

Date of Report: July 15, 2014

**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: Modoc July Complex                      B. Fire Number: CA-MDF-000344  
C. State: California                                      D. County: Modoc  
E. Region: R5 Pacific Southwest                      F. Forest: Modoc National Forest  
G. District: Devils Garden/Doublehead/Big Valley Ranger Districts  
H. Date Fire Started: July 1, 2014                      I. Date Fire Contained: July 6, 2014  
J. Suppression Cost: \$3,200,000  
K. Fire Suppression Damages Repaired with Suppression Funds  
    1. Fireline waterbarred (miles): Dobie Fire: 6.4 miles; Dalton Fire: 11.7 miles; Janes Fire: 0.8 miles; Lake Fire: 2.4 miles; Northern Fire: 3.4 miles  
    2. Fireline seeded (miles): None  
    3. Other (identify): None  
L. Watershed Number: Dobie Fire: 180102040302 Clear Lake Inflow South; Dalton Fire: 180102040302 Clear Lake Inflow South and 180102040301 Mowitz Creek; Janes Fire: 180102040105 Hager Basin; Lake Fire: 180102040301 Mowitz Creek; Northern Fire: 180102040302 Clear Lake Inflow South  
M. Total Acres Burned: Dobie Fire: 456 acres; Dalton Fire: 642 acres; Janes Fire: 8.8 acres; Lake Fire: 58 acres; Northern Fire: 117 acres ; Total Acres Burned: 1,281.8 acres  
    NFS Acres(All fires intirely within NFS Lands)    Other Federal (0)    State (0)    Private (0)

N. Vegetation Types: Dobie Fire: Sagebrush habitat type with native and nonnative bunchgrasses; Dalton Fire: Sagebrush/Juniper habitat type; Janes Fire: Open Juniper/Yellow pine woodland, with low sagebrush, bitterbrush, and mountain mahogany components; Lake Fire: Sagebrush/Juniper habitat type; Northern Fire: Sagebrush habitat type with native and nonnative bunchgrasses

O. Dominant Soils: Deven cobbly loams; Bieber very cobbly loams; Pass Canyon very cobbly loams and loams; Bakeoven very cobbly fine sandy loams

P. Geologic Types: basaltic, andesitic, and volcanic tuffs; weathered basalt

Q. Miles of Stream Channels by Order or Class: Dobie Fire: No Stream Channels; Dalton Fire: 0.5 miles of ephemeral channels; Janes Fire: 0.2 miles of ephemeral channels; Lake Fire: 0.7 miles of ephemeral channels; Northern Fire: No Stream Channels

R. Transportation System

Trails: 0 miles

Roads: Dobie Fire: 0 miles; Dalton Fire: 1.6 miles; Janes Fire: 0.02 miles; Lake Fire: 0 miles; Northern Fire: 0.04 miles

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

A. Burn Severity (acres): All fires were entirely low soil burn severity. Dobie Fire: 456 acres (Low); Dalton Fire: 642 acres (Low); Janes Fire: 8.8 acres (Low); Lake Fire: 58 acres (Low); Northern Fire: 117 acres (Low); Total Acres Burned: 1,281.8 acres, all low SBS.

B. Water-Repellent Soil (acres): 320 (slight severity, 0-1 inch depth)

C. Soil Erosion Hazard Rating (acres): 1,282 (low) 0 (moderate) 0 (high)

D. Erosion Potential: 0-2.25 tons/acre for a 2-yr to 10-yr runoff event respectively

E. Sediment Potential: not calculated 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 Recurrence Interval, (years): 2

