

**U.S. Department of the Interior  
Bureau of Land Management**

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**Environmental Assessment**  
DOI-BLM-NV-L010-2009-0018-EA  
December 1, 2009

Giroux Wash and Horse Range Wildlife Water Developments

*Location: White Pine and Nye Counties, Nevada*  
*Applicant/Address: Bureau of Land Management*

U.S. Department of the Interior  
Bureau of Land Management  
Ely District Office  
Phone: (775) 289-1800  
Fax: (775) 289-1910



## I. INTRODUCTION

This Environmental Assessment (EA) has been prepared to analyze BLM's proposal relative to Giroux Wash and Horse Range Wildlife Water Developments. The EA is a site-specific analysis of potential impacts that could result with the implementation of a proposed action or alternatives to the proposed action. The EA assists the Bureau of Land Management (BLM) in project planning and ensuring compliance with the National Environmental Policy Act (NEPA), and in making a determination as to whether any "significant" impacts could result from the analyzed actions. "Significance" is determined by the consideration of context and intensity of the impacts.

This document is tiered to, and incorporates by reference, the *Ely Proposed Resource Management Plan/Final Environmental Impact Statement* (BLM, 2007) released in November 2007. Should a determination be made that implementation of the proposed or alternative actions would not result in "significant environmental impacts" or "significant environmental impacts beyond those already disclosed in the existing NEPA document", a FONSI will be prepared to document that determination, and a Decision Record issued providing the rationale for approving the chosen alternative.

### **Background**

The Bureau of Land Management (BLM) in cooperation with the Nevada Department of Wildlife (NDOW) has constructed many wildlife water developments throughout the Ely District to improve the use of habitat for game and wildlife species. These developments typically consist of a 30' x 40' raised metal apron or a 25' x 80' plastic apron which collects precipitation and funnels it into two 1,800 gallon tanks. Some larger designs require a 40' x 60' raised metal apron and four 1,800 gallon tanks to accommodate elk (*Cervus elaphus*) usage. The tanks are plumbed together in series and each has an open drinker.

Mule deer (*Odocoileus hemionus*) populations in Nevada have been in decline for the past fifteen years (NDOW 2004). They suffer from habitat loss from factors such as pinyon-juniper encroachment (Tausch et al. 1981) and, in the past, from lower quality of forage due to livestock grazing (Cottam and Evans 1945, Robertson 1954). Deer depend on free water, especially during the dry season. They are generally found within three kilometers of a water source (Marshall et al. 2006) and at times female deer leave their home ranges in search of water if access to their usual source is denied (Hervert and Krausman 1986: see Krausman et al. 2006). Although it can take up to three years for deer to discover and begin using new water sources, their use of an area does increase where water developments exist (Marshall et al. 2006). A wildlife water development would create more suitable habitat for mule deer to mitigate for habitat loss and to augment populations.

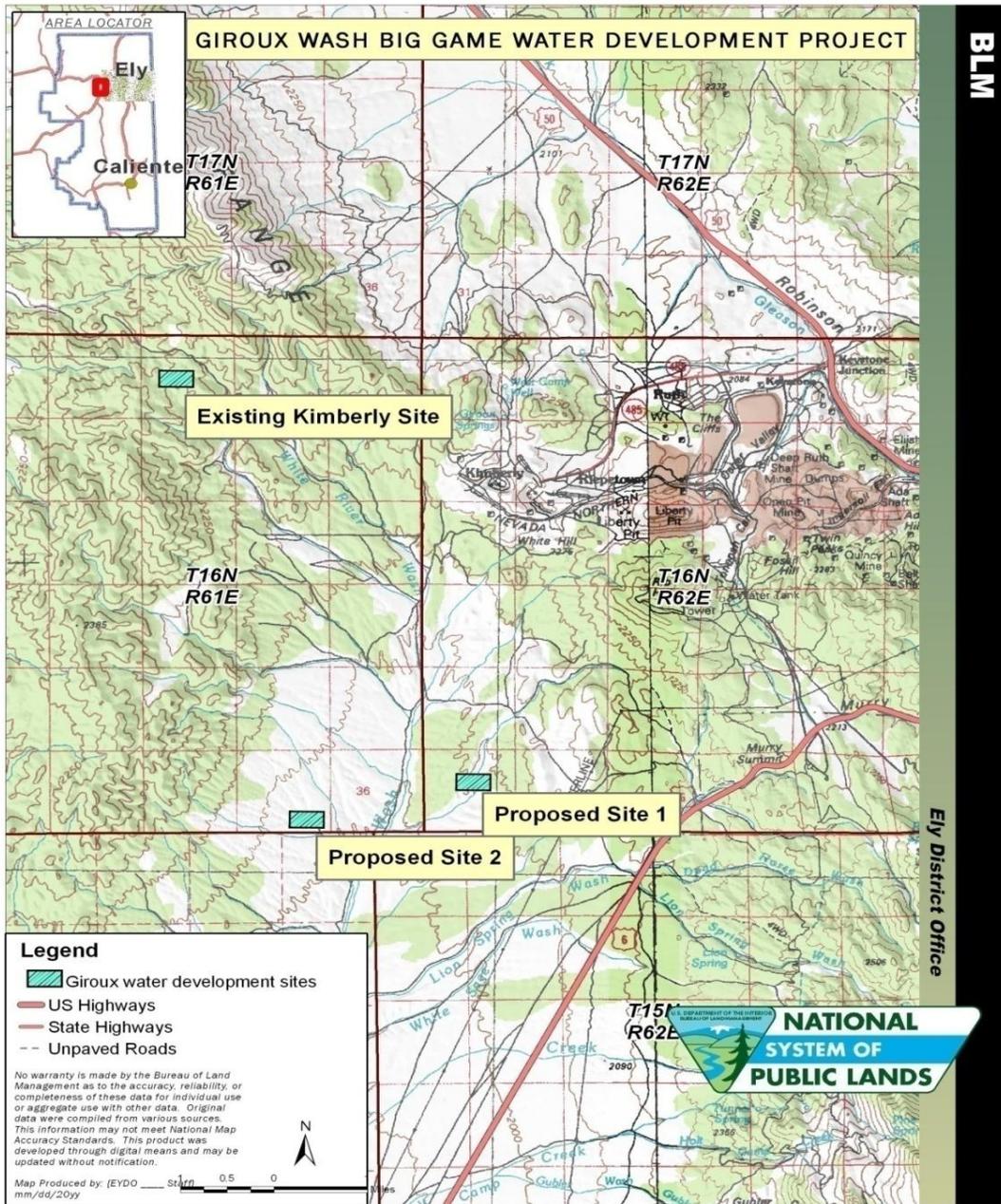
Elk, a species native to Nevada (Miller 1979), were extirpated by pioneers in the nineteenth century and reintroduced again in 1932 (Robison 1985). Elk are considered limited by water in their distribution throughout the western United States (McCabe 1982, O'Neil 1985). They also face habitat pressures from some competition with livestock for forage (Nelson 1984, Hart 1993, Nelson and Burnell 1975, Nagle and Harris 1996) and increasing habitat fragmentation due to

