USDA-FOREST SERVICE FS-2500-8 (6/06)

Date of Report: August 23, 2007

BURNED-AREA REPORT
(Reference FSH 2509.13)

PART I - TYPE OF REQUEST

A. Type of Report

[X] 1. Funding request for estimated emergency stabilization funds
[ ] 2. Accomplishment Report
[ ] 3. No Treatment Recommendation

B. Type of Action

[X] 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: Middle Fork Complex

B. Fire Number: ID-BOF-000840

C. State: Idaho

D. County: Boise & Valley

E. Region: Intermountain, R4

F. Forest: Boise National Forest

G. District: Emmett & Lowman

H. Fire Incident Job Code: P4DR50

I. Date Fire Started: July 17, 2007

J. Date Fire Contained: August 16,2007

K. Suppression Cost: $14,460,933

L. Fire Suppression Damages Repaired with Suppression Funds

	Lucky	Lightning	Sheep Trail
1. Fireline Waterbarred (mi)	7.8	23.3	0.75
2. Fireline Seeded $(mi)^2$	0	0.4	0

M. Watershed Number:

Lucky Fire	Lightning Fire	Sheep Trail
		1. 1706020509(5)
		170602050902(6)
	1. 1705012102(5)	**2**. 1706020509(5)
	170501210204(6)	170602050901(6)
	2. 1705012101(5)	**3**. 1706020508(5)
	170501210103(6)	170602050803(6)
1705012103(5)	**3**. 1705012101(5)	**4**. 1706020508(5)
170501210301(6)	170501210101(6)	170602050804(6)

N. Total Acres Burned:
NFS Acres(Lightning (6,994), Lucky (1,582), Sheep Trail (8,704)) Other Federal (0) State (0) Private (0)

O. Vegetation Types: Lucky and Lightning Fires generally have a mixture of Ponderosa pine/Douglas fir/sub-alpine fir. Sheep Trail is comprised of mostly Lodgepole pine with scattered areas of sub-alpine fir.

P. Dominant Soils: shallow sandy loam

Q. Geologic Types: See Soils Report

R. Miles of Stream Channels by Order or Class:

	Lucky	Lightning	Sheep Trail
Perennial	3.1	11.3	14.5
Intermittent	0	16.7	8.6

S. Transportation System

	Lucky	Lightning	Sheep Trail
Trails	0	4.8	0
Roads	10.1	9.7	11.3

PART III - WATERSHED CONDITION

A. Burn Severity (acres):

Burn Severity	Lightning	Lucky	Sheep Trail	Total
High	214 (3%)	43 (3%)	784 (9%)	1,041 (6%)
Moderate	2,209 (32%)	546 (35%)	2,313 (27%)	5,068 (29%)
Low	2,376 (34%)	656 (41%)	3,244 (37%)	6,276 (36%)
Unburned	2,196 (31%)	337 (21%)	2,362 (27%)	4,895 (28%)
Total	6,994	1,582	8,704	17,280

B. Water-Repellent Soil (acres):

Class	Lightning	Lucky	Sheep Trail	Total
Low	2,376	656	3,244	6,276
Moderate	0	0	0	0
High	2,423	589	3,097	6,109

C. Soil Erosion Hazard Rating (acres):

Soil Erosion Hazard Acres	Lightning	Lucky	Sheep Trail	Total
Low	0	0	330	330
Low – Moderate	0	0	56	56
Moderate	3,329	1,188	3,857	8,374
Moderate – High	1,099	0	2,844	3,943
High	2,451	350	0	2,801

D. Erosion Potential: Lightning (14), Lucky (12), Sheep Trail (3) tons/acre

E. Sediment Potential: Lightning (4,941), Lucky (1,715), Sheep Trail (1,984) cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

