Date of Report: September 8, 2003 Updated Final Report September 10, 2004

BURNED-AREA REPORT

(Reference FSH 2509.13)

The new updated FINAL accomplishment information is in BLUE

New and updated information and costs are in red (9/8/03)

This interim report describes the emergency watershed treatments accomplished to date. 1) Culvert and ditch cleaning was accomplishment by fire rehab. contractor at NO COST to BAER. 2) The Sunset Heights Subdivision spring waterbox area was straw mulched on approximately ½ acre; 3) Approximately ½ mile of a FS jeep road was ripped, outsloped, outside berm removed, and installed drainage dips/waterbars to minimize surface soil erosion on the road surface from increased water flows from the burned watershed above the road; 4) Contour felling of dead conifer trees on approximately 10 acres to minimize surface soil erosion. 5) No gate was required on Mulkey Creek since the 4x4's and ATV's could bypass the area. 6) Harmony Mineapproximately 10,000 cubic yards of toxic copper mine tailings were removed thru the CERCLA Removal Action. (No Cost to BAER).

For next fall, a range rider is required for 30 days to protect the new vegetation on a range allotment within the Withington Creek fire. This area is part of a pasture unit. The estimated cost is approximately \$2,000 for one month in September. Other treatments looked at included a temporary electric fence and removing cattle. The cost to install approximately two miles of temporary electric fence is approximately \$2,500 for material and then labor is extra. The fence will be more effective, but inaddition to higher costs, the fence will likely have serious maintenance problems, such as snags falling across the fence. The removal of livestock is unwarrwanted due to the fact that only a small percentage of the grazing unit needs protection.

BAER Monitoring for FY04 will be checking the land treatments of the following: 1) Straw mulching and diversion ditch; 2) Contour felling of conifer trees and 3) Jeep road water erosion control.

Knapweed monitoring will start in the spring of 2004.

The new updated FINAL accomplishment information for FY 2004 is written in BLUE, and is found under the Monitoring Narrative; Knapweed Monitoring and Land Treatment and Part VI.

PART I - TYPE OF REQUEST

- A. Type of Report
 - [X] 1. Funding request for estimated WFSU-SULT funds
 - [X] 2. Accomplishment Report
 - [] 3. No Treatment Recommendation
- B. Type of Action
 - [X] 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
 - [X] Status of accomplishments to date
 - [X] 3. Final Report (Following completion of work)

PART II - BURNED-AREA DESCRIPTION

A. Fire Name: Withington

B. Fire Number: H49999

C. State: Idaho

D. County: Lemhi

E. Region: 04

F. Forest: Salmon-Challis

G. District: Salmon-Cobalt and Leadore

H. Date Fire Started: 8/11/03

I. Date Fire Contained: 9/22/03

J. Suppression Cost: \$2.7 millon 8/23/03

K. Fire Suppression Damages Repaired with Suppression Funds

- 1. Fireline waterbarred (miles):
- 2. Fireline seeded (miles):
- 3. Other (identify):
- L. Watershed Number:
- M. Total Acres Burned: 10,500

NFS Acres(8,292) Other Federal (BLM-2,116) State () Private (159)

- N. Vegetation Types: Sub-alpine fir, Douglas-fir, Spruce, lodge-pole pine, shrubs, grouse whortleberry, beargrass, pine grass, mountain mahoney
- O. Dominant Soils: Soil textures include: very gravelly, cobbly or stoney sandy loams or loams on Quartzite; gravelly loams or clay loams on Volcanics: Quartzite: Cryic Ridgelands, Moist Sites; Weakly Dissected Cryic Mountain Slopelands, Moist Sites; Weakly Dissected Mountain Slopelands, Cool and Moist Sites; Weakly Dissected Mountain Slopelands, Warm and Dry Sites; Moderately Dissected Mountain Slopelands, Cool and Moist Sites; Rocky Steep Canyonlands; Steep Glaciated Headlands; Volcanics: Moderately Dissected Mountain Slopelands, Hot and Dry Sites; Strongly Dissected Mountain Slopelands, Cool and Moist Sites; Rocky Steep Canyonlands, Hot and Dry Sites; NRCS adjoining mapping on BLM: MDF- Cronks-Acord complex 20-50%; MTB- Millhi-Lacrol complex, 15-35%; SNAF- Lemco-Friedman complex-20-50%; XHS- Orthids, Rubleland, Rock outcrop 50-80%.
- P. Geologic Types: Quartzite and Volcanics
- Q. Miles of Stream Channels by Order or Class: 22.6 miles perennial;
- R. Transportation System

