

**Date of Report: 4/13/2021****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: Three Rivers****B. Fire Number: NM-LNF-000130****C. State: New Mexico****D. County: Lincoln & Otero****E. Region: 03****F. Forest: Lincoln National Forest****G. District: Smokey Bear RD****H. Fire Incident Job Code: P3NZN0 (0308)****I. Date Fire Started: April 26, 2021****J. Date Fire Contained: 100% as of 05/31/2021****K. Suppression Cost: \$4,233,000****L. Fire Suppression Damages Repaired with Suppression Funds (estimates): \$51,000**

- Fireline repaired (miles):** There was no dozer line put in. Handline = approximately 5 miles. All hand lines were expected to be rehabilitated and seeded by the Smokey Bear district fire personnel
- Other (identify):** . Two roads were affected and are in the process of being restored. Campground outhouses were pumped. 2 safety zones were seeded.

**M. Watershed Numbers:***Table 1: Acres Burned by Watershed*

HUC #	Watershed Name	Total Acres	Acres Burned	% of Watershed Burned
130500031102	Gamble Canyon-Three Rivers	15737	3620.4	23.0%
130500031103	Golondrina Draw-Three Rivers	18388	22.3	0.1%
130600080103	Upper Rio Ruidoso	30827	0.1	<1%
130600080201	Upper Rio Bonita	25847	2297.0	8.9%

**N. Total Acres Burned:**

Table 2: Total Acres Burned by Ownership

OWNERSHIP	ACRES
NFS	5,855
OTHER FEDERAL (LIST AGENCY AND ACRES)	0
TRIBAL LANDS	85 (Mescalero Tribe)
STATE	0
PRIVATE	0
TOTAL	5,940

**O. Vegetation Types:** Pinon-Juniper woodland, as well as Ponderosa Pine, Mixed Conifer, and Spruce-Fir forest, as well as Alpine and Subalpine Grassland. The Three Rivers fire burned with varying intensity through approximately 372 acres of piñon-juniper woodland and 429 acres of Ponderosa pine forest. At higher elevations it burned through approximately 1270 acres of high grass in meadows flanking the Crest Trail and into approximately 3869 acres of mixed conifer forest.

**P. Dominant Soils:** Mollisols, Pachic Haplocryolls, Pachic Hapludolls. Soils of the order Mollisols, commonly known as fertile grassland soils, occur throughout the entire burned area. The two most dominant soil sub-classifications of those Mollisols are the relatively deep Pachic Haplocryolls (found in the higher elevation spruce-fir life zones) at 3437 acres, or just over half (58%) of the 5939-acre burn; and Pachic Hapludolls (also fairly deep and generally having developed under mixed conifer forest) that make up approximately 23%, or 1359 acres of the burn scar. Soils at lower and mid elevations formed primarily in slope-transported material derived from the igneous intrusive and igneous volcanic rock that dominates the geology of the Sierra Blanca range. Surface soil textures are generally loams, but along stream channels and in their terraces, sandier soils have developed in alluvium derived from the same parent sources.

**Q. Geologic Types:** Igneous intrusive and igneous volcanic rocks constitute the geologic formations in the burned area. These include upper middle Tertiary volcanic rocks such as rhyolitic lavas and local tuffs, as well as upper Oligocene silicic flows and masses and associated pyroclastic rocks. (Turf geologic formation\*). Additionally, Tertiary intrusive rocks of intermediate to silicic composition including Miocene to Oligocene dikes, stocks, plugs, and diatremes exist within the burned area (Tui geologic formation\*). \*Source: USGS National Geologic Map Database

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

Table 3: Miles of Stream Channels by Order or Class

STREAM TYPE	MILES OF STREAM
PERENNIAL	4.9
INTERMITTENT	6.2
EPHEMERAL	45.0
OTHER (DEFINE)	0

#### S. Transportation System:

Trails: National Forest (miles): 18

Other (miles): 0

Roads: National Forest (miles): 0

Other (miles): 0

### PART III - WATERSHED CONDITION

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

Table 4: Burn Severity Acres by Ownership

Soil Burn Severity	NFS	Other Federal (List Agency)	State	Private	Total	% within the Fire Perimeter
Unknown (clouds)	6	0	0	0	6	0%

