

Date of Report: November 26, 2008

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: Sayre FireB. Fire Number: CA-ANF-004333C. State: CAD. County: Los AngelesE. Region: 05F. Forest: Angeles National ForestG. District: 51H. Fire Incident Job Code: PNEPG8I. Date Fire Started: November 15, 2008J. Date Fire Contained: November 21, 2008K. Suppression Cost: \$8 million

L. Fire Suppression Damages Repaired with Suppression Funds

1. Fireline waterbarred (miles): 5 miles of hand line, 14 miles of dozer line
2. Fireline seeded (miles): None
3. Other (identify): None

M. Watershed Number: 4th Field HUC# 18070102 (Upper Santa Clara River), 5th Field HUC# 1807010501 (Upper Los Angeles River)N. Total Acres Burned: 11,262

NFS Acres(5513) Other Federal (N/A) State (3019) Private (2730)

O. Vegetation Types: Annual Grass/Forb, Coastal Sage Scrub, Chamise Chaparral, Mixed Chaparral, Big cone Douglas Fir Forest, Coast Live Oak/Sycamore Riparian ForestP. Dominant Soils: The soils within the Sayre fire perimeter are largely dominated by shallow soils to a lithic

contact situated on very steep slopes. The primary soil series are *Caperton, Chilao, Trigo, and Millsholm*.

Q. Geologic Types: The Sayre fire is located in the Transverse Province. The San Gabriel Mountains consist of Precambrian to Cretaceous age gneisses and granitics, which produce toppling rockfall failures. The basement rocks are unconformably overlain by early Pleistocene Saugus Formation consisting of loosely consolidated sands, gravels, and conglomerates. This formation is highly erodible. Orographic uplift produces may produce torrential rains. Flooding, hyper-flooding, debris flows, debris torrents may occur.

R. Miles of Stream Channels by Order or Class: : Perennial = 0 miles, Intermittent = 56 miles, Ephemeral=0 miles

S. Transportation System

Trails: 0 miles Roads: 26.9 miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 1845 (16%) (Unburned), 2668 (24%) (low), 6686 (60%) (moderate), 2(<1%) (high)

B. Water-Repellent Soil (acres): 6560 (58% of fire)

C. Soil Erosion Hazard Rating (acres):
802 (low) 27 (moderate) 2703 (high) 7699 (very high)

D. Erosion Potential after fire: 14.7 tons/acre Erosion potential before fire: 2.2 tons/acre

E. Sediment Potential: **52,000** cubic yards / square mile/1st year

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years):	5
B. Design Chance of Success, (percent):	80
C. Equivalent Design Recurrence Interval, (years):	5
D. Design Storm Duration, (hours):	12
E. Design Storm Magnitude, (inches):	3.1
F. Design Flow, (cubic feet / second/ square mile):	60
G. Estimated Reduction in Infiltration, (percent):	28
H. Adjusted Design Flow, (cfs per square mile):	158*

(*Using Rowe et al method, see hydrology specialist report for peak flow data)

PART V - SUMMARY OF ANALYSIS

Background

The Sayre Fire began at 10:30 p.m. on Friday, November 15, 2008, on land administered by the Los Angeles River Ranger District, Angeles National Forest. Driven by strong Santa Ana (offshore) winds and low relative humidity, the fire spread quickly, burning into both Los Angeles County and later Los Angeles City jurisdictions. The fire began during a Red Flag Fire Weather Warning issued by the National Weather Service (Oxnard).

Four hundred and seventy nine residences were either damaged or destroyed. Most (~90%) of the watershed of Loop, Wilson, Sombrero, May, West Fork, Hog, and Schoolhouse Canyons burned. There is now a high risk of post fire erosion, flash flooding and debris flows to both public and private land values, including homes, businesses and roads, both within and downstream of these drainages.

