

BURNED-AREA REPORT
(Reference FSH 2509.13)**PART I - TYPE OF REQUEST****A. Type of Report**

- ☒ 1. Funding request for estimated WFSU-SULT funds
☐ 2. Accomplishment Report
☐ 3. No Treatment Recommendation

B. Type of Action

- ☒ 1. Initial Request (Best estimate of funds needed to complete eligible rehabilitation 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: Bridge FireB. Fire Number: CA-BDF-8860C. State: CAD. County: San BernardinoE. Region: 5F. Forest: San BernardinoG. District: Front CountryH. Date Fire Started: September 5, 2003I. Date Fire Contained: September 10, 2003J. Suppression Cost: 2.4 million

K. Fire Suppression Damages Repaired with Suppression Funds:

1. Fireline waterbarred (miles): 9
2. Fireline seeded (miles): 0
3. Other (identify): 6 miles hand line construction rehabbed

L. Watershed Number: City Creek subwatershed of the Santa Ana watershed (1807020309)

M. Total Acres Burned: 1352 (NFS Acres=1282; Other Federal=0; State=0; Private=70)

N. Vegetation Types: Lower Montane mixed chaparral, scrub oak, Ceonothus mixed chaparral, mixed soft chaparral, knobcone pineO. Dominant Soils: Trigo, SpringdaleP. Geologic Types: Cretaceous quartz monzonite, and Paleozoic metamorphicQ. Miles of Stream Channels by Order or Class: Order 1= 5.5 miles; Order 2=1 mile; Order 3=1 mile; and Order 4=0.5 mile.

R. Transportation System

Trails: 0 miles Roads: 3 miles

PART III - WATERSHED CONDITION

- A. Burn Severity (acres): 252=low; 756=moderate; 33 =high
- B. Water-Repellent Soil (acres): 210
- C. Soil Erosion Hazard Rating (acres): 0= low; 56=moderate; 985=high
- D. Erosion Potential: 37 tons/acre
- E. Sediment Potential: 58,200 cubic yards/square mile

PART IV - HYDROLOGIC DESIGN FACTORS

- A. Estimated Vegetative Recovery Period, (years): 5
- B. Design Chance of Success, (percent): 90
- C. Equivalent Design Recurrence Interval, (years): 10
- D. Design Storm Duration, (hours): 24
- E. Design Storm Magnitude, (inches): 8.5
- F. Design Flow, (cubic feet / second/ square mile): 62
- G. Estimated Reduction in Infiltration, (percent): 30
- H. Adjusted Design Flow, (cfs per square mile): 115

PART V - SUMMARY OF ANALYSIS

A. Describe Watershed Emergency:

Background Conditions

The Bridge Fire burned 1352 acres in the City Creek watershed between September 5th and 10th, 2003, in steep chaparral and conifer habitat. About 3% of the area burned with high intensity, 73% burned with moderate intensity, and 24% burned with low intensity. The erosional hazard is high or very high, but the soils are only weakly hydrophobic. Overall runoff volume is expected to increase about 15 % due to the fire, and sediment deliver will increase about 300% above normal the first year and 50% above normal the second year. This watershed flows through the city of Highland before entering the Santa Ana drainage. Recent fires in the area include the 436 acre City Creek fire of 1997, and the 2904 acre Hemlock fire of 1997. The winter following these two fires was characterized by El Nino heavy rains, and current structures downstream from those fires withstood this combination of heavy rain over burned areas.

As the channel reaches the depositional area at the edge of the city of Highland, it flows near a water treatment plant. This plant normally processes water from originating in Big Bear Lake, which was not affected by the Bridge Fire. The only water processed from City Creek comes from wells below the surface which are not affected by sediment increases in the surface flow. Water treatment structure are elevated enough avoid the slight increase in flow due to the fire. Below the treatment plant are five bridges: one at Highland Avenue; the second at Baseline

Road where the flow is slightly restricted; the third crossing is at Boulder Avenue with several widely spaced pillars. Before the fourth bridge the channel widens into a percolation basin, crosses under Highway 30 about 5 miles below the Bridge fire, then finally crosses under the Third Street Bridge just upstream from the confluence with the Santa Ana River. None of these bridges would be threatened by increased flows from the Bridge Fire. Accelerated erosion from the fire will and sediment transport will decrease water quality in the stream, especially for the first winter following the fire.

