

Date of Report: 7/29/12

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 # _____
 ☐ 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: Squirrel Creek B. Fire Number: WY-MBF-012139
C. State: Wyoming D. County: Albany
E. Region: 02 F. Forest: Medicine Bow Routt NF
G. District: Laramie H. Fire Incident Job Code: P2G0D0
I. Date Fire Started: June 30, 2012 J. Date Fire Contained: July 9, 2012
K. Suppression Cost: \$5.7M as of 7/9/12
L. Fire Suppression Damages Repaired with Suppression Funds
 1. Fireline waterbarred (miles): 5 (handline)
 2. Fireline seeded (miles): 0
 3. Other (identify): Approx 35 miles of dozer line rehabilitation and needed road maintenance will be completed this fall after fire season has passed. The work will be funded with suppression funds through a resource order submitted while the incident was active.
M. Watershed Number: 101800100204 – Squirrel Creek, 101800100201 - Bear Creek, 101800100402 - Lake Hattie, All of which are tributaries of the Laramie River
N. Total Acres Burned: 10,517 acres (per 7/9/2012 fire perimeter)
 NFS Acres(9,731) Other Federal (162) State () Private (984)
O. Vegetation Types: The Squirrel Creek fire is primarily composed of two general vegetation types: lodgepole pine forest and Wyoming big sagebrush shrublands. Other trees such as aspen, douglas fir, Engelmann spruce, limber pine and ponderosa pine occur in patches throughout the fire area and on parts of Sheep

Mountain and east facing slopes above Fox Creek, sparsely vegetated grasslands occur. Tree density and understory composition and cover vary with aspect and slope. Common understory plants in forested areas include dwarf huckleberry, Ross' sedge, elk sedge, bitterbrush, and currant. Small areas within the fire perimeter south of Lake Owen were previously logged and are composed of dense stands of young lodgepole pine. Plants occurring in sagebrush shrublands include bitterbrush, black sagebrush, Sandberg bluegrass, sheep fescue, prairie jungrass, and a variety of forbs. In the majority of the fire area, major drainage channels and streams are relatively narrow and are dominated by aspen, alder, willow and/or narrowleaf cottonwood stands. Wide stream bottoms and wetlands near the western edge of the fire perimeter contain combinations of aspen, willow, common sedges, spruce, and wetland forbs, varying according to the type and saturation level of the soil. Disturbed areas along Highway 230, Fox Creek Road, and some NFS roads within the fire perimeter contain a combination of native vegetation and invasive weeds such as cheatgrass, smooth brome, and Canada thistle.

- P. Dominant Soils: Soils in the central portion of the Sheep Mountain area are on moderately steep to very steep concave and convex mountains and escarpments. They are generally coarse textured inceptisols of the Leguallt and Herbaman Families. Up to 25% of the area is made up of rock outcrops. These soils are moderately erosional, have a moderate run-off potential and low potential for mass wasting.

Soils in the southern portion of Sheep Mountain along Fox Creek Road are loam textured mollisols of vary depths on very steep convex mountainsides of the Bowen and Irigul Families. Up to 50 percent of the area is rock outcrop with some areas having up to 80 percent of the surface covered with cobbles and stones. Because the slopes are very steep the potential for erosion, run-off and mass wasting is high.

Soils in the Squirrel Creek area are on moderately steep slopes. These soils are mostly alfisols (soils that have an eluviated clay layer below the topsoil) with varying depths to bedrock and amounts of rock fragments of the Ansel, Granile, Frisco and Taglake Families. The basic soil is deep with a coarser textured (sandy loam) surface layer and finer (loam, clay loam) subsurface layer. They have, depending on the slope, a low to moderate erosion potential and a low potential of mass wasting.

- Q. Geologic Types: The fire area is located in the Medicine Bow range of the Rocky Mountains. This range has a mixed variety of geological materials including schist and quartzite and other granites to sedimentaries such as sandstone and limestone. Alluviation and glaciation have affected this area to a large degree.

- R. Miles of Stream Channels by Order or Class: 19 perennial and 36 intermittent w/in fire perimeter.

- S. Transportation System

Trails: 3.1 miles; Roads: Oper. Maint. Level 1 (Closed): 2.0 miles; OML 2 (High Clearance) 16.3 miles;
Decommissioned: 5.1; County / Private: 4.7.

