

Date of Report: 7-20-07

Edited J.Bruggink July 25, 2007
 Edited J. Chatel October 15, 2007

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 #1
☐ 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: **Black Pine 2** B. Fire Number: **ID-STF-001943**
 C. State: **Idaho** D. County: **Cassia**
 E. Region: **04 - Intermountain** F. Forest: **14 - Sawtooth**
 G. District: **01 Minidoka – Black Pine Division** H. Fire Incident Job Code: **P4DNN9**
 I. Date Fire Started: **July 6, 2007** J. Date Fire Contained: **July 22, 2007**
 K. Suppression Cost: **\$3,000,000 (est.)**
 L. Fire Suppression Damages Repaired with Suppression Funds
 1. Fireline waterbarred (miles): **40 miles total and 3.5 miles on Forest Service lands**
 2. Fireline seeded (miles): **56 miles total and 0 miles on Forest Service lands**
 3. Other (identify):

M. Watershed Number(s): (6th level hydrologic units, percent of watershed acres within fire perimeter):

HU Number	HU Name	% in Fire	HU Number	HU Name	% in Fire
160203091601	Black Pine Canyon Creek	7.2	170402100304	Sweetzer Canyon-Meadow	79.4
160203091602	East Dry-Burnt Basin	38.0	170402100303	Hutchey-Mortenson	48.6
160203091702	Pole Canyon Creek	36.0	170402100301	Lower Meadow-Big Canyon	43.9
160203091703	Jones-Burnt Canyon	25.3	170402100401	Point Spring-Monument	89.1
170402100402	Sandrock	61.6	170402100403	West Dry-Eightmile-Fisher	11.7

- N. Total Acres Burned: **72,361**
 NFS Acres(**33,481**) Other Federal (**21,829**) State (**967**) Private (**16,084**)

O. Vegetation Types: Sagebrush/grasslands, and juniper

P. Dominant Soils: The dominant soils represent the limestone properties of the Phosphoria Formation of the Permian system and consist of Argic Calciorthids, Lithic Calciorthids, Calcixerollic Duriatgids, Pachic Argiborolls, and Argic Pachic Cryoborolls. Soils over the foothills and lower elevation valley bottoms are either loams or silt loams and have high productivity, are generally well drained with depths ranging from 6 to 10 inches. Surface soils on the mountain landforms are gravelly loams and also have moderate to high productivity. The surface erosion from overland flow across the area is low to moderate.

Q. Geologic Types: The geology of the Black Pine Range is primarily composed of sedimentary and slightly metamorphosed sedimentary rocks, which range in age from Devonian to Permian eras. The rocks are dominantly limestone, dolomite, and quartzitic sandstone that have been extensively deformed by folding, thrust faulting, and high-angle faulting.

R. Miles of Stream Channels by Order or Class: Miles are only for streams with defined streambeds.
First Order: 20.2 miles Second Order: 18.6 miles Third Order: 1.8 miles

S. Transportation System: Trails: 3.3 miles Roads: 91.2 miles

PART III - WATERSHED CONDITION

A. Burn Severity on National Forest Lands (acres): 23,999 (low) 3,049 (moderate) 354 (high)

Burn severity for streams with potential BAER concerns

Streams	Severity (acres and percent within Hydrologic Unit)				
	High	Moderate	Low	Unburned	Total
Monument Creek	0 (0%)	17 (0.3%)	5,266 (78%)	1,424 (21%)	6,707
Sweetzer Creek	101 (2%)	501 (10%)	2,668 (54%)	1,687 (34%)	4,957
Pole Creek	70 (1%)	476 (8%)	1,584 (25%)	4,116 (66%)	6,246
East Dry Creek	25 (1%)	197 (6%)	1,783 (54%)	1,313 (39%)	3,318
Drainage below Black Pine Mine	0 (0%)	8 (1%)	327 (31%)	724 (68%)	1,059
Black Pine Creek	9 (>1%)	437 (4%)	4,115 (42%)	5,337 (54%)	9,898

