August 28, 2013

# BURNED-AREA REPORT (Reference FSH 2509.13)

# **PART I - TYPE OF REQUEST**

A. Type of Report	18 to
[X] 1. Funding request for estimated emer [] 2. Accomplishment Report [] 3. No Treatment Recommendation	rgency stabilization funds
B. Type of Action	
[X ] 1. Initial Request (Best estimate of measures)	funds needed to complete eligible stabilization
[]2. Interim Report #	
[] Updating the initial funding reque	st based on more accurate site data or design
analysis [] Status of accomplishments to date	
[]3. Final Report (Following completion of	work)
PART II - BURNED-A	AREA DESCRIPTION
A. Fire Name: Falls	B. Fire Number: CA-CNF-002512
C. State: California	D. County: Riverside
E. Region <u>: 5</u>	F. Forest: Cleveland
G. District:_ Trabuco	H. Fire Incident Job Code: P5HT3V
. Date Fire Started: 8/5/2013	J. Date Fire Contained: 8/9/2013
K. Suppression Cost: 3,500,000	
Fire Suppression Damages Repaired with Sup 1. Fireline waterbarred (miles): app 2. Fireline seeded (miles): none	
M. Watershed Numbers- NFS lands: Lower San Jacinto River - HUC 5 180703010 San Juan Creek - HUC 5 180703010	020203; 753 acres burned (approx). 2; 631 acres burned

N. Total Acres Burned: 1384 NFS Acres(1045) Other Federal- BLM (0) State (0) Private (339) O. Vegetation Types: Scrub Oak Mixed Chaparral - 1075 ac. Coastal Sage Scrub - 261 acres, Coast Live Oak -23 acres, Agricultural - 2 acres, Urban - 10 acres Dominant Soils - Cienaba/Rock Outcrop Complex 793 ac, Cienaba/Blasingame/Rock Outcrop - 117 ac, Las Posas Gravelly Loam 61 ac, Vista-Rock Outcrop Complex - 108 ac, Rock Outcrop-Cienaba 141, Soboba Cobbly Sandy Loam 38 ac, Ramona fine sandy loam 70 ac, Capistrano sandy loam - 7 ac, Hanford Sandy loam - 47 ac Q. Geologic Types: granitic, alluvial R. Miles of Stream Channels by Order or Class: Intermittent 5.43 Perennial 0 S. Transportation System (NFS lands only) Trails: 0 miles Roads: 2.85 miles (includes 1.23 miles of SR 74- Ortega Hwy, and part of South Main Divide which is maintained by County) PART III - WATERSHED CONDITION A. Burn Severity - (acres): 828 (unburned/low) 535 (moderate) 20 (high) B. Water-Repellent Soil (acres): 130 acres C. Soil Erosion Hazard Rating (acres): 200 - not rated \_\_\_ (low) \_\_200\_\_ (moderate) \_\_900\_\_ (high) D. Erosion Potential: 3.4 tons/acre E. Sediment Potential: 1,500 cubic yards / square mile PART IV - HYDROLOGIC DESIGN FACTORS A. Estimated Vegetative Recovery Period, (years): 5 B. Design Chance of Success, (percent): 95 C. Equivalent Design Recurrence Interval, (years): \* 2 yr D. Design Storm Duration, (hours): \* 30 min E. Design Storm Magnitude, (inches): \* \_1.34\_\_\_

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

...75

G. Estimated Reduction in Infiltration, (percent	ent): *10%
H. Adjusted Design Flow, (cfs per square m	ile): <u>120</u>
*See Hydrology Report for details	

# PART V - SUMMARY OF ANALYSIS

## A. Critical Values/Resources and Threats

The following table summarizes values at risk and emergency determinations identified by the BAER Assessment team. The Specialist Reports, available in the project file, provide detailed descriptions of threats and emergency conditions for values at risk in the burned area.

Summary of Values at Risk and Emergency Determinations.