Values at risk from this fire

Federally endangered mountain yellow-legged frogs and Forest Service Sensitive speckled dace (a small fish) are at risk due to increased sediment yields after the fire. For one to three years after the fire, sediment may fill in pools that are required year-long by mountain yellow-legged frogs for breeding, feeding, and survival. During heavy sediment flows after the first several erosional storms, and throughout the first winter following the fire, fine ash and sediment is delivered into dace's habitat, which may kill them by clogging their gills.

There is also a risk that easier access to the creek may result in increased recreational use along the creek, further increasing the risk to aquatic species. This population of mountain yellow-legged frogs is the only known population in the San Bernardino Mountains. An isolated occurrence of speckled dace also occurs in the fire area and is considered important.

Impacts from this fire may significantly affect the viability of these local populations, especially the mountain yellow-legged frog, because the fire affected a very large proportion of known habitat in City Creek. Only about a mile of known suitable habitat for mountain yellow-legged frog exists above the influence of the fire. This unaffected habitat may harbor some individuals from the effects of sediment, and these individuals may be able to recolonize the area affected by the fire after it has stabilized, but the genetic variability of this population could be degraded. The effects of the sediment on both species is uncertain, but will likely exclude a significant amount of breeding habitat for the yellow-legged frogs by filling pools, and could result in the death of speckled dace through suffocation. The extent of this mortality and loss of breeding potential will mostly depend of the nature of rainfall event the first year; the heavier the rainfall, the greater the damage to the populations.

Noxious weeds may infest the area along dozer lines put in as fire breaks outside the perimeter of the fire itself. Newly disturbed soil and the possibility that equipment and crews introduce new species of weeds or spread seeds from species already existing on site greatly increases the chances of a noxious weed outbreak. Suppression funding will not cover long-term monitoring to assess the encroachment of noxious weeds along these lines.

A private residence with a fish pond, two houses, and a barn lies near the lower end of Schenk Creek in the floodplain. These structures are low lying enough to be at risk during high rainfall events regardless of whether the area had burned. Although increased flows due to the fire are expected to be small enough not threaten any structures during years of normal rainfall events, a culvert above the lowest house is partially plugged and needs to be cleaned out to prevent the creek from re-routing down the driveway.

A short section of Hwy 330 at the southern edge of the fire is at increased risk of rockfall due to the fire, which may create a safety hazard on the highway. There are also two culverts which may plug during heavy rainfall events, causing water to flow over the highway and creating a public safety hazard. These need to be cleaned and monitored.

There is some risk to public safety from post-fire flows and erosion. The lower portion of City Creek in the burned area is used for recreation but has also been used a lot in recent time for camping by homeless people. The homeless camps are down in the drainage along the creek.

Initial concerns re-evaluated as no-risk

Initially, the team evaluated some possible risks that were later dropped from further consideration. The old Brooking Toll Road Bridge was found not to be at risk from the increased water flows due to the fire, but has some chronic erosion problems at the base, which an engineer should examine. Homeless people may find shelter in the lower portions of City Creek below the fire, but the fire should not increase the chances of dangerously high flows or debris torrents overtaking anyone. The water treatment plant where City Creek leaves the mountains seemed to be at risk of sedimentation, but after the hydrologist discussed the fire with the operators, he found out that this station does not use surface water from City Creek, but from other sources through the Metropolitan Water District (see the hydrologist report). Initially, the team thought that vegetation and soil integrity would be threatened by increased OHV use along Highway 330 due to the loss of vegetation and an existing fence, but upon further examination, we decided that the risk is very low because the fence is intact, and the vegetation burned very lightly, and still presents a barrier to OHVs.

Treatments evaluated but dropped from further consideration

Sediment Basin: A sediment basin was proposed in order to trap about 3000 cubic yards of sediment in the small drainage originating in Section 11, and entering Schenk Creek about ¼ mile above the confluence with East Fork City Creek. This is the only area where a sediment basin could be built, and would serve to reduce sediment loading into mountain yellow-legged frog and speckled dace habitat. This would decrease sediment deposits into Schenk Creek the most, and to a lesser degree in East Fork of City Creek because the percentage of total stream sediment captured by the sediment basin lessens as one moves downstream and other sources of sediment enlarge in scope. The percentage of sediment that the basin would remove from the system would be approximately 11% in Schenk Creek, 6% between the mouth of Schenk Creek and the mouth of the West Fork of City Creek, and only about 2 % reduction below the fire boundary in City Creek. Because of the limited effectiveness and cost (\$250,000 estimate), this idea was dropped.

