USDA-FOREST SERVICE FS-2500-8 (7/00)

J.Bruggink Edit 12/01/2006 Date of Report: 7/28/06

BURNED-AREA REPORT
(Reference FSH 2509.13)

PART I - TYPE OF REQUEST

A. Type of Report

[x] 1. Funding request for estimated WFSU-SULT funds
[ ] 2. Accomplishment Report
[ ] 3. No Treatment Recommendation

B. Type of Action

[] 1. Initial Request (Best estimate of funds needed to complete eligible rehabilitation measures)

[X] 2. Interim Report
[X] 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: Jackass Flat Fire

B. Fire Number: NV-HTF-001365

C. State: NV/CA

D. County: Douglas, Lyon Cty, Nevada, Mono Cty, Ca.

E. Region: Intermountain Region, R4

F. Forest: Humboldt-Toyaibe

G. District: Bridgeport, RD

H. Date Fire Started: July 17, 2006

I. Date Fire Contained: July 21, 2006

J. Suppression Cost: $1,728,000

K. Fire Suppression Damages Repaired with Suppression Funds
1. Fireline waterbarred (miles): 2
2. Fireline seeded (miles): 0
3. Other (identify): 0

L. Watershed Number: HUC 6: 160503020203, (160503020205), (160503020304)

M. Total Acres Burned: 6213
NFS Acres(**x**) Other Federal ( ) State ( ) Private ( )

N. Vegetation Types: Pinyon pine, sagebrush/antelope bitterbrush

O. Dominant Soils: Soils in the fire area have area have formed from granite, sedimentary, and volcanic rocks. In the washes soils are derived from alluvium from the granite, sedimentary, and volcanic rocks above. According to the Douglas County and Alpine/Mono county soil surveys, the granitic derived soils are

predominately, Duco, Genoa, Trid, Roloc, Toejom, and Koontz. The sedimentary soils are Uhaldi. The volcanic soils are Cagle and Deven. Most of these soils are typic and lithic Arigixerolls.

P. Geologic Types: Undivided, nonporphyritic quartz monzonite is the predominant geology that occurs within the fire. According to the Bridgeport RD geology GIS coverage, 4700 acres (76%) of the fire are composed of granite. The geology occur on the west and southern half of the fire, Sedimentary rocks occur on the northeastern corner of the fire, with andesitic rocks being found in the most northeastern corner of the fire.

Q. Miles of Stream Channels by Order or Class: 21 miles of Ephemeral streams

R. Transportation System

Trails: 0 miles Roads: 13 miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 1337 (21%) (low) 4228 (68%) (moderate) 226 (4%) (high) 421 (7%) (unburned)
The fire burned very quickly across the landscape resulting in a rapid combustion of the vegetation. The litter layer and shrub layer were not totally consumed. Deeper litter layers showed unburned litter on the cooler aspects. Subsoil showed unburned fine roots near the surface.

B. Water-Repellent Soil (acres): Aproximately 60 acres have moderate to high hydrophobicity as a result of the fire. Mostly found under the larger pinyons where the litter layer was deeper. The coarse textured granitic soils within the fire can have a moderate to high natural hydrophobicity. Field testing has confirmed that.

C. Soil Erosion Hazard Rating (acres):
1054 (low) 1587 (moderate) 3572 (high)

D. Erosion Potential: 8.96 tons/acre (WEPP erosion rate over 24 month time period)

E. Sediment Potential: ____ cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years):
5 years understory; 100+ Pinyon woodland

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

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

D. Design Storm Duration, (hours): ____

E. Design Storm Magnitude, (inches):

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

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

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

PART V - SUMMARY OF ANALYSIS

A. Describe Watershed Emergency:

The emergency includes the protection of two spring boxes, placement of warning signs on access points leading to the fire, and protecting the landscape from offroad vehicles. Due to the remote location of the fire, no homes or structures, the low risk of cheatgrass invasion, and the low number of severly burned acres, the team felt that seeding and other hillslope treatments were not warranted.

Watershed

Risue, Rickey and Blackwell Canyons flood occasionally in response to summer thunderstorms and other events. The roads in the bottom of these canyons tend to wash out on a regular basis. There is a concern that the fire will exacerbate this effect. An intense thunderstorm, centered over Jackass Flats, occurred one week after the start of this fire. Both Risue Canyon road and Road 195 to Jackass Flat washed out in several locations.
No threat to life or property from increased flows was identified. Desert Creek, the only perennial stream near the fire, was only minimally impacted and there appears to be no threat to water quality. The burned area may contribute higher run-off to the adjacent channels. This increase in flow is likely to be small because the areas burned in each subwatershed are relatively small compared to the total acreage. Based on this assessment and identification of issues, no land treatments are recommended

Spring box protection
The burned area of the Jackass Flat fire had an impact on the amount of soil and debris that flowed down Risue Canyon during the flash flood that occurred on July 24, 2006. The flow of water contributed to the headbox being totally silted in. It is unknown if the underground pipe that filters water to a trough was affected. In order to protect this spring headbox from future damage, it would be best to install some sort of diversion structure just upstream from the headbox to divert flows away from the head box so that sediment does not fill the head box in its entirety. Cost approximately $1,000 for certified weed free straw and rebar to hold the straw in place.

