

**NORMAL FIRE REHABILITATION PLAN SUPPLEMENT
FINDING OF NO SIGNIFICANT IMPACT
AND
DECISION RECORD
NORTH DELANO FIRE (X-257)
BLM/EK/PL/2001/066**

Finding of No Significant Impact:

Based on the analysis of potential environmental impacts contained in Normal Fire Rehabilitation Plan Supplement Environmental Assessment BLM/EK/PL2001/066, 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 North Delano Fire BLM/PL2001/066. Over 8,827 acres of public rangeland managed by the Bureau of Land Management Elko Field Office were burned during this fire. Approximately 4547 acres of the burned public land acres will be rehabilitated by aerial seeding and 596 acres will be drill seeded with multiple species seed mixtures. Additionally, 27 miles of dozer line will be rehabilitated. Over 7.6 miles of new fence will be constructed and an additional 2.9 miles of existing fence will be reconstructed in order to establish grazing closures to rest rehabilitated areas. A low-water crossing composed of river rock placement will be constructed on Little Goose Creek. Approximately 596 acres proposed for drill seeding, 27 miles of dozer line rehabilitation, and 7.6 miles of new fence line will be inventoried for cultural resources. 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 North Delano 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 Wells 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
NORTH DELANO FIRE (X-257)
BLM/EK/PL-2001/066**

Introduction:

This Supplement Environmental Assessment (EA) tiers to the Elko Field Office FY 2000 Normal Fire Rehabilitation Plan Environmental Assessment (NRFPEA) BLM/EK/PL2001/037. The Proposed Action includes NFRPEA Treatment # 1 (Grazing closure), 2 (Planting of multiple species seed mixtures), 5 (Dozer line rehabilitation), 6 (Road repair), 8 (Invasive, nonnative weed species control), and 10 (Cultural resource site stabilization and protection). 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, and is consistent with the draft Interagency Burned Area Emergency Stabilization and Rehabilitation Handbook, Version 1.0, dated 6/14/01.

List of Preparers:

| | |
|-----------------|---------------------------------|
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Project Area Description:

A. Fire Description:

The North Delano fire was started by lightning strike and was reported on August 6, 2001 and was declared out on August 11, 2001. The fire burned 8,827 acres of public land. The fire occurred in the Gamble Individual and Little Goose Creek allotments. No structures were burned in the fire. The dozer line was constructed on low to moderate elevation rangeland along the entire burn perimeter. Burn severity was moderate to high in the area dominated by closed

canopy juniper trees but light over much of the remainder of the burned area. The remaining burned area in the Little Goose Creek Allotment not dominated by closed canopy juniper, would require seeding of herbaceous species. This area was in poor condition prior to the burn and would be susceptible to invasive and noxious weed encroachment. Upland herbaceous vegetation in the sagebrush/grass zone within the Gamble Allotment should recover naturally with rest from grazing. The fire burned fairly completely and few islands of unburned vegetation remain within the fire perimeter.

B. Vegetation and Soil Description:

The burned areas range in elevation from 5,200 ft in the northwestern portion of the fire to 6,800 ft in the southwest. They consist of a number of range sites with the potential to support a variety of plant communities. The plant communities at the higher elevations are dominated by Utah juniper, Basin big sagebrush, low sage brush, bitterbrush, Idaho fescue, bluebunch wheatgrass, Letterman needlegrass, and a variety of perennial forbs. Pinyon and juniper woodland is also present at all elevations. The plant communities at the mid to lower elevations are dominated by Wyoming big sagebrush, bluebunch wheatgrass, Canby bluegrass, Nevada bluegrass, Thurber's needlegrass, and a variety of forbs. Field observations of small unburned islands and adjacent areas outside of the burn indicate that the plant communities within the Little Goose Creek Allotment were in poor to fair condition prior to the fire. With the exception of approximately 600 acres within the Gamble Allotment which were dominated by closed-canopy juniper, the upland plant communities were in satisfactory condition prior to the burn and should recover with rest from livestock grazing.

Soils in the northern half of the fire, that is proposed for seeding, are primarily shallow soils over rhyolite, tuff, or limestone bedrock. They have high gravel and cobble contents when they occur on greater than 15% slopes. On gentle slopes there are few coarse fragments. Surface textures include loamy fine sand, silt loam, sandy loam, and loam. Subsoils are predominantly loams and clay loams. Runoff is rapid and permeability is very slow to moderately rapid. Wind erosion hazard is slight, except on the gentle slopes where there are few surface coarse fragments. Water erosion hazard varies from slight to high.

