

**NORMAL FIRE REHABILITATION PLAN SUPPLEMENT  
FINDING OF NO SIGNIFICANT IMPACT  
AND  
DECISION RECORD  
MAGGIE CREEK FIRE (X-170)  
BLM/EK/PL2001/049**

**Finding of No Significant Impact:**

Based on the analysis of potential environmental impacts contained in Normal Fire Rehabilitation Plan Supplement Environmental Assessment BLM/EK/PL2000/049, I have determined that the proposed action will not have significant impacts on the human environment and that an Environmental Impact Statement is not required.

**Decision:**

It is my decision to implement the Normal Fire Rehabilitation Plan (NFRP) Supplement as described in the Environmental Assessment for them Maggie Creek Fire BLM/PL2000/049. A total of 6,327 acres of public rangeland managed by the Bureau of Land Management Elko Field Office and 5,106 acres of private land were burned during this fire. Approximately 371 acres of the burned public land will be rehabilitated by planting of a watershed multiple species seed mixture. A total of 1600 acres of burned public land will be seeded with forage kochia and sagebrush and over 161 acres will be seeded with forage kochia alone. Over 9 miles of dozer line will be rehabilitated and seeded. Over 4 miles of existing fence will be repaired in order to establish grazing closures to rest rehabilitated areas. Approximately 13 miles of dozer and fence lines will be inventoried for cultural resources and over 2800 straw bales will be used to construct check dams to control erosion. Two flood hazard warning signs will be installed at the bottom of large drainage networks where the threat to public safety and property are greatest following potential future rainstorms. Approximately 610 acres of Scotch thistle and Russian knapweed located in the burned area will be treated and monitoring for future noxious weed invasion will be conducted. Further treatments will be applied if more weeds are detected. Post-fire grazing management, including the period of time needed for closure, will be determined based on monitoring and achievement of site specific resource objectives.

**Rationale:**

Implementation of the proposed action described in the NFRP Supplement EA for the Maggie Creek Fire will protect soils in the burned area, including preventing potential loss of soil due to wind and water erosion; will reduce potential invasion and establishment of noxious weeds; will provide quality forage for livestock and wildlife; and will facilitate meeting established standards and guidelines for livestock grazing.

The Elko Resource Management Plan is silent for the proposed action. The proposed action is consistent with the objectives of the RMP and is consistent with federal, state, and local laws, regulations, and plans to the maximum extent possible

**Monitoring:**

Post-treatment monitoring studies will be conducted to evaluate the effectiveness of the proposed treatments and to determine the time frame for reopening lands for grazing.

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Helen Hankins  
Elko Field Office

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Date

**NORMAL FIRE REHABILITATION PLAN SUPPLEMENT  
ENVIRONMENTAL ASSESSMENT  
MAGGIE CREEK FIRE (X-170)  
BLM/EK/PL-2001/049**

**Introduction:**

This Supplement Environmental Assessment (EA) tiers to the Elko Field Office FY 2000 Normal Fire Rehabilitation Plan Environmental Assessment (NRFPEA) BLM/EK/PL2000/037. The Proposed Action includes NFRPEA Treatment # 1 (Construction and repair of fence to facilitate grazing closure), 2 ( Planting of multiple species seed mixtures), 4 ( Construction of erosion and sediment control structures), 5 (Dozer line rehabilitation), 8 (Invasive, nonnative weed species control), and 10 (Cultural resource site stabilization and rehabilitation). The format of this Supplement EA follows the outline in the Emergency Fire Rehabilitation Handbook, BLM Manual Handbook H-1742-1 dated July 27, 1999.

**List of Preparers:**

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**Project Area Description:**

A. Fire Description:

The fire was started by a lightning strike and was reported on July 4, 2001 and was declared out on July 8, 2001. It burned 6,327 acres of public land and 5,106 acres of private land. Three grazing allotments were affected: South Hadley, North Carlin Field, and McKinley FFR. No structures were burned in this fire. The majority of the dozer lines were constructed on the north east corner of the fire at the base of Swales Mountain. Burn severity was moderate to high in the channel bottoms where fire removed most of the vegetation. Burn severity on the majority of the fire was low and “green up” of perennial grass species was visible after subsequent rains.