B. Water-Repellent Soil (acres): 3,339

C. Soil Erosion Hazard Rating (acres):
0 (low) 24,139 (moderate) 8,607 (moderate high) 3,658 (high)

D. Erosion Potential: 1 ton/acre

E. Sediment Potential: 774 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 2-5

B. Design Chance of Success, (percent): 80-90

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

D. Design Storm Duration, (hours): 0.5

E. Design Storm Magnitude, (inches): 0.34

F. Design Flow, (cubic feet / second/ square mile): **see table**

G. Estimated Reduction in Infiltration, (percent): **8**

H. Adjusted Design Flow, (cfs per square mile): **see table**

Streams	Design Flow (cfs per square mile) ¹	
	Pre-fire	Post-fire
Monument Creek	4.0	4.3
Sweetzer Creek	4.5	4.9
Pole Creek	4.2	4.5
East Dry Creek	5.4	5.8
Drainage below Black Pine Mine	8.4	8.4
Black Pine Creek	3.5	3.7

PART V - SUMMARY OF ANALYSIS

Background: A lightning storm started a wildfire on the Minidoka Ranger District, Black Pine Division on July 6, 2007. Approximately, 72,361 acres have burned between July 6 and July 18, 2007. The fire was a mixed severity mosaic burn. Some areas were not burned at all and other were burned at a high intensity and high severity. The number of firefighters assigned to the incident at its height was 340. Eight 20-person crews, 3 helicopters, 16 engines, 8 dozers and 3 water tenders were assigned to the fire.

A. Describe Critical Values/Resources and Threats:

Summary of Issues:

Human Life and Safety

Post-fire watershed conditions threaten the life and safety of visitors using the Black Pine Canyon (#586), East Dry Canyon (#586), Pole Canyon (#761), West Dry Canyon (#073) and Mineral Gulch (#198) roads. All of these roads occur in narrow, canyon bottoms that have entrenched road beds that can easily trap storm runoff in their road profiles. These roads also occur adjacent to moderate severity burned slopes. Normal storm frequencies and magnitudes can now more easily initiate rill and gully erosion on the severely burned, over-steepened slopes. These “minor” events can activate floods in the smaller tributary drainages that intersect this road, putting the safety of users at risk.

Property

Predicted peak flows from selected watersheds within the burned area are expected to be minor. However, several area roads {Black Pine Canyon (#586), East Dry Canyon (#586), and Mineral Gulch (#198)} are susceptible to intense summer thunderstorms due to the severity of burned acres and the lack of drainage features (e.g. rolling dips, waterbars, etc.) to accommodate increased runoff. Failure of these facilities can increase the risk to system roads.

Critical Natural Resources

Noxious Weeds - Field reviews indicate that there is a substantial risk of noxious weed invasion along roads and dozer lines used during fire suppression activities. This threat is due to a high likelihood that noxious weed

¹ Design flow based on single 10-year event for pre-fire (vegetated) and post-fire conditions.

seeds were brought into the area by fire equipment that has been used on other wildfires and suppression activity within known noxious weed locations within the burn.

Known noxious weed populations (cheat grass, black henbane, scotch, Canada and bull thistle, hounds tongue, spotted and diffused knapweed, dyer's woad, white top and star thistle) exist within and immediately adjacent to the burned area. Excluding cheat grass populations are small isolated areas along roadways, and drainage bottoms within or adjacent to the burned area. Cheat grass is the most wide spread across the area and it has formed monocultures in the Lower Black Pine drainage and Black Pine Mine area.

Black Henbane is scattered along road 201, used to access the Black Pine Mine, and portions of road # 587. Scotch thistle has been scattered along the Sweitzer road and in the head end of Big Canyon. Canada thistle, hounds tongue and bull thistle are scattered throughout the area, however Canada thistle is limited to wetter sites and deeper soils. Spotted knapweed is found at the mouth of Pole Canyon and diffuse knapweed is near the Glory Hole on the Black Pine Mine. The only known Dyer's Woad infestation is located on the Black Pine Mine near the water treatment facility. White top and star thistle have not been found on National Forest System Lands however they are on adjacent private lands.