Soil Burn Severity	NFS	Other Federal (List Agency)	State	Private	Total	% within the Fire Perimeter
Low	2885	58	0	0	2943	50%
Moderate	2317	18	0	0	2335	40%
High	647	8	0	0	655	11%
Total	6	0	0	0	6	0%

#### B. Water-Repellent Soil (acres): 2990 acres

The acres of water-repellent soils is slightly greater than the combined acres of the high-moderate burn severity areas. The reason is that all of the high burn severity, a majority of the moderate burn severity (about 4/5 of the acres) and some of the low burn severity observations were showing water repellency during the field soil burn severity assessment. This was confirmed with soil test plots. During drought conditions, there can be natural hydrophobicity when dry organic matter in the surface horizons create strong water repellency before any fire. This is more common in drier vegetation communities like pinon juniper.

#### C. Soil Erosion Hazard Rating: 1 (slight) 2,957 (moderate) and 2,982 (Severe)

#### D. Erosion Potential:

Catchment	Post Fire Erosion Potential (tons/acre/year)
Three Rivers	8.3
South Fork	.01
Big Bear	1.3
Little Bear	0.9
Aspen	0.5

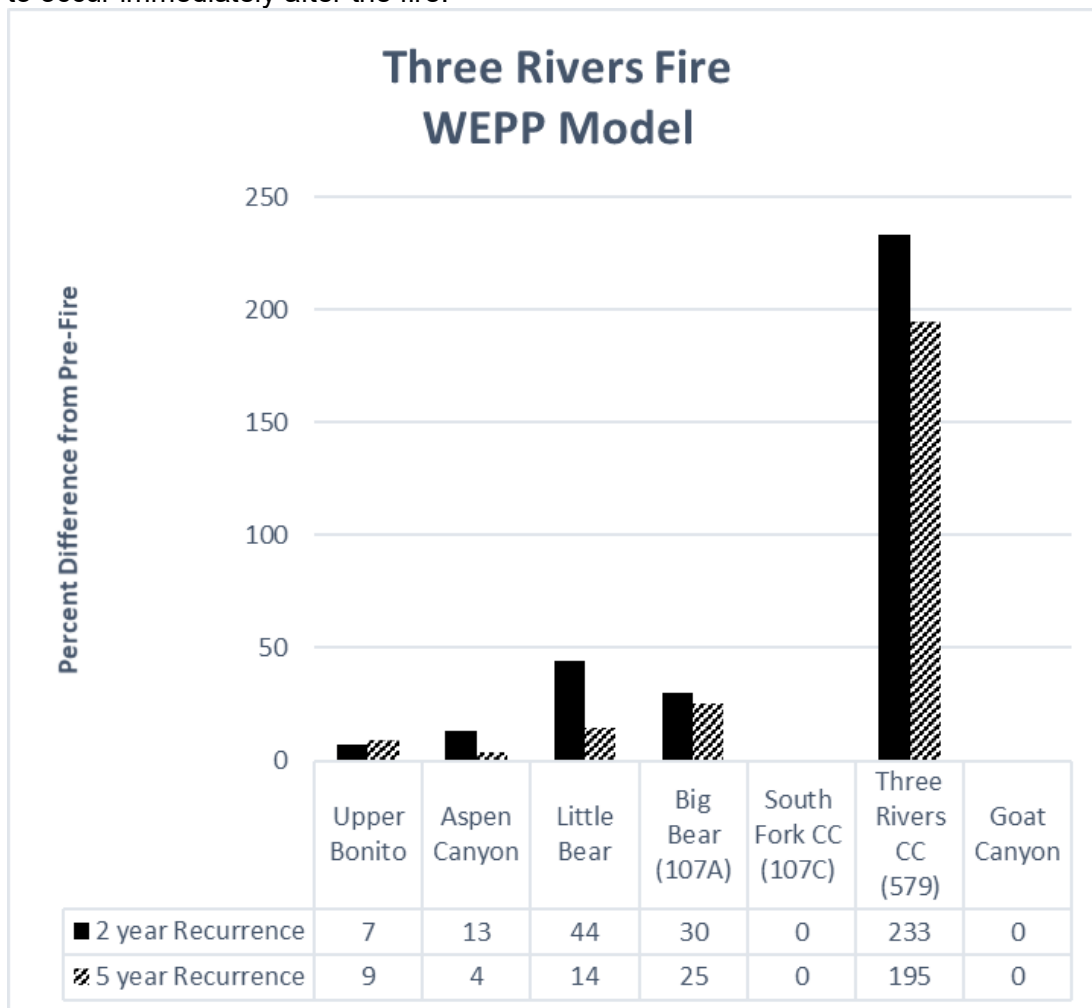
#### E. Sediment Potential:

Catchment	Post Fire Total Sediment Potential (tons)
Three Rivers	36,433
South Fork	25
Big Bear	2563
Little Bear	1131
Aspen	940

**F. Estimated Vegetative Recovery Period (years):** Estimated recovery is about 3 to 5 years but can be longer in some areas of high severity fire (Neary et al 2005). Mesic grasslands can regain former composition in about 1 to 2 years after disturbance with adequate precipitation (Brown et al 2000). In low to medium severity fire, resprouting grasses and forbs with intact roots/rhizomes can provide some cover the first year depending on the season of the burn. In some cases of high severity fire, deeper rooted Gambel oaks and aspen can emergence soon after the fire and provide some additional cover in healthy roots/rhizomes are intact deeper in the soil (Brown et al 2000).

**G. Estimated Hydrologic Response (brief description):** The chance of design success for the hydrological modeling that was completed for the Three Rivers BAER assessment is about 80%. Much of the Three Rivers watershed was burned during the Three Rivers fire. 78% of the Three Rivers watershed was burned. 16%

experienced high severity fire. 50% of the fire within Three Rivers was of moderate severity, with 16% at low severity. As a result, Three Rivers stream at the campground has the potential for increased flows that could impact the campground and downstream values. These flows are likely to be contained within the channel but upstream diversion from woody debris and topography combined with the potential for debris flows could cause flows to leave the channel and impact the campground. There is a high probability of debris flows, as indicated by the USGS modeling. The magnitude of flooding and debris flows are related to the characteristics of the precipitation events that occur after the fire. The watersheds on the east side of the fire experienced less fire effects. Fire in these watersheds was largely low to moderate severity and occurred at the headwaters of these watersheds. As a result, modeled peak flows show low increases related to the fire. Peak flow increases are likely to be contained within the channels. Debris flow risk is higher in some watersheds as seen in the USGS data provided elsewhere. As with Three Rivers watershed, the magnitude of flows is related to the precipitation events that occur after the fire. Data shown is for the 2- and 5-year recurrence peak flows within the smaller watersheds where the Three Rivers Fire occurred. These are the flows that are most likely to occur immediately after the fire.



## **PART V - SUMMARY OF ANALYSIS**

### **Introduction/Background**

The Three Rivers Fire started April 26, 2021, just inside the White Mountain Wilderness, above the Three Rivers Campground. It quickly spread into the White Mountains Wilderness and up into the western escarpment on the Smokey Bear Ranger District located on the Lincoln National Forest (LNF), over the mountain ridges into the Little Bear burn scar on the east. Fuel types were within initially pinon juniper, moved

into ponderosa and to the top of the mountains into the high elevation mixed conifer and alpine grassland vegetative types. The fire burned from 1925 meters elevation to 3420 meters elevation at the hill northwest of Lookout Mountain. The west side of the White Mountains form part of the western escarpment dropping into the Tularosa Basin. This western escarpment is composed of steep cliffs and vertical rises. and mountain range composed of an igneous and limestone mix. The higher elevation has mixed conifer, with the mid and lower slopes of the mountains composed of Ponderosa pine forests, grading into pinon juniper woodlands. The mountains terminate abruptly into pinon juniper, and once out of the hills, gives way to desert scrub. The mountain slopes are steep, with talus slopes and boulder fields prominent. The high elevation slopes hold some water, especially on the east side, but on the western escarpment surface flow from rain cascades off the steep slopes and directly into the heads of the drainages. There are several springs at the foot of the White Mountains that produce a small but steady amount of water. Three Rivers is a perennial stream, as it flows 9 months out of the year. The stream retains deep pockets and pools of water that, although seemingly unconnected on the surface, do not dry up, and allow survival of aquatic biota.

