

**Date of Report:** January 9, 2013 (Interim #1)

**BURNED-AREA REPORT**

(Reference FSH 2509.13)

**PART I - TYPE OF REQUEST**

**A. Type of Report**

- ☒ 1. Funding request for estimated emergency stabilization funds
- ☐ 2. Accomplishment Report
- ☐ 3. No Treatment Recommendation

**B. Type of Action**

- ☐ 1. Initial Request (Best estimate of funds needed to complete eligible stabilization measures)
- ☒ 2. Interim Report # 1 *Interim report #1 Items are italicized and in Bold Red Font*
  - ☒ 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:** Barry Point Fire

**B. Fire Number:** OR-FWF-120680

**C. State:** OR and CA

**D. County:** Lake and Modoc

**E. Region:** 6 and 5

**F. Forest:** Fremont/Winema and Modoc

**G. District:** Lakeview (R6) and Devil's Garden (R5) Ranger Districts

**H. Fire Incident Job Code:** P6G47N

**I. Date Fire Started:** August 6, 2012

**J. Date Fire Contained:** August 27, 2012

**K. Suppression Cost:** \$20,620,000 (as of 8/26/12)

**L. Fire Suppression Damages Repaired with Suppression Funds**

- 1. Fireline waterbarred (miles):** approximately 270 miles of fireline (including dozer line and handline) known as of 8/31. All lines are expected to be rehabilitated (waterbarred, brushed, berms pulled in) prior to first storm event.
- 2. Fireline seeded (miles):** None seeded at this time.
- 3. Other (identify):** Safety zones, staging areas, and drop points are in the process of being rehabilitated. Road drainage installed where suppression activities warranted doing so.

**M. Watershed Numbers:**

HUC 10	HUC 10 NAME	High Severity (ac)	Low Severity (ac)	Moderate Severity (ac)	Underburned or Unburned (ac)	Total Watershed Burned (ac)	Total Watershed Acres	Percent Watershed Burned
1802000101	Drews Creek	4,785	8,204	6,714	7,902	27,605	168,854	16%
1802000104	Dry Creek-Frontal Goose Lake	3,017	7,501	8,131	5,859	24,508	97,920	25%
1801020401	Fletcher Creek-Boles Creek	4,447	7,646	16,090	4,563	32,746	216,039	15%
1801020402	North Fork Willow Cr-Willow Cr	1,118	2,340	3,441	1,183	8,082	90,685	9%
	<b>Total (ac)</b>	<b>13,367</b>	<b>25,691</b>	<b>34,376</b>	<b>19,507</b>	<b>92,941</b>	<b>573,498</b>	<b>16%</b>

**N. Total Acres Burned:** 93,071 Total (as of 8/27/2012 reported by Fire Information Officer)  
**[59,776] NFS Acres [0] Other Federal [0] State [32,002] Private**

Soil Burn Severity Acres By Land Status					
	High (ac)	Moderate (ac)	Low (ac)	Underburned or Unburned	Grand Total
<b>Oregon</b>	<b>7,912</b>	<b>15,732</b>	<b>16,568</b>	<b>14,415</b>	<b>54,628</b>
NON-FS	1,323	2,198	3,269	4,672	11,462
Fremont-Winema NF	6,590	13,534	13,298	9,743	43,165
<b>California</b>	<b>5,455</b>	<b>18,643</b>	<b>9,124</b>	<b>5,091</b>	<b>38,313</b>
NON-FS	2,935	12,018	4,824	1,925	21,702
Modoc National Forest	2,519	6,625	4,300	3,166	16,611
<b>Grand Total (acres)</b>	<b>13,367</b>	<b>34,376</b>	<b>25,692</b>	<b>19,507</b>	<b>92,941</b>

**O. Vegetation Types:** Mixed conifer forests of White Fir, Ponderosa Pine, Incense-Cedar, plus Western Juniper, Greenleaf Manzanita, Serviceberry, Ross's Sedge and Big Sage.

**P. Dominant Soils:**

Fremont-Winema NF – Typic Argixeroll, loamy-skeletal, mixed, frigid; Fine, mixed,igid, Molic Haploxeralfs; Fine, mixed, frigid and mesic, Typic Rhodoxeralf.

Modoc NF - Loamy-skeletal and Fine Loamy, mixed, frigid, Pachic Ultic Argixeroll; Loamy-skeletal, mixed, mesic, Lithic Argixeroll.

**Q. Geologic Types:**

Tsf - RHYOLITIC AND DACITE (PLIOCENE AND MIOCENE) weathered lava flows and poorly consolidated claystone, siltstone, and volcanic ashflow tuff deposited.

