



United States  
Department of  
Agriculture

Forest  
Service

Intermountain  
Region

324 25<sup>th</sup> Street  
Ogden, UT 84401-2310

**File Code:** 2520-3

**Date:** October 11, 2000

**Route To:**

**Subject:** Diamond-Flossie Complex Initial BAER Request

**To:** Chief

I have approved the enclosed Initial 2500-8 BAER requests for the Diamond-Flossie Complex (Diamond and Flossie 2500-8's). These fires together are above our Regional authority and are being sent to the WO for review and approval. The fires are being considered as one request for funding and logistical purposes. The total initial request for both fires is \$581,582.

A separate interim report will be submitted for approval if additional treatments or changes to proposed treatments are determined necessary to alleviate the emergency conditions that exist. The monitoring costs shown in the 2500-8's are for 1 year of monitoring. The Cultural Resource inventory and monitoring is for evaluation of damages to known sites.

Please contact Jeff Bruggink, Regional BAER Coordinator, at (801) 625-5357 if you have any questions or concerns.

/s/ Jack G. Troyer (for)

JACK A. BLACKWELL  
Regional Forester

Enclosures (2)

Cc:

WO (Max Copenhagen, Margaree Williams)

AS (Mike Clonts)

BPR (Jeff Bruggink, Ken Heffner, Bill Burbridge)



Date of Report: October 3,  
2000

**BURNED-AREA REPORT**  
(Reference FSH 2509.13)

**PART I - TYPE OF REQUEST**

A. Type of Report

- ☒ 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)  
☐ 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: Diamond Complex

B. Fire Number: ID-PAF-014

C. State: Idaho

D. County: Valley

E. Region: 04

F. Forest: Payette

G. District: Krassel

H. Date Fire Started: August 8, 2000

I. Date Fire Controlled: unknown

J. Suppression Cost: unknown

K. Fire Suppression Damages Repaired with Suppression Funds

1. Fireline waterbarred (miles): N/A  
2. Fireline seeded (miles): N/A  
3. Other (identify):

L. Watershed Number: 1706020610      1706020611      1706020612      1706020613  
                                 1706020614      1706020615      1706020513

M. Total Acres Burned: 160,984

NFS Acres (159,442)    Other Federal (0)    State (1319)    Private (223)

N. Vegetation Types: ABLA/VASC; PIAL/ABLA; ABLA/XETE; PSME/SPBE; PSMECAGE;

PSME/AGST; PSME/FEID; PSME/PHMA; ABGR/SPBE; PP/AGST;  
PP/SPBE

O. Dominant Soils: Typic Cryopsamments, Typic Cryochrepts, Lithic Cryorthents,  
Typic Xeropsamments, Lithic Xerorthents

P. Geologic Types: Challis volcanics and Idaho Batholith

Q. Miles of Stream Channels by Order or Class:

R. Transportation System: Trails: 115 miles Roads:      miles Airstrips: 8

### **PART III - WATERSHED CONDITION**

A. Burn Intensity (acres): 90,152 (low) 70,832 (moderate to high)

B. Water-Repellent Soil (acres): 53,124 (estimate only)

C. Soil Erosion Hazard Rating (acres):  
100,068 (low) 25,500 (moderate) 35,417 (high)

D. Erosion Potential: 0.24 tons/acre

E. Sediment Potential: 17.1 cubic yards / square mile

### **PART IV - HYDROLOGIC DESIGN FACTORS**

A. Estimated Vegetative Recovery Period, (years): 3-5

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

C. Equivalent Design Recurrence Interval, (years): 100

D. Design Storm Duration, (hours): 24

E. Design Storm Magnitude, (inches): 2.0 (with snowmelt)

F. Design Flow, (cubic feet / second/ square mile): 67

G. Estimated Reduction in Infiltration, (percent): 10

H. Adjusted Design Flow, (cfs per square mile): 107

### **PART V - SUMMARY OF ANALYSIS**

**A. Description of Watershed Emergency:**

**Threats Private Property**

1. **Taylor Ranch:** This private (University of Idaho) facility is at high risk of flooding and mass wasting based on conditions in the Pioneer, Cliff, and Rush Creek watersheds. Taylor Ranch is situated on an alluvial fan at the mouth of Pioneer Creek. The ranch contains seventeen buildings and facilities including: landing strip, several structures (lab, historic cabins, caretaker's cabin), water system, hydropower, and trail bridges. **Threats to life** and property exist.

Within the Pioneer Creek Watershed: 1) 67 percent was rated moderate-high fire intensity rating  
2) 64 percent was sensitive landtypes to erosion, and 3) 61 percent was rated moderate to high potential for debris slides.

### **Threats to Forest Administrative Sites**

#### **1. Cabin Creek Guard Station, Historic Site, and Airstrip:**

The Forest Service through a fee simple purchase acquired the Cabin Creek property within the Diamond Complex. There are two small cabins that are maintained for historical values and used administratively by the Forest Service. The historic Cabin Creek site is listed on the National Register of Historic Places (NRHP). The guard station, historic cabins and airstrip are located on Cow Creek alluvial debris fan. In 1998, the Forest Service completed a \$100,000 project to rebuild the Cabin Creek Airstrip after a small debris slide diverted water onto the airstrip.

Assessments indicate that increased flows and the potential for debris slides and debris torrents from Cow Creek present a hazard to the Administrative Site, historic site, and airstrip. Within the Cow Creek watershed: 1) 78 percent was rated moderate-high fire intensity rating, and 2) 45 percent was rated moderate to high potential for debris slides.

### **Threat to Airstrips:**

1. **Taylor Airstrip:** The airstrip is constructed on an alluvial terrace generated by aggradations of Big Creek with outwash from Rush Creek. Gabions on the upstream side of the airstrip are causing bank erosion because of their design; gabions have been separated from the bank and are more likely to accumulate trees and other woody debris from the fire, thus further aggravating bank erosion.
2. **Soldier Bar Airstrip:** Soldier Bar is a rough, 1650-foot airstrip with a steep raise and dogleg along the length of the landing surface within the Diamond complex. The State of Idaho Airport Facilities Directory recommends emergency use only on this airstrip. This airstrip receives relatively little use (100 landings a year) due to its roughness, difficult approach, and location across Big Creek from the Big Creek trail (requiring a ford of Big Creek).

Water diversion structures installed on the landing surface were damaged by fire. The ends are loose and may threaten safe aircraft operations. These damaged structures will need to be replaced to prevent erosion.

