## ELBURZ 1 FIRE (CR3E) EMERGENCY STABILIZATION AND REHABILITATION PLAN ENVIRONMENTAL ASSESSMENT FINDING OF NO SIGNIFICANT IMPACT AND DECISION RECORD AND PROJECT APPROVAL BLM/EK/PL-2006/018

#### **Finding of No Significant Impact**

Based on the analysis of potential environmental impacts contained in the Bureau of Land Management (BLM), Elko Field Office, Elburz 1 Fire (CR3E) Emergency Stabilization and Rehabilitation Plan Environmental Assessment BLM/EK/PL-2006/018, 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 Emergency Stabilization and Rehabilitation Plans as described in the Environmental Assessment (EA) for the Elburz 1 Fire BLM/EK/PL-2006/018. A total of 9,634 acres burned in the Elburz 1 Fire, which consisted of approximately 758 acres on public land administered by the BLM Elko Field Office and 8,876 acres of private land. The Elburz 1 Fire is located in Elko County, Nevada.

Livestock grazing will be removed from the burned area in order to allow the burned and seeded vegetation to successfully establish. The closure will occur for a minimum of two growing seasons or until establishment objectives are met, in order to provide an adequate amount of time to allow the seeded vegetation to establish and plant species not damaged by the wildfire to respond to natural revegetation. The burned area will be reopened to livestock grazing once the establishment objectives in the Fire Closure Agreement/Decision have been met.

Post-fire grazing management, including the period of time needed for closure, will be determined based on coordination, cooperation, and consultation with the interested public, monitoring, and achievement of site specific resource objectives.

Approximately 758 acres will be aerially seeded with Wyoming big sagebrush. Aerial seeding will be accomplished using a helicopter and seed bucket or broadcaster. The seed will be applied when weather conditions are favorable to allow for coverage by snow or adequate moisture, and thus will be applied in late fall or early winter.

The dozerline will be seeded utilizing a broadcast or drill method. Broadcast seeding methods will be done utilizing either an all terrain vehicle (ATV), pickup, dozer, equivalent piece of equipment or by hand. Broadcast seeding will be conducted on areas that are not conducive to drill seeding. Drill seeding methods will be done utilizing a rangeland drill or equivalent piece of equipment. The dozerline will be dragged using a harrow or equivalent piece of equipment to provide full soil contact of the seeded species, in order to increase the success of treatment. The dozerline will be seeded with a perennial grass-forb mixture, such as crested wheatgrass, Siberian wheatgrass, and Ladak alfalfa.

Treatments and evaluations will be conducted on approximately 20 acres (10 acres treatments and 10 acres evaluations) of hoary cress and Scotch thistle for 3 years. More infestations may be detected as plants recover from the fire or establish from spread seeds. Integrated weed treatments will be used including, but may not be limited to, manual and chemical weed control measures. Manual treatments will be done by grubbing with shovels or hand pulling or chopping off of fruiting structures. Chemical treatments will be done following all label requirements and conform to the BLM Chemical Pest Control Handbook H-9011-1. Herbicides, Surfactants, and Dyes used will be approved for use on BLM administered lands and applied following standard safety and operating procedures. Herbicide application to rangeland sites will be by low pressure backpack sprayer or hand gun from an ATV. Herbicide application to road right-of-ways will be by vehicle mounted unit or ATV. No aerial application is planned.

Approximately 758 acres shall be inventoried for noxious weeds. The method used will be a broad scale ocular observation for qualitative and quantitative data. Infestations found will be documented using the Global Positioning System (GPS) for mapping and will be included in the plan for treatment at the next appropriate treatment time. The access roads throughout the fire and the dozerlines will also be inventoried.

#### Monitoring

Monitoring will be conducted on the proposed action each year following treatment (2007-2009) to determine the success of revegetation and/or stabilization efforts. Specific monitoring method(s) used will depend on the establishment objectives developed. For example, if the establishment objective is three seeded plants firmly rooted per square meter, utilize a modified "freqdens" technique or similar BLM established method for seeded areas. If the establishment objective is herbaceous production equal to or greater than herbaceous production of a comparable unburned range site, use production/site composition methods and/or density for areas managed for natural release. A resource specialist from the Elko Field Office will provide program oversight for this specification.

Post-treatment monitoring studies will be conducted to evaluate the effectiveness of the proposed treatments or to determine if additional treatments are needed, and to determine the time frame for re-opening lands for grazing. The monitoring results will be documented in the project file at the BLM, Elko Field Office.

#### Rationale

Implementation of the proposed action described in the Emergency Stabilization and Rehabilitation Plan EA for the Elburz 1 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.

Exclusion of livestock grazing is necessary to allow seedling establishment, restore plant vigor and seed production, allow reestablishment of preferred species, and deter invasion of undesirable species. Rest from grazing will allow for plants to re-establish and develop effective root depths and root reserves. Vegetation establishment will help reduce the risk of accelerated soil erosion and provide for soil stabilization.

The proposed aerial seeding will increase shrub cover; provide soil stabilization; and reduce the potential for invasion nonnative invasive plant species, such as cheatgrass, and noxious weeds, such as hoary cress and Scotch thistle. It will also provide cover and forage for affected wildlife populations, including special status species, sage grouse, pronghorn antelope, and mule deer. Overall, over 250 wildlife species that inhabit sagebrush habitats on a seasonal or yearlong basis, including sagebrush dependent species and migratory birds will benefit. Specifically, this seeding will provide forage for pronghorn antelope and mule deer. Other sagebrush dependent species such as sage grouse will also benefit. Migratory birds that utilize shrubs for nesting will also benefit. Seeding with shrubs will provide deep rooted perennial plants to establish, which will help provide soil stabilization, trap snow and reduce evaporation of the moisture from the soils due to wind. Shrubs will also provide sheltered areas from the wind, which will reduce some wind erosion on the site. All of these functions enhance the herbaceous plant community which protects the soil from potential increased soil erosion that is likely following a fire and reduces the opportunities for increases in invasive nonnative plant or noxious weed species. Establishment of vegetation helps to stabilize watersheds and upland soils to prevent further degradation to affected resources on lands within the fire perimeter or downstream drainages that may result from short duration, high intensity precipitation events.

Control of noxious weeds is consistent with the management plans for the resource and will help protect the ecological integrity, biodiversity, and site productivity of this shrub-steppe plant community. Treatment of noxious weeds is necessary to comply with Nevada State Laws, to implement the Integrated Weed Management Program of the Elko Field Office, and to be responsible neighbors to the adjacent private landowners. Working cooperatively with local weed management groups and private landowners will achieve better weed management.

The proposed action conforms to the 1987 Elko Resource Management Plan (RMP), as it was amended for fire management on September 29, 2004. The decision for fire rehabilitation from the Approved Fire Management

Amendment, page 20, is to "Conduct fire rehabilitation activities to emulate historic or pre-fire ecosystem structure, functioning, diversity and/or to restore a healthy stable ecosystem." The proposed action is consistent with resource objectives of the plan and with other Federal, state, local and tribal laws, regulations, policies and plans to the maximum extent possible.