The Three Rivers burned area is 98% located within the White Mountain Wilderness. Much of the White Mountains is designated wilderness, and only accessible by foot traffic. The terrain has been described as rocky and challenging, with rolling hills at the foot of the mountains and steep cliffs and talus slopes in the upper reaches of the mountains. Elevations range from 5,400 to 10,083. Annual precipitation for the White Mountains is about 19 inches, and the precipitation pattern is bi-modal with 70 percent of the precipitation coming during the summer months and the remaining 30 percent coming as snow during the winter months. Those areas within the burn that experienced moderate to high severity burn pose the potential for accelerated erosion and loss of water control. This is especially true of the western escarpment that burned during the fire.

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

The Three Rivers fire burned with 647 acres of high severity burn, 2317 acres of moderate severity burn, and 2885 acres as low and unburned severity. The fire burned up the western escarpment and into the high elevations of the 2012 Little Bear burn scar, impacting areas that had started to recover from that landscape-scale stand-replacement fire. Little to no vegetative ground cover remains in the high severity burn areas of mixed conifer, alpine and sub-alpine grassland and ponderosa habitats. Dropped needles and vegetative sprouting was noted in the moderate burn severity sites. Grass root collars remain intact within a majority of the moderate and low burn severity areas of the grassland and pinon-juniper vegetation type, and these areas have already started resprouting. The burned area will experience higher than normal erosion and overland water flow due to loss of vegetative cover, especially in the upper elevations with the steep terrain, until vegetative cover becomes re-established.

Post-fire conditions will impact the values at risk listed below. It has been determined from the BAER assessment and modeling that there are risks to public safety, property, infrastructure and natural resources. The following are values at risk, which includes a public safety risk.

Table 5: Critical Value Matrix

Probability of Damage or Loss	Magnitude of Consequences		
	Major	Moderate	Minor
	<b>RISK</b>		
Very Likely	<b>Very High</b>	<b>Very High</b>	<b>Low</b>
Likely	<b>Very High</b>	<b>High</b>	<b>Low</b>
Possible	<b>High</b>	<b>Intermediate</b>	<b>Low</b>
Unlikely	<b>Intermediate</b>	<b>Low</b>	<b>Very Low</b>

#### 1. Human Life and Safety (HLS):

Threats to life and safety exist along riparian areas and drainages in and below high and moderate severity burn as well as in and below reburn of the Little Bear burn scar. Road users, private landowners and recreational hikers will be exposed to increased risk of water flow, debris and snags. Due to loss of vegetative ground cover in the high severity burn, there is a likelihood of increased overland flow and sedimentation. Monsoon storms are often severe, with heavy rainfall, and can easily rain over one inch per

hour. This can cause flooding, sediment and debris flows. High winds can result in snags falling across the burned area, on trails and across roads. Closures and caution/hazard signs are recommended for trailheads and roads that intersect the burned area. These are for the Forest Service employees and for visitors to be warned and aware of the hazards in accessing this area via the trailheads and roads as access points into the area. Threats to human life and safety along the trails inside and below the burned area, have a probability of Likely with Major consequences for a Very High risk.