There is also a potential threat to a headbox on Jackass Creek, just past the Nevada/California Stateline, on the Nevada side. A dozer was used to improve the road for suppression efforts. It dug too far down into the soil, causing the water to flow over the existing road. The area remained too wet during suppression efforts to fix. The road needs to be armored with some gravel type fill, so that the water can flow through the road to the creek. If this doesn't happened, forest visitors will try to drive around the mucky portion of the road, potentially running over the headbox, which is just three to four feet off of the current road. The cost for this treatment is approximately $5000 for materials and road crew time. This cost is to come from fire suppression.

Recreation, public safety, and environmental degradataion

Recreation in the Risue Canyon and Desert Creek area consists mostly of dispersed camping, hunting, and riding ATVs and dirtbikes. There is one developed campground along Desert Creek. Both the developed campground and the dispersed camping areas along Desert Creek were not affected by the fire. The fire area is easily accessible from both the west and east side via the Risue Canyon road. Other more primitive roads split off from this main road, in addition to providing other entry points into the fire. The Risue canyon road follows the Risue canyon road from the West side. This canyon is prone to flooding, a high intensity storm on July 24 resulted in flooding of this canyon and washing out a periperal road within the fire. Signage warning the public of this risk and the risk of rocks and debris coming down from the side slopes will be needed.

Within the fire area are large areas of flat alluvial sagebrush/bitterbrush ecological community dominated ground adjacent to the main roads. A significant portion of this ecological community burned making it accessible to offroad vehicles. Offroad vehicle travel could accelerate enviromental degradation, reduced site productivity, introduce invasive species, and hinder the reestablishment of native vegetation.

Roads
There are 13 miles of native surface roads that are within the fire perimeter. A localized high intensity storm on July 24 caused flooding down a couple of these road resulting in the roads becoming impassible. A dirt county road 5 miles downstream was washed out. Due to the erosive nature of the granitic soils in and above the burn area and the position of the roads in valley bottoms, these roads have been susceptable to flooding.

Risue canyon road is the main access road through the fire area. It suffered some damage from the early storm. Road improvements will be required to prevent future washouts. Within one mile (and probably further south) of the Risue Canyon Road (# 42050) the Taylor Valley road has been buried under mudflow deposits from significant rain events that occurred since the fire was extinguished. Like many other roads in drainage bottoms, this road was vulnerable to any runoff events before the fire. The clay/silt mudflow deposits covering the road have now hardened into a uniform layer with a water resistant crust. These hardened mudflow deposits and the absence of vegetation throughout the area may attract all varieties of vehicle use unless restrictions are posted and enforced.

B. Emergency Treatment Objectives:
The objectives are to protect spring boxes from sedimentation, protect the roads from damage from increased runoff, and to warn visitors to the area of potential dangerous conditions.

Domestic Livestock Grazing
The objective is to temporarily restrict livestock grazing within the burn area for beginning August 1,2006 and continuing at a minimum until December 31, 2008 to allow the burn area to revegetate, and stabilize.

Roads
The objective is to protect the roads from damage from increased runoff by elevating the road surface and improving drainage.

Signing roads for public safety and OHV travel restrictions. Temporarily issuing an emergency closure order prohibit OHV travel in the burn area.
The objective is the protection of human life to post-fire hazards, and to restrict OHV travel in the burn area to reduce soil erosion, and increase the revegetation success.

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

Land __ % Channel __ % Roads __ % Other **0** % First storm already occurred

D. Probability of Treatment Success

Treatment	Years after Treatment		
	1	3	5
Land			
Channel	70	90	90
Roads	80	80	80
Recreation	80	80	80

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

F. Cost of Selected Alternative (Including Loss):

G. Skills Represented on Burned-Area Survey Team:

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

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. **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:

Weed free straw will be placed upstream of springbox in Risue Canyon and secured in place by rebar. This will protect the springbox from constantly being filled in with sediment after each storm event.

Gravel will be placed in the road next to a spring in Jackass Creek to faciltate water traveling to the creek and eliminating the need for vehicles from driving around the muddy portion of the road and damaging the springbox next to the road. Funding for this will come from suppression dollars.

Roads and Trail Treatments:

Risue Canyon Road (# 42050):

Note: Estimates include F.O.R. & hourly equipment costs, transport and support vehicle mileage costs, salary and per diem.