### **Approval and Implementation Date**

This wildfire management decision is issued under 43 CFR 4190.1 and is effective immediately. The BLM has made the determination that vegetation, soil, or other resources on the public lands are at risk of wildfire due to drought, fuels buildup, or other reasons, or at immediate risk of erosion or other damage due to wildfire. Thus, notwithstanding the provisions of 43 CFR 4.21(a)(1), filing a notice of appeal under 43 CFR Part 4 does not automatically suspend the effect of the decision. The Interior Board of Land Appeals must decide an appeal of this decision within 60 days after all pleadings have been filed, and within 180 days after the appeal was filed. (43 CFR 4.416)

## **Administrative Review or Appeal Procedures**

Within 30 days of receipt of this decision, parties who are adversely affected and believe it is incorrect have the right to appeal to the Department of the Interior Board of Land Appeals, Office of the Secretary, in accordance with regulations at 43 CFR 4.4. Procedural information on "Taking Appeals to the Board of Land Appeals" can be obtained at the BLM, Elko Field Office. An appeal should be in writing and specify the reasons, clearly and concisely, as to why the decision is in error. A copy of the Statement of Reasons must also be supplied to this office. Also within 30 days of receipt of this decision, appellants have a right to file a petition for a stay (suspension) of the decision together with an appeal, in accordance with the regulations at 43 CFR 4.21. The appellant has the burden of proof to demonstrate that a stay should be granted.

/s/

HELEN HANKINS Field Manager <u>10/5/06</u> Date

#### ELBURZ 1 FIRE (CR3E) EMERGENCY STABILIZATION AND REHABILITATION PLAN ENVIRONMENTAL ASSESSMENT BLM/EK/PL-2006/018

## CHAPTER 1 INTRODUCTION/PURPOSE AND NEED

#### 1.1 INTRODUCTION

The Bureau of Land Management (BLM), Elko Field Office, proposes to conduct emergency stabilization and rehabilitation activities on the public lands affected by the Elburz 1 Fire (CR3E). The Elburz 1 Fire started on June 25, 2006 and was contained on June 27, 2006. The Elburz 1 Fire was lightning caused. The Elburz 1 Fire burned a total of approximately 9,634 acres, which consisted of approximately 758 acres on public land administered by the BLM Elko Field Office and 8,876 acres of private land. Resources that were threatened and/or damaged by the fire or fire suppression activities consisted of range improvements (fences), structures, wildlife habitat, soil, vegetation, and cultural resources.

The legal description for the Elburz 1 Fire is:

MDB&M, T. 36 N., R. 57 E., Sections 1, 2, 10-15, 22-26, 34-36 T. 36 N., R. 58 E., Sections 7, 8, 16-20, 28-31

This Environmental Assessment (EA) has been prepared to comply with the National Environmental Policy Act of 1969. This EA tiers the Elko and Wells Resource Management Plans Fire Management Amendment Environmental Assessment (BLM/EK/PL-2003/026) that was completed in 2003, the FY2000 Normal Fire Rehabilitation Plan Environmental Assessment (NFRPEA), (BLM/EK/PL-2000-037), which was completed to update and replace the FY93 Normal Fire Rehabilitation Plan Environmental Assessment (EA-NV-010-92-060). These EAs analyze the wide range of treatments utilized by the BLM, Elko Field Office, for emergency stabilization and rehabilitation activities on public lands. The proposed treatments for the Elburz 1 Fire for emergency stabilization and rehabilitation treatments is also described in these EAs. The Proposed Action for the Elburz 1 Fire includes the following NFRPEA Treatments: 1 (Grazing Closure), 2 (Planting of Multiple Species Seed Mixtures), 5 (Dozer line Rehabilitation), and 8 (Invasive, Nonnative Weed Control).

Treatments for invasive, nonnative species are consistent with the methods described and evaluated in the Vegetation Treatment on BLM Lands in Thirteen Western States Final Environmental Impact Statement (FEIS) and the Programmatic Environmental Assessment of Integrated Weed Management on Bureau of Land Management Lands (BLM/EK/PL-98/008) for the Elko Field Office.

The maps illustrating the proposed action are available in the BLM, Elko Field Office.

# 1.2 PURPOSE AND NEED

The purpose of the proposed action described in the emergency stabilization and rehabilitation plans and this EA is to protect the burned area from livestock grazing; provide forage, cover, and habitat for wildlife, including but not limited to, BLM designated special status species, migratory birds, mule deer, pronghorn antelope, and sage grouse; seed the burned area to stabilize the soils and prevent the establishment of annual, invasive nonnative and noxious plant species; allow the undamaged plant species time to re-establish; and treat the invasive nonnative and noxious plant species to prevent spreading. The need for the proposed action is to stabilize and prevent unacceptable degradation to natural and cultural resources, to minimize threats to life or property resulting from the effects of the fire, and to prescribe cost effective post-fire stabilization and rehabilitation measures necessary to protect human life, property, and critical cultural and natural resources.

### 1.3 LAND USE PLAN CONFORMANCE STATEMENT

The proposed action conforms to the 1987 Elko Resource Management Plan (RMP), as it was amended for fire management on September 29, 2004. The decision for fire rehabilitation from the Approved Fire Management Amendment, page 20, is to "Conduct fire rehabilitation activities to emulate historic or pre-fire ecosystem structure, functioning, diversity and/or to restore a healthy stable ecosystem." The proposed action is consistent with resource objectives of the plan and with other Federal, state, local and tribal laws, regulations, policies and plans to the maximum extent possible.

# CHAPTER 2 PROPOSED ACTION AND ALTERNATIVE

# 2.0 PROPOSED ACTION

## 2.0.1 GRAZING CLOSURE

Livestock grazing would be removed from the burned area in order to allow the burned and seeded vegetation to successfully establish. The closure would occur for a minimum of two growing seasons or until establishment objectives are met, in order to provide an adequate amount of time to allow the seeded vegetation to establish and plant species not damaged by the wildfire to respond to natural revegetation. The burned area would be reopened to livestock grazing once the establishment objectives in the Fire Closure Agreement/Decision have been met.

Post-fire grazing management, including the period of time needed for closure, would be determined based on coordination, cooperation, and consultation with the interested public, monitoring, and achievement of site specific resource objectives.

## 2.0.2 PLANTING OF MULTIPLE SPECIES SEED MIXTURES

Approximately 758 acres would be aerially seeded with Wyoming big sagebrush. Aerial seeding would be accomplished using a helicopter and seed bucket or broadcaster. The seed would be applied when weather conditions are favorable to allow for coverage by snow or adequate moisture, and thus would be applied in late fall or early winter.

# 2.0.3 DOZERLINE REHABILITATION

The dozerline would be seeded utilizing a broadcast or drill method. Broadcast seeding methods would be done utilizing either an all terrain vehicle (ATV), pickup, dozer, equivalent piece of equipment or by hand. Broadcast seeding would be conducted on areas that are not conducive to drill seeding. Drill seeding methods would be done utilizing a rangeland drill or equivalent piece of equipment. The dozerline would be dragged using a harrow or equivalent piece of equipment to provide full soil contact of the seeded species, in order to increase the success of treatment. The dozerline would be seeded with a perennial grass-forb mixture, such as crested wheatgrass, Siberian wheatgrass, and Ladak alfalfa.

#### 2.0.4 INVASIVE, NONNATIVE WEED CONTROL

Treatments and evaluations would be conducted on approximately 20 acres (10 acres treatments and 10 acres evaluations) of hoary cress and Scotch thistle for 3 years. More infestations may be detected as plants recover from the fire or establish from spread seeds. Integrated weed treatments would be used including, but may not be limited to, manual and chemical weed control measures. Manual treatments would be done by grubbing with shovels or hand pulling or chopping off of fruiting structures. Chemical treatments would be done following all label requirements and conform to the BLM Chemical Pest Control Handbook H-9011-1. Herbicides, Surfactants, and Dyes used would be approved for use on BLM administered lands and applied following standard safety and operating procedures. Herbicide application to rangeland sites would be by low pressure backpack sprayer or hand gun from an ATV. Herbicide application to road right-of-ways would be by vehicle mounted unit or ATV. No aerial application is planned.