3. **Dewey Moore Airstrip:** The airstrip is located on a debris fan from older debris torrents that is about 50 feet in elevation above Big Creek. There is a corrugated metal culvert of about 8-inch diameter diverting the entire flow of Acorn Creek under the Dewey Moore emergency airstrip within the Diamond complex. The culvert is subject to plugging from debris, or a debris torrent. The old channel has characteristics of debris torrent events. In addition, there is a tractor buried in

one possible location to which the stream could move, that would potentially expose water to petroleum pollution.

Within the Cow Creek Watershed: 1) 53 percent was rated moderate-high fire intensity rating, and 2) 44 percent was rated moderate to high potential for debris slides.

### **Threats to Bridges**

1. **Big Creek Bridge:** The north abutment of the Big Creek Bridge at Taylor Ranch sits in an old alluvial channel of Cliff Creek. The abandoned Cliff Creek Bridge is situated approximately 20 feet upstream. The Cliff Creek Bridge will effectively act as a trash rack and accumulate any debris routed down the stream. This would easily block the current Cliff Creek Channel and divert the Cliff Creek directly onto the Big Creek Bridge (\$250,000) abutment.

Within the Cliff Creek watershed: 1) 24 percent of the lower third of the watershed burned at a moderate to high fire intensity, 2) The middle section of the “Cliff Creek” contains rock and cliffs, 3) 100 percent of the upper half of the watershed had a stand replacing fire in 1988.

2. **Beaver Creek Bridge:** The wing walls on the Beaver Creek Bridge burned and damaged by fire. High water could erode around the abutment and threaten the bridge.
3. **FS System Bridges (9):** The nine other bridges within the Diamond complex are subject to increased debris accumulation; there are three bridges on Big Creek, four on Beaver Creek, and one each on Crooked Creek and Cave Creek.

### **Threats to Trails**

Assessments revealed significant hazards to users, and impassable conditions on major sections of trail. Many sections of trail were simply blocked by downfall. Other sections of trail – such as lower Beaver Creek and the numerous sections of Big Creek experienced severe damage to the tread. This tread damage is related to sluffing associated with loss of downslope vegetation, rock slides, burned out of stumps or other woody material in the tread berm or downslope of the tread. The result is a narrower, uneven and rough tread, or in some situations the total disappearance of the trail prism and any discernible travel way.

Trails within the Diamond fire appear to have experienced the greatest damage to tread and will present the greatest challenge to repair and stabilization. In some case water diversion structures (water bars) were burned which will also increase potential for erosion damage to the trail. It is anticipated that problems with gully and erosion channels will worsen with the impaired watershed and trail condition as a results of the fire. It is clear that further damage to the trail system due to runoff erosion will be inevitable, although there may be opportunities to limit it to some extent with fall and early spring work.

The Big Creek Trail provides the only trail access to the BAER treatment sites at Gold Creek, Whiskey Creek, Dewey Moore Airstrip, Cabin Creek Admin and Airstrip, Soldier Bar Airstrip, and Taylor Ranch.

## **Threats to Campsites and Wilderness Use**

1. **Campsites and Wilderness Use:** The BAER Team has identified several high-risk areas that are frequently used as dispersed campsites. These include mouths of steep drainages with extensive moderate to high intensity burn such as Acorn, Buck, Cow, Deer, Rush/Lewis, Pioneer, and Eagan Creeks. These and other areas have elevated risk of flash flood events with high water and/or debris slides or debris torrents. High-risk periods include: spring snowmelt runoff, rain-on-snow events, and high intensity convective summer storms. In addition, the team has identified the threat from outfitter and guide and recreation livestock grazing on potential vegetative recovery.

### **Loss to Wilderness Resource, Water Quality, and T&E Species**

**Gold Creek Culverts:** There is a non-system trail in Gold Creek with two culverts within the Diamond complex. The culverts are part of an old abandoned road, and do not meet PACFISH standards and are not maintained. The culverts are susceptible to plugging with debris from the fire and causing failure of the old road prism. The culverts in Gold Creek have an increased risk from flood flows because 60 percent of the fire burned at moderate to high intensity. The Forest and NFMS would consider this an unacceptable amount of fine sediment to Big Creek.

**Whiskey Creek Culvert:** There is a corrugated metal pipe under the trail at Whiskey Creek within the Diamond complex. The culvert does not meet PACFISH standards and is not maintained. The culvert is susceptible to plugging with debris from the fire and causing failure of the old road prism. The Forest and NFMS would consider this an unacceptable amount of fine sediment to Big Creek.

### **Threats from Noxious Weeds**

The noxious weeds, spotted knapweed (*Centaurea maculosa*), rush skeletonweed (*Chondrilla juncea*), yellow toadflax (*Linaria vulgaris*), and canada thistle (*Cirsium arvense*) currently infest about 32 acres within the Diamond fire. Two invasive species, cheatgrass (*Bromus tectorum*) and sulfur cinquefoil (*Potentilla recta*) have also invaded disturbed sites. Significant threats to ecosystem integrity exist from the potential invasion of noxious weeds and invasive non-native plants at low elevations in the Big Creek drainage.

Noxious weed invasion is expected in areas within high intensity burn areas, scoured channels, airfields, and trails. Infestations which have the highest likelihood of spreading to surrounding lands include: Cabin Creek Airstrip, Soldier Bar Airstrip, Monument Airstrip, Goat Creek, and Rush Creek trail.

### **Threats to Cultural Resources**

The Heritage Program records for the Payette National Forest (PNF), listed 89 prehistoric and historic properties within the Diamond and Flossie Complex fire area. Of this number, 44 prehistoric and historic properties are considered as eligible for listing onto the National Register of Historic Places (NRHP).

The risk to prehistoric properties will occur through increased erosion or sedimentation. The Pioneer Creek and Calf Creek drainages will likely contribute seasonal sedimentation upon the historic properties located on their alluvial fans at the Taylor Ranch and Cabin Creek NRHP. Damage to prehistoric and historical archaeological sites and historical standing structures may be caused by erosion of stream banks that can undermine the terraces that these sites are located on. Blowouts in upper stream drainages may destroy portions of historic trails or cause archaeological sites or standing structures to be buried or collapse.

**B. Emergency Treatment Objectives:**

1. Eliminate threat to life.
2. Reduce hazards to employee and public.
3. Protect property and facilities from additional damage.
4. Prevent unacceptable loss of Wilderness resources, water quality, and T & E species.

