

**Telegraph Fire
EMERGENCY STABILIZATION PLAN**

**USDI BLM / FOLSOM FIELD OFFICE
CALIFORNIA STATE OFFICE**

FIRE BACKGROUND INFORMATION

Fire Name	Telegraph
Fire Number	EDS4
District/Field Office	Folsom Field Office
Admin Number	CA-180
State	California
County(s)	Mariposa
Ignition Date/Cause	July 25, 2008 / Human – Target Shooting
Date Contained	August 6, 2008
Jurisdiction	<i>Acres</i>
BLM	21,215
<i>USFS</i>	3,875
<i>State</i>	76
<i>Private</i>	8,925
Total Acres	34,091
Total ES Plan Costs	

Status of Plan Submission (check one box below)

X	Initial Submission of Complete ES Plan
	Updating or Revising the Initial Submission
	Amendment

PART 1. - EMERGENCY STABILIZATION PLAN SUMMARY

DEPARTMENT OF INTERIOR EMERGENCY STABILIZATION CRITERIA

1. Prevent Threats to Human Life and Property:
The fire has increased the likelihood of increased soil erosion, flow and rock movement substantially increasing the risk of culvert failure on the Burma Grade. On these very steep slopes, this could result in a “cascading failure” effectively closing this important escape route / access route to the Merced River corridor (which includes three high use campgrounds and a year round residence). Not only is this one of only two routes into this high use area, it is also situated above the only other access route. Therefore a failure would close both escape / access routes severely threatening public safety. The Burma Grade is also an important alternate escape routes in the event of fire or other emergency should close Highway 140. Reducing the threat of failure would also protect two residences and associated infrastructure (wells, power lines, telephone, sheds, etc...). These facilities are located immediately below the first switchback and could be severely impacted by a road failure or rockfall.
2. Stabilize and Protect Critical Heritage Resources or Sites: Several critical heritage resource sites were exposed or made accessible as a result of the fire, increasing the risk of damage and/or looting. Proposed treatments are designed to eliminate motorized access to the sites as well as reduce impacts to the sites themselves. Increased patrol of the areas will reduce the potential for further impacts and/or looting.
3. Replace highway safety facilities, including fences and signs, to enhance public safety:
Non-applicable.
4. Protect “Highest Priority Areas” through native plant restoration and maintenance via revegetation: Most of the fire was within or provided access to several high priority areas including the Merced River Wilderness Study Area (WSA), the Merced River Wild and Scenic River corridor, the Limestone Salamander Area of Critical Environmental Concern (ACEC), and important habitat for the foothill yellow-legged frog (a BLM sensitive species). Several treatments were designed to protect native vegetation, or the recovery of native vegetation, in these areas. Noxious weed detection and treatment will facilitate native plant restoration throughout the burned area and particularly in these critical areas. This area contains many historic trails that were closed by brush both in the high priority areas and in locations that provided access to these areas. Following the fire these routes are now open and drivable. This project would use natural barriers, where possible, to prevent these routes from being used. This would protect these high priority areas and allow native vegetation to recover. This will also prevent the spread of noxious weeds into the WSA and other priority areas.
5. Will the plan accomplish the following?
 - Be completed within one year of fire being contained?*
 - Have a high likelihood of success?*
 - Produce discernible benefits that otherwise would not occur naturally in the absence of*

ES activities/intervention?

All treatments can be completed within one year of fire containment. The proposed treatments all use standard design specifications and methods for road drainage improvement, integrated pest management, soil stabilization, and control of motorized access. This would contribute to a high likelihood of success. Proposed treatments produce discernible benefits to the protection of critical infrastructure, the protection of critical heritage resource sites and the protection of high priority natural areas that would not occur naturally in the absence of ES intervention. These benefits would include the maintenance of native vegetation in the Merced River Wilderness Study Area (WSA), the Merced River Wild and Scenic River corridor, the Limestone Salamander Area of Critical Environmental Concern (ACEC), and important habitat for the foothill yellow-legged frog (a BLM sensitive species). Without treatment these areas would be at great risk. Human safety would be greatly improved as two critical escape routes / access route would remain open.

BACKGROUND ON THE FIRE

Fire Status (August 7, 2008)

Fire Name: Telegraph

Location: Mariposa, Mt. Bullion, Bear Valley, Midpines, Briceburg, and Greeley Hill

Acres Burned: 34,091 acres (53 square miles)

Start Date and Time: 7/25/2008 @ 3:10 pm

Percent Contained: 100 percent

Containment Date: 08/06/2008

Cause: Target Shooting

Injuries: 0 reported yesterday, 38 total (all minor injuries)

Structures Destroyed: 30

Outbuildings Destroyed: 100

Cost to Date: \$37,620,588

COST SUMMARY TABLE

Action/ Spec. #	Planned Action	Unit (acres, WMs, number)	# Units	Unit Cost	FY08	FY09	FY10	FY11	Totals by Spec.
S1	Planning (plan prep, project management)				\$84,000	\$14,500	\$0	\$0	\$98,500
S2	Ground Seeding				\$0	\$0			\$0
S3	Aerial Seeding				\$0	\$0			\$0
S4	Seedling Planting (shrub/tree)				\$0	\$0			\$0
S5	Noxious Weeds				\$0	\$4,000			\$4,000
S6	Soil Stabilization (other than seeding, planting)				\$0	\$37,000			\$37,000
S7	Protective Fence/Gate				\$0	\$4,500		\$0	\$4,500
S8	Cattle Guard				\$0	\$0			\$0
S9	Road/Trail Water Diversion				\$81,000	\$0			\$81,000
S10	Cultural Protection (stabilization/patrol)				\$0	\$19,000			\$19,000
S11	Insect/Rodent Control				\$0	\$0			\$0
S12	Horse Gather				\$0	\$0			\$0
S13	Tree Hazard Removal				\$0	\$2,000			\$2,000
S14	Facilities/Improvements				\$0	\$4,500			\$4,500
S15	Closures (OHV, livestock, area)				\$0	\$42,000			\$42,000
S16	Monitoring (implementation, effectiveness)				\$0	\$26,900	\$45,900	\$45,900	\$118,700
	TOTAL COSTS				\$165,000	\$154,400	\$45,900	\$45,900	\$411,200