Approximately 758 acres should be inventoried for noxious weeds. The method used would be a broad scale ocular observation for qualitative and quantitative data. Infestations found would be documented using the Global Positioning System (GPS) for mapping and would be included in the plan for treatment at the next appropriate treatment time. The access roads on public lands throughout the fire and the dozerlines would also be inventoried.

# 2.1 ALTERNATIVE TO THE PROPOSED ACTION

# 2.1.1 NO ACTION ALTERNATIVE

Under the No Action Alternative, the proposed emergency stabilization and rehabilitation activities would not be approved and would not be implemented. Impacted resources would be left to the process of natural rehabilitation. Topsoil would be loss due to wind and water erosion. The plant community would encounter increase loss of diversity and structure. The probability of increased densities and infestations of noxious weeds and invasion of nonnative invasive species is high.

# CHAPTER 3 AFFECTED ENVIRONMENT

The Elburz 1 Fire burned approximately 9,634 acres of public and private land in the vicinity of the community of Elburz in Elko County, Nevada. The fire burned across alluvial fans, terraces, and floodplains, which are typical of the landforms found in the Basin and Range Physiographic Province. Elevations within the burn area range from approximately 5,200 to 5,800 feet above mean sea level. The average annual precipitation is 9 inches, which occurs mainly during winter and spring.

# 3.1 PROPOSED ACTION

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

- \* Areas of Critical Environmental Concern/Special Management Areas
- \* Cultural Resources: In 1984, the BLM inventoried a large percentage of the current burn area for the Glaser Land Exchange. Within the 14 sections inventoried, the BLM recorded 44 sites and 33 isolates. Small prehistoric sites and isolates were the predominant site type in the area; however, there were six sites that could generate important information about the history of the Great Basin. Site density becomes greater closer to the Humboldt River, but surprisingly little was found near the North Fork of the Humboldt River. The Central and Southern Pacific Railroad lines run to the south of the project area, and a railroad construction camp has been recorded in the vicinity. The General Land Office Plats reveal that two houses and a railroad station were located further to the south. The area could yield significant sites; however, none of the activities planned as part of the emergency stabilization and rehabilitation plans would adversely affect any sites.
- \* Environmental Justice
- \* Farmlands (Prime or Unique)
- \* Native American Religious Concerns
- \* Threatened and Endangered Species: The area provides winter habitat for bald eagles, a threatened species. Bald eagles foraging habitat is widely dispersed on upland habitat throughout the Humboldt River drainage, which includes the North Fork of the Humboldt River and surrounding areas.
- \* Wastes (Solid or Hazardous)
- Wild and Scenic Rivers
- Wilderness

Bureau specialists have further determined that the following resources, although present in the project area, are not affected by the proposed action:

- \* Lands: The project area includes both public lands administered by the BLM, Elko Field Office, and private lands. The public land is located in the northern portion of the bun area, where the elevations range from 5,500 to 5,800 feet. No rights-of-ways are affected by the proposed action.
- Recreation: The project area is located within an area of dispersed and moderate recreation use.
  No developed recreation sites occur within the burned area. Primary forms of recreation in the burned area may include hunting, hiking and off-highway vehicle touring.

Casual off-highway vehicle (OHV) use occurs within the burned area. This off-highway vehicle use occurs on a network of existing designated and undesignated routes, tracks, trails and overland or cross-country travel. Off-highway vehicle (OHV) use is associated with recreation uses such as hunting. Big game and bird hunting in the fall are the primary hunting uses within the burned area.

\* Socio-economics

Critical elements and resources brought forward for analysis:

## 3.1.1 AIR QUALITY

The burned area is located in an unclassified air basin. Air quality is generally considered good and thus considered to be in attainment, for the National Ambient Air Quality Standards criteria pollutants. The nearest Class I, Prevention of Significant Deterioration Area is located at the Jarbidge Wilderness Area in the northeast portion of the state.

There are localized occurrences of dust and blown ash caused by high winds, vehicular traffic, and construction activities.

## 3.1.2 LIVESTOCK GRAZING

The Elburz 1 Fire burned in the Halleck Federal Fenced Range (FFR). The permittee for the Halleck FFR is Glaser Land & Livestock Company. The total permitted active use for livestock in the Halleck FFR is 178 animal unit months (AUMs).

#### 3.1.3 MIGRATORY BIRDS

The proposed action is located on areas primarily characterized by the following vegetation types: basin big sagebrush shrubland with isolated areas of big sagebrush steppe, semi desert grassland, mixed salt shrubland, Xeric mixed sagebrush, pinyon/juniper and invasive annual grasslands. No riparian areas associated with the North Fork of the Humboldt River were affected. Maintaining complete, diverse sagebrush communities is integral to conservation efforts for foraging areas and cover diversity for migratory birds. A list of the migratory birds affected by the President's executive order is contained in 43 CFR 10.13. References to "species of concern" pertain to those species listed in the periodic report "Migratory Nongame Birds of Management Concern in the United States", priority migratory bird species as documented by established plans (such as Bird Conservation Regions in the North American Bird Conservation Initiative or Partners in Flight physiographic areas), and those species listed in 50 CFR 17.11. The Nevada Partners in Flight Bird Conservation Plan identifies the bird species for prioritization for management action associated with each of the habitat types described above for the Elburz 1 Fire (See Appendix A).

#### 3.1.4 NONNATIVE INVASIVE PLANT SPECIES

The noxious weed species found within the burned area include hoary cress and Scotch thistle. Hoary cress and Scotch thistle are a Nevada designated noxious weed species. Approximately 5 acres of hoary cress and 5 acres of Scotch thistle are known to inhabit the burned area on public lands. Both hoary cress and Scotch thistle exist along the roads and throughout the rangeland within the burned area.

Cheatgrass is present with in the Elburz 1 Fire perimeter and Halleck FFR Allotment. Numerous patches of cheatgrass were observed near the perimeter of the fire and in the unburned islands, increasing the likelihood of cheatgrass existed inside the burn area.

# 3.1.5 SOILS

Soils on the Elburz 1 Fire vary in parent material, depth, and texture, and other characteristics depending upon position on the landscape. In general, Hazard of erosion by water is slight to moderate and hazard of erosion by wind is slight. There is a well developed physical and biological crust on the soil surface which aids in infiltration and decreases the hazard of erosion by wind and water. Most of the soils on public lands consist of a loam, sandy loam, silt loam, and gravelly sandy loam. More information can be found in the Soil Survey of Elko County, Central Part.

# 3.1.6 VEGETATION

Vegetation consists primarily of Basin big sagebrush, big sagebrush, Wyoming big sagebrush, black sagebrush, bluebunch wheatgrass, Great Basin wildrye, Sandberg's bluegrass, Indian ricegrass, Thurber needlegrass, bottlebrush squirreltail, Douglas rabbitbrush and cheatgrass. Range sites for the public lands include Orovada soil-025X019N; Puett soil-025X025N; Chiara soil-025X019N; Bioya soil-025X019N; Haybourne soil-025X019N; Peeko soil-024X030N; Hunnton soil-025X019N; Kelk soil-025X019N; and Dacker soil-025X019N.