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

B. Design Chance of Success, (percent): 75

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

D. Design Storm Duration, (hours): 1 hour

E. Design Storm Magnitude, (inches): Lucky 0.3", Lightning 0.8" Sheep Trail 0.9"

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

G. Estimated Reduction in Infiltration, (percent): 35%

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

	WILDCAT4 5 Year - 1 Hr Storm Event	
Drainage	**Pre-Fire Q (cfs/sq mi)**	**Post Fire Q (cfs/sq mi)**
Lucky Fire		
FR 670 Culvert 1	-	33
FR 670 Culvert 2	-	25
Lightning Fire		
Lightning Creek - Irrigation Diversion	-	0.02
Lightning Creek - Fire Perimeter	-	0.02
Anderson Creek at Hailey Creek	-	0.02
Sheep Trail Fire		
Elk Creek Tributary 1	-	107
Elk Creek Tributary 2	-	48
Sheep Trail Creek	0.9	34
Bearskin Creek Tributary	1.1	27

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats:

Soils

- Potential loss of soil productivity. Soils in the burned area are derived from primarily granitic parent material and have inherently moderate-to-high surface erosion characteristics. In high severity burn areas the fire completely consumed the vegetation canopy and the effective ground cover that dissipates rainfall and regulates snowmelt runoff. This includes the plant litter and duff that also replenish the soil nutrient pool. Even with average precipitation, accelerated erosion rates combined with higher surface runoff efficiencies may move the exposed soil and nutrient-rich ash off-site. It is predicted that vegetative succession will provide between 75 to 90 percent shrub canopy and grass/forb ground cover within two to five years, it is likely the time frame for the potential natural vegetation community to effectively restore the soil-hydrologic functions of severely burned areas may exceed 10 years.

- Noxious Weeds. Soil productivity can be severely impacted in the burned area due to the spread of noxious weeds from existing populations and the introduction of noxious weeds and invasive species into new areas as a result of fire suppression efforts. An area of know noxious weed infestation is know to exist just north of the Silver Creek Plunge.

Fisheries

- The M.F. Complex Fire occurred in the Middle Fork Payette River and Middle Fork Salmon River subbasins. Each subbasin supports important habitat for threatened and resident fish species. Tributary streams in the Lucky and Lightning Fires drain into the Middle Fork Payette River that supports a depressed migratory bull trout population. The M.F. Payette River and associated tributaries from the fire also support popular recreational fishing for native redband trout and rainbow trout.
- The Sheep Trail Fire occurred in Elk, Bear Valley, Bearskin, and Sheep Trail Creeks that support wild, indigenous Chinook salmon, Steelhead Trout, and Bull Trout. The Bear Valley Chinook population is a spring run and is one of nine populations in the Middle Fork Salmon River. The Chinook population is at a high risk of extinction based on current abundance and productivity. Steelhead near the fire perimeter occur in one (the Middle Fork Upper Main population - MFUMA) of two populations in the M.F. Salmon River. This population includes fish spawning in tributaries and the mainstem upstream of Loon Creek. Finally, bull trout near the fire perimeter occur in the in Bear Valley local population in the Middle Fork Salmon River core area. Bull trout are considered strong in Elk Creek; suppressed in Bearskin Creek; and weak in Upper and Lower Bear Creek.

Hydrology

- Values at risk from increased flow, sediment transported and erosion due to fire induced increases in stream flows would include: Public safety (people in the burn area on the trail); and water quality.

Lucky Fire

- Potential Threats to Human Life. Portions of the 670 road cross drainages that may be at risk to increased flow, sediment erosion and debris flows. This increase in streamflow and associated debris may result in failure of culverts with the potential for portions of the road to washout; and poses a risk to human life and safety.
- Potential Threats to Property. Portions of the 670 road cross drainages that may be at risk to increased flow, sediment erosion and debris flows. This increase in streamflow and associated debris may result in failure of culverts with the potential for portions of the road to washout.
- Potential Threats to Municipal Watershed, Water Quality and Fisheries. The occurrence of high intensity rainstorms may affect runoff, water quality, and may increase the potential for debris flows in the burned watersheds. The Middle Fork of the Payette subbasin is a municipal watershed for the community of Horseshoe Bend and the River's Point Property Owners Association. Beneficial uses for the subbasin include salmonid spawning, cold water biota, agricultural and domestic water supply, primary and secondary contact recreation and special resource waters.