LAND USE PLAN CONSISTENCY

The proposed action is consistent with the Sierra Resource Management Plan's Record of Decision, approved in February 2008. The proposed actions would occur within the Merced River Special Recreation Management Area. Under the Sierra RMP, management objectives for this area include providing for river-oriented and land-based recreation opportunities, protecting cultural resources, and maintaining the visitor center and other visitor facilities to accepted BLM standards. The proposed actions would help protect the visitor facilities and recreational

opportunities called out in the Sierra RMP (ROD page 27). The proposed actions would also occur in, or would have indirect impacts on, the Merced River Wild and Scenic River, Merced River ACEC, Limestone Salamander ACEC, and Merced River Wilderness Study Area. The Sierra RMP provides management direction for these special management areas. This direction is dictated by existing federal laws, regulations, policies, and activity-level land-use plans (Merced River Wild and Scenic Management Plan and the Limestone Salamander ACEC Management Plan). The proposed actions are consistent with this management direction. They would help to protect wild and scenic outstandingly remarkable values (recreation, cultural, and water quality), ACEC values (limestone salamander and the Merced River), and wilderness study area suitability.

Applying mulch to stabilize soils and prevent erosion is consistent with the Sierra RMP. On page 8 (Section 2.2) of the Record of Decision (ROD) it states that BLM's management objectives are to "maintain soil cover and organic matter" and minimize harmful consequences of erosion and surface runoff".

Constructing vegetation barricades other physical closures to keep motorized vehicles including OHVs on designated routes, and replacing culverts, clearing rock fall, and making other related repairs to the Burma Grade/Bull Creek Road and the campground access road to keep these roads passable, are all consistent with Sierra RMP. On page 30 (Section 2.16) of the ROD, it states that BLM's management goal is to "Provide for appropriate levels of motorized, pedestrian, equestrian, and mountain bike uses commensurate with other uses and resource protection." Under management actions, the ROD states the Merced River WSA is closed to motorized vehicle use and that motorized use on BLM-administered land is generally limited to designated routes. The Burma Grade/Bull Creek Road and the campground access road are both routes designated in the ROD (see Map 6g).

Closing BLM-administered land within the burned area to livestock grazing is not specifically called out in the Sierra RMP. However, it is consistent with the livestock grazing management objectives on page 23 (Section 2.13) of the ROD. An objective is to "Ensure soils exhibit functional biological and physical characteristics appropriate to the soil type, climate, and land form." Under management actions, the ROD states "Reduce or terminate authorized grazing preference if there is excessive soil erosion or poor range conditions to provide forage for wildlife" (page 23). Due to the fire, excessive soil erosion is anticipated and range conditions are too poor to provide forage for both livestock and wildlife.

Treating noxious weeds is consistent with the Sierra RMP. On page 11 (Section 2.4) of the ROD it states that BLM's management objective is to "Control invasive species and increase native plant species using early detection, rapid response, and prevention measures."

PART 2. – EMERGENCY STABILIZATION ISSUES

Objectives: "determine the need for and to prescribe and implement emergency treatments to minimize threats to life or property or to stabilize and prevent unacceptable degradation to natural and cultural resources resulting from the effects of a fire." 620DM3.4

Priorities: 1). Human Life and Safety, and 2). Property and unique biological (designated Critical Habitat for Federal and State listed, proposed or candidate threatened and endangered species) and significant heritage sites. 620DM3.7

Emergency Stabilization Issues

1. Human Life and Safety

DOI Policy Criteria – Prevent threats to human life and health, property, or infrastructure caused by: • soil, ash, or debris movement • road and channel drainage.

DOI Policy Criteria - Replace highway safety facilities, including fences and signs to enhance public safety.

“Burma Grade”: The slopes above the Burma grade switchbacks experienced a moderate to high severity burn. This section of road was constructed approximately 75 years ago and consists of forty culverts ranging from 12 to 36 inches in diameter. The fire has increased the likelihood of increased soil erosion, flow and rock movement substantially increasing the risk of culvert failure. On these very steep slopes, this would result in a “cascading failure” effectively closing this important escape route / access route to the Merced River corridor (which includes three high use campgrounds and a year round residence). Not only is this one of only two routes into this high use area, it is also situated above the only other access route. Therefore a failure would close both escape / access routes severely threatening public safety. Reducing the threat of failure would also protect two residences and associated infrastructure (wells, power lines, telephone, sheds, etc...). These facilities are located immediately below the first switchback and could be severely impacted by a road failure or rockfall.

High severity burns can increase the threat of downstream flooding, as bare hill-slopes often shed water as opposed to having it infiltrate. Un-burnt areas have a vegetative cover to minimize rain splash erosion and have an organic layer which serves as a “sponge” holding water and allowing it to infiltrate. On burnt sites, “rain drops” can directly hit the ground causing rain splash erosion and eventually form a network of rills that can rapidly concentrate flows increasing down-slope discharge. Reducing rilling and runoff would also reduce the likelihood of rock fall (which could plug the culvert) and reduce erosion and subsequent sediment delivery to the Merced River from this small drainage. Modeling (ERMit) suggests that 1 ton/acre of straw would reduce sediment production (from the treatment unit) from 55 to 14 tons/acre (75% reduction). These treatments would increase the likelihood that the down slope crossing remains effective and this critical escape route would remain open.

