

# White Pine County Wilderness Ground Disturbance Reclamation Plan



## Preliminary Environmental Assessment NV-040-08-17

Ely Field Office  
Bureau of Land Management  
February 2008



## **1. Background Information**

### **1.1. Introduction**

On December 20, 2006 President Bush signed the White Pine County Conservation, Recreation, and Development Act. This Act designated seven new BLM managed wilderness areas and expanded one other wilderness area in White Pine County, Nevada. See Map 1 on following page. An inventory of existing unauthorized disturbances, including vehicle routes closed by the wilderness legislation as well as small site disturbances, within 8 designated wildernesses has been completed by the Ely Bureau of Land Management Field Office. These disturbances do not meet the goals of keeping wilderness as wild and natural as possible. A wilderness is defined in part by the Wilderness Act as "...an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions...."

### **1.2. Need for the Proposal**

The need for the proposed action is to preserve and protect naturalness in designated Wilderness by reclaiming existing disturbances.

### **1.3. Relationship to Planning**

The proposed action has been analyzed within the scope of the following statutes, regulations and policy and has been found to be in compliance:

1964 Wilderness Act

1969 National Environmental Policy Act (NEPA)

1973 Endangered Species Act

Special Status Plant and Animal Species: It is BLM's policy to carry out management, consistent with the principles of multiple-use, for the conservation of Special Status Plant Species and their habitats. BLM will ensure that actions authorized, funded, or carried out do not contribute to the need to federally list any of the species as threatened or endangered.

1976 Federal Land Policy & Management Act

40 CFR Part 1500 (NEPA), 43 CFR Part 1600 (Planning)

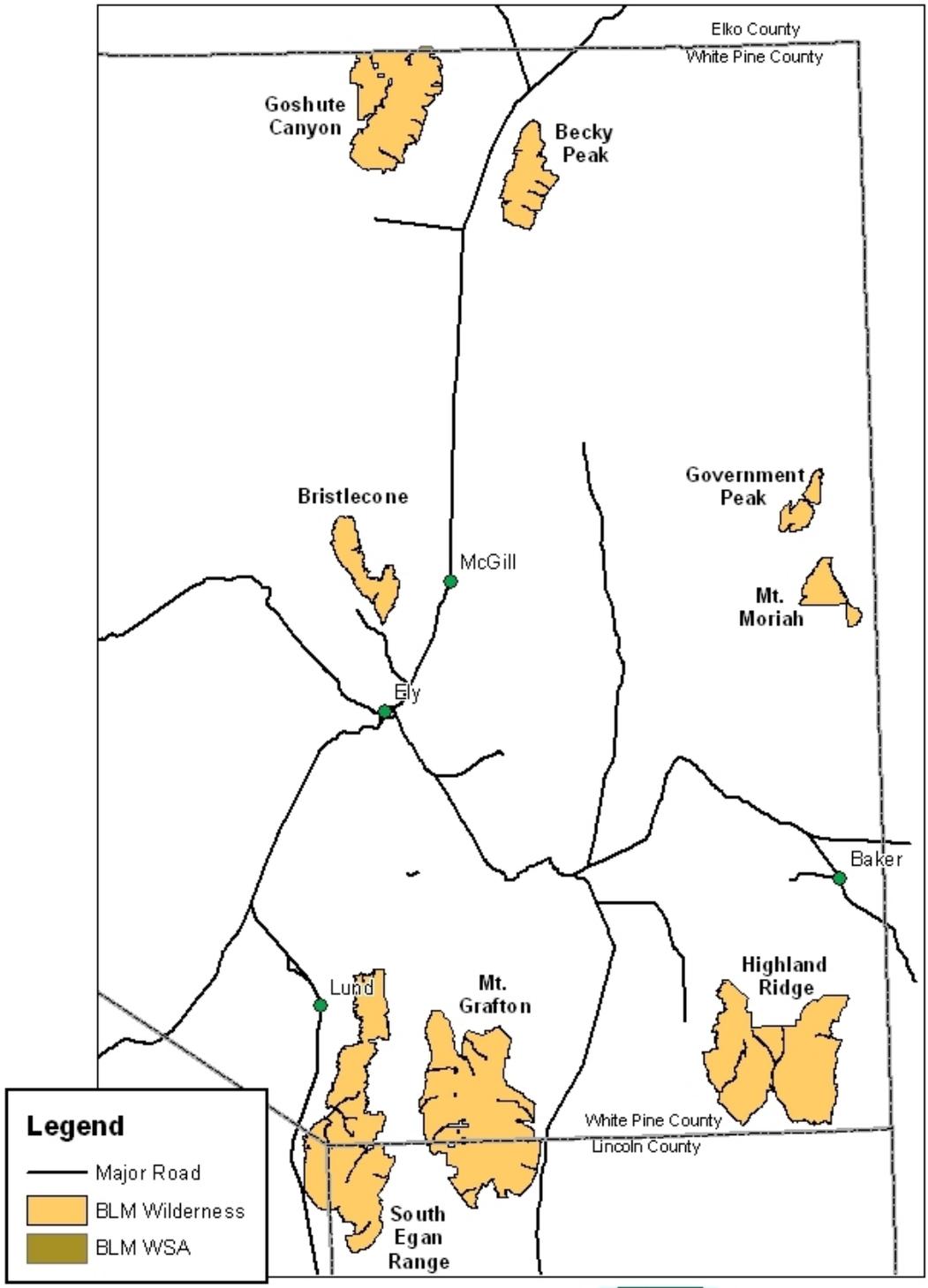
BLM MS 1790 (NEPA), 516 DM (Departmental Manual)/Handbook. H-1790-1 (NEPA)

43 CFR 6300 (Wilderness Management)

BLM Manual 8560, H-8560-1, 8561 (Wilderness Management)

White Pine County Conservation, Recreation, and Development Act of 2006

Map 1:  
White Pine County  
Wilderness Areas



**Legend**

- Major Road
- BLM Wilderness
- BLM WSA

No Warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.



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## **2. Description of Proposed Action and Alternatives**

### **2.1. Proposed Action**

Disturbance reclamation is proposed in all 8 designated Wildernesses in White Pine County. (Maps 2- 4 below.) These disturbances fall into two categories with common characteristics: vehicle routes closed to motorized travel by the Wilderness designation, and small site disturbances. There are approximately 191 miles of closed routes internal to the wilderness areas. Some of these may be rehabilitated completely; others will be converted to non-motorized trails. Additionally, there are several small site disturbances requiring moderate reclamation activities.

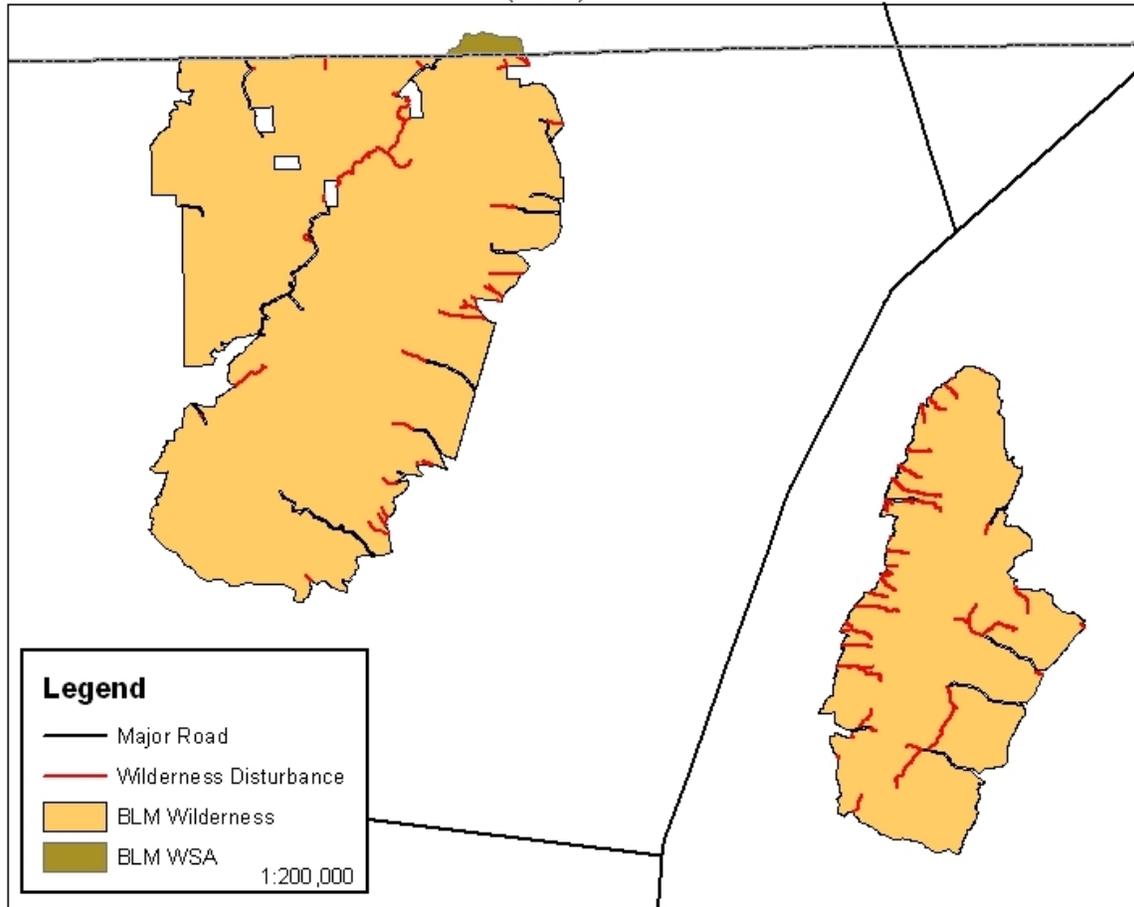
Due to the large amount of labor and funds required to reclaim disturbances, only those portions of the disturbances that are visible from outside the wilderness boundary will be reclaimed, initially. As funds permit, reclamation of the entire disturbance will be undertaken. Reclaiming the visible portions of the disturbances will reduce/eliminate further disturbances and the unreclaimed areas will naturally reclaim themselves over time. This action will not affect certain nonconforming but accepted uses or valid existing rights.

