

Date of Report: 10/12/2006

**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 DESCRIPTION****A. Fire Name:** Day Fire (Eastern) – Angeles NF **B. Fire Number:** LPF-002023**C. State:** CA**D. County:** Los Angeles**E. Region:** 5**F. Forest:** Angeles**G. District:** Santa Clara/Mojave Rivers**H. Fire Incident Job Code:** P5C50E**I. Date Fire Started:** 9/4/06**J. Date Fire Contained:** 10/2/06**K. Suppression Cost:** ~ \$60,000,000 (Total fire area as of 10/3/06)**L. Fire Suppression Damages Repaired with Suppression Funds**

1. Fireline waterbarred (miles): 21 miles within analysis area.  
2. Fireline seeded (miles): 0  
3. Other (identify): in progress: hand lines, camps, helispots, staging areas, private fencing and other structures, roads

**M. Watershed Number:** Lower Piru 1807010207**N. Total Acres Burned:** 12,550

NFS Acres(12,390) Other Federal ( ) State ( ) Private (160)

**O. Vegetation Types:** In lower elevations: Chamise chaparral, mixed chaparral, and grassland habitats, cottonwood/sycamore/willow riparian areas. At higher elevations: mixed conifer, mixed chaparral, Jeffery Pine, Sugar Pine, Bigcone Douglas Fir.

P. Dominant Soils: Soils: 75%, Trigo Lodo families – Haploxeralfs Complex, well drained formed in colluvial/alluvial deposits from mixed sources, 10 to 50% rock fragments; 20% Trigo Calleguas families – Haploxeralfs Complex, shallow soils formed in weathered sedimentary, gabbroic and diuretic rocks, rock fragments range from 0 to 45 %; 5% Trigo Calleguas families, rock outcrop consisting of continuous bare bedrock and inclusions of soil material.

Q. Geologic Types: Peace Valley Formation (lacustrine gray clay shale facies, Ridge Basin Group Ridge Route Formation (lacustrine buff sandstone facies, Ridge Basin Group), Landslide rubble of local rock units, landslide debris, Violin Breccia (breccia-conglomerates SW facies of gneiss and granite detritus, Ridge Basin Group).

R. Miles of Stream Channels by Order or Class: I&II = 7 miles, III = 5 miles, IV = 32 miles

S. Transportation System

Trails: 4 miles      Roads: 20 miles

### **PART III - WATERSHED CONDITION**

A. Burn Severity (acres): 3297 (low) 3109 (moderate) 177 (high) 5967 (unburned)

B. Water-Repellent Soil (acres): 5000

C. Soil Erosion Hazard Rating (acres):  
0 (low) 0 (moderate) 6583 (high)

D. Erosion Potential: 437 tons/acre

E. Sediment Potential: 7020 cubic yards / square mile; pre-fire = 590

### **PART IV - HYDROLOGIC DESIGN FACTORS**

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

B. Design Chance of Success, (percent): 90%

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

D. Design Storm Duration, (hours): 24

E. Design Storm Magnitude, (inches): 3

F. Design Flow, (cubic feet / second/ square mile): 13

G. Estimated Reduction in Infiltration, (percent): 53%

H. Adjusted Design Flow, (cfs per square mile): 24

## **PART V - SUMMARY OF ANALYSIS**

### **A. Describe Critical Values/Resources and Threats:**

The Day Fire burned for four weeks and was contained on 10/2/06 at about 160,000 acres. Because of the large area, inaccessible wilderness in 90% of the burn, and dangerous burning conditions, the area within the fire was partitioned into zones that could be managed safely for BAER analysis. The first area to cool down and become accessible was the eastern end of the fire, entirely within the Angeles National Forest between Hwy 5 to the east, the Piru Drainage to the west, Pyramid Lake to the north, and the southern perimeter of the fire to the south, an area of approximately 12550 acres. This zone is not completely within one watershed; the Piru flows southward out of the burn area into Piru Lake, but it does contain a concentrated area of values at risk near the highways and roads and is within one Forest. The remainder of the fire is presently (10/4/06) being analyzed by the BAER team and includes the Sespe, Santa Paula, lower Piru (the watershed between lake Pyramid and Lake Piru), and upper Piru watershed above Pyramid Lake and will address the total burned area effects on flow and sediment entering Pyramid Lake and Lake Piru.