Protect road from increased runoff effects and restore a maintainable driving surface.
Work activities:
Rebuild existing angled road dips to direct runoff and debris flows across the road (to prevent damaging flows from migrating within the road prism); construct additional angled road dips where necessary. ***Estimate*: 12 dips @ $ 1,500/each = $ 18,000**

Place rock riprap to armor road dip outlets and vulnerable portions of the road embankment adjacent to the main channel. ***Estimate*: 100 cubic yards @ $ 175/cubic yard = $ 17,500** {Includes purchase and delivery of riprap material (from Minden) to a stockpile site east of Eastside Lane; reloading, hauling and placement of the material at various work sites.}

Construct a 350' berm along the road shoulder to protect against flooding from an adjacent mud & debris choked wash. ***Estimate*: $ 2,500**

Dredge short segments of wash (adjacent to road drainage features) to remove mud & debris deposits that will result in floodwater pooling and overflow onto the roadway. ***Estimate* a combined total of 600' for $ 3,500**

Place gravel material from nearby wash (outside the burned area) on the flooded road segments (which were temporarily rebuilt with muddy sediment after the rain event) to restore the maintainability of the driving surface. ***Estimate*: 150 cubic yards @ $ 40/cubic yard = $ 6,000** {Includes excavating, loading, hauling, placement and grading of the material at work sites.}
Remove, clean and re-position existing cattleguard $ 2,500

Warning signs *Estimate*: 6 @ $ 300/each = $ 1,800 {Includes purchase, hauling, assembly and installation at four sites.}

Taylor Valley Road (# 42195):

Establish a closure south of the Risue Canyon Road ***Estimate*: 165' for $ 8,000** {Includes purchase, delivery, off-loading, reloading, hauling and installation at the closure site.}

Note: The closure will consist of spaced barrier rocks (or 10' jersey barriers) at an effective "pinch point" to exclude travel into the flood prone burned area by full-size vehicles.

Warning signs *Estimate*: 2 @ $ 300/each = $ 600 {Includes purchase, hauling, assembly and installation at the closure.}
Warning signs *Estimate*: 2 @ $ 400/each = $ 800 {Includes purchase, hauling, assembly and installation near the junction of Lobdell-Jackass Flat Road (# 42067) in section 8.}

Lobdell-Jackass Flat Road (# 42067):

No work items proposed.

Structures:

Safety/Protection:
OHV patrol are needed to ensure compliance of closure order to protect the burned areas from resource damage by OHV's to faciltate recovery of the landscape.

The signs are needed to ensure the public is aware of the hazards in the burn area, especially concentrated along the access roads most commonly used. Install warning signs in zones of flash flood potential and rolling rock hazard. Install closure signs at Taylor valley road.

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.)

Range Improvement: No monitoring will be required.

Cheatgrass Invasion: No monitoring will be required.

Noxious Weeds: No monitoring will be required.

Domestic Livestock: 5 days for a GS-9 Rangeland Management Specialist to visit the burned area to ensure that domestic livestock are remaining off the burned area.

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

			NFS Lands				Other Lands			All
		Unit	# of	WFSU	Other	# of	Fed	# of	Non Fed	Total
Line Items	Units	Cost	Units	SULT $	$	units	$	Units	$	$
A. Land Treatments										
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Land Treatments				$0	$0		$0		$0	$0
B. Channel Treatments										
Spring box protection	each	1000	1	$1,000	$0		$0		$0	$1,000
Risue Dredge Wash	each	3500	1	$3,500	$0		$0		$0	$3,500
				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Channel Treat.				$4,500	$0		$0		$0	$4,500
C. Road and Trails										
Spring box protection	each	5000	0	$0		1	$5,000			$5,000
Risue Road Dips	each	1500	12	$18,000						$18,000
Risue Rip Rap	yards	175	100	$17,500						$17,500
Risue Berm	each	2500	1	$2,500						$2,500
Risue Gravel	yards	40	0	$0						$0
Reposition cattleguard	each	2500	0	$0						$0
Insert new items above this line!				$0	$0					
Subtotal Road & Trails				$38,000	$0		$5,000			$43,000
D. Safety and Protection Structures										
Taylor road closure	each	8,000	1	$8,000	$0					$8,000
Risue Warning signs	each	300	6	$1,800	$0		$0		$0	$1,800
Taylor warning signs	each	300	2	$600						$600
Taylor warning signs	each	400	2	$800						$800
OHV closure signs	each	70	10	$700	$0		$0		$0	$700
OHV Patrol	each	250	10	$2,500	$0		$0		$0	$2,500
Insert new items above this line!				$0	$0		$0		$0	
Subtotal Safety and Protection				$14,400	$0		$0		$0	$14,400
E. BAER Evaluation										
Team Assessment	each		1	$12,000	$0					$12,000
				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Evaluation				$12,000	$0		$0		$0	$12,000
F. Monitoring										
Veg and range monitoring	Person	200	5	$1,000	$0		$0		$0	$1,000
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Monitoring				$1,000	$0		$0		$0	$1,000
G. Totals				**$57,900**	**$0**		**$5,000**		**$0**	**$74,900**
Previously approved				$6,000						
Total This Request				**$51,900**						

PART VII - APPROVALS

1. Edward C. Monnig — 11/13/2006
   Forest Supervisor (signature) — Date

2. _____ _____

Regional Forester (signature) Date