Date of Report: 6/11/03

## **BURNED-AREA REPORT**

(Reference FSH 2509.13)

## PART I - TYPE OF REQUEST

- A. Type of Report
- [] 1. Funding request for estimated WFSU-SULT funds
- [X] 2. Accomplishment Report
- [] 3. No Treatment Recommendation
- B. Type of Action
- [] 1. Initial Request (Best estimate of funds needed to complete eligible rehabilitation measures)
- [X] 2. Interim Report
- [] Updating the initial funding request based on more accurate site data or design analysis
- [X] Status of accomplishments to date
- [] 3. Final Report (Following completion of work)

#### PART II - BURNED-AREA DESCRIPTION

- A. Fire Name: Buckhead B. Fire Number: P68655
- C. State: Oregon D. County: Lane
- E. Region: 06 F. Forest: Willamette
- G. District: Middle Fork
- H. Date Fire Started: 7/30/02, 1620

  I. Date Fire Controlled: 8/2/02, 1300
- J. Suppression Cost: estimated around \$150,000
- K. Fire Suppression Damages Repaired with Suppression Funds
- 1. Fireline waterbarred (miles): 0.25
- 2. Fireline seeded (miles): 0.79
- 3. Other (identify): temporary culvert removed, coarse gravel redistributed at water crossing.
- L. Watershed Number: Middle Fork Willamette, Lookout Reservoir, 17090001191
- M. Total Acres Burned: 35 NFS Acres(X) Other Federal ( ) State ( ) Private ( )
- N. Vegetation Types: Douglas-fir/Western Hemlock and hardwood shrubs
- O. Dominant Soils: SRI landtypes: 15W; 90% and 15, 10%
- P. Geologic Types: 90% undifferentiated tuffacious sedimentary rocks, tuffs and basalt; and 10% silicic vent complexes.

| the floodplain with wetlands.   |
|---|
| R. Transportation System  Trails: miles Roads: 0.7 miles  |
| Trailsmiles Troads. <u>c.r_</u> miles   |
| PART III - WATERSHED CONDITION  |
| A. Burn Severity (acres): <u>5.2</u> (low) <u>24.6</u> (moderate) <u>5.2</u> (high)   |
| B. Water-Repellent Soil (acres): 3  |
| C. Soil Erosion Hazard Rating (acres): (low) _35 (moderate) (high)  |
| D. Erosion Potential: <u>35</u> tons/acre   |
| E. Sediment Potential: 19,986 cubic yards / square mile   |
| PART IV - HYDROLOGIC DESIGN FACTORS   |
| A. Estimated Vegetative Recovery Period, (years): 3   |
| B. Design Chance of Success, (percent): 90  |
| C. Equivalent Design Requirence Interval (veers): 24  |
| C. Equivalent Design Recurrence Interval, (years): 24   |
| D. Design Storm Duration, (hours):  |
| · · · · · · · · · · · · · · · · · · ·   |
| D. Design Storm Duration, (hours): 24   |
| D. Design Storm Duration, (hours):  E. Design Storm Magnitude, (hours):  3.8  F. Design Flow, (cubic feet / second/ square mile):  75 |
| D. Design Storm Duration, (hours):  E. Design Storm Magnitude, (hours):  3.8  F. Design Flow, (cubic feet / second/ square mile):  75 |

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

A. Describe Watershed Emergency: The fire burned the riparian area of the Middle Fork of the Willamette River (Spring Chinook Salmon habitat, Federally listed threatened species), which is part of the Buckhead Wildlife Area (listed as an Oregon place for "Watchable Wildlife" sponsored by the Oregon Dept. of Wildlife). As per the Buckhead Wildlife Area, EA and Management Plan 8/80, species most likely to be seen: Western pond turtle (Region Forester's Sensitive Animal List), Oregon chub (Federally listed endangered species), Roosevelt Elk, Wood ducks, Bald Eagles (Federally listed species), and misc. song birds. Riparian restoration has been on-going to restore the riparian habitat with non-native plant removal, native species plantings, enhancement of existing Oregon chub ponds, creation of new ponds for the Oregon chub on the floodplain, and creation of pond edges favorable to Western pond turtle habitation. Due to the floodplain area burned and bare soil near the Oregon chub (Federally listed endangered species) ponds, the watershed emergency would be to minimize the movement of the fine sediment into the ponds during the first Fall/Winter storms and subsequent flood events. It is essential that land treatments be initiated immediately due to the anticipated

Q. Miles of Stream Channels by Order or Class: Adjacent the Middle Fork of the Willamette River (Class I) on

vigorous response from the non-native and noxious weeds in the area. To assure success of the T&E habitat land treatments and minimize long term impairment of the floodplain habitat, riparian shrub and tree plantings will be necessary to maintain the riparian habitat. Initial setback of the weeds will be necessary to assure success of the land treatments.