The following summary describes the conditions that warrant emergency rehabilitation actions within the East zone BAER analysis area.

#### *Risks to Life*

Risks to life may occur from rockfall off of cliffs above the Old Hwy 99 route; these steep slopes that burned are more susceptible to erosion which loosens rocks above the travelway.

Frenchman's Flat, a dispersed recreation area along Piru Creek may be a hazardous area during winter rains due to high winter runoff in Piru Creek, unexpected and sudden increases in volume of water released from Pyramid Reservoir one mile above Frenchman's Flat, the chance of mudflows on the west side of Piru Creek across from Frenchman's Flat and rockfall downstream, and from burned hazard trees along the north end of the Flat.

Large amount of floating woody debris will enter Pyramid Lake from the Piru Creek arm based on the aftermath of the nearby Piru fire back in 2003 on Piru Lake. This debris will create a hazard for recreational boaters throughout the first winter. This debris will not be life threatening but it can damage or bury the State's Power Plant cooling pond or pumping station and there is a risk of outlet plugging and damage to water pipe of the California Aqueduct at Pyramid Lake.

#### *Risks to Property*

The Beartrap picnic area along Pyramid Lake was partially burned and the watershed above the site was burned to the degree that flooding and debris flow could further damage the remaining structures and the dock. High lake levels due to flooding could also flood the outhouse chamber releasing sewage into the lake.

Yellow Bar picnic site did not burn but will likely be impacted by large amounts of floating woody debris entering Pyramid Lake from the burned Piru drainage.

The Slide Mountain trail is likely to experience increased erosion and could fail at drainages due to the burned area condition.

Several road culverts and drainage areas along the Old Hwy 99, Whitaker Peak Road and other private roads are undersized or are in need of maintenance to handle increased flows from the burned areas.

#### *Risks to Natural Resources*

There are several archeological sites along Piru Creek that are in danger of damage from overland flow and sedimentation which has been aggravated by the burn (see heritage report). Noxious weeds that grew in the vicinity of the dozer lines before the fire are likely to have spread along these lines, and other noxious weeds may have come in on bulldozers from other parts of the state. A Noxious Weed Detection Survey will be done the first growing season to see if there is a problem.

**B. Emergency Treatment Objectives:**

The primary objective of emergency treatment is to protect life and property through closure, avoidance and warning in the burned area while vegetation recovers, and by pre-treating trails and roads to withstand increased winter flows, then patrolling these areas to maintain these treatments after storms. Overland flow that could damage archeological sites will be controlled using straw bales, straw wattles, and sandbags to divert water and sediments away from sensitive areas. Other responsible agencies will be notified and consulted with about possible risks within burned areas they manage.

Some noxious weed monitoring is proposed to track and then plan treatments to slow the spread of noxious weeds into the burned area and dozer lines.

Surveys will be conducted for hazard trees and these will be treated in high risk areas.

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

Land 80 % Channel NA % Roads 90 % Other 90 %

**D. Probability of Treatment Success**

	Years after Treatment		
	1	3	5
Land			
Weed monitoring	80	60	50
Wattles, bales, sand bags	80	70	60
Channel			
Roads/Trails			
Old Highway 99	80	80	80
Whitaker Road and spur road	80	80	80
Slide Mt. trail	70	80	90
Protection/Safety			
Beartrap closure	90	NA	NA
Debris booms	60	60	NA
Frenchman's Flat Closure	90	NA	NA
Hwy 99 closure	90	NA	NA
Warning system	70	70	NA

**E. Cost of No-Action (Including Loss): \$2,811,353****F. Cost of Selected Alternative (Including Loss): \$876,794****G. Skills Represented on Burned-Area Survey Team:**

[x] Hydrology Vic Andresen and Terry Kaplan-Henry  
 [x] Soils Terry Kaplan-Henry  
 [x] Geology Alan King  
 [x] Wildlife Kevin Cooper  
 [x] Engineering John Grenz  
 [x] Botany Charlie Hohn  
 [x] Fisheries Kevin Cooper  
 [x] Archaeology Mike McIntyre

Other adjunct members included District and Forest resource and recreation staff.