**Closed vehicle routes** are linear disturbances created by motorized vehicle traffic that are largely denuded of vegetation, some vegetation may occur along the center hump of the route. Soils in the route are compacted and subject to increased erosion. Decompaction, scarifying, recontouring, vertical mulching, erosion control, and vegetative restoration with native species and seed mixes would be utilized to reclaim closed vehicle routes. These reclamation methods are described further below, in Reclamation Activities. There are 191 miles of closed vehicle routes requiring some level of reclamation. See Maps 2 through 4.

**Small site disturbances** include abandoned, unused, dispersed campsites or parking areas. These small site disturbances are no larger than 0.5 acres, mostly denuded of vegetation and organic matter, compacted soils, and tend to have heavily impacted vegetation on the perimeter. These small site disturbances are all along vehicle routes inside wilderness. There are 5 known, small site disturbances requiring some level of reclamation. See Map 5. Decompaction, vertical mulching, and vegetative restoration would be used to reclaim small site disturbances.

Because the proposed action would take place within designated wilderness a minimum required decision/minimum tool analysis was conducted to determine if the action truly was required for the management of the areas as wilderness, and what methods of implementation would be the least impacting to the wilderness resource. The analysis can be found in Appendix A. This worksheet was developed by the Arthur Carhart Wilderness Training Center as a tool to assist Wilderness Managers in making appropriate decisions in Wilderness. The following are the methods that were determined to be the minimum tool for implementing the proposed action.

Map 2:  
Closed Vehicle Routes in  
White Pine County Wilderness Areas  
(North)



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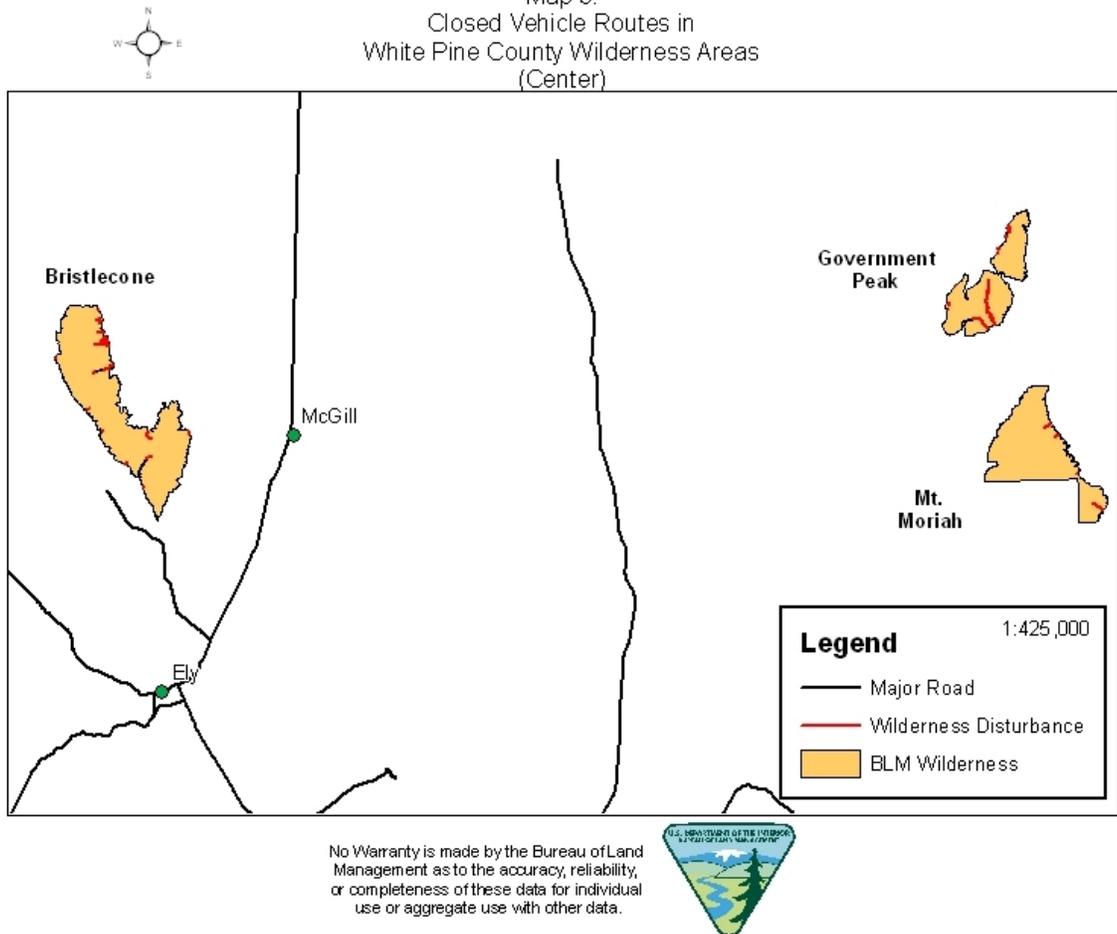


### 2.1.1 Reclamation Activities

Work would be completed by BLM staff and contractors with the assistance of volunteer hand crews. All reclamation activities will be subject to the Standard Operating Procedures in section 2.2.1. All actions in wilderness will be conducted with non-motorized equipment and non-mechanized transport. Actions would include and generally be conducted in the following order as needed:

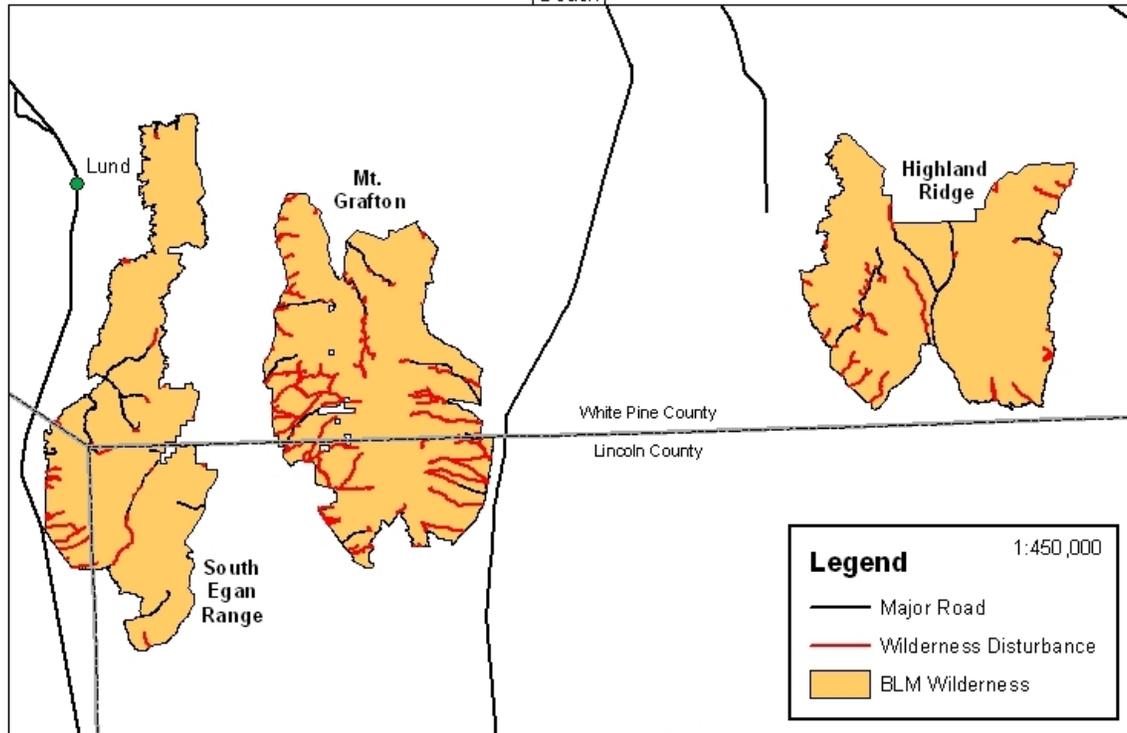
- (a) **Decompaction:** working the top few inches of the entire disturbed surface to relieve soil compaction. This action will be completed with the use of non-motorized hand tools (soil spades, spading forks, McCloud rakes, pulaskis, shovels, horse drawn implements, etc.).