PART III - WATERSHED CONDITION

- A. Burn Severity (acres, 9,403 (89%) (low) 1,115 (11%) (moderate) 0 (0%) (high).
Private lands were not assessed, however they appeared to be in a similar condition to NFS lands.
- B. Water-Repellent Soil (acres): 1,115 Ac with potential, no strong water repellent soils observed – see narrative below.
- C. Soil Erosion Hazard Rating (acres):
NFS lands: 1,277 (low) 3,294 (moderate) 5,220 (high) Private: 342 (low) 385 (mod)
- D. Erosion Potential: 1.0 – 2.5 tons/acre
- E. Sediment Potential: 180-470 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years):	<u>2-3 years</u>
B. Design Chance of Success, (percent):	<u>N/A – No hydrologic treatment recommended.</u>
C. Equivalent Design Recurrence Interval, (years):	<u>N/A – No hydrologic treatment recommended.</u>
D. Design Storm Duration, (hours):	<u>N/A – No hydrologic treatment recommended.</u>
E. Design Storm Magnitude, (inches):	<u>N/A – No hydrologic treatment recommended.</u>
F. Design Flow, (cubic feet / second/ square mile):	<u>N/A – No hydrologic treatment recommended.</u>
G. Estimated Reduction in Infiltration, (percent):	<u>N/A – No hydrologic treatment recommended.</u>
H. Adjusted Design Flow, (cfs per square mile):	<u>N/A – No hydrologic treatment recommended.</u>

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats:

Fire Effects Summary: The Squirrel Creek fire burned forested and un-forested mountain slopes along the east and south side of Sheep Mountain and in Squirrel, Fox and Woods creeks, which enter the Laramie River just downstream/east of Woods Landing. The area is managed primarily for deer and elk crucial winter range, and to a lesser degree dispersed recreation. The fire burned sagebrush and grassland with a low severity burn. The primary moderate intensity burn areas were the forested areas along the north facing slopes Squirrel and Fox Creeks, and selected forested patches along the east side and top of Sheep Mountain. The forested areas on Sheep Mountain and the eastern portions of Squirrel and Fox creeks were burned in a mosaic pattern with about 50% of the forested areas burning with a moderate severity, and the rest low or unburned. The western end of the fire, in Squirrel Creek burned slower and hotter, resulting in a higher burn severity than elsewhere, with less fine fuels left on the standing trees and more complete litter consumption. However these areas still fell into the moderate burn severity category as described in the Field Guide for Mapping Post –Fire Soil Burn Severity (Parsons, et al. 2010). Virtually all of the forested area in this western portion of fire perimeter burned.

Rainfall occurred over the area shortly prior to the burned area assessment. On July 5, 0.3 inches fell at the nearby Sawmill RAS weather station, and on July 6, 0.7 inches fell, which is close to the 2 year, 6 hour design storm (0.9 inches). The BAER field assessment on July 7 and 8 observed very little signs of runoff in ephemeral drainages and little to no debris, ash or sediment deposits in Fox or Squirrel Creek. In the western end of the fire where the hottest burn occurred, there were signs of water moving the charred litter and ash across the ground surface, but no rills or other erosion was observed. This indicates that hydrophobic soil conditions are not widespread or severe as a result of this fire.

Sediment deposition and erosion was evident on an old road (NFSR 552) within the treatment area, however this appeared to be from the road itself and not related to fire effects.

Potential Threats to Human Life and Safety:

Laramie Public Water Supply: The City of Laramie water supply intake is 4.5 miles downstream from the fire perimeter on the Laramie River. The fire perimeter encompasses slightly less than 10% of this watershed, with the moderately burned area covering 1.2% of the watershed area. While moderate or severe thunderstorms and the 2013 spring runoff may result in flush of ash and may increase turbidity in the Laramie River, the levels would likely be within natural variation and should not result in harm to the water intake structure, or water quality sufficient to pose a risk to human life or safety.