Team Leader: Kevin Cooper

Assistant TL: Joe Gonzales

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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:**

##### **Bear Trap**

###### *Issue*

Bear Trap picnic area was burned in the fire. Three unburned picnic site still remain, a concrete block outhouse suffered slight damage and a new floating dock was undamaged.

A sudden intense rain on the watershed may produce a debris flow that will sweep away the outhouse, the three unburned picnic sites and possibly damage the end of the dock.

If the weather is mild with light rains in the fall and early winter the debris flow may not occur. The three undamaged picnic sites and outhouse would likely have several feet of mud deposited around them, the mud that would come from a local burned slope behind the picnic area. With some protection these facilities would be quickly make these facilities available in the spring. Increased flow from Bear Trap channel could also flood the outhouse and cause sewage to enter the lake.

###### *Desired condition*

Protect life and prevent damage to property at the Bear Trap picnic area.

Protect the picnic site to a reasonable degree commensurate with the various potential rainfall events.

##### *Recommendations for Bear Trap picnic Area*

1. Thirty three feet of straw bales west of the outhouse. Thirty three feet of straw bales up slope of outhouse to prevent protect the outhouse from down slope movement of mud. Ninety feet of straw bales to protect the three picnic areas, within the ninety feet, thirty six feet of the straw bales needs to be two bales high. To build a two bale high wall requires three bales. (Two on the bottom and one at the top.)
2. The outhouse needs to be pumped before the rainy season incase a debris flow sweeps it away. This will prevent human wastes from getting into the lake.
3. The dock needs to be removed to safe location to prevent damage from a possible debris flow.
4. The picnic site needs to be closed for at least one winter and possible two winters. This will protect the public from unsafe conditions.

##### **Cherry Canyon Rock Shelter**

###### *Issue*

In Upper Cherry Canyon is a rock shelter that was used by Native Americans. Forest Service site (FS 05-01-53-00046) Trinomial site (CA-LAN1008). This site was visited on September 24, 2006 by two members of the BAER team. It was obvious that this site received significant amount of heating from the fire because the rock shelter was blackend with soot and some surface layers of the rock shelter have flaked off due to heating. The area above the rock shelter burned at moderate to high severity and mud and debris could spill over the top edge of the shelter and flow down the face of the shelter.

###### *Desired Condition*

Prevent further damage to the rock shelter from mud flowing over the top lip of the shelter.

### *Recommendation*

We recommend 8 straw wattles 15 feet long be installed on the slop above the shelter to capture mud and divert water away from the lip of the rock shelter. The straw wattles designed to protect the values at the Cherry Canyon Rock Shelter will be installed outside the boundaries of the site as documented in the site record. A heritage staff person will be on site to verify that no site deposit will be impacted.

Osito Cave, Wind Cave.

### *Issue*

A shallow cave shelter has several rock art panels in the back portion of the cave and was burned over in the fire. Forest Service site (FS 05-01-53-00017) Trinomial site (CA-LAn-0441). Up slope of the cave art site are bedrock mortars and fragment scatter. This site was examined by two BAER team members on September 24, 2006. The Day fire lightly burned or left unburned vegetation around and above the shelter, this is due to the 1999 Interstate Fire which burned the same area. The BAER after Interstate Fire used straw wattles and sandbags to protect the archeological site. We found the remains of two sandbag barriers and straw wattles that were installed in 1999. These sand bag barriers diverted water away for the cave with rock art the bedrock mortars. The wattles were designed to slow erosion that diverted water from going over the rock art shelter and the mortars. Mike McIntyre noticed that the some of the old wattles still remained.