Culvert Gulch: Approximately 99% of the Culvert Gulch drainage was impacted by the Telegraph fire. Modeling suggests that flow may increase substantially threatening the culvert at the Merced River Campground Access road. This road is a critical access point to the canyon, as three high use campgrounds are located downstream of the crossing. High severity burns can increase the threat of downstream flooding, as bare hill-slopes often shed water as opposed to having it infiltrate. Un-burnt areas have a vegetative cover

to minimize rain splash erosion and have an organic layer which serves as a “sponge” holding water and allowing it to infiltrate. On burnt sites, “rain drops” can directly hit the ground causing rain splash erosion and eventually form a network of rills that can rapidly concentrate flows increasing down-slope discharge. Reducing rilling and runoff would also reduce the likelihood of rock fall (which could plug the culvert) and reduce erosion and subsequent sediment delivery to the Merced River from this small drainage. Modeling (ERMit) suggests that 1 ton/acre of straw would reduce sediment production (from the treatment unit) from 82 to 22 tons/acre (73% reduction). These treatments would increase the likelihood that the down slope crossing remains effective and this critical escape route would remain open.

Approximately ½ mile down stream of this drainage is a spring that is expected to produce an increased amount of water. Other springs in this area are experiencing large increases in flow. A culvert is proposed to pass this water through the road preventing damage to the previously discussed road. Without this road, access could be limited threatening a residence and three high use campgrounds.

Hazard Trees and Fallen Rock:

River Road: Several additional hazard trees exist. This road is the only vehicle access to the residences (2 private, and one government), campgrounds and Merced River Trail. Prior to the fire, this road experienced rock fall/landslides each winter during storm events that resulted in short term road closures (up to a few weeks in heavy rain years). It is reasonably expected that the runoff will be greater and the rock fall more severe during the first few years following the fire. Fallen trees and rock could threaten access to the critical escape routes from the high use canyon.

Merced River Trail, including North Fork Trail: Burn severity in these areas was moderate to high. We have already seen several trees come down and others are expected over the next year. This poses a threat to human health and safety in these high use recreation areas.

2. Soil/Water Stabilization and Native Vegetation Protection/Restoration

Merced River Wilderness Study Area-This unit is managed under the Interim Management Policy and guidelines For Lands under Wilderness Review H-8550-1 and is thus managed to the “nonimpairment Standard”. The origin of the fire was on or immediately adjacent to the WSA. Roughly ¾ of the WSA was burned. Many ways and routes exist within the WSA. Before the fire, these ways and routes were effectively armored by thick brush. Many routes were partially blocked by brush and others were completely covered and concealed by brush. Now virtually all ways and routes are completely free from brush and plainly visible. There is a significant threat that motor vehicles will enter the WSA, ride on existing routes, and go beyond the existing routes because there is no brush or other physical barriers. This could lead to the spread of noxious weeds and harm the recovery of native vegetation critical to maintaining non-impairment. Such use has already been noted in our field observations since the fire.

Merced Wild and Scenic River-Approximately fourteen miles of the river corridor were burned: about 8 miles were burned on both sides of the river and an additional six miles were burned only on the north (river right) side of the river. Burn severity was generally less as you get closer to the river and riparian zone. The Merced River Campground Access Road effectively acted as a fuel break for long sections on the north side of the river. However, some spot fires did jump this road. The fire did burn the entire length of the Wild section downstream from the Mountain King Mine (private in-holding near Railroad Flat that includes a significant portion of Quartz Mountain). One of the “Outstandingly Remarkable Values” for which the river was designated was the native vegetation along and adjacent to the river. As with the Wilderness Study area, the fire has opened up old trails that may allow OHV use to threaten the native vegetation that contributes to the outstandingly remarkable values that justified the establishment of the Wild and Scenic River.

OHV use in this part of the Merced River has been increasing over the past five years. It is reasonably foreseen that OHV use will proliferate throughout the burned area and specifically in the WSA and Wild and Scenic River. Many of the previously brushed-in routes are now opened up and highly visible. This could lead to an invasion of noxious weeds, which in turn, will damage the native vegetation which is a critical element for WSA designation. An OHV staging area is located on USFS administered land approximately four miles north of the WSA boundary. BLM is working with the Groveland Ranger district, concurrent to the BAER process, to close down the Date Flat staging area.

Livestock Closure

This allotment includes portions of a Wilderness Study Area, the Limestone salamander ACEC (400 acres), and critical winter range for the Yosemite Deer Herd. The boundary between the private base property and the BLM allotment is unfenced, making it impossible to contain the cattle on the lessee’s private lease. An August 19, 2008, assessment of the burned area adjacent to the lessee’s private property indicates some areas of high severity burns that have reduced the forage in the area. Natural revegetation is expected to occur but will take time in this area. Allowing grazing in this area could impede the recovery of native vegetation.

3. Designated Critical Habitat for Federal/State Listed, Proposed, or Candidate Species
DOI Policy Criteria – Revegetate immediately after a fire to ensure native plant restoration in highest priority areas.

4. Critical Heritage Resources

DOI policy Criteria – Stabilize and protect critical heritage resources or sites.

This area contains many critical heritage resource sites. Prior to the Telegraph fire, these sites were either “grown over” or had difficult access (brushed in trails) which effectively protected

the sites. The telegraph fire has exposed several sites and also increased access which can lead to looting, unauthorized salvage, and vandalism. These irreplaceable resources are now at great risk. These sites include critical historic-era mining sites, such as the Schroeder Mill and Permit Mill as well as TM-77 (critical archaeological sites). In other cases, sites such as TM-61 are now being impacted by off-highway vehicle (OHV) use as the site is now easily accessible. It is critical that the pre-fire lack of access to these sites be restored.

5. Invasive Plants

DOI Policy Criteria – Revegetate immediately after a fire to ensure native plant restoration in highest priority habitat areas.

