BURNED-AREA REPORT

(Reference FSH 2509.13)

PART I - TYPE OF REQUEST

- A. Type of Report
 - [x] 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)
 - [x] 2. Interim Report
 - [x] 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: February B. Fire Number: AZ-TNF-0009 (P 3CB6W)
- C. State: AZ D. County: Gila, Coconino
- E. Region: 03 F. Forest: Tonto, Coconino
- G. District:Payson, Mogollon Rim
- H. Date Fire Started: 2/06/2006

I. Date Fire Controlled: Est 2-28-06

- J. Suppression Cost:\$3,500,000
- K. Fire Suppression Damages Repaired with Suppression Funds
 - 1. Fireline waterbarred (miles): 4
 - 2. Fireline seeded (miles): 4
 - 3. Other (identify): safety zones slashed and seeded
- L. Watershed Number: 1506020303
- M. Total Acres Burned: 4,243
- NFS Acres(4,216) Other Federal () State () Private (27)
- N. Vegetation Types: Ponderosa Pine/White Oak, Ponderosa Pine/Manzanita, Mixed Conifer, White Oak/Mtn.Mahogany
- O. Dominant Soils: Udic Haplustalfs, Typic Udorthents, Udic Ustochrepts, Typic Eutroboralfs
- P. Geologic Types: Kaibab Formantion, Coconino Sandstone, Supai Formation, Carboniferous limestone, sandstone and quartzite
- Q. Miles of Stream Channels by Order or Class: 3.03 miles perennial streams, 14.52 miles intermittent streams
- R. Transportation System

Trails: 3.4 miles Roads: 9 miles

PART III - WATERSHED CONDITION

A.	Burn Severity (acres):	1102(low)	367	_ (moderate)	_56	(high)
_		\ 0.40				

B. Water-Repellent Soil (acres): 240C. Soil Erosion Hazard Rating (acres):

1,153 (low) 0 (moderate) 2,820 (high)

D. Erosion Potential: <u>25</u> tons/acre

E. Sediment Potential: ________cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years):	<u>3-5 yrs</u>
B. Design Chance of Success, (percent):	<u>75</u>
C. Equivalent Design Recurrence Interval, (years):	10
D. Design Storm Duration, (hours):	_24
E. Design Storm Magnitude, (inches):	_4.4
F. Design Flow, (cubic feet / second/ square mile):	400
G. Estimated Reduction in Infiltration, (percent):	20
H. Adjusted Design Flow, (cfs per square mile):	1109

PART V - SUMMARY OF ANALYSIS

A. Describe Emergency:

The February Fire burned approximately 4200 acres along the base, the steep face, and the top of the Mogollon Rim in the Tonto and Coconino National Forests. Portions of the Bray Creek, Cow Canyon and Poison Canyon watersheds (tributaries to Webber Creek above the Geronimo Estates subdivision) and Sycamore Creek watershed (a tributary to the East Verde River above the Whispering Pines subdivision) were burned by the fire. Private land, the Bray Creek Ranch, occurs immediately below a portion of the burned area near the base of the Mogollon Rim. About 75 acres (35% of the watershed) of the watershed above the ranch burned with high to moderate severity. These areas could contribute to high flows, sediment, and debris which could impact buildings on the Ranch. Structures on the property (including the main residence) were impacted by runoff, sediment and debris following the Bray Fire in 1990. The Geronimo Estates subdivision lies on Webber Creek below the confluence with Bray Creek. This subdivision may be threatened by increased runoff from the burned area.

The Highline Trail, a National Recreation Trail, traverses the burned area from east to west at the base of the steep portion of the Mogollon Rim. A large percentage of the area that burned with high to moderate severity occurs just up slope of this trail. Runoff and erosion from these areas could damage the trail.

Several Forest roads pass through or below the burned area. These Include:

Road No.	Description	Miles
FR 439	Control Road (FR 64) to Bray Creek Ranch	2
FR 1144	FR 439 to Control Road	2
FR 64 (Control Rd)	From FR 32 to FR 440	3
FR 440	From Control Rd to Camp Geronimo	2
FR 32	Crossing of Sycamore Creek	.25

Forest Road (FR) 439 travels from the Control Road (FR 64) to the Bray Creek Ranch. About .7 miles of this road is a gated permitted road that provides access to the Bray Creek Ranch. The public portion of the road crosses Bray Creek at two locations that are threatened by debris and increased peak flows from the burned area.

FR 440 is a level 3 road that provides access to the Camp Geronimo Boy Scout Camp. This camp is heavily used by Boy Scouts in the summer and is the only access into and out of the camp. Poison Canyon crosses this road at a box culvert. Approximately 60 percent of the Poison Canyon watershed was burned in the fire, primarily with low burn severity.

The Control Road (FR 64) is a major level 3 road providing much of the access to subdivisions located along Webber Creek and the East Verde River. The Control Road crosses Webber Creek below the confluences with Cow Canyon and Poison Canyon. The Control Road also crosses Bray Creek at a concrete low water crossing.

Forest Road 32 crosses Sycamore Creek below the burned area and is the main access to subdivisions and recreation areas in the Upper East Verde River region. Sycamore Creek crosses FR 32 at a box culvert. Except for FR 439 no treatments other than flood patrols (particularly FR 440 to Camp Geronimo) are recommended.

Fire suppression equipment used in the fire suppression effort was not washed prior to use, and may have introduced noxious weeds into the burned area. Bull thistle is an invasive weed of particular concern for the burned area.

