

Date of Report: [July 7, 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 DESCRIPTION

- A. Fire Name: [Silver Complex](#) B. Fire Number: [CA-SNF-718](#)
C. State: [CA](#) D. County [Mariposa/Madera](#)
E. Region: [Pacific Southwest \(R-5\)](#) F. Forest: [Sierra](#)
G. District: [Bass Lake](#) H. Fire Incident Job Code: [P5D8SM](#)
I. Date Fire Started: [June 21, 2008](#) J. Date Fire Contained: [July 3, 2008](#)
K. Suppression Cost: [\\$3.32 million](#)
L. Fire Suppression Damages Repaired with Suppression Funds
 1. Fireline waterbarred (miles): [3.4](#)
 2. Fireline seeded (miles):
 3. Other (identify): [Handline waterbarred 3.2](#)
M. Watershed Number: [Miami Creek watershed \(HUC 6 180400070101\)](#) for Westfall & Silverknob
 [South Fork Merced River-Chilnaulna Creek \(HUC 6 180400080302\)](#) for Star
N. Total Acres Burned: [1,161](#)
 NFS Acres([1,161](#)) Other Federal () State () Private ()
O. Vegetation Types: [Lower Mixed conifer dominated by Ponderosa Pine with manzanita/bear clover understory, Red Fir/Mixed Pine/White Fir](#)
P. Dominant Soils: [Holland, Chawanakee, Umpa with rock outcrop Families](#)

Q. Geologic Types: Tonalite of Bass Lake, Granite of Hogan Mountain and Granite Porphyry of Star Lakes

R. Miles of Stream Channels by Order or Class: 4.5 miles of Class II-III

S. Transportation System

Trails: 0 miles Roads: 1.4 miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 152 (unburned + Rock) 687 (low) 254 (moderate) 10 (high)
(63 additional acres in nine other scattered small fires)

B. Water-Repellent Soil (acres): 0

C. Soil Erosion Hazard Rating (acres):
688 (low) 175 (moderate) 10 (high)

D. Erosion Potential: 2.38 tons/acre

E. Sediment Potential: 1523 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 2

B. Design Chance of Success, (percent): 95

C. Equivalent Design Recurrence Interval, (years): 2

D. Design Storm Duration, (hours): 6/24

E. Design Storm Magnitude, (inches): 2.4/5.5

F. Design Flow, (cubic feet / second/ square mile): 23.6

G. Estimated Reduction in Infiltration, (percent): 5

H. Adjusted Design Flow, (cfs per square mile): 24.8

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats: Numerous fires were ignited on the Bass Lake Ranger District of the Sierra National Forest due to lightning on the June 21st. Silverknob, Westfall, Star, Chiquito Poison, Gagg and Fuller all escaped initial attack. Of these fires, Silverknob, and Star were contained at 570 acres and 350 acres, respectively. Westfall was contained at 105 acres immediately upslope from the Westfall Guard Station.

Silverknob (570 acres total) – burn severity: 5 ac. High, 89 ac. Moderate and 476 ac. Low

Westfall (105 acres total) – burn severity: 5 ac. High, 27 ac. Moderate and 73 ac. Low.

Star (350 acres total) – burn severity: 60 ac. Moderate, 138 ac. Low and 152 ac. Rock outcrop or unburned

Silverknob and Westfall were the only fires with potential for significant life or property issues. These were limited to roads and adjacent property at Silverknob and Westfall Guard Station and Highway 41 at Westfall. The field review and analysis found no emergency associated with any of the Silver Complex Fires due to the burn severity, physical conditions and values-at-risk present.

B. Emergency Treatment Objectives: none identified except noxious weed monitoring

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

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

D. Probability of Treatment Success

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

E. Cost of No-Action (Including Loss):

F. Cost of Selected Alternative (Including Loss):

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

Team Leader: [Jerome V. DeGraff](#)

Email: jdegraff@fs.fed.us

Phone: [559-297-0706](tel:559-297-0706), 4932

FAX: [559-294-4809](tel:559-294-4809)

BAER Team Members

Alan Gallegos

Keith (Andy) Stone

Joanna Clines (Consulted)

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:

Channel Treatments:

Roads and Trail Treatments:

Protection/Safety Treatments:

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.)

While efforts were made to ensure that equipment was not carrying weed seeds to the burned area, there is some uncertainty as to the effectiveness of the efforts for initial attack. Therefore, monitoring of firelines around Silverknob and Westfall is requested for the first year following the fire (Spring 2009). Star was contained entirely by handline through the efforts of Smokejumpers and two Hot Shot Crews supported by helicopter water drops. Consequently, there are not weed monitoring needs for the Star Fire area. A detailed monitoring plan is being prepared for this work.