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

Land 80 % Channel 80 % Roads     % Other 80 %

**D. Probability of Treatment Success**

	Years after Treatment		
	1	3	5
<b>Private Residences:</b>			
Taylor Ranch	50	60	70
<b>Admin Sites and Airstrips:</b>			
Cabin Creek Admin and Airstrip	80	80	90
Soldier Bar Airstrip	90	90	90
Dewey Moore Airstrip	70	80	90
<b>Bridges, Trails, Camps:</b>			
Big Creek Bridge	80	80	90
Beaver Creek Bridge	80	80	90
System Bridges (9)	80	80	90
Diamond Complex Trails	80	80	90
Gold Creek Culverts	80	80	90
Whiskey Creek Culvert	80	80	90
Campsites and Public Info	80	80	90
<b>Land Treatments:</b>			
Noxious Weeds	80	80	80
<b>Cultural/Historic Resources:</b>			
Site Monitoring	80	80	90

**E. Cost of No-Action (Including Loss):** \$8,160,728.00

**F. Cost of Selected Alternative (Including Loss):** \$368,545.00

**G. Skills Represented on Burned-Area Survey Team:**

☒ Hydrology    ☒ Soils    ☐ Geology    ☐ Range    ☒ Wilderness  
☐ Forestry    ☐ Wildlife    ☒ Fire Mgmt.    ☒ Engineering

☐ Contracting      ☐ Ecology      ☒ Botany      ☒ Archaeology  
☒ Fisheries      ☐ Research      ☐ Landscape Arch      ☒ GIS

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## **H. Treatment Narrative:**

### **Private Property:**

1. **Taylor Ranch:** Assistant Dean Leonard Johnson, University of Idaho, was contacted on September 18, 2000 and informed that the BAER Team determined there was a threat to life and property. The Forest is attempting to facilitate a cooperative effort to address **the threat to life** at Taylor Ranch. A meeting between the University, a NRCS Team, and the Forest is tentatively scheduled on October 12 at Taylor Ranch to begin a detailed cooperative assessment on needed action. Cost is estimated only for the Forest involvement in that process.

Cost: \$4,842

Benefits: \$2,000,000. Allows for possible protection of University of Idaho structures and property. **Reduce direct threat to life by identifying the risk and developing a safety plan.**

### **Forest Administrative Sites**

#### **1. Cabin Creek Guard Station and Airstrip**

Objective: Protect the Cabin Creek administrative site, historic cabins, and airstrip by removing hazards and implementing channel treatments to manage surface water after the expected flood or debris slide occurs:

- a) Clear and improve to the overflow channel east of the airstrip to control floodwaters.
- b) Create a ford by removing the fill and the plugged iron culvert at the airstrip to cabin road, in order to prevent floodwaters from going onto the airstrip or down the road towards the cabins.
- c) Armor the spillway at the pond with native rock to prevent down cutting and developing a new channel at the southern end of the airstrip and above the cabins. This existing pond will serve as a settling basin.
- d) Plug the head gate of an irrigation channel to protect the administrative cabin, which is listed in the National Register of Historic Places (NRHP), from flooding and sedimentation. Bury the burned out holding tank that presents a hazard to the public. (Use existing concrete waste and cover with soil.)
- e) Control Cow Creek floodwaters around the northern end of the Cabin Creek airstrip until the stream enters Cabin Creek by improving existing channels and opening plugged overflow channels.



- f) Prevent water from entering an old channel that are causing head cutting and developing a large gully at the north end of the airstrip. This channel could wash out an old ranch dump.
- g) Construct a 30 feet long by 1 foot high, natural appearing, elevated stream bank at the channel inlet of old alluvial channel to ensure high water stays in the existing channel.
- h) Remove sediment and vegetation at a plugged head gate to open an overflow channel to prevent floodwaters from dispersing across the alluvial fan and towards a buried tractor.
- i) Remove hazard trees that may fall on the buildings at Cabin Creek administrative site.
- j) Monitoring effectiveness of the treatments by site visits after each damage-producing storm events and during the first snowmelt runoff season.

Cost: \$14,036

Benefits: \$639,600. The replacement value for NRHP properties is estimated at \$39,600. Prevent similar damage that occurred in 1997 that required the Forest to repair the airstrip at a cost of \$100,000. Reduce threat of serious injury for public as well as employees. Reduce the threat of potential contamination, sedimentation, and habitat degradation to threaten and endangered species at an estimated value of \$500,000. **Reduce indirect threat to life by maintaining and protecting airstrip.**

### Airstrips:

1. **Soldier Bar Airstrip:** Remove and replace water diversion structures that were installed on the landing surface and damaged by the fire. Monitoring effectiveness of the treatments by site visit after the first damage-producing storm event.

Cost: \$11,340

Benefits: \$230,000. **Eliminate threat to life** and loss of aircraft (\$200,00) due by installing safe waters diversion structures. Eliminate rills and gully erosion on airstrip that would require Forest to expend \$30,000 to repair.

2. **Dewey Moore Emergency Airstrip/Acorn Creek:**

Objective: Protect the Dewey Moore Airstrip by implementing channel treatments to manage surface water after the expected flood or debris slide occurs:

- a) Improve the efficiency of the culvert by reconstructing the culvert inlet structure with native rock.
- b) Raise the stream bank that parallels 84 feet of the airstrip by 1 foot with rock, wood, and sod transplants.
- c) Provide a one-foot high 50 feet long sod berm below the culvert outlet to prevent high water from going across the alluvial fan and down the airstrip.
- d) Create an inside ditch and overflow channel along the north portion of the airstrip clearing and improving an old ditch system.
- e) Channel water from the airstrip into the overflow channel by developing shallow water bars created along old hay field furrows. These shallow furrows will be adjacent to but not on the landing zone.
- f) Monitoring effectiveness of the treatments by site visits after each damage-producing storm events and during the first snowmelt runoff season.

Cost: \$9,216

Benefits: \$350,000. Prevent similar damage that occurred in 1997 that required the Forest to repair the Cabin Creek Airstrip at a cost of \$100,000. Reduce the threat of potential contamination,

sedimentation, and habitat degradation to threaten and endangered species at an estimated value of \$500,000. **Reduce indirect threat to life by maintaining and protecting airstrip.**

### **Bridges**

1. **Big Creek Bridge at Taylor Ranch:** Remove abandoned Cliff Creek Bridge to alleviate the potential of a debris jam that would divert water and erode the abutments of the Big Creek Bridge, which could result in the loss of that structure. Remove gabion abutments and restore stream banks.

Cost: \$10,044

Benefits: \$250,000. Prevent loss of the Big Creek Bridge valued at \$250,000.

2. **Beaver Creek Bridge:** Replace damaged wing walls on bridge to prevent the approaches from washing out.

Cost: \$7,560

Benefits: \$250,000. Prevent loss of bridge at a replace cost of \$250,000.