Map 3:  
Closed Vehicle Routes in  
White Pine County Wilderness Areas  
(Center)



- (b) Scarifying/pitting: loosening and texturizing the impacted disturbed surface in random locations to better capture water, organic debris and wind-blown seeds, thereby stimulating natural revegetation. This will be done with non-motorized hand tools.
- (c) Recontouring: reconfiguring/shaping the route to blend it with the adjacent, and relatively undisturbed, landscape. This will involve the creation of small hummocks and banks, where appropriate, to mimic the surrounding landscape. Berms will be pulled in and the soil distributed across the disturbed surface. Vehicle tracks in sandy washes will be raked. This will lessen visual contrasts and provide a surface for natural revegetation. This action will be completed with non-motorized hand tools.

Map 4:  
Closed Vehicle Routes in  
White Pine County Wilderness Areas  
(South)



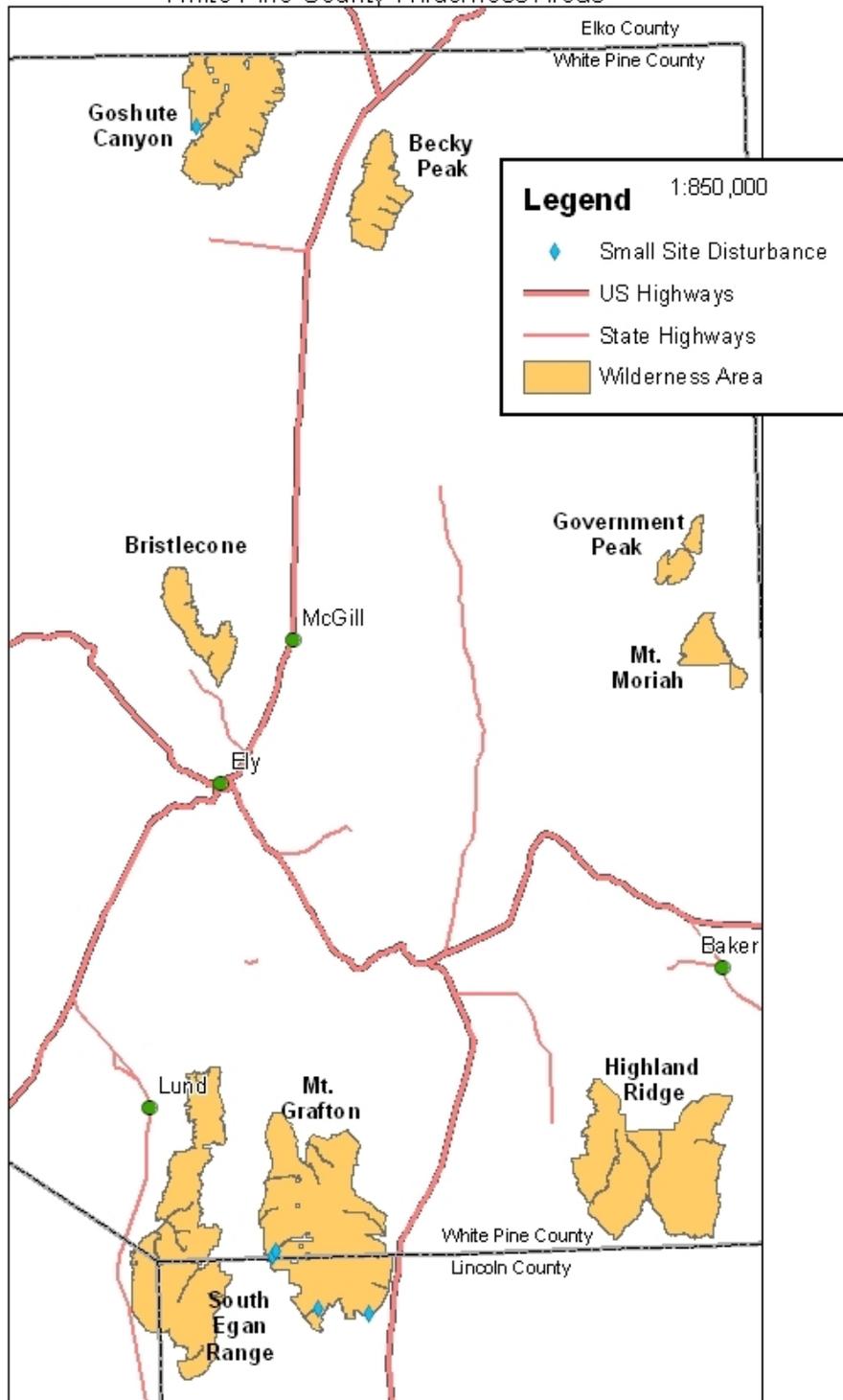
No Warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.



- (d) Vertical mulching: dead and down vegetation is "planted" to obscure the visible portions of the disturbance. Additional dead vegetation, rock material and other organic matter may be distributed over the worked surface to decrease visual contrasts, create sheltered sites to aid in natural revegetation and add organic debris. Dead and downed vegetation and other materials would be gathered from areas near to the disturbances by hand.
- (e) Erosion control: placing sterile weed free hay bales or creating light terracing/berms to reduce erosion and create barriers to vehicles on steep slopes. This is especially effective on hill climbs. The hay bales break down over time and provide additional organic debris to the reclamation site. Bales would be brought in by hand or horseback to the worksite.



Map 5:  
Small Site Disturbance in  
White Pine County Wilderness Areas



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- (f) Vegetative Restoration: This would involve planting, transplanting and/or seeding necessary to help stabilize soil, speed overall vegetative recovery and camouflage evidence of disturbances. All seed would be locally collected or native species scattered on reclaimed surfaces to accelerate natural revegetation. This action would be completed by non-motorized hand tools.
- (g) Barriers: In the event that closed routes are repeatedly driven over by motorized vehicles, temporary or permanent fences will be constructed outside of wilderness. These structures may range from temporary wire fences to permanent, post and rail, fences at trailheads.

### **2.1.2 Standard Operating Procedures - Additional Environmental Protection Measures**

This proposed action is further defined by the following Environmental Protection Measures that will serve as Standard Operating Procedures. All reclamation activities covered by this environmental assessment will be performed in full compliance with these Standard Operating Procedures.

- (a) Reclamation activities will be conducted on lands administered by the Bureau of Land Management, and potentially on private lands with landowner permission and cooperation.
- (b) A migratory bird survey will occur on disturbances where reclamation work would be conducted during the spring nesting season for migratory birds (May 1<sup>st</sup> through July 15<sup>th</sup>). If nesting sites are found in the immediate vicinity of the work site, reclamation activities on that route would be postponed until the end of the nesting season.
- (c) The proposed action is categorically exempt from cultural inventory under Appendix C #2 of the State Protocol Agreement between Nevada BLM and the Nevada State of Nevada's State Historic Preservation Office (SHPO). Further, in compliance with the State Protocol Agreement between the Bureau of Land Management and the State of Nevada's State Historic Preservation Office, if during project implementation the undertaking may effect or has effected a previously unidentified property that may be eligible for the National Register, the BLM will ensure that all activities associated with the undertaking, within 100 meters of the discovery are halted, the BLM Archaeologist is contacted and the discovery is appropriately protected, until the BLM Authorized Office issues and Notice to Proceed (NTP).
- (d) Conservation crews, volunteers and any agency personnel assisting in reclamation activities will be oriented in the use of tools and equipment as well as any special wildlife, plant, cultural and wilderness resources and will be informed of the locations of wilderness boundaries. Crew, volunteers and personnel will all be provided with Cultural observation reports prior to reclamation activities.

- (e) All vehicles will be limited to designated and existing roads outside of designated Wilderness. All vehicles and all other project equipment will be cleaned and inspected prior to entering project areas. The cleaning will concentrate on the undercarriage, with special emphasis on axels, frame, cross members, motor mounts, and on underneath steps, running boards, and front bumper/brush guard assemblies. Vehicle cabs will be swept out and refuse will be disposed of in waste receptacles.

### **2.1.3 Maintenance**

Reclamation actions would need to be maintained. Natural or human-caused destruction of reclamation actions may occur. Continued unauthorized motorized vehicle use of reclaimed routes may also occur. Reclamation actions would be re-implemented as necessary on a case-by-case basis, using the standard operating procedures and operational parameters established in this environmental assessment.

