

Date of Report: June 27, 2006

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 DESCRIPTIONA. Fire Name: Reserve Complex (Wilson II and Martinez II Fires) B. Fire Number: NM-GNF-200612C. State: NMD. County: CatronE. Region: 03F. Forest: GilaG. District: ReserveH. Fire Incident Job Code: P3CQU8I. Date Fire Started: Wilson 06/06/06, Martinez 06/06/06J. Date Fire Contained: On 06/25/06 95%

Wilson and Martinez Fires initially managed as Fire Use Fires.
The Martinez Fire was declared a Wildfire on June 14th and named the Martinez II.
The Wilson Fire was declared a Wildfire on June 16th and named the Wilson II.
The two fires were managed as the Reserve Complex.

K. Suppression Cost: \$5.45 million

L. Fire Suppression Damages Repaired with Suppression Funds

1. Fireline waterbarred (miles): Wilson 3.5 Martinez 7.5 (Cat Line)
2. Fireline seeded (miles): Wilson 3.5 Martinez 7.5 (Cat Line)
3. Other (identify): Part of the Cat Line will be straw mulched.

M. Watershed Number: Wilson Fire-Upper San Francisco River 5th Code-15040004010, Martinez Fire-Middle San Francisco River 5th Code-15040004040N. Total Acres Burned: 15,800 for Reserve Complex 7,500 for Wilson and 8,300 for Martinez
NFS Acres(15,780) Other Federal () State () Private (Martinez 15 and Wilson 5)

O. Vegetation Types: Ponderosa Pine/Gambel Oak forest, Ponderosa Pine/Pinyon Pine/Alligator Juniper/Gray Oak Forest, Pinyon Pine/Alligator Juniper/Gray Oak Woodlands and small amounts of Riparian Vegetation.

P. Dominant Soils: Used General Ecosystem Survey. Map Units: 149, 168, 196, 390, and 479 Lithic Haplustalfs, Typic Haplustalfs, Mollic Eutroboralfs, Eutric Glossoboralfs, Typic Ustorthents, Lithic Ustochrepts, Typic Udorthents, and Typic Dystrochrepts.

Q. Geologic Types: Rhyolite, basalt, andesite, Gila conglomerate and small amounts of alluvium.

R. Miles of Stream Channels by Order or Class: Within the Wilson and Martinez Fires the drainages are all ephemeral.

S. Transportation System

Trails: 0 Wilson, 0 Martinez miles

Roads: 9 Wilson, 0 Martinez miles

PART III - WATERSHED CONDITION

A. Burn Severity Fire Use (acres):
1,575 Wilson, 890 Martinez (low)
690 Wilson, 670 Martinez (moderate)
25 Wilson, 340 Martinez (high)
2,290 Wilson, 1,900 Martinez Total

Burn Severity Wildland (acres):
4,150 Wilson, 4,220 Martinez (low)
870 Wilson, 1,220 Martinez (moderate)
190 Wilson, 960 Martinez (high)
5,210 Wilson, 6,400 Martinez Total

B. Water-Repellent Soil (acres): 200 Wilson 1,800 Martinez

C. Soil Erosion Hazard Rating (acres):
0 Wilson 0 Martinez (low), 2,075 Wilson 3,320 Martinez (moderate), 5,425 Wilson 4,980 Martinez (high)

D. Erosion Potential: 0.7 Wilson 4.7 Martinez tons/acre

E. Sediment Potential: 20 Wilson 93 Martinez cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 25

B. Design Chance of Success, (percent): 70%

C. Equivalent Design Recurrence Interval, (years): 25 yr

D. Design Storm Duration, (hours): 1 hr

E. Design Storm Magnitude, (inches): Martinez 1.65 in; Wilson 1.60 in

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

| Watershed | CFS/ SQ mi |
|-----------------------------------|------------|
| Martinez/Gordon Canyon | 114 |
| Martinez/Lower Martinez | 15 |
| Wilson/Devil Canyon (burned area) | 50 |

G. Estimated Reduction in Infiltration, (percent):

25%

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

| Watershed | CFS/ SQ mi |
|-----------------------------------|------------|
| Martinez/Gordon Canyon | 159 |
| Martinez/Lower Martinez | 19 |
| Wilson/Devil Canyon (burned area) | 99 |

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats:

The Wilson and Martinez fires were lightning-caused fires and were initially managed as Wildland Fire Use Fires. On June 14, 2006 the fire activity increased and the decision was made to confine and contain the Martinez Fire. On June 16, 2006 the decision was made to confine and contain the Wilson Fire. The fire names were changed to Wilson II and Martinez II and were managed as the Reserve Complex. Before they were called wildfires the Wilson Fire had burned approximately 2,290 acres and the Martinez fire had burned approximately 1,900 acres. By June 25 the Wilson had burned 7,500 acres and the Martinez had burned 8,300 acres.