3. **FS System Bridges (9):** Monitor for any debris buildup and remove debris jams in the immediate area of bridge abutments to enhance capacity to handle increase stream flows and large woody debris. Debris will be place back in stream below the bridge. Remove identified hazard trees that may fall on the bridge structure. Bridges must be checked annually over next three to five year period. Monitor by site visits during or shortly after storm events through the first runoff season.

Cost: \$9,680

Benefits: \$2,250,000. Prevent loss of bridges with replace cost of \$250,000 per structure.

### **Trails**

1. **Diamond Complex Trails:**

Objectives: Provide clear and safe passage to emergency treatment sites (airstrips, culverts, bridges) for both crews and stock support. Remove imminent safety hazards. Reestablish proper drainage and water management structures to prevent further loss to the Wilderness transportation infrastructure.

Emergency trail work will be accomplished this fall and next spring prior to snowmelt runoff. Trail work after spring runoff will be considered non-emergency

- a) Provide clear and safe passage for crews and stock along the Big Creek and other trails to the BAER treatment sites. Clear trails impacted by fire of trees and rocks, repair drainage, and reconstruct tread where needed to access emergency treatment sites.
- b) Reduce imminent hazards such as felling burnt snags; removing hazardous downfall and rocks, and filling holes, along trails that receive high administrative and public use.
- c) Replace and install water diversions structures to accommodate runoff and reduce potential for trail washouts prior to the spring runoff.
- d) Remove debris slides where potential exist to washout more trail.
- e) Monitoring effectiveness of the treatments by site visits after each damage-producing storm events and during the first snowmelt runoff season.

Cost: \$160,128

Benefits: \$1,095,000. Protection of the trail infrastructure of approximate average value of \$3,000 per mile x 115 miles = \$345,000. Minimize threats to human safety; prevent resource & facility degradation while providing for availability of reasonable passable trail access (where feasible) to serve possible fire management and administrative needs as well as public access. Reduce threat of sedimentation and habitat degradation to threaten and endangered species. The associated benefit to fish is estimated at \$750,000.

### **Campsites and Wilderness Use and Safety**

1. **Campsites and Wilderness Use:** The BAER Team has identified several high-risk areas that are frequently used as dispersed campsites. The proposed action at this time is to initiate a public education strategy. This would include press releases, posting of information at trailheads, and increased wilderness technician contact with the public in the FCRNR Wilderness. In addition, the wilderness technician will monitor outfitter and guide camps and popular dispersed campsites for overgrazing by recreation livestock. Utilization levels will be monitored and use restricted if necessary.

Cost: \$25,440

Benefits: **Reduce direct threat to life.**

### **Loss to Wilderness Resource, Water Quality, and T&E Species**

1. **Gold Creek Culverts** On Gold Creek side of Big Creek, remove two culverts and restore the stream channel to natural dimension, pattern, and profile. Discourage use of abandoned road and dispose the corrugated metal pipe.

Cost: \$13,920

Benefits: Reduce sedimentation and habitat degradation to threaten and endangered species. The associated benefit to fish is estimated at \$250,000. Restore Wilderness quality.

2. **Whiskey Creek Culvert:** Remove culvert on the abandoned Big Creek road and restore the stream channel to natural dimension, pattern, and profile. Construct trail re-route and ford to accommodate trail traffic and dispose the corrugated metal pipe.

Cost: \$14,040

Benefits: \$250,000. Reduce threat of old road washout, sedimentation, and habitat degradation to threaten and endangered species estimated at \$250,000. Restore Wilderness quality.

### **Noxious Weeds**

1. **Treat noxious weed infestations with herbicides or mechanically** within the burn perimeter for three years following the fire. Treatment would occur on 32 acres in the Diamond and Flossie Complex. Treatment will be done with backpack sprayers using chemicals and guidelines approved in the wilderness weed treatment EIS (USDA, 1999). Treatment near waterways will require hand removal of infestations to prevent water contamination.

2. **Monitor** for noxious weed invasion and the effectiveness of treatments. Monitoring would be done periodically to assess BAER weed treatments and recovery of the burned sites. It would evaluate the success or failure of treatment, recommend adjustments to treatment or re-treatment, and report the findings to management. Monitoring design would include establishing photo points and running baseline transects in the fall of 2001 and continuing to work with weed experts in Region 4 and local universities to design an effective monitoring plan that would provide the correct sample size and techniques.
3. **Inventory susceptible lands** within the burn perimeter for noxious weeds. Inventory areas adjacent to the fire and along corridors that pass through infested sites to burned areas will help identify new treatment areas and contain infestations.

*Cost: \$38,017*

Benefit: \$96,128. The cost benefit of controlling invasive plants immediately after the fire can be evaluated by estimating control cost if invasions were left untreated for two years. With the high likelihood that infestations would spread into the adjacent burned areas at the lower elevations in the moderate to high intensity burns, cost on not containing invasive plants amounts to \$96,128.

### **Cultural Resources**

1. **Monitoring:** Culture resources may be subject to sedimentation and erosion. A monitoring program is recommended to assess whether recommended treatments are effective and whether initial suggestions regarding the stability and vegetative recovery within significant site areas is correct. Monitoring in 2001 should concentrate on identified sites. Monitoring will consist of having a qualified archaeologist visit each listed site once each year, complete a Payette Cultural Resource Monitoring Form for each, updating of site forms if necessary, and to take photographs of representative conditions. The following costs are for transportation, field and office work.

Cost: \$9,336

Benefit: \$500,000. The benefit to monitoring for protection of Culture Resources would eliminate the cost of unnecessary data recovery projects sites at risk.

### **I. Monitoring Narrative:**

There are six separate monitoring plans identified by the BAER Team that qualify for BAER Monitoring and Evaluation following directions stated in Chapter 60 of the BAER Handbook: 1) Storm Event Monitoring, 2) Noxious Weed Monitoring, 4) Cultural/Historic Monitoring 5) Evaluation of the BAER Planning Process, 4) Evaluation Of Project Implementation Phase, and 6) Effectiveness Monitoring of the BAER Rehabilitation Treatment Project.

#### **Storm Event Monitoring**

Objectives: Rehabilitation projects will be examined following major storms and after snowmelt runoff season.

1. Evaluate the proper functioning condition of water management design and structures at airstrips.
2. Evaluate the drainage design and structures associated with system trails.
3. Assess for accumulation of debris against bridges.

4. Assess for occurrence of floods, debris slides and debris torrents and how they may affect downstream life or property.

Cost: Already accounted in the Diamond BAER Treatment prescription.