- 2. Property (P):** The Three Rivers Campground lies directly below the Three Rivers burned area. This was reviewed and identified as being at a Very High risk for human life and safety and infrastructure integrity loss. This campground has a BAER treatment recommendation of closure with hazard/caution signs and removal of potentially floatable materials. The campground information is listed below:

Three Rivers Campground: This campground has a total capacity of 162.0 with 15 units, development scale of 3 and recreation opportunity spectrum (ROS) class rural. The campground contains multiple toilets, a steel equestrian corral, garbage bins, picnic tables, pedestal grills, and sun/wind shelters and pavilions. There is also a solar powered well and water tank within the campground. Access to this road is obtained via NFSR 00579 and is the only way in and out. The potential for entrapment during a heavy rain event, resulting in flooding and sedimentation, is possible. The campground was assessed of having a Likely probability of damage or loss, with a Major magnitude of consequences, leading to a Very High-Risk assessment.

There are no roads within the Three Rivers burned area, but there are roads below the burn scar. These roads will be impacted by the predicted increased post-fire water flows at higher flow rates than the pre-fire flows. These roads are expected to be impacted by sedimentation, flooding and possibly headcutting. The engineering field reconnaissance identified three roads that could be compromised, and also provide access points for entering the burn scar. Post fire effects could compromise the integrity of the roads, posing a safety hazard. Two of these roads suffered post-fire effects from the Little Bear fire, and with the current post-fire effects, a few of these problems have the potential to resurface. BAER treatments recommend closures and/or hazard/caution signs to be installed. Post fire conditions could lead to further erosion and deterioration of the roads. In one case, a temporary closure of the road is warranted for human health and safety concerns. The following roads were identified as having a high risk for human life and safety or infrastructure integrity loss:

FSR 579: This is a 3.4100-mile-long operational maintenance level 3 road made of improved native material. It is the only access to three rivers campground and trailhead. Beginning termini is Three Rivers Ranch House and ending termini is NFSR 579 (loop). This road was assessed with a Possible probability of damage or loss, with a Moderate magnitude of consequences, leading to a risk assessment of Intermediate for the structure. Human life and safety was assessed with a Likely probability of an event occurring, with Major consequences, giving a safety risk rating of Very High.

FSR 107 A: This is a 2.2100-mile-long operational maintenance level 2 road made of native material. Beginning termini is NFSR 107 and ending termini is dead end. The road is under private jurisdiction from milepost (MP) 0.3000 to MP 0.4200 and is gated at MP 0.3000. The road under forest service jurisdiction remains open from NFSR 107 to the gate and from MP 0.4200 to MP 2.2100. This road was assessed with a Possible probability of damage or loss, with a Moderate magnitude of consequences, leading to a risk assessment of Intermediate.

FSR 107 C: This is a 0.7740-mile-long operational maintenance level 4 road with bituminous surface treatment. Beginning termini is NFSR 107 and ending termini is Southfork CG. This road was assessed with an Unlikely probability of damage, with a Moderate magnitude of consequences, leading to a risk assessment of Low.

There are several trails within the Three Rivers burned area. The fire burned primarily in the White Mountain Wilderness. It made a significant run within the large drainages on the west of the mountain range and stopped and spotted into the east side of the range within the perimeter of the Little Bear Fire scar from 2012. Seven trails with a combined 24 miles are directly within and below the burn scar, and will be impacted by post-fire effects. This includes the Three Rivers Trailhead, located directly beneath the Three Rivers side of the burned area. These are all recommended for closure. The trails were assessed with a Possible probability of damage with Moderate magnitude of consequences, leading to a risk assessment of Intermediate. However the human health and safety risk was assessed with a Likely probability of an event to occur, with Major magnitude of consequences, leading to a risk assessment of Very High.

- 3. Natural Resources (NR):**

**Non-Native Invasive Species Early Detection and Rapid Response:** After the Little Bear fire in 2012, the area was documented to have several acres of non-native invasive plant species (NNIS). This is still the case, and the Three Rivers fire is expected to result in post-fire spreads of these NNIS. Multiple vectors for invasive plant spread will be evident in the post-fire environment and will include increased water flows, wind, animals, vehicles and sediment movement. Early detection of NNIS is the most economical means of NNIS management. This effort is focusing on the early detection for NNIS. This risk was ranked at a probability of Likely, with a magnitude of Moderate, making this rank as a High risk for NNIS spread, especially in post-fire bare soil conditions.