The Wilson Fire was located 9 miles northeast of Reserve, New Mexico and just south of Toriette Lakes. The fire drains towards the south through several ephemeral drainages, which are Wilson, Largo, Devil, and Spring Canyons. The eastern portion of the fire drains into Wilson Canyon, which drains into the Tularosa River approximately 3 miles below the fire. The Tularosa River is not meeting New Mexico State Water Quality Standards for conductivity and has T & E Species loach minnows. The central portion of the fire drains into Largo Canyon. Below the fire, Largo Canyon has small portions with intermittent flow. Largo Canyon drains into the San Francisco River approximately 10 miles below the fire. The western portion of the fire drains into Devil Canyon and Spring Canyon, which drain into the San Francisco River about 2 to 5 miles below the fire. The San Francisco River has occupied critical habitat for loach minnow. The fire is within the Cross V Allotment and several stock tanks are in the fire area and have a potential to be filled with sediment. For this fire the main values at risk are loss of soil productivity, reduction of water quality and sedimentation to downstream areas, and impacts to loach minnow.

The Martinez Fire was located 12 miles southeast of Reserve, New Mexico and just northeast of Saliz Pass. The fire drains towards the west and south mainly through Gordon Canyon, which has ephemeral flow. Gordon Canyon drains into Saliz Creek, which has perennial flow. Saliz Creek drains south into the San Francisco River approximately 5 miles below the fire. Just below the fire in Saliz Canyon are three small areas of private land. The private lands have some buildings on them and most are out of the flood plain. Just below the fire about ¼ mile on private land is the Martinez Ranch Headquarters. The ranch

headquarters has one summer home, which is sitting within the floodplain. Forest Road 16 enters these private lands from State Highway 180. Some portions of this road are in Saliz Canyon below the fire. There is also a power line in the area and several power line poles are in Saliz Canyon below the fire. The fire is within the Martinez and Leggett Allotments. The Martinez Allotment is closed to grazing. For this fire the main values at risk are loss of soil productivity, reduction of water quality in downstream areas, impacts to loach minnow, and flooding risk to a summer home at the Martinez Headquarters, access road, and power line.

B. Emergency Treatment Objectives:

1. To reduce soil erosion and loss of soil productivity.
2. To reduce sedimentation to downstream areas.
3. To reduce the potential for high water runoff.

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

Land 50 % Channel N/A % Roads/Trails N/A % Protection/Safety 85 %

D. Probability of Treatment Success

| | Years after Treatment | | |
|-------------------|-----------------------|-----|-----|
| | 1 | 3 | 5 |
| Land | | | |
| Seeding | 50 | 60 | 70 |
| Channel | --- | --- | --- |
| | | | |
| Roads/Trails | --- | --- | --- |
| | | | |
| Protection/Safety | 85 | 90 | 95 |
| | | | |

E. Cost of No-Action (Including Loss): **\$2,648,250**

F. Cost of Selected Alternative (Including Loss): **\$1,876,150**

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 type="checkbox"/> Fire Mgmt. | <input type="checkbox"/> Engineering |
| <input type="checkbox"/> Contracting | <input type="checkbox"/> Ecology | <input 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 Members:

Carolyn Koury, Hydrologist
 Bill Wells, Hydrologist
 Jim Probst, Hydrologist
 Charles Souders, Soil Scientist
 David Bailey, GIS
 Joe Garroto, Archeologist
 Felix Quesada, Resource Advisor
 Collin Ewing, Resource Advisor

Team Leader: Mike Natharius

Email: mnatharius@fs.fed.us

Phone: 505-388-8246

FAX: 505-388-8204

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:

BAER request:

- Approximately 1200 acres of high/moderate severity burn within the Martinez Fire perimeter and 200 acres within the Wilson Fire perimeter are proposed for aerial seeding with a fixed wing aircraft. Seed mix will include 4-5 seeds including both native and annual cereal, and will be applied at a rate of approximately 40 seeds / square foot.
- 5 stock tanks are proposed for cleanout within the Wilson Fire perimeter that had moderate to high severity burn in the drainage areas immediately above the tanks. These tanks will function as sediment catchments above the San Francisco River with loach minnow habitat.
- 5 heritage sites that have been compromised by burnt snags are proposed for sawyer work and mulching.