Trails: 3 miles Roads: est. 15 miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 3,100 (low) 2,650 (moderate) 450 (high)
Un-burned= 2,500ac. approx.; Talus = 1,000 ac. approx. and Rock outcrop= approx. 800 ac

- B. Water-Repellent Soil (acres): est 600, due to dry conditions, soil compaction ,soil textures
- C. Soil Erosion Hazard Rating (acres):(est)

7,400 (low) 2,600 (moderate) 500 (high)

D. Erosion Potential: 2.14 to 3.36 tons/acre

(7-mile watershed @ 30% slope= 2.14; Withington Creek WS @ 50% slope= 3.36)

E. Sediment Potential: 1,451 to 2,042 cubic yards / square mile (7 mile watershed= 1,451; Withington Creek WS= 2,042

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): <u>2- range land</u> All rangeland grass sites observed have recovered within the 1st yr.and about 95% of the pinegrass burned near the contoured felled logs under the Douglas-fir sites has returned and are producing long seed stalks..

5- forest lands 20- streams

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

C. Equivalent Design Recurrence Interval, (years): <u>na</u>

D. Design Storm Duration, (hours): <u>na</u>

E. Design Storm Magnitude, (inches):

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

G. Estimated Reduction in Infiltration, (percent):

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

PART V - SUMMARY OF ANALYSIS

A. Describe Watershed Emergency:

1) Flooding risk at John Skriletz property. 2) Withington Creek county road culvert is undersized. 3) Culverts and drainage structures require cleaning due to two recent rainfall events on the Withington Creek FS road system. 4) Eroding jeep trail road # 31B requires drainage structures. 5) 7-mile culvert under State Highway 93 South is undersized 6) Watershed above the Sunset Heights Subdivision spring box is un-vegetated. 7) Exposed hazardous mine tailings at the Harmony Mine.

BAER ASSESSMENT:

The potential values at risk include the following: 1) 7-mile culvert under State Highway 93 South. 2) Sal Mountain roadless area. 3) Bull and Cut-throat trout in 12-mile Creek and Cut-throat trout in Withington and Haynes Creeks (Cut-throat trout is a Region 4 sensitive, T & E specie). 4) John Skriletz property. 5) Withington Creek county culvert. 6) Culverts on the Withington Creek FS road system. 7) Road # 31B. 8) Exposed hazardous mine tailings at the Harmony Mine. 9) Downstream benificial uses.

Soils Field Reviews: On-Site soil field reviews conducted on August 20, 21, 22 and 24th.

This fire burned from an elevation of about 4,500 above the Salmon River south of Salmon, up to Sal Mountain at 9,592 feet. The fire burned rangelands and forest lands with vast amount of un-burned lands, talus rock and rock outcrop within the fire area. The burn covers 10,500 acres of which the following is estimated: low burn severity = 30 %, moderate burn severity = 25 %, high burn severity = 4 %, un-burned = 24 %, talus = 9 %, rock outcrop = 8 %. Estimated erosion hazard rating: low = 70 %, moderate = 25 % and high = 5 %.

