

Date of Report:

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
☐ 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
☐ 3. Final Report (Following completion of work)

PART II - BURNED-AREA DESCRIPTIONA. Fire Name: APACHEB. Fire Number: CA-BDF-005147C. State: CAD. County: RiversideE. Region: 05F. Forest: San Bernardino National ForestG. District: San JacintoH. Fire Incident Job Code: P5D59GI. Date Fire Started: 4/29/2008J. Date Fire Contained: 5/5/2208K. Suppression Cost: \$3.2 Million

L. Fire Suppression Damages Repaired with Suppression Funds

1. Fireline waterbarred (miles): less than 1 mile
2. Fireline seeded (miles): 0
3. Other (identify): n/a

M. Watershed Number: #18100200303; West Fork Palm CanyonN. Total Acres Burned: 769.38

NFS Acres (468.58) Other Federal (60.4) State (0) Private (240.4)

O. Vegetation Types: mixed-conifer, California black oak, Canyon live oak, Hard chaparral, white fireP. Dominant Soils: Lithic Xerorthents, Rock outcrop complex, 50 to 100% slopes; Rs - Rock outcrop, 30 to 100% slopes; Off Forest - DaG - Wapi-Pacifico Families - Rock outcrop complex, 50 to 75% slopesQ. Geologic Types: undivided pre-Cenozoic metasedimentary and metavolcanic rock

R. Miles of Stream Channels by Order or Class:

Intermittent = 1.62 miles; Ephemeral = 0.91 miles; Perennial = 0 miles

S. Transportation System

Trails: 1.17 miles

Roads: 0 miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 94.9 (12%) (low) 397.7 (52%) (moderate) 276.8 (36%) (high)

B. Water-Repellent Soil (acres): 277

C. Soil Erosion Hazard Rating (acres):

0 (low) 0 (moderate) 769.5 (high)

D. Erosion Potential: 35 to 55 tons/acre [pre-burn modeled as 2]

E. Sediment Potential: 38 cubic yards / square mile [pre-burn modeled as 4.5]

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 3-5

B. Design Chance of Success, (percent): 80

C. Equivalent Design Recurrence Interval, (years): 5

D. Design Storm Duration, (hours): 6

E. Design Storm Magnitude, (inches): 3

Maximum intensity: 2 in per 30 min

F. Design Flow, (cubic feet / second/ square mile): using Rowe et al. method

Peak discharge: equal or exceeded peak discharge	Normal watershed peak discharge (cfs/sq mi)
Q 2	0.29
Q 5	0.47
Q 10	0.70

G. Estimated Reduction in Infiltration, (percent): 35

H. Adjusted Design Flow, (cfs per square mile): using Rowe et al. method

Peak discharge: equal or exceeded peak discharge	1 year post burn peak discharge (cfs/sq mi)
Q 2	0.41
Q 5	0.63
Q 10	0.93

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats:

The Apache Fire burned a total of 769 acres on National Forest System (NFS) and private lands. A total of 469 acres burned on the San Bernardino NF. The majority of the area burned under moderate soil burn severity (52%), with 36% being high, and 12% being low. The fire was within the San Jacinto Wilderness and the Santa Rosa and San Jacinto National Monuments. The Pacific Crest Trail (PCT) is the main access through the Apache Fire. Elevations of the burned area ranged from approximately 4,600 to 7,600 feet. The West Fork Palm Canyon watershed contains the Apache fire perimeter and has a total acreage of 28,769 acres. The burned area watersheds have steep slopes over 60% with rock and rock outcrop dominating the landscape. Various portions of the the Apache fire were burned in 1929, 1942, and 1980. No fire has occurred in this area since this time.

The majority of the Apache Fire area is covered by soil LrG - Lithic Xerorthents, Rock outcrop complex, 50 to 100% slopes. These slopes are generally found from 4,000 to 7,600 feet above mean sea level (msl) and receive 25 to 35 inches of annual precipitation. Soil depth is generally 10 to 20 inches. The soils have very low water holding capacity along with moderately rapid to very rapid permeability. These soils have a maximum erosion potential of very high. Soil productivity is very low. The soil survey states, "the soils in this unit have a high potential for movement due to dry ravel if the protective cover is removed." (USDA, 1981).