Weeds already present in the Merced River corridor have the opportunity to spread into the burn area because of the reduction of competition from other vegetation and abundant bare ground produced by the fire. Weed spread can retard or prevent the natural recovery of native vegetation.

Weed spread in the burn area can negatively impact the natural and recreational values of the Merced Wild and Scenic River and the Merced River Wilderness Study Area and the Merced River Special Recreation Management Area (SRMA). The Merced SRMA has three campgrounds and high visitor use focused on white water rafting. Any increase in weed populations can have a multiplier effect resulting in weeds being carried to weed-free portions of the corridor, and the widespread transmission of weed seed to other locations.

Stanislaus National Forest has applied for BAER funds for weed monitoring and control in the aftermath of the Telegraph Fire. Their lands abut BLM lands and primary weed movement corridors including roads, dozer lines and streams cross the BLM/USFS boundary. Only work on both sides of the boundary has any promise of long-term success.

PART 3. - DESCRIPTION OF TREATMENTS

Issue 1. Human Life and Safety

S6 Soil Stabilization

A. Treatment/Activity Description.

Burma Grade: Two units totaling 17 acres would be mulched to minimize rilling and the rapid concentration of water. Application rate would be one ton of straw per acre. Mulch would be applied by handcrews.

Culvert Gulch: A 25 acre unit in the upper drainage would be mulched to minimize rilling and the rapid concentration of water. Application rate would be one ton of straw per acre. Mulch would be applied by handcrews.

- B. How does the treatment relate to damage or changes caused by the fire? Mulching can prevent or reduce erosion and subsequent rilling. This would reduce impacts to hillslope hydrology and reduce the concentration of water and its rapid movement down slope. This would reduce the risk to downstream culverts (on both the Burma grade and “Culvert Gulch”) as well as reduce the likelihood of destabilizing rocks that could then fall either on the residences or into the culverts. This treatment is well established and has a high likelihood of success.
- C. Why is the treatment/activity reasonable, within policy, and cost effective?
This is a well established treatment that has a highly likelihood of success. The resources at risk include two critical access routes and two residences with associated infrastructure. This is a reasonable cost to protect life and property. All materials imported to the site must be weed free. This is of particular importance for vegetative material like straw or wood straw. Straw must be either certified weed free or rice straw. Straw and wood straw should be stored/staged in weed free areas, so that it does not become contaminated with weed seed before application.

S9 Road/Trail Water Diversion

A. Treatment/Activity Description.

Burma Grade: This treatment would replace/enlarge 27 culverts of the forty culverts, establish ditches at 10 sites, and monitor seven culverts. This project was reviewed by the Field Office Engineer and Associate Field Manager as it is a high risk area. The treatment is necessary to ensure that the road can “pass” both increased water and rock fall associated with the burnt lands.

Culvert Gulch: This culvert would be upgraded from two to three feet in diameter to handle the increased flow and rock that are expected to be exported from this drainage. A 12 inch culvert will be added to pass water from the spring.

- B. How does the treatment relate to damage or changes caused by the fire?
The Telegraph Fire burned the slopes above these drainages at moderate to high severity. The hydrologic analysis found that these slopes will likely experience increases in both water yield and rock fall until vegetative recovery is established. This is a serious threat to human safety as noted under the discussion of issues in section 2. The purpose of this treatment is to upgrade the existing culverts to increase the likelihood that they can pass the anticipated increase in water and rock fall. This is an excepted ES&R treatment that has been shown to be highly effective.
- C. Why is the treatment/activity reasonable, within policy, and cost effective?

This is a well established treatment that has a highly likelihood of success. The resources at risk include two critical access routes and two residences with associated infrastructure. This is a reasonable cost to protect life and property.

S9 *Road/Trail Water Diversion*

A. Treatment/Activity Description.

Increase the availability of heavy equipment to clear rockfall and, or landslides along the Merced River Campground Access Road. On normal years this road experiences some rockfall that results in temporary closures—averaging one to two occurrences per year. It can be assumed that the post-fire condition will increase the number and severity of such events by a factor of two or three times. Therefore, approximately three to six road blocking rockfall events are anticipated. This would be approximately 2-4 more events than we have experienced from pre-fire condition.

B. How does the treatment relate to damage or changes caused by the fire?

Brush plays a major role in anchoring rocks on the hillslope. Once the brush was consumed, the risk of rock fall was greatly increased. This poses a threat as rock falls can temporarily close off these critical escape routes from the campgrounds and residences.

C. Why is the treatment/activity reasonable, within policy, and cost effective?

The treatment would be highly effective and would be an inexpensive treatment that utilizes existing partnerships.

S13 *Tree Hazard Removal*

A. Treatment/Activity Description.

Conduct a thorough hazard tree analysis and remove all hazards within the campgrounds, along the Merced River Campground Access Road, and along the Merced River Trail including the North Fork Trail. This will reduce the threat to human safety throughout the Merced River Special Recreation Area.

B. How does the treatment relate to damage or changes caused by the fire?

The fire stressed many trees in high use areas. Several of these trees will likely die over the next year posing a threat to human safety.

C. Why is the treatment/activity reasonable, within policy, and cost effective?

Hazard tree removal is a well established ES&R treatment with a high likelihood of success. The cost is reasonable as only hazardous trees are removed. No additional cost would be incurred.

Issue 2. Soil/Water Stabilization and Native Vegetation Restoration

This issue includes the BLM guidance’s emphasis area of “Revegetate immediately after a fire to ensure native plant restoration in highest priority areas” as it’s related to watershed function and restoration. This emphasis area allows for the placement of barriers and closures to provide for desired vegetative recovery. High priority areas include but are not limited to: NLCS, WSA, important winter range, land use plan identified habitat management areas, T&E habitat, BLM sensitive species habitat, etc. The Telegraph fire area includes several of these high priority areas.