Lightning Fire

- Potential Threats to Human Life. Portions of the 668 road cross drainages that may be at risk to increased flow, sediment erosion and debris flows. This increase in streamflow and associated debris may result in failure of culverts with the potential for portions of the road to washout; and poses a risk to human life and safety.
- Potential Threats to Property. Portions of the 668 road cross drainages that may be at risk to increased flow, sediment erosion and debris flows. This increase in streamflow and associated debris may result in failure of culverts with the potential for portions of the road to washout.
- The Airline, Lightning Ridge and Onion Valley trails maybe at risk from the increased runoff and trail erosion resulting from the occurrence of high intensity rainstorms in severely burned areas located on the hillslopes and small drainages adjacent to the trail.
- There are private residences located approximately 3 miles and about 7 miles downstream on Lightning Creek and Anderson Creek, respectively.
- Potential Threats to Municipal Watershed, Water Quality and Fisheries. The occurrence of high intensity rainstorms may affect runoff, water quality, and may increase the potential for debris flows in the burned watersheds. The Middle Fork of the Payette is a municipal watershed for the community of Horseshoe Bend and the River's Point Property Owners Association. Beneficial uses for the subbasin include salmonid spawning, cold water biota, agricultural and domestic water supply, primary and secondary contact recreation and special resource waters.

Sheep Trail Fire

- Potential Threats to Human Life. Portions of the 563, 579, and 582 road cross drainages that may be at risk to increased flow, sediment erosion and debris flows. This increase in streamflow and associated debris may result in failure of culverts with the potential for portions of the road to washout; and poses a risk to human life and safety.
- Potential Threats to Property. Portions of the 579, 563, and 582 road cross drainages that may be at risk to increased flow, sediment erosion and debris flows. This increase in streamflow and associated debris may result in failure of culverts with the potential for portions of the road to washout.
- Potential Threats to Water Quality and Fisheries. The headwaters of a few streams have been burned. The occurrence of high intensity rainstorms may affect runoff, water quality, and may increase the potential for debris flows to these streams.

Engineering

- The watersheds burned in the Middle Fork Complex may show the effects of the fire via increased runoff rates, erosion, sediment, and debris transport. This creates a future concern for roads, culverts, bridges, and channels along the drainage paths of the burned watersheds in that they may be plugged, overtopped or washed away more frequently than experienced when the watershed was in its pre-fire condition.
- Public safety and threats posed to public and employees due to fire-created hazards along traveled routes.

Weeds

- Noxious weeds and non-native invasive species may pose a threat to native vegetation and other high value resources, including watersheds, soils, fisheries, wildlife and rare plants.
- Current inventories show 152 mapped acres of four species of noxious weeds within and surrounding the Middle Fork Complex fires.
- Unknown unmapped acres of non-native invasive species within and surrounding the Middle Fork Complex fires
- Spread of noxious and invasive plant species
- Use of undesired species for rehabilitation

Rare Plants

- Fire effects to rare plant populations and habitat.
- Impact known rare plant populations or habitat from fire suppression efforts such as use of fire retardant, construction of hand fireline, dozerline, helispots, drop points, road reopening/use.
- Use of undesirable species for rehabilitation.
- Potential for colonization of rare plant sites or habitat by non-native invasive plants (noxious weeds)

White Bark Pine

- Mortality to whitebark pine populations within the fire perimeter.
- Capacity for natural stand regeneration.

B. Emergency Treatment Objectives:

- Reduce threats to personal injury and/or human life from falling limbs, trees, debris and other unsafe conditions along travel routes.
- Inform users of Forest roads and trails of hazards present in the burned area.
- Reduce the risk of failure to trails and roads that may impact human safety, downstream water quality, and aquatic habitat.
- Prevent invasive plant species from out competing native species following the burn.