Flow modelling indicates that the West Fork Palm Canyon watershed would experience only a 1% flow increase at the base of the watershed due to the burning of 3% of the upper watershed. Overall sediment yield would increase by 20% averaged across the watershed. Within the fire area, the modelling indicated a 40% increase in flow and an 8.5 fold increase in sediment yield. Hillslope modeling indicated that the high soil burn severity area covering the PCT would have a 17 to 26 fold increase in sediment delivery.

The PCT is a 2,650-mile trail from Mexico to Canada through three western states. The PCT was designated one of the first scenic trails in the National Trails System authorized by Congress in 1968. Thousands of hikers and equestrians use this trail each year. Some only travel a few miles, while others complete the whole length in one season. Up to 1,000 people are expected to use this section of the PCT this season. The Apache Fire affected a 0.85-mile segment of the PCT from 0.32-miles east southeast of Antsell Rock to the Apache Springs Trail junction. There is an elevation change of 560 feet and the vast majority of the trail traverses 50 to 60 percent slopes in this section. As result of the Apache fire, there is a threat to hikers from a increased risk of soil movement, especially during precipitation events. The increased runoff from the burned slopes will increase erosion and damage to the trail tread and could concentrate runoff and erosion onto the slopes below the trail. Dry ravel, especially along the switch-back portions of the PCT may make the trail hazardous to users and increase long-term maintenance costs.

Potential values at risk for R5 Sensitive and Rare plants are the stability and viability of sensitive plant populations. The four R5 Sensitive plants, Shaggyhair alumroot, white-margined oxytheca, and Johnston's rockcress are known only from the San Jacinto and Santa Rosa mountains, while California penstemon has only two vouchered locations elsewhere.

During fire suppression activities, 3 helispots and 3.9 miles of hand lines were created on Forest Service land and used extensively by suppression personnel. It is unknown where the suppression equipment and personnel were before this fire and whether noxious weed seeds may have been inadvertently transported in clothing or boots. If noxious weeds were introduced they could pose a significant risk to native plant regeneration. Existing populations of noxious weeds occur outside the fire area, but close enough that they could spread into the burned area. These weed populations would have the potential to affect the habitat function of native plant communities. Noxious weeds will adversely affect the integrity of the Wilderness. The 10 Year Wilderness

Stewardship Challenge establishes noxious plant species as a necessary element to monitor and treat to maintain Wilderness integrity and character.

Due to a combination of factors such as - slope, soil burn severity, expected watershed response, localized weed source, the BAER Assessment Team determined that there is potential for some concentrated, localized impacts as a result of the Apache Fire. The following table summarizes the potential values at risk and BAER Assessment Team evaluations:

VALUES	FINDINGS	EMERGENCY DETERMINATION
Human Life and Safety		
- Safety of Forest Visitors (PCT hikers)	Under dry conditions there does not appear to be an immediate threat to users from rock fall or dry soil movement.	Under dry conditions (currently), no emergency exists. Warning signs will be placed to warn users. Reassess trail condition following major precipitation events.
Property		
- Pacific Crest Trail; Apache Springs Trail	Intense summer thunderstorms and winter storms will increase runoff and cause damage to the trail facility and impact slopes downslope. Approximately 0.85 miles of the PCT and 0.32 miles of the Apache Springs Trail was affected by the Apache Fire.	Emergency exists as a result of the Apache Fire.
Ecosystem Structure and Function		
- Botanical resources (Native vegetation recovery, Wilderness character)	It is unknown whether suppression equipment and personnel clothing were weed free before deployment to the Apache fire. A source of noxious weeds was found adjacent to the fire perimeter which could spread onto burned slopes.	Potential emergency exists as a result of the Apache Fire. Need to conduct noxious weed detection survey.
- Wildlife resources		No emergency exists as a result of the Apache Fire.