S15 Closures (OHV, livestock, area)

A. Treatment/Activity Description

Unauthorized OHV routes that were once unusable would be barricaded to prevent damage to native vegetation and to allow burnt areas to recover. Many of the ways and routes proposed to be barricaded lead into the Merced River WSA, one leads to the Wild section of the Merced Wild and Scenic River, and others lead to parts of the Limestone Salamander ACEC and North Fork Merced Wild and Scenic Study River. By prohibiting access to these routes, we will be minimizing the spread of Noxious Weeds and improving the recovery of native vegetation. The following table and paragraphs summarize the proposed treatments and specific methods. If monitoring finds that these closures are ineffective, more substantial structures would be required.

Physical Barrier Table

Locations where physical closures are proposed under the ES program

	Location (see map)	Photo log	Name and treatment recommendations
1	237050 m E 4166561 m N	0408-0410	Top of Burma Grade; build brush barricade and rip road
2	237223 m E 4168180 m N	N/A	Borrow Pit right-hand dead-end; fall gray pines, build brush barricade and rip road
3	237330 m E 4168366 m N	0411-0415	Upper Borrow Pit (closure is contingent on other closures to the north); brush barricade and rip road
4	237235 m E 4168239 m N	0416-0417	Borrow Pit shortcut; build brush barricade and fall knob cone pines
5	237832 m E 4168049 m N	0420-0422	New culvert road; install new culvert with tank trap, rip road, and build brush barricade
6	236216 m E 4168850 m N	4023-4024	Side hill re-contour; rip road, and build brush barricade
7	236196 m E 4168936 m N or 236160 m E 4169121 m N	4025-4029	Ponderosa Way split; cover site with brush, rip and install water bars on steep OHV route
9	237864 m E 4169468 m N or 237806 m E 4169309 m N	4032-4033	Jenkins Hill Rd to Borrow Pit at BLM boundary; build brush barricade and rip road
10	238926 m E 4169967 m N	4034-4036	Bull Creek Rd to Jenkins Hill Rd spur; build brush barricade and rip road
12	235568 m E 4171092 m E	4041-4043	Bull Creek Rd to Black Mountain at Ponderosa Way (south of intersection leading down to mine); build brush barricade and rip road
13	762351 m E 4170604 m N	4044-4045	Quartz Mountain; build brush barricade (already mostly done by Dan Lusby) and rebuild 300 ft of wire fence (posts already in place)
16	760194 m E 4170760 m N	4049-4058	East Side Priority Trail; install gate for mining claimant, fall trees, and build brush barricade; may need 400 ft of wire fencing
18	760046 m E 4171009 m N	4061	Fireplace Spur; re-contour and build berm and build brush barricade
19	759999 m E 4171047 m N	0458-0463	Cut Switchback new fuel break; add brush and fall trees
20	760030 m E 4171043 m N	0464-0465	Ogella Road along the North Forth; build brush barricade and fall trees
21	759204 m E 4171251 m N	0469-0471	Upper Ogella Road; rip road and build brush barricade
23	758120 m E	?	Landing Strip; add to the existing brush barricade

	4169591 m N		
24	758120 m E 4169200 m N	?	Brush Wall; fall tree and add brush to existing brush barricade built by Dan Lusby during fire suppression phase
25	See map	N/A	Schroeder Mine road; build brush barricade
26	See map	N/A	Permit Mine driveway; build brush barricade
27	See map	N/A	Mosher Road; rebuild gate if not rebuilt by private landowner

Ripping Specification:

Use a dozer to rip the roadbed of routes that were previously brushed in. The purpose of this is to loosen the soil compaction so that native vegetation will regrow and recover within the burned area. Routes will be ripped a minimum of 200 feet from the intersection of the main designated road, some routes may be ripped their entire length; see Physical Barrier Table and Treatment Map.

Brush Barricade Specifications:

Brush barricades are to be constructed adjacent to the designated roads in order to block access to the burned area on routes that are not designated for motorized travel; see Physical Barrier Table and Treatment Map. The ideal outcome is that these barricades of dead brush will cover and conceal undesigned routes, and provide an impenetrable barrier to motor vehicles. This treatment will allow for native vegetation recovery while preventing surface disturbance, route proliferation, soil erosion, and the spread of noxious weeds.

These barricades should be constructed of heavy brush and woody material compacted and woven together so that the public can not remove the brush to get through the barricade. Trees should be integrated into the mix if available near the site. The brush should fill the entire width of the route and extend into any live brush or skeletons that remain along the edges of the route. The brushy material should extend for at least twenty (20) feet along proposed route and be (8-10) feet in height. Heavy equipment should be used to harvest, transport, place, and construct these barriers so that they will not easily be dismantled by the public. Suitable locations will be determined and marked in the field where brush can be harvested. If any brush is available from nearby dozer lines, it should be used prior to removing live brush.

B. How does the treatment relate to damage or changes caused by the fire?

Before the fire, many ways and routes were effectively blocked or covered and therefore concealed by brush. Now virtually all ways and routes are completely free from brush and plainly visible. There is now a significant risk that vehicles will now have access to the WSA, ACEC, and Wild and Scenic River as there is no brush or other physical

barriers to impede their progress. This could lead to the spread of noxious weeds and harm the recovery of native vegetation critical to maintaining non-impairment of the WSA. This is directly related to the fire and consumption of the brush.

C. Why is the treatment/activity reasonable, within policy, and cost effective investment.

This treatment utilizes the minimal treatment necessary to be successful. The treatment is consistent with techniques appropriate to maintain wilderness and wildlands characteristics. Over time, the treatment will become part of the natural landscape and the revegetation will be back to its pre-fire condition. No treatments other than to promote natural recovery are taking place. This treatment utilizes local, natural materials leading to a cost effective treatment.