C. Probability of Completing Treatment Prior to Damaging Storm or Event:
Land **75** % Channel **NA** % Roads/Trails **90** % Protection/Safety **90 (road warning signs)** %

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land	70	70	70
Channel	NA	NA	NA
Roads/Trails	95	95	95
Protection/Safety	90	90	90

E. Cost of No-Action (Including Loss): **$908,000**

F. Cost of Selected Alternative (Including Loss): **$90,000**

G. Skills Represented on Burned-Area Survey Team:

[x] Hydrology [x] Soils [ ] Geology [ ] Range [ ]
[ ] Forestry [ ] Wildlife [ ] Fire Mgmt. [x] Engineering [ ]
[ ] Contracting [ ] Ecology [x] Botany [x] Archaeology [ ]
[x] Fisheries [ ] Research [ ] Landscape Arch [x] GIS

Team Leader: TJ Clifford

Email: tjclifford@fs.fed.us Phone: 208-365-7007 FAX: 208-365-7037

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:

Noxious Weeds

Treat documented noxious weed infestations that have respouted in the burned area. This allows for the immediate treatment and eradication (i.e. hand pulling, herbicide application, biological agent control, seeding of native species) of known infestations.

Treat undocumented noxious weed infestations that have been located as a result of monitoring within the burned area. Focus on areas disturbed during fire management operations and travel routes used to support fire management operations.

Location (Suitable) Sites:

- Existing known weed infestations within and directly adjacent to the Middle Fork Complex Fires burned area on Forest (see map in project files). Locations will be identified through Weed Monitoring Treatment described later in this request. These locations will be documented and mapped for future monitoring and treatment.

Design/Construction Specifications:

- Select herbicide, application rate, and application timing based on specific weed being treated, and access to the location of the infestation.
- Consideration for TES (listed species) habitat and sensitivity when selecting appropriate herbicide.

Purpose of Treatment:

- Reduce the potential for establishment of new noxious weed infestations in highly susceptible burned areas, prevent spread of existing infestations, and prevent increase in weed density in existing infestations.

Channel Treatments: None

Roads and Trail Treatments:

Lightning fire

Road Drainage Reconstruction

It is recommended that the road segment of concern on Rd. 668 should be bladed, the ditches should be pulled and the culvert catchbasins should be over excavated to help handle post-fire runoff, debris or sediment. It is expected that the potential runoff would be much less than the potential runoff on Rd. 670 in the Lucky Fire and would not warrant constructing drain dips. These treatments should help minimize damage to the road segment in the event the culverts become plugged or overtopped.

Location (Suitable) Sites:

- Road 670 from MP 0.0 to MP 1.4 and Road 668 from MP 11.3 to MP 15.3. Total miles of road to be treated = 1.4 + 4 = 5.4 miles

Design/Construction Specification(s):

- On both road segments: Clean all culvert inlets and catchbasins with a backhoe. Remove material from cross drain culvert catchbasins to a minimum depth of 6" below the invert elevation to provide capacity to catch debris and sediment resulting from increased runoff from the burn area upslope of the road. Shape the road template with a road grader to provide for efficient surface drainage of the roadway. Additionally, on Road 670: construct 13 outsloped rolling dips downgrade of existing culvert installations that will serve as positive diversion points to remove flow from the ditchline in the event the culvert becomes plugged.

Place existing slash, created during suppression operations that is available along the berm, below the outfall of each dip to provide fillslope protection.

- Construct rolling dips on Road 670 at the following locations, distance measured from the junction with Road 698:

- Stations: 6+50, 13+00, 15+80, 17+40, 22+70, 31+00, 34+50, 43+40, 48+30, 53+50, 63+80, 72+50, and 76+00.

Purpose:
- This treatment will minimize or prevent excessive sediment (pollutant of concern) delivery to the Middle Fork Payette River with a current TMDL. This also delivers to a Municipal watershed.

Road Hazard Mitigation

Minimize hazard to employees through worksite during the implementation of other BAER treatments.

Location (Suitable) Sites:
- Road 670 from MP 0.0 to MP 1.4 and Road 668 from MP 11.3 to MP 15.3. Total miles of road to be treated = 1.4 + 4 = 5.4 miles

Design/Construction Specification(s):
- Fall trees, damaged by the fire, and determined to be a hazard to employees or equipment used to implement the Road Drainage Reconstruction treatment. These trees must pose an immediate threat to the worksite and must be tall enough to reach the roadway. Leave portions of felled trees that are upslope of the road in a stable position on the ground. Dispose of material that falls on the cut slope or roadway surface by scattering on the fill slope below the road. Remove any material that falls into streamcourses, culvert catchbasins, or road ditchlines.

