**Date of Report: 07/08/2021**

# BURNED-AREA REPORT

## PART I - TYPE OF REQUEST

**A. Type of Report**

☒ 1. Funding request for estimated emergency stabilization funds

☐ 2. No Treatment Recommendation

**B. Type of Action**

☒ 1. Initial Request (Best estimate of funds needed to complete eligible stabilization measures)

☐ 2. Interim Request #___

☐ Updating the initial funding request based on more accurate site data or design analysis

## PART II - BURNED-AREA DESCRIPTION

**A. Fire Name: Rafael**

**B. Fire Number: AZ-PNF-000863**

**C. State: AZ**

**D. County: Coconino, Yavapai**

**E. Region: Southwestern R3**

**F. Forest: Coconino,** Kaibab, Prescott

**G. District: Flagstaff, Williams, Chino Valley**

**H. Fire Incident Job Code: P3N3CY**

**I. Date Fire Started: 6/18/2021**

**J. Date Fire Contained: 96% - 7/8/2021**

**K. Suppression Cost: $11,000,000.00 - 7/8/2021**

**L. Fire Suppression Damages Repaired with Suppression Funds (estimates):**

1. **Fireline repaired (miles): Dozerline – 13.5 miles Handline – 2 miles**
2. **Other (identify):**

**M. Watershed Numbers:**

*Table 1: Acres Burned by Watershed*

| HUC # | Watershed Name | Total Acres | Acres Burned | % of Watershed Burned |
|---|---|---|---|---|
| **150602020307** | Big Spring Canyon | 31715 | 2568 | 8 |
| **150602020313** | Cedar Creek | 8893 | 8722 | 98 |
| **150602020402** | Government Canyon | 12771 | 248 | 2 |
| **150602020406** | Horseshoe Canyon-Verde River | 37129 | 3209 | 9 |
| **150602020310** | Little LO Spring Canyon | 12268 | 8416 | 69 |

| HUC # | Watershed Name | Total Acres | Acres Burned | % of Watershed Burned |
|---|---|---|---|---|
| **150602020314** | Lower Sycamore Creek | 30695 | 12023 | 39 |
| **150602020312** | Middle Sycamore Creek | 18347 | 16623 | 91 |
| **150602020405** | Railroad Draw | 10851 | 5816 | 54 |
| **150602020506** | Secret Canyon | 11146 | 503 | 5 |
| **150602020510** | Spring Creek | 30850 | 1742 | 6 |
| **150602020311** | Tule Canyon | 29883 | 11365 | 38 |
| **150602020309** | Upper Sycamore Creek | 14925 | 4592 | 31 |
| **150602020308** | Volunteer Canyon | 24522 | 1874 | 8 |
| **150602020503** | West Fork Oak Creek | 27357 | 1004 | 4 |

## N. Total Acres Burned:

*Table 2: Total Acres Burned by Ownership*

| OWNERSHIP | ACRES |
|---|---|
| **NFS** | 76,341 |
| **OTHER FEDERAL (LIST AGENCY AND ACRES)** | |
| **STATE** | 2,035 |
| **PRIVATE** | 296 |
| **TOTAL** | 78,672 |

## O. Vegetation Types:

Sycamore Canyon dissects the Mogollon Rim, the transition zone between the Basin and Range Province to the south, and the Colorado Plateau to the north. The Rafael Fire burned along this transition zone. The canyon topography blends two distinct vegetative zones:

1. Colorado Plateau – Ponderosa Pine Forests, Wet and Dry Mixed Conifer Forests, and Montane/ Subalpine Grasslands.
2. Basin and Range – Pinyon-Juniper Woodlands, Pinyon-Juniper Shrublands, Pinyon-Juniper Grasslands, and Interior Chaparral,

## P. Dominant Soils:

**Table 3. Dominant Soils** – These 11 TEUI map units make up approximately 50% of the burned area. This table shows general soil and site characteristics by TEUI map unit.