### **2.1.4 Monitoring**

The Bureau of Land Management will monitor disturbances for any increased unauthorized uses and associated impacts. To assess the need for any additional reclamation work, photo points would be established at the time of reclamation and photos would be taken of the disturbance annually. BLM personnel, volunteers or Conservation Crew members will conduct monitoring in the spring and fall using digital cameras and global positioning (GPS) units.

## **2.2 No Action Alternative**

Active reclamation of routes within the 8 wilderness areas would not occur. Signing of closed routes would continue, as would law enforcement and public education.

**Closed vehicle routes** would be managed through placement of signs and physical barriers outside of the Wilderness boundary.

**Small site disturbances** include abandoned, unused, dispersed campsites or parking areas would be left to reclaim naturally.

## **2.3 Alternatives considered but eliminated from detailed analysis**

The use of motorized vehicles and tools was considered for implementation of the proposed action. Although this would be a faster method of accomplishing reclamation, this alternative was dropped from detailed analysis because it was not the minimum tool for administration of the wilderness areas.

## **2.4 Other Alternatives**

Other action alternatives were determined unnecessary to respond to unresolved conflicts concerning alternative uses of available resources.

### **3. Description of the Affected Environment**

The eight wilderness areas covered by the proposed action are located in White Pine County, with overlap into Lincoln and Nye counties, in the Great Basin Desert. White Pine County is large but with few people (approximately 10,000 persons in the county). The total area of the county is 8,895 square miles (larger than the state of New Jersey). Numerous mountain ranges run north-south through the county, with the highest point in the county being Wheeler Peak (13,065 feet) in the Snake Range. Two of the wilderness areas overlap into both Nye and Lincoln Counties, though the majority of the wilderness areas considered in this plan lie in White Pine County.

In the region of the wilderness areas, the BLM manages 79.4% of the land; of which 6.3% is designated BLM Wilderness. Additionally, the US Forest Service manages 13.5% of the land, and 4.1% is privately owned. The remaining 3% is divided primarily amongst the National Park Service, the State of Nevada, Bureau of Indian Affairs, and the US Fish & Wildlife Service.

The wilderness areas are geographically within the Great Basin ecoregion. The Great Basin is the term coined for the “vast sink in the American West corralled between the Sierra Nevada Range of California to the west and the Wasatch Range (of the Rocky Mountains) to the east, and between the Mojave Desert to the south and the Snake River Plain of southern Idaho to the north” (Blackwell, 2006). The influence of these boundary ranges can be seen most strikingly in the area’s flora and fauna. Much of the plant life in the eastern Great Basin can be attributed to the Rockies or the Mojave, with pockets of unique varieties of plants. As one wise person once stated: the area should not be judged solely upon its valleys of monotonous sagebrush; pockets of trees and wildflowers offer great reprieve from the intensely scorching desert sun (Lanner, 1983).

The wilderness areas covered in this plan are generally comprised of a mountainous ridgeline toward the center of the wilderness area with lower elevations at the edges. Consequently, the steep, dramatic mountains characteristic of the White Pine County wilderness areas contain many of the disturbances at lower elevations.

Additionally, the Great Basin receives low amounts of precipitation annually; a little over 9 inches, mostly in the form of snowfall. The growing season is short (90 days) and late frosts are common.

The critical elements of the human environment, as identified by the BLM Manual 1790-1, are listed in the following table. Elements that may be affected are further described in this Environmental Assessment. Rationales for those elements that would not be adversely affected are also listed in the following table. These critical elements would not be considered further in this document.

**Table 1: Critical Elements of the Human Environment and Rationale for Detailed Analysis for the Proposed Action**

Critical Element	No Effect	May Affect	Not Present	Rationale
Air Quality	X			Proposed actions would not create increases in air pollutant concentrations.
Archaeological Resources and Historic Properties	X			Proposed Action may enhance preservation of cultural resources.
Areas of Critical Environmental Concern and Special Designations			X	Resource is not present.
Environmental Justice	X			No minority or low-income groups would be affected by disproportionately high and adverse health or environmental effects.
Farm Lands (prime or unique)			X	Resource is not present.
Flood Plains			X	Resource is not present.
Migratory Birds		X		Reclamation would be mitigated between May and June 15.
Native American Religious Concerns	X			There are no known issues of concern to local tribes.
Non-Native, Invasive Species		X		Surface disturbances for route rehabilitation may increase risk of non-native, invasive weed species establishment. Control measures may reduce noxious species.
Threatened and Endangered Species	X			No threatened or endangered species occur in the planning area.

Critical Element	No Effect	May Affect	Not Present	Rationale
Special Status Species		X		Reclaiming disturbances may enhance habitat for these species, though individual species may be impacted during rehabilitation.
Visual Resource Management	X			No negative impacts would occur to VRM.
Wastes (hazardous or solid)			X	No wastes would be generated by the Proposed Action.
Water Quality (drinking)	X			Drinking water sources would not be encountered.
Water Quality (ground)	X			Ground water sources would not be encountered.
Wetlands/Riparian	X			Rehabilitation of routes and disturbances would not occur in riparian areas.
Wild Horses and Burros	X			No impacts would occur to wild horses.
Wild and Scenic Rivers			X	Resource is not present.
Wilderness		X		Proposed actions are for the management of wilderness areas.

In addition to the Critical Elements of the Human Environment, the BLM considers other resources that occur on public lands, or issues that may result from the implementation of the Proposed Action. The potential resources, uses and issues that may be affected are listed in Table 2. A brief rationale for either considering or not considering the issue or resource further is provided. The resources and issues that are considered in the Environmental Assessment are described in the Affected Environment section of this document and are analyzed in the Environmental Consequences section.

**Table 2: Other Resources and Issues, and Rationale for Detailed Analysis for the Proposed Wilderness Disturbance Reclamation Plan**

Resource or Issue	No Effect	May Affect	Not Present	Rationale
Fire Management	X			Reclamation activities will not affect the management of fire in the wilderness areas.

Livestock Grazing and Range		X		Short term disturbances to livestock may occur during reclamation, but vegetation should improve as a result of the proposed action.
Recreation		X		Motorized recreation is already prohibited in the disturbed areas. Other forms of permitted recreation would not be affected.
Vegetation and Soil		X		Route rehabilitation would affect small areas of vegetation and soil.
Wildlife		X		Reclamation activities may temporarily disturb wildlife movement.

### 3.1 Livestock Grazing and Range

All of the wilderness areas have “grandfathered in” livestock grazing and associated developments. The developments present include spring developments, guzzlers, tanks and troughs, and fences. Several of the wilderness areas have also had seeding projects, generally toward the edges of the Wilderness boundaries.

The roads included in this plan for reclamation may have evolved for grazing management purposes.

### 3.2 Migratory Birds

Migratory birds associated with lower montane woodlands and intermountain conifer forests and woodlands include the gray flycatcher (*Empidonax wrightii*), pinyon jay (*Gymnorhinus cyanocephalus*), gray vireo (*Vireo vicinior*), juniper titmouse (*Baeolophus ridgwayi*) and black-throated gray warbler (*Dendroica nigrescens*) (NDOW, 2005).

Migratory birds associated with aspen woodlands include MacGillivray’s warbler (*Oporornis tolmiei*), willow flycatcher (*Empidonax traillii*), orange-crowned warbler (*Vermivora celata*) and yellow-breasted chat (*Icteria virens*) (NDOW, 2005).

Migratory birds associated with sagebrush communities include the sage thrasher (*Oreoscoptes montanus*), sage sparrow (*Amphispiza belli*), and Brewer’s sparrow (*Spizella breweri*) (NDOW, 2005).

### 3.3 Noxious Weeds and Invasive Species

The existence of some invasive, non-native, and noxious weeds has been determined in the Risk Assessment for Noxious and Invasive Weeds (Appendix B). The GIS weed survey identifies the following plants as being within Wilderness:

<i>Centaurea stoebe</i>	Spotted knapweed
<i>Cicuta maculate</i>	Water hemlock
<i>Cirsium arvense</i>	Canada thistle
<i>Cirsium vulgare</i>	Bull thistle
<i>Onopordum acanthium</i>	Scotch thistle

The following species are found along roads leading to the 8 Wildernesses:

<i>Acroptilon repens</i>	Russian knapweed
<i>Carduus nutans</i>	Musk thistle
<i>Hyoscyamus niger</i>	Black henbane
<i>Lepidium draba</i>	Hoary cress
<i>Tamarix spp.</i>	Salt cedar

### 3.4 Recreation

The primary recreation uses that occur in the project areas are in relation to hunting of big game and game bird species. Other uses include low levels of dispersed hiking and horseback riding, as well as camping. Many of the roads and disturbances that are proposed for rehabilitation were most likely created through recreation uses, including the use of off-highway vehicles and camping.

### 3.5 Special Status Species

Sage grouse, a BLM classified special status species, are known to occur in the proposed action area. There are several leks within or in close proximity to several of the wilderness areas.

