**USDA-FOREST SERVICE** 

Date of Report: 08/20/2012

# **BURNED-AREA REPORT**

(Reference FSH 2509.13)

# **PART I - TYPE OF REQUEST**

| A.                                | Type of Report  |   |  |  |  |  |  |
|-----------------------------------|---|---|--|--|--|--|--|
|                                   | <ul><li>[X] 1. Funding request for estimated emerg</li><li>[] 2. Accomplishment Report</li><li>[] 3. No Treatment Recommendation</li></ul>  | ency stabilization funds                              |  |  |  |  |  |
| В.                                | 3. Type of Action   |   |  |  |  |  |  |
|                                   | [X] 1. Initial Request (Best estimate of fund   | s needed to complete eligible stabilization measures) |  |  |  |  |  |
|                                   | <ul> <li>[] 2. Interim Report #</li> <li>[] Updating the initial funding request based on more accurate site data or design analysis</li> <li>[] Status of accomplishments to date</li> </ul> |   |  |  |  |  |  |
|                                   | [] 3. Final Report (Following completion of work)   |   |  |  |  |  |  |
| PART II - BURNED-AREA DESCRIPTION |   |   |  |  |  |  |  |
| A.                                | Fire Name: Jumpup Fire  | B. Fire Number: AZ-KNF-000877                         |  |  |  |  |  |
| C.                                | State: AZ   | D. County: Coconino                                   |  |  |  |  |  |
| E.                                | Region: 03  | F. Forest: Kaibab (0307)                              |  |  |  |  |  |
| G.                                | District: 3   | H. Fire Incident Job Code: P3G5J3                     |  |  |  |  |  |
| I. C                              | Date Fire Started <u>: 08/13/2012</u>   | J. Date Fire Contained: 08/16/2012 (estimated)        |  |  |  |  |  |
| K. Suppression Cost: \$150,000.00 |   |   |  |  |  |  |  |
| L.                                | L. Fire Suppression Damages Repaired with Suppression Funds 1. Fireline waterbarred (miles): 1.2 miles 2. Fireline seeded (miles): 1.2 miles 3. Other (identify):                             |   |  |  |  |  |  |
| M.                                | Watershed Number: 150100030706 (363 ac.)  |   |  |  |  |  |  |
| N.                                | Total Acres Burned: 363 NFS Acres(X) Other Federal ( ) State ( )  | Private ( )   |  |  |  |  |  |
| Ο.                                | D. Vegetation Types: Utah juniper, shrubs, and grasslands   |   |  |  |  |  |  |
| Р.                                | Dominant Soils: Lithic Ustochrepts (309 ac.), Typic Ustochrepts (54 ac.)  |   |  |  |  |  |  |

- Q. Geologic Types: Permian sedimentary rocks. Gray to tan, cherty limestone of Kaibab and Toroweap Formations, and underlying white to tan, fine-grained Coconino Sandstone (gypsum; mudstone; dolomite; orthoguartzite) R. Miles of Stream Channels by Order or Class: 0.81 miles of 1st order streams; 0.05 miles of 2nd order streams; 1.31 miles of 4<sup>th</sup> order streams. S. Transportation System Trails: 1.18 miles
  - Roads: 0.15 miles

## PART III - WATERSHED CONDITION

- A. Burn Severity (acres): 137 (unburned/very low) 167 (low) 56 (moderate) 3 (high)
- B. Water-Repellent Soil (acres): All high severity burn acres and 50 percent of moderate severity burn acres (i.e., 31 ac.)
- C. Soil Erosion Hazard Rating (acres): 123 (moderate) 240 (high) 0 (low)
- D. Erosion Potential: 11.5 tons/acre
- E. Sediment Potential: 7,835 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): 10 D. Design Storm Duration, (hours): \_0 .5 hr.\_ E. Design Storm Magnitude, (inches): \_1.25 in.\_ F. Design Flow, (cubic feet/second/square mile): 950 G. Estimated Reduction in Infiltration, (percent): 10\_
  - PART V SUMMARY OF ANALYSIS

30

#### A. Describe Critical Values/Resources and Threats:

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

There are known populations of cheatgrass, Russian thistle, and Scotch thistle adjacent to the fire perimeter. Cheatgrass and Scotch thistle have been recently treated with herbicides, but the potential exists for these weeds and recently discovered Russian thistle to invade burned areas.