#### Noxious Weed Implementation and Effectiveness Monitoring

Objectives: To evaluate the success or failure of treatment.

1. Detect increases in noxious weeds or non-native invasive species.
2. Detect success of herbicide and mechanical control methods.
3. During 2000 complete final monitoring design and establish baseline plots.
4. During 2001, monitor effectiveness of spraying and mechanical control.
5. Map new populations using GPS/GIS and establish photo points.

Cost: Already accounted in the Diamond BAER Treatment prescription.

#### Cultural/Historic Monitoring

Objectives: Assess whether recommended treatments are effective and whether initial suggestions regarding the stability and vegetative recovery within significant site areas is correct.

Cost: Already accounted in the Diamond BAER Treatment prescription.

**A systematic evaluation will be conducted on the Payette NF BAER process. Separate evaluations will be made of the planning and implementation phases of a burned-area emergency rehabilitation project.**

#### Evaluation of the BAER Planning Process

Objectives: Evaluation of the effectiveness and quality of project planning should address the following:

1. The mobilization, composition, and qualifications of the Burned-Area Survey Team.
2. The transfer of pertinent information from Line to the BAER survey team.
3. The availability of transportation and communication facilities.
4. Safety considerations during the survey.
5. Documentation of survey results.
6. Coordination with other agencies, private parties, and other resources.
7. Timeliness and accuracy of Form FS-2500-8, Burned-Area Report.
8. Consistency between handbook/regional direction and how that applies to on-the-ground implementation requirements.

Methodology: The three FY2000 BAER Team Leaders on the Payette NF will conduct a programatic review of this year's BAER planning process. Each of the 3 BAER Reports will be reviewed. Problems will be identified and discussed. Recommendations will be made in a final report submitted to the Forest Supervisor and Regional BAER Coordinator.

Cost: \$2,250 Salary: 3 persons x 3 days @ \$250 = \$2250. (Split between Diamond and Flossie)

#### Evaluation of BAER Project Implementation Phase

Objectives: Evaluation of project implementation should address the following:

1. Prompt implementation of planned treatments.
2. Coordination with other resource requirements.
3. Project organization.
4. Procurement and contracting.
5. Safety during project implementation.
6. Cost accounting.
7. Timeliness and accuracy of the final Form FS-2500-8, Burned-Area Report.

Methodology: The BAER Team Leader (GS-12) will review the project implementation with the District Project Manager (GS-11) and crew leader (GS-7) on the Krassel District.

Cost: \$1,980 Salary: 3 persons x 3 days @ \$220 = \$1980. (Split between Diamond and Flossie)

**Effectiveness monitoring will be conducted on projects where earth moving and channel treatment occurred to determine if the emergency rehabilitation project accomplished what it was planned and designed to do.**

#### Effectiveness Monitoring of the BAER Rehabilitation Treatment Project

Objectives: Determine if prescribed treatment was technically correct and effective in treating the emergency at the following sites.

1. Cabin Creek Administrative Site and Airstrip
2. Dewey Moore Airstrip
3. Whiskey Creek Culvert
4. Gold Creek Culverts
5. Critical Trail Sections

Methodology: On-the-ground examination by the core BAER team ( 4 persons) after the first runoff season and second runoff seasons.

Diamond Cost: \$10,780. Aircraft: 4 trips @ \$340= \$1340, Field per diem: 2 x 4 persons x 5 sites @ \$16 = \$640, Salary: 2 x 4 persons x 5 sites @ \$220 = \$8800.

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

			NFS Lands				Other Lands			All
		Unit	# of	WFSU	Other			# of	Non Fed	Total
Line Items	Units	Cost	Units	SULT \$	\$			units	\$	\$
<b>Private Residences:</b>										
Taylor Ranch	site	4842	1	\$4,842			\$0		\$0	\$4,842
<i>Subtotal Private Residences</i>				<i>\$4,842</i>			<i>\$0</i>		<i>\$0</i>	<i>\$4,842</i>
<b>Adm. Sites/Airstrips</b>										
Cabin Creek Admin and Airstrip	site	14036	1	\$14,036			\$0		\$0	\$14,036
Soldier Bar Airstrip	site	11340	1	\$11,340			\$0		\$0	\$11,340
Dewey Moore Airstrip	site	9216	1	\$9,216			\$0		\$0	\$9,216
<i>Subtotal Admin/Airstrips</i>				<i>\$34,592</i>			<i>\$0</i>		<i>\$0</i>	<i>\$34,592</i>
<b>Bridges and Trails</b>										
Big Creek Bridge	site	10044	1	\$10,044			\$0		\$0	\$10,044
Beaver Creek Bridge	site	7560	1	\$7,560			\$0		\$0	\$7,560
System Bridges (9)	site	1075	9	\$9,675			\$0		\$0	\$9,675
Diamond Complex Trails	miles	1392	115	\$160,128			\$0		\$0	\$160,128
Campsites	plan	25440	1	\$25,440			\$0		\$0	\$25,440
Gold Creek Culverts	site	13920	1	\$13,920			\$0		\$0	\$13,920
Whiskey Cr Culvert	site	14040	1	\$14,040			\$0		\$0	\$14,040
<i>Subtotal Bridges and Trails</i>				<i>\$240,807</i>			<i>\$0</i>		<i>\$0</i>	<i>\$240,807</i>
<b>Noxious Weeds:</b>										
Noxious Weeds	acres	1188	32	\$38,017			\$0		\$0	\$38,017
<i>Subtotal Noxious Weeds</i>				<i>\$38,017</i>			<i>\$0</i>		<i>\$0</i>	<i>\$38,017</i>
<b>Cultural Resources:</b>										
Site Monitoring	plan	9336	1	\$9,336			\$0		\$0	\$9,336
<i>Subtotal Cultural Resources</i>				<i>\$9,336</i>			<i>\$0</i>		<i>\$0</i>	<i>\$9,336</i>
<b>BAER Survey</b>										
Salary	total	25894	1	\$25,894			\$0		\$0	\$25,894
Travel & per diem	total	780	1	\$780			\$0		\$0	\$780
Aircraft & Helicopter	total	1382	1	\$1,382			\$0		\$0	\$1,382
<i>Subtotal BAER Survey</i>				<i>\$28,056</i>			<i>\$0</i>		<i>\$0</i>	<i>\$28,056</i>
<b>G. Monitoring Cost</b>										
Planning	plan	1125	1	\$1,125			\$0		\$0	\$1,125
Implementation	plan	990	1	\$990			\$0		\$0	\$990
Effectiveness	plan	10780	1	\$10,780			\$0		\$0	\$10,780
<i>Subtotal BAER Survey</i>				<i>\$12,895</i>			<i>\$0</i>		<i>\$0</i>	<i>\$12,895</i>
<b>H. Totals</b>				<b>\$368,545</b>			<b>\$0</b>		<b>\$0</b>	<b>\$368,545</b>