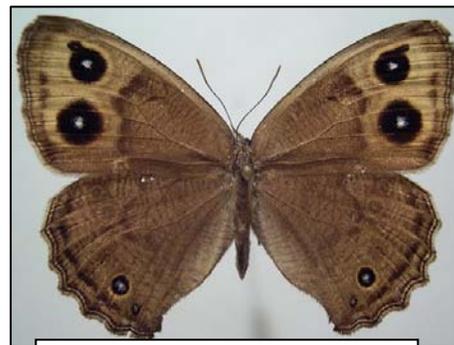
The following fauna were identified through the Nevada Natural Heritage Program (2006) dataset and lie within one or more wilderness areas.

Pygmy Rabbit (*Brachylagus idahoensis*),  
White River Wood Nymph (*Cercyonis pegala pluvialis*),  
Northern Steptoe Springsnail (*Pyrgulopsis serrata*),  
Townsend's Big-Eared Bat (*Corynorhinus townsendii*),  
Schell Creek Mountain Snail (*Oreohelix nevadensis*), and  
Bonneville Cutthroat Trout (*Oncorhynchus clarki utah*).

As the smallest of all rabbits, the pygmy rabbit is distinguished from all others by size alone. It can be found in sagebrush growing in clumps because it feeds primarily on sagebrush. It is principally nocturnal and crepuscular.

The White River Wood Nymph, in the true butterfly family, inhabits "ecological refugia, or specialized or unique habitats." For this reason it is listed in the BLM Manual 6840.06 E as a sensitive species (BLM, 2003).

Townsend's Big-Eared Bat feeds exclusively on moths. They live in caves and old mine shafts. No long-distance migrations are known. Like many other bats, they return year after year to the same roost sites (MSB, 2005).



White river Wood Nymph.  
(ILS, 2000)

One of 14 cutthroat trout subspecies, Bonneville cutthroat trout is the only native inland salmonoid of the western US. It is distinguished from the other cutthroat trout by a more uniform distribution of spots. Habitat modification and range

fragmentation, the introductions of non-native species, and fishing have all contributed to the decline of the Bonneville cutthroat. (WGF, 2005).

The following two vascular plants are considered special status species, and were identified through the Nevada Natural Heritage Program (2006) dataset as lying within one or more wilderness area.

Waxflower (*Jamesia tetrapetala*), and  
Nachlinger Catchfly (*Silene nachlingerae*).

A fragrant, spreading shrub, the waxflower grows to 3-10 dm tall. It produces solitary, four-petaled flowers which are white with pink margins. It is also known as Fourpetal Cliffbush (NNHP, 2001).

A perennial herb, Nachlinger Catchfly grows to 6-25 cm high. It produces 2-4 white to purple flowers per stem and blooms in late summer (NNHP, 2001).

### **3.6 Vegetation and Soils**

#### **3.6.1 Vegetation**

Vegetation surrounding the disturbed areas in Wilderness varies. Most locations are primarily sagebrush or pinyon-juniper woodlands. Sagebrush communities may also include perennial grasses. Large portions of the wilderness areas may also be characterized by both vegetation classes throughout broad transition zones.

The proposed action areas are disturbed and mostly free from vegetation. Some vegetation may grow in the center hump of the closed vehicle routes.

#### **3.6.2 Soils**

Soils are shallow and rocky and most of them have been developed from weathered granite, basalt or limestone rock. Soils on the disturbances have been disturbed and compacted to varying degrees as a result of frequent motorized vehicle travel and other activities. The soils are generally susceptible to accelerated erosion from wind and water, especially when the surface has been disturbed.

### **3.7 Wilderness**

#### **Naturalness & Primeval Character**

The 8 wilderness are in a predominantly natural state with the evidence of human activity localized. Human imprints include both authorized and unauthorized activities. Authorized activities include various range improvements and wildlife water developments. Unauthorized disturbances include vehicle routes, now closed as a result of wilderness designation, these routes are generally 4WD or ATV accessible roads created by repeated cross-country travel. Approximately 191 miles of routes and 5 small site disturbances exist within the wilderness areas.

#### **Untrammelled by Man**

The eight wilderness areas discussed here are largely untrammelled by man. The ground disturbances discussed here have the effect of trammeling the wilderness and showing man's impact.

### Opportunities for Solitude or Primitive and Unconfined Recreation

There are outstanding opportunities for solitude in all 8 wilderness areas. A variety of geologic formations (washes, canyons, and basins) and vegetative screening (large and small coniferous forests) all provide excellent opportunities for solitude.

Recreational uses of the wilderness areas include day hiking, backpacking, caving, photography, equestrian use, rockhounding, big game and upland bird hunting, wildflower viewing, bird watching, sightseeing and other activities.

### Supplemental Values

All areas have outstanding scenic qualities as described, in part, by the 1991 Bureau of Land Management statewide wilderness report.

### **3.8 Wildlife**

Several species of large mammals are found in the wilderness areas. They are mule deer, pronghorn antelope, elk, bighorn sheep, mountain lions and coyotes. Various raptors are known to inhabit these areas including Golden Eagles, Northern Harriers, Cooper's Hawks and Goshawks. Numerous species of smaller mammals, birds, reptiles and amphibians are found in the area. Jack rabbits and cottontail rabbits are very common throughout Nevada. Occasional snakes, including rattlesnakes, are spotted.

## **4. Environmental Consequences**

The impact analysis for all 204 disturbances have been grouped under this environmental assessment because of the common characteristics both the closed routes and small site disturbances have, and the common impacts reclamation actions would have on them.

### **4.1 Proposed Action**

No impacts are anticipated from the proposed action to floodplains, and wetlands; Wild and Scenic Rivers; prime or unique farmlands; environmental justice; cultural, paleontological, and historical resource values; water quality (drinking/ground); air quality; wild horse and burros; Native American religious concerns; or migratory birds.

#### **4.1.1 Livestock Grazing and Range**

Short term disturbances to livestock may occur as restoration is undertaken. However, vegetation should be improved as a result of the proposed action.

#### **4.1.2 Migratory Birds**

Reclamation would be mitigated during the nesting season (between May and June 15) by first surveying for migratory birds along the restoration corridors.

#### **4.1.3 Noxious Weeds and Invasive Species**

The existence of some invasive, non-native, and noxious weeds has been determined in the Risk Assessment for Noxious and Invasive Weeds. The consequences of this action are discussed in the Appendix B.

#### **4.1.4 Recreation**

The proposed action would improve opportunities for primitive and unconfined recreation, notably hiking, hunting and camping, by rehabilitating disturbances to more closely resemble their natural state. The proposed action would not affect forms of recreation that are not permitted in wilderness areas, such as the use of motorized or mechanized equipment.

#### **4.1.5 Special Status Species**

Individual animals may be affected during reclamation activities. Over the long term, however, habitat will be improved and further motorized disturbances are anticipated to be reduced by the proposed action.

The Nachlinger Catchfly is found within the wilderness areas, but not on or near any of the disturbed sites. Therefore, there will be no affect on these plants. The waxflower is found in Muphy's Wash in the Highland Ridge Wilderness Area. There is potential that it lies on a closed route intended for reclamation. For this region, a survey for waxflower would occur before rehabilitation occurs. If the plant is found on a site reclamation would not occur it its vicinity.

#### **4.1.6 Vegetation and Soils**

All sites are currently disturbed due to present and past uses. Vegetative restoration, scarifying, recontouring and decompaction would involve some soil disturbance. This disturbance would occur on less than 1% of the total wilderness areas. However, this is the intent of the proposed action-- to relieve compaction, texturize the surface, recontour the route and reduce erosion. Generally, these actions will improve soil conditions by increasing infiltration, percolation and available supply of water; breaking up soil compaction; increasing ground surface texture for improved collection of organic debris; facilitating the reestablishment of plant growth; and reducing existing and potential erosion problems.

There would be minimal impact to vegetation during most reclamation activities. Disturbed surfaces are already partially or entirely denuded of vegetation. Limited vegetation could be damaged by being replanted on the route surface. Some adjacent vegetation could be crushed by workers. Collection of seeds for placement on disturbed sites from areas adjacent to reclamation sites would impact plants in the immediate vicinity. All other reclamation actions would assist in the natural revegetation of the area.

#### **4.1.7 Wilderness**

Wilderness values of naturalness, solitude or primitive and unconfined recreation, and other special features as described below would be affected by the proposed reclamation activities. All seven reclamation activities would reduce the visibility and accessibility of these disturbances to motorized vehicles, which will enhance the naturalness, solitude and primitive recreation values of the wilderness areas.