S15 Closures (OHV, livestock, area)

A. Treatment/Activity Description.

Close the area to livestock grazing for two years or until monitoring objectives are met to allow natural revegetation to occur. Evaluate the vegetation to determine when it would be prudent to allow grazing to resume on the allotment. Also evaluate terms and conditions of the lease, such as numbers of AUMs and season of use, as well as cattle movement and possible concentration areas.

B. How does the treatment relate to damage or changes caused by the fire?

Field reviews indicate that some areas of high severity burns that have reduced the forage in the area. Natural revegetation is expected to occur but will take time in this area. Allowing grazing in this area could impede the recovery of native vegetation.

C. Why is the treatment/activity reasonable, within policy, and cost effective?

This is a well established treatment that has a highly likelihood of success. This is within BLM authorities.

Issue 3. Designated Critical Habitat for Federal/State Listed, Proposed, or Candidate Species

No Treatments Proposed

Issue 4. Critical Heritage Resources

S10 Cultural Protection (stabilization/patrol)

A. Treatment/Activity Description

Patrols and brush barricades are the proposed treatments. The Telegraph Fire burned off vegetation, making critical cultural resources much more visible and assessable to the public. Looting, vandalism, and OHV-related damage is anticipated, but can be prevented with patrols and brush barricades designed to keep OHV use on designated routes. Funding to hire a seasonal employee six work months to patrol critical “at risk” cultural resources is requested to handle this large workload. The proposed brush barricades are discussed in this plan (above). They would help protect critical cultural resources as well as a variety of other significant environmental resources (Wilderness Study Area suitability, Wild and Scenic River outstandingly remarkable values, etc.) now threatened by OHV use as a result of damages/changes caused by the fire.

B. How does the treatment relate to damage or changes caused by the fire?

The proposed patrols and brush barricades are directly related to the damages/changes caused by the Telegraph Fire. The fire burned off of thousands of acres of vegetation, exposing several critical cultural resources (including archaeological sites with marked graves). Now that the vegetation has been burned off, these critical resources are much more visible and assessable to the public. They are much more susceptible to looting, vandalism, and OHV-related damage. One critical resource, TM-77, is a large prehistoric archaeological site with a grave. The fire burned off of vegetation. This site is now highly visible to the public due to its proximity to a heavily used road. TM-61 is prehistoric archaeological site. Now that the vegetation has been burned off by the fire, this site is vulnerable OHV riders could easily ride through the site, damaging the archaeological deposit. There are also similar OHV threats to prehistoric sites TM-46, TM-03, and TM-04. The proposed patrols and brush barricades directly address these issues.

C. Why is the treatment/activity reasonable, within policy, and cost effective investment?

The treatment is the best, most cost-effective way to deal with the issue of protecting critical cultural resources from looting, vandalism, and OHV-related damage. Trying to obscure these resources by covering them with vegetation would likely draw attention to them and would be much more expensive treatment option. The patrols and brush barricades are more cost effective way to prevent damage. The treatments are within policy. BLM uses patrols and monitoring to protect cultural resources on BLM-administered land throughout the West. Patrols have proven to be very effective at preventing damage to cultural resources, but patrolling can be time consuming. The patrolling workload for the Telegraph Fire burned area is expected to be particularly

large. Funding is needed to hire a seasonal employee dedicated to the task of patrolling at-risk cultural resources exposed by the fire. Six months is needed to give native vegetation a chance to recover. Also, six months should be enough time to make sure that the visiting public knows that BLM will not tolerate looting, vandalism, and OHV use in archaeological sites. It is urgent that the patrols begin immediately, before the cooler weather months, when cultural resource looting, vandalism, and OHV-related damage are anticipated.

S15 Closures (OHV, livestock, area)

A. Treatment/Activity Description

Unauthorized OHV routes that were once unusable would be barricaded to prevent damage to critical cultural resources. Many of the ways and routes proposed to be barricaded lead to pre-historic and historic sites. These areas are now at risk of vandalism, looting, and inadvertent resource damage. See “Issue 2. Soil/Water Stabilization and Native Vegetation Restoration” for a complete description of sites and methods.

B. How does the treatment relate to damage or changes caused by the fire?

Before the fire, many ways and routes were effectively blocked or covered and therefore concealed by brush. Now virtually all ways and routes are completely free from brush and plainly visible. This is also the case with the cultural sites in many areas. There is now a significant risk that vehicles will now have access to these sites as there is no brush or other physical barriers to impede their progress. This could lead to vandalism and looting and inadvertent damage. This is directly related to the fire and consumption of the brush.

C. Why is the treatment/activity reasonable, within policy, and cost effective investment?

This treatment utilizes the minimal treatment necessary to be successful. Over time, the treatment will become part of the natural landscape and the revegetation will be back to its pre-fire condition. No treatments other than to promote natural recovery are taking place. This treatment utilizes local, natural materials leading to a cost effective treatment.

Issue 5. Invasive Plants

S5 Noxious Weeds Treatment

D. Treatment/Activity Description

The weeds with the most ecological impact known to occur in the Telegraph Fire area are yellow starthistle and Italian thistle. Both are annuals, so the prevention of seed set and the gradual depletion of the seed bank are the keys to their control. An integrated pest management approach will be employed. Where large concentrations of the weeds have already established, herbicide will be used, because it is much more efficient way to eliminate dense patches of these weeds. Glyphosate is known to be effective for these species and it was recently used successfully by the US Forest Service to combat a large population of yellow starthistle at El Portal. Transline is another BLM approved herbicide with good track record against these species and because it has a narrower spectrum, with its use even fewer non-target species would be affected. A truck mounted spray rig may be used in areas with road access; backpack sprayers will be used where roads are not available. Where small isolated weed patches occur, and in areas adjacent to water bodies where there are concerns about the effects of some herbicides on some aquatic organisms, (e.g., the effects of some glyphosate formulations on frogs), hand pulling will be used. As long as hand pulling occurs before seed set it can be just as effective as herbicide in controlling these annual species. Of course hand pulling is much more labor intensive in many situations.