Vegetation along the banks of the North Fork of the Humboldt River consist of Basin big sagebrush, black greasewood, Great Basin wildrye, rubber rabbitbrush, bottlebrush squirreltail, and spiny hopsage. Range sites for this area include Kelk soil-024X006N; Ocala soil-024X007N; and Moranch soil-024X008N.

No known plant species designated as Special Status Species are known to occur on the burn area.

# 3.1.7 VISUAL RESOURCES

The Elburz 1 Fire is located within Visual Resource Management (VRM) Classes III and IV. However, the proposed action is located within the VRM Class IV.

The Class III VRM objective is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. 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 landscape. Changes caused by management activities may be evident and begin to attract attention, but these changes should remain subordinate to the existing landscape.

The Class IV VRM objective is to allow for management activities that involve major modification of the existing character of the landscape. The level of contrast can be high, dominating the landscape and the focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements of the characteristic landscape.

The landscape consists of various terrain types from floodplains, relatively flat plateaus, gently rolling hills, to steep hill slopes. Landscape colors include vegetative seasonal color variations of green, gray-green, and light yellowish tan to brown and blackened vegetation from the June 2006 Elburz 1 Fire. Soil colors are light browns and tan. Vegetative texture is a fairly uniform composition of shrubs and grasses.

Man-made features in the area are mostly linear. These include bladed dirt roads, two-track roads/jeep trails, fences, powerlines and the railroad. Other man-made features in the vicinity of the burn include houses or buildings, which would have a blocky feature.

## 3.1.8 WATER QUALITY (SURFACE)

Area burned by the Elburz 1 fire is drained by ephemeral streams that are tributary to Humboldt River and North Fork Humboldt River. There are no perennial streams within the burned area. State water Quality Standards as outlined in Nevada Administrative Code (NAC) 445A apply to both Humboldt River and North Fork Humboldt River. The Nevada 2004 303(d) list shows Humboldt River in violation of state water quality standards for iron and total phosphorus. North Fork Humboldt River is listed for violations of iron, temperature, and total phosphorus.

## 3.1.9 WILDLIFE AND SPECIAL STATUS SPECIES

The Elburz 1 Fire occurred within mule deer crucial summer range and pronghorn antelope crucial winter range. It is estimated that of public acres burned, twenty percent is on mule deer summer range and seventy percent is on pronghorn antelope winter range. Basin big sagebrush provides the main shrub component needed for forage and cover, and ecological site dynamics on the affected area. One hundred percent of this habitat is limited, due to previous impacts from its proximity to urban development, cattle grazing, and cheatgrass invasion.

Collectively, more than 250 wildlife species could utilize suitable habitat on the affected area on a seasonal or yearlong basis. Other game and nongame wildlife species include approximately 100 bird species, 70 mammal species and several reptile and amphibian species that can be found in sagebrush habitats on the allotment on a seasonal or yearlong basis. The fire area provides habitat for many of these species. Some of these species are shown for the "Lower Sagebrush/Grassland Steppe - Northeastern Nevada" in Appendix B while others are shown/duplicated in Nevada Partners in Flight Bird Conservation Plan Appendix A per affected habitat type. For more complete lists, consult the BLM Nevada Elko District Bird, Mammal, and Reptile and Amphibian Lists available through BLM Elko Field Office.

The area provides seasonal or yearlong habitat for 33 terrestrial wildlife species that have been designated as State of Nevada Listed Species and Nevada BLM Sensitive Species. Bat species may find temporary roosting sites in sagebrush areas that are adjacent to riparian wetlands (North Fork of the Humboldt River). See Appendix C. Sage grouse are a BLM Sensitive Species. The burned area is within the Nouth Fork Sage Grouse Population Management Unit (PMU) in Northeastern Nevada considered under the Elko Strategy by the Northeastern Nevada Stewardship Group Inc (NNSG). The area affected by the Elburz 1 Fire provides summer and winter sage grouse habitat. Though this area is not crucial habitat, sage grouse have been observed by State and BLM biologists and the public during the summer, fall and winter.

Pygmy rabbits are found in a variety of vegetation types that include big sagebrush that are suitable for creating their burrow system. Observations in Nevada have been made over broad areas including those characterized by the basin big sagebrush vegetation types. These vegetation types were affected by the fire. Relative to the affected area, the highest likelihood of occurrence would be on sites that support big sagebrush that may be associated with meadows or former meadows or areas directly adjoining these areas.

There are nineteen raptor species present in the Elko District. All nineteen have the potential to utilize sagebrush habitats. Numerous golden eagles have been reported in the area of the Elburz 1 Fire.

# 3.2 ALTERNATIVE TO THE PROPOSED ACTION

#### 3.2.1 NO ACTION ALTERNATIVE

The description of the affected environment for the No Action Alternative would be the same as that for the proposed action. However, differences that may occur to the affected environment would be the result of natural processes and the invasion of nonnative plant species. The area may experience increased erosion, which could cause increased sedimentation to the North Fork of the Humboldt River and Humboldt River. Water Quality in the North Fork of the Humboldt River may become more degraded.

## CHAPTER 4 ENVIRONMENTAL CONSEQUENCES

### 4.1.1 AIR QUALITY

Localized blowing ash and soil would occur until the burned soil surface receives enough soil moisture to prevent it from blowing, a physical soil crust forms, or vegetation is reestablished. Treatments which disturb the soil surface would contribute further to wind erosion; however, rest from grazing for a minimum of two growing seasons or until establishment objectives are met and successful revegetation would reduce future fugitive dust emissions to pre-burn conditions.

Wind erosion and blowing ash can increase Particulate Matter #10 (PM 10) emissions, decreasing visibility in the local area. Due to the limited size of the fire, the PM 10 air quality standard should not be exceeded, nor should an impact occur to the Class I area at Jarbidge.

#### 4.1.2 LIVESTOCK GRAZING

The fire impacted 9,613 acres within the Halleck FFR. In order to allow the burned and seeded vegetation to successfully establish, livestock grazing would be removed from the burned area within the Halleck FFR for a minimum of two growing seasons allowing an adequate amount of time to allow the seeded vegetation to establish and natural regrowth and reestablishment to occur.

Closure of the burned area to livestock grazing would result in a temporary reduction in AUMs on the Halleck FFR. This suspension of a portion of the active grazing use would occur for a minimum of two growing seasons or until establishment objectives are met.

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 invasive, nonnative and noxious weed infestations. 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 the grazing permittee for the Halleck FFR.

#### 4.1.3 MIGRATORY BIRDS

No adverse impacts have been identified as a result of the implementation of the proposed action.

The direct impacts to migratory birds are the loss of habitat for nesting. There are major concerns regarding the temporary to long term loss of the shrub component on migratory bird seasonal use areas. The temporary loss, and sometimes long term or permanent loss, of cover on migratory bird habitat is a critical limiting factor for those species that utilize habitats on a seasonal or yearlong basis that existed with a brush component prior to the fire.

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. Basin big sagebrush was negatively impacted by the fire. Basin big sagebrush vegetation types generally do not naturally respond well to complete shrub loss in block-burn configurations. Though intact stands still exist in the interior of the bun which would aid in natural reseeding, Basin big sagebrush seed banks (viable residual seed dispersed last fall and winter) were likely lost as a result of the fire within the large blocks. Recruitment would be slow from intact stands without rehabilitation. The proposed seed mixture would help to provide wildlife cover and forage and help to minimize the reestablishment of exotic annual plants such as cheatgrass. This mixture would also help allow for any natural reestablishment of shrubs on the burned area. The seeding proposal should provide beneficial impacts to migratory bird species by restoring habitat and is consistent with the conservation measures listed in Section 3(e) of the President's Migratory Bird Executive Order.