##### **Naturalness**

The naturalness of the area would be enhanced by the proposed action. The existing disturbances have an impact on the appearance of naturalness in the wilderness areas. Many of the disturbances can be seen for long distances and heavily contrast with the surrounding undisturbed portions of the wilderness. By

rehabilitating those portions of the disturbances visible from the wilderness boundary the areas will appear more natural and less disturbed. Those disturbances not reclaimed will remain disturbed and unnatural for a longer period of time than those that will be reclaimed. The amount of time that it will take for the unreclaimed portions of the disturbances to naturally rehabilitate will be reduced because less additional disturbance will occur once the visible portions are reclaimed and/or barricaded. Work crews would generate some human waste in the wilderness.

#### Untrammelled by Man

The presence of these disturbances has a trammeling effect on the wilderness areas and associated wilderness values. The action of rehabilitating the disturbances further hampers the natural processes of wilderness by further inflicting the hand of man. However, by rehabilitating the disturbances in the fashion proposed would allow the disturbed areas to then reclaim the natural processes by which they were originally designed.

#### Opportunities for Solitude or Primitive and Unconfined Recreation

During the completion of reclamation activities, solitude and primitive recreation would be negatively impacted by the presence of conservation crews, volunteers and BLM personnel. This impact would be temporary and would occur in less than 1% of the total wilderness areas.

After the completion of the reclamation activities, solitude and primitive recreation would be enhanced. Reclamation activities would facilitate the motorized vehicle use limitations imposed by wilderness designation. Reclamation projects in other BLM managed wilderness and wilderness study areas have reduced the level of illegal motorized trespass occurring on existing routes. This reduction in motorized trespasses will increase the opportunities for solitude and primitive recreation in the areas. Less regulation (e.g. signage) and contact with wilderness users would improve the wilderness experience.

#### Special Features

There would be some impact to special features associated with the wilderness areas by the proposed action. The proposed action would have an impact on special features related to cultural resources. Because some of the existing vehicle routes and associated small site disturbances provide access to cultural sites, the likelihood of visitors disturbing those sites would be reduced if the disturbances were reclaimed prevent additional unauthorized trespasses.

#### **4.1.8 Wildlife**

The intent of reclamation activities is to promote the restoration of the natural habitat and protect the habitat in the wilderness from unauthorized motor vehicle intrusions. During reclamation activities, minimal disturbance in areas adjacent to pre-existing disturbances may occur. Some reclamation activities, such as decompaction, recontouring and barricading may affect individual animals and/or their burrows.

#### **4.2 No Action Alternative**

A continuation of present management would include placement of boundary markers and information signs, and continued annual monitoring for unauthorized uses.

Reclamation activities would occur within wilderness on a case-by-case basis. A continuation of existing impacts would occur. Existing boundary markers would continue to be removed by natural forces and unauthorized persons. Law enforcement, public education, barriers, gates and signing would continue at or outside wilderness boundaries; however, these methods are only partially effective.

#### **4.2.1 Livestock Grazing and Range**

With the no action alternative, continued motor vehicle incursions would likely occur, therefore, negative impacts to livestock and their range would continue and potentially increase.

#### **4.2.2 Migratory Birds**

Migratory birds may continue to be negatively affected by motorized vehicle incursions.

#### **4.2.3 Noxious Weeds and Invasive Species**

Impacts due to invasive, non-native species are expected to occur and increase. Disturbances continuing to receive unauthorized motorized use may become infested with noxious or invasive weeds.

#### **4.2.4 Recreation**

Recreation would remain in a slightly diminished state given the concentration of closed, yet unrehabilitated, routes cutting through wilderness.

#### **4.2.5 Special Status Species**

Habitat of the special status species would take longer to rehabilitate naturally under the no action alternative, thereby reducing the vitality of the species themselves.

#### **4.2.6 Vegetation and Soils**

No improvement to soil conditions would occur from the no-action alternative. Erosion would likely continue to be a problem if no reclamation occurred. Soils would continue to be affected by continued wilderness disturbances.

Vegetation would take longer to recover in disturbed areas. No impacts to vegetation in areas adjacent to existing disturbances would occur as a result of reclamation actions.

#### **4.2.7 Wilderness**

Wilderness values of naturalness, solitude, primitive and unconfined recreation, scenic and ecological values would continue to be impacted by existing disturbances. The No Action alternative would not meet the requirements of the 1964 Wilderness Act or the White Pine County Conservation, Recreation and Development Act.

##### **Naturalness**

The naturalness of the area would not be enhanced by the no-action alternative. Disturbances would continue to contrast the surrounding undisturbed portions of wilderness.

##### **Untrammeled by Man**

The trammeling effects of man, namely the multitude of routes into wilderness, would be apparent and in effect for much long under the no action alternative.

Opportunities for Solitude/ Primitive or Unconfined Recreation

No reclamation work crews would impact visitor's opportunities for solitude.

Opportunities for solitude would not be enhanced by the no-action alternative.

## Special Features

Special features of the wilderness areas would continue to be impacted by unauthorized motorized access.

### 4.2.8 Wildlife

Wildlife habitat would continue to be impacted by disturbances, and potentially additional motorized incursions, within wilderness. No positive habitat restoration would occur. No impacts to individual animals or burrows would occur as the result of the surface disturbing reclamation actions.

## **5. Cumulative Impacts**

According to the 1994 BLM Handbook Guidelines for Assessing and Documenting Cumulative Impacts, the cumulative analysis should be limited to those issues and resource values identified during scoping that are of major importance. The issue of major importance identified during internal scoping was the maintenance of naturalness within Wilderness through the reclamation of disturbances within wilderness. A general discussion of past, present, and reasonably foreseeable future actions follows:

### **5.1. Proposed Action**

#### **Past**

These wilderness areas were designated in December 2006. The growth in population and growth in the use of Off-Highway Vehicles has resulted in the improved motorized access to these once remote and inaccessible areas. Impacts from vehicle use (prior to wilderness designation) and continued unauthorized use of closed routes has led to the current impacts to wilderness, wildlife, vegetation, soil, *et cetera*.

#### **Present**

Current actions include increased educational programs on Wilderness and Leave No Trace principles, increased signing efforts and patrols. Reclamation activities will reverse the cumulative effects of this use, resulting in overall positive effects to wilderness characteristics, wildlife, vegetation, soil, and visual resources. The purpose of the operational parameters outlined in this Proposed Action is to minimize any negative cumulative and/or residual effects of the proposed reclamation activities.

#### **Reasonably Foreseeable Future Actions**

The population of southern and eastern Nevada continues to grow and expand. New disturbances may be created by unauthorized uses attempting to circumvent the reclaimed disturbances, creating entirely new impacts and the need for additional reclamation actions. Those routes that are reclaimed may receive continued motorized trespass, which will necessitate the need for additional reclamation work.

#### **Proposed Mitigation and Monitoring**

Mitigation and monitoring measures incorporated into the proposed action are sufficient, based on the analysis of environmental consequences no additional mitigation is proposed.

## References

- Blackwell, Laird. 2006. Great Basin Wildflowers. A Falcon Guide. Morris Book Publishing, LLC.
- BLM Sensitive Species. 2003. Accessed on January 24, 2008 at: <http://www.blm.gov/nhp/efoia/nv/ib/2003/nvib2003-097a.pdf>.
- The International Lepidoptera Survey. 2000. Photo from: <http://tils-ttr.org/library.html>
- Lanner, Ronald. 1983. Trees of the Great Basin, A Natural History. University of Nevada Press.
- MSB. 2005. Townsends Big-eared Bat. Museum of Southwestern Biology, Department of Biology, University of New Mexico, Albuquerque, New Mexico, USA. Accessed January 24, 2008, at: <http://www.msb.unm.edu/mammals/batcall/accounts/accountsbase/cortow.html>.
- Nevada Department of Wildlife. 2005. State of Nevada comprehensive wildlife conservation strategy. Accessed on February 8, 2007, at: [www.ndow.org/wild/conservation/cwcs/#plan](http://www.ndow.org/wild/conservation/cwcs/#plan).
- Nevada Natural Heritage Program. 2001. Rare Plant Fact Sheet, Nachlinger Catchfly. Accessed on January 24, 2008, at: <http://heritage.nv.gov/atlas/silennachl.pdf>.
- Nevada Natural Heritage Program. 2001. Rare Plant Fact Sheet, Waxflower. Accessed on January 24, 2008 at: <http://heritage.nv.gov/atlas/jamestetra.pdf>.
- Wyoming Game and Fish Department. 2005. Comprehensive Wildlife Conservation Strategy for Wyoming. Accessed on January 24, 2008, at <http://gf.state.wy.us/wildlife/CompConvStrategy/index.asp>.

**Appendix A**  
**Minimum Requirement/Tool Worksheets**

Step 1- Determining the Minimum Requirement (a two-part process)

Part A. Minimum Requirement Key to making determinations on wilderness management proposals

(This flow chart will help you assess whether the project is the minimum required action for the administration of the area as wilderness. Answering these questions will determine if this proposed action really is the minimum required action in wilderness.)