Emergency Treatment Objectives: To minimize fine sediment transport and invasion of new weed species and re-establishment of non-native and noxious weed species which could detrimentally impair the riparian ecosystem habitat rehabilitation, and the critical pond habitat for the Oregon chub (Federally listed endangered species) and Western Pond Turtle (Regional Forester's Sensitive Animal List). Treatments proposed: Native grass, shrub, and tree species would be planted adjacent the Oregon chub ponds to avoid detrimental impairment to the riparian habitat (5 acs. native grass seeding and 3 acs. riparian planting of shrubs and trees). To assist with the successful land treatments and avoid permanently impairing the structure and function of the riparian ecosystem, an initial teatment is proposed to manually setback the re-establishing non-native and noxious weed species (approx. 20 acres). Annual rye grass hand seeding will be completed on approx. 20 acres to minimize fine sediment movement and minimize bare soil areas being open to invasion of new weed species. Funding sources will be developed for subsequent years land treatments to assure that the riparian habitat is not impaired by the invasion of weeds.

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

Land 90 % Channel N/A % Roads N/A % Other N/A %

D. Probability of Treatment Success

Years after treatment

|         | 1 60 | ars arter treating | 51 IL |
|---------|------|--------------------|-------|
|         | 1    | 3                  | 5     |
| Land    | 80%  | 90%                | 90%   |
|         |      |                    |       |
| Channel |      |                    |       |
|         |      |                    |       |
| Roads   |      |                    |       |
|         |      |                    |       |
| Other   |      |                    |       |
|         |      |                    |       |

- E. Cost of No-Action (Including Loss):\$270,000
- F. Cost of Selected Alternative (Including Loss):\$109,806
- G. Skills Represented on Burned-Area Survey Team:

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

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#### 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 Completed:

**Erosion control native grass seeding:** Approximately 5 acres of area adjacent the OR chub ponds has been hand seeded with Blue Wildrye at 30 lbs./acre. The treatment has minimized the movement of fine sediment and has maintained the riparian ecosystem structure and function. Adjacent western pond turtle nesting habitat (small areas of bare soil) for the western pond turtle was not seeded as planned.

Native shrub and tree planting: Approximately 5 acres of area adjacent to the OR chub ponds has been planted. The following species have been hand planted: Vine maple, 200pa; Big leaf maple, 50pa; Red osier dogwood, 100pa; Oregon ash, 200pa; Oceanspray, 50pa; Long leaf Oregon grape, 144pa; Pacific ninebark, 50pa; Blac cottonwood, 50pa; Oregon white oak, 50pa; Cascara, 20pa; Red currant, 30pa; Nootka rose, 20pa; Thimbleberry, 30pa; Salmonberry, 20pa; Pacific willow, 20pa; Sitka willow, 20pa; snowberry, 50pa; Evergreen huckberry, 30pa; and Red huckleberry, 75pa. There are a total of 19 species planted and a total of 1,209 plants per acre. The species planted have been identified as native to the site based on botany surveys in the area. The objective is to aid in erosion control and avoid impairment to the riparian ecosystem structure and function has been initiated.

**Weed pre-treatment:** The weed pre-treatment has been completed on approximately 20 acres and was completed prior to any plantings on the site. The weed treatment included cutback, pulling, and grubbing out the vigorous weed species (Non-native and noxious) such as: Blackberry, Scotch broom, Thistle, Butterfly bush, etc. The objective is to assure success for the planting of native grasses, shrubs, and trees. Currently, other project funding is being requested to continue with future weed treatments. *Approximately* \$2,889 of the BAER funds remains and will be used for a weed treatment (cutback) around the area of native tree and shrub plantings (work being scheduled for the first week of July) as well as a noxious weed survey (survey work to be completed by the second week in July).

**Erosion control annual rye grass planting:** The annual rye hand seeding has been completed on approximately 20 acres. The Annual rye has been applied by hand at an application rate of 20 lbs./acre. The objective to minimize movement of fine sediment has been accomplished and the planted vegetation has assisted in reducing the invasion of new and old weed species.

## **Channel Treatments:**

N/A

#### Roads and Trail Treatments:

N/A

#### Structures:

N/A

# H. 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.)

Monitoring of the BAER treatments has been completed to determine success of the land treatments. A report of the monitoring findings will be prepared and submitted for the final BAER report. Follow-up noxious weed surveys are anticipated for completion in late June or early July 2003. No additional funding will be requested for monitoring. Future monitoring will continue with other project funds and some environmental education funding where the local schools are cooperating to look at some long term monitoring of real environmental situations such as fire recovery. Subsequent weed surveys and treatments could follow if new sources of weeds are found.