Values at Risk	Threat	Determination/Comments
Life and Public Safety		
Ortega Highway S-74	Hazard due to potential road damage from rockfall, landslides	Emergency exists. Caltrans and Riverside County jurisdictions
Property	I	
Forest roads and trails	Erosion	No emergency
Houses downstream of fire	Erosion, flooding	Emergency exists- Riverside County jurisdictions
Natural and Cultural	<u> </u>	
Resources		
Soil Productivity	Loss of soil productivity as a result of increased erosion.	No emergency
Water Quality - Lake Elsinore	Potential for impacts to water quality at Lake Elsinore due to erosion	Emergency exists. City of Lake Elsinore jurisdiction
Water Quality- forest streams	OHV access will adversely affect water quality in forest streams that are tributaries to San Juan Creek	Emergency exists
Native Vegetative Recovery and Sensitive Plants and Wildlife	Unauthorized OHV access into burn area and will negatively impact native plant recovery and reduce habitat quality for wildlife, due to damage to existing barbed-wire fence and barriers along	Emergency exists.
	South Main Divide Road	
Weed invasion	Spread of weeds into areas opened up by fire	Emergency exists
Archaeological Sites	Loss or damage to site from increased erosion	No emergency

Life and Safety - Ortega Highway

Life and Property – Lakeland Village: Risks to highway and downstream homes from increased flows, erosion, rock fall hazards. The burned watersheds are expected to have increases in peak flow and sediment loads for 1 to 5 years following the fire until vegetation can recover. The small basin in the Lower San Jacinto watershed is at a higher risk of increases in peak flow and sediment delivery because of the high percentage of burned acreage, terrain, and soil type. Slope treatments are not recommended as several slopes exceed 75% and much of the area is comprised of boulders and bedrock. Treatable area either burned at low SBS or is located outside of Forest Service land. Contacting private land owners, the county, and Caltrans regarding the potential risk is recommended.

Risk Assessment - Ortega Highway and Lakeland Village.

Probability of Damage or Loss: Very Likely.

Magnitude of Consequence: Major. This road receives high levels of use by the public and forest visitors and is located on a steep slope with erosive soils. Several drainages converge into a small flood control channel just above Lakeland Village.

Risk Level: Very High. These resources are under the jurisdiction of Caltrans and Riverside County.

Property and Safety - Forest Roads and Trails: Risks include potential damage from erosion or increased flows.

Risk Assessment - Roads and Trails

Probability of Damage or Loss: Unlikely, no evident risk to Forest roads and trails due to minimal impact from or overlap with the fire

Magnitude of Consequence: Low.

Risk Level: Low.

Natural Resource - Soil Productivity: There is no emergency to soil productivity due to the fire-adapted ecosystem.. It is expected the burned area may contribute to increased runoff and sediment to the drainages as compared to pre-burn conditions. This threat exists even without burned conditions upstream. Flash flooding potential exists in these drainages without the influences of post- fire watershed conditions.

Risk Assessment - Soil Productivity

Probability of Damage or Loss: Unlikely. This determination is due to the limited expected change in watershed response.

Magnitude of Consequence: Minor. This determination is due to the limited change in watershed response.

Risk Level: Low.

Natural Resources - Water Quality- Lake Elsinore: Lake Elsinore is expected to receive increased water flows and sediment due to the fire. The burned watersheds are expected to have increases in peak flow and sediment loads for 1 to 5 years following the fire until vegetation can recover. The small basin in the Lower San Jacinto watershed is at a higher risk of increases in peak flow and sediment delivery because of the high percentage of burned acreage, terrain, and soil type. Slope treatments are not recommended as several slopes exceed 75% and much of the area is comprised of boulders and bedrock. Treatable area either burned at low SBS or is located outside of Forest Service land. Contacting the Lake Elsinore Water District is recommended.

Risk Assessment - Water Quality

Probability of Damage or Loss: Very Likely. There is a high probability that additional sediment will be deposited in Lake Elsinore.

Magnitude of Consequence: Moderate.

Risk Level: Moderate. This is under the jurisdiction of the City of Lake Elsinore and the Lake Elsinore Water District.

Natural Resources - Water Quality- Forest streams: Forest streams on the western side of the fire are expected to be impacted by OHV activity. These streams are tributaries to San Juan Creek.

Risk Assessment – Water Quality

Probability of Damage or Loss: Very Likely. There is a high probability that additional sediment will be contributed to Forest streams if OHV activity cannot be prevented.

Magnitude of Consequence: High

Risk Level: High.

