

Date of Report: 7/26/01**BURNED-AREA REPORT**

(Reference FSH 2509.13)

PART I - TYPE OF REQUEST

A. Type of Report

- ☒ 1. Funding Request for Estimated WFSU-FW22 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 and design analysis
☐ Status of accomplishments to date

☐ 3. Final report-following completion of work

PART II - BURNED-AREA DESCRIPTIONA. Fire Name: Libby SouthB. Fire Number: WA NES 047C. State: WAD. County: OkanoganE. Region: 06F. Forest: OkanoganG. District: Melthow ValleyH. Date Fire Started: 7/9/01

I. Date Fire Controlled:

J. Suppression Cost: \$6.0 million

K. Fire Suppression Damages Repaired with WFSU-PF12 Funds:

1. Fireline waterbarred (miles) 13.6
2. Fireline seeded (miles) 13.6
3. Other (identify)

L. Watershed Number: 1702000812M. NFS Acres Burned: 3010Total Acres Burned: 3800

(740)State ()BLM (50)PVT () _____

N. Vegetation Types: Doug-fir,Ponderosa Pine, steppe-shrub mixed

O. Dominant Soils: Volcanic ash over deep glacial till deposits

P. Geologic Types: Metamorphized sediments

Q. Miles of Stream Channels by Order or Class:
_____ 7.5

R. Transportation System:

Trails: 0 miles

Roads: 3.5 miles

PART III - WATERSHED CONDITION

A. Fire Intensity (acres): 2650 (low) 230 (moderate) 1010 (high)

B. Water-Repellent Soil (acres): 0

C. Soil Erosion Hazard Rating (acres): 0 (low) 3800 (moderate) 0 (high)

D. Erosion Potential: 5 tons/acre

E. Sediment Potential: 213 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period: 3 years

B. Design Chance of Success: 75 percent

C. Equivalent Design Recurrence Interval: 10 years

D. Design Storm Duration: 6 hours

E. Design Storm Magnitude: 1.2 inches

F. Design Flow: 22 cubic feet per second per square mile

G. Estimated Reduction in Infiltration: 5 percent

H. Adjusted Design Flow: 23 cubic feet per second per square mile

PART V - SUMMARY OF ANALYSIS

A. Describe Watershed Emergency: See attached

B. Emergency Treatment Objectives: See attached

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

Land 100 % Channel % Roads 100 % Other %

D. Probability of Treatment Success

	<----Years after treatment----->		
	1	3	5
Land	75	95	100
	5	50	100
Channel			
Roads	100	100	100
Other			

E. Cost of No Action (Including Loss): \$ 1,421K

F. Cost of Selected Alternative (Including Loss): \$ 418K

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

Team Leader: Mel Bennett

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Fax:: (509) 826-3789

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.

The following treatments have been proposed to mitigate the threat to life, property, and loss of site productivity:

Land Treatments: see attached

Channel Treatments:

Roads and Trail Treatments: See attached

PART VI - EMERGENCY REHABILITATION TREATMENTS AND SOURCE OF FUNDS
BY LAND OWNERSHIP

			NFS Lands			Other Lands			All
Line Items	Units	Unit Cost \$	Number of Units	WFSU-FW22 \$ M	Other \$	Number of Units	Fed \$	Non-Fed \$	Total \$ M
					ident.		ident.	ident.	

A. LAND TREATMENTS

Seed	acr	51.	470	24.	0	0	0	0	24
Bio	acr	2.	640	1.3	0	0	0	0	1.3

B. CHANNEL TREATMENTS

none									

C. ROADS AND TRAILS

protect	mi	7	2.5	18	0	0	0	0	18
culverts	ea	1K	3	3	0	0	0		3

D. STRUCTURES

E. BAER EVALUATION/ADMINISTRATIVE SUPPORT

Salary, Travel, Etc.									
BAER				10K					10K

F. TOTALS

				57					57

PART VII – APPROVALS

1. _____ 7/26/2001 (mm/dd/yyyy)
Forest Supervisor Date

2. _____ (mm/dd/yyyy)
Regional Forester Date

Instructions for Completion of Form FS-2500-8, Burned Area Report

Initial and Interim Reports. For the initial and interim (if any) reports, enter the month, day, and year that the Burned-area Survey Team completes the report.