#### **4. Cultural and Heritage Resources:**

One cultural site was identified in the burn area (Area of Potential Effect) of the Three Rivers Fire. Two sites were identified outside the APE but could have potential impacts from any damaging storms after the fire. The risk to these sites were rated as a probability of Possible, with a Moderate magnitude of consequences for a risk rating of Intermediate

### **B. Emergency Treatment Objectives:**

**Land Treatments:** The objective of non-native invasive plant species (NNIS) early detection survey and rapid response (EDRR) treatment is to prevent the establishment or expansion of populations in the recently burned area.

**Road and Trail Treatments:** The objective of road stabilization is to lower the risk of damage to Forest Service infrastructure (system roads) by lowering the erosion of the road surface in and below high to moderate burn severity areas and to provide for human safety. Campground closure, removal of all items not in concrete or bolted down, pulling the pump to the well and capping the well is all part of ensuring human health and safety. Storm inspection and response objectives during the monsoon season are to ensure the integrity of the BAER road treatments and provide a rapid response with repairs to alleviate any breach in road stabilization.

**Protection/Safety Treatments:** The primary objective of the Burned Area Emergency Response (BAER) Team is to recommend prompt actions deemed reasonable and necessary to effectively protect, reduce or minimize significant threats to human life and property and prevent unacceptable degradation of natural resources. The highest priority of the BAER team is rapid implementation of any treatment regarding human life and safety. The objective of the temporary road, trail and campground closures is to reduce risk to human life and safety. Closure and warning/hazard signs at the entrances of the roads and trails that intersect the burned area are placed to reduce the risk to human life and safety. These warn of a closure and that the user is entering a burned area and warn against the increased potential for falling rock and debris, snags, and increased water flow. The objective of the temporary closure of the Three Rivers burned area through two years is to reduce the risk to human life and safety, and to allow natural recovery of the area by preventing further disturbance across the landscape. An important objective of the BAER team is to share findings of the assessment and a final burn severity map to NOAA Weather Service, with the anticipated post wildfire watershed effects and associated threats to human safety. The information is utilized in the development of spot weather forecasts for the burned area. An additional objective is to work with partners for non-forest values at risk, including but not limited to: NRCS, the electric company and the state department of transportation.

#### Land Treatments:

The objective of non-native invasive (NNIS) plant species early detection surveys and rapid response (EDRR) is to prevent the establishment or expansion in the recently burned area.

#### Road and Trail Treatments:

1. The objective of road stabilization is to lower the risk of damage to Forest Service infrastructure (system roads) by lowering the erosion of the road surface below high to moderate burn severity areas and to provide for human safety.
2. The objective of the temporary road closure is to reduce risk to human life and safety.
3. Storm inspection and response objectives during the monsoon season are to ensure the integrity of the BAER road treatments and provide a rapid response with repairs to alleviate any breach in road stabilization.

Protection/Safety Treatments:

1. The primary objective of the Burned Area Emergency Response (BAER) Team is to recommend prompt actions deemed reasonable and necessary to effectively protect, reduce or minimize significant threats to human life and property and prevent unacceptable degradation of natural resources.
2. The objective of the warning & hazard signs at the entrances of the roads and trails that intersect the burned area are placed to reduce the risk to human life and safety. These warn that the area is closed and the user is entering a burned area and warn against the potential for falling rock and debris, snags, and increased water flow.
3. The highest priority of the BAER team is rapid implementation of any treatment regarding human life and safety. The objective of any temporary closure recommendation of the Three Rivers burned area through at least a year, and the Three Rivers Campground for 2 years is to reduce the risk to human life and safety, and to allow natural recovery of the area by preventing further disturbance across the landscape.
4. An important objective of the BAER team is to share findings of the assessment and a final burn severity map to NOAA Weather Service, with the anticipated post wildfire watershed effects and associated threats to human safety. The information is utilized in the development of spot weather forecasts for the burned area.
5. An additional objective is to work with partners for non-forest values at risk, including but not limited to: NRCS, the electric company, NM State Forestry, the County, the Corps of Engineers, BLM and the state department of transportation