No measures were taken to prevent further spread or introduction of any invasive species within the initial attack of the fire. Once the fire was turned over to the Type 2 team a wash station was brought in and used. Upon talking with crews and individuals on the fire we found that it was not made a priority to wash vehicles arriving on the incident, however they were washed at demobe.

The burned area, now lacking desired vegetation that can normally out-compete noxious weeds, supports favorable conditions for initial expansion of nearby populations of noxious weeds and other invasive species (Cheatgrass). The spread of existing or new invasive species would lead to a reduction of desirable native vegetation. Once invasives establish the long-term impacts would be the loss of soil productivity due to increased solar radiation and runoff, increased fire frequency, loss of suitable wildlife habitat and decreased forage production.

Black Pine Mine - The Black Pine 2 fire destroyed components of a water treatment system and planted vegetation at the heap leach pad/ impoundment face at the Black Pine Mine.

The Black Pine Mine was a gold mine that operated from 1992 to 2002. Gold was recovered using a heap leach pad where ore was treated with cyanide. Mining had ceased in 1997 and the mine was in final reclamation and closure when the company filed for bankruptcy in 2000. The bankruptcy resulted in the Sawtooth Forest accepting responsibility for taking the remaining reclamation bond and completing closure of the mine since 2000. The fire was an unexpected event that was not factored into the original reclamation bond so funds from the bankruptcy account are limited.

As part of the heap leach pad closure, the Forest manages a gravity-fed water treatment system designed to treat heap effluent from meteoric water draining through the heap leach pad. Untreated, the heap effluent contains concentrations of arsenic, mercury, and nitrates that exceed State of Idaho drinking water standards. The treatment system is designed to allow water to drain from the base of the heap leach pad through a pipe into treatment cells which reduce the arsenic and mercury metal concentrations. The water then flows depending on water quality analyses either into a subsurface leach field or into a surface land application system that disperses water through drip lines over a 100 acre area east of the mine. Prior to the wildfire, the system was performing as intended and the solution's metal concentrations were meeting discharge standards.

In summary, the Black Pine Mine water treatment system is required to remove and/or reduce toxic metals and nitrate from mine effluent so it can be discharged according to water quality and quantity standards defined by the plan of operation. The fire affected three components of the treatment system that require immediate

reconstruction and re-establishment of vegetation – 1) the soil layer and vegetation cover on the heap leach pad, 2) the stability of the impoundment face, and 3) the land application area for treated water.

Trespass Cattle - The Black Pine 2 fire consumed approximately 10 miles boundary fence along the southeast portion of the fire from East Dry Pole Canyon South and West to Formation Canyon. This boundary fence is used to separate Forest Service grazing allotments (Mineral Gulch and Black Pine) from BLM grazing allotments and private agricultural and grazing lands and is the only barrier between the Forest and the other adjoining lands. Without these fences livestock are able to pass freely between these lands.

Review of the Black Pine Mine revealed that there was a complete burn of all the vegetation on the heap, administration area, shop site, haul roads and the land application area. There is a need for revegetation efforts in these areas to allow for proper reclamation and rehabilitation of the mining areas and water treatment process needed to comply with mine reclamation standards.

In order for the rehabilitation efforts to be successful on the mine reclamation area it will need to be protected from grazing activities, while the vegetation reaches required rehabilitation standards for the area. These standards are that the site meet 90% of the production of “off site” production and 75% of the “off site” ground cover. The pre-fire conditions all exceed these minimum standards.