D. Design Storm Duration, (hours): 6

E. Design Storm Magnitude, (inches): 0.82

F. Design Flow, (cubic feet / second/ square mile): 3.03 (Dalton Fire)

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

H. Adjusted Design Flow, (cfs per square mile): 3.13 (Dalton Fire)

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

### **A. Describe Watershed Emergency:**

The Modoc July Complex Fire started on July 1, 2014 from an outbreak of dry lightning and is approximately 1,281.8 acres in size. This complex included five larger fires; Dobie, Dalton, Janes, Lake and Northern; as well as 15 smaller spot fires. These fires include burned areas within the Clear Lake, Mowitz Creek, and Hager Basin drainages. The Mowitz Creek drainage drains the majority of the burn. The fires burned on flat to very gentle slopes within the Devils Garden area Northwest of Alturas, California. The watersheds in the burn are characterized by relatively flat and rock armored slopes. The fire was in a rural area and there were only five values at risk identified (see table one for the values at risk identified and the risk assessment). There is little risk to these values due predominantly to low soil burn severity and gentle rocky ground; little watershed response above unburned levels is anticipated.

Table 1: Values-At-Risk, Risk Assessment, and Recommendations for the Modoc Complex Fires

<b>Value at Risk</b>	<b>Probability of Loss</b>	<b>Magnitude of Consequences</b>	<b>Risk</b>	<b>Notes/Recommendations</b>
NFS Roads	Unlikely	Minor	Very Low	Flat watersheds, low soil burn severity, crossings are rocky fords, no culverts, rolling dips exist on roads. Very low risk to Roads.
Dalton Reservoir (Vernal Pool)	Unlikely	Minor to Moderate	Very Low to Low	Dalton Fire, Unlikely T&E Habitat, Potential habitat for a R5 Sensitive Species, Fire is small percentage of watershed, flat watersheds, low soil burn severity. Very low risk to Dalton Reservoir.
Noxious Weeds	Very Likely	Moderate	Very High	Evidence of suppression vehicles have driven through existing weed sites close to fire perimeter. Very high risk of the spread/establishment of noxious weeds. Recommend monitoring/spot treatment.
Arch Sites	Unlikely	Minor	Very Low	Flat watersheds, low soil burn severity, very low visitation. Very low risk to Arch sites as a result of the fire.
Visitor/Employee Safety	Unlikely	Major	Intermediate	Flat watersheds, low soil burn severity, very few snags, very low visitation, some snags in

				Dalton Fire. Recommend warning signs located at access points into the fire area.
--	--	--	--	--

Precipitation in the fire area is moderate to low, averaging 14 inches per year. Rainfall occurs mostly during the winter months, with some potential for thunderstorms during the summer months. The summer thunderstorms have some potential for intense and localized rainfall. The fire (vegetative) burn severity was mostly low with a few areas of moderate and high severity where tree density was greater.

B. Emergency Treatment Objectives: As noted above, threats to life and natural resources from increased snags and noxious weeds exist within the fire area. For these reasons the primary treatment objectives are to minimize loss of life and risk to human safety. Noxious weed treatments are identified to reduce the risk of degradation of significant botany resources.

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

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

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Life/Safety	90	90	90
Land	90	90	90
Channel	--	--	--
Roads	--	--	--
Other	--	--	--

E. Cost of No-Action (Including Loss): No property or infrastructure loss is expected as a result of this fire. Assessment Cost are \$9,805.

F. Cost of Selected Alternative (Including Loss): Assessment costs plus costs of proposed treatments \$23,133.

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

Christopher Stewart, Team Leader (Trainee)  
Dave Young, Team Leader/Soil Scientist (Trainer)  
Mary Flores, Soil Scientist (Trainee)  
Barry Hill, Hydrologist  
Celia Yamagiwa, GIS  
Susian Frye, Archaeology

Forest Gauna, Botany

Team Leader (Trainee): Christopher Stewart

Email: csstewart@fs.fed.us

Phone: (530) 233-8853

FAX: (530) 233-8709

#### H. Treatment Narrative:

##### Life and Safety Treatment:

Hazard Signs: Hazard trees are present in the burned interior of the fire, generally few and scattered. This is a hazard to FS employees or the public in the area, with an unlikely probability but major potential consequence if someone were to be struck by a falling tree. Because of the unlikely probability, administrative closure is not considered warranted; signage would be a low-cost alternative to mitigate risk and liability. Three warning signs with the narrative "Entering Burned Area – Stay on Roads and Trails" are proposed on FS lands at the north, south, and east entry points to the burned area.