The soils are derived from Challis Volcanics on the west and east sides of the fire and Quartzite in the middle. The burned soil and the un-burned soil both showed hydrophobic conditions about one inch below the surface. The soil texture checked was a silt loam or loam and very dry. It appears that some of the hydrobhobic soil conditions where burned was caused by the fire, but it appears to be a natural condition. The ground surface was covered by approximately 20 to 80 percent of large gravels, cobbles and stones on the quartzite soils and 5 to 20 percent on the Challis volcanics. The slopes generally are very steep, but with areas on the west side ranging from 15 to 30 percent and on the east side of the fire ranged from 25 to 80 percent. On-site investigation on rangeland and forested areas consisted of low and moderated burn severity. From a distance one forested area looked like a high burn severity, but being on-site of the same area, it showed to be moderate, but the burn intensity was high with 2-3 inches of ash covering the surface. Below this high intensity burn area in Withington Creek area is a large amount of low to moderate burn severity areas and where the pine needles are starting to fall on the ground and grass is starting to grow. Also, another dirt road on (BLM) is below this area and above Withington Creek. This will help to minimize the amount of surface and gully runoff into the creek. The preliminary study indicated that some sites had substantial fine root material left in the soil over most of the burned area surveyed, with many fine roots just under the soil surface that were not burned and many areas had needlecast that has started to fall and cover the ground. The needlecast and the vast amount of coarse rock fragments on the quartzite soil surface will help provide protection against surface sheet erosion. All of the main roads checked within the Withington Creek road system appeared to be very stable and showed very little signs of surface erosions. The rangelands are starting to show small growth of 1 to 3 inches for some grass species, since there has been two rain events over the last two weeks. These two rain events were large enough to cause debris flows in the burned areas. No re-vegetation has shown under the ash layer (1-2 inches thick) on the moderate-high burn intensity forested land above Withington Creek. Overall, the total fire area appears to be a good mosaic burn pattern. Some portions of Seven Mile Creek on the BLM was of a high burn severity and intensity, especially in the riparian areas. The lower end of Seven Mile Creek was not burned approximately one mile above the highway. Some areas between the BLM and Forest Sevice showed hydrophobic conditions under the burned sagebrush.

The main fisheries concern is that Bull and Cutthroat Trout are found in 12-mile Creek and Cut-throat Trout in Withington and Haynes Creeks (Cutthroat trout is a Region 4 sensitive, T & E specie). It appears that the fisheries will not be impacted as first thought, since there is not as much anticipated erosion as expected. The Twelve Mile Creek Watershed and Haynes Creek drainage was slightly burned, high up on the mountain side with a lot of unburned vegetated land and talus rocks between the fire and the creeks. The South Fork of Withington Creek (Harmony Fork) riparian areas are burned in some portions, but it appears to be stable enough to handle any runoff concerns. The main Withington Creek is burned in some areas, but the vegetation is growing back that will help protect fisheries.

This fire area does not lend itself to aerial reseeding due to very steep slopes, very rocky surface, very small area of potential concerns and the cost would exceed the benefit. There might be a need for hand seeding or applying straw mulching in a small area in the Withington Creek area, but this will be looked at a later date before this winter.

A range rider may be required next spring or summer to protect areas burned, between the Forest Service and BLM rangeland. These two areas lost a good portion of fence that separated the allotments. A range rider might be required so the native grasses and shrubs have an oppertunity to re-establish and grow and to increase their survival rate. The two areas are in the head of Mulkey Creek and on the west side above the Sunset Heights Subdivision. The cost analysis for a range rider will be determined this winter. If this proves to be cost effective verse a new fence, then a new interm BAER request will be sent to the Regional BAER Coorinator.

A new gate is required in the upper end of Mulkey Creek to keep out the 4x4 and ATV's from driving up the creek onto the unprotected Forest Lands.

The Salmon-Cobalt and Leadore Ranger Districts of the Salmon National Forest has knapweed at lower elevations along all roads entering and within the fire area. (see Monitoring for Knapweed below).

Hydrology Field Reviews

Eli Creek Subwatershed

On August 19, 2003 a field review of the Sunset Heights/Eli Creek Area was done to look at fire effects. A focus of the field review in this area was to look at the Sunset Heights Water System and determine restoration needs on the Forest to protect this water system.

There is a small watershed area (1/2 acre) located above the Sunset Heights Subdivision spring headbox that was burned in the fire. The steep slope below the source area burned hot in the fire and the riparian vegetation is completely consumed. At the slope break below the steep slope the riparian vegetation, consisting of aspen and brush, is burned in patches, but is mostly unburned. This area should provide a good sediment filter for erosion from the steep slope. There does not appear to be a significant risk of flooding to residences in the Sunset Heights area from this fire. While the fire did burn the upper end of several small drainages above the subdivision, the lower portions of these drainages did not burn and there appears to be depositional areas above the subdivision.