| Map Unit | Acreage | Slope Range (%) | Parent Material | Depth Classification | Particle Size Classification |
|---|---|---|---|---|---|
| Prescott TEUI 468 | 4,938 | 40 - 120 | Sandstone | Very Shallow to Shallow (0 - 50cm) | Sandy-Skeletal |
| Coconino TEUI 471 | 4,736 | 40 - 120 | Sandstone/Limestone | Very Shallow to Shallow (0 - 50cm) | Loamy-Skeletal |

| | | | | | |
|---|---|---|---|---|---|
| Kaibab TEUI 537 | 4,597 | 0 - 15 | Basalt/Cinders | Shallow to Moderately Deep (0-100cm) | Clayey-Skeletal |
| Kaibab TEUI 519 | 3,793 | 0 - 15 | Basalt/Cinders | Very Shallow to Shallow (0 - 50cm) | Clayey-Skeletal |
| Kaibab TEUI 541 | 3,771 | 40 - 120 | Sandstone | Shallow to Moderately Deep (0-100cm) | Sandy-Skeletal |
| Coconino TEUI 555 | 3,086 | 40 - 120 | Sandstone/Limestone | Very Shallow to Shallow (0 - 50cm) | Sandy-Skeletal |
| Prescott TEUI 482 | 2,693 | 15 - 40 | Sandstone | Very Shallow (0 - 25cm) | Sandy-Skeletal |
| Kaibab TEUI 540 | 2,670 | 40 - 120 | Sandstone | Shallow to Moderately Deep (0-100cm) | Sandy-Skeletal |
| Coconino TEUI 530 | 2,607 | 15 - 40 | Basalt/Cinders | Very Shallow to Shallow (0 - 50cm) | Clayey-Skeletal |
| Kaibab TEUI 563 | 2,163 | 0 - 15 | Basalt/Cinders | Moderately Deep (50 - 100cm) | Clayey-Skeletal |
| Coconino TEUI 579 | 2,112 | 0 - 15 | Basalt/Cinders | Very Shallow to Shallow (0 - 50cm) | Clayey-Skeletal |

**Q. Geologic Types:**

a. Sandstone, Limestone, Basalt

**R. Miles of Stream Channels by Order or Class:**

*Table 4: Miles of Stream Channels by Order or Class*

| STREAM TYPE | MILES OF STREAM |
|---|---|
| **PERENNIAL** | 1.2 |
| **INTERMITTENT** | 78 |
| **EPHEMERAL** | 313 |
| **OTHER (DEFINE)** | 3.4 - (artificial path) |

S. **Transportation System:**
**Trails:** *National Forest (miles):* 56 *Other (miles):*
**Roads:** *National Forest (miles):* 185 *Other (miles):*

## PART III - WATERSHED CONDITION

**A. Burn Severity (acres):**

*Table 5: Burn Severity Acres by Ownership*

| Soil Burn Severity | NFS | Other Federal (List Agency) | State | Private | Total | % within the Fire Perimeter |
|---|---|---|---|---|---|---|
| **Unburned** | 8,403 | | 101 | 118 | 8,622 | 11 |
| **Low** | 47,590 | | 1,933 | 171 | 49,694 | 63 |

| Soil Burn Severity | NFS | Other Federal (List Agency) | State | Private | Total | % within the Fire Perimeter |
|---|---|---|---|---|---|---|
| **Moderate** | 14,675 | | 0 | 4 | 14,679 | 19 |
| **High** | 5,673 | | 0 | 3 | 5,676 | 7 |
| **Total** | 76,341 | | 2,035 | 296 | 78,672 | 100 |

**B. Water-Repellent Soil (acres):** 13,015

**C. Soil Erosion Hazard Rating:**

a. Slight - 33,002

b. Moderate - 10, 998

c. Severe - 34,278

**D. Erosion Potential:**

Terrestrial ecological units with a significant erosion potential were identified. Significant erosion potential is defined as:

1. High erosion hazard due to inherent soil properties **and/or**
2. Large predicted increases in soil loss compared to pre-fire conditions **and**
3. Occupy a large extent (>2%) of the burned area

Table 6.

