

**NORMAL FIRE REHABILITATION PLAN SUPPLEMENT
FINDING OF NO SIGNIFICANT IMPACT
AND
DECISION RECORD
KELLY CREEK FIRE, X540
BLM/EK/PL2000/038**

Finding of No Significant Impact:

Based on the analysis of potential environmental impacts contained in Normal Fire Rehabilitation Plan Supplement Environmental Assessment BLM/EK/PL2000/038, 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 the Kelly Creek Fire BLM/PL2000/038. Over 26,000 acres of public rangeland managed by the Bureau of Land Management Elko and Winnemucca Field Offices and 11,000 acres of private land were burned during this fire. Approximately 11,000 of the burned public land acres will be rehabilitated by planting of multiple species seed mixtures. Over 9 miles of roads will be repaired and 42 miles of dozer line will be rehabilitated. Over 23 miles of new fence will be constructed and 11 miles of existing fence will be repaired in order to establish grazing closures to rest rehabilitated areas. Monitoring for noxious weed invasion in the burned and disturbed areas will be conducted and treatments will be applied if weeds are detected. In addition, a wild horse gather of approximately 353 horses will be necessary to allow for redistribution of cattle excluded from burned areas. 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. The Elko Field Office Manager has been delegated NFRP decision-making authority for the area burned within the BLM Winnemucca District.

Rationale:

Implementation of the proposed action described in the NFRP Supplement EA for the Kelly 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 and cheatgrass; 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.

Helen Hankins
Elko Field Office

Date

**NORMAL FIRE REHABILITATION PLAN SUPPLEMENT
ENVIRONMENTAL ASSESSMENT
KELLY CREEK FIRE (X540)
BLM/EK/PL-2000-038**

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 NRFPEA Treatment # 1 (Construction and repair of fence to facilitate grazing closure), 2 (Planting of multiple species seed mixtures), 5 (Dozerline Rehabilitation), 6 (Road repair), 7 (Wild horse removal), and 8 (Invasive, nonnative weed species control). The format of this Supplement EA follows the outline in the Emergency Fire Rehabilitation Handbook, BLM Manual Handbook H-1742-1 dated 7/27/99.

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 June 30, 2000 and was declared out on July 21, 2000. It burned 26,094 acres of public land and 11,622 acres of private land. Four grazing allotments were affected: Tall Corral, Little Humboldt, Jakes Creek, and Bullhead. All of these allotments contain both private and public land and the percentage of the allotment burned varied from 2 % (Bullhead) to 70% (Tall Corral). One structure was burned in the Kelly Creek drainage. The majority of the dozer lines were constructed on lower elevation sites

between the Kelly Creek and Jake Creek Ranch roads. Burn severity was moderate to high in South Fork Jakes Creek and the upper reaches of Kelly Creek, particularly in channel bottoms where fire removed most of the vegetation. Along the main fork of Jakes Creek, the burn severity was low to moderate. Aspen and willow have begun to sprout and a minimal amount of riparian vegetation was left alongside streambanks. Burn severity was low along Tall Corral Creek.

B. Vegetation and Soil Description:

The burned area ranges in elevation from 4640 ft in the southwestern portion of the fire to 7640 ft in the northeast. Extensive riparian zones occur along Kelly Creek, and the North and South Forks of Jakes Creek. Soils in the perennial drainages are shallow to moderately deep and well-drained. Debris flows and recent alluvial deposits in channels and foothills include a variety of particle sizes ranging from boulders and cobbles to very fine clays. Vegetation in these drainages is dominated by willow, aspen, chokecherry, and dogwood. Upland soils are composed of volcanic materials varying from basaltic to intermixed ash and tuffaceous materials which are reasonably erosion resistant. Vegetation at these sites is predominately a sagebrush/bunchgrass complex with a significant understory of cheatgrass. At higher elevations the same sagebrush/bunchgrass is found, but with little or no cheatgrass.