Sevenmile Creek Subwatershed

On August 20, 2003 a field review was conducted in the Sevenmile Creek drainage. The upper and middle portions of this watershed were mostly burned in the fire. The vegetation in the upper watershed consisted of timber and some grass/sagebrush. In the middle portion of the watershed the fire burned in grass/sagebrush. The lower portion of the watershed has a mosaic of fire mostly in grass and sagebrush.

Just above the Forest Boundary there is a wet meadow/pond that had a livestock exclosure around it and the fence was partially burned in the fire. This area will serve as a sediment deposition area from the upslope burned areas. This wet meadow appears to be the remnant of a small reservoir that served as an irrigation water storage reservoir. A dam below the meadow appears to have failed in the past and caused a flood in Sevenmile Creek that caused significant channel downcutting. This can be corrected by reconstructing the exclosure fence around the wet meadow. This meadow will be important for trapping sediment from the burned upslope area. This can be done with Watershed Improvement funds.

The upper portion of the Sevenmile Creek watershed is in Quartzite parent material. Slope instability is rare in quartzite derived soils. The middle and lower portions of the Sevenmile Creek drainage are in Challis Volcanics and slope instability is evident along the drainage. Evidence of historic and recent slumps/landslides can be seen along the slopes above the stream. It is probable that the flood event that caused the channel downcutting could have cut the toe of the slopes causing some of the slope failures. In the portions of the watershed with Challis Volcanics the vegetation was mostly grass/sagebrush with very few trees on the slopes, therefore the slope stability/instability is probably not considerably changed as a result of the fire.

At the mouth of Sevenmile Creek there is a 42 inch round culvert where Hwy 93 crosses the stream. This culvert probably does not have sufficient capacity for the anticipated runoff from the burned watershed. Because of the small amount of fill above the culvert it appears to be infeasible to replace this culvert with a larger one. It might be possible to install two culverts side-by-side at this crossing. IDOT will be notified of the risk of this culvert failure.

Withington Creek Subwatershed

On August 21, 25 and 26, 2003 field reviews of the Withington Creek subwatershed were conducted. Key items to review in the Withington Creek drainage were the Harmony Mine and the existing road system.

On August 21st a review of the stream crossings on the Withington Creek Road and an assessment of the flooding risks was completed below the Forest boundary. The culvert (60 inch squash pipe) located on the Withington Creek Road between Valley of Praise and the Skriletz residence has inadequate capacity for the anticipated runoff. The capacity of this pipe is greatly reduced by deposition in the pipe. At the low water stage during the field review there was only about 1 foot of unused capacity in the pipe. This section of the Withington Creek Road is maintained by Lemhi County. The county will be informed of the concern about this pipe. In conversations with local residences we were informed this pipe almost was overtopped during the 2003 runoff and the road almost washed out at this crossing. The remainder of the stream crossings on private land appeared to have adequate capacity for the anticipated post-fire runoff.

On August 25, 2003 a field review of the Harmony Fork of Withington Creek was completed. On Friday, August 22nd a rainstorm occurred in the fire area. This storm caused debris torrents on two small drainages in the Harmony Fork of Withington Creek. The debris flows were a mix of talus rock, ash and soil. The road to the Harmony Mine has been covered by debris flows from the fire area in several locations.

Slopes in the Harmony Fork have a large component of rock and are very stable. No evidence of any appreciable surface erosion or rilling was evident from the recent storm.

At the Harmony Mine the mill building and cabins have been completely destroyed by the fire. Only concrete piers, nails and other metal debris remain after the fire. The mill tailings that are located in the valley below the old mill site are unstable and susceptible to surface erosion. When the mine was in operation the upslope water was carried around the tailings impoundment and then flumed down to the existing stream channel below the impoundment. At some time in the past the ditch failed causing the water to flow into the tailings impoundment. The tailings dam failed and a significant portion of the tailings washed downstream. Evidence of tailings deposition can be seen in downstream low gradient stream reaches. An estimated 40,000 cubic yards of unstable mine tailings remain on site and pose a water quality threat to Withington Creek. Metals of concern in the tailings include copper, cobalt, zinc, lead, silver, selenium and arsenic (Harmony Mine Site, Preliminary Assessment/Site Inspection Report. EPA 2000). A more detailed discussion of the water quality concerns can be found in the Preliminary Assessment/Site Inspection Report

The watershed area above the tailings area was almost completely burned in the Withington Fire. With the increased runoff anticipated from the burned area the risk of erosion and transport of the tailings downstream is greatly increased over the pre-burn conditions. The tailings should be removed from the valley bottom and placed in a stable repository away from surface water. This action needs to be accomplished before winter to prevent further erosion of the tailings material during the spring snowmelt period. The Forest Minerals Administrator is currently working with EPA and the State of Idaho Department of Environmental Quality to determine the best way to expedite the removal of this hazardous material.