Burned trees (snags) falling can be a significant hazard after fires. Snags posing an immediate hazard along open roads were removed as a result of fire suppression activities. The fire area is not easy to access due to private lands to the east and limited motorized access on high clearance road and therefore does not receive heavy public use. The only developed recreation area within the burned area is the Medicine Bow Rail Trail, which is a converted railroad. A lesser used trail within the area is the Sheep Mountain Trail which does pass through burned forested areas, as well as through open sage and grassland. These trails are currently closed while the district removes snags along these trails to mitigate the hazard.

Risk to Property: The only structures on NFS lands within the fire area are two recreation residences on NFS lands just north of HWY 230. One of these residences burned, while the other did not, which is a historic property. These two locations are along a tributary of Woods Creek. The building locations themselves are out of the flood plain and at low risk of damage from increased runoff. The hillside above the remaining building is vegetated primarily with aspen and it experienced a low severity burn. This hillside appears to be a low risk of failure or severe erosion, so the risk of damage to the remaining structure from hillslope failure appears to be low.

On private lands, there are residences along Fox Creek through and downstream of the fire area. Several of these residences are reached through culverts or bridges that could potentially be at risk from a large flood. The past two snowpack years have exceeded the estimated 100 year flood in the Laramie River watershed and none of the houses were flooded during those events, although one of the Fox Creek crossings on private land reportedly had washed out. The very limited response that the burn area showed from the recent rainstorms and the small amount of moderately burned area within these watersheds puts these structures at very low risk of damage from increased runoff resulting from the fire. It is unlikely that any rainstorm event would exceed the levels of these past flood events. Therefore, the potential for threats to property as a result of increased flooding after the fire is low.

There is a house on private lands within the Dale Creek drainage on Sheep Mountain north east of the Fox Creek road. A portion of the Dale Creek watershed is within the fire perimeter; however this area burned with a low burn severity. There is an in-channel stock reservoir above the residence; however this pond is on the upper boundary of the fire, so there is no burned area contributing to the runoff into this pond. The pond and this property appear to be at low risk.

Infrastructure Risk: On NFS lands, within the fire perimeter, the roads are entirely high clearance, level 2 roads, or level one closed roads. These roads predominately are located within low burn severity areas, but may be adjacent to, or receive runoff from moderately burned areas. The increased runoff could result in the need to clean drain dips. The only known road culvert is on NFSR 552. This high clearance road has not been drivable in the recent past. The crossing had previously washed out in two places and is currently being used as the foundation for a beaver dam.

The Squirrel Creek crossing of the Medicine Bow Rail Trail is a large (4" diameter CMP) with little sediment deposition. This crossing has several large beaver ponds above, which will reduce the amount of sediment and debris which could block this culvert. This crossing is at low risk of failure.

The stream crossings and culverts along HWY 230 and the Fox Creek Road (a county road) may have increased sediment deposition. The ones most at risk are those with existing sediment deposition which severely limits their capacity. The potential increase in runoff is far less than the flows experience the previous two years due to historically high snowpack. These roads are at low risk, however cleaning sediment deposition and trimming the willows around these crossings would further decrease any potential risk. Fox Creek crosses HWY 230 through a concrete box culvert which has a large capacity. This crossing is a low risk of failure.

Risk to Cultural Resources: One historic structure, a recreation residence is located within the fire area. As described above, this structure is at low risk from post-fire events due to the low severity burn on the hillslope above and the low risk of flooding in the drainage adjacent to the structure.

Risk to Critical Natural Resources: Burn areas in the general vicinity of the Squirrel Creek fire are expected to revegetate with grasses and forbs within a 1-3 year timeframe. In the adjacent Isabelle fire in 2006, understory revegetation such as grasses, forbs, and wetland shrubs have revegetated the area during the past six years. Trees are expected to return to previously forested areas in both burns in the following decades. The Isabelle fires gives a good indication of what can be expected in the western portion of the Squirrel Creek burn area while prescribed burns in sagebrush shrublands along Highway 230 give a good indication of what can be expected in the eastern portions of the burn, in and around Sheep Mountain. Prescribed burns in these sagebrush areas have seen the return of grasses and forbs within 1-2 years post-fire with the growth of sagebrush and other shrub seedlings occurring 1-5 years post-fire. Post-fire vegetation in these areas typically have much lower shrub canopy cover for extended periods of time (>15 years) and may have increased cover of non-native species, specifically cheatgrass. A review of the vegetation in riparian areas associated with Fox Creek and Squirrel Creek found that portions of the riparian vegetation had burned, but 2-3 inch sedges had already resprouted in Fox Creek at the time of our survey.