Purpose of Treatment Specification:
- Protect employees and equipment during implementation of BAER treatments recommended in this Report.

Warning Sign Installation

A warning sign should be installed at an appropriate location, shown on the map, warning the public that they are entering a burned area and should be aware of falling trees and rolling rocks.

Install signs at roads, trailheads, and trail junctions that enter the burned area or provide access to trails within the burn warning of increased hazard from falling snags and broken trees, flooding, and debris flows (see treatment maps). Signs will be purchased and posted in the fall of 2007 to inform pedestrian and equestrian travelers.

Location (Suitable) Sites:
- Warning sign locations: Road 670 at MP 0.0 by the bridge over the Middle Fork of the Payette River, and at MP 1.5 near the west side of the Lucky Fire. Road 668 at the junction with Road 668B, and outside the west edge of the fire approximately 4 miles past the 668B junction. On Road 563 at the junction with Road 564, and at the junction with Road 563A. Install one warning sign each on Roads 563A and 563B that will face traffic entering from Road 563. A total of 8 warning signs will be installed.

- Not Advised for Trailers sign locations: Road 670 at MP 0.0 by the bridge over the Middle Fork of the Payette River, and at MP 9.9 which is the junction with Road 693(Scriver Creek Road). A total of 2 advisory signs will be installed.

Design/Construction Specification(s):

- For Warning Signs: Purchase and install 1 each 4" x 4" x 12' pressure treated posts and 1 each 4' x 4' aluminum sign with black letters on high intensity orange background for each location specified above, text to read:

BURNED AREA
BEWARE OF:
FALLING TREES
& LIMBS
ROLLING ROCKS
FLASH FLOODS

- For Advisory Signs: Purchase and install 1 each 4" x 4" x 12' pressure treated post and 1 each 36" x 36' diamond shape aluminum sign with black letters on high intensity yellow background for each location specified above, text to read:

NOT
ADVISED
FOR
TRAILERS

Purpose of Treatment Specification:

- Public and employee safety

<u>Trail & Road Closures</u>

Inform the public of the temporary administrative closures. Closure signs will be posted. The closure is to minimize threats to human life and safety due to rolling rocks, falling snags, and debris coming from slopes destabilized by the fire.

The following road and trail closures will be put into effect as soon as possible for all users to minimize threats to human life and safety:

- The portion of the Airline Trail (025) within the fire boundary should be placed under an administrative closure until further notice. The closure extends from the trailhead on FDR 611 to the northwestern most extent of the fire boundary as indicated on the map.

- The portion of the Lightning Ridge Trail (038) should be placed under an administrative closure until further notice. The closure would extend from the boundary of the burned area along FDR 668 to the other side of the fire boundary just past the junction with the Onion Valley Trail (003).

- The portion of the Onion Valley Trail (003) should be placed under an administrative closure until further notice. The order applies to the trail segment from it's junction with the Lightning Ridge Trail (038) to the fire boundary just to the north.

- At the junction of FDR 563A and FDR 563, at the junction of FDR 563B and FDR 563, at the junction of FDR 668B and FDR 668, and at the junction of FDR 668C and FDR 668.

    - Furnish and install 16 foot stock gate, mounted on railroad ties, with appropriate barricade and Type 2 reflectorized markers. Install one on each location to block access to the burned area.

The temporary closures will be in place "until further notice" and are intended to minimize threats to life and safety of trail users operating motorized and mechanized vehicles, and to prevent trail damage caused by motorized and mechanized trail machines. These trails may be open to the public after additional evaluation.

Lucky fire

Road Drainage Reconstruction (duplicate to treatment prescribed for Lightning)

Due to the steepness of the side slopes and the steep grade of the road, it is recommended that 13 outsloped dips be constructed down grade from culvert outlets on the road segment of concern on Rd. 670. Slash should be placed at the outfall of the drain dips. The road segment should be bladed, the ditches should be pulled and the culvert catchbasins should be over excavated to help handle post-fire runoff, debris or sediment. These treatments should help minimize damage to the road segment in the event the culverts become plugged or overtopped.