E. How does the treatment relate to damage or changes caused by the fire?

Exposed soils have a high vulnerability to weed infestations. The telegraph fire burned over 20,000 acres of BLM lands resulting in bare soils that may be impacted by weeds. This situation was not present prior to the fire when this watershed had excellent ground cover and few weeds.

F. Why is the treatment/activity reasonable, within policy, and cost effective investment?

These treatments have been shown to be highly successful, especially when addressed holistically across ownerships. The Forest Service will be treating their lands increasing the likelihood of success. The treatment is very cost effective, as the area currently impacted is very small. Failure to address this issue now could result in a substantial cost increase in the future.

PART 4. – INDIVIDUAL TREATMENT SPECIFICATIONS

Action/Spec. #	Planned Action	Unit (acres, WMs, number)	# Units	Unit Cost	FY08	FY09	FY10	FY11	Totals
S1	Planning (plan prep, project management)	WMs	1	\$7,500	\$500	\$7,000			\$7,500
	Project Management - Field Office	Total Per Diem/Travel	1		\$500	\$7,500			\$8,000
	Plan Preparation	WMs	5	\$12,600	\$63,000				\$63,000
	Plan Prep-Travel	Total	1		\$20,000				\$20,000
	TOTAL								\$98,500
S5	Noxious Weeds	Acres	20	\$200		\$4,000			\$4,000
S6	Soil Stabilization (other than seeding/planting)	Acres	42	\$880		\$37,000			\$37,000
S7	Protective Fence/Gate	each (gate)	3	\$1,500		\$4,500			\$4,500
S9	Road/Trail Water Diversion	each	27	\$3,000	\$81,000				\$81,000
S10	Cultural Protection (patrol)	Seasonal WM	6	\$3,200		\$19,000			\$19,000
S13	Tree Hazard Removal	WM	0.5	\$4,000		\$2,000			\$2,000
S14	Facilities/Improvements (clear rock fall off campground road)	Event	3	\$1,500		\$4,500			\$4,500
S15	Closures (OHV, cultural, native veg, noxious weeds)	each (barrier)	21	\$2,000		\$42,000			\$42,000
S16	Monitoring (implementation, effectiveness) Weed, OHV, Cultural, Livestock, Culverts, Hazard Trees, Falling Rocks, Straw Mulch	WM (oversight)	1	\$7500		\$7,500	\$7,500	\$7,500	\$118,700
		WMs (monitor)	12 (6 in 2009)	\$3200		\$19,400	\$38,400	\$38,400	
	TOTAL COSTS				\$165,000	\$154,400	\$45,900	\$45,900	\$411,200

PART 5. – COST-RISK ANALYSIS

Probability of Stabilization Treatments Successfully Meeting Objectives

Action/ Spec. #	Planned Action	Unit (acres, WMs, number)	# Units	Total Cost	% Probability of Success
S5	Noxious Weeds	Acres	20	\$4000	80%
S6	Soil Stabilization (other than seeding/planting)	Acres	42	\$37,000	75%
S7	Protective Fence/Gate	each (gate)	3	\$4,500	75%
S9	Road/Trail Water Diversion	each	27	\$81,000	85%
S10	Cultural Protection (patrol)	WM	6	19,000	80%
S13	Tree Hazard Removal	WM	0.5	\$2,000	100%
S15	Closures (OHV, livestock, area)	each (barrier)	21	\$42,000	80%
	TOTAL COSTS				

COST-RISK SUMMARY

The costs of the project and probability of success of the proposed treatments are compared with the risks to resource values if: 1) no action is taken, and 2) the proposed action is successfully implemented. Alternatives may be included in this analysis to assist in the selection of the treatments that will cost effectively achieve the objectives. Answer the following questions to determine which proposed treatments should be selected and implemented.

1. Are the risks to natural resources and private property **acceptable** as a result of the fire if the following actions are taken?

Proposed Action Yes No Rationale for answer: The risks are acceptable and the proposed action addresses the issues identified. The proposed action would maintain access and escape routes in this high use river corridor and protect three residences, developed recreation sites, critical cultural resources, and native vegetation in high priority areas, such as the WSA, ACEC and WSR.

No Action Yes No Rationale for answer: It is expected that the river corridor will be at high risk due to increased water flow and rock fall. Uncontrolled access to the WSA could lead to impaired native vegetation, impairing its suitability for wilderness designation. Uncontrolled access could also damage critical cultural resources.

2. Is the probability of success of the proposed action, alternatives or no action acceptable given their costs?

Proposed Action Yes No Rationale for answer: This project addresses three of the highest priority program areas: human health and safety, critical cultural resources and native vegetation using cost effective methods.

No Action Yes No Rationale for answer: Resources in these critical emphasis areas will remain at risk.

3. Which approach will most cost-effectively and successfully attain the objectives and therefore is recommended for implementation from a Cost/Risk Analysis standpoint?

Proposed Action , Alternative(s) , or No Action

RISK OF RESOURCE VALUE LOSS OR DAMAGE

Identify the risk (high, medium, low, none or not applicable (NA) of unacceptable impacts or loss of resources.