Tb - BASALTIC LAVA FLOWS (MIOCENE AND OLIGIOCENE)

Tvm - ANDESITE AND DACITE - Mafic and Intermediate Vent Rocks (Pliocene and Miocene)

Qal - ALLUVIAL DEPOSITS (Holocene and Pleistocene)

**R. Miles of Stream Channels by Order or Class:**

Stream Flow Regime (miles) by Severity					
Flow Regime by Land Status	High	Low	Moderate	Underburned or Unburned	Grand Total
<b>Fremont-Winema National Forests</b>	<b>5</b>	<b>33</b>	<b>25</b>	<b>16</b>	<b>79</b>
Ephemeral	2	7	8	2	19
Intermittent	2	23	15	14	54
Perennial	1	2	2	1	6
<b>Modoc National Forest</b>	<b>8</b>	<b>31</b>	<b>24</b>	<b>11</b>	<b>75</b>
Ephemeral	6	12	12	5	36
Intermittent	2	19	9	6	36
Perennial	0	0	3	0	3
<b>Non-FS</b>	<b>10</b>	<b>35</b>	<b>48</b>	<b>21</b>	<b>114</b>
Ephemeral	6	11	27	4	48
Intermittent	3	21	20	16	60
Perennial	0	3	1	1	5
<b>Grand Total</b>	<b>23</b>	<b>99</b>	<b>98</b>	<b>48</b>	<b>268</b>

**S. Transportation System****Trails:** 0 miles

**Roads:** See table below. Note, on the California side approximately 57% of the fire is on private land of which we do not have an accurate roads layer for.

Miles of Road by Severity					
	High	Low	Moderate	Underburned or Unburned	Grand Total
<b>Modoc NF</b>	17.4	47.6	65.9	13.1	143.9
<b>Fremont-Winema NF</b>	34.2	84.7	67.9	49.6	236.4
<b>Oregon Private Non-system Roads</b>	4.7	9.4	6.7	12.5	33.2
<b>Grand Total (Miles)</b>	<b>56.2</b>	<b>141.6</b>	<b>140.5</b>	<b>75.2</b>	<b>413.5</b>

**PART III - WATERSHED CONDITION**

- A. Burn Severity (acres):** 19,507 (Underburn/unburned) 25,690 (low)  
34,375 (moderate) 13,367 (high)

NOTES – The above numbers include all lands within the fire perimeter. BARC imagery on 8/11/12 was too smokey to accurately interpret. Spot imagery acquired on 8/23/12 was clear and was used as the Team's starting point for field and aerial validation of burn severity. An additional BARC Land Satellite image was acquired on 8/27/12 for further validation of burn severity.

- B. Water-Repellent Soil (acres):** Table below includes all ownership acres within the fire perimeter. Weak repellancy was estimated on 90% of the high severity acres amounting to approximately 12,030 acres (13% of the burn acres) with a 28% decrease in infiltration estimated on those acres.

Acres of Water Repellant Soils	
Oregon	7,121
California	4,909
<b>Total</b>	<b>12,030</b>

C. Soil Erosion Hazard Rating (acres): 7,101 (low) 12,714 (moderate) 1,922 (high)

D. Erosion Potential: 6 tons/acre

E. Sediment Potential: 50 cubic yards / square mile

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

Note: see appendix for modelled flows throughout the fire

- A. Estimated Vegetative Recovery Period, (years): 7
- B. Design Chance of Success, (percent): 80
- C. Equivalent Design Recurrence Interval, (years): 2
- D. Design Storm Duration, (hours): 0.5
- E. Design Storm Magnitude, (inches): 0.43
- F. Design Flow, (cubic feet / second/ square mile): 7
- G. Estimated Reduction in Infiltration, (percent): 27
- H. Adjusted Design Flow, (cfs per square mile): 15

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

##### **A. Describe Critical Values/Resources and Threats (narrative):**

The following is a brief summary of the values within and along the fire area as well as the threats to those values. For more detailed information see specialist reports and **Appendix B** for a summary of the values at risk, probability of damage or loss, magnitude of consequences and the resulting level of risk.