Some shrub species associated with mixed salt desert scrub habitat would likely sprout from root crowns after the fire. There is no known estimate of what percentage of given species would sprout for the affected area although it can take one or more years for sprouting to occur. The low burn severity and record high moisture levels received for Northern Nevada from Fall 2005 to Spring 2006 increases the potential for sprouting.

## 4.1.4 NONNATIVE INVASIVE PLANT SPECIES

Hoary cress, Scotch thistle and cheatgrass are present within the burn perimeter. These species are found primarily along the roads and in upland range sites. Because the plant community had a moderate weed component prior to the burn, there is greater potential for these weed species to become more widely established. This potential is the result of a loss of native vegetation and disturbance from suppression activities. Spread of these weeds can reduce forage for native ungulates, increase erosion potential, and reduce the fire return interval. Weed detection inventories, and the treatment of weeds, along with other rehabilitation and stabilization efforts, would minimize the negative impacts of noxious and invasive weed establishment.

It is expected that infestations of these plant species exist elsewhere within and adjacent to the burn. More infestations may be detected as plants recover from the fire or establish from spread seeds. Nonnative invasive plant species and noxious weeds are invasive by nature and would continue to spread rapidly through the burned area and increase in density unless treated. Dozers were used to construct fire line and have the potential to spread noxious weeds.

The Elburz 1 Fire set back the successional processes of many mid to late seral plant communities. The loss of perennial vegetation allows for the encroachment of nonnative invasive plant species, such as cheatgrass. The burned area provides window of opportunity or niche for nonnative invasive plants such as cheatgrass to establish. Cheatgrass is a highly invasive undesirable species that thrives across the Great Basin due to its competitive nature and ability to create monocultures and less diversity in the landscape. The shallow root systems increase erosion potentials and decrease watershed health and function. Cheatgrass has low nutritional value for livestock and wildlife, which negatively impacts critical wildlife habitat. It is a fine flashy fuel that increases fire frequencies.

# 4.1.5 SOILS

The majority of the Elburz 1 fire burned with low burn severity. A low burn severity consumes vegetation above the soil surface but leaves sufficient vegetation and litter on the ground to intercept raindrops and aid in infiltration. Vegetation is expected to recover completely within one year of a low severity fire. Abundant physical and biological soil crusts would aid in this recovery by providing nutrients and stability.

Soils within the Elburz 1 fire could experience increased wind, sheet, and gully erosion where vegetative cover or biologic soil crusts have been removed. This erosion could result in loss of soil productivity and susceptibility to weed invasion. Seeding of areas where vegetation has been removed would provide soil stability and accelerate recovery. Closing the burn area to grazing along with weed treatment and monitoring would provide ample time for vegetation to grow and for soils to stabilize reducing the risk of erosion.

# 4.1.6 VEGETATION

Impacts to vegetation include the elimination of vegetation as a result of fire. Other impacts include covering unburned vegetation with ash, soil and dust. In the moderate burn intensity areas, seed within the soils have either been consumed or the intense heat has significantly reduced viability. In the low burn intensity areas, seed banks may have been impacted as well but to a much lesser degree. Where the plant root mass remains undamaged by the fire, regeneration is expected to occur. In the areas where the soil was abundantly covered with seed and other unburned litter, natural regeneration is expected to occur. In many areas throughout the burn areas, fire intensities were high enough to consume and kill many of the brush species, such as Basin big sagebrush and big sagebrush. Shrubs such as Basin big sagebrush and big sagebrush don't respond well to a fire, which reduces the potential for plant regeneration and viability of the native seed stock.

Loss of the shrub species in the plant community has destroyed the vegetation structure and altered the makeup of the wildlife habitat. Shrubs, particularly the browse species, provide high protein food during the summer and winter for mule deer and pronghorn antelope. Another impact to wildlife from the loss of vegetation is the lack of cover for sage grouse and other birds. Vegetative cover is used for protection from the weather as well as for nesting.

The proposed seed mixture provides a balance between stabilizing the site and still allow for any natural reestablishment of native grasses, forbs, and shrubs on the burned area where possible. Successful seeding of the burned area as proposed would help reduce or eliminate impacts to vegetation resulting from the fire. Closing the burn area to grazing would allow for the natural reestablishment of the plant species, which would reduce the impacts to vegetation.

# 4.1.7 VISUAL RESOURCES

Both the fire itself and fire suppression activities have resulted in visual impacts to the area. The proposed action would improve the color, form and texture of visual resources in the area by increasing the vegetative diversity of the area through the establishment of a mix of perennial vegetation. This perennial vegetation would change the texture from uniform and fine to more patchy and coarse. Both form and color would be more varied with the different vegetative types. Once perennial vegetation is established, the project area would more closely approximate the color, form and texture of the native vegetation that existed previous to the fire. Revegetation efforts are designed to restore the area to a more characteristic landscape without attracting undue attention, which would help to alleviate the existing visual contrasts.

Stabilization and rehabilitation activities would attract attention but these would be temporary. The results from these activities would not dominate the view of the casual observer and would repeat the basic elements found in the predominant natural features of the landscape. Changes caused by stabilization and rehabilitation activities would be subordinate to the existing landscape. Therefore, Class III and IV visual resource management objectives would be met.

# 4.1.8 WATER QUALITY (SURFACE)

Humboldt River and North Fork Humboldt River could experience negative impacts to water quality as ash and sediment are discharged from the burned area. Ash can raise the pH in streams, but typically this occurs following the first few precipitation events and does not persist. Additional sediment carried into the Humboldt River and North Fork of the Humboldt River would also occur until the vegetation is successfully reestablished. Grazing closure and dozer line seeding would lessen the likelihood of negative impacts to Humboldt River and North Fork Humboldt River water quality.

# 4.1.9 WILDLIFE AND SPECIAL STATUS SPECIES

No adverse impacts have been identified as a result of the implementation of the proposed action.

The direct impacts to wildlife are the loss of habitat, including forage and cover. There are major concerns regarding the temporary to long term loss of the shrub component on mule deer and pronghorn antelope seasonal use areas for the affected herds. The direct impacts to wildlife are the loss of habitat, including forage and cover. The temporary loss, and sometimes long term or permanent loss, of cover and forage on crucial big game range is a critical limiting factor for affected mule deer and pronghorn antelope herds.

The area is at risk of large scale wildfires and habitat fragmentation that could jeopardize sage grouse habitat and populations. One primary concern for sage grouse are wildland fires that result in the complete loss of habitat over large areas. Although the suspected causes of sage grouse decline are numerous loss of habitat, including loss by fire, ranks at the top of the list. As described in the impacts to migratory birds, the greatest threat to sagebrush-dependent species is type conversion of sagebrush communities. Maintaining complete, diverse sagebrush communities is integral to conservation efforts for these species. The proposed seed mixture would help to provide cover and forage for wildlife, including sage grouse, perching birds, and mammals, as well as, that for prey species of Special Status Species raptors and bats. It would help to minimize establishment of noxious weeds, and reestablishment of exotic annual plants such as cheatgrass. The Proposed Action would also allow for any natural reestablishment of shrubs on the burned area.