On August 26, 2003 a field review of the main fork of Withington Creek was conducted to determine restoration needs. There is an extensive road network in this fork of Withington Creek. The majority of these roads are stable and except for one road segment, the roads did not show evidence of surface erosion following the August 22nd storm. There is a need to clean culvert inlets and install drainage dips along the road network in some locations. To reduce surface erosion and enhance vegetative recovery on the roads, traffic on these roads should be minimized. An area closure is being written to close these roads to public use for a 1-2 year period.

One segment of road in this drainage is very steep and is actively eroding. This segment showed evidence of surface erosion and downslope soil movement following the August 22nd storm. This road segment needs to be stabilized to reduce soil erosion and potential water quality impacts. The recommended treatment would be to rip the road to break up the soil compaction and increase water infiltration and install water bars. There is approximately 0.4 of a mile of road that needs treatment. Overall there was variable fire intensity in the main fork of Withington Creek Several areas, including the north-facing timbered slopes burned at moderate to high intensity. While there has been a concern about the need to seed these slopes, the effectiveness of seeding in reducing erosion in the first year post-fire is questionable. In many places in this drainage unburned areas in the valley bottom should serve as effective sediment filters and reduce the risk of stream sedimentation

B. E	Emergency	Treatment	Ob	jectives:
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Reduce the amount of potential surface soil erosion on about ½ acre watershed above the spring headbox located above the Sunset Heights Subdivision on Forest Service land; Protect culverts and road drainage system within the Withington Creek road system; Minimize surface soil erosion on FS road 31B.

C. Probability of Completing Treatment Prior to First Major Damage-Producing Storm: (There has been 2 damage producing storm events over the last three weeks)

D. Probability of Treatment Success

	Years after Treatment					
	1	3	5			
Land	90	90	80			
Channel						
Roads						
Other	90	90	90			

- E. Cost of No-Action (Including Loss): est \$ 7,000-10,000
- F. Cost of Selected Alternative (Including Loss): \$ 3,653 (W/O BAER Costs)
- G. Skills Represented on Burned-Area Survey Team:

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

Team Leader: Gary Jackson

Email: gljackson@fs.fed.us Phone: 208-756-5110 FAX: 208-756-5151

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:

Mulch straw on about ½ acre of a small watershed around and above the Sunset Heights Subdivision spring box located on Forest Service Lands that is used for their water system. This will reduce the potential amount of sediment from reaching the spring box area. This will be completed before the first snow this late fall. A four person fire crew spent about 4 hours including travel and time to spread straw at the above ½ acre site. Estimated cost of fire crew and 2 Forest Service employees was about \$599. (FY04). The fire crew then selectivity contour felled approximately 28 dead, burned trees on about 10 acres to help reduce on-site soil surface erosion and added straw behind logs to prevent seeping under logs. This occurred in the high intensity burned small stand of trees in the main Withington Creek area. Approximately 12 hours for a 4 person fire crew.and 16 hours of 2 Forest Service employees estimated cost was \$1,531 (FY04). NO gate was installed on Mulkey Creek since jeeps and ATV's could bypass the area and continue into the burned area. For next spring (FY04), a Range Rider is required for 30 days to protect the new vegetation on a range allotment within the Withington Creek fire. Estimated cost is approximately \$2,000 for the one month period. The cost to install aproximately two miles of fence is \$2,500 for material and then extra for labor. The fence is more effective, but has serious problems such as snags falling across the fence and maintainence.