Guiding Questions	Answers and explanations
<p>1. Is this an emergency? (i.e. a situation that involves an inescapable urgency and temporary need for speed beyond that available by primitive means, such as fire suppression, health and safety of people, law enforcement efforts involving serious crime or fugitive pursuit, retrieval of the deceased or an immediate aircraft accident investigation)</p> <p>If Yes&gt; Document the rationale for line officer approval using the minimum tool form and proceed with action.</p> <p>If No&gt; Go to question 2</p>	<p>No. The proposed action is not considered an emergency.</p>
<p>2. Does the project or activity conflict with the stated management goals, objectives and desired future conditions of applicable legislation, policy and management plans?</p> <p>If Yes&gt; Do not proceed with the proposed project or activity.</p> <p>If No&gt; Go to question 3</p>	<p>No. Currently no approved wilderness management plan exists for the involved wilderness areas. Management is based on law, regulation, and policy. BLM Wilderness Regulations section 6303 allows BLM to authorize officers, employees, agencies, or agents to occupy and use wilderness areas to carry out the purposes of the Wilderness Act. BLM Manual 8560 mandates that BLM keeps watersheds, water bodies, water quality, and soils in a natural condition and will allow associated ecological processes previously altered by human influences to return to their natural conditions. BLM is also mandated to maintain or enhance the naturalness of the wilderness areas. The proposed project would meet all of the above regulations and policies.</p>

<p>3. Are there any less intrusive actions that should be tried first? (i.e. signing, visitor education, or information)</p> <p>If Yes&gt; Implement other actions using the appropriate process.</p> <p>If No&gt; Go to question 4</p>	<p>No. Public outreach is presently being conducted to inform visitors of wilderness regulations and maps showing the wilderness boundaries have been and will continue to be distributed to visitors. All routes in the wilderness areas will be signed and closed, but without physically rehabilitating the routes inside wilderness the impacts to naturalness would persist for a considerable amount of time.</p>
<p>4. Can this project or activity be accomplished outside of wilderness and still achieve its objectives? (such as some group events)</p> <p>If Yes&gt; Proceed with action outside of wilderness using the appropriate process.</p> <p>If No&gt; Go to question 5</p>	<p>No. Barriers may be constructed outside of wilderness to minimize the unauthorized motorized trespass along the routes, where needed, but without physically rehabilitating the routes inside wilderness the impacts to naturalness would persist for a considerable amount of time.</p>
<p>5. Is this project or activity subject to valid existing rights? (such as mining claims or right of way easements)</p> <p>If Yes&gt; Proceed to Minimum Tool Analysis</p> <p>If No&gt; Go to question 6</p>	<p>No. Routes determined necessary for motorized access for valid existing rights or nonconforming but accepted uses will not be reclaimed.</p>
<p>6. Are there special provisions in legislation (the Wilderness Act or WPCCRDA of 2006) that allows this project or activity?</p> <p>If Yes&gt; the proposed project or activity should be considered but is not necessarily required just because it is mentioned in legislation. Go to part B</p> <p>If No&gt; Go to Part B</p>	<p>No. There are no specific special provisions in legislation pertaining to disturbance restoration in wilderness.</p>

Part B. Determining the Minimum Requirement

Responsive Questions for Minimum Requirement Analysis: Explain your answer in the response column. If your responses indicate potential adverse affects to wilderness character, evaluate whether or not you should proceed with the proposal. If you decide to proceed, begin developing plans to mitigate impacts, and complete a Minimum Tool Analysis. Some of the following questions may not apply to every project.

Effects on Wilderness Character	Responses
<p>1. How does this project/activity benefit the wilderness as a whole as opposed to one resource?</p>	<p>Removing an impact caused by human activity by rehabilitating disturbances inside the wilderness areas will increase the overall naturalness of the areas. Disturbance restoration will also minimize the amount of illegal motorized use occurring along routes, which impact the opportunities for solitude and primitive recreation in the wildernesses.</p>
<p>2. If this project/activity were not completed, what would be the beneficial and detrimental effects to the wilderness resources?</p>	<p>If the proposed project were not completed the existing impacts to the naturalness of the area associated with the disturbances would persist for a considerable amount of time. The level of motorized trespass occurring would be higher if the proposed project was not implemented. The temporary impacts to the solitude of the area associated with the work crews would not occur if the proposal was not implemented.</p>
<p>3. How would the project or activity help ensure that the wilderness provides outstanding opportunities for solitude or a primitive and unconfined type of recreation? (E.g. does the project/activity contribute to the people's sense that they are in a remote place with opportunities for self discovery, adventure, quietness, connection with nature, freedom, etc.)</p>	<p>Presently motorized trespass occurs on existing routes throughout the wilderness areas, these trespasses have an impact on the sense of solitude and opportunities for primitive recreation in the wilderness areas. Rehabilitating, camouflaging, and barricading these routes will reduce the amount of motorized trespass occurring which will increase the sense of solitude and opportunities for primitive recreation in the wilderness areas.</p> <p>There would be temporary impacts to solitude from the presence of the work crews during the actual restoration work.</p>

<p>4. How would the project/activity help ensure that human presence is kept to a minimum and that the area is affected primarily by the forces of nature rather than being manipulated by humans?</p>	<p>Because the disturbances are a human caused impact they are a constant reminder of human manipulation in the areas. Rehabilitating the disturbances could also be considered a human manipulation, but because the proposed action would be restoring natural conditions to the area it would also ensure that the area was affected primarily forces of nature.</p>
<p>Management Situation 5. What do your management plan, policy, and legislation say to support proceeding with this project?</p>	<p>Currently no approved wilderness management plan exists for the involved wilderness areas. Management is based on law, regulation, and policy. BLM Wilderness Regulations section 6303 allows BLM to authorize officers, employees, agencies, or agents to occupy and use wilderness areas to carry out the purposes of the Wilderness Act. BLM Manual 8560 mandates that BLM keeps watersheds, water bodies, water quality, and soils in a natural condition and will allow associated ecological processes previously altered by human influences to return to their natural conditions. BLM is also mandated to maintain or enhance the naturalness of the wilderness areas. The proposed project would meet all of the above regulations and policies.</p>
<p>6. How did you consider wilderness values over convenience, comfort, political, economic or commercial values while evaluating this project/activity?</p>	<p>The proposal is not associated with any values other than enhancing the naturalness and solitude of the wilderness areas.</p>
<p>7. Should We Proceed?</p>	<p>Yes Go to step 2 (Minimum Tool Analysis)</p>

Step 2 - Determining the Minimum Tool (the Minimum Tool Analysis)

These questions will assist you in determining the appropriate tool(s) to accomplish the project or proposed activity with the least impact to the wilderness resource.

Develop several alternate approaches to implementing the project or activity.

Alt#1 No action alternative	Alt#2 An alternative using non-motorized equipment or non-mechanized transport
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Describe the alternatives. Be specific and provide detail.

- What is proposed?
- Why is it being proposed in this manner?
- Who is the proponent?
- When will the project take place?
- Where will the project take place?
- How will it be accomplished? (What methods and techniques)

Alt#1 No action would take place to actively reclaim unauthorized disturbances.	Alt#2 Work would be done using non-motorized hand tools (except work on barriers outside of wilderness), and horse drawn implements. Hay bales would be packed on horses to the work sites. Wheel barrows would possibly be used for hauling heavy materials, such as rock, for short distances.
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Utilize the following criteria to assess each alternative (a brief statement should suffice)

Biophysical effects

- Describe the environmental resource issues that would be affected by the proposed action.
- Describe any effects this action will have on protecting natural conditions within the regional landscape, (i.e. non-native insects and disease, or noxious weed control)
- Include both biological and physical effects.

Alt#1 The no action alternative would not have positive impacts to natural conditions within these wildernesses.	Alt#2 Impacts associated with motor vehicles would not occur.
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Social/recreation/experiential effects

- Describe how the wilderness experience may be affected by the proposed action
- Include effects to recreation use and wilderness character
- Consider the proposed effect the proposal may have on the public and their opportunity for discovery, surprise and self-discovery

Alt#1 Potential impacts to recreation use and wilderness character from continued unauthorized motorized use. These existing disturbances detract from public wilderness experiences.	Alt#2 Solitude and primitive recreation would be impacted during the time that work crews were in the wilderness.
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Societal/political effects

- Describe any political considerations, such as MOUs, agency agreements, local positions that may be affected by the proposed action.
- Describe relationship of method to applicable laws

Alt#1 The no-action alternative is not consistent with applicable laws and policies.	Alt#2 Methodology consistent with the designating legislation and the Wilderness Act.
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Health and safety concerns

- Describe and consider any health and safety concerns associated with the proposed action. Consider the types of tools used, training, certifications and other administrative needs to ensure a safe work environment for employees. Also consider the effect the proposal may have on the health and safety of the public.