### *Desired Condition*

Osito Cave, Wind Cave.

Reduce or prevent damage to the rock art panels and to slow/prevent erosion of the fragments scatter from the site.

### *Recommendation*

We recommend reinforcing and installing new sandbag barriers to protect the cave art, mortar holes and fragment scatter. We need 300 feet of sandbags to divert water away from the mortars and 50 feet of sandbags to divert water around the rock art site. The sand bag barriers should be at least 1 foot high and 1 foot wide. We estimate that it will take 700 sandbags to construct the barrier. To slow erosion we need 20 straw wattles that are 25 feet long.

## Oak Flat Spring Campsite

### *Issue*

The Oak Flat Spring and Campsite is an archeological site Forest Service (FS 05-01-53-00001) Trinomial site (CA-LAn-0248). With in this area is the FS Oak Flat fire station, a FS campground and a Boy Scout camp. The Oak Flat area is nearly level with slow drainage. Oak Flat received a very light burn and no facilities were lost. The up slope oak grove also burned with low severity. Some surface mud is expected to flow off the slopes onto and into the archeological site and other facilities. Any low depressions on Oak Flat could accumulate several inches to a foot of mud. The mud will not be life threatening but it can damage or bury some archeological sites and damage some of the current buildings and facilities located on Oak Flat. The estimated value of the current facilities at Oak Flat is \$750,000.

### *Desired Condition*

Control and contain the mud that will likely come of the lightly burned slopes around Oak Flat.

### *Recommendation*

To control the mud that is likely to come of the slopes around we are recommending a straw bale wall that will go completely around the site. The straw bale wall is easier to install than silt fencing and will slowly disappear after several years. The straw bale wall needs to be 1,800 feet long. An additional 300 feet of straw wattles are needed at certain locations to control mud and water flow. Cut road dips or slope road dips into the hillside on the road above and behind the mortar holes archaeological site to prevent soil/debris/water damaging the site. A heritage staff person will be on site to verify that no deposit will be impacted.

### **Channel Treatments:**

None

### **Roads and Trail Treatments:**

Whitaker Peak Road (6N53): Dry ravel, falling rock and inadequate drainage are the main concerns on this road. (Note: Mileages are measured on a vehicle odometer from the Jct. of 6N53 with Old Hwy 99). M.P. 2.5 (saddle) to 2.9 (sharp turn to NW): this section has a high potential for rolling rock from burned slopes above, increased by the removal (burning) of vegetation. Steep channels on the North side of Ruby Canyon appear to have had debris flows which flushed stored sediment downstream, some of which remained in lower segments of the same channels. The very steep slopes, now barren of vegetation, show a covering of loose sediment which will become mobilized during precipitation events. Large quantities of sediment will flow downstream into Ruby Creek, then Piru Creek, and finally into Piru Reservoir. Another section of the Whitaker Peak road of concern is M.P. 3.4 to 3.6 (saddle), where the rockfall hazard onto the highway is high. Road closures, storm patrol, and warning signs are proposed mitigations. Rock scaling was considered and evaluated to reduce risk of rolling/falling rock. The places where scaling might be beneficial were so widely scattered and infrequent that scaling was determined to be impractical.

Old Highway 99: The section of this highway between the base of Pyramid Dam and the junction with Whitaker Peak Road is bounded by many old and recent landslides, some deep, slow moving and massive, others shallow and fast moving, in addition to areas subject to rockfall or rolling rock. In addition, the fill-slope below the highway in many places is failing, especially about 200 yards north of the junction with the Oak Flat Road (6N45). The highway is closed or partially blocked frequently during winter months by slope instability associated with rainfall. The potential for these impacts to the highway, and to any people or vehicles in the wrong location, is higher now that many of the slopes above have burned. Road closures, warning signs or other warning systems, and storm patrol are recommended measures to lessen the risks. Responsibility for drainage repair, road safety and treatments such as wet weather closures or seasonal closure to the public and the gates requiring this falls to Los Angeles County from the Hwy 5 entrance north to Frenchmen's Flat is approx. 5 miles, and to the California Department of Water Resources from Frenchmen's Flat to the spillway on Lake Pyramid is approx. 3 miles.