The majority of the burned area occurs in Crucial Deer and Elk Winter Range and the Sheep Mountain Special Wildlife Area and the burn has created a high probability of expansion of non-native invasive plants into this area. Cheatgrass (*Bromus tectorum*) is the primary threat and cheatgrass invasion could create large-scale and possibly irreversible degradation to landscape appearance and ecosystem function in this crucial winter range. This represents a high risk to this natural resource, which is currently shared by big game, livestock and other wildlife. Cheatgrass infestations have been documented adjacent to roads, trails, prescribed burn areas and other high-use or disturbed areas along the eastern and western flanks of Sheep Mountain, on hillsides west of the Fox Creek Road and north of Highway 230. Populations before the burn were small and scattered, comprising approximately 10% cover in the area mapped as high risk for cheatgrass invasion (Figure 1, in red). Post-fire populations are expected to increase substantially and move beyond the original disturbance footprint, expanding in size and distribution and increasing in elevation throughout large sections of the burned area. Post-fire infestations are expected to increase to 40% cover in those same areas. This represents a significant and highly undesirable change in the landscape and ecosystem. This population expansion is thought to be very likely because past prescribed burning in the vicinity of the fire (and in the presence of existing cheatgrass populations) has resulted in large scale spread of cheatgrass, similar to what is predicted after the Squirrel Creek fire. Figure 1 illustrates areas with high, moderate or low likelihood of invasion by cheatgrass, taking into account proximity to known populations, suspected seed transport by firefighting activities, and pre-burn vegetation types.

Table 1: Acres at risk of invasion from cheatgrass (*Bromus tectorum*) in the burn area of the Squirrel Creek Fire, Laramie Ranger District 2012.

Invasion Risk	Acres
High	1,004
Moderate	3155
Low	5,216
NFS total burned:	9,375

The BAER Risk Assessment (FSM 2523.1 Exhibit 2) for this critical value is “very high”, since the probability for expansion of cheatgrass due to the fire is “very likely” and the magnitude of consequences is “moderate”. BAER funds are being requested for initial cheatgrass control measures on NFS lands in areas with a high likelihood of cheatgrass invasion due to the high risk of long-term degradation landscape appearance, ecosystem function and habitat quality. This area comprises 1,004 acres of the 10,951 acre burn (Table 1.)

Table 2: Acres at risk of invasion from Canada thistle, musk thistle, and yellow toadflax within the Squirrel Creek Fire, 2012.

Invasion Risk	Acres
High	2,093
Low	7,282
NFS total burned:	9,375

Canada thistle (*Cirsium arvense*), musk thistle (*Carduus nutans*), and yellow toadflax (*Linaria vulgaris*) infestations have also been documented in small patches or as individual plants throughout the burn area. Thistle and toadflax population expansion have been documented after other fires in the area and populations are expected to increase after the Squirrel Creek fire. Fire typically increases the distribution of these weeds as well as facilitating existing patch expansion because these species can quickly resprout from unburned underground structures, flower, and wind-disperse

seed throughout the recently burned and barren landscape. Expansion of these weed species constitutes an additional threat to the landscape appearance, ecosystem function, and habitat quality in Crucial Winter Range. In the years following the Squirrel Creek fire weed populations are expected to remain at post-fire elevated levels or further increase in size due to vegetation and habitat types in the burn area and and the expected slow recovery of forest vegetation. Figure 2 highlights areas at high risk for thistle and toadflax population increases, calculated using the location of known populations and pre-burn vegetation types.

The BAER Risk Assessment (FSM 2523.1 Exhibit 2) for this critical value is “high”, since the probability for expansion of noxious weeds due to the fire is “likely” and the magnitude of consequences is “moderate”. BAER funds are being requested for spot control of expanding thistle and toadflax populations..