Location (Suitable) Sites:

- Road 670 from MP 0.0 to MP 1.4 and Road 668 from MP 11.3 to MP 15.3. Total miles of road to be treated = 1.4 + 4 = 5.4 miles

Design/Construction Specification(s):

- On both road segments: Clean all culvert inlets and catchbasins with a backhoe. Remove material from cross drain culvert catchbasins to a minimum depth of 6" below the invert elevation to provide capacity to catch debris and sediment resulting from increased runoff from the burn area upslope of the road. Shape the road template with a road grader to provide for efficient surface drainage of the roadway. Additionally, on Road 670: construct 13 outsloped rolling dips downgrade of existing culvert installations that will serve as positive diversion points to remove flow from the ditchline in the event the culvert becomes plugged. Place existing slash, created during suppression operations that is available along the berm, below the outfall of each dip to provide fillslope protection.

- Construct rolling dips on Road 670 at the following locations, distance measured from the junction with Road 698:

- Stations: 6+50, 13+00, 15+80, 17+40, 22+70, 31+00, 34+50, 43+40, 48+30, 53+50, 63+80, 72+50, and 76+00.

Road Hazard Mitigation (duplicate to treatment prescribed for Lightning)

Minimize hazard to employees through worksite during the implementation of other BAER treatments.

Location (Suitable) Sites:

- Road 670 from MP 0.0 to MP 1.4 and Road 668 from MP 11.3 to MP 15.3. Total miles of road to be treated = 1.4 + 4 = 5.4 miles

Design/Construction Specification(s):

- Fall trees, damaged by the fire, and determined to be a hazard to employees or equipment used to implement the Road Drainage Reconstruction treatment. These trees must pose an immediate threat to the worksite and must be tall enough to reach the roadway. Leave portions of felled trees that are upslope of the road in a stable position on the ground. Dispose of material that falls on the cut slope or roadway surface by scattering on the fill slope below the road. Remove any material that falls into streamcourses, culvert catchbasins, or road ditchlines.

Purpose of Treatment Specification:

- Protect employees and equipment during implementation of BAER treatments recommended in this Report.

Warning Sign Installation (duplicate to treatment prescribed for Lightning)
A warning sign should be installed at an appropriate location, shown on the map, warning the public that they are entering a burned area and should be aware of falling trees and rolling rocks.

Install signs at roads, trailheads, and trail junctions that enter the burned area or provide access to trails within the burn warning of increased hazard from falling snags and broken trees, flooding, and debris flows (see treatment maps). Signs will be purchased and posted in the fall of 2007 to inform pedestrian and equestrian travelers.

Location (Suitable) Sites:

- Warning sign locations: Road 670 at MP 0.0 by the bridge over the Middle Fork of the Payette River, and at MP 1.5 near the west side of the Lucky Fire. Road 668 at the junction with Road 668B, and outside the west edge of the fire approximately 4 miles past the 668B junction. On Road 563 at the junction with Road 564, and at the junction with Road 563A. Install one warning sign each on Roads 563A and 563B that will face traffic entering from Road 563. A total of 8 warning signs will be installed.

- Not Advised for Trailers sign locations: Road 670 at MP 0.0 by the bridge over the Middle Fork of the Payette River, and at MP 9.9 which is the junction with Road 693(Scriver Creek Road). A total of 2 advisory signs will be installed.

Design/Construction Specification(s):

- For Warning Signs: Purchase and install 1 each 4" x 4" x 12' pressure treated posts and 1 each 4' x 4' aluminum sign with black letters on high intensity orange background for each location specified above, text to read:

BURNED AREA
BEWARE OF:
FALLING TREES
& LIMBS
ROLLING ROCKS
FLASH FLOODS

- For Advisory Signs: Purchase and install 1 each 4" x 4" x 12' pressure treated post and 1 each 36" x 36' diamond shape aluminum sign with black letters on high intensity yellow background for each location specified above, text to read:

NOT
ADVISED
FOR
TRAILERS

Purpose of Treatment Specification:

- Public and employee safety

Sheep trail fire

Warning Sign Installation (duplicate to treatment prescribed for Lightning)
A warning sign should be installed at an appropriate location, shown on the map, warning the public that they are entering a burned area and should be aware of falling trees and rolling rocks.