Natural Resources - Sensitive Wildlife Species. The potential values at risk for sensitive species are the stability and viability of populations. There are several sensitive animals known to occur within the Falls Fire area, including Red Diamondback Rattlesnake and San Diego Horned Lizard. These species are resilient to fire. However they are vulnerable to injury or death associated with expected increases in OHV activity due to the loss of existing barriers and loss of vegetation in the burned area.

Risk Assessment - Sensitive Wildlife

Probability of Damage or Loss: Very Likely

Magnitude of Consequence: Moderate.

Risk Level: Very High.

Natural Resources - Native Vegetation Recovery and Sensitive Plants: Chaparral affected by the fire are expected to recover. Vegetation recovery is potentially at risk to due to OHV activity that may occur off South Main Divide, as existing wooden barriers and natural vegetation barriers along the road were damage or destroyed by the fire.

There is an extremely high risk of unauthorized OHV activity following the fire. Unauthorized OHV activity will greatly disturb the natural landscape, visual quality, recreational opportunity expectations of forest users, and the ability of the vegetation to regenerate. Past experience shows administrative closures are ineffective in preventing unauthorized OHV activity. South Main Divide cannot be closed as it is a public right of way that provides access to private inholdings and home. The Falls Fire is en route to a designated OHV area and highly urbanized areas with an extremely large number of OHV users in the area. Physical barriers and OHV regulation enforcement by patrol personnel are the only proven effective methods of reducing unauthorized OHV activity.

Because of the removal of vegetation and flatter terrain in the San Juan Creek watershed fire area, the burned area is susceptible to an increase in unauthorized OHV use. Roads and trails are related to chronic increases in sediment production/delivery. Chronic sediment sources pose the greatest risk to aquatic organisms as many species have evolved to handle pulses of sediment such as those that result from fires but not chronically elevated sediment levels such as those related to roads. To prevent the potential for increased unauthorized OHV use that could lead to long-term soil productivity and water quality issues, it is recommended that barriers be placed along the main access road in the fire burn area (South Main Divide).

Risk Assessment - Native Vegetation Recovery

Probability of Damage or Loss: Very Likely; The probability of unauthorized OHV activity is high.

Magnitude of Consequence: Major, unauthorized vehicle activity will damage soils and vegetation and may be a source of additional fire starts.

Risk Level: Very high.

Natural Resources - Invasive Weeds: Two invasive plant species of particular concern are known to exist in the fire area, Yellow Starthistle (*Centaurea solstitialis*) and Spanish Broom (*Spartium junceum*). Both of these species are known have to ability to rapidly expand into areas disturbed by wildfire. These species currently have a limited distribution on the Forest and are a focus of noxious weed control efforts on the Cleveland National Forest.

Risk Assessment - Invasive weeds

Probability of Damage or Loss: Very Likely, these weeds are known to present in area and have high potential for spread into burned area.

Magnitude of Consequence: High

Risk Level: High.

Cultural Resources: No historic or prehistoric archaeological sites, features or structures (heritage resources) have been recorded within the CNF portion of the Falls Fire burned area, based on the results of the documented previous cultural resource survey that has been conducted. Approximately 80% of the burned area on the CNF is comprised of terrain in which the slope exceeds approximately 20%. This attribute of the terrain, in conjunction with the lack of perennial water sources and the paucity of floral and faunal resources that would have been necessary to support human habitation during the prehistoric period in this area, the potential for prehistoric archaeological deposits outside of the previously surveyed portions of the burned area on the CNF is considered to be low.

Risk Assessment - Cultural Resources

Probability of Damage or Loss: Unlikely.

Magnitude of Consequence: Low.

Risk Level: Low.