B. Vegetation and Soil Description:

The burned area ranges in elevation from about 5200 ft in the southern and eastern portions of the fire to 6200 ft in the north to northwestern portions. No perennial streams were directly affected by the fire.

However, there are two watershed areas of concern in the Maggie Creek burn. The first is where several ephemeral drainages flow into Susie Creek near Huntsman Ranch, approximately a half mile southeast of the burn. This watershed is large, approximately 7,000 acres, and the soils are very erosive and located on steep slopes. The other area of concern is the large ephemeral drainage that is a tributary to Dry Gulch which flows through Secs. 1, 2, 11, 12, and 14. Extensive sedimentation and incision have occurred in this drainage network.

The two areas of concern have high runoff potential. Slopes are steep and infiltration rates are slow to very slow. Runoff is rapid throughout most of the area, and the watershed sizes are large. A storm that occurred on July 5, 2001, the day after the fire, produced about 0.3 inches of rain in less than one hour. This storm caused large amounts of soil and debris movement from the burned area and partially washed out a culvert near Huntsman Ranch. A recent field examination of the area revealed extensive sheet, rill, and gully erosion, both from the recent storm event and from past events.

The Huntsman Ranch Road which runs north from the Carlin Honor Camp is at risk of being washed out in several places, particularly near Huntsman Ranch. The culvert has already partially washed out there from the rain on July 5<sup>th</sup>.

Susie Creek is within one mile of the burn and is vulnerable to extensive sedimentation coming from the unnamed drainages by Huntsman Ranch. Water quality would likely degrade in Susie Creek if another large precipitation event occurs before the watershed can be stabilized. Huntsman Ranch is also at risk of flooding and sediment damage. The watershed size above the ranch is over 7,000 acres, of which approximately 30% burned.

Soils within the burned area occur on mountains and fan piedmont remnants on 2 to 50% slopes. Soils range from shallow to deep, and commonly have a cemented hardpan or bedrock within 40 inches of the surface. They formed in loess or alluvium that is high in volcanic ash, or over tuff bedrock. Surface textures are commonly fine sandy loams to loams, and subsurface textures are typically clays. Coarse fragments occur in some of the soils. Most of the soils are within Hydrologic Soil Groups C or D. Group C soils have slow infiltration rates and Group D soils have very slow infiltration rates. Hydrologic Soil Groups are a grouping of soils based on their runoff potential which do not include slope and plant cover. Group D soils have the highest runoff potential and Group A soils (none present here) have the lowest runoff potential. Water erosion hazard is moderate to high, and wind erosion hazard is slight to moderate. Field inspection of the burn revealed that the soils were very susceptible to water erosion (rilling, gullying and sheet erosion).

The majority of the area affected by the Maggie Creek Fire has experienced fire within the past 20 years. The northeast corner of the burn has stands of mountain big sagebrush, serviceberry,

bitterbrush, and a good understory of perennial grasses such as blue bunch wheatgrass, Idaho fescue, and Thurber's needlegrass. The south corner of the burn has a moderate infestation of cheatgrass but a fair amount of perennial grasses present.

**Proposed Project Treatments:**

A. Revegetation:

1. Watershed aerial seeding:

Approximately 371 acres would be seeded with Thickspike and Intermediate wheatgrass and Triticale. Seed would be aerially applied between late October through December. If possible, seed would be broadcast on snow to aid in germination and reduce seed consumption by rodents and birds.

2. Rangeland aerial seeding:

Approximately 9 miles of dozer line would be seeded with intermediate wheatgrass and Nordan crested wheatgrass. Seed would be applied with a broadcast seeder on back of a four wheeler directly after the dozer lines are rehabilitated. If possible a harrow drag would be used to help cover the seed.