**PART VII - APPROVALS**

- |    |  |                                |
|----|--|--------------------------------|
| 1. | <u>/s/ DAVID F. ALEXANDER</u><br>Forest Supervisor (signature)   | <u>October 4, 2000</u><br>Date |
| 2. | <u>/s/ Jack G. Troyer (for)</u><br>Regional Forester (signature) | <u>10/11/2000</u><br>Date      |



Date of Report: October 3, 2000

**BURNED-AREA REPORT**  
(Reference FSH 2509.13)**PART I - TYPE OF REQUEST**

## A. Type of Report

- ☒ 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)  
☐ 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: Flossie ComplexB. Fire Number: ID-PAF-011C. State: IdahoD. County: Idaho & ValleyE. Region: 04F. Forest: PayetteG. District: KrasselH. Date Fire Started: August 2, 2000I. Date Fire Controlled: unknownJ. Suppression Cost: unknown

K. Fire Suppression Damages Repaired with Suppression Funds

1. Fireline waterbarred (miles): N/A  
2. Fireline seeded (miles): N/A  
3. Other (identify):

L. Watershed Number: 1706020706      1706020709      1706020715      1706020716M. Total Acres Burned: 95,285 (includes PAF portion only of 3 Bears)

NFS Acres(94,883)    Other Federal (0)    State (0)    Private (402)

N.Vegetation      Types: PIAL-ABLA;ABLA/VASC;ABLA/XETE;  
ABLACAGE;ABLA/CARU;ABLA/VAGL;ABGR/ACGL;ABGRSPBE;ABGRSPBE;ABGR.CLUN;PSM  
E/PHMA;PSME/SYAL/PSME/AGST;PSME/FEID;PIPO/AGST;PIPO/SYAL

O. Dominant Soils: Typic Cryiosamments, Typic Cryoborolls, Typic Xeropsamments

P. Geologic Types: Granitic rocks of Idaho batholith (quartz monzonite)

Q. Miles of Stream Channels by Order or Class:

254 perennial; 46 intermittent

R. Transportation System

Trails:      miles      Roads:      miles      Airstrips:     

### **PART III - WATERSHED CONDITION**

A. Burn Intensity (acres): 47,673 (low) 38,138 (moderate) 9,534 (high)

B. Water-Repellent Soil (acres) : 19,069

C. Soil Erosion Hazard Rating (acres): Assumed 50% of sensitive landtype acres with moderately high to high hazard ratings are locate within areas that burned with moderate t high intensity  
76,510 (low) 19,069 (moderate) 4,767 (high)

D. Erosion Potential: 0.23 tons/acre

E. Sediment Potential: 10.9 cubic yards / square mile

### **PART IV - HYDROLOGIC DESIGN FACTORS**

A. Estimated Vegetative Recovery Period, (years): 3-5

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

C. Equivalent Design Recurrence Interval, (years): 100

D. Design Storm Duration, (hours): 24

E. Design Storm Magnitude, (inches): 2.0 (with snowmelt)

F. Design Flow, (cubic feet / second/ square mile): 67

G. Estimated Reduction in Infiltration, (percent): 10

H. Adjusted Design Flow, (cfs per square mile): 107

### **PART V - SUMMARY OF ANALYSIS**

A. Describe Watershed Emergency:

### **Threats to Forest Administrative Sites**

1. **The Chamberlain Guard Station:** The Forest maintains the Chamberlain guard Station within the Flossie Complex. The fire damaged the drinking water system and trees in the immediate vicinity of the buildings were killed posing a threat of falling trees to building residents.

### **Threats to Bridges**

1. **Chamberlain Creek Bridge:** The wing walls on the Chamberlain Creek Bridge were burned and damaged by fire. High water could erode around the abutment and threaten the bridge. The bridge is also subject to increased debris accumulation that could create a debris dam and wash out the structure.

### **Threats to Trails**

Assessments revealed significant hazards to users, and impassable conditions on major sections of trail. Many sections of trail were simply blocked by downfall. In some cases water diversion structures (water bars) were burned which will also increase potential for erosion damage to the trail. It is anticipated that problems with gully and erosion channels will worsen with the impaired watershed and trail condition as a result of the fire. It is clear that further damage to the trail system due to runoff erosion will be inevitable, although there may be opportunities to limit it to some extent with fall and early spring work.

The Chamberlain Basin Trail provides the main access from Big Creek to the Chamberlain Basin Guard Station and Stonebreaker Ranch.

### **Threats to Life at River Campsites**

1. **Campsites and Wilderness Use:** The BAER Team has identified several high-risk areas along the Main Salmon River that are frequently used as river campsites. These sites include: Hot Springs Campsite, Barth Campsite, Poor Bar Campsite, Bruin Bar Campsite, and Magpie Creek Campsite. Several of these sites are situated near the mouths of steep drainages with extensive moderate to high intensity burn such as Bruin Creek and Dillinger Creek. These and other areas have elevated risk of flash flood events with high water and/or debris slides or debris torrents flows. High-risk periods are during snowmelt runoff, in winter after rapid warming with extended rain, and during high intensity rainfall events.

### **Threats from Noxious Weeds**

The noxious weeds, spotted knapweed (*Centaurea maculosa*), rush skeletonweed (*Chondrilla juncea*), yellow toadflax (*Linaria vulgaris*), and Canada thistle (*Cirsium arvense*) currently infest about 23 acres within the Diamond fire. Two invasive species, cheatgrass (*Bromus tectorum*) and sulfur cinquefoil (*Potentilla recta*) have also invaded disturbed sites. Significant threats to ecosystem integrity exist from the potential invasion of noxious weeds and invasive non-native plants at low elevations in the Big Creek drainage.

Noxious weed invasion is expected in areas within high intensity burn areas, scoured channels, airfields, and trails. Infestations which have the highest likelihood of spreading to surrounding lands include: Cabin Creek Airstrip, Soldier Bar Airstrip, Monument Ranch Airstrip, Goat Creek, and Rush Creek trail.

## **Threats to Cultural Resources**

The Heritage Program records for the Payette National Forest (PNF), listed 89 prehistoric and historic properties within the Diamond and Flossie Complex fire area. Of this number, 44 prehistoric and historic properties are considered as eligible for listing onto the National Register of Historic Places (NRHP).