Soils in the southern half of the burn occur on mountain slopes, mountain valley fan remnants, hills and rock pediment remnants. Mountain soils are shallow over limestone and have a very high volume of gravel, cobble and stone. They have silt loam and loam textures and moderate permeability. The wind erosion hazard is slight and the water erosion hazard is moderate to high.

Soils on hills and rock pediment remnants are shallow over bedrock or moderately deep over a hardpan. Textures range from loamy sand to clay loam. On steep slopes soil have high surface cobble content, and on gentle slopes there are few, if any, coarse fragments. These soils occur on gentle to steep slopes and have medium to rapid runoff. Permeability is slow to moderately rapid. Wind and water erosion hazard is slight. No active rill or gully erosion was found on these soils during the postfire reconnaissance flight. Although nearly all the vegetation burned

completely in some of the wooded areas, the soils were not hydrophobic when tested in the field. Some pedestalling was observed which is an indicator of sheet erosion.

Soils on mountain valley fan remnants are moderately deep over a hardpan or deep over bedrock. Small amounts of gravel may be present in these soils. Textures range from loam to clay and permeability is very slow to moderately slow. Wind erosion hazard is slight and water erosion hazard slight on gentle slopes and moderate on the steeper slopes.

Proposed Project Treatments:

A. Revegetation:

1. Rangeland aerial seeding:

Approximately 4,547 acres would be aerially seeded in swaths to rehabilitate vegetative plant communities. The seed mix would contain Intermediate wheatgrass, bluebunch wheatgrass and thickspike wheatgrass. 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. The purpose of the seeding would be to reestablish vegetative cover to stabilize soils, improve wildlife habitat and reduce the potential for the invasion of invasive, nonnative weed species.

2. Rangeland drill seeding:

Approximately 596 acres would be drill seeded with intermediate wheatgrass, crested wheatgrass and Russian wildrye to stabilize soils, prevent the encroachment of invasive annuals and noxious weeds and improve elk habitat. Drilling operations would be conducted between October and November prior to freezing of the ground surface and subsequent snow accumulations.

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

Approximately 5 acres of hoary cress and black henbane infestations on or near the burn would be chemically treated. If further noxious weed infestations are detected after fire rehabilitation efforts, appropriate Integrated Pest Management (IPM) control measures would be implemented to control the invasion. In particular, any disturbed dozer lines and adjacent areas would be targeted for this noxious weed monitoring and subsequent treatment if weeds are detected.

B. Structures:

1. Fencing:

Approximately 7.6 miles of new fence would be constructed and 2.9 miles of existing allotment boundary fence would be reconstructed 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 Treatment:

1. Dozer line and safety zone rehabilitation:

Approximately 27 miles of bulldozer-damaged areas would be drill seeded with a mix composed of crested wheatgrass to reduce erosion and encourage revegetation. Two miles of dozer line would require physically pulling back berms and spreading cat piles. Five safety zones would also require spreading of dead trees and other heavy vegetation to prevent access and to improve visual resources.

2. Repair of low water crossing:

Due to fire suppression traffic, the Little Goose Creek low-water crossing has expanded onto the road. It is recommended that this crossing be repaired/rebuilt as a low water crossing. This would entail removing existing silt build-up and installing a cellular confinement system (to aid in load support, slope and sediment retention, and added channel protection) and/or large substrates (i.e. large gravel, cobble, and small boulders). The roadway within the water-width could need to be raised to maintain the channel slope. Maintaining a low-water crossing would reduce the potential of creating a fish barrier to Yellowstone cutthroat trout which reside in this creek.

D. Site Preparation: none

E. Other:

1. Cultural resource inventories:

During and immediately after the North Delano Fire, BLM-Elko archaeologists were able to survey the dozer lines. Small lithic scatters were identified but none appeared to be National Register-eligible. The bulldozed-damaged areas do not need further examination for cultural resources. However, a class III inventory would be required prior to construction of the new 7.5 mile fence line and before drill seeding the 596 acres.

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
Floodplains

Wastes, hazardous/solid
Wetlands/Riparian Areas
Wild and Scenic Rivers
Wilderness

Critical elements and resources brought forward for analysis:

A. Air Quality:

The burned area would be 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 and erosion control treatments would encourage regrowth of vegetation, thus reducing future potential air quality impacts.