Item	Unit	Unit Cost	# of Units	Cost
Warning Sign Minor (Small 2' x 4')	each	\$250	3	\$750
Installation Materials	each	\$30	3	\$90
Installation Labor	days	\$325	1.5	\$488
Total Request				\$1,328

##### Land Treatments:

Noxious Weed detection surveys would be needed to determine if weeds have been introduced. Treatments of any weed sites found should take place the season following the fire, early enough in the year to ensure that weeds don't have an opportunity to set seed. Early detection and rapid response is the most effective means of controlling noxious weeds: once weeds become established, they provide a seed source for further spread to unimpacted and uninfested areas via livestock, wildlife, and human activities. The Dalton, Lake, Janes, Dobie, and Northern fires, along with other confirmed small fires within the July Complex, and associated fire lines and drop points would be surveyed between April and July 2015 for newly established weed occurrences. Monitoring would include documentation and hand-pulling of small new weed occurrences at the time of inspection. New weed occurrences will be pulled to root depth and, if necessary, placed in sealed plastic bags to prevent seed from dropping, and properly disposed.

##### Outputs of weed detection and treatment surveys:

- GPS record of survey tracks
- GPS polygon of any noxious weed occurrences discovered
- Incorporate data into GIS spatial databases
- Record treatment method
- Dates of treatment

##### Cost Estimate

5 days for Supervisor/Report Writing at \$320 per day: \$1,600

15 days for a botany survey crew consisting of 4 GS-5 technicians at \$165 per technician per day: \$9,900

Miscellaneous supplies such as gas: \$500

Total Cost Estimate: \$12,000

##### Channel Treatments:

None

##### Roads and Trail Treatments:

None

Structures:

None

**I. Monitoring Narrative:**

No treatment monitoring other than for Noxious Weeds (covered under land treatments) are proposed.

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

<b>A. Land Treatments</b>									
Noxious Weeds				\$12,000	\$0		\$0	\$0	\$12,000
Warning Signs				\$1,328	\$0		\$0	\$0	\$1,328
				\$0	\$0		\$0	\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0	\$0	\$0
<b>Subtotal Land Treatments</b>				<b>\$13,328</b>	<b>\$0</b>		<b>\$0</b>	<b>\$0</b>	<b>\$13,328</b>
<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>				<b>\$0</b>	<b>\$0</b>		<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>C. Road and Trails</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 Road &amp; Trails</b>				<b>\$0</b>	<b>\$0</b>		<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>D. Structures</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 Structures</b>				<b>\$0</b>	<b>\$0</b>		<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>E. BAER Evaluation</b>									
<b>Assessment Team</b>				\$9,805	\$0		\$0	\$0	\$9,805
				\$0	\$0		\$0	\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0	\$0	\$0
<b>Subtotal Evaluation</b>				<b>\$9,805</b>	<b>\$0</b>		<b>\$0</b>	<b>\$0</b>	<b>\$9,805</b>
<b>F. Monitoring</b>									
				\$0	\$0		\$0	\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0	\$0	\$0
<b>Subtotal Monitoring</b>				<b>\$0</b>	<b>\$0</b>		<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>G. Totals</b>									
				<b>\$23,133</b>	<b>\$0</b>		<b>\$0</b>	<b>\$0</b>	<b>\$23,133</b>

## PART VII - APPROVALS

1. /s/Amanda McAdams  
Forest Supervisor (signature)