<u>Channel Treatments</u>: Off Forest Major Concerns

1) Inform John Skriletz of the flooding risk at his property and the need to remove the debris from Withington Creek below the irrigation diversion. 2) Inform Lemhi County of the need to replace the culvert on the Withington Creek Road between Valley of Praise and the Skriletz residence. 3) Inform the State of Idaho Transportation Department about the potential problems with the 7-mile culvert under State Highway 93 South being undersized for the potential flooding. Completed. 1) Mr. John Skriletz was contacted in person; 2) Mr. Kerry Cheney of the Lemhi County Road and Bridge Department and 3) Mr. Tom Cole of the Idaho Department of Transportation were both sent letters (on file with BAER folder).

Roads and Trail Treatments:

Protect culverts and road drainage system within the Withington Creek FS road system; Reduce the surface soil erosion on FS road 31B by ripping and installing drainage dips on the steep, eroding jeep trail, that takes off from Road #31. Culverts and ditches were cleaned on FS roads 31 and 31A by fire rehab equipment at the same time that fire rehab was occurring on site. No cost to BAER. One day was spent to aid contractor on FS road 31B by ripping, removing outside berm, outsloping and installing dips and waterbars to approximatel ½ mile of dirt road. This was required to help minimize surface erosion on the road from the burned watershed above the road. Cost was \$450.00 (FY04).

Structures: Harmony Mine

Work with EPA and the Department of Environmental Quality to determine the best approach to expedite the removal and appropriate disposal for the hazardous tailings present at the Harmony Mine. The risk of erosion and downstream transport of this material is significantly elevated due to the increased runoff anticipated from the burned watershed above the tailings area. CERCLA funding would be used for this removal action. Completed. Approximately 10,000 cubic yards of copper toxic mine tailings were removed from the existing tailings pile and moved to a secure repository site approximately 1 mile below the mine site on land administered by the Forest Service. This was a joint share with the Forest Service and EPA thru the CERCLA Removal Action costing approximately \$570,000.

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.)

Noxious Weed: Knapweed

Knapweed is found at all Drop Points and on all roads at low elevations including: McDevitt Creek, Haynes Creek and Withington Creek. The monitoring on the Salmon-Cobalt and Leadore Ranger District of the Salmon National Forest will consist of the following: The safety zone at Drop Point # 5, two dozer lines above Drop Point # 5 and # 10 south of F.S. road 31A; the upper elevations of the Haynes/McDevitt loop road, Haynes/Kadletz loop road, Cheney Creek road, Upper Withington Creek Road, Upper Mulkey Creek 4x4, ATV road; the two track jeep Ridge Road between Mulkey and Withington Creek: the ½ mile of old 4x4 road above the Sunset Heights Subdivision that extended to the north, where they constructed a new road down the sidehill to meet the other roads below; the watertrough/feeding site at "Frying Pan Meadows Spring"; Spike Camps on Kadletz/Haynes Creek and Haynes/McDevitt Creek road loop; Drop Points (5, 10, 35, 40) and the helispots (H-2 and H-3). Helispot H-1and drop point # 30 both contais knapweed according to resource advisors. The Observation overlook on the ridgetops between Haynes Creek and Cheney Creek to the north, the west side of roads # 660 and #119, in sections 31, 6, 18.(east of Joe Moore Creek). Generally, knapweed in the first year might be hard to identify until it has enough growth to identify verses the other weeds that might also become established at the same time. Therefore, monitoring dollars will be requested at the end of the first year for the second year to make sure the idenity of any new knapweed infestations.

EFFECTIVENESS MONITORING

Noxious Weed: Knapweed

No new knapweed seedlings were observed during the FY04 monitoring program on Forest Service lands where they have not been established before. Existing knapweed site were observed during the monitoring program on the BLM, the State of Idaho section at Baldy Basin, and lower elevations on Forest Service lands. Monitoring dollars will not be requested for FY05.

Land Treatment Monitoring

BAER Monitoring for FY04 will be checking the land treatments of the following: 1) Straw mulching and diversion ditch; 2) Contour felling of conifer trees, 3) Jeep road water erosion control, 4) Range Rider.