3. Monitoring to detect noxious weed invasion of burned areas:

Approximately 610 acres of noxious weeds detected in the burned area, including Scotch thistle and Russian knapweed, would be chemically treated. If noxious weeds are detected after fire rehabilitation efforts, appropriate Integrated Pest Management (IPM) control measures would be implemented to control the invasion. In particular, any disturbed roads, dozer lines, and adjacent areas would be targeted for this noxious weed monitoring and subsequent treatment if weeds are detected.

4. Wildlife aerial seeding:

Approximately 1600 acres would be aerially seeded in swaths (every other swath) within 3217 acres in the southern perimeter of the burn with Wyoming big sagebrush, Basin big sagebrush, Western yarrow, and forage kochia. Seed would be distributed on snow, where possible, to aid in germination and to reduce seed consumption by rodents and birds. The purpose of the seeding is to provide forage for wildlife, particularly crucial winter forage for pronghorn antelope and mule deer. The seeding would also reduce the potential for invasion of noxious weeds and cheatgrass.

Approximately 161 acres of public land in the southeast corner of the burn would also be aerially seeded with forage kochia to provide winter forage for pronghorn antelope and mule deer. Seed would also be aerially distributed on snow, where possible. The seeding would also reduce the

potential for invasion of noxious weeds, particularly Scotch thistle.

**B. Structures:**

1. Fencing:

Approximately 4 miles of fence would be repaired to allow for a grazing closure of the burned area within the South Hadley Allotment and North Carlin Field for a period to be determined by post-rehabilitation monitoring. The fences are needed to protect the proposed watershed seeding treatment and burned area to allow for vegetation to become reestablished.

**C. Erosion Control Treatments**

1. Dozer line rehabilitation:

The dozer lines were not rehabilitated directly after the fire and berms were not pulled and spread back over the line. Approximately 9 miles of bulldozer-damaged areas would need be rehabilitated and broadcast seeded with 5 lb/ac of Intermediate and Siberian wheatgrass to reduce erosion and encourage revegetation.

2. Straw bales:

Approximately 2800 bales of straw would be used to construct over 300 checkdams on small, ephemeral drainages located in T.34 N., R. 53 E., Secs. 6, 7, and 18, to slow surface runoff and reduce the potential for sedimentation into Susie Creek.

3. Flood Hazard Warning Signs:

Two flood hazard warning signs would be installed along roads at the bottom of large drainage networks where the threat to public safety and property are greatest following future large rainstorms. One would be installed approximately ½ mile north of Huntsman Ranch and the other would be placed along the Dry Gulch road.

**D. Site Preparation: None**

**E Other:**

1. Cultural resource inventories:

Cultural resource inventories would be conducted along the approximately 13 miles of dozer and proposed fence lines. These inventories would identify any cultural resources that might need to be protected during rehabilitation treatments.

## **Consideration of Critical Elements and Resources:**

The following critical elements of the human environment are not present or are not affected by the proposed action or alternative:

- ACECs
- Environmental Justice
- Farmlands, prime or unique
- Wastes, hazardous/solid
- Wild and Scenic Rivers
- Wilderness

Critical elements and resources brought forward for analysis:

### A. Air Quality:

The burned area is highly susceptible to wind erosion until revegetation occurs. Wind erosion can increase Particulate Matter #10 (PM#10) emissions causing exceedence of PM #10 air quality standards which can negatively affect human health. In addition, airborne dust can cause visibility and safety problems on roads in the area. The proposed vegetation, fencing, and erosion control treatments would encourage regrowth of vegetation, thus reducing future potential air quality impacts.