Accomplishment Reports. On accomplishment reports, enter month, day, and year that the implementation team completed the reported work.

Part I – TYPE OF REQUEST

A. Type of Report

1. Funding Request. Check to initiate or update request for WFSU-FW22 funding authorization. Complete all parts.
2. Accomplishment Report. Check to report status of project implementation or completion of project implementation and final costs. Complete all parts.
3. No Treatment Recommendation. Check to report a decision to recommend no burned area emergency rehabilitation watershed treatment. In addition, complete parts II, III, V.A., V.G., and VII.

B. Type of Action. Check appropriate box, indicating if action is:

1. Initial Request. Best estimate of funds needed to complete eligible rehabilitation measures.
2. Interim Report. Update of initial funding request based on more accurate site data, cost information, and design analysis; and/or status of accomplishments.
3. Final Report. Completion of project implementation and final costs. Includes actual costs, photographs, and narrative descriptions accomplishments.

Part II – BURNED-AREA DESCRIPTION

- A. Fire Name. Enter the fire name as it appears on Form ICS 209, Incident Status Summary.
- B. Fire Number. Enter the Forest Supervisor's fire number as it appears on Form ICS 209.
- C. State. Enter the name of the State in which the fire started.
- D. County. Enter the name of the country in which the fire started.
- E. Region. Enter the number of the Region responsible for action
- F. Forest. Enter the name of the National Forest responsible for action.
- G. Ranger District. Enter the name of the District responsible for action.
- H. Date Fire Started. Enter the month, day, and year.
- I. Date Fire Controlled. Enter the month, day and year.
- J. Suppression Cost. Enter the best estimate of the suppression cost available on the date of the report.
- K. Fire Suppression Damages Repaired with WFSU-PF12 Funds. Enter in the appropriate blanks:

1. Miles of firelines waterbarred, including work roads waterbarred or cross-drained.

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H. Date Fire Started. Enter the month, day, and year.

I. Date Fire Controlled. Enter the month, day, and year.

J. Suppression Cost. Enter the best estimate of the suppression cost available on the date of the report.

K. Fire Suppression Damages Repaired with WFSU-PF12 Funds. Enter in the appropriate blanks:

1. Miles of firelines waterbarred, including work roads waterbarred or cross-drained.

2. Miles of firelines seeded.

3. Other (Identify). Include any other work done to prevent erosion or otherwise repair suppression damage throughout the fire area.

L. Watershed Number(s). Enter specific National Forest System (NFS) watershed number as described in FSM 2575. If more than one watershed is involved, enter the additional number(s) in parentheses.

M. NFS Acres Burned. Enter the acres of NFS land burned, total acres burned, and other ownerships burned to the nearest whole acre.

N. Vegetation Types. Enter the names of major plant communities in the burned area.

O. Dominant Soils. Enter the soil names that characterize the dominant soils of the burned area. Use soil names that best reflect soil characteristics and level of available information.

P. Geologic Types. Enter the geologic types for the burned area.

Q. Miles of Stream Channels by Order or Class. Enter miles of NFS streams or channels by stream order or by class as described in Regional directive supplements.

R. Transportation System. Enter the mileage to the nearest mile within the total burned area for all Forest Service trails and roads.

PART III - WATERSHED CONDITION

A. Fire Intensity. Enter the acres of burned area by fire intensity groupings described in section 23.31. Specify by ownership, if necessary.