roads, which they avoid (Lyon 1983, Thomas et al. 1979, Wisdom et al. 2005). “Increasing the distribution and availability of water on many of the driest rangelands will likely enhance elk use of such areas, especially during dry seasons or years” (Krausman et al. 2006).

Man-made water developments hold many benefits for the game animals listed above as well as for many other non-game species. A greater diversity of non-game than game animals in fact visit such developments (AFGD 2004, O’Brien et al 2006: see Krausman et al. 2006). While this includes predator species, such as kit foxes (*Vulpes macrotis*), few predation events have been observed at water developments (AFGD 2004). The conservation benefits help mitigate human disturbances, while the proposed project would not cause undue degradation of the project area.

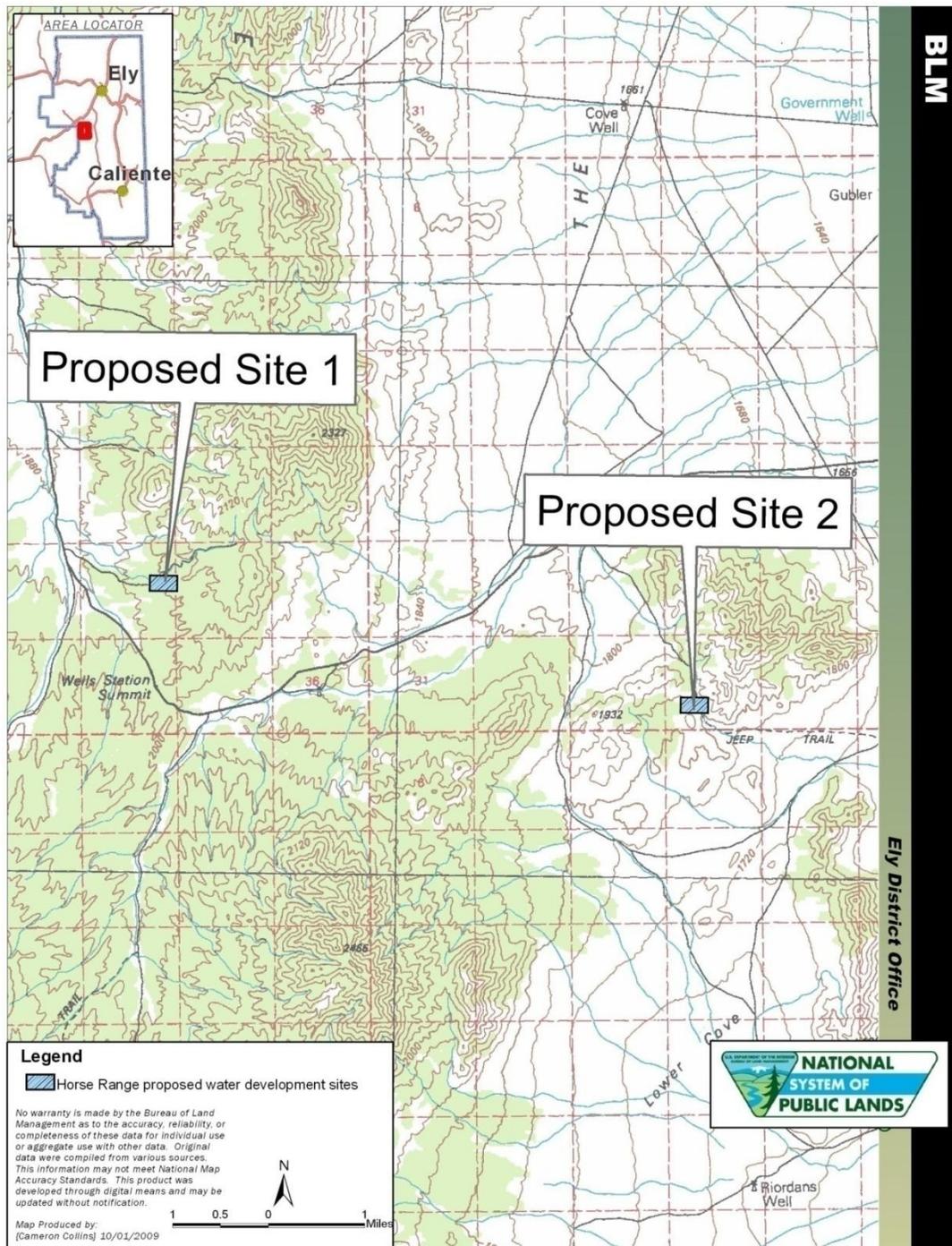
### **Purpose and Need for the Proposal**

The Kimberly big game wildlife water development, located approximately three miles west of the western mine boundary of Robinson Mine (Figure 1), was installed cooperatively between BLM and Robinson Mine in the mid-1990’s. It is used heavily by elk and mule deer and runs empty during dry summers, requiring fill-ups in recent years by a water tender from Robinson Mine, and by NDOW in the 1990s. Rather than install additional tanks at this site, which has limited space and would further concentrate big game activity, Robinson Mine, NDOW, and BLM propose to construct a new water development to more evenly distribute big game use in the area, particularly of elk. An additional source of water that lasts through summer would lessen the likelihood of big game animals using manmade water sources on mine property, and may reduce use of the Kimberly water development which could allow it to remain useable throughout the year, avoiding the need for continued tanker fill-ups. Big game occurrence and use would be more evenly distributed across the landscape rather than concentrated around the Kimberly Guzzler. The preferred site is over six miles from the nearest well or livestock trough.