### B. Cultural Resources:

The Maggie Creek Fire occurred within an area known to archaeologists as the Central Great Basin which has been inhabited by humans for approximately 12,000 years. Archaeological sites and cultural properties in this area must be afforded protection whenever possible. Section 106 of the Natural Historic Preservation Act mandates that the federal government will account for cultural resources in its projects and undertakings, including fire rehabilitation efforts. Ground disturbing activities such as dozer line rehabilitation and fence construction could damage cultural sites. Therefore, areas designated for mechanized seeding and other ground disturbance would be inventoried for cultural resources before the disturbance occurs in accordance with the State Protocol Agreement Between BLM, Nevada and the Nevada State Office of Historic Preservation (SHPO). At a minimum, to reduce potential impacts to cultural resources, activities that involve mechanized surface disturbance of less than 10 cm depth would generally have transect spacing of 100 meters. More intense inventory would be used for highly sensitive areas. If surface disturbance is greater than 10 cm, then 30 meter transect intervals would be used.

All cultural resources discovered or relocated would be plotted on maps and at a minimum will be recorded on the Nevada IMACS short form. Resources except those previously determined not eligible, by BLM and SHPO, or that have been fully mitigated, would be flagged for avoidance and avoided during rehabilitation activities. Flagging would be placed to minimize the

potential for looting and vandalism and removed as soon as possible.

C. Floodplains:

There are two major drainages in the Maggie Creek Fire area. Burn severity was moderate to high in the unnamed drainages proposed for watershed seedings, particularly in the channel bottoms where vegetation was thickest. Future precipitation events could result in abnormally high flooding due to the lack of vegetation along these intermittent drainages and in the surrounding watersheds. In order to reduce the impacts of potential flooding events, the burned watersheds should be rested from livestock grazing for a minimum of two growing seasons. Burned riparian areas should recover naturally in the absence of livestock grazing pressure. The use of straw bale check dams would aid in reducing erosion impacts from future large rainstorms until revegetation occurs. In addition, seeding of upland areas would enhance revegetation of these watersheds, and aid in reducing the impacts from future flood events as well.

D. Invasive, Nonnative Species:

Scotch thistle and Russian knapweed are found on public and private land throughout the burn area. Fire suppression efforts, including dozer line construction and use of engines and other mechanized vehicles, is likely to have introduced Scotch thistle and knapweed seeds into the burned area. In order to reduce the potential impacts of an invasion of noxious weeds, monitoring should be conducted after rehabilitation treatments are completed. Since noxious weeds were discovered to have invaded the burn area, herbicide treatments would need to be implemented to reduce the spread of the noxious weeds. The proposed monitoring, seedings, and noxious weed treatments would help contain the current infestation of noxious weeds and help stop further spread of noxious weeds into the Maggie Creek Burn.

E. Native American Religious Concerns:

Native Americans would be consulted as appropriate prior to any ground disturbing activities such as harrowing or dozer line repair, and prior to use of herbicides. If traditional cultural properties or other areas having traditional or religious significance to Native Americans are discovered as a result of consultation, then BLM would insure that measures are taken to avoid or reduce impacts to these areas of concern to Native Americans.

F. Threatened, Endangered, Candidate, or Sensitive Species:

No threatened or endangered plant species are known to occur in the burn area. The sage grouse (*Centrocercus urophasianus*) has been designated by the BLM Nevada State Director as a sensitive species and therefore afforded the same protection as a candidate species. Although the suspected causes of sage grouse decline are numerous, loss of habitat, including loss by fire, ranks at the top of the list. Rehabilitation of sage grouse habitat, and the prevention of invasion by fire prone annual weeds such as cheatgrass, is a wildlife priority of both BLM and the Nevada

Department of Wildlife. The proposed seeding treatments and rest from grazing pressure are designed to restore sagebrush habitat and/or reduce the impacts from the invasion or reinvasion of fire prone annual weeds.

G. Visual Resources:

The burned area is within Visual Resource Management Class IV and changes in this class should be subordinate to the existing landscape. Both the fire itself and fire suppression activities such as creation of dozer lines, have resulted in visual impacts to the area. Revegetation efforts are designed to blend into the background without attracting undue attention and aid in restoring the area to a more characteristic landscape. Recontouring and seeding of dozer lines would reduce adverse visual impacts as well. Construction of new fence would create a new linear feature into the landscape but would meet Class IV requirements.