Interstate 5: Fire burned up to or down from I-5 along a 4-5 mile stretch on its west side. Most of the burned vegetation was grass or light fuels, and severity was low to very low. Dip-slope failures and fill failures are common, and some recent, pre-fire scarps and slide deposits were observed. Since these slopes burn frequently, it is unlikely that the fire will have any significant effect on the stability of the slopes adjacent to I-5. Nevertheless, it is recommended to have Cal Trans geologists inspect the instability situation related to the highway.

The Slide Mountain trail is on a slope that burned completely and so the tread will be challenged by excess runoff. This hiking trail is used regularly by volunteers who staff the Slide Mountain Lookout, a facility that was saved by suppression efforts. The lower mile of this trail is an old road and was opened for vehicle access during suppression efforts, and will be rehabilitated to a hiking trail with suppression funds. The upper two miles was not affected by suppression efforts but will be impacted by runoff from the burned area. In order to prevent unacceptable damage to this trail, it will need to be winterized by a trail crew. Cost for a contract trail crew is approximately \$20,000/mile.

OHV Trespass Because bulldozer lines are accessible from public roads, there is a threat that OHV users may trespass onto these lines and then onto burned areas, greatly aggravating erosion problems. Since there are no official designated routes in the area that are necessary to close for burned area protection, and because suppression rehab efforts are responsible for blocking access to these dozer lines, no request for BAER funds is proposed at this time. There are several dozer lines and large areas identified where OHV users would be able to directly access burned slopes from public roads. The Whitaker Peak road is not gated and locked, and that road should be closed until the vegetation recovers enough to keep OHV users from trespassing.

## **Protection/Safety Treatments:**

### Piru Creek/Pyramid Lake

#### *Issue*

Floating debris will be washed down Piru Creek and left floating in Pyramid Lake. The debris mat that forms will likely block entrance to both Yellow Bar and Tin Cup Picnic Areas which did not burn in the fire. It may be possible under certain wind conditions for recreational users to get into one of the picnic areas and then become trapped when the wind changes. If a northwest wind hits the debris mat it will float out into the center of the lake. With the return of the typical south winds on the lake the debris mat will float into the arm containing Emigrant Landing which could close the whole lake for recreation. The debris mat also needs to be kept away from water/power intakes at the lake.

#### *Desired Condition*

Contain the debris mat in Piru arm of Pyramid Lake which will permit the continued recreational use of the lake at a reduced level. Keep the floating debris in Piru arm of the lake will keep it away from water intakes that generate power and supply water to Castaic Lake. Castaic Lake is a holding/water supply lake and is one of the sources of water for Southern California. Eventually remove this debris from the lake.

#### *Recommendation*

A debris boom needs to be placed across the mouth of Piru arm of Pyramid Lake. This will contain the debris within the arm of the lake. This debris boom needs to be about 1200 feet long and stretch from Nugget Point to a point on the opposite side of the Piru arm of the lake. Removing the debris will be easier when they are contained in one location.

Yellow Bar and Tin Cup Picnic Areas should be closed during the winter months due to the floating debris. If a recreational user gets into the arm at the wrong time they could become trapped by debris if the wind changes. Boaters will run the risk of colliding with debris. Also the picnic area should be closed due to the floating debris boom.

The BAER team also recommends that if the debris boom in Piru Arm is not constructed, the floating outhouses be moved to an area where they would not be damaged by floating debris such as onshore away from wave action.

