

USDA-FOREST SERVICE

FS-2500-8 (7/00)

Date of Report:

6/154/2005

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: Binion Fire B. Fire Number: OH-WAF-000031
C. State: Ohio D. County: Lawrence
E. Region: Eastern R09 F. Forest: Wayne National Forest

G. District: Ironton Ranger District

H. Date Fire Started: 4/17/05 I. Date Fire Contained: 4/23/05

J. Suppression Cost: Estimated \$100,000

K. Fire Suppression Damages Repaired with Suppression Funds

1. Dozerline waterbarred (miles): 1.54
2. Handline (miles) 0.62
2. Fireline/dozerline seeded (miles): zero
3. Other (identify): Straw mulch & seed

L. Watershed Number: 05090103050 Pine Creek Watershed

M. Total Acres Burned: 303
NFS Acres (194) Other Federal () State () Private (109)

N. Vegetation Types: Predominantly upland oak

O. Dominant Soils: Silt loams with residual sandstone and shale's. Soils were not at field capacity when fire occurred.

P. Geologic Types: Pine Creek lies within the Allegheny Plateau portion of the Appalachian Plateau. The major geologic system is the Pennsylvanian. Distinguishing characteristics are lacustrine deposits, moderate high relief, coarser grained coal-bearing rock sequences, and elevations ranging from 515 to 1400 feet.

Q. Miles of Stream Channels by Order or Class: The fire occurred on the ridge top and was contained in the upper reaches of the watershed. Where the dozerline or handline is perpendicular to 3 1st order ephemerals, there is a potential for sediment delivery. This is being addressed in fire suppression activities.

R. Transportation System

Trails: 0 miles Roads: 0 miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 128 (low) 175 (moderate) 0 (high)

B. Water-Repellent Soil (acres): none observed

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

D. Erosion Potential: - tons/acre

E. Sediment Potential: - cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): <1

B. Design Chance of Success, (percent): 95

C. Equivalent Design Recurrence Interval, (years): -

D. Design Storm Duration, (hours): -

E. Design Storm Magnitude, (inches): -

F. Design Flow, (cubic feet / second/ square mile): -

G. Estimated Reduction in Infiltration, (percent): 0%

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

PART V - SUMMARY OF ANALYSIS

Describe Watershed Emergency:

After an immediate field review it was determined that no watershed emergency exists. However, due to abnormally high fire intensity, the Binion Fire has created forest understory conditions that will likely facilitate the establishment and spread of non-native invasive plant species (NNIPS) into the burned areas. Exposed bare mineral soil and increased light levels have created suitable germination sites for NNIPS already present

in and around the burn area. Chad Kirschbaum, Ironton District Botanist/Ecologist, carried out a preliminary survey of the firelines and some of the pre-existing ATV trails in the northern sections of the burned area (see attached map). Large populations of multiflora rose (*Rosa multiflora*), Tartarian honeysuckle (*Lonicera tartarica*) Japanese honeysuckle (*Lonicera japonica*), Asiatic stilt grass (*Microstegium vimineum*) and garlic mustard (*Alliaria petiolata*) were found (see attached map). The same invasive species have been observed in the southern portion of the burn but have not been recorded with GPS. As a result of the disturbed conditions created by the recent burn, these species will most likely spread further into non-infested areas of the burned area if left untreated.

A. Summary of monitoring sites:
See attached monitoring report.

- B. Emergency Treatment Objectives:
Eliminate or minimize the seed sources of invasive plants before they spread from infested areas to severely burned areas. Treatment and monitoring will continue until the native understory has re-initiated. Specifically, our objectives are to:
- 1) GPS and measure patches and individuals of the species identified above prior to seed dispersal.
 - ~~4~~2) In the first year of treatment, eliminate the reproductive capacity of 50% or more of the plant populations identified from the baseline monitoring.
 - ~~4~~3) Monitor and treat NNIPS populations (if needed) for up to 3 years.