## **B.** Emergency Treatment Objectives:

- Land Treatments
  - Reduce the risk of spread for Yellow Star Thistle
- Channel Treatments
  - None recommended
- Road and Trail Treatments
  - None recommended
- Protection and Safety Treatments
  - Reduce threat of unauthorized OHV activity originating from South Main Divide Road which would impair vegetation recovery.
  - Reduce potential for damage to habitat for sensitive wildlife species
- C. Probability of Completing Treatment Prior to Damaging Storm or Event:

Land 95 % Channel % Roads/Trails 95 % Protection/Safety 95 %

# D. Probability of Treatment Success

	Years after Treatment					
	1 3 5					
Land	95	95	95			
Channel	90	90	90			
Roads/Trails	95	95	95			
	14					
Protection/Safety	95	95	95			

- E. Cost of No-Action (Including Loss): 1,500,000
- F. Cost of Selected Alternative (Including Loss): \$80,250
- G. Skills Represented on Burned-Area Survey Team:

<ul><li>[x] Hydrology</li><li>[] Forestry</li><li>[] Contracting</li><li>[] Fisheries</li></ul>	[ ] Soils [x ] Wildlife [ ] Ecology [ ] Research	[] Geology [] Fire Mgmt. [x] Botany [] Landscape A	[ ] Range [ ] Engineering [x ] Archaeology rch [x ] GIS	[x] Recreation [] Haz Mat [X] Weeds
Team Leader <u>:</u> Kirst	ten Winter, For	est Biologist		
Email: <u>kwinter@fs.fe</u> Feam members: Emily Fudge – Hydrol Kirsten Winter – Botal	ogy, Soils	_	FAX <u>: 85</u>	<u>8 673 6192</u>
ance Criley – GIS, W		u vogotation		3

#### H. Treatment Narrative:

Liz Staudenmayer - GIS Steve Harvey- Archaeology

The following sections summarize the treatments recommended to address the emergency situations for values at risk

## **Land Treatments:**

# Life and Safety- Ortega Highway

No land treatment is recommended because the slopes on the National Forest land exceed 60 percent, and are too steep for any effective treatments. The lower slopes that are less steep are on private property.

The Forest will proceed with notifying the local agencies, including Caltrans, the Office of Emergency Services, and the Riverside County Flood Control Agency regarding the potential risks in this area.

#### Weed treatment

Yellow Starthistle: A small crew will survey the South Main Divide Fuel Break and the small riparian drainage flowing west in the burned area in the summer of 2014 when Yellow Starthistle is beginning to flower in adjacent areas. The crews will hand pull and bag and remove any Yellow Starthistle plants encountered. Any plants removed will be marked with a pin flag and the area will be revisited by the crew two to three weeks later to survey for resprouts or missed plants. The total work for 2014 should be two full days for crews of five people.

Spanish Broom: A small crew will survey the Ortega Highway and the drainages below the highway in late spring of 2014 when broom is flowering and visible but has not yet set seed. Large plants will be sprayed with a triclopyr based herbicide (Garlon 4) by basal bark application. New plants will be treated with a foliar application of Garlon 4. Spraying will be done under the supervision of a certified pesticide applicator and will follow the mitigations outlined in the 2009 NEPA decision to treat Broom along the Ortega Highway.

Unit	Unit Cost	# Units	Total
Crew Cost	\$2500/day	2 day	\$5,000

## **Channel Treatments-**

Life and Property – Lakeland Village Water Quality – Lake Elsinore

No channel treatment is recommended because the channels on National Forest lands are on slopes that exceed 60 percent, and are too steep for any effective treatments. The lower channels that are less steep are on private property.

The Forest will proceed with notifying the local agencies, the Office of Emergency Services, Lake Elsinore Water District, and the Riverside County Flood Control Agency regarding the potential risks in this area.

# **Protection/Safety Treatments:**

# Barriers, Fencing, and Patrols (Protection of Property, Resources)

Pipe Rail Barriers, Fencing, and Patrols – Barriers will be installed at sites highly vulnerable to intrusion by OHV's onto Forest land from adjacent ownerships. This treatment is needed to prevent land damage caused by unauthorized entry after the loss of natural vegetation barriers. Without physical protection, vehicular and other damage is expected to be significant on Forest Service land since there is virtually no post-fire vegetation to act as a barrier. Administrative closures have proven to be ineffective in preventing intrusion and damage, and are not possible on South Main Divide as it is a public/county road that provides access to many private homes. Signing of all vulnerable areas will be done in addition to physical barriers. The area will be patrolled on weekends to educate visitors and to help preclude off-road traffic.