- **Human Life and Safety-**

- Potential loss of or injury to human life exists throughout the fire area due to post-fire environmental conditions primarily due to hazard trees and the potential for post-fire debris flows and floods. The probability of damage from hazard trees is possible with the magnitude of consequence being major resulting in a high risk along major travel routes. The probability of loss or injury to human life from debris flows/floods is possible with the magnitude of consequences being moderate resulting in an intermediate risk. **Treatments Recommended - Caution signs (Treatment P2)**

**and hazard tree assessments (Treatment P1) for both Regions 5 and 6; additional recommendation to keep Bald Eagle Management Area (BEMA) seasonal closure gates closed year around at Dog Lake BEMA and Drews Reservoir South BEMA in Region 6 in areas of high vegetation mortality until the area is safe).**

- Property (roads, culverts, structures, Ruby Pipeline) – There are several levels of risk associated with the loss or damage to property due to post fire environmental conditions related to increased flow magnitudes, culverts plugging and overtopping, debris flows and erosion.
  - 4020 Road (Region 6) - This road is the main Forest Service access point for the south end of the Fremont-Winema National Forest. It is used for recreational activities as well as private land access. There are 3 culverts located on the 4020 road that have a likely probability of damage associated with being undersized for post-fire flows. The magnitude of consequence for these culverts getting plugged or being undersized and resulting in road damage or road failure is moderate resulting in a high risk. Downstream private lands have an intermediate risk of being impacted due to these road/culvert failures, however the private residences along Dry Creek are located predominately outside the zone that would be influenced by a debris flow or flood. **Treatments Recommended on FS land (Treatment R1-replace culverts).**
  - 4020021 Road (Region 6) - This road connects two major roads within the fire perimeter, the 4020 and the 4017. The road bisects a part of the fire that burned with moderate and high severity. The road has a likely probability of damage associated with post fire overland flow and erosion. The magnitude of consequence from associated degradation to this road is moderate resulting in a high risk. **Treatment Recommended (Treatment R3-hydrologic drainage).**
  - 4020369 and 4020401 Roads (Region 6) – These roads cross Horseshoe Cr and have undersized culverts that are expected to be at risk to post-fire increased flows. Horseshoe Creek is a tributary to Dog Creek which is suspected to contain the sensitive species Goose Lake Lamprey. There is a likely probability of damage to the roads from the culverts plugging or being overtopped. The magnitude of consequences is moderate resulting in a high risk. **Treatment Recommended (Treatment R4-pulling 2 pipes and installing rock ford).**
  - Road Infrastructure (Regions 5 and 6) – Major travel routes within the fire perimeter have a possible probability of damage related to post-fire conditions during major storm events. The magnitude of consequences is moderate resulting in an intermediate risk. **Treatment Recommended (Treatment R2-storm inspection and response).**
  - Private Property on Dry Creek (Region 6) – These private properties along Dry Creek are located within the fire perimeter and downstream of, and adjacent to, National Forest lands. The probability of damage to the properties from post-fire erosion, flooding and debris flows is unlikely with the proposed R1 treatments. The magnitude of consequences are moderate with an overall risk of low. **No Treatment Recommended.**

- Ruby Pipeline (Region 6) – The Ruby Pipeline is a 42 inch diameter buried natural gas transmission line that runs east-west through the fire area. The terrain that the pipeline runs through is relatively flat, with rolling hills. The pipeline has a 100-180ft wide swath along its route that is cleared of vegetation. The probability of damage to the pipeline from post-fire erosion, flooding and debris flows is unlikely with a magnitude of consequences being major and an overall risk of intermediate. **No Treatment Recommended.**
- Drews Creek Campground (Region 6) – Drews Creek Campground sits about 1.5 miles outside the northeast end of the fire perimeter. Values at risk include a pole perimeter fence, two CXT toilets, six wooden pic-nic tables, and campground water sources. The probability of damage or loss to resources is considered unlikely with a magnitude of consequence as minor resulting in a risk of minor. **No Treatment Recommended.**
- Dog Lake Campground (Region 6) - Dog Lake Campground is within the fire perimeter. Values at risk include seventeen picnic tables, one sixty-foot boat dock, one pump house with diesel motor, five wooden-cab Romtec toilets, one CXT concrete toilet, one portable fiberglass toilet and two 20'x50' pole frame/metal roof RV shelters. The probability of damage or loss to resources is considered unlikely due to a relatively low severity burn area upslope of the campground. The magnitude of consequence is minor resulting in a risk of very low. **No Treatment Recommended.**
- Crowder Guard Station (Region 5) – The Crowder guard station includes four structures and additional outside utilities. The probability of damage or loss to resources is considered unlikely since most of the surrounding area burned with low severity and intensity. The magnitude of consequence of loss of property is moderate resulting in a low risk. **No Treatment Recommended.**
- Private Residences on the South end of Drews Reservoir (Region 6) –There are approximately 35 resident structures on the south end of Drews Reservoir just outside the northeast side of the fire perimeter. The structures are predominately located outside the area most likely influenced by a debris flow or flood event. The probability of damage or loss to resources is considered possible with a magnitude of consequence as moderate resulting in a risk of intermediate. **Treatment Recommended (Treatment P2-signs).**
- Private Residence on Dog Lake (Region 6) – This private residence is within the fire perimeter adjacent to Dog Lake Campground. Values at risk include a private structure as well as human life. The probability of damage or loss to resources is considered unlikely due to a relatively low severity burn area upslope of the area. The magnitude of consequence is moderate resulting in a risk of low. **No Treatment Recommended.**
- Private Residence at Renner Lake (Region 5) – This private residence is located adjacent to the fire area on the east side of the fire and located downslope of FS property. The upslope area from the residence experienced moderate to high severity and intensity however the drainage area is relatively small and the distance to the top of the drainage is relatively short. In addition the private residence is located outside the zone that would be influenced by a debris flow or flood. The

