

**NORMAL FIRE REHABILITATION PLAN SUPPLEMENT  
FINDING OF NO SIGNIFICANT IMPACT  
AND  
DECISION RECORD  
BEOWAWE FIRE, X021  
BLM/EK/PL2000/040**

**Finding of No Significant Impact:**

Based on the analysis of potential environmental impacts contained in Normal Fire Rehabilitation Plan Supplement Environmental Assessment BLM/EK/PL2000/040, 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 Beowawe Fire BLM/PL2000/040. Over 13,000 acres of public rangeland managed by the Bureau of Land Management Elko Field Offices and 570 acres of private land were burned during this fire. Approximately 6000 of the burned public land acres will be rehabilitated by planting of multiple species seed mixtures. Over 10 miles of roads will be repaired and 35 miles of dozer line will be rehabilitated. Over 11 miles of new fence will be constructed and 0.5 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. 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 Beowawe 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.

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Helen Hankins  
Elko Field Office

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Date

**NORMAL FIRE REHABILITATION PLAN SUPPLEMENT  
ENVIRONMENTAL ASSESSMENT  
BEOWAWE FIRE (X021)  
BLM/EK/PL-2000-040**

**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), 5 (Dozerline Rehabilitation), 6 (Road repair), 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 July 17, 2000 and was declared controlled on July 27, 2000. It burned 13,360 acres of public land and 569 acres of private land. Only one grazing allotment was affected, the South Buckhorn Allotment. Of the 319,777 acres in this allotment, 13,360 acres of public land and 569 acres of private land were burned. The percentage of the allotment burned was 4%. No structures were burned in the Beowawe Fire. Over 0.5 miles of fence was damaged by the fire and 35 miles of dozer line was constructed during fire suppression efforts.

## B. Vegetation and Soil Description:

The burned area ranges in elevation from 5920 ft in the southeast portion of the fire to peaks of 7361 ft. Perennial streams in the Beowawe Fire flow from southeast to northwest with northeast/southwest aspects to their slopes. Soils in the perennial drainages are shallow to deep and well-drained, with medium to rapid runoff. Hazard of erosion due to water is moderate to severe under pre-burn conditions. There is evidence of past soil movement in the Brock and Cottonwood Creek tributaries. Vegetation in these drainages is dominated by cottonwood and willow. 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 seeding:

Approximately 3461 acres in the Buckhorn Mine area will be aerial seeded for pronghorn antelope, sage grouse, and mule deer with forage kochia, big sagebrush, small burnet, and rice hulls (used as a seed dispersal mechanism). See attached specification sheets for seed and seeding rates per acre for this and the following seeding treatments. Seed would be aurally 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. Aerial rangeland seeding:

Approximately 1955 acres in the Crescent valley portion of the burn at the base of Cottonwood Canyon and along the southwest, west, and northern edges of the aerial wildlife seeding will be aerial seeded with Vavilov Siberian wheatgrass, Nordan crested wheatgrass, forage kochia, and Western yarrow. Seed would be aurally 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.

#### 3. Watershed aerial seeding:

Approximately 698 acres within the Brock and Cottonwood drainages will be aerial seeded with Nordan crested wheatgrass, intermediate wheatgrass, and Triticale. Seed would be aurally applied between late October through December. Seed would be aurally 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.

#### 4. Monitoring to detect invasive, nonnative weed species invasion of burned areas:

If invasive or 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 10.8 miles of new fence will be constructed and 0.5 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.

2. Cattle Guards:

Four 14 ft and one 28 ft wide cattle guards will be installed on the Buckhorn Mine County Road to aid in excluding livestock from burned areas.

**C. Erosion Control Treatments**

1. Road repair:

Approximately 10.1 miles of suppression-damaged roads will be regraded after adequate soil moisture is present and 0.75 miles of road will be graveled to reduce erosion and widening by travelers trying to get around impassable areas.

2. Dozer line rehabilitation:

Approximately 1.3 miles of bulldozer-damaged areas will be rehabilitated by pushing back berms and regrading the disturbed areas. Approximately 35 miles of dozer line will then be drill and/or aerial seeded with Nordan crested wheatgrass and Siberian crested wheatgrass to reduce erosion and encourage revegetation.

**D. Site Preparation: None.**

**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

Wild Horses and Burros  
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 Beowawe 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.

Resource advisor reports for the Beowawe Fire indicate that some damage occurred to 4 archaeological sites in the Buckhorn Chert Quarries during dozer line construction. These sites will be inspected prior to any future rehabilitation efforts in this area.

C. Floodplains:

There are two perennial streams in the Beowawe Fire area. They are Cottonwood Creek and Brock Creek. Burn severity was low to moderate in Cottonwood Creek with some live cottonwoods remaining. In Brock Creek, burn severity was moderate to high with little or no

vegetation remaining. 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 Cottonwood and Brock 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 cottonwood 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:

Noxious weeds hoary cress and scotch thistle are found on public and private land outside the Beowawe Fire area and may be located in areas within the burn. Fire suppression efforts, including dozer line construction and use of engines and other mechanized vehicles, is likely to have introduced these or other noxious weed species seeds further 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 Beowawe 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.

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 Cottonwood and Brock Creeks. Increased sediment discharged 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 Beowawe Fire through loss of vegetation. Cottonwoods, willows, 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. Wildlife:

Wildlife was adversely impacted by the Beowawe 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, one proposed seeding is specifically designed to benefit sage grouse, antelope, and mule deer. 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.

#### 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 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)