Part VI – Emergency Stabilization Treatments and Source of Funds

Interim # 1

[illegible]

PART VII - APPROVALS

1. /s/ Edward C. Cole
Forest Supervisor (signature)

07/09/08
Date

2. /s/ George Kulick (for)
Regional Forester (signature)

07/15/08
Date

APPENDIX A
SILVER COMPLEX Noxious and Invasive Non-native Species Report/Monitoring Plan

Fire Name: Silver Complex Month/Year: July / 2008
Author Name: Joanna Clines
Author Title: Forest Botanist
Author Duty Station: Sierra National Forest, Bass Lake Ranger District

I. Resource Condition Assessment

A. Initial Concerns

Reducing the introduction and spread of non-native invasive species has been identified as a Forest Service Strategic Goal for 2003-2008. Within the 570 acre Silver Knob Fire and the 105 acre Westfall Fire, heavy equipment, fire engines, water tenders, and other vehicles may have introduced seeds or other propagules of non-native plant species to these areas. In addition, infestations of noxious weeds were known previous to the fires to exist in and near these areas. Invasive non-native plant species are adapted to soil disturbance and can be stimulated by heat, charrate (rainwater leached through burned vegetation), and ash; and the removal of competition from established vegetation. The removal of established vegetation, either by a natural event such as a fire or deliberate means such as a dozer creating a fire break, can create the optimum situation for invasive plant establishment and spread.

B. Existing Information

Dozens of non-native plant species are known to occur in the general vicinity of these two burn areas, however most of them are not highly invasive and will not be the focus of this report. The following species are aggressive enough to warrant concern such that without extraordinary measures, existing infestations will spread at the expense of the recovering native vegetation and result in degraded ecosystem and watershed function. Although no noxious or invasive weeds have been documented within the burn perimeters, the following species are known to occur within 1 mile of one or both of the burn areas: Bull thistle (*Cirsium vulgare*), Himalayan blackberry (*Rubus discolor*), klamathweed (*Hypericum perforatum*), and Italian thistle (*Carduus pycnocephalus*). Primary vectors within and to/from the burn areas are roads used extensively by fire suppression personnel during the burn. These roads are frequented by off-highway vehicles such as ATVs and dirt bikes nearly year-round. In addition, weed seeds could have been transported into the burn on suppression equipment and supplies. Fire is known to enhance the establishment of all weed species present. The presence of yellow starthistle (*Centaurea solstitialis*) and medusahead (*Taeniatherum caput-medusae*) along roads leading to the burn area and at Sierra High School where the fire camp was held makes it highly likely that seeds might have been transported to the burn areas.

Coniferous forest found in the burn area is adapted to fire and is expected to recover rapidly if an influx of non-native invasive plants is prevented. Many native woody species will sprout within weeks of the burn, and spring of 2009 will witness a flush of germination of woody and herbaceous species in the low and moderate burn severity areas, and possibly also in the higher intensity areas, primarily of native, fire-adapted species whose seeds have lain dormant in the soil for decades.

A suite of herbaceous species will emerge from the seed bank in much of the coniferous forest. Many of these will be nitrogen-fixing species such as those in the genera Lotus, Lupinus, and Trifolium. Bulbiferous plants such as Calochortus, Lilium, Tritelia, Chlorgalum, and Brodiaea typically proliferate directly after burns. Preventing the introduction and spread of invasive weeds is intended to allow the natural recovery of this fire-adapted ecosystem to proceed unimpeded.

II. Emergency Determination

A potential emergency may be caused by the Silver Complex because of the high potential for introduction and/or spread of noxious and non-native invasive plant species.

III. Treatments to Mitigate the Emergency

A. Treatment Type: Detection surveys for noxious weeds and other invasive non-native plant species.

B. Treatment Objective: To locate any new occurrences of noxious and invasive non-native plant species, to eradicate them upon detection, and follow up to ensure effectiveness.

C Treatment Description: GPS/mapping of any noxious and non-native plant infestations, concentrating efforts along travel routes, dozer lines, and areas where equipment was used as well as areas of high burn severity where soil is bare. Submit report to Regional BAER Coordinator and evaluate the need for further action.

D. Treatment Cost:
Fiscal Year 2009

PERSONNEL	Hourly rate	2 weeks
20 hours - 1 GS 11 botanist to train temps, make maps, and write reports	40.63	\$ 812.60
2 GS 5 temps working four 10 hour days for 2 weeks	12.58	\$ 2,012.80
FLEET/SUPPLIES	FOR/month	2 weeks
Mileage averaging 110/day round trip from North Fork for 8 days	.40/mile	\$ 352.00
Equipment (safety vests, gloves, plastic bags, digging tools, traffic control signs, camera, misc)		\$ 500.00
TOTAL REQUESTED:		\$ 3,677.40

Fiscal Year 2010
(Costs expected to be equal to or less than those for FY2009)

III. Discussion/Summary/Recommendations

It is the intent of the Forest Service to prevent or minimize the establishment of noxious weeds and non-native invasive plant species within the Silver Complex burned areas and adjacent land. It is necessary to conduct detection surveys along an estimated dozer lines and burned slopes to evaluate the potential spread and/or introduction of noxious weeds and non-native invasive plants for approximately 2 years to in order to promptly detect and treat newly introduced infestations.