**Figure 1.** Proposed wildlife water development sites in Giroux Wash, White Pine County.

Mule deer that summer in the White Pine Range utilize a migration pathway to and from wintering areas to the south. This pathway traverses the general area around Wells Station Summit, between the Horse Range and Grant Range, Nye County. There currently are no natural or manmade water sources along this corridor, making this an ideal area for a big game water development (Figure 2).



**Figure 2.** Proposed wildlife water development sites in the Horse Range, Nye County.

**Conformance with BLM Land Use Plan**

The proposed action is in conformance with the Goals and Objectives of the Ely District Record of Decision and Approved Resource Management Plan (BLM 2008), which states,

- “To use wildlife water developments, both natural and artificial, to improve the condition of wildlife habitat, and to use artificial wildlife water developments to mitigate impacts to wildlife species from loss of natural water sources or loss of habitat (p. 34).”

The proposed action is also in conformance with the following program-specific management decisions:

- “WL-20: Use the criteria listed below to identify artificial wildlife water developments:
  - To mitigate for loss of natural water sources;
  - To mitigate for habitat loss or habitat fragmentation
  - To reduce inter-specific competition between wildlife, livestock, and wild horses;
  - To reduce inter-specific competition between wildlife species; and
  - In suitable wildlife habitat that is water limited.

### **Relationship to Statutes, Regulations, or other Plans:**

The Proposed Action is in compliance with Federal, State, and local laws, regulations, policies, and plans. These include the White Pine County Public Lands Policy Plan (2007), the White Pine County Elk Management Plan (revised 2007) and Executive Order 13443, signed in 2007. This Executive Order directed the Department of the Interior to “Manage wildlife and wildlife habitats on public lands in a manner that expands and enhances hunting opportunities.” Additional dependable water sources would expand usable habitat for elk and deer, allowing them to increase population size and range distribution, thus expanding hunting opportunities.

### **Scoping and Public Involvement and Issues**

#### Internal Scoping

Impacts to cultural resources that could exist in the area were the only preliminary issues expressed during internal scoping on March 2, 2009. A Class III cultural inventory was conducted by BLM archaeologists on October 13, 2009.

#### External Scoping

Letters notifying the interested public and Tribes of the Giroux Wash portion of the Proposed Action were sent May 21, 2009. No issues were expressed during the public scoping period. Letters notifying the interested public and Tribes of the Horse Range portion of the Proposed Action were sent November 4, 2009. No comments were received.

## **II. DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVE**

### **Proposed Action**

BLM proposes to construct a big game water development in Giroux Wash, White Pine County, approximately 0.8 miles south of the southern boundary of Robinson Mine. Two potential sites have been identified, but the preferred site (Figure 1; Proposed Site 2) is located at T16 N, R61E, SWSE 35. An additional proposed site is located at T16N, R62E, SWNE 31, and could be constructed at a later date if the need is identified.

BLM proposes to partner with NDOW, Robinson Mine, Rocky Mountain Elk Foundation, and local volunteers to construct a big game wildlife water development southwest of Robinson Mine, within the Giroux Wash Allotment. This water development would consist of two large poly aprons (approx. 20' x 100') on the ground to catch rain and snow. Each apron would funnel water through a Johnson Screen and 2" diameter buried polyethylene pipe to a 1,800 gallon Boss Tank with drinker in one corner. An overflow from these main tanks would be piped into a second tank for an overall capacity of 7,200 gallons for the four tanks combined. The large capacity of water storage is needed to support use by elk for an extended period of time during late summer and fall. The two aprons would be placed side by side. The four tanks would be placed in a series of two main tanks and two overflow tanks with a pipe rail fence around them to exclude livestock and wild horses.

A four-strand, barbed wire fence would be constructed around the apron to prevent damage to the apron from livestock, wildlife, or wild horses. The bottom wire would be barbless. The apron fence would be approximately 10' wider than the outer edges of the apron. A pipe rail fence with two 1-5/8" steel rails at 24" and 42" above the ground would be installed around the storage tanks and drinker. This would prevent cattle and wild horses from accessing the site. The apron, steel fencing, and any exposed pipe would be left to rust and corrode, thus visually integrating the project into the surrounding environment. The tanks are brown in color and would blend into the landscape or background.

NDOW proposes to secure kits for two water sources including poly aprons, Boss tank drinkers, and associated hardware. Rocky Mountain Elk Foundation proposes to provide two additional Boss tank drinkers for overflow and the pipe rail fence enclosing all four tanks. Robinson Mine proposes to provide heavy equipment labor in the form of a rubber-tired backhoe to install aprons and tanks. BLM proposes to provide the barbed-wire fence enclosing the catchment aprons, and BLM would be responsible for maintenance of the project.

The agencies and Robinson Mine would organize a group of local volunteers from within and from the interested public to assist with construction and fencing. Equipment and materials would be located on site a day prior to the volunteer day, and it is anticipated that the entire project could be completed in one day with adequate planning and coordination. Access would be on existing two-track roads and no new road construction would be needed.

A second big game wildlife water development would be constructed in the southern Horse Range, Nye County, within either the Duckwater or Hardy Spring allotments during summer 2010. The preferred site (Proposed Site 1; Figure 2) is located in the Duckwater allotment at, T9N, R59E, SENE 27 and an additional site (Proposed Site 2; Figure 2) is located at T9N, R60E, W2SW 34 and could be constructed at a later date if the need is identified.