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

**Land:** 95%

**Channel:** N/A

**Roads/Trails:** 95%

**Protection/Safety:** 95%

**D. Probability of Treatment Success**

*Table 6: Probability of Treatment Success*

	<b>1 year after treatment</b>	<b>3 years after treatment</b>	<b>5 years after treatment</b>
<b>Land</b>	95	95	95
<b>Channel</b>	N/A	N/A	N/A
<b>Roads/Trails</b>	95	95	95
<b>Protection/Safety</b>	95	95	95

**E. Cost of No-Action (Including Loss):** \$8,002,650

**F. Cost of Selected Alternative (Including Loss):** \$153,383



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

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

**Team Leader:****Email:**Rhonda Stewart**Phone(s)**575-434-7222**Forest BAER Coordinator:****Email:**Rhonda Stewart**Phone(s)**575-434-7222**Team Members:** *Table 7: BAER Team Members by Skill*

Skill	Team Member Name
<i>Team Lead(s)</i>	Rhonda Stewart Jennifer Hickman
<i>Soils</i>	Nori Koehler Tom Giambra
<i>Hydrology</i>	Livia Crowley Pete Haraden
<i>Engineering</i>	Armando De La Cruz
<i>GIS</i>	Rob Arlowe Taci Ugraskan
<i>Wildlife</i>	Taylor Joray
<i>Recreation</i>	Jeremy Pritchett Brandon Brumlow
<i>Archaeology</i>	Scott Hays-Strom
<i>Weeds</i>	
<i>Other</i>	

**H. Treatment Narrative:**

These proposed treatments summarize emergency response proposals to mitigate post-fire effects on the Three Rivers burned area, based on the field surveys, soil hydrophobicity, hydrological modeling and the Soil Burn Severity Map finalized May 26, 2021. Proposed treatments are necessary to address potential threats to life, safety, property, infrastructure, and natural resources and are associated with sites in and below high to moderate severity burns. Priority will be placed on implementation of any treatments that protect human life and safety.

**Land Treatments:** NNIS early detection and rapid response will be needed to deal with post-fire spread due to sedimentation and predicted soil movement. After the Little Bear Fire in 2004, NNIS new establishments were numerous, and the rate of spread in the post-fire bare earth was accelerated. These existing infestations are expected to take advantage of the bare soil conditions from the Three Rivers fire, which burned over into the Little Bear fire scar. The rapid detection will take 10 days, with 2 people, and is estimated at \$5,000. Treatment: NNIS Early Detection/Rapid Response. \$5,000 estimated cost

**Channel Treatments:** There are no channel treatments proposed for the Three Rivers burned area.

**Campground, Roads and Trail Treatments:** Three Rivers Campground: Treatment: Two-year closure, install gate and warning sign, remove pump, cap water well, and remove solar panels and any unsecured objects within campground. Remove 3 culverts, install rolling dips: Estimated Cost: \$3,000. Personnel: 2 engineers – 2 and ½ day - \$2,500. 4-person crew – 1 day - \$1,000. Total Estimate: \$6,500

Storm Inspection and Response: Treatment: Seven post-storm event site visits and response.  
Estimated cost \$7,000

**Protection/Safety Treatments:** Warnings and Closures - Roads: NFSR 00107 A: Treatment: Install warning sign. NFSR 00579: Treatment: Install warning sign in FS jurisdiction near private ranch. NFSR 00107 C: Treatment: Install warning sign. Signs: Five (5) 48" x 30" FW8-14d ENTERING BURNED AREA, STAY ON ROADS AND TRAILS signs. Estimated cost: \$1,750. , or Sign Installation & Oversight: Estimated cost: \$5,000 Total Estimated Cost \$6,750

Warnings and Closures – Campgrounds: Three Rivers Campground - Install CAMPGROUND CLOSED sign or message board at intersection of U.S. Highway 54 and Three Rivers Road. One (1) solar powered message board. Estimated cost for message board at the Highway 54 intersection: \$15,200. Estimated cost for CAMPGROUND CLOSED sign at Three Rivers Campground - One (1) white on brown CAMPGROUND CLOSED sign in 4-inch text: \$350 Southfork CG: Treatment: Install warning sign for conditions up-canyon. Total Estimated Cost: \$15,550.