B. Cultural Resources:

The North Delano 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 would account for cultural resources in its projects and undertakings, including fire rehabilitation efforts. Ground disturbing activities such as drill seeding, 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 will 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 will be plotted on maps and at a minimum would 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. Invasive, Nonnative Species:

Fire suppression efforts, including dozer line construction and use of engines and other

mechanized vehicles, may have introduced noxious weed species seeds into the burned area. Approximately 5 acres of existing hoary cress and black henbane infestations have been detected in or close to the burned area and would be chemically treated. Subsequent monitoring would be conducted after rehabilitation treatments are completed. If noxious weeds are discovered to have invaded the burn area, further herbicide treatments would need to be implemented to reduce the spread of the noxious weeds. The proposed noxious weed monitoring would help to prevent or reduce noxious weed invasions of the North Delano burn area.

Cheatgrass invasion in the North Delano burned area should be minimal since prefire plant communities were in excellent condition and should recover with rest from grazing. Cheatgrass may increase in disturbed areas within the fire perimeter, however, competition from existing perennial species should minimize cheatgrass encroachment over much of the burned area.

D. Native American Religious Concerns:

By law, policy and executive order, BLM is required to undertake a good-faith consultation process with regional Native American tribal and band governments prior to projects that might affect Native American sacred areas, Traditional Cultural Properties or other traditional values. Native Americans would be consulted as appropriate prior to any ground disturbing activities or herbicide treatments. If the BLM obtains information identifying Traditional Cultural Properties or other areas having traditional or religious significance, then the BLM would insure that reasonable measures are taken to avoid impacts to these areas of concern to Native Americans.

E. 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.

F. Visual Resources:

The burned area is within Visual Resource Management Class III and the objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Within Class III VRM areas, management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic 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.

G. Water Quality, surface/ground:

There are no perennial streams nor springs within the burned area. Most of the burn is in the Dry Gulch watershed and drains to the north via several ephemeral drainages. Two small areas in the northwest and southwest, drain into Rock Spring Creek and Dry Canyon.

Precipitation events would cause higher than normal runoff until the vegetation is restored to preburn conditions. This is particularly true in the wooded areas that burned hot and left little, if any cover. One area of concern is near Rock Spring, located approximately three miles west of the fire, where several drainages are actively eroding. Increased runoff originating from the burn could cause further channel incision and sediment deposition along the county road. The proposed aerial seeding and grazing closures would reduce the risk of downstream damage by establishing more vegetative cover, thus reducing runoff impacts.

Increased runoff from the northern portion of the burn into Dry Gulch could cause further flooding along the road crossing at Little Goose Creek. The proposed improvement to the existing low-water crossing would alleviate the flood risk, and maintain adequate habitat for cutthroat trout.

H Wildlife:

Wildlife was adversely impacted by the North Delano 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. The proposed seedings are specifically designed to benefit elk.

Yellowstone cutthroat trout occur in Little Goose Creek, which may be adversely affected by the deteriorated state of the road crossing. This native fish was petitioned for listing under the Endangered Species Act but is not listed as a candidate or special status species at this time. The repair of the road crossing and strengthened low-water crossing is a preferred repair option to maintain adequate trout habitat.

I. Grazing:

The proposed closure 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 closure 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 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 would be identified to reduce impacts to ranchers where possible.

J. 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.

K. Cumulative Impacts:

Cumulative impacts for proposed Emergency Stabilization and Rehabilitation treatments are discussed in the programmatic Elko Field Office FY 2000 Normal Fire Rehabilitation Plan Environmental Assessment (NFRPEA) BLM/EK/PL2000/037, which is available for review at the BLM Elko Field Office.

Project Cost Summary: (the cost summary information can be found in the Burned Area Emergency Stabilization and Rehabilitation (BAER) Plan and Accomplishment Report for the August 2001 Fire Complex.)

Project Maps: (project maps can be found in the Burned Area Emergency Stabilization and Rehabilitation (BAER) Plan and Accomplishment Report for the August 2001 Fire Complex.)

Cost/Risk Assessment: (the cost/risk assessment can be found in the Burned Area Emergency Stabilization and Rehabilitation (BAER) Plan and Accomplishment Report for the August 2001 Fire Complex.)

Native/Nonnative Worksheet: (the native/nonnative worksheet can be found in the Burned Area Emergency Stabilization and Rehabilitation (BAER) Plan and Accomplishment Report for the August 2001 Fire Complex.)