A. Describe Critical Values/Resources and Threats:

Threats to Life and Property

Private Residences/Property, North of Highway 210, Along Foothills: The combined factors of severely burned watersheds directly above private property, large volumes of loose, stored sediment in channels and on the steep slopes, and the location of property in the floodplain directly below those watersheds indicate a high risk to life and property creating an emergency situation. Debris basins in Loop, May, Wilson, Schoolhouse, Hog and Sombrero Canyons have the potential to be overwhelmed with debris and flood water during large storms leading to the plugging of water intakes, thereby decreasing their ability to bypass storm water into flood control channels and possibly causing the sedimentation and flooding of streets, residential areas and businesses below. There is also a risk to the health and safety of people visiting the bottoms of any of the major drainages (e.g. Loop, May, Wilson, Schoolhouse, and Sombrero Canyons) from flash flooding/debris flows during large storm events. Hikers, mountain bikers, and equestrians are also at risk from rock fall and washouts while traveling along any of the user created trails in the burn area.

Camp 9 Waterline : This 3 inch steel water pipeline that originates at the mouth of Loop Canyon is maintained by L.A. County and delivers water to Camp 9 and the Forest Service Bear Divide Station. This pipe was already exposed by previous flooding where it occurs in the Loop Canyon channel, creating a potential for it to be damaged or removed by debris flows.

Santa Clara Divide Road Guardrails: Approximately 900 linear feet of guardrail along the eastern most end of Santa Clara Divide Road before Bear Divide were burned over during the Sayre Fire. These guardrails exist for safety, as the Divide Road is a mountain road with many curves and steep drop-offs. Most of the wooden posts along these stretches of guardrail were weakened or completely burned, leading to a loss of integrity.

Santa Clara Divide Road (3N17): This road is essentially a ridge top road that follows the Santa Clara Divide. It extends from its intersection with San Fernando Road just off the 14 freeway in the west to its intersection with Angeles Crest Highway near Chilao in the east. This road was the primary fire access and was heavily used. Several dozer lines originated from this road. The road was burned over in a few locations, especially at the eastern end of the fire. Due to its heavy use, there was some suppression damage to this road. Increased runoff and sediment flow threaten the integrity of this road.

May Canyon Road (3N54): This road is paved and leaves a residential neighborhood in Sylmar near Veteran's Memorial Park and connects to Santa Clara Divide Road. This road is critical since it provides an escape route for the Los Angeles County Camp 9 in the case that Santa Clara Divide Road is not passable to Bear Divide. The fire originated near the bottom of this road. During the fire, this road was completely burned over. A large amount of rocks, branches, and sediment came down onto the road during the fire storm. The road is currently impassable due to sediment on the road at milepost 1.5. Increased runoff and sediment flow threaten the integrity of this road. The road crosses several drainages. At many locations, culverts are used to pass the runoff through the road prism. Due to the increased sediment flow, these culverts are in danger of becoming plugged, which would cause major erosion or complete washout of the road prism.

Wilson Canyon Road (3N56): This road begins behind the Olive View Hospital in Sylmar and connects to Santa Clara Divide Road. The primary use of this road is recreational use by hikers and horseback riders, but is also occasionally used for vehicle access for administrative purposes. This road was completely burned over by the fire. Increased runoff and sediment flow threaten the integrity of this road.

Threats to Water Quality

Hazmat: There are five hazardous waste sites affected by the Sayre wildfire on ANF lands; a complete list can be found in the Hazardous Materials Specialist report. The Department of Toxic Substances Control concurred that the hazardous waste sites requires cleanup and disposal. Since the sites have not been cleaned up, it is likely that there will be pollution released to surface water. EPA and California State environmental law has determined that further cleanup action by the Forest Hazardous Materials program is warranted at the waste sites, at this time. A site on ANF land with a concrete waste holding tank and waste related debris poses a risk to the public. The fire has removed vegetation and exposed an abandoned tank setting on a cut mountain slope which is easily accessible by hikers. The manhole covers are open along the road shoulders causing a safety concern. There is a potential for heavy rains or snow accumulation to cause the tank to migrate down slope, thereby causing a water quality problem.