probability of damage or loss to resources is considered possible due to the moderate and high severity burn area upslope of the residence. The magnitude of consequence is moderate resulting in a risk of intermediate. **No Treatment Recommended.**

- Natural and Cultural Resources

- TES aquatic species (Region 5) – Willow and Fletcher Creeks in Region 5 have federally endangered Shortnose and Lost River Suckers.
  - Fletcher Creek (Region 5) – Fletcher Cr is intermittent on FS lands within the fire perimeter. Fire severity around Fletcher Cr was moderate to high. The upper reaches of Fletcher Cr have relatively low gradient with very rocky soils. Fletcher Cr has an enclosure in the most southern part of the fire perimeter to protect the federally endangered Shortnose and Lost River Sucker from grazing impacts. The fence has been damaged by the fire. The probability of damage or loss of sucker habitat is very likely due to the burned enclosure fence and the magnitude of consequence is major resulting in a very high risk. **Treatment Recommended (Treatment L1-Repair Fletcher Creek Enclosure Fence and fell identified hazard trees to mitigate safety hazard while repairing fence).**
  - Willow Creek (Region 5) – Willow Cr is predominately a perennial stream within the fire area and experienced some high and moderate severity fire adjacent to the area. Willow Cr has an enclosure fence that protects the federally endangered Shortnose and Lost River Suckers from grazing impacts. Given the current situation of this enclosure fence, the probability of damage or loss to Willow Creek is very likely due to the burned perimeter fence and the magnitude of consequence is major resulting in a very high risk. **Treatment Recommended (Treatment L1-Repair Willow Creek Enclosure Fence and fell identified hazard trees to mitigate safety hazard while repairing fence).**
- Pease Flat Vernal Pool (Region 5) – This vernal pool is situated along and outside the southeast edge of the fire. The terrain around the pool is relatively gentle and the area upslope of the pool primarily burned at low severity. The probability of damage or loss to the vernal pool is unlikely with a magnitude of consequence being moderate, resulting in a low risk. **No Treatment Recommended.**
- Desirable Plant Communities (Regions 5 and 6) – There is a likely probability of damage or loss to desirable plant communities from the spread of invasive weeds with post-fire bare soil conditions. The magnitude of consequence is moderate resulting in an intermediate risk. **Treatment Recommended (Treatment L2- Weed Detection in both Region 5 and 6).**
- Cultural Resources – Region 5 has approximately 140 identified cultural sites and Region 6 has approximately 85 known sites within the fire perimeter. There is a likely probability for loss or degradation to known sites from exposure and looting. The magnitude of consequence is major (irreversible damage) resulting in a very high risk. **Treatment Recommended (Treatment L3 – Archy Protection in Region 6 and Archy Monitor in Region 5)**

**B. Emergency Treatment Objectives (narrative):** The primary objective of this Burned Area Emergency Response Report is to recommend prompt actions deemed reasonable and necessary to effectively protect, reduce or minimize significant threats to human life and property and prevent unacceptable degradation of natural and cultural resources. The application of these BAER treatments would minimize on-site and downstream damages to the identified values at risk. The emergency treatments being recommended by the Barry Point Fire BAER Team are specifically designed to achieve the following results.

Proposed Land and Protective Treatments

The objectives of the land and protective treatments are to:

1. protect human life and safety by assessing for, and removing hazards, limiting access into unsafe areas and posting hazard awareness signs
2. mitigate and prevent the spread of invasives
3. protect lands to allow for critical natural recovery that is essential for protection of federally endangered Lost River and Shortnose suckers.
4. protect cultural resources

Proposed Road Treatments

The objectives of the road treatments are to:

1. reduce the high risk for accelerated surface runoff/failure, damaging National Forest roads within the Barry Point Fire area.
2. reduce the potential for road related surface/mass erosion and accelerated sediment delivery to downstream fisheries habitat.
3. improve culvert capacity to reduce the potential for road failure due to increased flows
4. remove hazards within the burned area while implementing recommended road treatments
5. prevent out-year drainage problems

Proposed Channel Treatments

There are no proposed channel treatments.