B. Emergency Treatment Objectives:

To alleviate the emergency to the Pacific Crest Trail, Apache Springs Trails and R5 Sensitive and Rare plants the BAER Assessment Team recommends:

1. Stabilize burned portions of the Pacific Crest Trail in quickest most cost-efficient manner
2. Rapid assessment and treatment of noxious weed introduction

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

Land N/A % Channel N/A % Roads/Trails 80 % Protection/Safety 80 %

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land	90%	90%	N/A
Channel	N/A	N/A	N/A
Roads/Trails	80%	90%	90%
Protection/Safety	80%	90%	90%

E. Cost of No-Action (Including Loss): **\$20,130,000**

F. Cost of Selected Alternative (Including Loss): **\$42,463**

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

Team Leader: Anne Poopatanapong/ Robert G. Taylor

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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: noxious weed detection

Weed detection surveys will be used to determine whether ground disturbing activities related to the Apache fire have resulted in the expansion of noxious weeds into the San Jacinto Wilderness. Estimated costs are based on the assumption that two visits would be necessary because of the differences in flowering times of the various weed species. If timing is such that all the target species are detectable in one visit, the actual costs would be lower than displayed below. If noxious weeds are detected an interim request will be submitted if an effective treatment for the particular weed species can be implemented.

GS-11 botanist (\$313.41/day x 2 days)	= \$626.82
2 GS-07 botanists (\$225/day x 4 days)	= \$1,800.00
Miscellaneous supplies/Food/Per diem	= \$ 250.00
<u>Vehicle mileage (150 miles @0.55/mile)</u>	<u>= \$80.00</u>
SUBTOTAL for weed detection surveys	= \$ 2,756.82

Channel Treatments: n/a

Trail Treatments: Storm proofing

In order to maintain the integrity of the PCT (as property), storm-proofing burnt sections of the PCT are needed. Repairs to the PCT include: rehabilitating drainage systems, construction or repair of water bars to reduce runoff concentration, and installing appropriate warning signs. After each significant storm

event, survey damage, repair damage, evaluate risks and reassess whether to keep PCT open. Post-storm assessment of both trails will be required to protect property and re-evaluate threat to life, and hazardous conditions signage will need to be posted at the Spitler Peak, Fobes, and Cedar Springs Trailheads as well as at Highway 74 and the PCT.

Clean existing, replace damaged, and add water bars	= \$3,500
Remove upslope dry ravel (Due to severe side slopes along the trail corridor (55 to 60+ %) and constant movement of the denuded decomposed granitic soils the potential for dry ravel is constant. Removal of the dry ravel which may narrow the trail tread will be very labor intensive (due to remote location)	= \$4,100
Rock work to stabilize tread (Significant amounts of single tier wall will need to be installed to protect the outer edge of the trail tread. Due to loss of vegetation that was binding the soil, which supported the trail tread, dry raveling is undermining the trail.)	= \$3,000
Trail signs purchase and installation	= \$ 500
Minor scaling	= \$ 600
Packer support (Packer support is the use of pack and saddle stock to support crew activities in this remote area. Pack animals will be used to ferry tools, supplies, water, and groceries)	= \$3,100
Team Leader coordination	= \$1,100
SUBTOTAL for Trail Treatments	= \$15,900

Protection/Safety Treatments: Storm patrol

Due to dry raveling damaging or closing the trail, working patrols will be needed to do periodic assessments on the trail condition. These working patrols will correct minor expected problems and report significant events.

Minor repairs, (2 person, local, FS) following each storm	
(2 x 10 times per season @2 day ea x 145.00/day	\$5,800
Vehicle mileage 110 x 10 x .55/mile	\$ 605
SUBTOTAL	\$6,400

TOTAL treatment estimate for one season **\$25,057**

Note: Above figures reflect the use of force account labor as planned. If contracted an additional 30% of the above total will be needed for survey and design at 15% and COR contract administration at 15% costs.

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.)