Alt#1 None	Alt#2 No health and safety concerns other than those normally associated with working outside with hand tools, or working around horses would be associated with the proposal. Only employees or volunteers that are experienced in the use of livestock would be allowed to work with the stock. No health or safety concerns for the general public are associated with the proposal.
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Economic and timing considerations

Alt#1 None	Alt#2 Because of the time associated with using only non-motorized hand tools and horse drawn implements to rehabilitate the routes this alternative would increase the amount of time it would take to accomplish the projects. This alternative would be the cheapest alternative if sufficient volunteer help was available, otherwise the alternative could become costly, because of the large amount of time required for restoration work using non-motorized equipment.
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Formulate a preferred alternative from the above alternatives and describe in detail below.

Alternative #2 is the minimum tool for restoring natural conditions to routes in wilderness. All actions in wilderness will be conducted with non-motorized equipment and non-mechanized transport (with the exception of wheelbarrows for moving heavy objects). See Operational Parameters in the EA for specifics. Access to the project sites would be by foot or horse travel only.

- What are the maintenance requirements?  
Maintenance work will follow the same minimum tool guidelines.

- What standards and designs will apply?  
See Operational Parameters in the EA for specifics
- Develop and describe any mitigation measures that apply?  
Work will be scheduled to avoid working on weekends and holidays to minimize the likelihood of impacting wilderness users. Because the completion of the restoration projects will often times depend on the availability of volunteer work, this may not always be possible.
- What provisions have been made for monitoring and feed back to strengthen future efforts and/or prevent the need for recurring future actions?  
Monitoring of the project sites would be by foot or horse travel only. Before and after photos of the routes will be taken. Routine patrols of the reclaimed disturbances will occur and yearly photos will be taken of the restoration work to document any changes occurring.

## Appendix B

# **RISK ASSESSMENT FOR NOXIOUS & INVASIVE WEEDS** **White Pine Wilderness Restoration & Rehabilitation** **White Pine County, Nevada**

On January 24<sup>th</sup>, 2008 a Noxious & Invasive Weed Risk Assessment was completed for the White Pine Wilderness restoration and rehabilitation project located in White Pine County, Nevada. The proposed action is to reclaim, vehicle routes and small site disturbances within the 8 designated Wildernesses in White Pine County. There are approximately 191 miles of closed vehicle routes internal to the project area and several small disturbances. Reclamation actions would include decompaction, scarifying, and recountouring all with the use of non-motorized hand tools. In addition, vertical mulching and erosion control measures would occur.

No field weed surveys were completed for this project. Instead the Ely District weed inventory data was consulted. The following species are found within the boundaries of the 8 Wildernesses:

<i>Centaurea stoebe</i>	Spotted knapweed
<i>Cicuta maculate</i>	Water hemlock
<i>Cirsium arvense</i>	Canada thistle
<i>Cirsium vulgare</i>	Bull thistle
<i>Onopordum acanthium</i>	Scotch thistle

The following species are found along roads leading to the 8 Wildernesses:

<i>Acroptilon repens</i>	Russian knapweed
<i>Carduus nutans</i>	Musk thistle
<i>Hyoscyamus niger</i>	Black henbane
<i>Lepidium draba</i>	Hoary cress
<i>Tamarix spp.</i>	Salt cedar

There is also probably cheatgrass (*Bromus tectorum*), bur buttercup (*Ranunculus testiculatus*), halogeton (*Halogeton glomerus*), and Russian thistle (*Salsola kali*) scattered along roads in the area.

**Factor 1 assesses the likelihood of noxious/invasive weed species spreading to the project area.**

None (0)	Noxious/invasive weed species are not located within or adjacent to the project area. Project activity is not likely to result in the establishment of noxious/invasive weed species in the project area.
Low (1-3)	Noxious/invasive weed species are present in the areas adjacent to but not within the project area. Project activities can be implemented and prevent the spread of noxious/invasive weeds into the project area.
Moderate (4-7)	Noxious/invasive weed species located immediately adjacent to or within the project area. Project activities are likely to result in some areas becoming infested with noxious/invasive weed species even when preventative management actions are followed. Control measures are essential to prevent the spread of noxious/invasive weeds within the project area.
High (8-10)	Heavy infestations of noxious/invasive weeds are located within or immediately adjacent to the project area. Project activities, even with preventative management actions, are likely to result in the establishment and spread of noxious/invasive weeds on disturbed sites throughout much of the project area.

For this project, the factor rates as Low (3) at the present time. While there is a chance for weed species to spread to the area it will be minimized by the use of hand tools instead of heavy machinery for project purposes and the use of weed-free organic products for erosion control measures

**Factor 2 assesses the consequences of noxious/invasive weed establishment in the project area.**

Low to Nonexistent (1-3)	None. No cumulative effects expected.
Moderate (4-7)	Possible adverse effects on site and possible expansion of infestation within the project area. Cumulative effects on native plant communities are likely but limited.
High (8-10)	Obvious adverse effects within the project area and probable expansion of noxious/invasive weed infestations to areas outside the project area. Adverse cumulative effects on native plant communities are probable.

This project rates as High (8) at the present time. If new infestations establish within the project area this could adversely impact those native plant communities since the most of the 8 Wildernesses are currently considered to be weed-free. Any new infestation establishment would be very difficult to effectively treat since they would be within the boundaries of a Wilderness and would be subject to minimal tool guidelines. Also, any increase of cheatgrass could alter the fire regime in the area.

**The Risk Rating is obtained by multiplying Factor 1 by Factor 2.**

None (0)	Proceed as planned.
Low (1-10)	Proceed as planned. Initiate control treatment on noxious/invasive weed populations that get established in the area.
Moderate (11-49)	Develop preventative management measures for the proposed project to reduce the risk of introduction of spread of noxious/invasive weeds into the area. Preventative management measures should include modifying the project to include seeding the area to occupy disturbed sites with desirable species. Monitor the area for at least 3 consecutive years and provide for control of newly established populations of noxious/invasive weeds and follow-up treatment for previously treated infestations.
High (50-100)	Project must be modified to reduce risk level through preventative management measures, including seeding with desirable species to occupy disturbed site and controlling existing infestations of noxious/invasive weeds prior to project activity. Project must provide at least 5 consecutive years of monitoring. Projects must also provide for control of newly established populations of noxious/invasive weeds and follow-up treatment for previously treated infestations.

For this project, the Risk Rating is Moderate (24). This indicates that the project can proceed as planned as long as the following measures are followed:

- Monitoring will be conducted for a period no shorter than the life of the permit or until bond release and monitoring reports will be provided to the BLM. If the spread of noxious weeds is noted, appropriated weed control procedures will be determined in consultation with BLM personnel and will be in compliance with the appropriate BLM handbook sections and applicable laws and regulations.
- Prior to entering public lands, the contractor, operator, or permit holder will provide information and training regarding noxious weed management and identification to all personnel who will be affiliated with the implementation and maintenance phases of the project. The importance of preventing the spread of weeds to uninfested areas and importance of controlling existing populations of weeds will be explained.
- To eliminate the transport of vehicle-borne weed seeds, roots, or rhizomes all vehicles used for the completion, maintenance, inspection, or monitoring of ground disturbing

activities; or for authorized off-road driving will be free of soil and debris capable of transporting weed propagules. All such vehicles will be cleaned with power or high pressure equipment prior to entering or leaving the work site or project area. Cleaning efforts will concentrate on tracks, feet and tires, and on the undercarriage. Special emphasis will be applied to axels, frames, cross members, motor mounts, on and underneath steps, running boards, and front bumper/brush guard assemblies. Vehicle cabs will be swept out and refuse will be disposed of in waste receptacles. Cleaning sites will be recorded using global positioning systems or other mutually acceptable equipment and provided to the Field Office Weed Coordinator or designated contact person.

- To eliminate the introduction of noxious weed seeds, roots, or rhizomes all interim and final seed mixes, hay, straw, hay/straw, or other organic products used for reclamation or stabilization activities, feed, bedding will be certified free of plant species listed on the Nevada noxious weed list or specifically identified by the BLM Ely Field Office.
- To eliminate the introduction of noxious weed seeds, roots, or rhizomes all source sites such as borrow pits, fill sources, or gravel pits used to supply inorganic materials used for construction, maintenance, or reclamation will be inspected and found to be free of plant species listed on the Nevada noxious weed list or specifically identified by the BLM Ely Field Office. Inspections will be conducted by a weed scientist of qualified biologist.
- Removal and disturbance of vegetation would be kept to a minimum through construction site management (e.g. using previously disturbed areas and existing easements, limiting equipment/materials storage and staging area sites, etc.)
- Reclamation would normally be accomplished with native seeds only. These would be representative of the indigenous species present in the adjacent habitat. Rationale for potential seeding with selected nonnative species would be documented. Possible exceptions would include use of non-native species for a temporary cover crop to out-compete weeds. Where large acreages are burned by fires and seeding is required for erosion control, all native species could be cost prohibitive and/or unavailable. In all cases, seed mixes would be approved by the BLM Authorized Officer prior to planting.

Reviewed by: \_\_\_\_\_  
Bonnie Waggoner  
Ely District Noxious & Invasive Weeds Coordinator

1/24/2008  
Date