Warnings and Closures – Trails: The trails that access the described above are recommended for installation of closure and hazard/caution signs at the trailheads and junctions where the trails will be going through high and moderate burned severity for safety awareness. There are hazard trees at some of the trailheads that could threaten the life or health of employees installing the signs, so these will be taken down prior to sign installment to facilitate safe working conditions during this BAER treatment. Two people for two days of installation will be needed. Treatment: Hazard/Caution trail signs. Thirty-two signs with 3 days for installation will have a \$5,024 estimated cost.

Closure: The BAER Team recommended a closure order be placed in the Three Rivers burned area for the duration of the monsoon season. This is for the health and safety of forest visitors as well as a caution warning for forest employees during the expected storms and wind events that occur with the monsoons. The Three Rivers BAER team coordinated with the NOAA Weather Service and provided them with the final Burn Severity Map as well as critical downstream Values at Risk. As a result, the NOAA Weather Service will be providing spot weather forecasts for the Three Rivers Burn scar, concentrating on the Three Rivers watershed and the Little Bear burn scar.

In addition, the BAER team coordinated with Natural Resource Conservation Service (NRCS), the Corps of Engineers, City of Alamogordo, Otero County, New Mexico State Forestry, Union Pacific Railroad, Bureau of Indian Affairs, Mescalero Tribe, Otero County Electric Coop (OCEC) and the New Mexico State Highway Department of Transportation (NMDOT), providing them with finalized Burn Severity maps, and non-Forest identified Values at Risk. This coordination will continue as needed.

## **I. Monitoring Narrative:**

There is no BAER monitoring proposed for the Three Rivers burned area. There will be normal business monitoring of the area, plus a research project proposed by the University of Arizona. These will not require BAER funding.

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

Line Items	Units	Unit Cost	NFS Lands		Other \$	Other Lands				All Total \$
			# of Units	BAER \$		# of units	Fed \$	# of Units	Non Fed \$	
<b>A. Land Treatments</b>										
				\$0	\$0		\$0		\$0	\$0
NNIS EDRR	days	500	10	\$5,000	\$0		\$0		\$0	\$5,000
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Land Treatments</i>				\$5,000	\$0		\$0		\$0	\$5,000
<b>B. Channel Treatments</b>										
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Channel Treatments</i>				\$0	\$0		\$0		\$0	\$0
<b>C. Road and Trails</b>										
				\$0	\$0		\$0		\$0	\$0
Three Rivers Campground	job	6,500	1	\$6,500						\$6,500
Storm Inspection & Response	events	1,000	7	\$7,000	\$0		\$0		\$0	\$7,000
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Road and Trails</i>				\$13,500	\$0		\$0		\$0	\$13,500
<b>D. Protection/Safety</b>										
				\$0	\$0		\$0		\$0	\$0
Roads - Closures/Hazard	ea	1,350	5	\$6,750						\$6,750
CG - Closure sign	ea	350	1	\$350						\$350
CG - Mssg Board	ea	15,200	1	\$15,200						\$15,200
Trails - Closures/Hazard	ea	157	32	\$5,024	\$0		\$0		\$0	\$5,024
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Protection/Safety</i>				\$27,324	\$0		\$0		\$0	\$27,324
<b>E. BAER Evaluation</b>										
Initial Assessment	Report			---	\$47,187		\$0		\$0	\$47,187
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				---	\$0		\$0		\$0	\$0
<i>Subtotal Evaluation</i>				\$0	\$47,187		\$0		\$0	\$47,187
<b>F. Monitoring</b>										
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Monitoring</i>				\$0	\$0		\$0		\$0	\$0
<b>G. Totals</b>				\$45,824	\$47,187		\$0		\$0	\$93,011

**PART VII - APPROVALS**

1./s/ **William D. Sapp, Acting**  
Forest Supervisor

**June 4, 2021**  
Date