Sagebrush is needed for forage and cover, and ecological site dynamics. Successful seeding and natural revegetation of the burned areas would reduce or eliminate the impacts to wildlife by restoring forage and cover.

# 4.2 ALTERNATIVE TO THE PROPOSED ACTION

## 4.2.1 NO ACTION ALTERNATIVE

Implementation of the No Action Alternative would result in the denial of the proposed action. Impacts resulting from the No Action Alternative would include the spread of annuals, such as cheatgrass, and noxious weeds, such as hoary cress and Scotch thistle. These species are already present and would continue to increase in density. The burned area would not be closed to grazing, which would not allow for undamaged plant species time to reestablish. It would also allow for other nonnative invasive plant and noxious weed species that are transported on vehicles to gain a niche to get established. A major concern is that nonnative invasive species and noxious weeds that currently are not present in the area may appear in the burned area. The identified adverse impacts to the resources would still be applicable. Until the establishment of a shrub component into the vegetation community, wildlife would continue to lack a vegetative cover as a component of the habitat.

Localized blowing ash and soil would occur until the burned soil surface receives enough soil moisture to prevent it from blowing, a physical soil crust forms, or vegetation is reestablished. Wind erosion and blowing ash can increase Particulate Matter #10 (PM 10) emissions, decreasing visibility in the local area. Due to the limited size of the fire, the PM 10 air quality standard should not be exceeded, nor should an impact occur to the Class I area at Jarbidge.

Soils that had low burn severity would have accelerated sheet, wind and water erosion in the short term until the vegetation naturally recovers or the soil forms a crust. Soils that have a well developed biologic soil crust and microtopography would allow adequate infiltration from low intensity precipitation events. The impact to soils would be greatest from high intensity precipitation events.

Areas that had moderate or high burn severity are at risk of being revegetated with cheatgrass and other undesirable species. These species do not provide adequate soil stabilization and would experience long term accelerated erosion. The risk of large future fires would also increase.

Water quality in the North Fork of the Humboldt River and Humboldt River could be affected in the short term by large runoff events originating from the burned area, which would carry ash and sediment. Ash typically moves into the water soon after the fire, either by wind or runoff, and raises the pH of water. Sediment laden runoff could cause degradation of water quality in the North Fork of the Humboldt River and the Humboldt River, and the impact could persist for several years. If more annual and invasive, nonnative species occupy the burn, less soil stabilization would occur and soils would experience permanent higher runoff rates and sheet erosion.

# 4.3 RESIDUAL IMPACTS

Residual impacts resulting from the proposed action would include the spread of annuals, such as cheatgrass, nonnative invasive plant species and noxious weeds. In the event that cheatgrass and nonnative invasive plant species or noxious weeds would increase in density to the point of eradicating the native vegetation, the AUMs for the Halleck FFR could be reduced or lost. Soil erosion could increase, which would increase sedimentation to the North Fork of the Humboldt River and the Humboldt River.

# 4.4 CUMULATIVE IMPACTS

All resource values have been evaluated for cumulative impacts. Cumulative effects are the environmental impacts resulting from the incremental impacts of a proposed action, when added to other past, present, and reasonably foreseeable future actions, both federal and nonfederal. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. The emergency stabilization and rehabilitation treatments for the Elburz 1 Fire, as proposed in the stabilization and rehabilitation plans, do not result in an intensity of impact (i.e. major ground disturbance) that would cumulatively constitute a significant impact on the quality of the environment. Cumulative impacts for proposed Emergency Stabilization and rehabilitation treatments are discussed in the programmatic FY 2000 Normal Fire Rehabilitation Plan Environmental Assessment (NFRPEA) BLM/EK/PL-2000/037, which is available for review at the BLM, Elko Field Office. A three year reasonably foreseeable timeframe was used since this is the maximum timeframe for the implementation and monitoring of emergency stabilization and rehabilitation plans.

The geographic area included in the cumulative impacts assessment is the location of the Elburz 1 Fire for the vegetation and soil resources and the Halleck FFR for livestock grazing. The geographic area for the wildlife is the Nevada Division of Wildlife (NDOW) Management Area Seven. The land uses evaluated that may create cumulative impacts to the resources in or affected by the Elburz 1 Fire, include livestock grazing, mineral exploration, recreation and fire. Livestock grazing, recreation, and fire have occurred for several years in the past to the present, and are expected to occur in the future. The Elburz 1 Fire would be closed to livestock grazing for a minimum of two growing seasons or until vegetation establishment objectives are met.

Within the fire perimeter impacts to vegetation and soils have resulted in the past and present from livestock grazing, recreation, mineral exploration and fire. Surface disturbances within and adjacent to the burn area have been created by the installation of fences and range improvements that are associated with livestock grazing. Records show mineral exploration for locatable minerals occurred in the past (1981 to 2001) in the northeast and northwest portions of the fire. Surface disturbance created by exploration activities included construction of roads, drill sites, and trenches. Reclamation of surface disturbance created by mineral exploration would have been completed to the standards at the time. No mineral exploration is occurring in the area at this time. Roads have been created within and adjacent to the burn area that are associated with various activities. Dozerlines have been created and used in the fire suppression tactics. Soil disturbing activities can cause changes to soil characteristics, such as pulverization or mixing of soil layers, removal of soil either by wind or water erosion, removal or destruction of biologic soil crusts, and composition changes when soils become hydrophobic as a result of heat from fires. Changes in the soil characteristics can result in changes to vegetation types and communities. Cumulative impacts to soils may be short term, lasting until soil crusts or vegetation reestablishment occurs or long term due to physical changes and natural elements, such as weathering and erosion.

Throughout NDOW Management Area Seven wildland fires have occurred ranging in size from small (less than 40 acres) to large catastrophic fires that consume vast amounts of land. Large portions of the wildfires that have occurred in Elko County from 1980 to 2005 within 20 miles of the Elburz 1 Fire perimeter have been seeded with Wyoming and big sagebrush and at the present have various degrees of reestablishment. This has helped provide cover and forage for approximately 250 wildlife species, including mule deer, which utilize sagebrush habitat types on a seasonal or yearlong basis. However, the Elburz 1 Fire has exacerbated the present limited availability of shrub cover on a collective intermediate and winter range and migration corridors for the affected mule deer herd. The availability of adequate cover and forage provided by shrubs is presently considered to be a limiting factor for the affected mule deer herds when considering the wildfire-affected portions of winter, intermediate range and migration corridors on the nearby 2,496 acre Sheep Fire in 2000, 14,002 acre Isolated Fire in 2001, 19,578 acre Stag Mountain Fire in 2001, and 7,461 acre Sherman Fire in 2005. Although the 2005 Chance Fire is located in NDOW herd management area ten, it is located within 20 miles south of the Elburz 1 Fire; it burn 23,749 acres. These wildfire burn areas have prior approved emergency stabilization and rehabilitation plans that included big sagebrush seeding efforts that presently provide limited cover and forage as part of mule deer intermediate range and migration corridors.

The communities of Ryndon, located to the southwest of the fire, and Elburz, located to the south of the fire, are growing communities. As the result of the Glazer Land Exchange the land status within the fire perimeter is mostly private. Urban development would increase surface disturbance within the fire perimeter, which would cause changes over time to the soils and vegetation type. Wildlife habitat in the area would be impacted by the growth of the communities and urban development as it dwindles in size. Other impacts to wildlife would be obstructions such as, but not limited to, more roads, houses, and fences.