Seeding: The team did not feel that seeding was justified because of the low probability that it would be successful in reducing erosion beyond natural recovery rates. Steep slopes in the fire reduce the ability to successfully spread seed, and reduces seed germination. Natural recovery, based on nearby fires, normally reaches an average of at least 40 percent ground cover one year after the fire, and 80 percent ground cover two years after the fire. Costs associated with seeding include the monetary costs, safety risks, introduction of non-natives, and retarded recovery of native species.

Slope treatments: Slope treatments, involving straw wattles or log erosion barriers, were proposed for the burned slopes above E. Fork and W. Fork City Creek in order to reduce the amount of sediment and ash reaching the portions of the aquatic systems that support important populations of mountain yellow-legged frogs and speckled dace. Because of slope steepness and rockiness of the slopes, it was felt that wattles/LEBs would not hold enough sediment to be effective enough to protect the water quality in those portions of the creek. Even very intensive wattle efforts on those slopes would only be marginally effective. Combining the low effectiveness with the high cost of straw wattle treatment, the team dropped this treatment idea.

Road Clearing, culvert clearing under Hwy 330: Treatments along the Highway 330 right-of-way are the responsibility of Caltrans. Team leader Kevin Cooper contacted Caltrans and discussed the concerns about rockfall and plugged culverts. Our geologist did not identify any increased hazards from landslides to the highway. The local district will share this report with Caltrans.

Residence in Schenk Creek: The Natural Resource Conservation Service was notified by the team leader that the landowner may have some problems with increased drainage through their property. NRCS requested that we inform the landowner that he should speak directly with NRCS for further suggestions about how to protect his property. The landowner is

responsible for the cost of any protection measures. The local district will contact the landowner.

Relocation of mountain yellow-legged frogs: Because no other treatments would be effective in reducing sedimentation that will lead to mortality of tadpoles and juvenile mountain yellow-legged frogs (an endangered species), the team recommended capturing and relocating individual frogs and larvae to unburned areas above the burn perimeter and/or to burned areas with a reduced sedimentation risk, and monitoring the effect of this treatment. The cost of transplanting the mountain yellow-legged frog population will be \$12,400.

While this treatment is unusual, there is precedent for moving species of very high value where other options do not exist. The other possible treatments (straw wattles and a sediment basin) were deemed to be ineffective for providing protection of water quality that is so critical to the survival of an aquatic species. While direct intervention in saving individuals is not a technique we favor, in this case, due to the importance of this single occurrence of mountain yellow-legged frogs in the San Bernardino Mountains, this extraordinary measure was pursued as a treatment option.

As the team pursued the details of this treatment, biologists from USGS conducted another post-fire survey (on September 23, 2003) of the area from where tadpoles would be collected. During this survey, it became apparent that the tadpoles seen immediately after the fire had metamorphosed during the last two weeks. This factor, as well as the low number of metamorphs observed 9/23/03, changed the need for this treatment. Tadpoles were considered at the greatest risk of death due to post-fire sediment yields; however, since they are no longer present and the first rains have not occurred, that risk is no longer present. Metamorphs were considered to be at lower risk from the post-fire sediment yields and were also considered poor candidates for relocation due to their mobility. As such, the need for and feasibility of this treatment has been reconsidered. For the above-mentioned factors, this proposed treatment has now been dropped.

Relocation of speckled dace: The biologists feel that the distribution and abundance of speckled dace above the fire would permit recovery after channel conditions stabilize, and did not feel transplanting the speckled dace would increase the chances of recovery.

B. Emergency Treatment Objectives:

- Reduce the impacts of sedimentation to aquatic species in City Creek, its two forks, and Schenk Creek.
- Provide for public safety for recreational users in City and Schenk Creeks.
- Prevent a severe infestation of noxious weeds along the dozer lines and other disturbed areas in the fire.