Pyramid Lake, west side: Slope instability issues similar to those at Bear Trap exist along the lake below low to moderate severity burned areas. Debris slides, debris flows and soil slips are likely to occur on steep, burned slopes directly above the lake. If any of those slides reach the lake and rapidly deposit a large quantity of material into the lake, the potential exists for a tsunami-style wave to occur, similar to a ten foot wave which occurred at Castaic Lake (personal communication, G. Faulconer, Project Biologist, DWR, 9/25/06). Such a wave could be hazardous to boats, docks, fishermen, or other humans close to or on the lake. Warnings should be issued when rain storms threaten or occur. The responsibility for issuing warnings is included in the list of management agencies below, and the Santa Clarita Sheriff's Department has a station and several patrol boats on the marina at Pyramid Lake. In addition, slide features will introduce sediment which will increase turbidity and reduce reservoir capacity.

A closure system to Pyramid Lake during the winter rainy period would be the safest method of protecting recreationists from both floating debris as a boating hazard, and rockfall or landslides and the resulting waves. There are several levels of closures that could be effective. A full seasonal closure that is re-evaluated in the spring of '07 and '08 is the safest method but may have other economic impacts and disrupt recreation the most. Other spatial or temporal closure options require constant monitoring and establishment of trigger points for warning or closure action, and so include the risk that these systems may fail. Some considerations for a closure follow. In order to respond to floating debris, one option other than a capture boom would be to wait until the first large storm is predicted, establish a temporary boat closure, and re-evaluate the debris problem after each storm. In the absence of wet weather, the risk that debris will enter the lake is very low, and the risk to boaters from debris is easily detectable. A point may be reached early in the winter where the debris buildup is too hazardous to open the lake to recreational boaters. If a boom is put in place and monitoring



shows it is effective in containing floating debris, the lake could remain open outside of the Piru arm, as long as other tributaries such as Beartrap did not produce floating debris, in which case a boom here may also be effective if it can be anchored, but there will be far less debris produced here than from Piru Creek. In any of the scenarios above, the threat of landslides and rockfall into the west side of the lake remains the same; there will be a constant hazard after the burn, and this hazard will be exacerbated by rainfall, not just during the rainfall event, but for some unknown time afterward until the vegetation is re-established. This increased threat from the burn usually diminishes over a three year period as the brush grows back.

Management agencies affected by this hazard area include the US Forest Service, Department of Water Resources, special use permit holders, LA County Sheriff's department, and others. The treatment options will require cooperation and future planning to determine the best method to mitigate the hazards.

Department of Water Resources will install their debris boom at Pyramid Lake immediately. The Forest Service request for BAER funding to support one-half of the total cost of transporting, and assembly and installation west of Nugget Point. The Forest Service will not be responsible for maintaining the debris boom or removing woody debris from the water surface of the lake.

### Frenchman's Flat

#### *Issues*

Frenchman's Flat is a very heavily used dispersed recreation area on the Angeles National Forest. This area is located about 2.5 stream miles downstream of Pyramid Dam. Hundreds of forest visitors use the area for fishing, picnicking and water play activities, especially during warm weekends. Homeless people have also been observed living down stream from Frenchman's Flat. The fire did not burn in the Frenchman's Flat area, but did burn all of the areas adjacent to the flat and the slopes on the opposite side of Piru Creek. The Department of Water Resources expects to increase the number of high flow releases from the dam due to run off caused by the burned area upstream of Pyramid Dam.

The following hazards caused by the fire have been identified:

1. Increase in the frequency and duration of high flow releases from the dam.
2. The fire burned some nearby willows and cottonwoods making them hazard trees.
3. The slope on the opposite side of the creek burned at high severity and may produce mud/debris flow.

#### *Desired Conditions*

Protect the public from the increased hazards created by the fire.

#### *Discussion/Recommendations.*

We expect an increase in the number of high flow releases from the dam. The flow releases can fluctuate from fairly low releases to very high within an hour. This could be a hazard for anyone near the creek. Sudden increases are likely to happen during the winter during and after a storm.

If a mud flow develops on the burned slope opposite Frenchman's Flat it will most likely occur during and after a winter storm.