Greater sage grouse populations would continue to decline without reestablishment of the sagebrush component. The stabilization and rehabilitation actions taking place on the various fires throughout the area are helping to slow this population loss, but the fact that the fires have removed sagebrush in vast adjacent areas has negatively affected sage grouse and may continue to do so into the future.

Impacts to wildlife include, but are not limited, to the loss or alteration of forage and cover. Wildlife may be displaced and avoid areas once inhabited due to the loss or alteration of forage and cover, migration routes may shift. Due to lack of food, especially during the winter months, starvation may occur.

Cumulative impacts to vegetation can include changes in vegetation types and communities. Establishment of nonnative invasive plant or noxious weed species or annuals such as cheatgrass can change the characteristics of a vegetation type or community by replacing and eliminating native species from the plant community. Seedings may or may not change the characteristics of the vegetation type or community dependant upon the plant species included in the seed mixture that is being planted. Seedings may be used to reestablish native species that have been lost as a result of fire or introduce new species, native or nonnative, to the vegetation type in order to compete with nonnative invasive plant or noxious weed species in order to help restore a productive, diverse and sustainable vegetation community. Changes in vegetation type and plant communities can result in other impacts such as the loss of vegetation for livestock grazing and loss or alteration of habitat, including forage and cover, for wildlife.

Over the years wildland fires have occurred in the vicinity of the Elburz 1 Fire, throughout the Halleck FFR Allotment and within the NDOW Management Area Seven. Since 1980 wildland fires in the area (20 mile radius) of the Elburz 1 Fire have ranged from small fires less than 40 acres in size to large fires, such as the 2000 Sheep Fire, which burned approximately 2,496 acres; 2001 Isolated Fire, which burned approximately 14,002 acres; 2001 Stag Mountain Fire, which burned approximately 19,578 acres; 2005 Sherman Fire, which burned approximately 7,461 acres; the 2005 Chance Fire, which burned approximately 23,749 acres; the 2006 Gopher Fire, which burned approximately 32,566 acres, the 2006 Charleston Fire, which burned approximately 149,245 acres; and the 2006 Mudd Fire, which burned approximately 13,456 acres. Fire history illustrates that within a five mile radius of the Elburz 1 Fire approximately ten fires have occurred since 1980. According to the 2004 Fire Management Amendment to the Elko and Wells Resource Management Plans, the Elko District has experienced large fires over the last 5 years (1999-2003) with 1999 being the most active year. The 2006 fire season may increase the cumulative impacts to the various resources dependant upon the amount of land burned. As of September 10, 2006, approximately 946,363 acres of rangeland, primarily on public lands, have been affected by wildland fires on the Elko District in 2006. Annual changes in fire occurrence consist of factors such as fuel loads, change in vegetation, and climatic conditions. Wildland fire ignitions are primarily the result of lightning strikes but may also be caused by humans. Wildland fire may impact soils dependant upon the temperatures of the fire. Soils may burn or become hydrophobic. The primary resource impacted by wildland fires is vegetation. Impacts to vegetation are also dependant upon the temperatures of the fire, which are relative to several factors such as fuel types. Impacts may include, but are not limited to, changes in successional stages of vegetation communities, alteration of habitats for wildlife, and modification of fuel loading.

#### 4.5 MONITORING

Monitoring would be conducted on the proposed action each year following treatment (2007-2009) to determine the success of revegetation and/or stabilization efforts. Specific monitoring method(s) used would depend on the establishment objectives developed. For example, if the establishment objective is three seeded plants firmly rooted per square meter, utilize a modified "freqdens" technique or similar BLM established method for seeded areas. If the establishment objective is herbaceous production equal to or greater than herbaceous production of a comparable unburned range site, use production/site composition methods and/or density for areas managed for natural release. A resource specialist from the Elko Field Office would provide program oversight for this specification.

Post-treatment monitoring studies would be conducted to evaluate the effectiveness of the proposed treatments or to determine if additional treatments are needed, and to determine the time frame for re-opening lands for grazing. The monitoring results would be documented in the project file at the BLM, Elko Field Office.

# CHAPTER 5 CONSULTATION AND COORDINATION

#### 5.1 LIST OF PREPARERS

Janice Stadelman	NEPA Coordination	
Tom Warren	Fire Stabilization & Rehabilitation Manager, Project Lead	
James Harmening	Operations/Specifications	
Mark Dean	Soils, Water, Air, Resource Advisor	
Mark Coca	Nonnative Invasive Weed Species	

Cultural Resources
Vegetation, Livestock Grazing
Migratory Birds, T&E, Wildlife
Visual Resources, Recreation
Native American Consultation

#### 5.2 PERSONS, GROUPS, OR AGENCIES CONSULTED

Livestock Grazing Permittees Glaser Land & Livestock Company

<u>Nevada Division of Wildlife, Elko Nevada</u> Steve Foree, Senior Habitat Biologist Ken Gray, Wildlife Biologist

Nevada Division of Forestry Dennis Walker

#### 5.3 NATIVE AMERICAN CONSULTATION

No known Traditional Cultural Properties or other areas having traditional or religious significance are present within or near the Elburz 1 Fire. Most often, the Tribes support the emergency stabilization and rehabilitation efforts. However, they are concerned that the fires open up areas for looters and vandalism of cultural resource sites, since artifacts are exposed and easier to see on a black landscape. Monitoring of cultural sites within the burned areas should be done on a regular basis for their protection.

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.

To date, no known impacts have been identified or would occur to Traditional Cultural Properties or other areas having traditional or religious significance as a result of the implementation of the proposed action. Native American Consultation is ongoing. When 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.

#### CHAPTER 6 REFERENCES

- Bureau of Land Management, 1987. Elko Resource Area Draft Resource Management Plan and Environmental Impact Statement. US Department of the Interior, Bureau of Land Management, Elko District Office.
- Bureau of Land Management, 1986. BLM Manual Handbook 8410-1, Visual Resource Inventories. US Department of the Interior, Bureau of Land Management, January 17, 1986.
- Bureau of Land Management, 1987. Elko Resource Management Plan Record of Decision. US Department of the Interior, Bureau of Land Management, Elko District Office.
- Bureau of Land Management, 1988. National Environmental Policy Act Handbook H-1790-1. US Department of the Interior, Bureau of Land Management, October 25, 1988.
- Bureau of Land Management, 2000. FY2000 Normal Fire Rehabilitation Plan Environmental Assessment (BLM/EK/PL-2000-037). US Department of the Interior, Bureau of Land Management, Elko Field Office, Elko, Nevada.