**C. Probability of Completing Treatment Prior to Damaging Storm or Event:**

Land 90% Channel N/A Roads/Trails 80% Protection/Safety 90%

**D. Probability of Treatment Success**

	Years after Treatment		
	1	3	5
Land	80	90	90
Channel	N/A	N/A	N/A
Roads/Trails	80	90	90
Protection/Safety	80	90	90



**E. Cost of No-Action (Including Loss):** \$1.8 million (combined for Regions 5 and 6)

**F. Cost of Selected Alternative (Including Loss):** \$348,820 (combined for Regions 5 and 6)

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

<input checked="" type="checkbox"/> Hydrology	<input checked="" type="checkbox"/> Soils	<input type="checkbox"/> Geology	<input checked="" type="checkbox"/> Range
<input type="checkbox"/> Forestry	<input checked="" type="checkbox"/> Wildlife	<input checked="" 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:** Rob Tanner - Region 6 – Asst. Forest Hydrologist, Deschutes and Ochoco NF

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**Team:**

*JIM ARCHULETTA (R6) – SOIL SCIENTIST*  
*GREG ORTON (R6) – SOIL SCIENTIST*  
*MARY FLORES (R5) – WILDLIFE/SOIL SCIENTIST (TRAINEE)*  
*KYLE WRIGHT (R5) – HYDROLOGIST*  
*VINCE PACIFIC (R6) – HYDROLOGIST (TRAINEE)*  
*HILDA KWAN (R5) – HYDROLOGIST (TRAINEE)*  
*JIMMY LEAL (BLM) – FISHERIES*  
*MICHELLE DURRANT (R6) – ARCHAEOLOGIST*  
*JOHN KAISER (R6) – ARCHAEOLOGIST*  
*JERRY GATES (R5) – ARCHAEOLOGIST*  
*ERICA TARBOX (R6) – ENGINEERING*  
*JOLENE ALBERTSON (R6) – ENGINEERING*  
*PEGGY OKEEFE (R5) - ENGINEERING*  
*JEANNETTE WILSON (R6) – BOTANIST/INVASIVE SPECIES*  
*FOREST GAUNA (R5) – BOTANIST/INVASIVE SPECIES*  
*LARRY HILLS (R6) – RECREATION*  
*DOROTHY THOMAS (R6) – GIS*  
*CATHERINE CALLAGHAN (R6) – LANDS AND MINERALS*  
*MARTINA KEIL (R6) - RANGE*  
*JENNY JAYO (R5) - RANGE*  
*BRYAN YOST (R6) - WILDLIFE*

**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:**

**L1 (Region 5): Repair Willow and Fletcher Cr Protection Fences** – The enclosure fences around Willow and Fletcher Creeks are used to protect the species of, and habitat for, the federally endangered Lost River and Shortnose Sucker. The areas are managed to protect and restore riparian habitat for the sucker species, and the fences are used to control livestock use during critical times of the season pertinent to the sucker. The fences also allow the Forest Service to manage invasive plant species (Canada thistle and Dyer's woad) within the protection fence. The fences are located in an area that burned with high and moderate severity which resulted in the loss of wooden posts and melted wire in many locations, but not everywhere. Funds are requested to put the fences back to minimal working order to protect both sucker species. The Willow Cr fence is located at T47N, R11E, Sec 16, 20, 21, and 29. The Fletcher Cr fence is located at T46N, R11E Sec 2, 3, 4.

The Team assessed what a minimal treatment would look like for these areas and concluded that an electric fence or something similar was not reasonable over a length of 9.85 miles of fence. Resting the adjacent pastures from grazing was also considered and was determined to be unreasonable given the permittees reliance on this ground for a portion of the year to make a living. The Team recommends utilizing the portions of fence that are still in tact, repairing those areas that can use repair, and rebuilding those area that are non-functional.

Total miles of enclosure fence within the fire perimeter on Willow and Fletcher Cr is 9.85 miles (6.35 miles on Willow Cr and 3.5 miles on Fletcher Cr). These fences protect approximately 2.5 miles of Willow Cr and 1.5 miles of Fletcher Cr. The Team is requesting 4.6 miles of fence reconstruction on Willow Cr at \$8000/mi totalling \$36,800, 5.25 miles of fence repair (including Willow and Fletcher) at \$1000/mi totalling \$5250. The Team is also requesting hazard tree mitigation over 9.85 miles at \$2200/mi totalling \$21,670 to allow for protection of human life while repairing the fences. Total request for this treatment on Willow and Fletcher Creeks is \$63,720.

**L2 (Region 5): Weed Detection** – This treatment would involve assessing for new invasive weeds within the fire area and treating them prior to spread. Requesting 15 employee days at \$300 for a total of \$4500.