Threats to Threatened, Endangered and Sensitive Species

California condor: An emergency does exist for California condor as a result of post-fire effects of the Sayre Fire. The emergency condition results from the increased accessibility to concentrated areas of microtrash. The fire has removed vegetation and exposed areas where microtrash is now easily accessible by foraging condors. The concern is that the exposed microtrash sites are located in areas of high condor use. Microtrash consumption can lead to injury or death in condors.

Threats to Ecosystem Stability/Soil Productivity

Accelerated slope instability (both NFS, State, and Private lands): Nearly 84 percent of the area within the fire perimeter burned with either light or moderate soil burn intensity (as mapped with BARC). Post-fire field surveys indicate that over 95 percent of vegetation cover was consumed during the fire regardless of burn intensity. There is a wide range of effective soil cover averaging between 20-50 percent. There is high potential of increased mass-wasting and surface erosion. Localized erosion rates could be more than eight times background erosion with average rainfall events. All soils have varying degrees of surface water-repellency (hydrophobicity) regardless of burn severity. The hydrophobicity is naturally occurring and is exacerbated with fire. Hydrophobicity strongly impairs the ability of soil to infiltrate water thereby increasing runoff potential and erosive energy. Except for mechanically disturbed areas, a biological surface crust caps the soils and mitigates the effects of wind erosion from major Santa Ana wind events, which without the crust, could possibly be a greater threat to soil productivity than water erosion.

The pre-fire vegetation facilitated deposition of wind-blown soil material on the soil surface contributing to soil depth and soil productivity. This material was held on slopes by shrubs and grasses. Slopes greater than 70 percent dominate the steep drainages on Forest Service administered land burned in the Sayre fire. When the vegetative overstory burned off, the soil material became unstable on slopes greater than 70 percent. As a result, dry-ravel is occurring throughout the fire forming colluvial fans, accumulating in drainages, and piling on roads. This dry-ravel soil is a potential large source of early weather event sediment.

With the combustion of the shrub overstory, there is little impediment to expanded Off-Highway Vehicle (OHV) and equestrian use. The crusts discussed above disintegrate under these disturbances and lose all protective properties; gully initiation and propagation through the disturbed soil surface can be expected.

There is an ample seed bank in the surface horizon of the soils and live roots are abundant. Rapid vegetative growth is expected after the first soil wetting rains. However, most of the green-up will be non-native grasses. Although these grasses offer short term erosion mitigation, they out compete establishing native shrubs, have less soil cover value than native shrubs, and are decadent when the first storms arrive. Therefore, if non-

native grasses establish and displace the native shrub communities, long-term soil productivity is threatened with increased long-term erosion risk.

Threats to Vegetation Recovery

Increase in Noxious Weed Populations: An emergency exists with respect to vegetative recovery as a result of the threat of post-fire weed introduction and spread. The unknowing introduction and dispersal of invasive weeds into areas disturbed by fire suppression and rehabilitation has the potential to establish large and persistent weed populations. In addition, it is highly likely that existent weed infestations will increase in the burn area, due to their accelerated growth and reproduction and a release from competition with natives. These weed populations could affect the structure and habitat function of native plant communities within the burn area. It is expected that most native vegetation would recover if weed invasions are minimized. There are numerous recently bladed dozerlines within the burn perimeter. The Sayre Fire removed the vegetative barriers that previously limited the amount of cross country travel to these fuelbreaks occurring in the area. Increased use of this area by horseback riders, mountain bikers, and illegal vehicles may facilitate the spread of invasive weeds. Additionally, the erosion and soil compaction caused by these types of uses may also inhibit the recovery of native plant populations. As a result, horseback and illegal vehicle use may contribute to increased density and distribution of invasive weeds. An increase in invasive weeds can contribute to type conversion and overall reduction in the density and distribution of native plants.

Threats to Cultural Resources

Historic and Prehistoric Sites: Seven heritage resources were affected by the fire. All sustained a complete loss of vegetation, however it is determined that only three sites are potentially at-risk from scouring, erosion cuts, or slope wash. Physical barriers or deflectors are determined to be ineffective due to on-site specific topography and difficulty in accessing the site with the equipment used to implement such treatment measures. Therefore, a system of photo point monitoring to track and assess affects to these sites is proposed. Natural re-growth of vegetation will assist in stabilizing the soils at the sites.