B. Emergency Treatment Objectives (narrative):

The main objective of the cheatgrass, thistle and toadflax suppression treatments is the control and maintenance of weed populations at pre-fire levels before populations are able to grow to uncontrollable size. Maintenance of weeds (including cheatgrass) at pre-fire levels will maintain landscape appearance, ecosystem functions and quality and quantity of wildlife habitat in Crucial Winter Range and Sheep Mountain Special Wildlife Area. This funding is needed to curtail weed expansion before post-fire landscape conditions facilitate extensive weed infestation that would be extremely expensive or impossible to control. A detailed description of methods that will be used to meet this objective are described below.

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

Invasive Species 100 % Land n/a % Channel n/a % Roads/Trails n/a % Protection/Safety n/a %

Immediately following the Squirrel Creek fire (before the fire was even fully contained) there were several convective storm events that dropped variable amounts of rain (0.3 to 0.7 inch) throughout the burn area. Because the fire was of low to moderate severity an in shallow soils these large rain events had very little effect on current rates of soil erosion and soil stability in the burn area. The rain also decreased the hydrophobicity of the soil which will increase infiltration rates and decrease runoff and erosion during future precipitation events. Because soil is expected to remain stable and infiltration is close to pre-fire levels, it is not expected that future storms or precipitation events will have damaging effects on land treatments involving cheatgrass suppression or weed spraying.

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land (invasive Species)	60%-90%	60%-90%	60%-90%
Channel	n/a		
Roads/Trails	n/a		
Protection/Safety	n/a		

The recommended treatment method consists of broadcast spraying of Plateau herbicide, an effective emergence suppressant of non-native grasses and weeds (60-90% suppression of cheatgrass is expected with one treatment). Herbicide treatment of lower risk areas and subsequent treatments of high risk areas (typically 2 or more Plateau treatments are used to increase suppression rates) are considered non-emergency and will be accomplished using other funding sources.

The estimated acreage with high risk for thistle invasion is approximately 2000 acres (Table 2) but spot treatment will be utilized on populations within these areas and herbicide for approximately 50 acres of coverage is needed. The same herbicide mixture (a combination of Telar XP and Milestone) is effective as a spot treatment for all three species. Treating all three species at the same time significantly reduce labor.

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

The no action alternative would include no BAER action at this time to control weed infestations. As a result weed populations, especially cheatgrass, would grow to unmanageable levels and would need to be treated later by district Range staff and through force account work. Infestations levels would be much higher than pre-fire conditions and would require extensive treatment. It is estimated that 40% of the high risk area mapped for cheatgrass invasion will be infested with cheatgrass by fall of 2013 if left untreated. Populations of thistle and toadflax would also be larger and more resistant (due to size of populations) to herbicide application. The extensive cover of weeds would require additional labor by force accounts and substantially increase in cost as weed populations increase in size and distribution across the landscape.

No Action Alternative	Cost per	Unit	Number	Total
Plateau herbicide (app. rate of 4 oz./acre)	\$170.00	gallon	50	\$8,500.00
Milestone herbicide	\$70.00	quart	8	\$560.00
Telar XP herbicide	\$14.00	ounce	50	\$700.00
HiLight Dye	\$35.00	gallon	4	\$140.00
Surfactant	\$30.00	gallon	4	\$120.00
Range Con	\$234.00	day	5	\$1,170.00
Range Tech	\$116.00	day	5	\$580.00
Labor (force account)	\$60.00	acre	1000	\$60,000.00
TOTAL:				\$71,770.00

F. Cost of Selected Alternative (Including Loss):

Weed Control - Herbicide application	Cost per	Unit	Number	Total
Plateau herbicide (app. rate of 4 oz./acre)	\$170.00	gallon	50	\$6,800.00
Milestone herbicide	\$70.00	quart	8	\$560.00
Telar XP herbicide	\$14.00	ounce	50	\$700.00
HiLight Dye	\$35.00	gallon	4	\$140.00
Surfactant	\$30.00	gallon	4	\$120.00
Range Con	\$234.00	day	10	\$2,340.00
Range Tech	\$116.00	day	10	\$1,160.00
Botanist	\$250.00	day	5	\$1,250.00
ATV herbicide sprayer	\$500.00	each	2	\$1,000.00
Backpack sprayers	\$125.00	each	10	\$1,250.00
TOTAL:				\$14,070.00

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"/>
<input type="checkbox"/> Forestry	<input type="checkbox"/> Wildlife	<input checked="" 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	

Team Leader: Carol Purchase.