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

|                          |       |        | NFS Lai | nds         |       | X |       | Other L | ands  |             | All      |
|--------------------------|-------|--------|---------|-------------|-------|---|-------|---------|-------|-------------|----------|
|                          |       | Unit   | # of    | WFSU        | Other | X | # of  | Fed     | # of  | Non Fed     | Total    |
| Line Items               | Units | Cost   | Units   | SULT \$     | \$    | X | units | \$      | Units | \$          | \$       |
|                          |       |        |         |             |       | 8 |       |         |       |             |          |
| A. Land Treatments       |       |        |         |             |       | X |       |         |       |             |          |
| EC native seeding        | acres | ###### | 5       | \$3,133     |       | X |       | \$0     |       | \$0         | \$3,133  |
| EC annual rye            | acres | 110    | 20      | \$2,193     |       | X |       | \$0     |       |             | \$2,193  |
| Riparian planting        | acres | 1566   | 5       | \$7,831     |       | X |       | \$0     |       | \$0         | \$7,831  |
| Weed pre-treatment       | acres | 908    | 20      | \$18,169    |       | X |       | \$0     |       | \$0         | \$18,169 |
| *Rip. Plant weed treat   | acres | 575    | 5       | \$2,879     |       | X |       | \$0     |       |             | \$2,879  |
| Subtotal Land Treatments |       |        |         | \$34,205    |       | X |       | \$0     |       | <b>\$</b> 0 | \$34,205 |
| B. Channel Treatmen      | ts    |        |         |             |       |   |       |         |       |             |          |
|                          |       |        |         | \$0         |       | X |       | \$0     |       | \$0         | \$0      |
|                          |       |        |         | \$0         |       | X |       | \$0     |       | \$0         | \$0      |
|                          |       |        |         | \$0         |       | X |       | \$0     |       | \$0         | \$0      |
|                          |       |        |         | \$0         |       | X |       | \$0     |       | \$0         | \$0      |
| Subtotal Channel Treat.  |       |        |         | \$0         |       | 8 |       | \$0     |       | \$0         | \$0      |
| C. Road and Trails       |       |        |         |             |       | 8 |       |         |       |             |          |
|                          |       |        |         | \$0         |       | 8 |       | \$0     |       | \$0         | \$0      |
|                          |       |        |         | \$0         |       | 8 |       | \$0     |       | \$0         | \$0      |
|                          |       |        |         | \$0         |       | 8 |       | \$0     |       | \$0         | \$0      |
|                          |       |        |         | \$0         |       | 8 |       | \$0     |       | \$0         | \$0      |
| Subtotal Road & Trails   |       |        |         | <b>\$</b> 0 |       | X |       | \$0     |       | <b>\$</b> 0 | \$0      |
| D. Structures            |       |        |         |             |       | X |       |         |       |             |          |
|                          |       |        |         | \$0         |       | X |       | \$0     |       | \$0         | \$0      |
|                          |       |        |         | \$0         |       | X |       | \$0     |       | \$0         | \$0      |
|                          |       |        |         | \$0         |       | X |       | \$0     |       | \$0         | \$0      |
|                          |       |        |         | \$0         |       | X |       | \$0     |       | \$0         | \$0      |
| Subtotal Structures      |       |        |         | \$0         |       | X |       | \$0     |       | \$0         | \$0      |
| E. BAER Evaluation       |       |        |         |             |       | X |       |         |       |             |          |
| BAER team costs          |       |        |         | \$1,800     |       | X |       | \$0     |       | \$0         | \$1,800  |
|                          |       |        |         | \$0         |       | Ø |       | \$0     | _     | \$0         | \$0      |
|                          |       |        |         |             |       | 8 |       |         |       |             |          |
| G. Monitoring Cost       |       |        |         | \$2,000     |       |   |       | \$0     |       | \$0         | \$2,000  |
|                          |       |        |         |             |       | 8 |       |         |       |             |          |
| H. Totals                |       |        |         | \$38,005    |       | 8 |       | \$0     |       | \$0         | \$38,005 |

<sup>\*</sup> Rip.plant weed treatment anticipated for first week in July 2003 completion.

# **PART VII - APPROVALS**

| 1. | Forest Supervisor (signature) | Date     |
|----|-------------------------------|----------|
| 2. | Regional Forester (signature) | <br>Date |