- 1. The Sunset Heights Subdivision spring waterbox area on Forest Service land was straw mulched on approximately ½ acre to minimize surface soil erosion from the burned land. Also include was a cleanout of a water diversion ditch above the spring box. Effectiveness monitoring was completed on September 9, 2004 and indicated that no surface soil erosion occurred. The straw cover and cleaned out ditch prevented any material to flow down into the spring box area.
- 2. Contour felling of dead conifer trees on approximately 10 acres on hillside to minimize surface on-site and off-site soil erosion. Effectiveness monitoring was completed on August 12, 2004. All contoured fell logs are in excellent condition and no surface erosion has been observed. All logs contain wheat straw on the up-hill side that has germinated and prevented any surface erosion under the logs.
- 3. Approximately ½ mile of a Forest Service jeep road was ripped, outsloped, outside berm removed, installed drainage dips/waterbars to reduce the soil surface erosion on the road from the burned hillsides above the road. Effectiveness monitoring was completed on August 12, 2004. No surface erosion occurred and road is in excellent condition.
- 4. A range rider was required for 30 days to protect the new vegetation on a range allotment within the Withington Creek fire. A range rider was hired from August 10 to September 10, to keep the cattle out of the burned areas and to protect the new seedlings.

REGION-4

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

Line Items A. Land Treatments Mulching/Sunset Heights Water System (1/2 ac) Material/NoxiousWeedFreeStraw labor Subtotal Land Treatments Actual cost of straw & labor Contour felled trees- erosion barriers	Units No. Mo.	Unit Cost	# of Units	WFSU SULT \$ \$0 \$50 \$500 \$550 \$599	Other \$	# of Units	Fed \$	# of Units	Non Fed \$	All Total \$
A. Land Treatments Mulching/Sunset Heights Water System (1/2 ac) Material/NoxiousWeedFreeStraw labor Subtotal Land Treatments Actual cost of straw & labor Contour felled trees- erosion	No.	Cost		\$0 \$0 \$50 \$500 \$550			\$		Fed \$	\$
A. Land Treatments Mulching/Sunset Heights Water System (1/2 ac) Material/NoxiousWeedFreeStraw labor Subtotal Land Treatments Actual cost of straw & labor Contour felled trees- erosion	No.	Cost		\$0 \$0 \$50 \$500 \$550			\$		\$	\$
A. Land Treatments Mulching/Sunset Heights Water System (1/2 ac) Material/NoxiousWeedFreeStraw labor Subtotal Land Treatments Actual cost of straw & labor Contour felled trees- erosion	No.			\$0 \$ 50 \$500 \$550	•		\$0			
Mulching/Sunset Heights Water System (1/2 ac) Material/NoxiousWeedFreeStraw labor Subtotal Land Treatments Actual cost of straw & labor Contour felled trees- erosion		\$55		\$ 50 \$500 \$550			+		\$0	0.5
System (1/2 ac) Material/NoxiousWeedFreeStraw labor Subtotal Land Treatments Actual cost of straw & labor Contour felled trees- erosion		\$55		\$ 50 \$500 \$550			+		\$0	90
Material/NoxiousWeedFreeStraw labor Subtotal Land Treatments Actual cost of straw & labor Contour felled trees- erosion		\$55		\$ 50 \$500 \$550			+		\$0	0.2
labor Subtotal Land Treatments Actual cost of straw & labor Contour felled trees- erosion		\$55		\$500 \$550					1	
Subtotal Land Treatments Actual cost of straw & labor Contour felled trees- erosion		\$55		\$550			\$0		\$0	\$ 50
Actual cost of straw & labor Contour felled trees- erosion		\$55					\$0		\$0	\$ 500
Contour felled trees- erosion		\$55		\$599			\$0		\$0	\$550
		\$55								\$599
		\$5 5								
Darriers		ของ	28	\$1,531						\$1,531
Range Rider	IVIO.	\$2,000	1	\$2,000						\$2,000
itange Ridei		Ψ2,000		Ψ2,000						Ψ2,000
B. Channel Treatments							<u> </u>			
Di Ginamiori i roddinionio				\$0			\$0		\$0	\$0
Subtotal Channel Treat.				\$0			\$0		\$0	\$0
C. Road and Trails				7.0			<u>, </u>		7-1	
Rip FS jeep Rd # 31B									ĺ	
· · · · ·	Hrs.	\$58	6	\$348						\$348
operator I	Hrs.	\$24	6	\$144						\$144
mobilization				\$ 80						\$ 80
Subtotal Road				\$572						\$572
Actual Cost				\$450						\$450
Clean culverts/ditches/rd#31,31A				\$0			\$0		\$0	\$0
backhoe	Day	\$100	1	\$100						\$100
Operator/labor [Day	\$300	1	\$300						\$300
mobilization [Day	\$100	1	\$100						\$100
FOR [Day	\$ 30	1	\$ 30						\$ 30
Subtotal Culvert				\$530						\$530
Actual Cost				0						0
Road closure on Mulkey Creek	_		_							
<u> </u>	each	\$100		\$100						\$100
	Hrs	\$ 17	3	\$ 51						\$ 51
	feet	\$ 1	20	\$ 20					+	\$ 20
	Hrs.	\$ 20	1.5	\$ 30					+	\$ 30
	mile	\$ 2	40	\$ 80						\$ 80
Subtotal gate				\$281						\$281
Actual cost				0 ¢1 202			\$0		ΦO	0 \$1,292
Subtotal Road & Trails Total Actual Cost Road & Trail				\$1,383 \$450			Φ0		\$0	\$1,383 \$450
D. Structures				φ450						Φ450
D. Oli uctui es				\$0			\$0	I	\$0	\$0
Subtotal Structures				\$0 \$0			\$0		\$0 \$0	\$0 \$0
E. BAER Evaluation				φυ			Ψυ		ΨΟ	φυ
Assessment				\$5,211			\$0		\$0	\$5,211

