distance of 80 feet on top of the bank to keep the water and sediment in the channel. The sandbag wall would be 80 feet long 3 feet wide and 2 feet high.

Arroyo Seco Road

Recommended action: Two "K" rails to be installed on the upper bank of the channel where the channel makes the bend to the west. This should successfully divert the water and keep it in its channel.

Roads and Trail Treatments:

Structures:

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.)

No weed monitoring will be necessary. There were no dozer lines established on Forest, all vehicles remained on paved roads outside the fire perimeter, and no noxious weeds were detected at the helibase.

The treatments at Arroyo Seco will be monitored on a regular basis by the residents of FS fire station with normal operating funds.

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

A. Land Treatments					R	Я			
				\$0	8	Ř	\$0	\$0	\$0
				\$0	B	8	\$0		
				\$0	3	8	\$0	\$0	\$0
				\$0	3	8	\$0	\$0	\$0
Subtotal Land Treatments				\$0	3	8	\$0	\$0	\$0
B. Channel Treatmen	ts				3	8	•		
Sand bags	bags	0	1000	\$0	Š	8	\$0	\$0	\$0
K-rails	each	400	3	\$1,200	\$	8	\$0	\$0	\$1,200
K-rails transport	each	1	1770	\$1,770		K	\$0	\$0	\$1,770
CCC sandbagging	each	1	6100	\$6,100	[K			\$6,100
FS implementor	each	1	1000	\$1,000		X			\$1,000
Sand and delivery	each	1	972	\$972		X	\$0	\$0	\$972
Subtotal Channel Treat.				\$11,042		X	\$0	\$0	\$11,042
C. Road and Trails					8	8	•	•	
				\$0	8	Ř	\$0	\$0	\$0
				\$0	8	8	\$0	\$0	\$0
				\$0	8	8	\$0	\$0	\$0
				\$0	8	8	\$0	\$0	\$0
Subtotal Road & Trails				\$0	3	8	\$0	\$0	\$0
D. Structures					3	8	·	-	
				\$0	8	8	\$0	\$0	\$0
				\$0	8	8	\$0	\$0	\$0
				\$0	{	X	\$0	\$0	\$0
				\$0	{	X	\$0	\$0	\$0
Subtotal Structures				\$0	[X	\$0	\$0	\$0
E. BAER Evaluation					{	X			
				\$3,500	{	X	\$0	\$0	\$3,500
				\$0		X	\$0	\$0	\$0
F. Monitoring				\$0		8	\$0	\$0	\$0
G. Totals				\$14,542	- 8	8	\$0	\$0	\$14,542
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PART VII - APPROVALS

1.	<u>/s/ Gloria D. Brown</u> Forest Supervisor (signature)	<u>September 29, 2004</u> Date
2	/s/ Vicki Jackson (for)	October 13, 2004
2.	Regional Forester (signature)	Date