B. Emergency Treatment Objectives:

- Provide for Public Safety— Ensure communication of potential post fire values at risk has occurred. Reduce threat to life and safety by closing hazardous areas and roads until watershed stabilization has occurred and/or the threats/hazards have been removed. Re-evaluate the burned area before lifting the closures. Cleanup or stabilize hazardous material sites to prevent water and soil contamination and restore damaged guardrails.
- Limit Damage to Property- Private residences/businesses, other structures, water systems, and roads and private driveways within and downstream of the burn area are at greater risk from flash flooding and sedimentation after the fire. Clearing channel obstructions and increasing the road cross-drainage capacity will help mitigate the effects of accelerated storm flows and sedimentation to property. The treatment objectives are to increase the awareness of the property owners, Natural Resource Conservation Service (NRCS), Los Angeles County Flood and Fire, and other agencies of the potentially hazardous conditions resulting from the Sayre fire.
- Noxious Weeds - Reduce the potential for impaired vegetative recovery and introduction/spread of noxious weeds.
- California Condor- Protect condors from microtrash threats.
- Road and Trail Treatments – Objective is to improve road drainage to protect the road system. Reduce erosion from the road surface and sediment delivery to stream channels. Reduce the threat to life and safety for road users.
- Cultural Resource Sites – Objectives are to monitor the possibility for increased erosion/sediment deposition to damage cultural sites.

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

Land 90 % Channel 90% Roads/Trails 90 % Protection/Safety 90 %

D. Probability of Treatment Success

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

E. Cost of No-Action (Including Loss): \$5,150,000

F. Cost of Selected Alternative (Including Loss): \$2,923,00

G. Skills Represented on Burned-Area Survey Team:

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

Team Leader: Katie VinZant: Angeles National Forest

Email: kvinzant@fs.fed.us

Phone: (626) 574-5268

FAX: (626) 574-5207

Core Team

Eric Nicita (Soil Scientist)

Joe Gonzales (Hazmat)

Paul Gregory (Hydrologist trainee)

Angelica Mendoza (Wildlife Biologist)

Dave Collins (GIS)

Eric Martindale (Engineering)

Casey Shannon (Hydrologist)

Kelli Brasket (Archaeologist)

Katie VinZant (Botanist)

Cliff Johnson (Lands)

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.)

Implementation Team

To provide for logistics and tracking of treatment implementation.

Estimated Cost:

Implementation Team Leader (\$350/day x 15 days)	\$5250
Hydrologist/Soil Scientist (\$350/day x 5 days)	\$1750
Per diem/Lodging	\$2000
Vehicle mileage(1400 miles @0.55/mile)	\$ 770
TOTAL	\$9770

Land Treatments:

Noxious Weed Detection Surveys

Surveys will begin in 2009 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 in riparian areas, dozerlines, and known invasive and sensitive plant populations would be the first priority. The second survey priorities would be along roads, handlines, and staging areas. Surveys of the general habitats in the burned area would be the lowest priority. Detailed weed detection survey guidelines are attached in Appendix A.

Weed detection surveys to determine whether ground disturbing activities related to the Sayre 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.

Estimated Cost:

2 GS-11 botanists (\$360/day x 10 days)	\$ 7200
Vehicle mileage (1000 miles @0.55/mile)	\$ 550
TOTAL	\$ 7750

Road Treatments:

Santa Clara Divide Road (3N17)/ May Canyon Road (3N54)/Wilson Canyon Road (3N56)

BAER treatments recommended include the installation of three overside drains at critical locations that previously did not have a drain or where the existing drain is not adequate to handle the increased runoff; removal of existing debris and sediment from 26 debris basins to increase basin capacity.