This water development would consist of one large poly apron on the ground to catch rain and snow (approx. 20'x100') and an associated apron fence (approx. 40' x 120'). The apron will funnel catchment water through a Johnson Screen and 2" diameter buried polyethylene pipe to two 1,800 gallon Boss Tanks (43"x102"x192") with drinkers in the corners. The apron will be fenced with standard BLM four-strand barbed-wire. The drinker tanks will be fenced with a

metal pipe rail fence to exclude livestock and wild horses and will be approximately 60'x 60'. A rubber-tired backhoe will be used to smooth a location for the apron, which consists of removing surface vegetation and mounding soil to approximately 1' high at the apron edges to create a catchment. The tanks will be partially buried in the ground, with approximately 2' protruding above soil surface. Approximately 40' of pipe will be buried 3' underground to convey water from apron to tanks.

Equipment and materials will be located on site the week prior to the volunteer day, and it is anticipated that the entire project could be completed in one day with adequate pre-planning and coordination. Access would be on existing two-track roads and no new road construction would be needed.

Installation of the wildlife water developments would result in  $\leq 1/4$  acre of total surface disturbance each. Access to the sites for subsequent annual inspections and routine maintenance would be on foot. Standard Operating Procedures located in Appendix 1 and Appendix 2 would be followed.

### **No Action Alternative**

Under the NEPA required alternative of No Action, these wildlife water developments would not be constructed and therefore would provide no benefit to wildlife.

### **Alternatives Considered but not Analyzed in Detail**

No other alternatives are needed to address unresolved conflicts concerning alternative uses of available resources.

## **III. DESCRIPTION OF THE AFFECTED ENVIRONMENT**

The areas affected by the Proposed Action are located in White Pine and Nye Counties, Nevada. The topography in the area is typical of that found in the southern Great Basin, including Basin and Range topography, with sagebrush and salt desert shrub communities found in the valley bottoms and benches, pinyon-juniper communities found on the lower to middle mountain slopes, intergrading into mountain mahogany and mixed conifer forests with occasional aspen stands at higher elevations. Elevation is 6,580' at the Giroux Wash locations and 6,520' and 5,970' at Horse Range 1 and Horse Range 2 locations, respectively. Vegetation includes a sagebrush overstory with limited grass/forb understory and scattered juniper trees.

### **Resources/Concerns Considered for Analysis**

The following items have been evaluated for the potential for significant impacts to occur, either directly, indirectly or cumulatively, due to implementation of the Proposed Action. Consideration of some of these items is to ensure compliance with laws, statutes or Executive Orders that impose certain requirements upon all Federal actions. Other items are relevant to the management of public lands in general, and to the Ely District BLM in particular.

Resource/Concern	Issue(s) Analyzed ? (Y/N)	Rationale for Dismissal from Analysis or Issue(s) Requiring Detailed Analysis
Air and Atmospheric Values	N	Air quality throughout the area is good, but disturbance of the soil surface during construction could cause dust and airborne particles to increase locally for a brief period of time. Detailed analysis is not necessary.
Cultural Resources	N	A Class III cultural inventory was conducted by BLM archaeologists on October 13, 2009. At Giroux Wash Proposed Site 1, a non-historic property consisting of a bi-face and a flake was located. No cultural resources were located at Site 2. No sites eligible for the National Historic Register were located. As a result of this inventory, no effects upon cultural resources are expected.
Forest Health*	N	Design features of the proposed action would not affect any forest resources.
Migratory Birds	N	A number of migratory bird species are known or likely to have a distribution that overlaps with the project area. Migratory bird nesting and foraging habitat is located throughout the project area. Because surface disturbance at each site is relatively small (< 1 acre) relative to the overall distribution and abundance of migratory bird habitat, the proposed wildlife water development sites are not expected to affect migratory bird populations within the Proposed Action area.
Rangeland Standards and Guidelines*	N	Increased concentration of big game is not expected to lead to reduced vegetative cover near the project area (Standard 1). This project would improve wildlife habitat (Standard 3). Overall the direct and indirect impact to Rangeland Standards and Guidelines is expected to be minimal, requiring no further analysis.
Native American Religious and other Concerns	N	No concerns were raised regarding the Proposed Action.
FWS Listed or proposed for listing Threatened or Endangered Species or critical habitat**	N	No listed or proposed Threatened and Endangered species or critical habitat is present in the immediate vicinity of the project area. The White River spinedace ( <i>Lepidomeda albivallis</i> ), a federally endangered species, occurs within the CESA. Given the relatively large distance between the Proposed Action and this species' occupied habitat, and absence of expected effects to water resources, no

		effects to White River Spinedace are anticipated.
Wastes, Hazardous or Solid	N	No hazardous or solid wastes exist in the project area, nor would any be introduced by project construction activities.
Water Quality, Drinking/Ground	N	The proposed action does not pose any impact to ground water in the project area. No surface water in the project area is used as human drinking water sources. There would be no direct or indirect effects to resource.
Environmental Justice	N	No minority or low-income groups would be affected by the Proposed Action.
Floodplains	N	Surface water flows toward the lowlands via channels and washes from nearby mountain ranges to fluvial floodplains such as dry lake beds in the valley bottoms. The Proposed Action is not located within floodplains so there would be no effect..
Prime and unique farmlands	N	There are no prime or unique farmlands within the Proposed Action area.
Wetlands/Riparian Zones	N	There are no wetlands or riparian areas near any of the wildlife water development sites. No further analysis is required.
Invasive Non-native Species	N	No noxious weeds are found within any of the sites. Impacts from this project are minimal. The weed risk assessments had risk ratings of moderate indicating that the project could proceed as planned as long as the preventive measures identified in the weed risk assessments are followed. No further analysis is needed.
Special Status animal Species, other than those listed or proposed by the FWS as Threatened or Endangered.	N	There are no Special Status animal species within the area of the proposed water developments.  White River desert sucker ( <i>Catostomus clarki intermedius</i> ), White River speckled dace ( <i>Rhinichthys osculus</i> ssp.) and Preston White River springfish ( <i>Crenichthys baileyi albivallis</i> ), all BLM Sensitive Species, occur within springs and waterways in the White River Valley in the CESA. Given the relatively large distance between the Proposed Action and these species' occupied habitat, and absence of expected effects to water resources due to the Proposed Action, no effects to fish are anticipated.
Special Status plant Species, other than those listed or proposed by the FWS as Threatened or Endangered. Also, ACECs designated for special status plant species.	N	There are no Special Status plant species or ACECs within the area of the proposed water developments.