- Morgan trailhead, replace 10 wooden barrier posts
- South Main Divide Road install 600 feet of pipe rail barrier
- South Main Divide Road install 4000 feet of barbed-wire fence
- South Main Divide install warning signs
- South Main Divide weekend patrols

#### **Treatment Costs**

Δ	Item =	Unit Cost	Units	Total
	South Main Divide additional barriers- installed price	50/lf .	600 feet	\$30,000
	South Main Divide - barbed wire fence	6000/mi	4000 feet	\$ 4,550
3	Morgan Trailhead – 10 wood posts	150/ea installed	10	\$1,500
	Warning signs	50 /ea installed	20	\$1,000
	Patrol	300/day	100 days	\$30,000
	Contracting Officers Rep	400/day	8	\$3,200
	Total		35	\$70,250

## **Monitoring Narrative:**

In 2015, crews will monitor and re-treat weed occurrences.

## **Monitoring Cost**

1.

# Weed Treatment Monitoring

Unit	Unit Cost	# Units	Total
Crew Cost	\$2500/day	2 day	\$5,000

			NFS La	nds			Other L	ands		All
	Unit	# of		Other	# of	Fed	# of	Non Fed	Total	
Line Items	Units	Cost	Units	BAER\$	\$	units	\$	Units	\$	\$
A. Land Treatments	-					-				
Weed treatment	ea	5000	1	\$5,000	\$0	7821	\$0	11700	\$0	\$5,000
i i i i i i i i i i i i i i i i i i i	- v			\$0	\$0		\$0		\$0	\$0
Insert new Items above this line!				\$0	\$0		\$0		\$0	\$0
Subtotal Land Treatments				\$5,000	\$0		\$0		\$0	\$5,000
B. Channel Treatmen	its									
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Subtotal Channel Treat.		022 0245		\$0	\$0		\$0		\$0	\$0
C. Road and Trails									40	-
none							\$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							45,		40	4.
Barriers	ea	70250	1	\$70,250	\$0		\$0		\$0	\$70,250
				\$0	\$0		\$0		\$0	\$0
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Subtotal Structures				\$70,250	\$0		\$0		\$0	\$70,250
E. BAER Evaluation				4.0,			7.			Ψ. ο,Σου
	1	8500	1	\$8,500			\$0		\$0	\$8,500
Insert new Items above this line!					\$0		\$0		\$0	\$0
Subtotal Evaluation				\$8,500	\$0		\$0		\$0	\$0
F. Monitoring				1.,			- 40		- 44	
Weed tr. Monitoring	1	5000	- 1	\$5,000						\$5,000
				72/222						ψομουσ
nsert new Items above this line!				\$0	\$0	$\vdash$	\$0		\$0	\$0
Subtotal Monitoring				\$5,000	\$0		\$0		\$0	\$5,000
				13,13	7.0					40,000
G. Totals	-			\$80,250	\$0		\$0		\$0	\$80,250
Previously approved					-		7.7		-	
Total for this request				\$80,250						

PART VII - APPROVALS

1.

Forest Supervisor

Da

Date<sup>4</sup>

2. Region

Regional Forester (signature

Page | 12

# Xerox WorkCentre 7346 **Transmission Report**

Date & Time: 08/30/2013 12:45 PM

Page: I(Last Page)

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Job Date & Time

08/30/2013 12:45 PM

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

PART I - TYPE OF REQUEST BURNED-AREA REPORT (Reference FSH 2509.13)

August 28, 2013

[X ] 1. Initial Request (Best estimate of funds needed to complete eligible stabilization [] 2. Interim Report #

[ ] Updaiing the initial funding request based on more accurate

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

PART II - BURNED-AREA DESCRIPTION

F. Forest: Cleveland B. Fire Number: CA-CNF-002512 D. County: Riverside

H. Fire Incident Job Codo: P5HT3V

J. Date Fire Contained: 8/9/2013

I. Date Fire Started: 8/5/2013 K, Suppression Cost: 3,500,000

District:\_ Trabuco

Fire Suppression Damages Repaired with Suppression Funds
 Fireline waterbarred (miles):\_\_approx\_4
 Fireline seeded (miles):\_\_none

Page | 1

Date & Time Sent Recipient Information

Lower San Jacinto River - HUC 5 1807020203; 753 acres burned (approx). San Juan Creek - HUC 5 1807030102; 631 acres burned

Result

08/30/2013 12:45 PM

maudwilliamson@fs.fed.us

Completed

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