| TEUI Map Unit | ERU | Slope Range | Erosion Hazard Rating | Acreage and (%) of Total Area Burned | Pre-fire Sedimentation Rate (tons/acre) | Average Sedimentation Rate 1 Year Post-Fire (tons/acre) |
|---|---|---|---|---|---|---|
| Coconino 470 | Interior Chaparral | 40 - 120 | Severe | 1,327 (2%) | 1.0 | 41.3 |
| Coconino 471 | Interior Chaparral | 40 - 120 | Severe | 4,736 (6%) | 0.5 | 39.3 |
| Coconino 555 | Mixed Conifer w/ Aspen | 40 - 120 | Severe | 3,086 (4%) | 0.1 | 26.6 |
| Coconino 584 | Ponderosa Pine Forest | 15 - 40 | Severe | 1,560 (2%) | 0.0 | 7.7 |
| Kaibab 540 | Mixed Conifer - Frequent Fire | 40 - 120 | Severe | 2,670 (3%) | 0.1 | 22.3 |
| Kaibab 541 | PJ Woodland | 40 - 120 | Severe | 3,771 (5%) | 16.6 | 39.5 |
| Kaibab 564 | Ponderosa Pine Forest | 15 - 40 | Severe | 1,269 (2%) | 0.0 | 10.0 |
| Prescott 455 | PJ Evergreen Shrub | 15 - 40 | Severe | 1,403 (2%) | 2.9 | 13.6 |
| Prescott 458 | PJ Evergreen Shrub | 0 - 15 | Slight | 1,448 (2%) | 0.1 | 7.2 |
| Prescott 465 | PJ Evergreen Shrub | 40 - 120 | Severe | 1,820 (2%) | 10.5 | 41.4 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Prescott 466 | PJ Evergreen Shrub | 40 - 120 | Severe | 1,360 (2%) | 9.0 | 49.5 |
| Prescott 468 | Interior Chaparral | 40 - 120 | Severe | 4,938 (6%) | 7.9 | 53.1 |
| Prescott 480 | PJ Evergreen Shrub | 40 - 120 | Severe | 1,409 (2%) | 2.4 | 65.0 |
| Prescott 482 | PJ Evergreen Shrub | 15 - 40 | Moderate | 2,693 (3%) | 3.2 | 26.0 |

**E. Sediment Potential:**

Sediment potential is a single number for expected sediment delivery that is averaged across the entire fire (all burn severities and TEUs). Referencing this number alone could mask the site-specific impacts that are expected for units with high erosion potential.

The predicted unburned, pre-fire sedimentation rate averaged across the Rafael Fire for NFS lands is approximately 1.36 tons per acre with a 10% probability of exceedance.

The predicted post-fire sedimentation rate averaged across the Rafael Fire for NFS lands is approximately 14.76 tons per acre with a 10% probability of exceedance.

**F. Estimated Vegetative Recovery Period (years):**

5 years. May be longer in areas of high soil burn severity and moderate soil burn severity where complete vegetation mortality occurred within the overstory.

**G. Estimated Hydrologic Response (brief description):**

Watershed conditions following a fire, such as loss of stabilizing vegetation, decreased soil porosity, and increased hydrophobicity in soils, are all factors that can increase the magnitude, timing, and volume of stormwater runoff. Additionally, the volume of sediment and ash that these flows can transport can cause aggradation, down cutting, and/or widening of stream channels that can significantly reduce the functioning condition of these channels. The increased peak flows pose a threat to life, property, and resources within and below the burned area.

Post-fire hydrologic response for 2, 5, and 10 year 1-hour precipitation events were modeled using HEC-HMS 4.8 for the Cedar Creek and Lower Sycamore Creek 6$^{th}$ code watersheds. HEC-HMS was chosen as the modeling method due to the size of the watersheds of interest being over 5 sq. mi. A Farmer-Fletcher storm distribution curve over one-third of the catchment was used to model convective storm distributions.

Runoff from the 2-year one-hour convective event (~.914”) was modeled to result in approximately 4 times greater flow than unburned conditions as a function of burn severity distribution throughout the two watersheds. Runoff from the 5-year convective storm (~1.24”) was modeled to result in approximately 2 times greater flow from unburned conditions. Lastly, the 10-year one-hour storm (~1.50”) resulted in slightly less than 2 times increase from unburned conditions. The decrease in

percent change as recurrence intervals lower in probability is due to increased precipitation depths resulting in higher peakflows instead of curve numbers dictating the model outputs.