Wilderness/WSA	N	Neither of the proposed wildlife water developments are located in Wilderness or Wilderness Study Areas.
Heritage Special Designations	N	There are no Heritage Special Designation areas at or near any of the project sites.
Wild Horses and Burros	N	The Horse Range sites are located in the White River Herd Area and the Giroux Wash sites are located in the Jakes Wash Herd Area, both of which are managed for “0” wild horses. The proposed action would have no direct or indirect impact on wild horses.
Fish and Wildlife	Y	<p>Additional water, a scarce resource in the Great Basin, would become available to local wildlife populations, thus benefitting them and potentially leading to changes in habitat use patterns, productivity, and survival. Effects are analyzed in this Environmental Assessment.</p> <p>No fish occur within the vicinity of the project area, but they do occur within the Cumulative Effects Study Area. Given the relatively large distance from and absence of expected effects to water resources due to the Proposed Action, no effects to fish are anticipated.</p>
Soils/Watershed	N	Due to the relatively small (< 1 ac) surface disturbances at the project sites, effects to soils and watershed function do not require further analysis..
Visual Resources Management	N	Due to project design and location the proposed developments and alternative sites would not be visible from key observation areas and would therefore have negligible effects on visual resources.
Grazing Uses/Forage	N	<p>Giroux Wash Guzzlers 1 &amp; 2 occur within the Giroux Wash Grazing Allotment. The allotment is permitted for 2198 sheep from 4/1 – 11/1 for 3107 AUMs and for 260 cattle from 4/1 to 12/15 for 2214 AUMs. Very few of the AUMs for either sheep or cattle have been activated in recent years, due to the lack of reliable water sources in the allotment. The nearest and only water source in the allotment is Jakes Well, approximately six miles south of the proposed guzzlers. The guzzlers occur in an area that is not used by sheep and receives slight cattle use. Giroux Wash Guzzlers 1 &amp; 2 would have no direct or indirect impact on grazing uses or forage availability.</p> <p>Horse Range 1 is located within the Wells Station Grazing Allotment. The allotment is currently</p>

		<p>permitted for 211 cattle from 11/1 to 12/15 for 312 AUMs. In addition, a recognized sheep trail occurs in the allotment along the main Wells Station Road. Sheep have trailed through the allotment 1 out of the last 14 years, and spend less than 1 day on the trail in this allotment. Horse Range 1 occurs in an area that receives slight cattle use and no sheep use. Normally, deer and cattle do not compete for winter forage, and have little dietary overlap. Thus Horse Range 1 would have no direct or indirect impact on grazing uses or forage availability.</p> <p>Horse Range 2 is located in the Hardy Spring Allotment in an area of limited livestock use. This is a cattle grazing allotment with a season of use from 10/15 to 05/15 with a permitted use of 3,473 AUMs across the allotment. This project would result in &lt;1 acre of grazing loss which would have no direct or indirect impact on forage availability across the allotment.</p>
Land Uses***	N	There are no rights of way or other realty actions proposed at or near the project sites.
Transportation/Access	N	The Proposed Action will not alter or affect any transportation or access routes.
Recreation Uses including Back country Byways, Caves, Rockhounding Areas	N	The project would not affect recreation resources in the area.
Fire Management	N	There are no impacts to fire management expected from the Proposed Action.
Paleontological Resources	N	Limestone outcrops, the primary substrate within which many fossils are located, do not occur within the area of the Proposed Action. Therefore, the potential for paleontological resources to occur within the area and be affected by the Proposed Action is very low.
Socioeconomics	N	There are no impacts to socioeconomics expected due to the Proposed Action.
Public Health and Safety****	N	No public health or safety concerns have been identified. A Risk Management Worksheet will be created to mitigate any risks associated with the project.
Water Resources (Water Rights)	N	No concerns were identified throughout the NEPA process.
Mineral Resources	N	No issues were identified during scoping or internal BLM review.
Vegetative Resources	N	Because of the small area of disturbance (< 1 acre)

	described in the Proposed Action, effects to vegetative resources are negligible Marshal et al. (2006) found that although large game usage of habitat near water developments does increase, vegetation is not greatly affected (that is, forage quality does not suffer from overuse). . No further analysis is necessary.
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\*Usually not an issue unless the action is related to grazing, ESR, or habitat/vegetation restoration projects.

\*\*Consultation required unless a “not present” or “no effect” finding is made.

\*\*\*Rights of way and other realty actions.

\*\*\*\*Analyzed if the project could cause issues with law enforcement, traffic hazards, excessive noise that could affect the public, etc.

### **Potentially Affected Elements**

Based on the review of existing baseline data and surveys conducted in preparation of this EA, BLM specialists have identified the following as potential issues:

- Wildlife

## **IV. ENVIRONMENTAL EFFECTS**

### **Resources Not Present or Not Affected by the Proposed Action**

The following resources or potential issues are either not affected or are not present in the project area: air quality, forest health, rangeland standards and guidelines, Areas of Critical Environmental Concern (ACEC), cultural resources, environmental justice, prime farmlands, floodplains, migratory birds, Native American religious concerns, Federally Listed or Proposed Plant and Animal Species, Special Status animal and plant species, hazardous wastes, water quality (drinking/ground), wetlands/riparian, wilderness values, heritage special designations, soils/watershed values, grazing uses, realty actions, transportation, fire management, paleontological resources, wild and scenic rivers, public health and safety, water resources, mineral resources, noxious weeds and non native invasive plants, vegetative resources, socioeconomics, recreation, wild horses, fish, and visual resources.

### **Wildlife**

#### **Proposed Action**

The area surrounding the wildlife water development sites provides year-round habitat for big game species including mule deer, elk, and occasional pronghorn. The area also provides habitat for coyotes (*Canis latrans*), rabbits (*Sylvilagus* and *Lepus* spp.), sagebrush obligate and dependent birds, and other small mammals and reptiles. The Proposed Action should benefit many species of wildlife by providing a new water source, a scarce resource in the Great Basin ecosystem. The proposed action is consistent with the need for the action.