Install signs at roads, trailheads, and trail junctions that enter the burned area or provide access to trails within the burn warning of increased hazard from falling snags and broken trees, flooding, and debris flows (see treatment maps). Signs will be purchased and posted in the fall of 2007 to inform pedestrian and equestrian travelers.

Location (Suitable) Sites:

- Warning sign locations: Road 670 at MP 0.0 by the bridge over the Middle Fork of the Payette River, and at MP 1.5 near the west side of the Lucky Fire. Road 668 at the junction with Road 668B, and outside the west edge of the fire approximately 4 miles past the 668B junction. On Road 563 at the junction with Road 564, and at the junction with Road 563A. Install one warning sign each on Roads 563A and 563B that will face traffic entering from Road 563. A total of 8 warning signs will be installed.

- Not Advised for Trailers sign locations: Road 670 at MP 0.0 by the bridge over the Middle Fork of the Payette River, and at MP 9.9 which is the junction with Road 693(Scriver Creek Road). A total of 2 advisory signs will be installed.

Design/Construction Specification(s):

- For Warning Signs: Purchase and install 1 each 4" x 4" x 12' pressure treated posts and 1 each 4' x 4' aluminum sign with black letters on high intensity orange background for each location specified above, text to read:

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- For Advisory Signs: Purchase and install 1 each 4" x 4" x 12' pressure treated post and 1 each 36" x 36' diamond shape aluminum sign with black letters on high intensity yellow background for each location specified above, text to read:

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Purpose of Treatment Specification:

- Public and employee safety

<u>Trail & Road Closures (duplicate to treatment prescribed for Lightning)</u>

Inform the public of the temporary administrative closures. Closure signs will be posted. The closure is to minimize threats to human life and safety due to rolling rocks, falling snags, and debris coming from slopes destabilized by the fire.

The following road and trail closures will be put into effect as soon as possible for all users to minimize threats to human life and safety:

- The portion of the Airline Trail (025) within the fire boundary should be placed under an administrative closure until further notice. The closure extends from the trailhead on FDR 611 to the northwestern most extent of the fire boundary as indicated on the map.

- The portion of the Lightning Ridge Trail (038) should be placed under an administrative closure until further notice. The closure would extend from the boundary of the burned area along FDR 668 to the other side of the fire boundary just past the junction with the Onion Valley Trail (003).

- The portion of the Onion Valley Trail (003) should be placed under an administrative closure until further notice. The order applies to the trail segment from it's junction with the Lightning Ridge Trail (038) to the fire boundary just to the north.

- At the junction of FDR 563A and FDR 563, at the junction of FDR 563B and FDR 563, at the junction of FDR 668B and FDR 668, and at the junction of FDR 668C and FDR 668.

    - Furnish and install 16 foot stock gate, mounted on railroad ties, with appropriate barricade and Type 2 reflectorized markers. Install one on each location to block access to the burned area.

The temporary closures will be in place "until further notice" and are intended to minimize threats to life and safety of trail users operating motorized and mechanized vehicles, and to prevent trail damage caused by motorized and mechanized trail machines. These trails may be open to the public after additional evaluation.

Protection/Safety Treatments:
See discussion for road drainage and road warning signs.

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.)

Bridge Monitoring
The bridge across the Middle Fork Payette River at the entrance to Rd. 670 should be monitored three times a year for three years for trees coming to rest against the center pier, especially after storm events. It is estimated that an excavator may be needed once a year for three years to clear trees and debris from the bridge pier.

Location (Suitable) Sites:
- Bridge over the Middle Fork of the Payette River on Road 670

Design/Construction Specification(s):
- Forest Service will perform during and post storm inspections of the bridge, to look for damage from burned trees floating downriver that contact or hang up on the bridge structure. Logjams in the vicinity of the bridge will be monitored for flow patterns that cause increased scour along the bridge abutments and center span pier that lies in the middle of the channel.

- If logjams occur that are a threat to the bridge, remove them from the channel and place the logs in a location where they cannot re-enter the river and impact the bridge.