Part VI – Emergency Stabilization Treatments and Source of Funds

Interim #

Part IV - Emergency Stabilization Treatments and Sources of Funds - Interim										
			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										
Noxious Weed survey				\$2,760	\$0		\$0		\$0	\$2,760
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
Insert new items above this line!				\$0	\$0		\$0		\$0	\$0
Subtotal Land Treatments				\$2,760	\$0		\$0		\$0	\$2,760
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										
Storm proofing				\$0	\$0		\$0		\$0	\$0
water bar work				\$3,500						\$3,500
remove dry ravel				\$4,100						\$4,100
rock work on tread				\$3,000						\$3,000
minor scaling				\$600						\$600
packer support				\$3,100						\$3,100
trail signs	number	5	100	\$500	\$0		\$0		\$0	\$500
implementation lead	days	3	366.67	\$1,100	\$0		\$0		\$0	\$1,100
Insert new items above this line!				\$0	\$0		\$0		\$0	\$0
Subtotal Road & Trails				\$15,900	\$0		\$0		\$0	\$15,900
D. Protection/Safety										
Storm patrol	person-days	160	40	\$6,400	\$0		\$0		\$0	\$6,400
Insert new items above this line!				\$0	\$0		\$0		\$0	\$0
Subtotal Structures				\$6,400	\$0		\$0		\$0	\$6,400
E. BAER Evaluation										
Team Members	person-days	20	357	\$7,140						\$7,140
Vehicle Travel	miles	200	0.55	\$110						\$110
Helicopter Flight	number	1	603.6	\$604			\$0		\$0	\$604
Insert new items above this line!				---	\$0		\$0		\$0	\$0
Subtotal Evaluation				\$7,854	\$0		\$0		\$0	\$7,854
F. Monitoring										
Insert new items above this line!				\$0	\$0		\$0		\$0	\$0
Subtotal Monitoring				\$0	\$0		\$0		\$0	\$0
G. Totals				\$32,914	\$0		\$0		\$0	\$32,914
Previously approved										
Total for this request				\$32,914						

PART VII - APPROVALS

- | | | |
|----|---|-----------------------------|
| 1. | <u>/s/ Jeanne Wade Evans</u>
Forest Supervisor (signature) | <u>May 12, 2008</u>
Date |
| 2. | <u>/s/ George C. Iverson (for)</u>
Regional Forester (signature) | <u>5/19/08</u>
Date |

NOXIOUS WEED DETECTION SURVEY PLAN

Fire Name: Apache Month/Year: May, 2008

Author: Jordan Zylstra

Author Duty Station: SBNF, Idyllwild Ranger Station

A. Background

Reducing the introduction and spread of non-native invasive species has been identified as a Forest Service Strategic Goal for 2003-2008. Cheatgrass (*Bromus tectorum*), storksbill (*Erodium cicutarium*), and puncturevine (*Tribulus terrestris*) are known to occur within the burn area and along access routes to the burn. The Pacific Crest Trail (PCT) is a likely vector for weed transport within the burn area. In addition, seed could have been transported into the burn during suppression activities. Fire is known to enhance the establishment of all weed species present.

B. Management Concerns

Noxious weed invasions interfere with habitat recovery and ecosystem health within burned areas and fire suppression sites (e.g. hand lines, drop points, and staging areas). In particular, noxious weeds hinder the recovery of habitat by aggressive colonization and competition with native species.

C. Objectives

To determine if the fire and associated ground disturbing activities has promoted the establishment and spread of noxious weeds to the extent that eradication efforts are necessary. Early detection dramatically increases the likelihood of successful treatment. If weeds are detected, a supplemental request for BAER funds will be made for eradication.

D. Parameters

Noxious weed presence, location, density, population size, and persistence.

E. Locations

In and along trails, handlines, helicopter drop points, and adjacent to known sensitive and invasive plant populations.

F. Weed Detection Survey Design and Methodology

Surveys will begin as early as 2008 during the flowering periods of weed species. Because of differences in flowering times for all potential species, two visits may be required during the growing season. Completion of surveys around known sensitive plant populations would be the first priority. The second survey priorities would be along trails, handlines, and helicopter drop points. Surveys of the general habitats in the burned area would be the lowest priority. All locations of weed species would be mapped, using the San Bernardino NF “weed species to map” list (Table 1.). Surveys would be completed using the NRIS protocol available at the national website: <http://fsweb.ftcol.wo.fs.fed.us/frs/rangelands/index.shtml>. Results would be entered into the NRIS database. Weed species listed in the San Bernardino NF “weed species to note” list (Table 2.) that are discovered in the burn area would be recorded in the plant species list for the entire burn, or mapped and recorded in NRIS if the population is restricted in size and distribution.