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C. Probability of Completing Treatment Prior to First Major Damage-Producing Storm: (N/A)

Land ___ % Channel ___ % Roads ___ % Other ___ %

D. Probability of Treatment Success

Years after Treatment			
	1	3	5
Land			
Channel			
Roads			
Other Mechanical Treatments	50%	95 80%	

E. Cost of No-Action (Including Loss):
Once established, NNIPS will displace native tree, shrub and herbaceous species by out-competing them for light, water and nutrients. State-listed and regional forester sensitive species may also be present in the burned area since three populations of rare plants have been located near-by (see map). Displacement by NNIPS is a major threat to rare plant species.

F. Cost of Selected Alternative (Including Loss):

We anticipate a significant reduction of 50-95 percent in NNIPS invasion over the next three years and less damage/loss to a number of resources such as timber, wildlife habitat, T&E species, etc.

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 checked="" 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 checked="" 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: Pamela M. Stachler, Forest Hydrologist

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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:

The preferred treatment is a combination of hand and mechanical treatment along with subsequent herbicide application.

Treatment of NNIPS populations will begin in September of 2005. Garlic mustard, Asiatic stilt grass and Japanese honeysuckle will be pulled by hand or spot-sprayed with glyphosate. Large Japanese honeysuckle vines will be cut and then herbicided with a brush application of glyphosate (20% with water and surfactant). Tartarian honeysuckle and multiflora rose will be cut with brush-hogs. Glyphosate (20% with water and surfactant) will be immediately applied to cut stems of Tartarian honeysuckle and multiflora rose. The effectiveness of these treatments will be evaluated using the monitoring variables below.

Due to the controversy surrounding the use of herbicide, an Environmental Assessment will be completed.. Based on the need to address NNIPS in a timely manner, funds are only being requested for mechanical treatments at this time. Repeated mechanical treatments in a single growing season will be required and thus is reflected in the budget. Pending successful completion of an environmental assessment to apply herbicides, and monitoring results to support herbicide use, we may submit a subsequent funding request for herbicide use and required training for field personnel.

Channel Treatments:

Roads and Trail Treatments:

Structures:

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.)
See attached monitoring report.

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

			NFS Lands				Other Lands				All
		Unit	# of	WFSU	Other		# of	Fed	# of	Non Fed	Total
Line Items	Units	Cost	Units	SULT \$	\$		units	\$	Units	\$	\$
Year 1 - 2005											
A. Land Treatments											
Supervision - Botanist	days	200	17	\$3,400	\$0						\$3,400
Project Leader (GS-5)	months	2280	3.5	\$7,980	\$0			\$0		\$0	\$7,980
SCA Intern team (3)	weeks	708	14	\$9,912	\$0			\$0		\$0	\$9,912
Housing and Utilities	month	600	4	\$2,400	\$0						\$2,400
Vehicle	months	3.5	266	\$931				\$0		\$0	\$931
Mileage (32 mi RT)	miles	0.16	2240	\$358	\$0						\$358
Hericide App. Training	tests	35	4	\$140	\$0						\$140
Insert new items above this line!				\$0	\$0			\$0		\$0	\$0
Subtotal Land Treatments				\$25,121	\$0			\$0		\$0	\$25,121
B. Channel Treatments											
				\$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
C. Road and Trails											
				\$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 Road & Trails				\$0	\$0			\$0		\$0	\$0
D. Structures											
				\$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 Structures				\$0	\$0			\$0		\$0	\$0
E. BAER Evaluation											
Initial Detection	days	200	5	\$1,000	\$0			\$0		\$0	\$1,000
Insert new items above this line!				\$0	\$0			\$0		\$0	\$0
Subtotal Evaluation				\$1,000	\$0			\$0		\$0	\$1,000
F. Monitoring											
Project Leader (GS-5)	months	2280	2.5	\$5,700	\$0			\$0		\$0	\$5,700
Vehicle	months	266	2.5	\$665							\$665
Mileage (32 mi RT)	miles	0.16	1600	\$256							\$256
Insert new items above this line!				\$0	\$0			\$0		\$0	\$0
Subtotal Monitoring				\$6,621	\$0			\$0		\$0	\$6,621
G. Totals				\$32,742	\$0			\$0		\$0	\$32,742

PART VII - APPROVALS

1.

Mary C. Reddan

Forest Supervisor (signature)

June 17, 2005

Date
2.

Regional Forester (signature)

Date

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