Table 7. HEC-HMS Results (Percent Change: Prefire to Postfire)

| Storm Event (1-hour duration) | Precipitation Depth (in.) | Percent Change (%) |
|---|---|---|
| 2-year | 0.914 | 194.73 |
| 5-year | 1.24 | 116.48 |
| 10-year | 1.5 | 89.17 |

## PART V - SUMMARY OF ANALYSIS

### Introduction/Background

The Rafael Fire was discovered on June 18th, 2021 on the Prescott National Forest in a remote area approximatley 4 miles north of Perkinsville, AZ. The fire originated in a pinyon juniper vegetation type and strong winds combined with uphill topography allowed the fire to move quickly within the Sycamore Canyon Wilderness and onto the Kaibab and Coconino National Forests.

### A. Describe Critical Values/Resources and Threats (narrative):

*Table 8: Critical Value Matrix*

| Probability of Damage or Loss | Magnitude of Consequences | | |
|---|---|---|---|
| | Major | Moderate | Minor |
| | **RISK** | | |
| Very Likely | **Very High** | **Very High** | **Low** |
| Likely | **Very High** | **High** | **Low** |
| Possible | **High** | **Intermediate** | **Low** |
| Unlikely | **Intermediate** | **Low** | **Very Low** |

1. **Human Life and Safety (HLS):**
    a. There is a very high risk to human life and safety on NFS lands within and immediatley downstream of the burn area. The highest risk is within the Sycamore Canyon Wilderness area and downstream drainage. Threats to human life and safety include falling tees and limbs, rolling rocks, flash floods and debris flows. Threats downstream of the burned area on NFS lands include flash floods and debris flows.
2. **Property (P):**
    a. There is a very high risk to approximately 14.8 miles of trails within the burned area. These trail sections occur within or below moderate and high SBS on steep terrain (>40%). The major threat to these trail sections include first year erosion rates ranging from 25 tons/acre to 53 tons/acre.
    b. There is a high risk to portions of FSR 538 that travel through areas of high and moderate soil burn severity. FSR 538 is a major ingress/egress route to Turkey Butte Lookout. The secondary route to the lookout is not reliable. The major threat to these road sections include first year erosion rates >25 tons/acre that will comprise culverts.
3. **Natural Resources (NR):**
    a. There is a high risk to naturalized plant communities from threats related to high soil burn severity and suppression disturbances. The highest threat comes from populations of Dalmatian toadflax documented just outside the fire perimeter and Scotch thistle near staging areas on the Coconino NF near the boy scout camp. The areas of suppression disturbance (dozer line, hand line and staging areas) and high soil burn severity had no documented presence of these species prior to the fire.

b. There is a low risk to southwestern willow flycatcher and yellow billed cuckoo habitat. There is a low risk to the majority of the Mexican spotted owl critical habitat except within a small portion of high and moderate soil burn severity where there is a likely probability that invasive and noxious species will invade. There is a low risk to the northern Mexican gartersnake, narrow-headed gartersnake, spikedace, loach minnow and razorback sucker critical habitat.

4. **Cultural and Heritage Resources:** Fourteen archaeological sites were assessed during the BAER assessment. Of these, one site required further discussion and evaluation for treatment due to a high risk from post fire flows and erosion. Ultimately treatments were not recommended due to the remoteness and sensitivity of the site.

**B. Emergency Treatment Objectives:**

Human Life and Safety – Post closure and warning signs to control public access and to inform the public of post-wildfire hazards that exist within the burned area.

Trail Infrastructure – Minimal work should be completed to save prioritized trail segments from total loss requiring full redesign and reconstruction.

Road Infrastructure – Ensure primary access route to the fire lookout remains drivable.

Early detection rapid response – Early detection and rapid response to targeted areas to detect infestation of invasive and noxious weeds in burned areas as well as locations impacted by fire suppression activities.