There is potential for storm flows to compromise the integrity of approximately 0.25 mile of Forest Roads 423 which is outside of the fire perimeter, but downslope of the burned area, including a culverted crossing. The 423 road is located in the bottom of Slide Canyon adjacent to an ephemeral drainage that discharges into Slide Elbow Tank.

There is potential for damage to approximately 0.75 miles of the Slide Canyon Trail (Trail No. 58) through erosion of the trail tread.

- B. Emergency Treatment Objectives:
  - Implementation of Best Management Practices (BMPs)/road hardening measures on a 0.25 mile-long segment of Forest Service Road 423 to control stormwater runon and runoff and protect the road prism.
  - Implement Best Management Practices and other hardening measures on 0.75 miles of the Slide Canyon Trail (Trail No. 58) to prevent erosion of the trail tread.
- C. Probability of Completing Treatment Prior to Damaging Storm or Event:

Land 70 % Channel % Roads/Trails 70 % Protection/Safety %

D. Probability of Treatment Success

|                   | Years | Years after Treatment |     |  |  |  |
|-------------------|-------|-----------------------|-----|--|--|--|
|                   | 1     | 3                     | 5   |  |  |  |
| Land              | 80    | 85                    | 90  |  |  |  |
|                   |       |                       |     |  |  |  |
| Channel           | N/A   | N/A                   | N/A |  |  |  |
|                   |       |                       |     |  |  |  |
| Roads/Trails      | 85    | 90                    | 95  |  |  |  |
|                   |       |                       |     |  |  |  |
| Protection/Safety | N/A   | N/A                   | N/A |  |  |  |
|                   |       |                       |     |  |  |  |

- E. Cost of No-Action (Including Loss): Based on a commercial value of \$50.00 per cubic yard for topsoil and a potential soil loss rate of 11.5 tons per acre, the cost of the No Action Alternative would be approximately \$13,110 if the A horizon were lost from 30 acres of fire affected area. The No Action alternative would also result in potential damage to Forest infrasturucture (i.e., Forest Road 423 and the Slide Canyon Trail), valued at approximately \$8,000.00.
- F. Cost of Selected Alternative (Including Loss): \$5,500
- G. Skills Represented on Burned-Area Survey Team:

| [] Hydrology   | [x] Soils    | [] Geology        | [x] Range       |
|----------------|--------------|-------------------|-----------------|
| [x] Forestry   | [x] Wildlife | [x] Fire Mgmt.    | [] Engineering  |
| [] Contracting | [x] Ecology  | [] Botany         | [x] Archaeology |
| [ ] Fisheries  | [] Research  | []] andscape Arch | [v] GIS         |

Team Leader: Kit MacDonald

Email: cdmacdonald@fs.fed.us Phone: (928) 635-8354 FAX: (928) 635-8208

#### 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.)

#### Roads and Trails

Road hardening on approx. 0.25 miles of the 423 Road - \$2,800.

Implement trail hardening measures on approximately 0.75 miles of Slide Canyon Trail (Trail No. 58). - \$1,350.00

Conduct invasive and noxious weeds and treatment effectiveness monitoring (4 days at \$350.00 per day). - \$1,400.00

## 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.)

Treatment effectiveness monitoring will occur four times annually for the first year following implementation of road and trail hardening measures. Monitoring for the presence of invasive or noxious weeds would occur simultaneously.