As of this time we know of several trees are likely to become hazard trees. We do not know of the condition of several other trees near the flat.

We recommend:

1. The Forest install signs in English and Spanish warning of high flow releases from the dam.
2. Increase patrols in the area to keep homeless and visitor out to warn about the dangers of mud flows from the slope on the opposite side of the creek.
3. The Forest will seek the advice of a timber specialist to examine the trees which may be hazards and have them trimmed or cut down. Treat the hazard trees immediately. Insure Forest Service Handbook procedures for tree removal are followed, and consult with the Forest Safety Officer prior to and during the time trees are being removed.

4. A closure system for Frenchmen's Flat should be considered to prevent injury to recreationists from high water, rockfall, and landslide activity. These threats are not mitigatable and so the hazard will be present until the vegetation across the fire recovers enough to protect the soil, in about three years. Threats from high water are more predictable than the threat from rockfall and landslide activity, but still require an effective monitoring and warning system, particularly if people camp for extended periods of time. Finding and notifying people who may be reluctant to leave on short notice and possibly at night or on weekends/holidays is difficult. It would be simpler and safer to keep the area closed, at least for the winter months, until the vegetation has recovered. Because the threat of rockfall and landslides cannot be mitigated, and because high water threats are difficult to warn people of, and because the Old Hwy 99 also has rockfall threats, the BAER team recommends closing Frenchmen's Flat until the spring of '07, when the closure can be re-evaluated.
5. In the event that Old Hwy 99 and/or Frenchmen's Flat remains open for the winter, a warning system for high water releases from Pyramid Lake should be instituted to warn recreationists in Piru drainage below the spillway.

Note - We are recommending to LA County Dept. of Public Works that they should consider closing Old Highway 99 for public safety due to potential slide problems. This would effectively close Frenchman's Flat to the public. The Old Highway 99 is (4 lanes wide) although only two road lanes are maintained by LA County Road Maintenance Division closure will require at least two large gates.

### ***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.)

Because our policy is to minimize the establishment of non-native invasive species to prevent unacceptable degradation of the burned area, it is necessary to conduct monitoring to evaluate the potential for spread from both existing populations and from the activities associated with fire suppression. Therefore, noxious and invasive weed monitoring is proposed for a period of one to three years to verify the suspected infestations and determine the fire's potential impact on weed populations within the burned area. If the monitoring shows that there is successful reproduction of certain noxious or invasive weed species and a sharp upward trend occurs as a result of the Day Fire, it may trigger the need for further treatment and action. Reports will be turned in to the Regional BAER coordinator annually, which will disclose the prior year funding and explain and justify the future year funding.

It is necessary to monitor of all dozer lines and travel routes for the next three years especially if new weed detections take place in the first year (FY 2007). There are 11 miles of dozer lines that will have to be monitored by walking. All travel routes on the forest will need to be monitored and checked for new weed infestations.

A Noxious Weed Detection Survey and report would be submitted to Regional BAER coordinator and to the Santa Clara Mojave Rivers Ranger. If weed introduction and spread has increased due to effects of the Day fire, an Interim BAER report would be completed to request funding to do treatment and to do Noxious Weed Treatment Effectiveness Monitoring.

The following noxious weeds are present within the Day Fire burned area:

*Centaurea melitensis* (tocolote) is found is found near the Hwy 5 corridor and the dozer lines in the analysis area. Although it is not yet on the State Noxious Weed List, it is in the same genus and is often mistaken for yellow star thistle, classified as a "C" Pest. It is an aggressive invasive weed, a Southern European annual common in waste places, fields, along trails, and roads.

*Centaurea solstitialis* (yellow star thistle) is just coming into the analysis area according to the local botanist Charlie Hohn. It is a southern European annual with longer spines than tocolote, rated as a "C" Pest on the State Noxious Weed List. Yellow star thistle is spread almost exclusively by seed, which may lie dormant for as long as 10 years and is known to cause "chewing disease" and death in horses. Studies have shown that repeated prescribed burns (at least 3 consecutive years) may reduce the yellow star thistle seed bank, but burning during the appropriate phenological stage is critical for the elimination of seed production. Although yellow star thistle is not known to out compete chaparral, it is critical to minimize potential spread while native vegetation recovers within the burned area. It will persist along roads and continuously disturbed areas.