In order to fully implement the proper standards and rehabilitation requirements there should be no grazing impacts to the mine reclamation area until it has returned to pre fire conditions. Without an adequate barrier between the Forest and private and BLM grazing lands it is highly likely that the livestock grazing these lands in 2008, will be attracted to the newly seeded area on the Black Pine Mine and across the Forest. With the proximity of the Forest revegetation area and the water sources located on the BLM, and private lands to the Forest grazing allotment it is critical that the boundary fence between the two administrative units be replaced prior to the beginning of the 2008 grazing season for the recovery efforts on the Forest to be successful.

B. Emergency Treatment Objectives:

The goal of the burned area emergency rehabilitation is to:

- Reduce threats to personal injury and/or human life of visitors using select system roads.
- Control expected invasion of noxious weeds within the area, especially along and adjacent to Forest roads and dozer lines used by fire equipment and in existing populations within the Black Pine 2 fire boundary.
- Reduce the risk of an emergency discharge of untreated effluent in the the valley-fill heap at the Black Pine Mine.
- Reduce the risk of erosion to the impoundment structure that is stabilizing the heap at the Black Pine Mine. Erosion may lead to a release of spent ore and discharge of untreated effluent into the valley below.
- Provide fencing necessary to prevent access from cattle from BLM and private lands from entering newly seeded areas and protect vegetation on the Black Pine Mine.
- Minimize damage to key system roads within the Black Pine 2 fire boundary.
- Identify appropriate monitoring activities that estimate the effectiveness of emergency stabilization treatments and identify necessary maintenance and continuation of other approved BAER activities.

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

Land **75** % Channel **NA** % Roads/Trails **50** % Protection/Safety **100** %

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land	85	95	100
Channel	NA	NA	NA
Roads/Trails	75	85	95
Protection/Safety	100	100	100

E. Cost of No-Action (Including Loss): **\$852,000**

The values at risk directly lost through No-Action includes: damage to channel below emergency spill way on Black Pine Mine, loss of soil productivity (as impacted by noxious weed potential), impact of ground water quality below Black Pine Mine, loss of natural vegetation on mine heap, impacts to system roads due to changed hydrologic conditions.

F. Cost of Selected Alternative (Including Loss): **\$469,790**

It was assumed the primary treatments (revegetation of mine, noxious weeds, and road drainage) would be successful in reducing resource values lost through No-Action by 75 to 85 percent. The remaining resource values lost (as a factor of success) were added to the cost of the primary land treatment.

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

Team Leader: **John Chatel, Forest Fisheries Biologist**

Email: **jchatel@fs.fed.us**

Phone: **208-737-3218**

FAX: **208-737-3236**

Team Members:

Dena Santini, Wildlife Biologist, Minidoka Ranger District
 Lucas Phillips, Range Management Specialist, Minidoka Ranger District
 Kevin Parker, Range Management Specialist, Minidoka Ranger District
 Terry Hardy, Soil Scientist, Boise National Forest
 Bill Goodman, Hydrologist, Dixie National Forest
 Mark Dallan, Hydrologist (trainee), Minidoka Ranger District
 Kim Pierson, Botanist, Sawtooth National Forest
 Duwayne Kimball, Engineering, Sawtooth National Forest

H. **Treatment Narrative:**

Protection/Safety Treatments:

Road Hazard Signs

Purpose of Treatment: Ensure maximum visibility and readability of signs warning visitors of the hazards to human life and safety that exist in burned area. Signs are intended to emphasize the increased hazards from debris flows and flooding.

General Description: Install signs at key roads that enter or the burned area.

Location (Suitable) Sites:

- 1) One hazard sign at the junction of 586 and 587 (Black Pine Canyon) that accesses the burned area.
- 2) One hazard sign at the junction of 198 and 021 (Mineral Gulch) that accesses the burned area.
- 3) One hazard sign at the junction of 587 and 590 (East Dry Canyon) that accesses the burned area.
- 4) One hazard sign at the junction of 761 and 761A (Pole Canyon) that accesses the burned area.
- 5) One hazard sign at the junction of 073 and 767 (West Dry Canyon) that accesses the burned area.