Estimated Cost:

Sediment Removal	26 basins @ \$450.00/basin	\$11,700
24" Overside Drain	3 drains @\$3,200.00/drain	\$9,600
Contractor Mobilization		\$4,500
Contract Prep. & Admin. @ 25%		\$8,575
Archeology survey, GS-9, 3 days at \$250		\$750
Botanical Survey, GS-11, 2 days at \$375		\$750
TOTAL		\$35,875

Protection/Safety Treatments:

Interagency Coordination/Interim Reporting

Interagency coordination started during the fire and continued throughout the BAER Assessment. Continuing this coordination by providing the BAER Assessment Report, specialist reports and attending meetings is anticipated. This treatment will also provide funds for the completion of interim/accomplish reports.

Estimated Cost:

Implementation Leader(350/day)	6 days	\$2100
Forest BAER Coordinator(400/day)	6 days	\$2400
TOTAL		\$4500

Guard Rail Restoration

Approximately 900 linear feet of guardrail at 11 sites along the eastern most end of Santa Clara Divide Road before Bear Divide were burned over during the Sayre Fire. These guardrails exist for safety, as the Divide Road is a mountain road with many curves and steep drop-offs. Most of the wooden posts along this 900 feet were weakened or completely burned, leading to a loss of guardrail integrity. This treatment would include the replacement of damaged wooden posts and the reconstruction of the guardrail with existing metal. Many of these wooden posts were treated with creosote, a hazardous material, and will need to be properly disposed of.

Estimated Cost:

Wood posts	15/ft x900	\$13500
Remove Hazmat Matter (posts)	12/ft x 900	\$10800
Labor	15/ft x 900	\$13500
Contractor Mobilization	20/ft x 900	\$18000
Contract Prep. & Admin. @ 25%		\$13950
TOTAL		\$69750

Hazmat Cleanup

There are four hazardous waste sites affected by the Sayre wildfire on ANF lands; a complete list can be found in the Hazardous Materials Specialist report. The Department of Toxic Substances Control concurred that the hazardous waste sites requires cleanup and disposal. Since the sites have not been cleaned up, it is likely that there will be pollution released to surface water. EPA and California State environmental law has determined that further cleanup action by the Forest Hazardous Materials program is warranted at the waste sites, at this time. The basis for the cleanup action plan is provided in the ANF "Oil and Hazardous Substance Pollution Contingency Plan". The hazardous waste cleanups will be done by the responsible parties and they have been contacted by the BAER assessment team members during field survey.

Estimated Cost:

GS 11 Hazmat Specialist (\$320/day x 5)	\$1600
GS 9 Asst. Resource Officer for Saugus District (\$250/day x 2)	\$ 500
GS 11 Asst. Resource Officer for LARR District (\$400/day x 2)	\$ 800
Vehicles (900 miles @0.55/mile)	\$ 495
TOTAL	\$3395

Human Waste and Sewage Tank Removal

A site on ANF land with a concrete waste holding tank and waste related debris pose a risk to the public. The fire has removed vegetation and exposed an abandoned tank setting on a cut mountain slope which is easily accessible by hikers. The manhole covers are open along the road shoulders causing a safety concern. The treatment for removal of human waste and solids waste is vacuum equipment clean-up of the tank. The waste is consider hazardous waste as the Los Angeles County Sanitation District will not accept human waste with 1000 mg/L of TDS (total dissolve solids) at there treatment plants. There is a

potential for heavy rains or snow accumulation to cause the tank to migrate down slope, thereby causing a water quality problem. The treatment for the abandoned tank is removal and disposal off forest.

Estimated Cost:

GS 11 Hazmat Specialist (\$320/dayx2)	\$640
Mobilization	\$1500
Disposal	\$2000
Lab Tests	\$200
Materials/Supplies	\$100
Vehicles (200 miles @0.55/mile)	\$110
TOTAL	\$4550

Condor Protection: Lead and Microtrash Removal

There are four 1 acre sites, one 2 acre site, and one 5 acre site with high concentrations of microtrash in known California condor perching and foraging areas within the fire perimeter. The fire removed brushy and herbaceous vegetation and created conditions where pre-existing microtrash is now exposed and accessible to foraging condors. Vegetation recovery in this area is now susceptible to disturbance, erosion, etc., due to easy access by vehicles, mountain bikes and people possibly causing long-term loss of vegetation.