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

Land 95 % Channel 95 % Roads 95 % Other 95 %

D. Probability of Treatment Success

Type of Treatment	Years after Treatment		
	1	3	5
Land	95	100	
Channel	95	95	95
Roads	95	100	
Other	95	100	

E. Cost of No-Action (Including Loss): 10,155,000

F. Cost of Selected Alternative (Including Loss): 5,591,200

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

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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.)*

Channel Treatments: A large flat across the highway from the City Creek fire station and at the edge of the steep channel had been bermed historically to minimize erosion of these flats into the City Creek channel. This area drains into City Creek, and water moving off of the flats had been directed to an asphalt collector which directed flow into a large culvert and down into the canyon, where water was released onto a large pile of rocks. Due to the fire, loss of water control will greatly increase erosion and cause major gullying around and downslope from the culvert, increasing sediment delivery into City Creek. Post-fire increased flows will greatly exacerbate the existing erosion. We propose to repair this culvert inflow with sandbags and replacing the top of the old culvert to control the excess water moving off of the flats. Cost of this project is approximately \$5000.

Signs: Signs addressing the increased risk of flash flooding, erosion, and landslides during the first two years after the fire would be used at access points to City Creek, warning the public of the danger. The cost to produce 10 signs is \$3500.

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.)

The treatments that will be monitored are suppression activities such as dozer line construction, hand line construction, and the spread of new or existing noxious weed seed sources by foot and vehicle into areas ripe for germination. Because no mechanism exists for monitoring noxious weeds with suppression funds, BAER funds are made available for this. Due to the change in the proposed treatments, monitoring of the mountain yellow-legged frog relocation has been dropped.

1) Noxious weeds monitoring: Noxious weed infestations are very likely to increase dramatically following a fire due to an increase in available areas for germination, and the likely introduction of noxious weeds from heavy equipment and personell, who may arrive from many areas across the western U.S. Areas of highest concern are along dozer lines, along the highway, and in the riparian areas, since these are the most likely areas where noxious weed seeds may be introduced and then distributed. There are also concentrated areas of several threatened, endangered, and sensitive plant and animal species that are at high risk of detrimental effects from noxious weed introduction. These are the areas the team feels should be monitored for noxious weed infestations for three years in order to prevent a large infestation from occurring. A detailed monitoring report is attached. The total cost of monitoring for noxious weeds will be \$4687 the first year, \$2700 dollars the second year, and \$2700 dollars the third year. We request authority to spend \$4687 dollars the first year, and if a noxious weed infestation is found, we will submit and interim report requesting funding to eradicate this population. The monitoring plan is attached.

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

Line Items	Units	Unit Cost	# of Units	WFSU SULT \$	Other \$	# of units	Fed \$	# of Units	Non Fed \$	Total \$
A. Land Treatments										
Signs	each	350	10	\$3,500	\$0		\$0		\$0	\$3,500
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
Subtotal Land Treatments				\$3,500	\$0		\$0		\$0	\$3,500
B. Channel Treatments										
Culvert repair	each	5000	1	\$5,000	\$0		\$0		\$0	\$5,000
Hwy330 culvert clear				\$0	\$0		\$0		\$2,500	\$2,500
Clear channel at house									\$2,500	\$2,500
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
Subtotal Channel Treat.				\$5,000	\$0		\$0		\$5,000	\$10,000
C. Road and Trails										
Hwy330 patrol				\$0	\$0		\$0		\$5,000	\$5,000
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
Subtotal Road & Trails				\$0	\$0		\$0		\$5,000	\$5,000
D. Structures										
				\$0	\$0		\$0			
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
Subtotal Structures				\$0	\$0		\$0		\$0	\$0
E. BAER Evaluation										
				\$26,300	\$0		\$0		\$0	\$26,300
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
Subtotal Evaluation				\$26,300	\$0		\$0		\$0	\$26,300
F. Monitoring										
Monitor weeds										
GS11 botanist	days	303.49	2	\$607	\$0		\$0		\$0	\$607
GS9 botanist	days	232.4	10	\$2,324	\$0		\$0		\$0	\$2,324
GS5 biotech	days	168.17	10	\$1,682	\$0		\$0		\$0	\$1,682
Mileage	miles	0.37	200	\$74	\$0		\$0		\$0	\$74
				\$0	\$0		\$0		\$0	\$0
Subtotal Monitoring				\$4,687	\$0		\$0		\$0	\$4,687
G. Totals				\$39,487	\$0		\$0		\$10,000	\$49,487

Analysis cost = \$ 26,300
Treatment request = \$ 8,500
Monitoring request = \$ 4,687
TOTAL = \$39,487

PART VII - APPROVALS

- Forest Supervisor (signature)

Date
- Regional Forester (signature)

Date

ATTACHMENT: BRIDGE FIRE MONITORING PLAN

1) NOXIOUS WEED MONITORING

a) Background:

Reducing the introduction and spread of non-native invasive species has been identified as a Forest Service Strategic Goal for 2003-2008. Four, highly invasive, state designated noxious weeds and 9 additional species that pose the greatest threat to ecological communities of Concern in California are present within the Bridge Fire area or dozer lines associated with the burned area. See Map 1 Noxious weed location map. The potential for degradation of occupied and modeled habitat for 8 federally listed wildlife and plant species and several sensitive species is high due to the number and extent of noxious weeds present. Numerous plant vectors also occur (State Highway 330, Forest system roads, powerline corridor) and seed was transported throughout the burned area on suppression equipment prior to the knowledge about weed infestation. Fire is known to enhance the establishment of all of the weeds present.

Table 1. Invasive non-native plants and noxious weeds that pose the greatest threats to Southern California Forest Ecosystems present or having the potential to occur within the Bridge Fire

Scientific Name	Common Name	CalEPPC pest listing*	CDEFA pest rating**	Known to Occur	Potential to occur
List A – 1 & 2: Most Invasive					
<i>Arundo donax</i>	Giant reed, arundo	A-1	C#		X
<i>Bromus madritensis ssp. rubens</i>	Red brome	A-2		X	
<i>Bromus tectorum</i>	Cheat grass	A-1		X	
<i>Foeniculum vulgare</i>	Wild fennel	A-1		X	
<i>Tamarix chinensis</i> , <i>T. gallica</i> , <i>T. parviflora</i> , <i>T. ramosissima</i> Note: <i>T. chinensis</i> and <i>T. gallica</i> are high potential, others are present	Tamarisk, salt cedar	A-1	C#		X
List B: Lesser Invasive					
<i>Brassica nigra</i>	Black mustard	B		X	
<i>Centaurea melitensis</i>	Tocalote	B	C#	X	
<i>Cirsium vulgare</i>	Bull thistle	B	C#	X	
<i>Ricinus communis</i>	Castor bean	B			X
<i>Spartium junceum</i>	Spanish broom	B	C#	X	
<i>Verbascum thapsus</i>	Woolly mullein	B		X	
Need More Information					
<i>Nicotiana glauca</i>	Tree tobacco				X
<i>Salsola tragus</i>	Russian thistle, tumbleweed		C	X	
<i>Salsola paulsenii</i> (may hybridize with <i>S. tragus</i>)	Barbwire Russian thistle, Tumbleweed		C	X	
Annual Grasses That Pose Significant Threats					
<i>Avena barbata</i>	Slender wild oat			X	
<i>Avena fatua</i>	Wild oat			X	
<i>Bromus diandrus</i>	Ripgut brome			X	

*** California Exotic Pest Plan Council (CEPPC) List Categories**

List A: Most Invasive Wildland Pest Plants; documented as aggressive invaders that displace natives and disrupt natural habitats. Includes two sub-lists; List A-1: Widespread pests that are invasive in more than 3 Jepson regions, and List A-2: Regional pests invasive in 3 or fewer Jepson regions

List B: Wildland Pest Plants of Lesser Invasiveness; invasive pest plants that spread less rapidly and cause a lesser degree of habitat disruption; may be widespread or regional.

Red Alert: Pest plants with potential to spread explosively; infestation currently small or localized. If found, alert Cal EPPC, County Agricultural Commissioner or California Department of Food and Agriculture.

Need More Information: Plants for which current information does not adequately describe nature of threat to wildlands, distribution or invasiveness. Further information is requested from knowledgeable observers.

Annual Grasses: A preliminary list of annual grasses, abundant and widespread in California, that pose significant threats to wildlands. Information is requested to support further definition of this category in next list edition.

Considered but Not Listed: Plants that, after review of status, do not appear to pose a significant threat to wildlands

**** California Dept. of Food and Agriculture Pest Ratings**

All weeds on California's 130 plus noxious weed list have a rating. The overall rating system is NOT based on how bad a weed is—all weeds are considered "bad"—but rather on overall distribution throughout the state. Ratings and formal definitions by the CDFA are:

A=rated weeds are normally limited in distribution throughout the state. Eradication, containment, rejection or other holding action at the state-county level. Quarantine interceptions to be rejected or threat at any point in the state.

B=rated weeds are more widespread. Eradication, containment, control or other holding action at the discretion of the commissioner. State endorsed holding action and eradication only when found in a nursery.