H. Water Quality, surface/ground:

The burned watersheds will be subject to increased flooding and erosion due to the lack of vegetative cover. Increased erosion is likely to result in decreased water quality in receiving waters such as Susie Creek and Maggie Creek. Increased sediment into these streams could negatively impact aquatic species. The proposed seeding treatment, rest from grazing, and installation of straw bale check dams would reduce future sheet, rill, and gully erosion, as well as reduce peak flows coming into Susie Creek and Maggie Creek.

I. Wetlands/Riparian Zones:

There are no perennial streams within the Maggie Creek burn perimeter but the burned watersheds contribute runoff to several perennial streams: Susie Creek, on the south eastern border of the fire and Maggie Creek to the south and west of the burn area. Both of these streams have extensive wetland/riparian vegetation. The proposed seedings and grazing closure should stabilize burned slopes and reduce future potential erosion or sedimentation impacts to Susie and Maggie Creeks by accelerating revegetation.

J. Wildlife:

The Maggie Creek Fire occurred in crucial pronghorn antelope winter range and transitional range for mule deer and pronghorn antelope. Wildlife was adversely impacted by the Maggie Creek Fire primarily through temporary loss of habitat through removal of vegetation by the fire. The proposed rehabilitation treatments include resting the area from livestock grazing and seeding the watersheds. These treatments would benefit wildlife by allowing faster regrowth of vegetation.

K. Grazing:

The proposed closures to grazing within the burned area would protect seeding efforts and aid in natural revegetation of burned public rangeland, while reducing the potential for future noxious weed. Grazing closures would also improve future forage conditions for both livestock and wildlife. However, grazing closure and relocation of livestock would have some short term adverse impacts on ranchers in the area who normally use the allotments for grazing. The actual AUM losses suffered by ranchers have not been determined at this point. Through field inventories and monitoring, GIS analyses, and consultation, cooperation, and coordination with individual permittees, specific rest periods and other grazing management options will be identified to reduce impacts to ranchers where possible.

#### L. Migratory Birds:

The proposed restorative actions are located in a sagebrush habitat type. The Nevada Partners in Flight Bird Conservation Plan identifies the following bird species associated with this physiographic region: sage grouse (obligate), black rosy finch, ferruginous hawk, gray flycatcher, loggerhead shrike, vesper sparrow, prairie falcon, sage sparrow, sage thrasher, Swainson's hawk, burrowing owl, calliope hummingbird, Brewer's sparrow, Western meadowlark, black-throated sparrow, lark sparrow, green-tailed towhee, Brewer's blackbird, horned lark, and lark sparrow.

The greatest threat to these sagebrush-dependant migratory bird species is type conversion of sagebrush communities. Maintaining complete, diverse sagebrush communities is integral to conservation efforts for these species. Low elevation sagebrush sites, such as the project area, are vulnerable to conversion to cheatgrass types following wildfire. The proposed action to reseed with aggressive perennial grasses to prevent cheatgrass from dominating the site, coupled with secondary efforts to re-establish sagebrush on the stabilized site (as necessary) should provide beneficial impacts to these species and is consistent with the conservation measures listed in Section 3(e) of the President's Migratory Bird Executive Order.

**Project Cost Summary:** (the cost summary information can be found in the Burned Area Emergency Rehabilitation (BAER) Plan and Accomplishment Report for the Elko 14 Fire Complex)

**Project Maps:** (project maps can be found in the Burned Area Emergency Rehabilitation (BAER) Plan and Accomplishment Report for the Elko 14 Fire Complex)

**Cost/Risk Assessment:** (the cost/risk assessment can be found in the Burned Area Emergency Rehabilitation (BAER) Plan and Accomplishment Report for the Elko 14 Fire Complex)

**Native/Nonnative Worksheet:** (the native/nonnative worksheet can be found in the Burned Area Emergency Rehabilitation (BAER) Plan and Accomplishment Report for the Elko 14 Fire Complex)