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

**Land**: N/A
**Channel:** N/A
**Roads/Trails:** 70
**Protection/Safety:** 80

**D. Probability of Treatment Success**

*Table 9: Probability of Treatment Success*

| | *1 year after treatment* | *3 years after treatment* | *5 years after treatment* |
|---|---|---|---|
| ***Land*** | 70 | 80 | 80 |
| ***Channel*** | | | |
| ***Roads/Trails*** | 70 | 80 | 90 |
| ***Protection/Safety*** | 80 | 70 | 70 |

**E. Cost of No-Action (Including Loss): $753,000.00**

**F. Cost of Selected Alternative (Including Loss): $168,000.00**

**G. Skills Represented on Burned-Area Survey Team:**

☒ Soils ☒ Hydrology ☒Engineering ☒ GIS ☒ Archaeology
☒ Weeds ☒ Recreation ☒ Fisheries ☒ Wildlife
☐ Other:

**Team Leader:**
**Email:** Chad Yocum/Micah Kiesow **Phone(s)**: 928-458-4879/505-438-5433

**Forest BAER Coordinator: David Moore (PNF), Robert Ballard (KNF), Jan Curtis-Tollestrup (CNF)**
**Email:**david.moore@usda.gov**,** robert.w.ballard@usda.gov, jan.curtis-tollestrup@usda.gov
**Phone(s): 928-443-8179 928-635-8354 928-527-3451**

**Team Members:***Table 10: BAER Team Members by Skill*

| Skill | Team Member Name |
|---|---|
| *Team Lead(s)* | Chad Yocum/Micah Kiesow |
| *Soils* | Rob Ballard |
| *Hydrology* | Edgar Martinez |
| *Engineering* | Sergio DeLeon (t) |
| *GIS* | Mark Christiano |
| *Archaeology* | John Rose/Michael Terlep (t) |
| *Weeds* | Jesse Duff-Woodruff |
| *Recreation* | Jason Williams |
| *Wildlife & Aquatics* | Noel Fletcher, Mark Bellis (t), Albert Sillas |

**H. Treatment Narrative:**

**Land Treatments:**
Early Detection Rapid Response is recommended to protect naturalized plant communities within high soil burn severity areas and suppression disturbance areas. Detection survey is expected to allow for protection of ecological integrity of native plant communities. Surveys and rapid response eradication treatments will begin in 2021 during the flowering periods of weed species. Survey for annual and perennial noxious/invasive species that establish with summer rains should be accomplished during mid-late summer and early fall of 2021. For species that establish with winter rains, survey should occur during the late spring and early summer of 2022. A biological control method will be used to treat for Dalmatian toadflax (*Linaria dalmatica*) infestations which is outlined and approved in the FEIS for Integrated Treatment of Noxious or Invasive Weeds for Coconino, Kaibab, and Prescott National Forests. This treatment method is appropriate due to the amount and size of the burned area and a high risk potential for the spread of this noxious weed species.

**Table 11. EDRR – High Soil Burn Severity Areas**

| Item | Labor | Unit | Cost | Total |
|---|---|---|---|---|
| Survey Detection | AZ Conservation Corps | 1 | $4,500 | $4,500 |
| Linaria dalmatica biocontrol | | 20 boxes | $150.00 | $3,000.00 |
| | | | | |
| **Coconino National Forest** | | | | $7,500 |

**Table 12. EDRR – Suppression Disturbance**

| Item | Labor | Unit | Cost | Total |
|---|---|---|---|---|
| Survey Detection/Chemical Treatment | AZ Conservation Corps | 1 | $4,500 | $4,500 |
| | | | | |
| **Coconino National Forest** | | | | $4,500 |

**Channel Treatments:** N/A

**Roads and Trail Treatments:**

Trail storm proofing is recommended to protect trail infrastructure within the burned area. Minimal work should be done to stabilize trail alignments preventing total loss. Total trail loss would not only require total reconstruction, but once the alignments are undetectable the entire trail would need a total redesign and layout. The work would include rapid trail benching, removing backslope sloughing to keep the trail alignment identifiable, focused on priority trail segments in or below high and moderate SBS on steep (>40%) slopes. Trail treatments will be completed by three 5 person crews. Both the Prescott NF and Coconino NF will modify existing agreements to expedite the treatments being completed. See trail treatment map for specific locations.