Purpose of Treatment Specification:
- Protect investment and public safety. The purpose of this treatment is to prevent infrastructure loss as a result of debris piling up against the bridge and causing center pier failure or debris piling up on either side of the channel just upstream from the bridge directing flow into abutments. The bridge is part of the main access FDR 670 into the Sixmile subwatershed that has multiple timber sale (NEPA complete) and potential salvage opportunities planned for the near future.

Weed Monitoring

The noxious weed monitoring is to ensure early detection of noxious weed introduction in the burned area and suppression sites as a result of suppression or wildfire activity. Early detection of noxious weed infestations will minimize the spread and initiate rapid treatment to new infestations associated with fire suppression/fire effects.

Location (Suitable) Sites:

- Monitoring areas include all sites disturbed by the fire suppression activities such as helibases, helispots, drop points, heliwater spots, spike camps, and fire camp. All travel routes into and through the burned area should be monitored.

Design/Construction Specifications:

- 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. Monitoring will be accomplished by a two person crew or contract crew over a 10-day period. Initial monitoring will take place after the fire (beginning early Spring/Summer of 2008). Additional monitoring and treatment may be requested depending what is found within the burned area.
- Select herbicide, application rate, and application timing based on specific weed being treated, and access to the location of the infestation.
- Consideration for TES (listed species) habitat and sensitivity when selecting appropriate herbicide.
- Documented weed infestations include the species of Spotted Knapweed, Rush Skeletonweed, Canada Thistle and Dalmatian Toadflax.

Purpose of Treatment:

- The purpose of Noxious Weed Monitoring is early detection of noxious weed introduction in the burned area and suppression sites as a result of suppression or wildfire activity. Early detection of noxious weed infestations will minimize the spread and initiate rapid treatment to new infestations associated with fire suppression/fire effects. Noxious weed species and invasives found during the monitoring will be treated at time of identification.

Monitor Non-system Road Failure

Unclassified roads with drainage structures within the Lightning Fire will be monitored to determine the failure risk and associated sediment delivery from the these drainage structures to the municipal watersheds and 303(d) listed water bodies in the Middle Fork Payette River subbasin.

Stream Monitoring

Monitor the burn perimeter along Elk and Bearskin Creeks to look for hillslope sediment that may reach each stream channel. Monitor the tributary in Section 25 of lower Sheep Trail Creek for hillslope erosion. Monitoring should be completed before August 16, 2008. If hillslope erosion is judged to be excessive, the forest should discuss if treatments are required and an interim BAER plan be submitted.

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										
Noxious Weeds	acres	22	0	$0	$0		$0		$0	$0
				$0	$0		$0		$0	$0
				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Land Treatments				$0	$0		$0		$0	$0
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										
Road Drainage Recons	Miles	3478	5.4	$18,781	$0		$0		$0	$18,781
Trail & Road Closure	Each	1736	4	$6,944	$0		$0		$0	$6,944
				$0	$0		$0		$0	$0
				$0			$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Road & Trails				$25,725	$0		$0		$0	$25,725
D. Protection/Safety										
Road Hazard Mitigatior	Miles	808	5.4	$4,363	$0		$0		$0	$4,363
Warning Sign Installati	1	5279	1	$5,279	$0		$0		$0	$5,279
				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Structures				$9,642	$0		$0		$0	$9,642
E. BAER Evaluation										
Plan Preparation	Each	38135	1	$38,135			$0		$0	$0
Insert new items above this line!				---	$0		$0		$0	$0
Subtotal Evaluation				---	$0		$0		$0	$0
F. Monitoring										
Bridge Monitoring	Each	3312	1	$3,312	$0		$0		$0	$3,312
Weed Monitoring	Acres	22	285	$6,270	$0		$0		$0	$6,270
Monitor Non-system R	Miles	228	5	$1,140	$0		$0		$0	$1,140
Stream Monitoring	Miles	250	0	$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Monitoring				$10,722	$0		$0		$0	$10,722
G. Totals				$46,089	$0		**$0**		**$0**	**$46,089**
Previously approved										
Total for this request				**$46,089**						

PART VII - APPROVALS

1. _/s/ Richard A. Smith_____ _8/23/2007_____
Forest Supervisor (signature) Date

2. _/s/ Cathy Beaty for_____ _9/5/07_____
Regional Forester (signature) Date