B. Water-Repellent Soil. Enter the acres of burned area having water-repellent soil. Specify by ownership, if necessary.

C. Soil Erosion Hazard Rating. Enter the acres of burned area by soil erosion hazard rating in low, moderate, or high classes. Specify by ownership, if necessary.

D. Erosion Potential. Enter the estimated total potential erosion in tons per acre. This is the total on-site erosion potential calculated in accordance with Forest guides, Universal Soil Loss Equation (USLE), or other appropriate methods. The estimate should be a weighted average for all soils and should be based on the next 24-month time period without treatment.

E. Sediment Potential. Enter the estimated potential sediment delivered to channels in cubic yards per square mile.

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period. This is the period of time, in years, that is required for the burned area to develop vegetation sufficient to reduce runoff and erosion potential to essentially prefire conditions. This is a best estimate of natural regeneration, supplemented by the treatment prescribed.

B. Design Chance of Success. Enter the design's likelihood of success. For example, an entry of 90 percent indicates that it is 90 percent certain that runoff and erosion will be controlled by measures installed during the period specified in item A. Conversely, there is also a 10 percent chance that a runoff event larger than designed for will occur during the recovery period.

C. Equivalent Design Recurrence Interval. This is the average interval in years expected between storms of the duration and magnitude described in items D and E (design storm). This value is determined according to the calculated risk diagram described in section 26.5.

D. Design Storm Duration. The storm duration, expressed in hours, is based on the best judgment and available data regarding the types of storms causing the most damage. In some areas, these may be 30-minute convective storms, whereas in other areas 6-hour frontal storms may cause the most damage.

E. Design Storm Magnitude. This value, expressed in inches, is used in the design of land treatment measures for controlling the predicted volume of surface runoff and can be interpolated from isopluvial maps developed for local precipitation conditions. Enter the amount of rainfall for the recurrence interval and duration in items C and D.

F. Design Flow. This is the expected peak flow expressed in cubic feet per second per square mile (cfs/m) for the design storm in item E. This factor is used in the design of treatments to control concentrated flows, and may be determined from related storm duration and magnitude (design storm), estimated from U.S. Geological Survey data, or calculated from a regional analysis for the equivalent design recurrence interval. This design flow assumes prefire conditions of ground cover and infiltration.

G. Estimated Reduction in Infiltration. This is the estimated percentage of the burned area with a reduction in infiltration expected immediately following the fire. Use this factor to evaluate the need for land treatment measures to control runoff onsite.

H. Adjusted Design Flow. This is the peak flow increase, expressed in cubic feet per second per square mile (cfs/m), resulting from the reduction in infiltration given in item G. Consider this factor in the need to increase spillway capacity for channel structures. Estimate these adjustments to flow by referring to the runoff curve values or locally developed processes. Make other adjustments for areas proposed for treatments, such as contour furrowing which will not contribute to the design flow.

PART V - SUMMARY OF ANALYSIS

A. Describe Watershed Emergency. Enter an assessment of the watershed emergency. Discuss the on-site productivity values and the off-site life or property values at risk. Explain how the resultant watershed condition of the burned area may contribute to the loss of water control or the deterioration of water quality or site productivity. This information is available from section A of the cost-risk analysis worksheet (see ch. 30, ex. 01).

When the Burned Area Emergency Rehabilitation (BAER) team determines that emergency treatments are not necessary, summarize the rationale and the watershed conditions which led to this conclusion.

B. Emergency Treatment Objectives. Enter the specific treatment objectives needed to alleviate the emergency described in part V, item A.

C. Probability of Completing Treatment Prior to First Major Damage-Producing Storm. Enter the estimated percentage, to the nearest 10 percent, for the probability of completing the installation of emergency rehabilitation measures or treatments prior to the first major damage-producing storm after the wildfire is controlled.

D. Probability of Treatment Success. Enter in the appropriate block the probability, to the nearest 10 percent, of each type of treatment meeting its objective for the specified time period following installation. Treatment types may be subdivided if necessary. For example, if there are several types of land treatments with different probabilities of success, they may be shown separately.