| Part VI – Emergency Stabilization Treatments and Source of Fu | ınds Interim# |
|---|---------------|
|---|---------------|

|                                   |       |        | 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                |       |        |           |         |       |       |             |       |                                       |        |
| A. Land Treatments                |       |        |           | \$0     |       |       | \$0         |       | \$0                                   | \$(    |
|                                   |       |        |           | \$0     | \$0   |       | \$0         |       | \$0                                   | \$     |
| Insert new items above this line! |       |        |           | \$0     | \$0   |       | \$0         |       | \$0                                   | \$     |
| Subtotal Land Treatments          |       |        |           | \$0     | \$0   |       | \$0         |       | \$0                                   | \$     |
| B. Channel Treatmen               | ts    |        |           | **      | Ť     |       | **          |       | , , , , , , , , , , , , , , , , , , , |        |
|                                   |       |        |           | \$0     | \$0   |       | \$0         |       | \$0                                   | \$(    |
| Insert new items above this line! |       |        |           | \$0     | \$0   |       | \$0         |       | \$0                                   | \$(    |
| Subtotal Channel Treat.           |       |        |           | \$0     | \$0   |       | \$0         |       | \$0                                   | \$(    |
| C. Road and Trails                |       |        |           |         |       |       |             |       |                                       |        |
| Harden FS Road 423                | miles | 11,200 | 0.25      | \$2,800 |       |       | \$0         |       | \$0                                   | \$2,80 |
| Slide Canyon Trail                | miles | 1,800  | 0.75      | \$1,350 | \$0   |       | \$0         |       | \$0                                   | \$1,35 |
| ·                                 |       |        |           | \$0     | \$0   |       | \$0         |       | \$0                                   | \$     |
|                                   |       |        |           | \$0     | \$0   |       | \$0         |       | \$0                                   | \$(    |
| nsert new items above this line!  |       |        |           | \$0     | \$0   |       | \$0         |       | \$0                                   | \$(    |
| Subtotal Road & Trails            |       |        |           | \$4,150 | \$0   |       | \$0         |       | \$0                                   | \$4,15 |
| D. Protection/Safety              |       |        |           |         |       |       |             |       | •                                     |        |
|                                   |       |        |           | \$0     | \$0   |       | \$0         |       | \$0                                   | \$(    |
| Insert new items above this line! |       |        |           | \$0     | \$0   |       | \$0         |       | \$0                                   | \$(    |
| Subtotal Structures               |       |        |           | \$0     | \$0   |       | \$0         |       | \$0                                   | \$(    |
| E. BAER Evaluation                |       |        |           |         |       |       |             |       |                                       |        |
|                                   |       |        |           | \$800   |       |       | \$0         |       | \$0                                   | \$(    |
| nsert new items above this line!  |       |        |           |         | \$0   |       | \$0         |       | \$0                                   | \$(    |
| Subtotal Evaluation               |       |        |           |         | \$0   |       | \$0         |       | \$0                                   | \$(    |
| F. Monitoring                     |       |        |           |         |       |       |             |       |                                       |        |
| Effectiveness                     | days  | 350    | 4         | \$1,400 | \$0   |       | \$0         |       | \$0                                   | \$1,40 |
| nsert new items above this line!  |       |        |           | \$0     | \$0   |       | \$0         |       | \$0                                   | \$(    |
| Subtotal Monitoring               |       |        |           | \$1,400 | \$0   |       | \$0         |       | \$0                                   | \$1,40 |
| G. Totals                         |       |        |           | \$5,550 | \$0   |       | \$0         |       | \$0                                   | \$5,55 |
| Previously approved               |       |        |           |         |       |       |             |       |                                       | •      |

# PART VII - APPROVALS

| 1. | _/s/ Stuart IVI. Lovejoy (for)  | <u>8/21/12</u> |
|----|---------------------------------|----------------|
|    | Forest Supervisor (signature)   | Date           |
|    |                                 |                |
| 0  | lal Caubin I. Navyraan In       | 0/07/40        |
| 2. | <u>/s/ Corbin L. Newman, Jr</u> | <u>8/27/12</u> |
|    | Regional Forester (signature)   | Date           |