

(Reference FSH 2509.13)

Q. Geologic Types: Sedimentary and metasedimentary rocks, unstable terrane

R. Miles of Stream Channels by Order or Class: _	Order	Miles
	1	5.9
	2	2.6
	3	0.9
	4	1.2
	5	0.6

S. Transportation System To be completed in interim request.

Trails: 1.6 miles Roads: 0 miles

PART III - WATERSHED CONDITION To be completed in interim request.

A. Burn Severity (acres): 729 (very low/unburned) 141 (low) 24 (moderate) 0 (high)

B. Water-Repellent Soil (acres): none

C. Soil Erosion Hazard Rating (acres):
239 (low) 626 (moderate) (high)

D. Erosion Potential: 216 tons/acre

E. Sediment Potential: 60,104 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS To be completed in interim request.

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

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

C. Equivalent Design Recurrence Interval, (years): 25

D. Design Storm Duration, (hours): 24

E. Design Storm Magnitude, (inches): 8

F. Design Flow, (cubic feet / second/ square mile): 34.25

G. Estimated Reduction in Infiltration, (percent): 0

H. Adjusted Design Flow, (cfs per square mile): 34.25

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats:

A majority of the 904 acre Panther Fire is located the Lower Trinity Ranger District on Six Rivers N.F. Approximately 40 acres is located on the Hayfork Ranger District on the Shasta Trinity N.F. The fire was started by lightning on July 24, 2006 and contained on August 7, 2006. Interior islands continue to burn. An initial assessment of emergency restoration needs has determined that soil stabilization/hillslope erosion treatments, channel treatments, and roads and trail treatments are not needed. An initial assessment of the potential for spread of invasive weeds has found that a number of drop points and safety zones used/developed during wildfire suppression were found to be infested with yellow star-thistle. Furthermore, no equipment cleaning wash station was established for equipment used in wildfire suppression.

Additionally, if off-site materials are used for soil stabilization the potential exists for introduction weeds from contaminated material. In summary, the possible introduction and spread of invasive weeds into the burned area may put native plant communities at risk.

B. Emergency Treatment Objectives:

A. Reduce the potential for spread of yellow star-thistle from infested drop zone and safety zone areas to previously uninfested areas where heavy equipment was used during suppression (e.g.dozer lines) and b. reduce the risk of introducing new weed seed brought in on equipment or off-site material used for soil stabilization. To meet these objectives the following are proposed: a. use certified weed-free mulch where mulching is prescribed, b. use locally collected grass seed where seeding is prescribed¹ c. in order to increase competition and hasten establishment of cover, revegetate areas particularly vulnerable to weed establishment in the fire area (i.e. safety zones and drop points where there is little to no overstory shade and equipment has recently operated) using genetically appropriate, native grass plugs¹ or woody species, d. conduct invasive weed detection assessment in the summer (2007) along the dozer line, at safety zones, and drop points, and e. manually treat as applicable.

¹Several hundred pounds of locally collected blue wild rye (*Elymus glaucus*) are available on Forest for use in the Panther Fire as well as an estimated 2000 plugs of the same species and stock.

C. Probability of Completing Treatment Prior to Damaging Storm or Event: To be completed in interim request.

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

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land	NA	90	
Channel	NA	NA	
Roads/Trails	NA	NA	
Protection/Safety	NA	NA	

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 type="checkbox"/> Geology	<input checked="" type="checkbox"/> Range	<input type="checkbox"/>
<input type="checkbox"/> Forestry	<input checked="" type="checkbox"/> Wildlife	<input type="checkbox"/> Fire Mgmt.	<input type="checkbox"/> Engineering	<input type="checkbox"/>
<input type="checkbox"/> Contracting	<input type="checkbox"/> Ecology	<input checked="" type="checkbox"/> Botany	<input type="checkbox"/> Archaeology	<input type="checkbox"/>
<input 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.)

Land Treatments:

- A. Soil stabilization/hillslope erosion: None needed. This was mostly a low-intensity fire, with only a few acres of moderate-intensity fire. The ground has retained most of its organic litter and in areas where the canopy was burned a thick layer of needles is already beginning to cover the soil. No hydrophobic soils were detected. Due to the largely intact canopy, presence of organic soil cover, retention of soil structure, and lack of hydrophobic soils, no detrimental effects to soil productivity or hydrologic function are anticipated.
- B. Invasive weeds: the emergency treatment is described above under Item B of the Summary. Initial/emergency treatment involves treatment via revegetation of particularly vulnerable areas (safety zones and drop points) with native grass plugs or woody species suitable for the sites. Revegetation would occur at 4 safety zones located along side the dozer line and potentially 2 drop points proximal to 2 of the safety zones. Estimate maximum acres to be treated: 3.5 acres. As stated above, two yellow starthistle infestations were detected during wildland fire rehabilitation assessment at a safety zone/drop point at the north end of the dozer line and another drop point and the south end of the dozer line. Furthermore, no equipment cleaning occurred during wildfire suppression activities. The objective of the revegetation treatment is to provide immediate above-ground and below-ground competition at sites particularly vulnerable to weed establishment (vulnerable sites are defined as those with little or no canopy cover where equipment has operated and disturbed the ground). This immediate provision will reduce the risk of subsequent weed seed germination over the next year or two and in out-years, provide a cover defensible against any latent seed stored in the bank.
 - a. Where drop zones/safety areas occur in natural open stands adjacent to oak woodlands or other open vegetation, plugs of *Elymus glaucus* (grown from seed collected in the same ecological subsection as the fire) will be planted. *Elymus glaucus* is a native perennial grass that is a proven competitor to invasive species. Estimated acres 2.0. which equates to about 1200 plugs on an 8'x8' spacing.
 - b. Where drop zones/safety areas are nested in forested stands, woody species (e.g. Douglas-fir, ponderosa pine) suitable to the site and seed zone which overlaps the fire area will be planted. Estimated acres 1.5 which equates to about 900 seedlings on an 8'x8' spacing.
 - c. As a part of land treatments, invasive weed detection assessment of dozer lines, safety zones, drop zones and access routes, including manual treatment of any detected occurrences, would occur in the summer of 2007. Pending results, funding for monitoring would be requested for FY 2008.

Channel Treatments: There are a few small stream channels within the fire boundary and stream crossings at the dozer lines. All material that was placed in stream channels as a result of dozer line construction or other suppression efforts has been removed. Further channel treatments are not needed. No changes in timing or magnitude of peak flows is expected, therefore changes to stream channels should be very minor if not undetectable.

Roads and Trail Treatments: Roads and trails used for suppression efforts have been returned to their pre-fire condition (or better). Due to the mostly low intensity of the fire, trails within the fire perimeter were largely unaffected. There are no existing roads within the fire perimeter.

Protection/Safety Treatments: There are no protection or safety concerns with this fire. No structures, powerlines, water supply intakes or other human resources exist below potentially unstable areas or downstream of effected streams.

I. Monitoring Narrative:

(Describe the monitoring needs, what treatments will be monitored, how they will be monitored, and when monitoring will occur. A detailed monitoring plan must be submitted as a separate document to the Regional BAER coordinator.)

Part VI – Emergency Stabilization Treatments and Source of Funds

Interim #

			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											
Reveg priority sites	Job	1	\$3,100	\$3,100	\$0			\$0		\$0	\$3,100
Project planning	Days	5	\$300	\$1,500	\$0			\$0		\$0	\$1,500
Detection/treatment	Days	18	\$153	\$2,754	\$0			\$0		\$0	\$2,754
Vehicle	Job	1	\$972	\$972	\$0			\$0		\$0	\$972
Per diem	Job	1	\$168	\$168	\$0			\$0		\$0	\$168
Insert new items above this line!											
Subtotal Land Treatments				\$8,494	\$0			\$0		\$0	\$8,494
B. Channel Treatments											
				\$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											
				\$0	\$0			\$0		\$0	\$0
Insert new items above this line!				\$0	\$0			\$0		\$0	\$0
Subtotal Road & Trails				\$0	\$0			\$0		\$0	\$0
D. Protection/Safety											
				\$0	\$0			\$0		\$0	\$0
Insert new items above this line!				\$0	\$0			\$0		\$0	\$0
Subtotal Structures				\$0	\$0			\$0		\$0	\$0
E. BAER Evaluation											
Initial survey	Job	6588	1	\$6,588	\$0			\$0		\$0	\$6,588
Tracking/reporting	Job	1500	1	\$1,500	\$0			\$0		\$0	\$1,500
Nox Weed assessmen	Job	900	1	\$900	\$0			\$0		\$0	\$900
Insert new items above this line!				---							
Subtotal Evaluation				\$8,988	\$0			\$0		\$0	\$8,988
F. Monitoring											
				\$0	\$0			\$0		\$0	\$0
Insert new items above this line!				\$0	\$0			\$0		\$0	\$0
Subtotal Monitoring				\$0	\$0			\$0		\$0	\$0
G. Totals				\$17,482	\$0			\$0		\$0	\$17,482
Previously approved											
Total for this request				\$17,482							

PART VII - APPROVALS

1. /s/ William Metz, for
Forest Supervisor (signature)

8/29/2006
Date

2. /s/ Vicki A. Jackson (for)
Regional Forester (signature)

9/7/06
Date