July 15, 2014  
Date

2.   
Regional Forester (signature)

7/31/2014  
Date

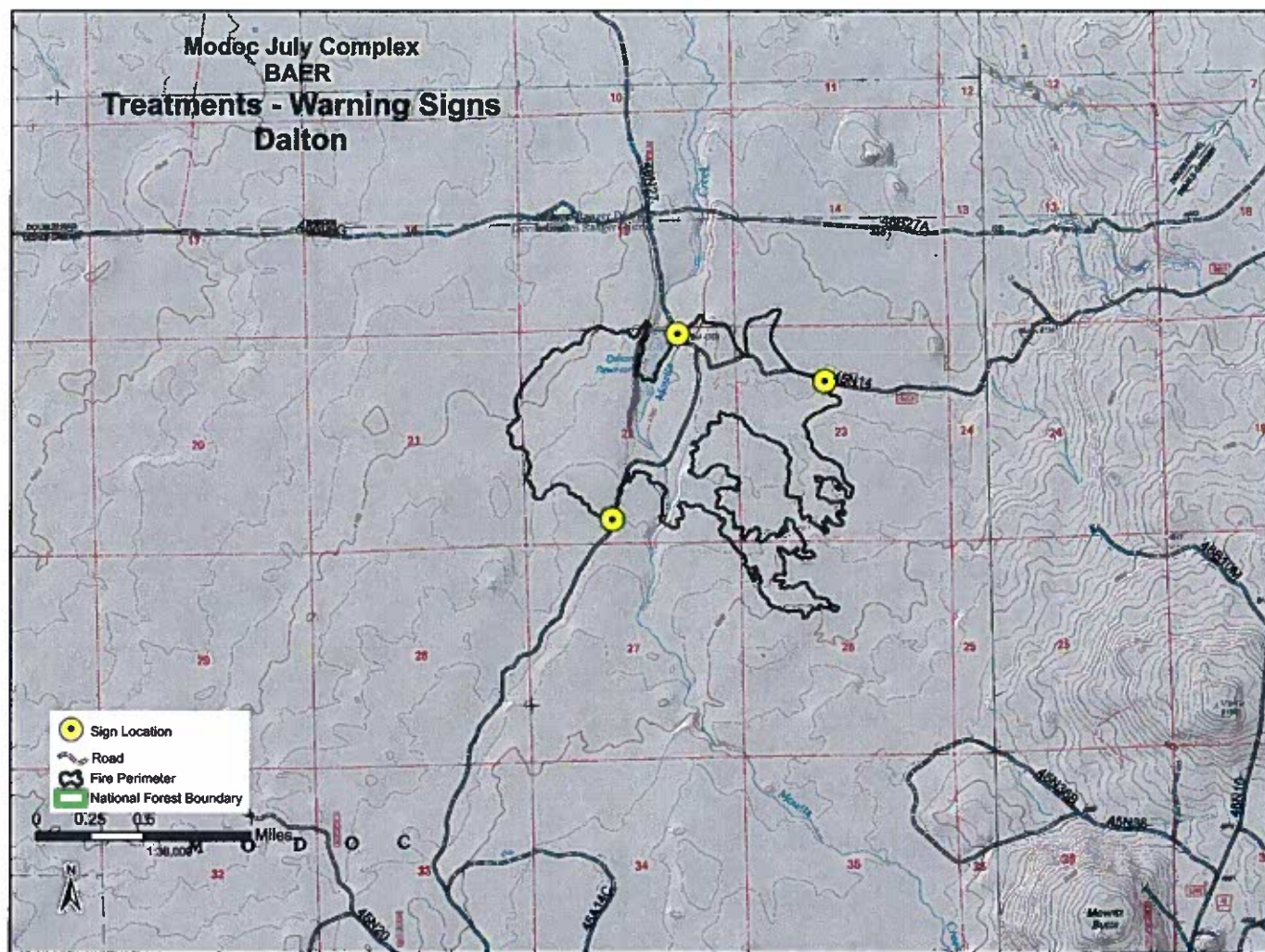


Figure 1: Soil Burn Severity Map





Figure 2: Proposed Warning Sign Treatments within the Dalton Fire Area

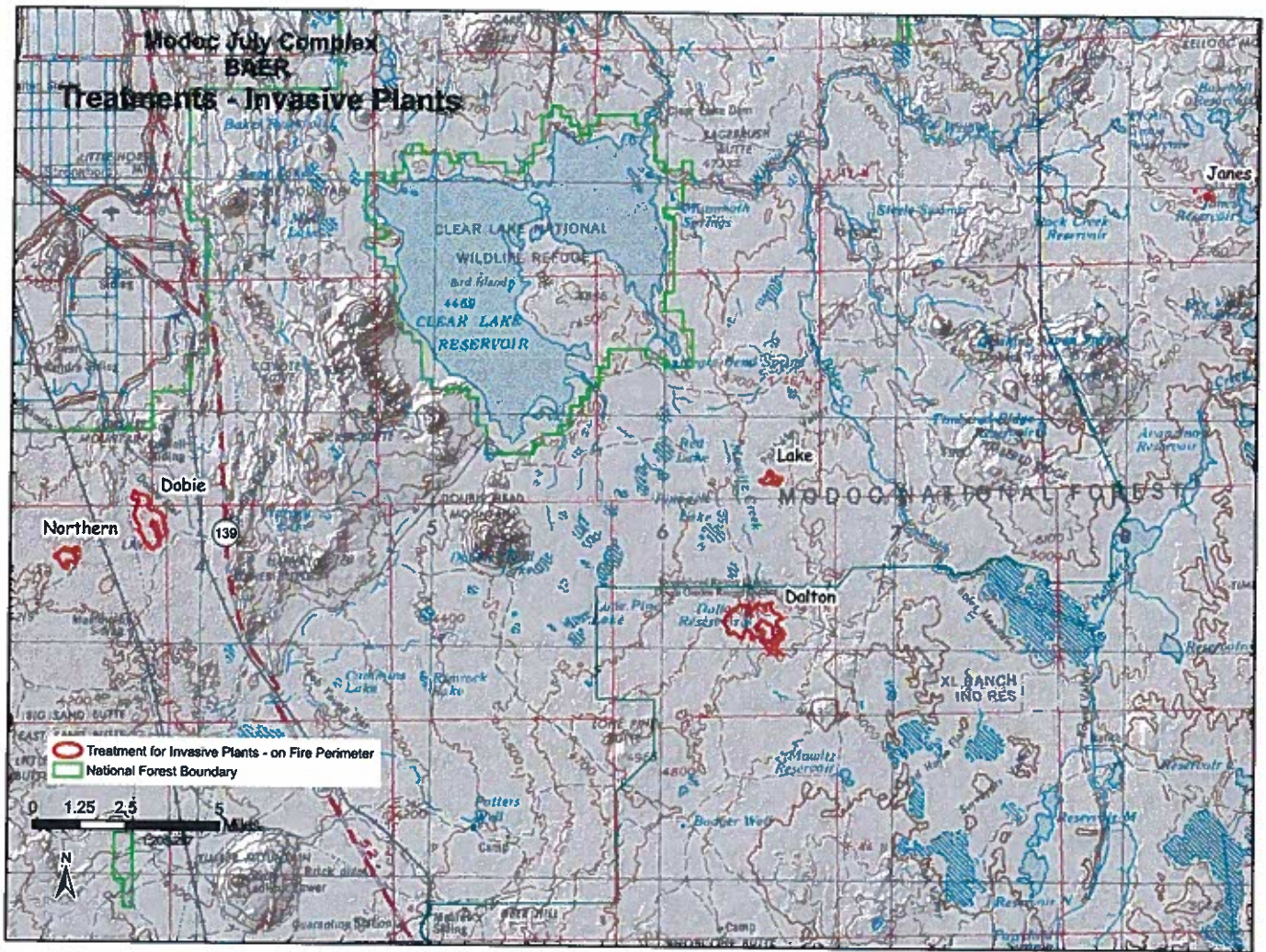


7/13/2014  
cymagwa

File: D:\2014\_JulyLightning\projects\BAER\TreatmentsDalton\_BAER8x11P\_ModocJulyComplex.mxd



Figure 3: Proposed Noxious Weed Treatments



7/13/2014  
cyamagwa

File: D:\2014\_JulyLightning\projects\BAER\TreatmentsComplex\_BAER8x11P\_ModocJulyComplex.mxd