**Table 13. Trail Priorities for Treatment**

| Number | Trail Name | **Priority** | Miles | Justification |
|---|---|---|---|---|
| 12 | Mooney | 1 | 0.42 | Critical Stock Driveway to Summer Pasture |
| 63 | Sycamore Basin | 2 | 1.94 | Access to Historic Cabin listed on the national register with Scheduled GAOA Stabilization Work |
| 53 | Henderson | 3 | 0.84 | Used by Range Permittees |
| 70 | Winter Cabin | 4 | 1.68 | Access to Historic Cabin for future preservation and fire response |
| 52 | Yew Thicket | 5 | 3.53 | Longest trail, provides fire response to remote areas |
| 35 | Taylor Cabin | 6 | 1.35 | Most direct route to Taylor Cabin for Foot Traffic |
| 61 | Lonesome Pocket | 7 | 1.28 | Fire access and range permittee use |
| 117 | Deadman Pocket | 8 | 3.76 | Fire access and range permittee use |

**Table 14. Trail Treatment Cost Breakdown per Mile**

| Item | Item/Mile | Days | Miles | Miles Per Day | Cost/Day | **Total Cost** | **Cost per Mile** |
|---|---|---|---|---|---|---|---|
| | | | | | | **$45,000** | **$3,000** |
| Conservation Corps Crew | 5 person crew | 24 | 15 | 1.6 | $1,667 | $40,000 | $2,667 |
| Conservation Corps Crew | Mobilization Cost | 4 | | | $1,250 | $5,000 | |
| | | Days | Miles | Mobilization | | **Total Cost by Forest** | |
| **Coconino National Forest** | | 8 | 5 | $1,667 | | **$15,000** | |
| **Prescott National Forest** | | 16 | 10 | $3,333 | | **$30,000** | |

Road Storm Inspection and Response is recommended to protect road infrastructure for a major ingress/egress route to Turkey Butte Lookout. The secondary route to the lookout is not reliable. Storm inspection and response would consist of 1 person inspecting road sections at highest risk within moderate and high soil burn severity after an estimated 4 monsoonal events. Response would include force account labor and machinery to mobilize to site and clean culverts. Cost is estimated at an overtime rate due to potential timing of storms.

**Table 15. Road Storm Inspection and Response**

| Item | Cost/Event | Events | Total |
|---|---|---|---|
| Labor | $600.00 | 4 | $2,400.00 |
| **Coconino National Forest** | | | **$2,400.00** |

**Protection/Safety Treatments:**

An administrative closure is currently in place for the fire area. This closure is recommended to remain in place through at least the first monsoon season to protect human life and safety. Following the first monsoon season the forests should reassess post fire threats and risk to inform reopening. The highest risk from the burned area occurs within Sycamore Canyon Wilderness and directly downstream within drainages to the confluence with the Verde River.

Coconino NF -Install 7 closure/warning signs on roads and 15 closure/warning signs on trails as depicted within the treatment map. Install 1 gate on FSR 131 as shown on treatment map. This popular swimming area is remote and difficult to manage.

Kaibab NF -Install 10 warning signs on roads and 8 warning signs on trails as depicted within the treatment map.

Prescott NF -Install 4 closure/warning sides on roads and 6 closure/warning signs on trails as depicted within the treatment map. Install 1 gate on FSR 181 as shown on treatment map. This remote and difficult to manage road allows access to the Sycamore Canyon Wilderness area.

**Table 16. Sign Cost Estimate**

| Item | Quantity | Cost | Total |
|---|---|---|---|
| Trail Warning Sign | 23 | $55.00 | $1,265.00 |
| Trail Closure Sign | 6 | $66.00 | $396.00 |
| Road Warning Sign | 19 | $50.00 | $950.00 |
| Road Closed Sign | 2 | $100.00 | $200.00 |
| Post | 42 | $20.00 | $840.00 |
| Hardware (bolts) | 100 | $1.00 | $100.00 |
| Labor | 10 days | $200.00 | $2000.00 |
| Vehicle | 10 days | $150.00 | $1500.00 |

**Table 17. Sign Cost by Forest**

| Signs and Hardware | Trail Warning | Trail Close | Road Warning | Road Close | Post | Signs and Hardware | Labor Days | Vehicle Days | Total Cost |
|---|---|---|---|---|---|---|---|---|---|
| **Coconino** | 10 | 5 | 6 | 1 | 16 | 44 | 4 | 4 | **$3,044.00** |
| **Kaibab** | 8 | 0 | 10 | 0 | 18 | 36 | 4 | 4 | **$2,736.00** |
| **Prescott** | 5 | 1 | 3 | 1 | 8 | 20 | 2 | 2 | **$1,471.00** |