Travel				\$ 37	\$0	\$0	\$ 37
Subtotal BAER-Actual Cost				\$5,248	\$0	\$0	\$5,248
G. Monitoring Cost							
Knapweed							
Haynes/McDevitt loop rd (2							
people)	Hrs.	\$25	10	\$250			\$250
Haynes/Kadletz loop rd;spike							
camp (2 people)	Hrs.	\$25	8	\$200			\$200
Cheney Cr. Rd. (2 people)	Hrs.	\$25	10	\$250			\$250
Upper Mulkey Cr. rd	Hrs.	\$25	8	\$200			\$200
Observation overviews	Hrs.	\$25	3	\$75			\$ 75
Helispots (H-2,3 /1 person)	Hrs.	\$15	2	\$ 30			\$ 30
Helispot (H-2) helicopter-1 per.	Hrs.	\$670	1	\$670			\$670
Drop Points (4sites/ 1 person)	Hrs.	\$15	3	\$ 45			\$ 45
, , ,				·			•
Subtotal Monitoring			45	\$1,720			\$1,720
				¥ 1,1 = 5			¥ - ,- = -
H. Totals				\$8,901			\$8,901
Actual Cost Spent excluding							
Knapweed Monitoring				\$7,827			\$ 7,827
Amount left for Knapweed				.			.
Monitoring in FY04				\$1,074			\$ 1,074
Money required for FY04				Ф C4C			Ф 040
Knapweed Monitoring				\$ 646			\$ 646
· '	Month	\$2,000	1	\$2,000			\$ 2,000
BAER Monitoring	Hrs	\$35	8	\$280			\$280
H. TOTAL REQUESTED							
(FY04)				\$2,926			\$ 2,926
Money avail. For Knapweed				•			
Monitoring (FY04)				\$1,720			\$1,720
Actual Cost Knapweed	desi	¢220		¢4 220			£4.220
Monitoring (FY04)	day	\$330	4	\$1,320			\$1,320
Actual Cost Range Rider (FY04)	month	\$2,000	1	\$2,000			\$2,000
Actual Cost BAER Monitoring	month	\$2,000	•	\$2,000			Ψ2,000
(FY04)	day	\$280	1	\$280			\$280
TOTAL ACTUAL COST (FY04)		,		\$3,600			\$3,600
Amount not needed & left over				\$400			\$400
Amount not needed & left Over				ΨΨΟΟ			φ+υυ
TOTAL COST (FY 03 &							
•			a	11 420			144 400
04)			1	311,428			11,428

PART VII - APPROVALS

1.	/s/William A. Wood WILLIAM A.WOOD		
	Forest Supervisor (signature)	Date	
	, ,		
2.	/s/		
	Regional Forester (signature)	Date	