## No Action Alternative

There would be no benefit to wildlife species.

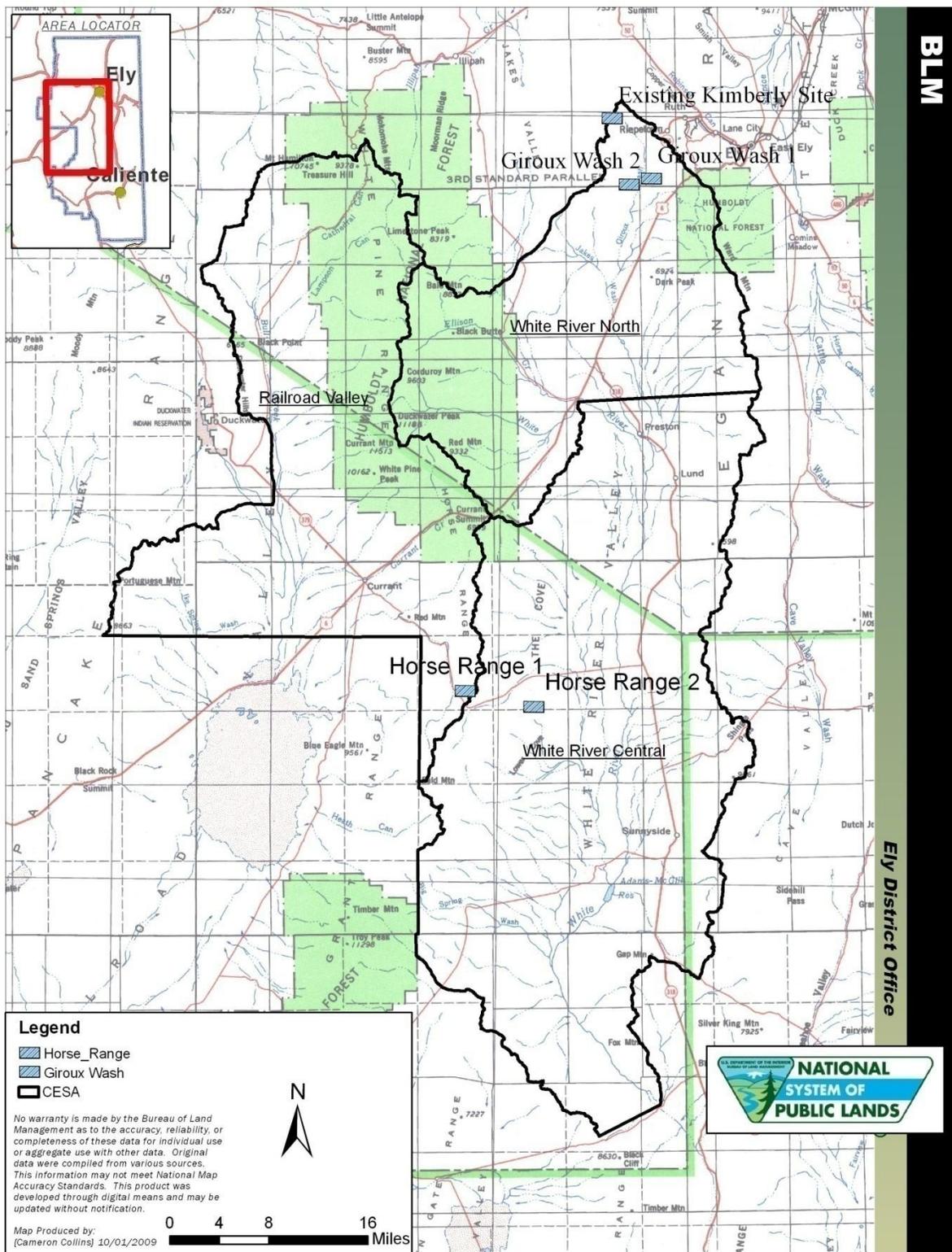
## **V. CUMULATIVE IMPACTS**

The purpose of the cumulative analysis in the EA is to evaluate the significance of the Proposed Action's contributions to cumulative impacts. A cumulative impact is defined under federal regulations as follows:

'...the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time' (40 CFR 1508.7).

According to the 1994 BLM Handbook (WO-IB-94-310) *Guidelines for Assessing and Documenting Cumulative Impacts*, the analysis can be focused on those issues and resource values identified during scoping that are of major importance. The issue identified by the ID team for this Proposed Action was wildlife.

The cumulative effects study area (CESA) is the White River North watershed in which the Giroux Wash sites are located, the Railroad Valley watershed for Horse Range 1, and White River Central watershed for Horse Range 2 (Figure 3).



**Figure 3.** Cumulative Effects Study Area (CESA) for the Giroux Wash and Horse Range wildlife water developments. The CESA consists of the Railroad Valley, White River North, and White River Central watersheds.

### Past Actions

Twelve other wildlife water developments have been constructed throughout the CESA, the nearest being 4.5 miles from the Horse Range 1 site. These actions have allowed for expansion of big game species into formerly unoccupied or sparsely used habitat and for increases in population sizes.

Livestock grazing by cattle and sheep has been continuous since about 1870 and wild horse use has been common in the area in recent decades. In August, 2009, 197 wild horses were gathered from the Seaman/Golden Gate Herd Area and an additional 182 were gathered from the White River Herd Area.

Robinson Mine, an open pit copper mine, has been in near constant operation since the early 1900's.

Recreational use of the CESA, included OHV use, hunting, wildlife viewing, antler collecting, etc. occurred throughout the area.

### Present Actions

Most of the area surrounding the potential water development sites is not grazed or grazed only lightly by domestic livestock, due to lack of nearby water sources. However, livestock grazing (cattle, sheep, and goats) continues throughout the CESA. In addition, much of the CESA also receives use by wild horses, mule deer, elk, and pronghorn. Recreational activities within the surrounding areas include hunting, trapping, wildlife viewing, and OHV use.

Robinson Mine is currently in operation. The southern boundary of the mine permit area is located between 1-1.5 miles north of the proposed sites within Giroux Wash.