Design/Construction Specifications:

- 1) Road Signs: Reflectorized wood backed signs (2' x 2') with letter size according to USFS Handbook specifications mounted on 4" x 4" x 8' posts at heights and distances mandated in USFS Handbook.

Land Treatments:

Noxious Weeds

Purpose of Treatment: Reduce the potential for expansion of known noxious weed infestations (black henbane, scotch, Canada and bull thistle, hounds tongue, spotted and diffused knapweed, dyer's woad, white top and star thistle) in susceptible burned areas due to fire related disturbance and prevent increase in weed density in existing infestations. The potential that these activities, or the resulting removal of the surrounding native vegetation from the fire, will cause an increase in the noxious/invasive plant species populations is high.

General Description: The district will treat 40 acres of existing noxious weeds that have resprouted and new infestations resulting from fire suppression activities in the burned area. Any noxious weed infestations found as a result of the fire will be targeted for immediate eradication using appropriate application techniques and herbicides. All treatments will take place in accordance with the Forest Noxious Weed Management Plan and Environmental Analysis under the direction of the Minidoka District Ranger. Treatment of new infestation will be based upon what is found during monitoring one year after the fire. Several trips may be needed to appropriately treat weeds, given the variable life history characteristics of the known noxious weeds in the burned area. This allows for the immediate treatment and eradication (i.e. herbicide application) of known infestations at the appropriate life stage to be most effective. All treatment activities will continue to be coordinated and carried out with the assistance of the appropriate County weed supervisor/ BLM office and private landowners.

Location (Suitable) Sites: Existing and new weed from suppression activities infestations within the Black Pine 2 burned area on Forest.

Design/Construction Specifications: Select herbicide, application rate, and application timing based on specific weed being treated, and access to the location of the infestation.

Fence Replacement

Purpose of Treatment: A range fence is required to prevent access from cattle from BLM and private lands from entering newly seeded areas on the Black Pine Mine.

General Description: Approximately 10 miles of the boundary fence needs to be replaced.

Location (Suitable) Sites: Construction will start along the south eastern portion of the fire area from East Dry Pole Canyon South and West to Formation Canyon.

Design/Construction Specifications: A cost estimate includes materials and labor for constructing four strands of standard galvanized barbed wire strung between steel posts.

Black Pine Mine Revegetation

Purpose of Treatment: Heap Leach Pad – revegetate the heap leach pad to reduce infiltration of meteoric water into the heap and reduce the volume of water that requires treatment. Impoundment – revegetate the impoundment, emergency spillway, and outfall channel. If the spillway and outfall channel erode, they will likely headcut upslope jeopardizing the stability of the impoundment. Land

Application/Administrative Area - Re-establish vegetation on the land application with a seed mix that focuses on nitrate removal and prevents uptake of toxic metals.

General Description: Re-establish vegetation on the heap leach pad as soon as possible with a seed mix that will establish quickly and reduce infiltration. Re-establish vegetation on the impoundment as soon as possible to reduce risk for these sites to erode and destabilize if a high intensity rain event should occur.

Location (Suitable) Sites: Heap leach pad (128 acres), Impoundment (5 acres), and Land Application/Administrative area (150 acres).

Design/Construction Specifications: Use site-specific seed mixes for the three areas recommended by the Aberdeen Plant Materials Center. Polysorb, a water retention product is recommended to be applied to 60 acres of the heap to allow for increased water retention in the rooting zone. This will allow for greater root production and lead to long-term vegetation establishment.