C=rated weeds are generally widespread throughout the state. Action to retard spread outside of nurseries at the discretion of the commissioner. Reject only when found in a cropseed for planting or at the discretion of the commissioner.

Q=rated species are treated as temporary "A" weeds. Denoting action outside nurseries at the state-county level pending determination of permanent rating.

D=rated weeds are organisms considered to be of little or no economic importance. No action. Anything not rated as "A", "B", "C", or "Q" is given a "D" rating.

b) Management concerns: Are noxious weed invasions interfering with habitat recovery and ecosystem health within the burned area and associated dozer and hand lines? In particular are noxious weeds interfering with the recovery of occupied and modeled wildlife and plant habitat and riparian areas?

c) Objectives: To determine if the fire and associated ground disturbing activities associated with dozer and hand line construction has promoted the establishment and spread of noxious weeds to the extent that eradication efforts are necessary.

d) Parameters: Noxious weed presence, density and persistence.

e) Locations: Occupied and modeled habitat for federally listed wildlife and plant species and associated riparian areas, dozer lines and hand lines (Map 2: Noxious Weed Proposed Survey Map).

f) Monitoring Design and Methodology: Surveys would begin in 2004 during the flowering periods of tecolote, Spanish broom and bull thistle species known to occur within the burned area. Because of differences in flowering times for these species, two visits may be required during each growing season. During surveys for these species, any locations of arundo, tamarisk and castor bean that are invading riparian areas would also be mapped. Completion of surveys of burned terrestrial habitat, riparian habitat and dozer lines within occupied and modeled wildlife and plant habitat is the first priority. Completion of noxious weed surveys along Highway 330 as the second priority, as this is the main pathway for seeds to be spread throughout the area and to other locations within the SBNF. Monitoring would be completed using the NRIS protocol available at national website <http://fsweb.ftcol.wo.fs.fed.us/frs/rangelands/index.shtml>. Results would be entered into the NRIS database. Consultation with the USFWS for the potential effects of monitoring within occupied threatened or endangered wildlife or plant habitat would be completed during the emergency consultation of the Bridge Fire Incident.

g) Reporting: An annual Monitoring Report would be submitted to Regional BAER coordinator and to the Front Country District Ranger. If weed introduction and spread has increased due to effects of the Bridge Incident, an Interim BAER report would be completed to request eradication funding. Reporting costs are included in figures below.

h) Costs: Monitoring for 3 years = \$10,054

Monitoring to determine whether ground-disturbing actions related to the Bridge Incident and the fire itself have resulted in the expansion of noxious weeds is requested for a period of three years.

Estimated costs are based on the assumption that two visits would be necessary because of differences in flowering times for these species. If timing is such that all of the target species are detectable in one visit, the actual costs would be lower than displayed below.

FY 2004

GS-11 botanist or wildlife biologist (\$303.49/day x 2 days)	= \$ 606.98
GS-9 botanist/biologist (\$232.40/day x 2 visits x 5 days/visit)	= \$ 2,324.00
GS-5 biological technician (\$168.17/day x 2 visits x 5 days/visit)	= \$ 1,681.70
Vehicle mileage (200 miles @ 0.37/mile)	= \$ 74.00
TOTAL for FY04	= \$ 4,686.68

FY 2005

GS-11 botanist or wildlife biologist (\$303.49/day x 2 days)	= \$ 606.98
GS-9 botanist/biologist (\$232.40/day x 5 days)	= \$ 1,162.00
GS-5 biological technician (\$168.17/day x 5 days)	= \$ 840.85
Vehicle mileage (200 miles @ 0.37/mile)	= \$ 74.00
TOTAL for FY05	= \$ 2,683.83

FY 2006

GS-11 botanist or wildlife biologist (\$303.49/day x 2 days)	= \$ 606.98
GS-9 botanist/biologist (\$232.40/day x 5 days)	= \$ 1,162.00
GS-5 biological technician (\$168.17/day x 5 days)	= \$ 840.85
Vehicle mileage (200 miles @ 0.37/mile)	= \$ 74.00
TOTAL for FY06	= \$ 2,683.83

d) Personnel: District botanists, wildlife biologists and temporary biologists

e) Responsible staff: Deveree Kopp, Mountaintop District Botanist; Kathie Meyer, Front Country District Wildlife Biologist

f) Follow-up actions: Design and implement follow-up treatments as needed. Plan for integrated weed management and NEPA analysis if necessary using non-BAER funding.