Proposed Project Treatments:

A. Revegetation:

1. Wildlife aerial seedings:

Approximately 1500 acres will be seeded in swaths for bighorn sheep in the Jakes Creek area with Snake River wheatgrass, Western yarrow, and rice hulls (used as a seed dispersal mechanism). Approximately 4344 acres will be seeded in the Knolls/Jakes Creek Area for sage grouse with Wyoming big sagebrush, Western yarrow, Immigrant forage kochia, and rice hulls. (See attached specification sheets for seed and seeding rates per acre for this and the following seeding treatments). 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 drill seeding:

Approximately 5429 acres of the Jakes Creek Road area will be drilled using established drilling techniques with Vavilov Siberian wheatgrass, Boizoasky Russian wildrye, Nordan crested wheatgrass, and Hycrest crested wheatgrass. In addition, the same 5429 acres will be aerial seeded with a broadcast aerial seed mixture of Immigrant forage kochia, Western yarrow, and rice hulls. Application timing would be the same as for the wildlife aerial seedings described above.

The purpose of both seedings is to provide forage for livestock and wildlife and reduce the potential for the invasion of invasive, nonnative weed species.

3. Wild horse removal:

Approximately 353 wild horses will need to be removed from the Little Humboldt Herd Management Area if livestock use of seeded areas is closed to rest rehabilitated burned areas.

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

If noxious weeds are detected during and after fire rehabilitation efforts, appropriate Integrated Pest Management (IPM) control measures will be implemented to control the invasion. In particular, any disturbed roads, dozer lines, and adjacent areas will be targeted for this noxious weed monitoring and subsequent treatment if weeds are detected.

B. Structures:

1. Fencing:

Approximately 23 miles of new fence will be constructed and 11 miles of existing allotment boundary fence will be repaired to allow closure of seeded areas to grazing for a period to be determined by post-rehabilitation monitoring. The fences are needed to protect the proposed seeding treatments and to allow for vegetation to become reestablished.

C. Erosion Control Treatments

1. Road repair:

Approximately 9.5 miles of suppression-damaged roads will be regraded and graveled to reduce erosion and reduce widening by travelers trying to get around impassable areas.

2. Dozer line rehabilitation:

Approximately 42 miles of bulldozer-damaged areas will be rehabilitated by pushing back berms and regrading the disturbed areas. These rehabilitated areas will then be drill and aerial seeded with the drill and broadcast aerial seeding mixes described above to reduce erosion and encourage revegetation.

D. Site Preparation:

1. Rangeland seeding plowing:

Approximately 5429 acres of the Jakes Creek Road area would be plowed to a depth of 6-8 inches to reduce cheatgrass in preparation for drill seeding described above.

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, erosion control, and site prep treatments will encourage regrowth of vegetation, thus reducing future potential air quality impacts.

B. Cultural Resources:

The Kelly 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 discing, drilling, dozer line rehabilitation, fence construction, and road repair could damage cultural sites. Therefore, areas designated for mechanized seeding and other ground disturbance will 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 will generally have transect spacing of 100 meters. More intense inventory will be used for highly sensitive areas. If surface disturbance is greater than 10 cm, then 30 meter transect intervals will be used.

All cultural resources discovered or relocated will 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, will be flagged for avoidance and avoided during rehabilitation activities. Flagging will be placed to minimize the potential for looting and vandalism and removed as soon as possible.

C. Floodplains:

There are four major drainages in the Kelly Creek Fire. Burn severity was moderate to high in South Fork Jakes Creek and the upper reaches of Kelly Creek, particularly in the channel bottoms where vegetation was thickest. Much of the riparian vegetation was removed by the fire. Future precipitation events could result in abnormally high flooding due to the lack of vegetation along these streams and in the surrounding watersheds. In order to reduce the impacts of potential flooding events, the burned watersheds, including the streams, seeps and springs feeding into Kelly and South Fork Jakes Creeks, should be rested from livestock grazing for a minimum of two years. Burned riparian areas should recover naturally in the absence of livestock grazing pressure. Grazing should not be reauthorized near burned streams until aspen suckers are at least 5-7 ft tall. In order to facilitate this riparian and watershed rehabilitation, the proposed fence repair and construction would serve to eliminate cattle grazing in these watersheds during the required rest period. In addition, seeding of upland acreage will enhance revegetation of these watersheds, and aid in reducing future flood events as well.