A portion of the Shingle Pass – Sunnyside Allotment Fence extends into the White River Central Watershed. This fence is designed to better control cattle movement within and between the Shingle Pass and Sunnyside Grazing Allotments. This fence is currently laid out and awaiting construction.

### Reasonably Foreseeable Future Actions

It is reasonable to expect that livestock grazing would continue throughout the CESA as term grazing permits are renewed. The Hardy Spring and Sunnyside Grazing Allotments are scheduled to be evaluated and term grazing permit renewed in FY2010. The Forest Moon Grazing Allotment is scheduled to be evaluated and the term grazing permit renewed in FY2011. The Wells Station Allotment is currently being evaluated and the term grazing permit renewed in fiscal year 2010. The Giroux Wash Allotment is scheduled to be evaluated and the term grazing permit renewed in 2012 or 2013.

The location of Proposed Site 2 in the Horse Range is approximately 1.5 miles NNW of the Lower Cove Fire. Increased use of this burned area by wildlife should be anticipated if a wildlife

water development were constructed at this site (however, as detailed in the Proposed Action, it is not the preferred site in the Horse Range).

It is reasonable to expect that there would continue to be normal wildfire activity within the CESA, fuels treatment projects including prescribed burning, pinyon-juniper chainings, and sagebrush thinning projects designed to restore or re-establish the herbaceous understory. All such fuels projects are designed to move vegetative communities toward rangeland/woodland health standards identified by the Northeastern Great Basin or Mojave Southern Resource Advisory Committees.

It is reasonable to expect modest increases in at least some of the previously mentioned recreational activities if human populations in White Pine and Nye Counties, and the Las Vegas metropolitan area continue to grow.

A water well and potential water pipeline development for livestock has been proposed for the area less than one mile southeast of the preferred site in Giroux Wash. This project has been placed on the Egan Field Office range improvement project list to initiate planning in fiscal year 2010. The purpose of this project is to provide a water source for livestock in the area and distribute cattle or sheep use within the Giroux Wash Allotment. If completed, it could result in increased competition for forage between livestock, wild horses, and wildlife within the immediate area. However, the grazing permittee in the allotment has the flexibility to graze many different allotments and water sources. In addition, the Jakes Wash Wild Horse Herd Management Area is scheduled to be “zeroed out”. For these reasons, forage competition would not be expected to be a resource concern.

The expected life of Robinson Mine is through 2017 and there are no plans to significantly expand operations. However, this mine has been in operation for approximately a century, and it is reasonable to expect that fluctuations in commodity prices could lead to continued resource exploration and mine operation beyond 2017.

## **Cumulative Effects Summary**

### Noxious and Invasive Weeds

The establishment of non-native, invasive species such as halogeton, Russian thistle, cheatgrass and mustard could occur under the Proposed Action and other interrelated actions. However most past and all present and reasonably foreseeable future actions on public land have noxious and invasive weed prevention stipulations and weed treatment requirements associated with each project. These, in combination with the active BLM Ely District Weed Management Program, are designed to minimize the spread of weeds.

### Wildlife

The Proposed Action, in combination with other Reasonably Foreseeable Future Actions, is not expected to have effects upon wildlife populations above those previously described in this Environmental Assessment.

## **VI. PROPOSED MITIGATING MEASURES**

Appropriate measures to avoid significant effects to all resource concerns have been included as part of the Proposed Action. No additional mitigation measures are needed.

## **VII. LIST OF PREPARERS**

### **Internal District Review**

Cameron Collins	Project Lead; Wildlife Biologist
Elvis Wall	Native American religious concerns
David Jacobson	Wilderness, ACEC
Melanie Peterson	Hazardous & Solid Waste
Ruth Thompson	Wild Horse and Burro Specialist
Mindy Seal	Vegetation, Invasive Weeds
Gina Jones	Ecologist
Mark D'Aversa	Hydrologist/Soils
Kalem Lenard	Recreation, VRM
Chris Mayer	Supervisory Resource Management Specialist
Mark Lowrie	Range Specialist
Amanda Anderson	Range Specialist
Lynn Bjorklund	Environmental Protection Specialist
Zach Peterson	Forester
Leslie Riley	Cultural Resources

## **VIII. TRIBES, INDIVIDUALS, ORGANIZATIONS, OR AGENCIES CONSULTED**

The BLM consulted and coordinated with the following individuals, Federal, state and local agencies, tribes and non-BLM persons during the development of this environmental assessment:

Mike Podborny	Nevada Department of Wildlife
Steve Foree	Nevada Department of Wildlife
Katie Miller	Nevada Department of Wildlife
Lawrence Bear	Chair, Skull Valley Band of Goshute Indians
Jeannine Borchardth	Chair, Indian Peaks Band
Diana Buckner	Chair, Ely Shoshone Tribe
David Gonzales	Chair, Te-Moak Tribe of the Western Shoshone Indians of Nevada
Jerry Millet	Chair, Duckwater Shoshone Tribe
Alfreda Mitre	Chair, Las Vegas Paiute Tribe
Renaee Pete	Chair, Cedar City Band of Paiutes
Glenn Rogers	Chair, Shivwits Band of Paiutes
Ona Segundo	Chair, Kaibab Band of Paiute Indians
Rupert Steele	Chair, Confederate Tribes of the Goshute Indian Reservation
Philbert Swain	Chair, Moapa Band of Paiutes
Lora Tom	Chair, Paiute Indian Tribe of Utah