The proposed treatment is designed to eliminate condor access to microtrash. The primary treatment is removal of microtrash hazards through manual clean-up of all the sites. There are four 1-2 acre sites associated with turnouts along Santa Clara Road. There is one 1 acre site at the Loop Canyon Communication Site. One large 5 acre site is located along Contractors Point. Manual clean-up alone may not effectively reduce microtrash hazards for condors. Continual erosion from lack of vegetation cover can expose more microtrash. As a result, slopes with <60% slopes will be treated with hydroseeding. Hydroseeding will be needed to stabilize soil and promote quick revegetation to cover microtrash. A gate will be installed to minimize human disturbance and ensure vegetation recovery to cover microtrash. *Note: Cost may be reduced if we are able to recruit volunteers to help implement the land treatments.*

Estimated Cost:

Microtrash clean-up:

Type 1 Crew, 5 days	\$3,700/day	\$18,500
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Hydroseeding:

Local, native seeds	\$600/acre	\$3,000
Material and installation	\$3,000/acre	\$15,000

Gate Installation:

Materials		\$4,500
Labor		\$4,000
Backhoe	\$500/day	\$500

Misc. costs:

Mileage, supplies, etc.		\$500
FS Personnel to plan contracts and inspect	\$350/day	\$3,500
TOTAL		\$49,000

Hazard and Advisory Signs:

This treatment is preventative. Signs will be placed at 4 access points, one at Bear Divide, one at the trailhead of Los Pinetos Trail along Santa Clara Divide Road, and one each at the southern entrances of May and Wilson Canyon Roads. The signs will encourage visitors to stay on main roads/trails to facilitate native plant recovery, decrease noxious/invasive weed vectors and protect soil productivity and warn them of the possible dangers of rock fall and wash outs within the burn area. Signs will be durable in

nature and placed on an existing kiosk at Bear Divide and the Los Pinetos Trailhead and on new posts at May and Wilson Canyon Roads.

Estimated Cost:

1 GS-07(\$220/day x 2 days)	\$ 440
Archeology survey, GS-9, 1 day at \$250/day	\$ 250
Wooden Sign (500/each x 2)	\$1000
Miscellaneous Materials	\$ 50
Vehicle Mileage (100 miles x .55/mile)	\$ 55
TOTAL	\$1795

I. **Monitoring Narrative:**

Forest Road Stabilization Effectiveness Monitoring

To monitor the effectiveness of stabilization treatments along Forest Roads 3N17, 3N54 and 3N56 monitoring funds are requested. The treatments are designed to upgrade and supplement existing erosion control structures on Forest Service Roads to facilitate proper water drainage off the road, preserve the road tread, and decrease watershed efficiency.

Estimated Cost:

1-GS-11 Engineering Specialist (375/day x 6 days)	\$2250
Mileage, 6 days (100 miles/day x .55/mile)	\$ 330
TOTAL	\$2580

Unauthorized OHV Patrolling

To prevent the creation of unauthorized off-highway vehicle routes on 14 access points to fuelbreaks along Santa Clara Divide Road and burned National Forest Lands. Monitoring will be done by a patrol officer twice a month.

Estimated Cost:

1-GS-9 Patrol (300/day x 24 days)	\$7200
Mileage, 24 days (100 miles/day x .55/mile)	\$1320
TOTAL	\$8520

Heritage Site Monitoring

Seven heritage resources were affected by the fire. All sustained a complete loss of vegetation, however it is determined that only three sites are potentially at-risk from scouring, erosion cuts, or slope wash. Physical barriers or deflectors are determined to be ineffective due to on-site specific topography and difficulty in accessing the site with the equipment used to implement such treatment measures. Therefore, a system of photo point monitoring to track and assess affects to these sites is proposed. Natural re-growth of vegetation will assist in stabilizing the soils at the sites.