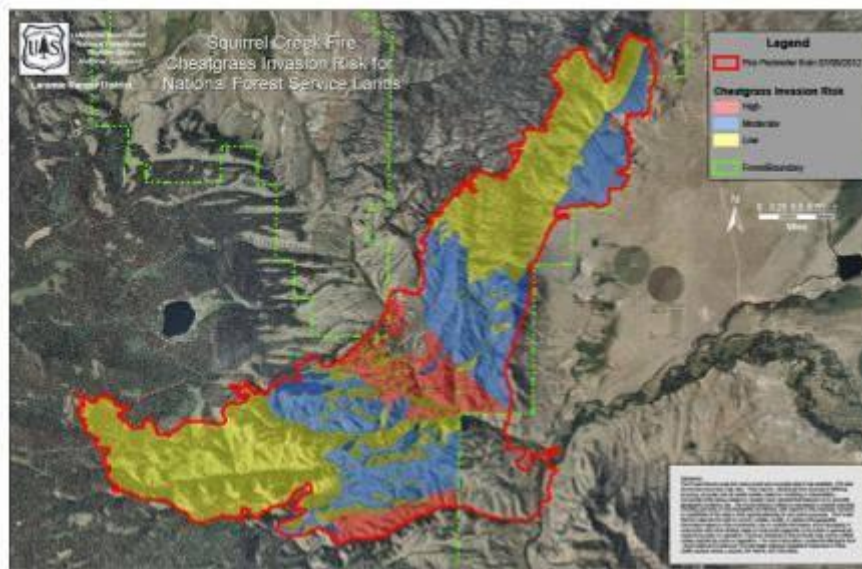
Email: cpurchase@fs.fed.us

Phone: 307.326.2543

FAX: 307.325.5250

H. Treatment Narrative:

Land Treatments: Cheatgrass Suppression: Cheatgrass suppression will be accomplished in high risk/high priority areas (Figure 1) using broadcast herbicide application. Plateau herbicide will be applied during fall "green up" a time period, typically in late September or early October, when winter annuals, such as cheatgrass, will begin to germinate and grow while most other native perennials have gone dormant. This timing targets undesirable vegetation while minimizing side effects to desirable, native species. The herbicide will be applied at rates varying from 4 to 6 ounces per acre, depending on vegetation types. Volunteer labor will be used to apply herbicide, taking advantage of existing volunteer partnerships with WyoTech (a local technical college), Rocky Mountain Elk Foundation, and the Mule Deer Foundation, and supervised by Range and Botany staff. Application will be done by a combination of ATV boom spraying and backpack spraying. Many of the areas targeted as high risk are in low severity burn but have rocky soils, rock outcrops, and some steep slopes. ATVs will be used in low severity burn areas on slopes of 20% or less and in moderate severity burn areas on slopes of 15% or less, when possible. Rocky and steep areas will be avoided by ATVS. All other areas will be sprayed by volunteers on foot carrying backpack sprayers. Volunteers will attempt to broadcast spray 100% of the



surface of the ground, when safety allows, to increase suppression rates and maximize the effectiveness of the treatment. Plateau herbicide is most effective at suppressing cheatgrass when fully broadcast across effective areas. Suppressing new cheatgrass growth at rates of 60-90% and preserving the natural ecosystem and native plants in the Squirrel Creek burn area is the goal of this BAER treatment.

Figure 1: NFS lands at high, moderate and risk of cheatgrass (*Bromus tectorum*) invasion within the Squirrel Creek fire, 2012.

Thistle and Toadflax Control: Canada thistle, musk thistle, and yellow toadflax control will be accomplished by using spot treatment of populations within the thistle and toadflax high risk/high priority areas (Figure 2).

A combination of Telar XP and Milestone herbicide will be used on all three species, beginning as soon as funding is allocated. These weeds should be sprayed before they are allowed to flower. If we get adequate precipitation this summer there is time for new weed growth to flower and disperse seeds. This should not be allowed to happen, as the sparsely vegetated post-burn landscape will make an ideal habitat for new weed establishment. Approximately 50 acres of weed populations are expected to emerge post-fire and will be sprayed using backpack sprayers as they are discovered from July until the end of the growing season. Labor will be performed by Range staff with the help of volunteers (if deemed necessary). Thistle and toadflax are much easier to destroy when young and newly established, the destruction of new or expanding populations before they are allowed to fully establish is the goal of BAER treatments.