Table 1. Weed Species to Map

** <i>Acroptilon repens</i>	Russian knapweed
** <i>Ageratina adenophora</i>	Eupatory
** <i>Ailanthus altissima</i>	Tree of heaven
* <i>Arundo donax</i>	Giant reed grass
A ** <i>Asphodelus fistulosus</i>	Asphodel
** <i>Atriplex semibaccata</i>	Saltbush
* <i>Brassica tournefortii</i>	African mustard
** <i>Carduus pycnocephalus</i>	Italian thistle
* <i>Centaurea solstitialis</i>	Yellow star thistle

* <i>Centaurea maculosa</i>	Spotted Knapweed
** <i>Centaurea melitensis</i>	Tocalote
** <i>Cirsium vulgare</i>	Bull thistle
** <i>Conium maculatum</i>	Poison hemlock
* <i>Cortaderia selloana</i>	Pamapas grass
* <i>Delairea odorata</i>	German Ivy
* <i>Dipsacus sativus</i>	Teasel
*** <i>Dimorphotheca sinuata</i>	African daisy
A * <i>Eichornia crassipes</i>	Water hyacinth
** <i>Elaeagnus angustifolius</i>	Russian olive
** <i>Eucalyptus globulus</i>	Blue gum
A * <i>Euphorbia terracina</i>	false caper
** <i>Ficus carica</i>	Fig
* <i>Foeniculum vulgare</i>	Fennel
*** <i>Fumaria officinalis</i>	Fumitory
** <i>Hedera helix</i>	English ivy
A * <i>Hydrilla verticillata</i>	Hydrilla
* <i>Lathyrus latifolius</i>	Perrenial sweetpea
* <i>Linaria genistifolia</i> ssp. <i>dalmatica</i>	Dalmatian toadflax
A * <i>Ludwigia</i> sp.	Water primrose
A * <i>Myriophyllum aquaticum</i>	Parrotfeather
** <i>Nicotania glauca</i>	Tree tobacco
*** <i>Olea europaea</i>	Olive
** <i>Pennisetum clandestinum</i>	Kikuyu grass
** <i>Pennisetum setaceum</i>	Fountain grass
*** <i>Picris echioides</i>	Bristly ox-tongue
*** <i>Piptatherum miliaceum</i>	Smilo grass
** <i>Potamogeton crispus</i>	Curlleaf pondweed
*** <i>Prunus cerasifera</i>	Cherry plum
A ** <i>Retama monosperma</i>	Bridal broom
** <i>Ricinus communis</i>	Castorbean
** <i>Robinia pseudoacacia</i>	Black locust
* <i>Rubus discolor</i>	Himalayan blackberry
*** <i>Salsola tragus</i>	Russian thistle
*** <i>Salsola paulsenii</i>	Barbwire Russian thistle
*** <i>Saponaria officinalis</i>	Bouncing bet
*** <i>Schinus molle</i>	Peruvian pepper tree
* <i>Spartium junceum</i>	Spanish broom
* <i>Tamarix ramosissima</i>	Saltcedar
*** <i>Tribulus terrestris</i> -	Puncture vine

Table 2. Weeds to Note

U <i>Aegilops cylindrica</i>	jointed goatgrass
** <i>Avena barbata</i>	slender wild oat
** <i>Avena fatua</i>	wild oat
*** <i>Bassia hysopifolia</i>	five-hook bassia
** <i>Brassica nigra</i>	black mustard
** <i>Bromus hordeaceus</i>	smooth brome
** <i>Bromus diandrus</i>	ripgut brome
* <i>Bromus madritensis</i> ssp <i>rubens</i>	red brome
* <i>Bromus tectorum</i>	cheatgrass
*** <i>Convolvulus arvensis</i>	field bindweed
U <i>Chorispora tenella</i>	blue mustard
U <i>Cnicus benedictus</i>	blessed thistle
** <i>Descurania</i> sp.	tansy mustard
** <i>Erodium</i> sp.	filaree
*** <i>Euphorbia lathyris</i>	gopher plant
** <i>Festuca arundinacea</i>	tall fescue
** <i>Holcus lanatus</i>	velvet grass
** <i>Hordeum murinum</i>	barley
*** <i>Hypochaeris glabra</i>	catsear
*** <i>Lactuca serriola</i>	prickly lettuce
U <i>Lepidium perfoliatum</i>	clasping pepperweed
** <i>Lolium multiflorum</i>	Italian ryegrass
U <i>Lunaria annua</i>	moonwort
*** <i>Marrubium vulgare</i>	horehound
*** <i>Medicago polymorpha</i>	bur clover
*** <i>Melilotus officinalis/alba</i>	sweetclover
** <i>Oxalis pes-caprae</i>	Bermuda buttercup
** <i>Phalaris aquatica</i>	Harding grass
U <i>Poa bulbosa</i>	bulbous bluegrass
*** <i>Polypogon monspeliensis</i>	rabbitfoot grass
U <i>Portulaca oleracea</i>	common purslane
U <i>Ranunculus testiculatus</i>	tuberclcd crowfoot
** <i>Raphanus sativus</i>	radish
** <i>Rumex</i> sp	dock
*** <i>Schismus barbatus</i>	Mediterranean grass
*** <i>Silybum marianum</i>	milk thistle
** <i>Sisymbrium irio</i>	london rocket
*** <i>Sonchus</i> sp	sow thistle
** <i>Trifolium hirtum</i>	rose clover
*** <i>Verbascum thapsus</i>	wooly mullein
** <i>Vinca major</i>	periwinkle
** <i>Vulpia myuros</i>	rattail fescue