**L2 (Region 6): Same as above**

**L3 (Regions 5 and 6): Cultural Resource Protection** - In Region 5, this treatment would involve monitoring 4 sites that have an intermediate risk to loss or damage. Requesting two days of personnel time for a total of \$600.

In Region 6, one site has been identified to have a very high risk to loss or damage due to post-fire exposure. Requesting \$500 to purchase and install jute matting over a 1,500 square foot area.

**L4 (Region 5): Apply Native Seed to 100 Acres** – This treatment would involve application of native seed to approximately 100 acres of high severity burn area along Willow Cr to prevent the spread of Canada Thistle and Dyer's Woad. Team is requesting 1000 lbs of native seed (Squirreltail, Blue wild rye, California brome, Sandberg bluegrass, Bluebunch wheatgrass) at \$6.50/lb for a total of \$6500. In addition 10 days of employee time (\$300/day) for a total request of \$9,500.

#### Interim #1

*The original cost estimate for 1,000 lb of native grass seed was too low, since it was based on the cost of California brome alone, which turns out to be among the easier (and therefore less expensive) seed to grow out, as well as having relatively large seeds. For a variety of reasons, different native grass species can be more or less difficult to harvest seed from; different seed sizes can also mean a greater or lesser number of seeds per pound. A more accurate estimate for average native grass seed is \$11.00/lb. The following table shows seed costs per pound, as well as the proportions of the seed mix used:*

<i>Species</i>	<i>Pounds Used</i>	<i>Cost per Pound</i>	<i>Totals</i>
<i>California brome</i>	<i>170 lb.</i>	<i>\$6.50</i>	<i>\$1,105</i>
<i>Great Basin wildrye</i>	<i>120 lb.</i>	<i>\$15.00</i>	<i>\$1,800</i>
<i>blue wildrye</i>	<i>120 lb.</i>	<i>\$9.00</i>	<i>\$1,080</i>
<i>bluebunch wheatgrass</i>	<i>45 lb.</i>	<i>\$13.00</i>	<i>\$585</i>
<i>Idaho fescue</i>	<i>120 lb.</i>	<i>\$16.00</i>	<i>\$1,920</i>
<i>Sandberg bluegrass</i>	<i>360 lb.</i>	<i>\$10.50</i>	<i>\$3,780</i>
<i>Σ</i>	<i>935 lb.</i>		<i>\$10,270</i>

*935 lb. of seed mix was actually spread, slightly less than the original projected 1,000 lb.*

*Besides blue wildrye, California brome, Sandberg bluegrass, and bluebunch wheatgrass, two other species were added to the seed mix: Idaho fescue and Great Basin wildrye. These expanded the potential for seeding effectiveness by increasing the chance that an appropriately adapted species would be present in whichever micro-habitat the seed mix was broadcasted into. Squirreltail was not used in the seed mix because its wind-dispersed seedhead makes it difficult to harvest and clean seed, and therefore very expensive (~\$22.00/lb). It also makes it likely to blow into the burned area from surrounding sites on its own; squirreltail is our most effective native primary successional grass coloniser.*

*The personnel time was meant to cover the costs of collecting wild grass seed, which would be planted out and harvested to replenish the stored seed that was used. Employee time spent collecting, however, does not fully cover the costs of the wild collected seed transportation, cleaning, testing, and storage to await grow-out, as well as administering grow-out contracts.*

*The requested updated cost is \$3,475.*

*We would like to re-allocate the monies from from P1, (Region 5), Evaluate and Mitigate Hazard Trees(\$3,600) to cover the requested funds needed to complete the purchase of the native seeds. The P1 treatment was completed using P-Code dollars.*

**Interim #1**

**Original cost estimate for seed: \$6,500; revised cost estimate for seed: \$10,270 a difference of \$ 3,770. (see above).**

**Original cost estimate for employee time: \$3,000; revised cost estimate for employee time: \$3,475. A difference of \$475.00 (see above).**

**Original total estimate for seed and employee time: \$9,500; revised total cost: \$13,745.**

**Channel Treatments:**

There are no proposed channel treatments.

**Roads and Trail Treatments:**

**R1 (Region 6): Resize 3 Culverts on 4020 Rd –** The 4020 road is the main Forest Service Access road along the southern portion of the fire area. This road provides access to private residences and National Forest recreation sites. This treatment would involve replacing three 18-inch culverts with 60- inch culverts to accommodate expected increases in flow. The Team is requesting \$64,100 per treatment for a total of \$192,300.