- Bureau of Land Management, 2006. Draft Bureau of Land Management Emergency Stabilization and Rehabilitation Plan Formats. US Department of the Interior, Bureau of Land Management.
- U.S.D.A. Natural Resources Conservation Service, 1997. Soil Survey of Elko County, Nevada, Central Part.
- U.S.D.I. Bureau of Land Management and U.S. Geological Survey, 2001. "Biological Soil Crusts: Ecology and Management". Technical Reference 1730-2.
- W.R.C.C. Western Regional Climate Center <u>Http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?nvcont</u>

# APPENDIX A Migratory Birds by Habitat Type Nevada Partners in Flight Bird Conservation Plan Elko District Ecotypes

Pinyon/ Juniper	Sagebrush	Salt Desert Scrub
Pinyon Jay	Cooper's Hawk	Lewis' Woodpecker
Gray Vireo	Lewis' Woodpecker	Phainopepla
Juniper Titmouse	Red-naped Sapsucker	Western Bluebird
Black-throated Gray Warbler	Sage Grouse	Lucy's Warbler
Ferruginous Hawk	Ferruginous Hawk	Loggerhead Shrike
Gray Flycatcher	Sage Sparrow	Burrowing Owl
Western Bluebird	Sage Thrasher	
Virginia's Warbler	Vesper Sparrow	
Scott's Oriole	Gray Flycatcher	
	Burrowing Owl	
	Loggerhead Shrike	
	Black Rosy Finch	
	Calliope Hummingbird	
	Prairie Falcon	
	Swainson's Hawk	

#### APPENDIX B Wildlife Species List Lower Sagebrush/Grassland Steppe, Northeastern Nevada

[Note: This is a partial list emphasizing upland habitat areas]

#### <u>Birds</u>

Turkey Vulture Bald Eagle Northern Harrier Swainson's Hawk Red-tailed Hawk Ferruginous Hawk Rough-legged Hawk Golden Eagle American Kestrel Merlin Prairie Falcon Cray Partridge Chukar Sage Grouse Mourning Dove Great Horned Owl Burrowing Owl Short-eared Owl Common Nighthawk Broad-tailed Hummingbird Northern Flicker Gray Flycatcher Ash-throated Flycatcher Say's Phoebe Western Kingbird Horned bark Barn Swallow Black-billed Magpie American Crow Common Raven Rock Wren Mountain Bluebird American Robin Sage Thrasher Loggerhead Shrike Northern Shrike European Starling Brewer's Sparrow Vesper Sparrow Lark Sparrow White-crowned Sparrow Lapland Longspur Red-winged Blackbird Western Meadowlark Brewer's Blackbird Brown-headed Cowbird Black Rosy Finch Gray-crowned Rosy Finch House Sparrow

Cathartes aura Haliaetus leucocephalus Circus cyaneus Buteo swainsoni Buteo jamaicensis Buteo regalis Buteo lagopus Aquila chrysaetos Falco sparverius Falco columbarius Falco mexicanus Perdix perdix Alectoris chukar Centrocercus urophasianus Zenaida macroura Bubo virginianus Athene cunicularia Asio flammeus Chordeiles minor Selasphorus platycercus Colaptes auratus Epidonax wrightii Myiarchus cinerascens Sayornis saya Tyrannus verticalis Eremophila alpestris Hirundo rustica Pica pica Corvus brachyrhynchos Corvus corax Salpinctes obsoletus Sialia currucoides Turdus migratorius Oreoscoptes montanus Lanius ludovicianus Lanius excubitor Sturnus vulgaris Pooecetes gramineus Chondestes grammacus Amphispiza belli Zonotrichia leucophrys Calcarius lapponicus Agelaius phoeniceus Sturnella neglecta Euphagus cyanocephalus Molothrus ater Leucosticte atrata Leucosticte tephrocotis Passer domesticus

#### Mammals Little Brown Bat

Long-eared Myotis Long-legged Myotis Small-footed Myotis Silver-haired Bat Western Pipistrelle Big Brown Bat Townsend's Big-eared Bat Brazilian Free-tailed Bat Black-tailed Jackrabbit Mountain Cottontail Pygmy Rabbit Townsend's Ground Squirrel Belding Ground Squirrel Least Chipmunk Botta's Pocket Gopher Northern Pocket Gopher Little Pocket Mouse Great Basin Pocket Mouse Dark Kangaroo Mouse Ord Kangaroo Rat Chisel-toothed Kangaroo Rat Deer Mouse Northern Grasshopper Mouse Desert Woodrat Sagebrush Vole House Mouse Kit Fox Coyote Long-tailed Weasel Badger Striped Skunk Mountain Lion Bobcat Mule Deer Pronghorn

#### <u>Reptiles</u>

Western Skink Western Whiptail Desert Collared Lizard Long-nosed Leopard Lizard Desert Spiny Lizard Sagebrush Lizard Western Fence Lizard Side-blotched Lizard Desert Horned Lizard Short-horned Lizard Long-nosed Snake Ground Snake Night Snake Gopher Snake Racer Striped Whipsnake Western Rattlesnake

Myotis lucifugus Myotis evotis Myotis volans Myotis ciliolabrum Lasionycteris noctivagan Pipistrellus hesperus Eptesicus fuscus Plecotus townsendii Tadarida brasiliensis Lepus californicus Sylvilagus nuttal1ii Sylvilagus idahoensis Spermophilus townsendii Spermophilus be1dingi Tamias minimus Thomomys bottae Thomomys talpoides Perognathus longimembris Perognathus parvus Microdipodops megacephalus Dipodomys ordii Dipodomys microps Peromyscus maniculatus Onychomys leucogaster Neotoma lepida Lemmiscus curtatus Mus musculus Vulpes macrotis Canis latrans Mustela frenata Taxidea taxus Mephitis mephitis Felix concolor Lvnx rufus Odocoileus hemionus Antilocapra americana

Eumeces skiltonianus Cnemidophorus tigrus Crotaphytus insularis Gambelia wislizenii Sceloporus magister Sceloporus graciosus Sceloporus cccidentalis Uta stansburiana Phrynosorna platyrhinos Phrynosorna douglassii Rhinocheilus lecontei Sonora semiannulata Hypsiglena torquata Pituophis melanoleucus Coluber constrictor Masticophis taeniatus Crotalus viridis

## APPENDIX C SENSITIVE SPECIES LISTING

#### Birds

Mountain plover (sensitive) American peregrine falcon (endangered) Bald eagle (threatened) Northern goshawk (sensitive) Western burrowing owl (sensitive) Ferruginous hawk (sensitive) Sage grouse (sensitive) Least bittern (sensitive) Columbia sharp-tailed grouse (sensitive) Mountain quail (sensitive) Flammulated owl (sensitive) Golden Eagle (sensitive)

#### Invertebrates

Mattoni's blue butterfly (sensitive) Nevada viceroy (sensitive) Grey's silverspot butterfly (sensitive)

#### Mammals

Pygmy rabbit (sensitive) Townsend's big-eared bat (sensitive) Spotted bat (sensitive) Brazilian free-tailed bat (sensitive) Hoary bat (sensitive) Pallid bat (sensitive) Silver-haired bat (sensitive) Western red bat (sensitive) Big brown bat (sensitive) Little brown myotis (sensitive) Small-footed myotis (sensitive) Long-eared myotis (sensitive) Fringed myotis (sensitive) Long-legged myotis (sensitive) Yuma myotis (sensitive) Occult myotis(sensitive) Western pipistrelle (sensitive) Preble's shrew (sensitive)

Charadrius montanus Falco peregrinus anatum Haliaeetus leucocephalus Accipiter gentilis Athene cunicularia hypugea Buteo regalis Centrocercus urophasianus Ixobrychus exilis hesperis Tympanuchus phasianellus columbianus Oreortyx pictus Otus flammeolus Aquila chrysaetos

Euphilotes rita mattoni Limenitus archippus lahontani Speyeria atlantis greyi

Brachylagus idahoensis Corynorhinus townsendii townsendii Euderma maculatum Tadarida brasiliensis Lasiurus cinereus Antrozous pallidus Lasionycteris noctivagans Lasiurus blossevillii Eptesicus fuscus Myotis lucifugus Myotis ciliolabrum Myotis evotis *Myotis thysanodes* Myotis volans Myotis yumanensis Myotis lucifugus occultus Pipistrellus hesperus Sorex preblei