Other funding: Approximately 600 acres of high/moderate severity burn with the Martinez Fire perimeter are proposed for aerial seeding with a fixed wing aircraft. These dollars are proposed to be funded with Forest project dollars.

Channel Treatments:

None Proposed

Roads and Trail Treatments:

None proposed

Protection/Safety Treatments:

- 2 signs indicating Flood Hazard are proposed at both inlets to Forest Road 16 before it enters Saliz Creek

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.)

Establish 2 photo points in Gordon Canyon to be monitored twice a year to evaluate success of seeding application.

Part VI – Emergency Stabilization Treatments and Source of Funds
Interim #

| Part VI - Emergency Stabilization Treatments and Source of Funds | | | | | | | | | | |
|--|-------|------|-----------|-----------|----------|-------------|-----|-------|---------|-----------|
| | | | NFS Lands | | | Other Lands | | | | All |
| | | Unit | # of | | Other | # of | Fed | # of | Non Fed | Total |
| Line Items | Units | Cost | Units | BAER \$ | \$ | units | \$ | Units | \$ | \$ |
| | | | | | | | | | | |
| A. Land Treatments | | | | | | | | | | |
| seeding (aerial) | acres | 85 | 1400 | \$119,000 | \$0 | | \$0 | | \$0 | \$119,000 |
| seeding (aerial) | acres | 85 | 600 | | \$51,000 | | | | | \$51,000 |
| Heritage site (mulch) | acres | 500 | 5 | \$2,500 | \$0 | | \$0 | | \$0 | \$2,500 |
| stock tank cleaning | each | 1500 | 5 | \$7,500 | \$0 | | \$0 | | \$0 | \$7,500 |
| Insert new items above this line! | | | | \$0 | \$0 | | \$0 | | \$0 | \$0 |
| Subtotal Land Treatments | | | | \$129,000 | \$51,000 | | \$0 | | \$0 | \$180,000 |
| 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. Protection/Safety | | | | | | | | | | |
| Signing | each | 150 | 2 | \$300 | \$0 | | \$0 | | \$0 | \$300 |
| | | | | \$0 | \$0 | | \$0 | | \$0 | \$0 |
| | | | | \$0 | \$0 | | \$0 | | \$0 | \$0 |
| Insert new items above this line! | | | | \$0 | \$0 | | \$0 | | \$0 | \$0 |
| Subtotal Structures | | | | \$300 | \$0 | | \$0 | | \$0 | \$300 |
| E. BAER Evaluation | | | | | | | | | | |
| Assessment | | | | | \$10,000 | | \$0 | | \$0 | \$10,000 |
| Insert new items above this line! | | | | --- | \$0 | | \$0 | | \$0 | \$0 |
| Subtotal Evaluation | | | | --- | \$10,000 | | \$0 | | \$0 | \$10,000 |
| F. Monitoring | | | | | | | | | | |
| photo point | day | 350 | 2 | \$700 | \$0 | | \$0 | | \$0 | \$700 |
| Insert new items above this line! | | | | \$0 | \$0 | | \$0 | | \$0 | \$0 |
| Subtotal Monitoring | | | | \$700 | \$0 | | \$0 | | \$0 | \$700 |
| | | | | | | | | | | |
| G. Totals | | | | \$130,000 | \$61,000 | | \$0 | | \$0 | \$191,000 |
| Previously approved | | | | | | | | | | |

PART VII - APPROVALS

1. /s/ Ronnee Sue Helzner
(for) Forest Supervisor (signature)

6-29-2006
Date

2. /s/ Lucia M. Turner (for)
Regional Forester (signature)

6/30/2006
Date