Black Pine Mine Water Management

Purpose of Treatment: Heap Leach Pond – Meteoric water that drains through the heap leach pad is captured in the pond under the heap. After the growth media was spread on the heap and initially seeded, it took four years for the vegetation to establish. The heap drain down prior to the fire was approximately 25 GPM. It is expected that without the vegetation cover the heap drain down will increase to about 50 GPM and thus will increase the volume of water stored and ultimately treated. Land Application - Prior to the fire, the land application system included 2.2 miles of 4 in. pipe and 102 miles of ½ inch drip line, and numerous valves, joints, fittings, etc. All of the pipe, drip lines, and valves were destroyed in the fire. With the land application piping not functioning, the volume of the heap leach pond will continue to increase. The combination of impacts to these two treatment components may likely result in the need for an emergency discharge, as there will be no capacity going into the winter months when land application is not feasible.

General Description: Heap Leach Pond – In the immediate time-frame, begin lowering the water level in the pond by pumping it through evaporating misters located at the base of the heap. In the long term, acquire a high-volume pump to apply the water over much of heap. This will accelerate the evaporation process and also provide needed moisture to the reseeded heap. Land Application – replace at least 1/3 of the land application system piping (40 acres) in 2007 to reduce the pond inventory to a point that will prevent an emergency discharge of untreated water. In the spring of 2008 reconstruct the entire piping system destroyed by the fire.

Location (Suitable) Sites: Head Leach Pad and Land Application Area

Design/Construction Specifications: Heap Leach Pond - utilize small-volume pump supplied by the Forest and exist employee to implement immediate evaporative treatment system. Rent high-volume pump and piping to implement long-term evaporation process. Land Application – other NFS funds (NFMG) provided will allow limited purchase of materials and labor to establish drip irrigation system on about 40 acres of the land application area. Additional materials and labor resources will be needed to complete reconstruction of the drip system over the remaining 50-60 acres.

Channel Treatments: None

Roads Treatments:

Purpose of Treatment: The purpose of these treatments is to restore road drainage and decrease the chance of failure in narrow canyons with few with turnouts.

General Description: The emergency stabilization recommendations for the section of Black Pine Canyon (#586), East Dry Canyon (#586), and Mineral Gulch (#198) roads located in the fire perimeter are as follows:

- 1) Reconstruct 18 existing drain dips per standard.
- 2) Construct 16 drain dips per standard.
- 3) Clean two culverts that are partially plugged.
- 4) Place larger riprap material below the ford to help stabilize the ford

Location (Suitable) Sites: Black Pine Canyon (#586), East Dry Canyon (#586), and Mineral Gulch (#198) roads located within the fire perimeter.

Design/Construction Specifications: Survey, design, and contract administration by USFS.

Purpose of Treatment: A second field investigation of existing Forest Service roads within the boundaries of the Black Pine 2 Fire was conducted on August, 1, 2007 in response to reports of road damage following a recent intense thunderstorm event in the area. The storm severely damaged the Mud Spring Road (#585), the Mud Spring Spur (#585A), and portions of the West Dry Canyon (#073) roads. Burned hillslopes caused rill and gully erosion that scoured swales and sent debris flows onto each road. This either buried portions of each road or downcut the soft roadbeds up to six feet. The Mud Spring Road and the Mud Spring Spur are now impassible. The Mud Spring Road will be permanently closed, while the Mud Spring Spur will be reconstructed once hillslopes have stabilized.

General Description: In order to prevent further resource damage three check dams using gabion structures and one hardened diversion berm in the new drainage channel which is now in the previous roadway prism location will be constructed. The gabions and diversion berm are intended to prevent damage to the Mud Spring Spur that will be repaired by minimizing further sediment deposition and scour.

Location (Suitable) Sites: Mud Spring Road (#585)

Design/Construction Specifications: Survey, design, and installation will be completed by the Sawtooth N.F. C&M crew.

I. Monitoring Narrative:

Road Storm Patrols - The purpose of the monitoring is to evaluate effectiveness of the emergency stabilization treatments completed on Black Pine Canyon (#586), East Dry Canyon (#586), and Mineral Gulch (#198) roads and to identify additional work needed to maintain and/or repair treatments. Engineering personnel will survey these roads two times. Two trips will be during or after high intensity storm events along the entire length of the Black Pine Canyon (#586), East Dry Canyon (#586), and Mineral Gulch (#198) roads within the fire perimeter.