Estimated Cost:

Archeologist GS-11, 2 days at \$375/day	\$ 750
Archeologist GS-9, 6 days at \$250/day	\$1500
Vehicle Mileage (800 miles x .55/mile)	\$ 440
TOTAL	\$2690

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

			NFS Lands				Other Lands			All
		Unit	# of		Other			# of	Non Fed	Total
Line Items	Units	Cost	Units	BAER \$	\$		# of units	Fed \$	Units	\$
A. Land Treatments										
Implementation Team	ea	9770	1	\$9770	\$0					\$9770
Noxious Weed detection	ea	7750	1	\$4,705	\$0			\$0	\$0	\$4,705
<i>Insert new items above this line!</i>				\$0	\$0			\$0	\$0	\$0
<i>Subtotal Land Treatments</i>				\$14,475	\$0			\$0	\$0	\$14,475
B. Channel Treatments										
<i>Insert new items above this line!</i>				\$0	\$0			\$0	\$0	\$0
<i>Subtotal Channel Treat.</i>				\$0	\$0			\$0	\$0	\$0
C. Road and Trails										
Drain/Basin Construction	ea	1237	29	\$35875	\$0			\$0	\$0	\$35875
<i>Insert new items above this line!</i>				\$0	\$0			\$0	\$0	\$0
<i>Subtotal Road & Trails</i>				\$35875	\$0			\$0	\$0	\$35875
D. Protection/Safety										
Interagency Coord	ea	4500	1	\$4,500						\$4500
Guardrail Restoration	unit	54468	1	\$54468						\$54468
HazMat cleanup	unit	849	4	\$3395						\$3395
Human Waste Tank Removal	unit	4550	1	4550						4550
CA Condor protection	ea	49000	1	\$49000						\$49000
Hazard Signs	unit	387.5	2	\$775	\$0			\$0	\$0	\$775
<i>Insert new items above this line!</i>				\$0	\$0			\$0	\$0	\$0
<i>Subtotal Structures</i>				\$116,688	\$0			\$0	\$0	\$116,688
E. BAER Evaluation										
Team Member Salaries	day	5428	7	\$38000						\$38000
Perdiem/Mileage	unit	7000	1	\$7000						\$7000
<i>Insert new items above this line!</i>				---	\$0			\$0	\$0	---
<i>Subtotal Evaluation</i>				\$45,000	\$0			\$0	\$0	\$45,000
F. Monitoring										
Road stabilization eff	ea	2580	1	\$2580	\$0					\$2580
Unauthorized OHV Monitoring	ea	8520	1	\$8520						\$8520
Heritage Site Monitoring	ea	2690	1	\$2690	\$0			\$0	\$0	\$2690
<i>Insert new items above this line!</i>				\$0	\$0			\$0	\$0	\$0
<i>Subtotal Monitoring</i>				\$13,790	\$0			\$0	\$0	\$13,790
G. Totals				\$225,828	\$0			\$0	\$0	\$225,828
Previously approved				\$0						\$0
Total for this request				\$225,828						\$225,828

PART VII - APPROVALS

1.

/s/ Jody Noiron

Forest Supervisor (signature)

12/1/08

Date
2.

Regional Forester (signature)

Date

Appendix A

NOXIOUS WEED DETECTION SURVEY PLAN

Fire Name: Sayre Fire Month/Year: November 2008

Author: Katie VinZant

Author Duty Station: Angeles National Forest

A. Background

Forest Service policy mandates the Forest to minimize the establishment of non-native invasive species to prevent unacceptable degradation of the burned area. It is necessary to conduct noxious weed detection surveys to evaluate the potential for spread from both existing populations and from the activities associated with fire suppression. Therefore, noxious and invasive weed detection surveys are proposed for the first year following the fires to verify the suspected infestations and determine the fires' potential impact on weed populations within the burned area. Wild oats (*Avena* spp.), ripgut brome (*Bromus diandrus*), cheatgrass (*Bromus tectorum*), tocalote (*Centaurea melitensis*), shortpod mustard (*Hirschfeldia incana*), tree tobacco (*Nicotiana glauca*), Smilo grass (*Piptatherum miliaceum*), black locust (*Robinia pseudoacacia*), and Spanish broom (*Spartium junceum*) are known to occur within the burn area on Forest Service land. In addition, tree of heaven (*Ailanthus altissima*), giant reed (*Arundo donax*), yellow star thistle (*Centaurea solstitialis*), pampas grass (*Cortaderia selloana*), fountain grass (*Pennisetum* spp.), castor bean (*Ricinus communis*), Russian thistle (*Salsola* spp.), Peruvian pepper tree (*Schinus molle*), saltcedar (*Tamarix ramosissima*), and Mexican fan palm (*Washingtonia robusta*) occur within a five mile radius of the burn and along direct access routes to the burn. Several plant vectors such as Forest roads, trails, high winds, and drainages occur within the fire area. Even though a weed washing station was utilized, seed could have been transported into the burn on suppression vehicles and equipment that arrived on the fire before the washing station was established. Fire is known to enhance the establishment of all weed species present. See the Botany Technical Specialist Report and Appendix A of this report for more information about specific weed population attributes and locations in the Sayre Fire.