**R2 (Region 5): Storm Inspection and Response –** The Team has identified a reduction in infiltration in high burn severity areas as approximately 28-32%. In combination with a reduction in evapotranspiration due to vegetation mortality the Team expects the timing, duration and magnitude of runoff to be exaserbated by the fire. The Team has identified a need to assess repair, unplug or aid in reducing storm damage pre-, during and post-storm events along major travel routes and road-stream crossings. We are requesting 6 days of personnel time (\$1800) to assess potential risks and 5 days of equipment time (\$5000) for a total of \$6800.

**R2 (Region 6): Storm Inspection and Response –** Same as above, but requesting 8 days of personnel time (\$2400) and 8 days of equipment time (\$8000) equipment time due to steeper topography and more burn acres in Region 6. Total request is for \$10,400.

**R3 (Region 6): Manage Road Surface Water –** This treatment would involve installing drainage water bars and drain dips along the southern-most 0.25 miles of the 4020021 road to mitigate expected post-fire conditions related to moderate/high burn severity upslope of this road. We are requesting \$3800 to mitigate the risk of road loss.

**R4 (Region 6): Removing Culverts –** This treatment would involve removing 2 undersized culverts that cross Horseshoe Cr and installing rock fords. The culverts are located on the 4020369 and 4020401 roads. Post-fire flows are expected to exceed culvert capacity and jeopardize road integrity. Horseshoe Creek is a tributary to Dog Creek which is suspected to contain the sensitive species Goose Lake Lamprey. We are requesting \$30,000 for this treatment

**Protection/Safety Treatments:**

**P1 (Region 5): Evaluate and Mitigate Hazard Trees –** The Suppression Rehabilitation Plan states, "to reduce hazards to firefighters during final mop-up, fall snags that pose "imminent"

danger (ref. Field Guide for Danger Tree Identification and Response, R6-NR-FP-PR-01-08) along all open roads (ref. Motor Vehicle Use Maps, Fremont-Winema NF, 2012) within the fire perimeter.” However, additional hazard trees not identified during mop-up activities, are expected to occur as trees not yet noticed as dead or dangerous are identified over the next couple months. These danger trees pose a risk to human life and safety. This emergency treatment would allow reconnaissance for hazard trees along open roads within the fire perimeter over the next several months and allow for an interim request for additional funds to mitigate identified hazard trees. Requesting 5 employee days (\$1500) to assess for hazard trees and 3 days (\$2100) to mitigate identified trees for a total request of \$3600.

**P1 (Region 6): Evaluate and Mitigate Hazard Trees** – Same as above, yet increasing days due to larger acreage of National Forest Lands. Requesting 8 employee days (\$2400) and 5 days (\$3500) to mitigate identified hazard trees for a total of \$5900.

**P2 (Region 5): Install Caution Signs** – This treatment would buy and install burned area caution notification signs (with wooden/steel post when necessary) at strategic locations entering the fire area to inform the public and forest users of post-fire conditions and hazards. Monitoring of signs and replacement as necessary is included in this treatment cost. Treatment is essential and necessary to reduce public exposure to post-fire hazards. Requesting 20 signs (\$1200), 20 posts (\$250) and 10 employee days (\$2500) for a total of \$3950.

#### ***Interim #1***

*The purchase of the warning signs has been completed. However, the original money requested only allowed for the purchase of 13 signs at \$91.00 each for a total of \$1,183.00. The original request for 20 signs and posts was \$1,200.00. The original request truly underestimated the cost of signs, posts, hardware and installation. We are requesting an additional \$150 for posts, and \$100 for hardware. A sign plan will need to be designed using more personnel time than asked for above. Consultation with Cal-Trans and the County will also be necessary. This was not included in the initial request. We are asking for an additional \$1,500 for personnel time which would include the installation of the posts/signs. Total additional funds requested for this treatment is \$1,750.00*

*The total revised treatment cost is \$5,700.00.*

**P2 (Region 6): Install Caution Signs** – Same as above, requesting \$3950 for Region 6.

#### **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.)**

**M1: Effectiveness Monitoring of L1, R1, R3, R4 and P2** – Effectiveness monitoring of these treatments would include photo points and whether or not the implemented treatment met the objectives of the treatment. Monitoring would occur pre and post treatment as well as during and after storm events. Requesting \$1800 in Region 5 and \$3000 in Region 6.