Noxious Weed Monitoring - The purpose of the monitoring is to evaluate the potential for the spread of existing non-native invasive species or introduction of new species through the burned area and suppression sites as a result of suppression or wildfire activity. Early detection of noxious weed infestations will also minimize their spread and allow rapid treatment. Noxious weed species and invasives found during the monitoring will be treated at the time they are located.

Authorized individuals will conduct all monitoring to insure compliance with specific, detailed requirements (intensity, frequency, funding, timing, length of time, locations, etc). Monitoring will be conducted following established R4 Monitoring methods.

Monitoring will be done at intensity and frequency to identify spread or occurrence of weed infestations following the fire event and recovery. Initial monitoring will take place after the fire (beginning Fall of 2007 until early Summer 2008). Monitoring costs are based on one individual going out and driving roads used to access fire and dozer line used for suppression tactics. There are a total of 50 miles of road and 17.4 miles of cat line which needs surveyed. There are several roads which access the forest thru private property. On these roads it is the Forest Services responsibility to maintain and treat right of ways. Monitoring would also occur near existing populations in the burn perimeter. Additional monitoring may be requested depending what is found within the burned area.

Part VI – Emergency Stabilization Treatments and Source of Funds
Interim # 1

Line Items	Units	Unit Cost	NFS Lands		Other \$	Other Lands			All Total \$
			# of Units	BAER \$		# of units	Fed \$	# of Units Non Fed \$	
A. Land Treatments									
Noxious Weed Treatment	Acres	40	140	\$5,600	\$0		\$0	\$0	\$5,600
Fence Replacement	Miles	9,943	5	\$49,715	\$49,715		\$0	\$0	\$99,430
Black Pine Reveg.	Acres	355	283	\$100,547	\$0		\$0	\$0	\$100,547
Black Pine Water	Each	118,400	1	\$118,400	\$50,000		\$0	\$0	\$168,400
<i>Subtotal Land Treatments</i>				\$274,262	\$99,715		\$0	\$0	\$373,977
B. Channel Treatments									
				\$0	\$0		\$0	\$0	\$0
<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									
Road Storm Proofing	Each	13,001	1	\$13,001	\$0		\$0	\$0	\$13,001
Interim 1 Gabions and Berm	Each	10,000	1	\$10,000	\$0		\$0	\$0	\$10,000
				\$0	\$0		\$0	\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0	\$0	\$0
<i>Subtotal Road & Trails</i>				\$23,001	\$0		\$0	\$0	\$23,001
D. Protection/Safety									
Hazard Warning Signs	each	5	550	\$2,750	\$0		\$0	\$0	\$2,750
				\$0	\$0		\$0	\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0	\$0	\$0
<i>Subtotal Structures</i>				\$2,750	\$0		\$0	\$0	\$2,750
E. BAER Evaluation									
Assessment Team	Report	22,708	1	---			\$0	\$0	\$0
<i>Insert new items above this line!</i>				---	\$0		\$0	\$0	\$0
<i>Subtotal Evaluation</i>				---	\$0		\$0	\$0	\$0
F. Monitoring									
Noxious Weeds	Acres	380	2	\$760	\$0		\$0	\$0	\$760
Road Storm Patrols	Report	1000	2	\$2,000	\$0		\$0	\$0	\$2,000
<i>Subtotal Monitoring</i>				\$2,760	\$0		\$0	\$0	\$2,760
G. Totals				\$302,773	\$99,715		\$0	\$0	\$402,488
Previously approved				\$292,773					
Total for this request				\$10,000					

PART VII - APPROVALS

1. /s/Jane P. Kollmeyer
Forest Supervisor (signature)

Oct 15, 2007_
Date

2. /s/ William P. LeVere for
Regional Forester (signature)

10/18/07
Date