Prehistoric properties within the burnt landscape area are expected to fare well under the wildfire conditions as most of them have been repeatedly exposed to fire in the past. The greater impact to prehistoric properties will occur through increased erosion or sedimentation. Damage to prehistoric and historical archaeological sites and historical standing structures may be caused by erosion of stream banks that can undermine the terraces that these sites are located on. Blowouts in upper stream drainages may destroy portions of historic trails or cause archaeological sites or standing structures to be buried or collapse.

### **B. Emergency Treatment Objectives:**

5. Eliminate threat to life.
6. Reduce hazards to employee and public.
7. Protect property and facilities from additional damage.
8. Prevent unacceptable loss of Wilderness resources, water quality, and T & E species.

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

Land 80 % Channel 80 % Roads     % Other 80 %

### **D. Probability of Treatment Success**

	Years after Treatment		
	1	3	5
<b>Forest Admin Sites:</b>			
Chamberlain Guard Station	90	90	90
<b>Bridges and Trails</b>			
Chamberlain Creek Bridge	80	90	90
Flossie Complex Trails	80	80	90
<b>Campsites and Public Information:</b>			
River Campsites	80	80	90
<b>Land Treatments:</b>			
Noxious Weeds	80	80	80
<b>Cultural/Historic Resources:</b>			
Site Monitoring	90	90	90

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

F. Cost of Selected Alternative (Including Loss):

G. Skills Represented on Burned-Area Survey Team:

<input checked="" type="checkbox"/> Hydrology	<input checked="" type="checkbox"/> Soils	<input type="checkbox"/> Geology	<input type="checkbox"/> Range	<input checked="" type="checkbox"/> Wilderness
<input type="checkbox"/> Forestry	<input 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 checked="" type="checkbox"/> Archaeology	
<input checked="" type="checkbox"/> Fisheries	<input type="checkbox"/> Research	<input type="checkbox"/> Landscape Arch	<input checked="" type="checkbox"/> GIS	

Team Leader: David Kennell  
Payette National Forest  
PO Box 1026  
McCall, ID 83638

Email: dkennell@fs.fed.us

Phone: (208) 634-0793

FAX: (208) 634-0744

H. Treatment Narrative:

**Forest Administrative Sites**

1. **Chamberlain Guard Station:** Shut down and winterize culinary water system, that was damaged by fire, until safe water supply is restored for public and employee use. Drain water line and clean and seal holding tank. Remove identified hazard trees that may fall on buildings at Chamberlain Administration site.

Cost: \$1,620

Benefits: Protect current water systems from additional damage.

**Bridges**

1. **Chamberlain Bridge:** Replace damaged wing walls on two trail bridges to avoid the approaches from washing out. Monitor for debris jams and remove if jams occur.

Cost: \$11,550

Benefits: Protection from potential washout of a \$250,000 bridge.

**Trails**

1. **Flossie Complex Trails:**

Objectives: Provide clear and safe passage to emergency treatment sites (bridges) for both crews and stock support. Remove imminent safety hazards. Reestablish proper drainage and water management structures to prevent further loss to the Wilderness transportation infrastructure.

Emergency trail work will be accomplished this fall and next spring prior to snowmelt runoff. Trail work after spring runoff will be considered non-emergency

- a) Provide clear and safe passage for crews and stock along trails to the BAER treatment sites. Clear trails impacted by fire of trees and rocks, repair drainage, and reconstruct tread where needed to access emergency treatment sites.
- b) Reduce imminent hazards such as felling burnt snags; removing hazardous downfall and rocks, and filling holes, along trails that receive high administrative and public use.
- c) Replace and install water diversions structures to accommodate runoff and reduce potential for trail washouts prior to the spring runoff.
- d) Remove debris slides where potential exist to washout more trail.
- e) Monitoring effectiveness of the treatments by site visits after each damage-producing storm events and during the first snowmelt runoff season.

Cost: \$117,600

Benefits: 1,255,000. Protection of the trail infrastructure of approximate average value of \$3,000 per mile X 85 miles = \$255,000. Minimize threats to human safety; prevent resource & facility degradation while providing for availability of reasonable passable trail access (where feasible) to serve possible fire management and administrative needs as well as public access. Reduce threat of sedimentation and habitat degradation to threaten and endangered species estimated at \$1,000,000.

### **Campsites and Wilderness Use and Safety**

1. **Campsites and Wilderness Use:** The BAER Team has identified several high-risk river campsites along the Main Salmon-FCRNR Wild and Scenic Corridor. The proposed action at this time is to initiate a public education strategy. This would include press releases, posting of information at trailheads, and increased wilderness technician contact with the public along the FCRNR Wild and Scenic Corridor.

Cost: \$25,440

Benefits: Reduce direct threat to life.

### **Noxious Weeds**

1. **Treat noxious weed infestations with herbicides or mechanically** within the burn perimeter for three years following the fire. Treatment would occur on 16 acres in the Flossie Complex. Treatment will be done with backpack sprayers using chemicals and guidelines approved in the wilderness weed treatment EIS (USDA, 1999). Treatment near waterways will require hand removal of infestations to prevent water contamination.
2. **Monitor** for noxious weed invasion and the effectiveness of treatments. Monitoring would be done periodically to assess BAER weed treatments and recovery of the burned sites. It would evaluate the success or failure of treatment, recommend adjustments to treatment or re-treatment, and report the findings to management. Monitoring design would include establishing photo points and running baseline transects in the fall of 2001 and continuing to work with weed experts in Region 4 and local universities to design an effective monitoring plan that would provide the correct sample size and techniques.
3. **Inventory susceptible lands** within the burn perimeter for noxious weeds. Inventory areas adjacent to the fire and along corridors that pass through infested sites to burned areas will help identify new treatment areas and contain infestations.

*Cost: \$29,137*

Benefit: \$63,382. The cost benefit of controlling invasive plants immediately after the fire can be evaluated by estimating control cost if invasions were left untreated for two years. With the high likelihood that infestations would spread into the adjacent burned areas at the lower elevations in the moderate to high intensity burns, cost on not containing invasive plants amounts to \$63,362.

### **Cultural Resources**

- 1) **Monitoring:** Culture resources may be subject to sedimentation and erosion. A monitoring program is recommended to assess whether recommended treatments are effective and whether initial suggestions regarding the stability and vegetative recovery within significant site areas is correct. Monitoring in spring 2001 should concentrate on identified sites. Monitoring will consist of having a qualified archaeologist visit each listed site once each year, complete a Payette Cultural Resource Monitoring Form for each, updating of site forms if necessary, and to take photographs of representative conditions. The following costs are for transportation, field, and office work.