E. Cost of No Action (Including Loss). Enter the cost of the no-action or baseline alternative as calculated in the BAER cost-risk analysis worksheet (see ch. 30, ex. 01).

F. Cost of Selected Alternative (Including Loss). Enter the cost of the selected alternative as calculated in the BAER cost-risk analysis worksheet (see ch. 30, ex. 01).

G. Skills Represented on Burned-Area Survey Team. Indicate the disciplines of members who served on the BAER team. Enter the names of additional skills used as needed. Enter the name, telephone number, and electronic address of the BAER team leader.

H. Treatment Narrative. Summarize the emergency treatment strategy in enough detail to describe each specific treatment and what it is intended to do. This information helps to determine qualifying treatments for the appropriate funding authorities.

For seeding treatments, always include species, application rates, and species selection rationale.

PART VI - EMERGENCY REHABILITATION TREATMENTS AND SOURCES OF FUNDS **BY LAND OWNERSHIP**

This table displays the specific emergency rehabilitation treatments needed and the funding required for each treatment, broken out by each type of land ownership. On accomplishment reports, this table displays actual quantities completed and dollars obligated.

See section 03 for the criteria and section 24 for a listing of eligible measures and treatments. Only those treatments that directly mitigate the emergency created by the wildfire qualify for emergency WFSU-FW22 funding. When burned acreages are confined to National Forest System lands, post costs to WFSU-FW22. For those burned areas involving National Forest System and non-Federal lands, this table should be jointly prepared by the Forest Service, Soil Conservation Service, and State and local agencies. See FSM 3540 for procedures.

A. Land Treatments. Enter the specific land rehabilitation treatments recommended by the burned-area survey team, units of measurement, estimated unit cost, number of units needed, and estimated total costs. Some examples of eligible land treatments include seeding, mulching, log terraces, and slashing. Also list under land treatments any protection measures such as temporary fences, gates, signing, animal control, or off-road vehicle control.

B. Channel Treatments. Enter the specific channel rehabilitation treatments recommended by the burned-area survey team, units of measurement, estimated unit cost, number of units needed, and estimated total costs. Some examples of eligible channel treatments include channel clearing, channel armoring, channel stabilization, and check dams.

C. Roads and Trails. Enter the specific road and trail drainage protection or modification recommended, units of measurement, estimated unit cost, number of units needed, and estimated total costs. Some examples of eligible treatments include installing cross drains, trash racks, or culvert riser pipes; armoring culvert outlets; or conducting flood patrol in lieu of other treatments. Only those treatments that directly mitigate the emergency created by the effects of the fire on the watershed qualify for funding under burned-area emergency rehabilitation.

Normal road and trail maintenance must be done with regularly appropriated funds. Justification for road/trail treatments proposed for BAER funding should be included in the treatment narrative, Part V, item H.

Enter the cost of maintenance scheduled in the annual road and trail maintenance program in the "Other dollars" column and indicate the type of funds to be used.

D. Structures. Enter the emergency structures recommended as being required in critical problem areas to maintain channel stability or to provide immediate protection from flood water, floatable debris, sediment, boulders, and mud flows. Enter the units of measurement, estimated unit cost, number of units needed, and estimated total costs. Some examples include debris or sediment basins, impound and release dams, or levee work.

For emergency structures proposed for funding under section 216 of the Flood Control Act of 1950 (33 U.S.C. 701; 7 CFR 624), see FSM 3540 for procedures.

E. BAER Evaluation/Administrative Support. Enter the salary costs and other expenses incurred by the BAER team members and administrative and clerical support in evaluating and prescribing treatment for emergency rehabilitation of burned areas.

F. Totals. Enter the totals of all columns.

PART VII - APPROVALS

This part documents the Forest Supervisor and Regional Forester approvals and dates of the approval. The approving officer at each level must sign and date (FSM 2523.04)