CAL-IPC List Catagories

*Severe: Most Invasive Wildland Pest Plants; documented as aggressive invaders that displace natives and disrupt natural habitats.

**Moderate: Wildland Plants of Lesser Invasiveness; plants that spread less rapidly and cause a lesser degree of habitat disruption

***Limited: Wildland Plants of Limited Invasiveness; plants that have a limited distribution and impact on natural habitats or species for which there is not adequate information to describe its threat to wildlands

A Red Alert: Plants with potential to spread explosively, infestations currently localized or small

Table constructed from CAL-IPC invasive plant species listing of 2006: www.cal-ipc.org

G. Reporting

A Weed Detection Survey Report would be submitted to the regional BAER coordinator and the San Jacinto District Ranger. If weed introduction and spread has occurred, an Interim BAER report would be completed to request eradication funding. Reporting costs are included in figures below.

H. Costs: Weed Detection Surveys for One Year = \$2756.82

Weed detection surveys to determine whether ground disturbing activities related to the Apache Incident and the fire itself have resulted in the expansion of noxious weeds is requested for the first year. Estimated costs are based on the assumption that two visits would be necessary because of the differences in flowering times. If timing is such that all the target species are detectable in one visit, the actual costs would be lower than displayed below.

FY 2008

GS-11 botanist (\$313.41/day x 2 days)	= \$626.82
2 GS-07 botanists (\$225/day x 4 days)	= \$1,800.00
Miscellaneous supplies/Food/Per diem	= \$ 250.00
<u>Vehicle mileage (150 miles @0.55/mile)</u>	<u>= \$80.00</u>
TOTAL for weed detection surveys for FY08	= \$ 2,756.82

I. Personnel

SBNF staff will be used for surveys

J. Responsible Staff

Kate Kramer, San Jacinto Ranger District - Botanist

K. Follow-up Actions

Design and implement follow-up treatments as needed. Plan for integrated weed management and NEPA analysis using non-BAER funding.

Apache Fire
Pacific Crest Trail Storm Patrol Monitoring

The 2500-8 report requests funds to monitor the effectiveness of storm-proofing and storm patrol treatments along the PCT. The treatments are designed to facilitate proper water drainage off the trail, preserve the trail tread, and decrease watershed efficiency.

1. Monitoring Questions
 - a. Are the treatments effectively decreasing watershed efficiency (is water being slowed down by treatment; are rills present; are fan-like dry ravel deposits prohibited) within the burned area above and below the trail?
 - b. Have the treatments effectively preserved trail tread within the fire area?
 - c. Are there specific locations where treatments have failed?
2. Measurable Indicators
 - d. Area of loss of trail tread
3. Data Collection Techniques
 - e. Photo documentation of site
 - f. Inspection Checklist (attached)
4. Analysis, evaluation, and reporting techniques

Due to the high resource values at risk the monitoring findings will be evaluated after every storm event. If the monitoring shows the treatment to be ineffective at stabilizing trail and there is extensive loss of trail tread an interim report will be submitted.

5. Monitoring report timeframes

The report will be evaluated weekly and if the treatment is effective, checklist findings will be compiled monthly and summarized by the following:

- g. Number of compromised water bars
- h. Length of trail tread lost
- i. Number of compromised rock retaining walls

Trail Inspection Checklist

Date: _____

Inspector _____

Time: _____

Describe locations reviewed during inspection: _____

Was there trail damage? _____. If so at what location and what structure
(GPS) _____

Describe damage and cost to repair? (GPS) _____

Were there warning signs in place? _____

Photo taken of trail damage _____

Photo taken of sign damage _____

Recommended repairs needed _____