Cost: \$8,303

Benefit: \$500,000. The benefit to monitoring for protection of Culture Resources would eliminate the cost of unnecessary data recovery projects sites at risk.

### **H. Monitoring Narrative:**

There are six separate monitoring plans identified by the BAER Team that qualify for BAER Monitoring and Evaluation following directions stated in Chapter 60 of the BAER Handbook: 1) Storm Event Monitoring, 2) Noxious Weed Monitoring, 4) Cultural/Historic Monitoring 5) Evaluation of the BAER Planning Process, 4) Evaluation Of Project Implementation Phase, and 6) Effectiveness Monitoring of the BAER Rehabilitation Treatment Project.

#### **Storm Event Monitoring**

Objectives: Rehabilitation projects will be examined following major storms and after snowmelt runoff season.

5. Evaluate the drainage design and structures associated with system trails.
6. Assess for accumulation of debris against bridges.
7. Assess for occurrence of floods, debris slides and debris torrents and how they may affect downstream life or property.

Cost: Already accounted in the Flossie BAER Treatment prescription.

#### **Noxious Weed Implementation and Effectiveness Monitoring**

Objectives: To evaluate the success or failure of treatment.

6. Detect increases in noxious weeds or non-native invasive species.
7. Detect success of herbicide and mechanical control methods.

8. During 2000 complete final monitoring design and establish baseline plots.
9. During 2001, monitor effectiveness of spraying and mechanical control.
10. Map new populations using GPS/GIS and establish photo points.

Cost: Already accounted in the Flossie BAER Treatment prescription.

#### Cultural/Historic Monitoring

Objectives: Assess whether recommended treatments are effective and whether initial suggestions regarding the stability and vegetative recovery within significant site areas is correct.

Cost: Already accounted in the Flossie BAER Treatment prescription.

**A systematic evaluation will be conducted on the Payette NF BAER process. Separate evaluations will be made of the planning and implementation phases of a burned-area emergency rehabilitation project.**

#### Evaluation of the BAER Planning Process

Objectives: Evaluation of the effectiveness and quality of project planning should address the following:

9. The mobilization, composition, and qualifications of the Burned-Area Survey Team.
10. The transfer of pertinent information from Line to the BAER survey team.
11. The availability of transportation and communication facilities.
12. Safety considerations during the survey.
13. Documentation of survey results.
14. Coordination with other agencies, private parties, and other resources.
15. Timeliness and accuracy of Form FS-2500-8, Burned-Area Report.
16. Consistency between handbook/regional direction and how that applies to on-the-ground implementation requirements.

Methodology: The three FY2000 BAER Team Leaders on the Payette NF will conduct a programatic review of this year's BAER planning process. Each of the 3 BAER Reports will be reviewed. Problems will be identified and discussed. Recommendations will be made in a final report submitted to the Forest Supervisor and Regional BAER Coordinator.

Cost: \$2,250 Salary: 3 persons x 3 days @ \$250 = \$2250. (Split between Diamond and Flossie)

#### Evaluation of BAER Project Implementation Phase

Objectives: Evaluation of project implementation should address the following:

8. Prompt implementation of planned treatments.
9. Coordination with other resource requirements.
10. Project organization.
11. Procurement and contracting.
12. Safety during project implementation.
13. Cost accounting.
14. Timeliness and accuracy of the final Form FS-2500-8, Burned-Area Report.



Methodology: The BAER Team Leader (GS-12) will review the project implementation with the District Project Manager (GS-11) and crew leader (GS-7) on the Krassel District.

Cost: \$1,980 Salary: 3 persons x 3 days @ \$220 = \$1980. (Split between Diamond and Flossie)

**Effectiveness monitoring will be conducted on projects where earth moving and channel treatment occurred to determine if the emergency rehabilitation project accomplished what it was planned and designed to do.**

#### Effectiveness Monitoring of the BAER Rehabilitation Treatment Project

Objectives: Determine if prescribed treatment was technically correct and effective in treating the emergency at the Chamberlain Creek Bridge and the Chamberberlain Guard Station.

Methodology: On-the-ground examination by the core BAER team ( 4 persons) after the first runoff season and second runoff seasons.

Cost: \$3,520. Aircraft: 2 trips @ \$340 = \$680, Field per diem: 2 x 4 persons x 2 sites @ \$16 = \$256, Salary: 2 x 4 persons x 2 sites @ \$220 = \$3520.

**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	\$	\$
Adm. Sites/Airstrips											
Chamberlain Administrative Site	site	1620	1	\$1,620				\$0		\$0	\$1,620
Subtotal Admin/Airstrips				\$1,620				\$0		\$0	\$1,620
Bridges and Trails											
Chamberlian Bridge	site	11560	1	\$11,560				\$0		\$0	\$11,560
Flossie Complex Trails	miles	1383.5	85	\$117,600				\$0		\$0	\$117,600
River Campsites	plan	25440	1	\$25,440				\$0		\$0	\$25,440
Subtotal Bridges and Trails				\$154,600				\$0		\$0	\$154,600
Noxious Weeds:											
Noxious Weeds	acres	1821.1	16	\$29,137				\$0		\$0	\$29,137
Subtotal Noxious Weeds				\$29,137				\$0		\$0	\$29,137
Cultural Resources:											
Site Monitoring	plan	8303	1	\$8,303				\$0		\$0	\$8,303
Subtotal Cultural Resources				\$8,303				\$0		\$0	\$8,303
BAER Survey											
Salary	total	13340	1	\$13,340				\$0		\$0	\$13,340
Travel & per diem	total	402	1	\$402				\$0		\$0	\$402
Aircraft & Helicopter	total	0	1	\$0				\$0		\$0	\$0
Subtotal BAER Survey				\$13,742				\$0		\$0	\$13,742
G. Monitoring Cost											
Planning	plan	1125	1	\$1,125				\$0		\$0	\$1,125
Implementation	plan	990	1	\$990				\$0		\$0	\$990
Effectiveness	plan	10780	1	\$3,520				\$0		\$0	\$3,520
Subtotal BAER Survey				\$5,635				\$0		\$0	\$5,635
H. Totals				\$213,037				\$0		\$0	\$213,037

**PART VII - APPROVALS**

- |    |  |                                |
|----|--|--------------------------------|
| 1. | <u>/s/ DAVID F. ALEXANDER</u><br>Forest Supervisor (signature)   | <u>October 4, 2000</u><br>Date |
| 2. | <u>/s/ Jack G. Troyer (for)</u><br>Regional Forester (signature) | <u>10/11/</u><br>Date          |