D. Invasive, Nonnative Species:

Hoary cress, a noxious weed, is found on public and private land to the west of the Kelly Creek Burn. Fire suppression efforts, including dozer line construction and use of engines and other mechanized vehicles, is likely to have introduced hoary cress or other noxious weed species seeds into the burned area. In order to reduce the potential impacts of an invasion of noxious weeds, monitoring must be conducted after rehabilitation treatments are completed. If noxious weeds are 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 and noxious weed treatment would help to prevent or reduce any such noxious weed invasion of the Kelly Creek burn area.

E. Native American Religious Concerns:

Native Americans will be consulted as appropriate prior to any ground disturbing activities such as discing and drilling. If traditional cultural properties or other areas having traditional or religious significance to Native Americans are discovered as a result of this consultation, then BLM will 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 re-invasion of fire prone annual weeds.

The Northern goshawk (Accipiter gentillis) is another species of concern. Goshawk nesting habitat, typically aspen groves near streams, was impacted by the Kelly Creek Fire. Protection and monitoring of this habitat, as proposed through fencing and rest from grazing, would reduce future adverse impacts to goshawk habitat and aid in its recovery.

G. Visual Resources:

The burned area is within Visual Resource Management Class 4 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.

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 Kelly Creek and Jakes Creek. Increased sediment into these streams could negatively impact aquatic species such as fish. The proposed seeding treatments and rest from grazing will reduce future erosion impacts to burned watersheds by aiding in restoring vegetation.

I. Wetlands/Riparian Zones:

Wetlands associated with riparian areas in the burned watersheds were impacted by the Kelly Creek Fire through loss of vegetation. Willows, aspen and perennial shrubs along streams should resprout naturally if grazing is prevented during the sensitive early growth stages. The proposed fencing and rest from grazing will enable these riparian species to regrow faster and return the riparian wetlands to a proper functioning condition.

J. Wild Horses:

Over 15,000 acres of the Little Humboldt Herd Management Area (HMA) were burned in the Kelly Creek Fire, representing 24% of the HMA. The wild horse population is currently 453 animals, while the appropriate management level designated in the draft Little Humboldt Allotment Evaluation is 100 head. Under the proposed action, wild horses, as well as livestock, would be excluded from the burned areas through fencing. If livestock use is re-allocated to lower elevations outside the burn, the unburned areas would be seriously overstocked. A wild horse gather would be necessary if this cattle redistribution takes place. The proposed action includes such a wild horse gather. This gather would reduce the wild horse population to a more manageable level, and allow for the redistribution of cattle off of the burned areas. This would eliminate grazing impacts to the burned/rehabilitated areas during the rest period and allow for faster vegetative recovery.

K. Wildlife:

Wildlife was adversely impacted by the Kelly 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 several areas with seed mixtures conducive to wildlife use. In particular, two proposed seedings are specifically designed to benefit sage grouse and bighorn sheep. In addition, aerial and drill seeding of lower elevation areas will help establish shrub species that would out compete exotic invading plant species, as well as provide critical forage and cover.

L. 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 and cheatgrass infestations. Grazing closures will also improve future forage conditions for both livestock and wildlife. However, grazing closure and relocation of livestock will have some short term adverse impacts on ranchers in the area who normally use the allotment 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.

Project Cost Summary: (the cost summary information can be found in the Burned Area Emergency Rehabilitation (BAER) Plan and Accomplishment Report for the Elko 13 Fire Complex)

Project Maps: (project maps can be found in the Burned Area Emergency Rehabilitation (BAER) Plan and Accomplishment Report for the Elko 13 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 13 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 13 Fire Complex)