B. Emergency Treatment Objectives:

- Reduce the risk of flooding and sediment delivery at the Bray Creek Ranch.
- Reduce the risk of damaging erosion to the Highline Trail.
- Reduce the risk of road failures on roads providing access to private land and recreation areas.
- Reduce risk of debris jams that could increase flood risks to Geronimo Estates.
- Reduce the risk of expansion of noxious weeds into the burned area.

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

D. Probability of Treatment Success

	Years after Treatment							
	1	1 3 5						
Land	75	75	75					
Channel	95	95	95					
Roads	75	75	75					

 E. Cost of No-Action (Including Loss): \$7,400,000 F. Cost of Selected Alternative (Including Loss): \$3,700,000 G. Skills Represented on Burned-Area Survey Team: 							
	[x] Hydrology [] Forestry [] Contracting [] Fisheries	[x] Soils [x] Wildlife [] Ecology [] Research	[x] Geology [] Fire Mgmt. [] Botany [] Landscape Arch	[] Range [x] Engineering [X] Archaeology [] GIS [X] Weeds	[] [] []		
Team Leader: Grant Loomis							

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Phone: (602) 225-5253

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H. Treatment Narrative:

Email: giloomis@fs.fed.us

Other

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Land Treatments:

- Install straw wattles on approximately 40 acres of moderately to severely burned areas on slopes above the Bray Creek Ranch. Surplus wattles from a previous BAER project are in storage at the Payson District and will be used for this project. (Approved on 2/22)

FAX: (602) 225 5295

- Hand seed approximately 40 acres of moderately to severely burned areas on slopes above the Bray Creek Ranch. (Approved on 2/22)

Interim Request

 Detect and remove noxious weeds that may have been introduced to the burned area by suppression activities along dozer lines and safety zones.

Channel Treatments:

Interim Request

- Remove floatable debris from 2 miles of Bray Creek to reduce risk of debris jams that could increase flood risks to Geronimo Estates and to prevent plugging of the culvert on FR 439 at the upper crossing of Bray Creek.

Roads and Trail Treatments:

- Drain and outslope the High Line Trail in areas with moderate to severe burn severity. (Approved on 2/22)

Interim Request

- Improve second crossing of Bray Creek on FR 439 by removing blockage and reinstalling culvert at the proper skew.
- Harden first crossing of Bray Creek on FR 439
- Provide Storm Patrols for FR 32 Crossing of Sycamore Creek, Control Road from FR 32 to Webber Ck and on FR 440 from Control Rd to Camp Geronimo.

Structures:

H. Monitoring Narrative:

(Describe the monitoring needs, what treatments will be monitored, how they will be monitored, and when monitoring will occur. A detailed monitoring plan must be submitted as a separate document to the Regional BAER coordinator.)

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

Part VI – Em	ler geric	y INGII	NFS La		iiciito d	X	, <u>5541</u>	Other L		Lanc	All
		Unit	# of	WFSU	Other	X	# of	Fed	# of	Non Fed	
Line Items	Units	Cost	# or Units	SULT \$	S S	X	# or units	rea \$	# of Units	Non Fed \$	s s
Line items	Units	Cost	Units	SULI \$	Þ	X	units	Þ	Units	Þ	Φ
A 1 1 T (X					
A. Land Treatments		0.50				X		Φ.0		Φ.0	0/00/00
Straw wattles	acres	650	40			8		\$0		\$0	2/22/06
Seeding (hand)	acres	45	40			8		\$0			'2/22/06
Weed Dtctn & Rmvl	miles	1000	15.5	\$15,500		Š		\$0		\$0	. ,
				\$0		Š		\$0		\$0	
Subtotal Land Treatments				\$15,500		X		\$0		\$0	\$15,500
B. Channel Treatmen						X					
Rmv Fltbl debris	miles	5000	2	\$10,000		X		\$0		\$0	
				\$0		X		\$0		\$0	
				\$0		X		\$0		\$0	
				\$0		X		\$0		\$0	
Subtotal Channel Treat.				\$10,000		X		\$0		\$0	\$10,000
C. Road and Trails						Š					
Trail Stablization	miles	3600	2					\$0		\$0	'2/22/06
FR 439 stream xngs	ea	10,500	1	\$10,500		Š		\$0		\$0	\$10,500
Storm Patrol	ea	200	5	\$1,000		8		\$0		\$0	\$1,000
Subtotal Road & Trails				\$11,500		8		\$0		\$0	\$11,500
D. Structures						8				*	
				\$0		8		\$0		\$0	
				\$0		8		\$0		\$0	
				\$0				\$0		\$0	
				\$0		8		\$0		\$0	\$0
Subtotal Structures				\$0		8		\$0		\$0	
E. BAER Evaluation				·		8					
assessment cost				\$0	\$9,500	\$		\$0		\$0	\$0
				\$0	,	8		\$0		\$0	
				Ψ0		8		+0		70	40
G. Monitoring Cost				\$0		8		\$0		\$0	\$0
				ΨΟ		\times		ΨΟ		ΨΟ	Ψ.
H. Totals				\$37,000		8		\$0		\$0	\$37,000
11. 101013				ψ51,000		8		Ψυ		ΨΟ	ψ51,000
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PART VII - APPROVALS

1.	/s/ Gene Blankenbaker Forest Supervisor (signature)	_2-23-06 Date
2.	<u>/s/Abel M. Camarena</u> Regional Forester (signature)	<u>2-27-06</u> Date