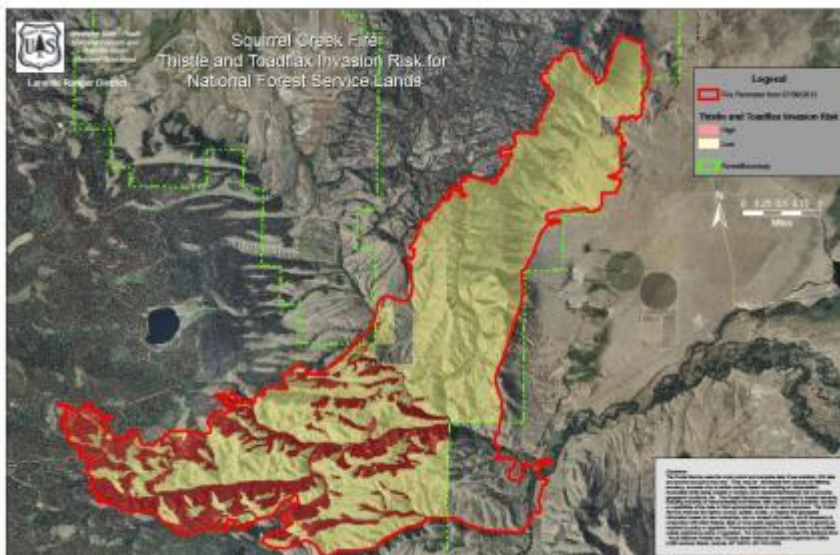


Figure 2: NFS lands at high and low risk of weed invasion from Canada thistle, musk thistle and yellow toadflax within the Squirrel Creek fire, 2012

Channel Treatments: None recommended.

Roads and Trail Treatments: None recommended.

Protection/Safety Treatments: None recommended.

I. Monitoring Narrative:

Implementation monitoring will be accomplished during the spraying. Areas sprayed will be mapped. An effectiveness monitoring plan will be submitted under an interim 2500-8 once the treatment has been implemented.

Part VI – Emergency Stabilization Treatments and Source of Funds
Initial Request

		NFS Lands			Other	Other Lands			All
		Unit	# of			# of	Fed	# of	
Line Items	Units	Cost	Units	BAER \$	\$	units	\$	Units	Total
									\$
A. Land Treatments									
Plateau herbicide	gallon	\$170.00	50	\$8,500					
Milestone herbicide	quart	\$70.00	8	\$560					
Telar XP herbicide	ounce	\$14.00	50	\$700					
HiLight Dye	gallon	\$35.00	4	\$140					
Surfactant	gallon	\$30.00	4	\$120					
Range Con	day	\$234.00	10	\$2,340					
Range Tech	day	\$116.00	10	\$1,160					
Botanist	day	\$250.00	5	\$1,250					
ATV sprayer	each	\$500.00	2	\$1,000					
Backpack sprayers	each	\$125.00	10	\$1,250					
Labor (volunteer, partners)					\$40,000				
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0
<i>Subtotal Land Treatments</i>				\$17,020	\$40,000		\$0		\$0
B. Channel Treatments									
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0
<i>Subtotal Channel Treat.</i>				\$0	\$0		\$0		\$0
C. Road and Trails									
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0
<i>Subtotal Road & Trails</i>				\$0	\$0		\$0		\$0
D. Protection/Safety									
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0
<i>Subtotal Monitoring</i>				\$0	\$0		\$0		\$0
E. BAER Evaluation									
				\$5,000					
<i>Insert new items above this line!</i>				---			\$0		\$0
<i>Subtotal Evaluation</i>				\$5,000	\$0		\$0		\$0
G. Totals									
Previously approved				\$22,020	\$40,000				
Total for this request				\$22,020	\$40,000				

PART VII - APPROVALS

1. /s/ Richard A. Cooksey
Forest Supervisor (signature)

July 16, 2012
Date

2. /s/Brian Ferebee (for)
Regional Forester (signature)

Jul 17 2012
Date