**Table 18. Gate Cost Estimate**

| Items | Quantity | Cost | Total |
|---|---|---|---|
| 16 ft. gate | 2 | $4,000.00 | $8,000.00 |
| Concrete | 40 | $10.00 | $400.00 |
| Labor | 8 days | $600 | $4,800.00 |
| Equipment | 4 days | $500 | $2000.00 |
| (backhoe, dump truck) | | **TOTAL** | **$15,200.00** |
| **Cost by Forest** | | | |
| **Coconino** | **$7,600.00** | | |
| **Prescott** | **$7,600.00** | | |

**I. Monitoring Narrative:**

## PART VI – EMERGENCY STABILIZATION TREATMENTS AND SOURCE OF FUNDS

| Line Items | Units | Unit Cost | # of Units | BAER $ | Other $ | # of units | Fed $ | # of Units | Non Fed $ | Total $ |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | |
| **A. Land Treatments** | | | | | | | | | | |
| EDRR - BAER | | | | $7,500 | $0 | | $0 | | $0 | $7,500 |
| EDRR - Suppression | | | | $4,500 | $0 | | $0 | | $0 | $4,500 |
| *Insert new items above this line!* | | | | $0 | $0 | | $0 | | $0 | $0 |
| *Subtotal Land Treatments* | | | | $12,000 | $0 | | $0 | | $0 | $12,000 |
| **B. Channel Treatments** | | | | | | | | | | |
| | | | | $0 | $0 | | $0 | | $0 | $0 |
| | | | | $0 | $0 | | $0 | | $0 | $0 |
| *Insert new items above this line!* | | | | $0 | $0 | | $0 | | $0 | $0 |
| *Subtotal Channel Treatments* | | | | $0 | $0 | | $0 | | $0 | $0 |
| **C. Road and Trails** | | | | | | | | | | |
| Trail Storm Proofing | | | | $15,000 | $0 | | $0 | | $0 | $15,000 |
| Road Storm Inspection and Response | | | | $2,400 | $0 | | $0 | | $0 | $2,400 |
| *Insert new items above this line!* | | | | $0 | $0 | | $0 | | $0 | $0 |
| *Subtotal Road and Trails* | | | | $17,400 | $0 | | $0 | | $0 | $17,400 |
| **D. Protection/Safety** | | | | | | | | | | |
| Road/Trail Hazard/Closure Signs | | | | $3,044 | $0 | | $0 | | $0 | $3,044 |
| Road Closure Gate | | | | $7,600 | $0 | | $0 | | $0 | $7,600 |
| *Insert new items above this line!* | | | | $0 | $0 | | $0 | | $0 | $0 |
| *Subtotal Protection/Safety* | | | | $10,644 | $0 | | $0 | | $0 | $10,644 |
| **E. BAER Evaluation** | | | | | | | | | | |
| Initial Assessment | Report | | | --- | $26,950 | | $0 | | $0 | $26,950 |
| | | | | $0 | $0 | | $0 | | $0 | $0 |
| *Insert new items above this line!* | | | | --- | $0 | | $0 | | $0 | $0 |
| *Subtotal Evaluation* | | | | $0 | $26,950 | | $0 | | $0 | $26,950 |
| **F. Monitoring** | | | | | | | | | | |
| | | | | $0 | $0 | | $0 | | $0 | $0 |
| | | | | $0 | $0 | | $0 | | $0 | $0 |
| *Insert new items above this line!* | | | | $0 | $0 | | $0 | | $0 | $0 |
| *Subtotal Monitoring* | | | | $0 | $0 | | $0 | | $0 | $0 |
| | | | | | | | | | | |
| **G. Totals** | | | | $40,044 | $26,950 | | **$0** | | **$0** | **$66,994** |
| Previously approved | | | | | | | | | | |
| Total for this request | | | | **$40,044** | | | | | | |

## PART VII - APPROVALS

1. LAURA JO WEST Digitally signed by LAURA JO WEST Date: 2021.07.09 09:42:31 -07'00'

Forest Supervisor Date