## Part VI – REGION 5 Emergency Stabilization Treatments and Source of Funds

Line Items	Units	Cost	Units	BAER \$	\$	units	\$	Units	\$	\$
<b>A. Land Treatments</b>										
L1-Willow/Fletcher Fence	each	63720	1	\$63,720	\$0		\$0		\$0	\$63,720
L2-Weed Detection/Treat	days	300	15	\$4,500	\$0		\$0		\$0	\$4,500
L3-Archy Assmnt	days	300	2	\$600						
L4-Seed 100 acres	each	13,745	1	\$13,745	\$0		\$0		\$0	\$13,745
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<b>Subtotal Land Treatments</b>				\$82,565	\$0		\$0		\$0	\$81,965
<b>B. Channel Treatments</b>										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<b>Subtotal Channel Treat.</b>				\$0	\$0		\$0		\$0	\$0
<b>C. Road and Trails</b>										
R2-Storm Inspect/Res	each	6800	1	\$6,800	\$0		\$0		\$0	\$6,800
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<b>Subtotal Road &amp; Trails</b>				\$6,800	\$0		\$0		\$0	\$6,800
<b>D. Protection/Safety</b>										
P1-Hazrd Tree Assmnt	each	0	0	\$0	\$0		\$0		\$0	\$0
P2-Caution Signage	each	5,700	1	\$5,700	\$0		\$0		\$0	\$5,700
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<b>Subtotal Structures</b>				\$5,700	\$0		\$0		\$0	\$5,700
<b>E. BAER Evaluation</b>										
Region 5 only				\$17,137			\$0		\$0	\$0
<i>Insert new items above this line!</i>				---	\$0		\$0		\$0	\$0
<b>Subtotal Evaluation</b>				---	\$0		\$0		\$0	\$0
<b>F. Monitoring</b>										
M1-Monitor L1, P2	days	6	300	\$1,800	\$0		\$0		\$0	\$1,800
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<b>Subtotal Monitoring</b>				\$1,800	\$0		\$0		\$0	\$1,800
<b>G. Totals</b>				\$96,865	\$0		\$0		\$0	\$96,265
Previously approved				\$94,470						
Total for this request				\$2,395						

## Part VI – REGION 6 Emergency Stabilization Treatments and Source of Funds

			NFS Lands			Other Lands				All
		Unit	# of		Other	# of	Fed	# of	Non Fe	Total
Line Items	Units	Cost	Units	BAER \$	\$	units	\$	Units	\$	\$
<b>A. Land Treatments</b>										
L2-Weed Detection/Treat	days	300	15	\$4,500	\$0		\$0		\$0	\$4,500
L3-Archy Protection	each	500	1	\$500	\$0		\$0		\$0	\$500
				\$0	\$0		\$0		\$0	\$0
Insert new items above this line!				\$0	\$0		\$0		\$0	\$0
Subtotal Land Treatments				\$5,000	\$0		\$0		\$0	\$5,000
<b>B. Channel Treatments</b>										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
Insert new items above this line!				\$0	\$0		\$0		\$0	\$0
Subtotal Channel Treat.				\$0	\$0		\$0		\$0	\$0
<b>C. Road and Trails</b>										
R1-Replace Culverts	each	64100	3	\$192,300	\$0		\$0		\$0	\$192,300
R2-Storm Inspect/Res	each	10400	1	\$10,400	\$0		\$0		\$0	\$10,400
R3-Manage Road Water	each	3800	1	\$3,800	\$0		\$0		\$0	\$3,800
R4-Remove Culverts	each	15000	2	\$30,000						\$30,000
Insert new items above this line!				\$0	\$0		\$0		\$0	\$0
Subtotal Road & Trails				\$236,500	\$0		\$0		\$0	\$236,500
<b>D. Protection/Safety</b>										
P1-Hazrd Tree Assmnt	each	5900	1	\$5,900	\$0		\$0		\$0	\$5,900
P2-Caution Signs	each	3950	1	\$3,950	\$0		\$0		\$0	\$3,950
				\$0	\$0		\$0		\$0	\$0
Insert new items above this line!				\$0	\$0		\$0		\$0	\$0
Subtotal Structures				\$9,850	\$0		\$0		\$0	\$9,850
<b>E. BAER Evaluation</b>										
Region 6 only				\$60,883			\$0		\$0	\$0
Insert new items above this line!				--	\$0		\$0		\$0	\$0
Subtotal Evaluation				--	\$0		\$0		\$0	\$0
<b>F. Monitoring</b>										
M1-Monitor R1,R2,R3, R4, P2,L3	days	300	10	\$3,000	\$0		\$0		\$0	\$3,000
Insert new items above this line!				\$0	\$0		\$0		\$0	\$0
Subtotal Monitoring				\$3,000	\$0		\$0		\$0	\$3,000
<b>G. Totals</b>				\$254,350	\$0		\$0		\$0	\$254,350
Previously approved										
Total for this request				\$254,350						

**PART VII - APPROVALS**

1. /s/ Kimberly H. Anderson  
Forest Supervisor (Modoc) (signature)

January 9, 2013  
Date

- for 2. Danice T. Grant  
Regional Forester (signature)

1/18/2013  
Date