*Linaria dalmatica* Dalmation Toadflax has been reported from the Hungry Valley area just north of the analysis area, and where bulldozers were moving in and out of. The potential for spread into new dozer lines is high.

*Lepidium latifolium* (Perennial pepper grass) is normally found in seasonal drainages but has been found on the Ridge Route in the analysis area and has the potential to be spread by dozer activity along the dozer lines.

#### **Costs:**

FY 2007 – Monitor the occurrence of noxious weed species and the extent of occurrence, concentrating in the burned area along travel routes and dozer lines. Submit report to Regional BAER Coordinator. Evaluate need for further action and treatment.

GS –11 Botanist	\$372.96/day x 10 days	\$3,730
GS – 9 Forester	\$193.47/day x 10 days	\$1,935
Mileage:	1000 miles 0.45/mile	\$ 450
Total		\$6,115

## Part VI – Emergency Stabilization Treatments and Source 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											
Osito Cave	site	6675	1	\$6,675	\$0			\$0		\$0	\$6,675
Oak Flat Spring	site	10170	1	\$10,170	\$0			\$0		\$0	\$10,170
Beartrap	site	2600	1	\$2,600							\$2,600
Upper Cherry Canyon	site	2130	1	\$2,130	\$0			\$0		\$0	\$2,130
Noxious weed monitoring		6115	1	\$6,115	\$0			\$0		\$0	\$6,115
Subtotal Land Treatments				\$27,690	\$0			\$0		\$0	\$27,690
B. Channel Treatments											
				\$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											
Whitaker Pk. Road		4583	1	\$4,583	\$0			\$0		\$0	\$4,583
Whitaker Pk. Spur Rd.		4030	1	\$4,030							\$4,030
Oak Flat Rd.		1755	1	\$1,755							\$1,755
Old Hwy 99 (LAC)		20263	2	\$20,263	\$0			\$0	1	\$20,263	\$40,526
Slide Mt. Trail	mile	20000	2	\$40,000	\$0			\$0		\$0	\$40,000
Insert new items above this line!				\$0	\$0			\$0		\$0	\$0
Subtotal Road & Trails				\$70,631	\$0			\$0		\$20,263	\$90,894
D. Protection/Safety											
Frenchman's flat		14200	1	\$14,200	\$0			\$0		\$0	\$14,200
Closure (See below)											
Old Hwy 99 (DWR)		20000							1	\$20,000	\$20,000
Boat Warning System		25000							1	\$25,000	\$25,000
Debris boom	each	25,000	2	\$50,000	\$0			\$0		\$50,000	\$100,000
Insert new items above this line!				\$0	\$0			\$0		\$0	\$0
Subtotal Structures				\$64,200	\$0			\$0		\$95,000	\$159,200
E. BAER Evaluation											
BAER Evaluation				\$40,000				\$0		\$0	\$40,000
Implementation TL	day	240	15	\$3,600	\$0			\$0		\$0	\$3,600
Cooperator Meeting	day	1500	1	\$1,500							\$1,500
Subtotal Evaluation				\$45,100	\$0			\$0		\$0	\$45,100
F. Monitoring											
Insert new items above this line!				\$0	\$0			\$0		\$0	\$0
Subtotal Monitoring				\$0	\$0			\$0		\$0	\$0
G. Totals				\$207,621	\$0			\$0		\$115,263	\$322,884
Previously approved											
Total for this request				\$207,621							

**PART VII - APPROVALS**

1. /s/ Jody Noiron  
Forest Supervisor (signature)

October 17, 2006  
Date

2. /s/ Peggy Hernandez (for)  
Regional Forester (signature)

October 24, 2006  
Date