B. Management Concerns

Noxious weed invasions interfere with habitat recovery and ecosystem health within burned areas and fire suppression sites. In particular, noxious weeds hinder the recovery of habitat, especially in arid and riparian ecosystems, by aggressive colonization and reduction of water quality and quantity.

C. Objectives

To determine if the fire and associated ground disturbing activities have 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 roads, trails, dozerlines, handlines, drop points, safety zones, riparian areas, and adjacent to known sensitive and invasive plant populations.

F. Weed Detection Survey Design and Methodology

Surveys will begin in 2009 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 in roads, dozerlines, staging areas, safety zones, and known invasive and sensitive plant populations will be the first priority. The second survey priorities will be along riparian areas, hand lines, and drop points. Surveys of the general habitats in the burned area will be the lowest priority. All locations of weed species will be mapped, using the Angeles NF, "Invasive Weeds" list.

Surveying will include documentation and hand pulling new weed occurrences at the time of inspection. New weed occurrences will be pulled to root depth, placed in sealed plastic bags, and properly disposed.

Documentation of new infestations will include:

- Mapping perimeter of new infestations

- Filling out Weed Element Occurrence Form (Appendix B)
- Treatment method
- Dates of treatment
- Incorporating data into local GIS spatial database
- Entering data into National Resource Information System (NRIS) database
- Entering data into FACTS database
- Evaluating success of treatment in subsequent inspections

G. Reporting

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

H. Costs: Weed Detection Surveys for One Year =\$7750.00

Weed detection surveys to determine whether ground disturbing activities related to the Sayre Fire 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.

For FS Employees for FY 2009

2 GS-11 botanists (\$360/day x 10 days)	\$ 7200
Vehicle mileage (1000 miles @0.55/mile)	\$ 550
TOTAL	\$ 7750

I. Follow-up Actions

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

Appendix C:

Sayre Fire Forest Road Stabilization Effectiveness Monitoring

The 2500-8 report requests funds to monitor the effectiveness of stabilization treatments along the Forest Roads. The treatments are designed to upgrade and supplement existing erosion control structures on Forest Service Roads to facilitate proper water drainage off the road, preserve the road tread, and decrease watershed efficiency.

1. Monitoring Questions
 - a. Are the treatments effectively decreasing watershed efficiency within the burned area?
 - b. Have the treatments effectively preserved road bed within the fire area?
 - c. Are there specific locations where treatments have failed?
2. Measurable Indicators
 - d. Number of times structures are plugged, filled, or broken down.
 - e. Area of loss of road bed.
3. Data Collection Techniques
 - f. Photo documentation of site
 - g. Inspection Checklist (attached)
4. Analysis, evaluation, and reporting techniques

Monitoring will be conducted after storm events. If the monitoring shows the treatment to be ineffective at stabilizing road and there is extensive loss of road bed or infrastructure an interim report will be submitted.

Road Inspection Checklist

Date: _____

Inspector _____

Time: _____

Forest Road _____

Describe locations reviewed during inspection: _____

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

Describe damage and cost to repair? (GPS) _____

Were the warning signs in place? _____

Photo taken of road damage _____

Photo taken of sign damage _____

Recommended actions to repair: _____