No Action-Treatments Not Implemented (check one)

Resource Value	N/A	None	Low	Medium	High
Unacceptable Loss of Topsoil					X
Weed Invasion					X
Unacceptable Loss of Vegetation Diversity			X		
Unacceptable Loss of Vegetation Structure			X		
Unacceptable Disruption of Ecological Processes				X	
Off-site Sediment Damage to Private Property					X
Off-site Threats to Human Life				X	
Other-loss of Access Road Due to Plugged Culverts					X

Proposed Action-Treatments Successfully Implemented (check one)

Resource Value	N/A	None	Low	Medium	High
Unacceptable Loss of Topsoil				X	
Weed Invasion			X		
Unacceptable Loss of Vegetation Diversity			X		
Unacceptable Loss of Vegetation Structure			X		
Unacceptable Disruption of Ecological Processes				X	
Off-site Sediment Damage to Private Property				X	
Off-site Threats to Human Life			X		
Other-loss of Access Road Due to Plugged Culverts			X		

PART 6. – MONITORING PLAN

Road Drainage – Determine if culverts are of adequate size to pass the flows and rock fall expected following the fire.

Objective: Keep all newly installed culverts functional during and following precipitation events.

Method: Inspect all treatment culverts during and following all events greater than ½ inch. Monitoring will continue for three years post fire or until vegetation is re-established to anchor rocks on the slopes.

Mulching – Monitor the effectiveness of straw mulch treatments at 1 ton / acre.

Objectives:

Maintain 75% of mulch material six months following application (the first rainy season).

Maintain 50% of mulch material one year following application

Method:

Inspect mulched areas comparing percent cover (using a dot grid) just after application to 6 months and one year following application. Include slopes of 45% and 55%.

Closures: - Monitor whether barriers are still intact and effective at protecting re-vegetating areas.

Objectives:

- (1) Are barriers intact and functioning until native vegetation provides a barrier to off-road travel (Implementation).
- (2) Are barriers effective at keeping motorized use off of critical revegetating areas, especially in high priority areas within WSA, ACEC, WSR and critical cultural resource sites (Effectiveness).
- (3) Are closures effective at preventing noxious weed spread into revegetating areas, especially in high priority areas (Effectiveness).

Methods:

Visually inspect barriers to ensure functionality. Visually inspect high priority critical areas to determine if motorized use and/or new noxious weed infestations are occurring.

Timing: Continuous year-round monitoring until native revegetation serves as a long-term closure. Noxious weed surveys would be most critical during spring and summer.

Patrols / Cultural: - Monitor whether patrols and closures are providing adequate protection for cultural resources.

Objective:

Ensure that treatments are effective at preventing post-fire damage to all critical cultural resources at risk.

Methods:

Visually inspect cultural sites for disturbance/looting. Determine if physical closures are effective at preventing disturbance. Treatments are considered effective if less than 10% of any site is damaged 3 years post-fire. Monitoring will occur continuously until native revegetation serves as a long-term barrier.

Weed Treatment: Determine the effectiveness of weed treatments and detect new populations in fire disturbed areas.

Objective:

Have a 90% reduction in total weed cover after the third year of treatment, as measured the following spring.

Method:

Ocular estimation of weed cover before and after treatment for specific known populations. Check limited areas two weeks following application of herbicide treatments to determine herbicide effectiveness and possible need for re-treatment. Check all treated areas the growing season following each year of treatment to determine long-term effectiveness of herbicide treatment, and need/mode of further treatment. Additional monitoring in and around priority disturbed areas to discover new populations for treatment.

Hazard Trees: Ensure all hazard trees are removed from areas with high safety concerns.

Objectives:

Remove all hazard trees from critical areas with safety concerns.

Methods:

Visually inspect developed recreation sites, trails, and roads. Monitoring would occur quarterly for the first year post fire.

Rock Fall: Ensure the main roads are clear of rock and debris to protect human safety.

Objective:

Identify new rock fall that needs to be removed. Ensure that all potentially hazardous rock has been removed within a week of fall.

Method:

Visually inspect the River road and Burma grade on a daily basis. Monitoring would occur

until the slopes stabilize.

Livestock Closure: Ensure livestock are not impeding re-vegetation in priority areas.

Objective:

Ensure that livestock are not on BLM lands, especially in high priority revegetating areas, including recovering riparian zones.

Method:

Visually inspect the fire area for trespass cattle; especially high priority areas such as WSA, ACEC, WSR and critical cultural resources. Monitoring would continue for three years post fire or until grazing is authorized.

PART 7. - MAPS *See attached map packet*

1. Fire Perimeter, Land Status, Values at Risk and Special Management Areas
2. Watersheds and Burn Severity
3. Road Drainage Improvement and Associated Soil Stabilization Treatment Units
4. Physical Barrier Closures
5. Weed Monitoring/Treatment Areas
6. Vegetation
7. Sensitive Wildlife Features
8. Range Allotments

REVIEW, APPROVALS, and PREPARERS

EMERGENCY STABILIZATION PLAN TEAM MEMBERS

Position	Team Member (Agency/Office)	Initial and Date
Team Leader / Hydrologist	Mike Philbin	
Operations / Engineering	Jeff Babcock	
NEPA Compliance & Planning	James Barnes	
Botanist	Al Franklin	
Soil Scientist	Josh Sorlie	
Cultural Resources/Archeologist	James Barnes	
Rangeland Mgt. Specialist	Peggy Cranston	
Wildlife Biologist	Peggy Cranston	
GIS Specialist	Sarah Tomich	
Fire Management Specialist	Brian Mulhollen	
Recreation Specialist	David Greenwood	
Resource Advisor(s) on Fire	Chris Ryan	

EMERGENCY STABILIZATION PLAN APPROVAL

“The Agency Administrator is responsible for developing, implementing, and evaluating emergency stabilization and rehabilitation plans, treatments, and activities.” 620 DM 3.5C

FIELD OFFICE MANAGER

DATE

FUNDING APPROVAL

Funding of all ES Plans will be approved through the National office in coordination with state ES&R coordinators to help determine highest priority projects. Funding is approved and allocated on a year-by-year basis.