## LITERATURE CITED

- Arizona Game and Fish Department. 2004. Technical Guidance Bulletin No. 8.
- BLM 2008. Ely District Record of Decision and Approved Resource Management Plan. U.S. Department of the Interior, Bureau of Land Management, Ely District Office, Ely Nevada. August 2008.
- BLM. 2007.. Ely Proposed Resource Management Plan and Final Environmental Impact Statement. U.S. Department of the Interior, Bureau of Land Management, Ely District Office, Ely Nevada. November 2007.
- Hart, R.H., J. Bisso, M.J. Samuel, and J.W. Waggoner, Jr. 1993. Grazing systems, pasture size, and cattle grazing behavior, distribution and gains. *Journal of Range Management* 46:81-87.
- Hervert, J.J. and P.R. Krausman. 1986. Desert mule deer use of water developments in Arizona. *Journal of Wildlife Management* 50:670-676.
- Krausman, P.R., S.S. Rosenstock, and J.W. Cain III. 2006. Developed waters for wildlife: science, perception, values and controversy. *Wildlife Society Bulletin* 34: 563-569.
- Lyon, L.J. 1983. Road density models describing habitat effectiveness for elk. *Journal of Forestry* 81:595-613.
- Marshal, J.P., P.R. Krausman, V.C. Bleich, S.S. Rosenstock, and W.B. Ballard. 2006. Gradients of forage biomass and ungulate use near wildlife water developments. *Wildlife Society Bulletin* 34: 620-626.
- McCabe, R.E. 1982. Elk and Indians: historical values and perspectives. Pages 61-123 *in* J.W. Thomas and D.E. Toweill, eds. *Elk of North America, ecology and management*. Stackpole Books. Harrisburg, PA, USA.
- Miller, S.J. 1979. The archaeology of Smith Creek Canyon, Eastern Nevada. Nevada State Museum Anthropological Paper #17: 273-329.
- Nagle, J.P. and G.A. Harris. 1996. Grazing compatibility of cattle and elk on mountain ranges. *Proc. Int. Grassland Congr., Helsinki, Finland* 10:994-997.
- Nelson, J.R. 1984. A modeling approach to large herbivore competition. Pages 491-524 *in* Developing strategies for rangeland management. Westview Press, Boulder, CO, USA.
- Nelson, J.R and D.G. Burnell. 1975. Elk-cattle competition in central Washington. Pages 71-83 *in* Proc. Range multiple use short course. University of Idaho, Moscow, ID, USA.
- Nevada Department of Wildlife. 2003. Nevada's pronghorn and antelope: ecology,

- management and conservation. *Biological Bulletin* No.13.
- Nevada Department of Wildlife. 2004. Mule deer: population dynamics, issues and influences. *Biological Bulletin* No. 14.
- O'Brien, C.S., R.B. Waddell, S.S. Rosenstock, and M.J. Rabe. 2006. Wildlife use of water catchments in southwest Arizona. *Wildlife Society Bulletin* 34(3): 582-591.
- O'Neil, J. 1985. Population status - management strategies and future research on elk in Arizona. Pages 35-43 *in* G.W. Workman, ed. *Proc. Western Elk Management*, a symposium. Utah Agric. Exp. Station., Utah State Univ., Logan, UT, USA.
- Robertson, H.J. 1954. Half-century changes on northern Nevada ranges. *Journal of Range Management* 7:117-121.
- Robison, E.A. 1985. Personal Communication via letter to William A. Molini, Nevada Department of Wildlife, cited in NDOW's Lincoln County Elk Management Plan, 1999.
- Tausch, R.J., N.E. West and A.A. Nabi. 1981. Tree age and dominance patterns in Great Basin Pinyon-Juniper woodlands. *Journal of Range Management* 34:259-264.
- Thomas, J.W., H. Black, Jr., R.J. Scherzinger, and R.J. Pedersen. 1979. Elk. Pages 104-137 *in* J.W. Thomas, ed. *Wildlife habitats in managed forests, the Blue Mountains of Oregon and Washington*. US Department of Agriculture Handbook 553, Washington, DC, USA.
- Wisdom, M.J., N.J. Cimon, B.K. Johnson, E.O. Garton, and J.W. Thomas. 2005. Spatial partitioning by mule deer and elk in relation to traffic. Pages 53-66 *in* Wisdom, M.J., technical editor, *The Starkey Project: a synthesis of long-term studies of elk and mule deer*. 2004 Transactions of the North American Wildlife and Natural Resources Conference, Alliance Communications Group, Lawrence, Kansas, USA.

## **APPENDIX 1**

### **Standard Operating Procedures**

1. The Proposed Action would comply with Interim Management Guidance for compliance with the Migratory Bird Treaty Act outlined in the *Washington Office Instruction Memorandum No. 2008-050*.
2. A Class III cultural survey of each area would be conducted and appropriate site documentation completed prior to project implementation. National Register eligible cultural resources would be avoided or impacts would be mitigated as necessary before the Proposed Actions are implemented.
3. Access would be via existing two-track roads. No permanent new roads or trails would be created. Some off-road travel could occur, however, off-road travel would be limited to that necessary to safely and practically achieve resource objectives.
4. A project inspector would be assigned to the project to ensure it is constructed according to specifications. The project would be inspected and maintained annually by BLM and/or NDOW personnel, as well as volunteers. The sites would be checked for noxious weeds annually for at least three seasons, or until native vegetation has recovered enough to lessen the chance of infestation.
5. Equipment would not be allowed to operate when the ground is unsuitable (i.e., excessively muddy or when saturated with moisture) or in terrain too steep to minimize ground impacts.
6. Removal of vegetation would be kept to the minimum necessary for construction.
7. Pursuant to Nevada Revised Statutes 527.060-120, all cactus species native to the State of Nevada are protected and regulated. Removal of all cactus species would be avoided as much as practicable.
8. Project area cleanup would be accomplished by removing all refuse to an approved sanitary landfill.
9. The exclusion fences would be flagged using white flagging to allow for wildlife and wild horses to adjust to the fence and decrease the potential for collisions.

**APPENDIX 2**  
**RISK ASSESSMENT FOR NOXIOUS & INVASIVE WEEDS**  
**Horse Range Wildlife Water Development**  
**Nye County, Nevada**

On November 24, 2009 a Noxious & Invasive Weed Risk Assessment was completed for the two wildlife water development projects in the Horse Range in Nye County, NV. A big game wildlife water development would be constructed in the southern Horse Range, within either the Duckwater or Hardy Spring allotments during summer 2010. The preferred site (Proposed Site 1; Figure 2) is located in the Duckwater allotment at, T 9N, R 59E, SENE 27 and an alternative site (Proposed Site 2; Figure 2) is located at T 9N, R 60E, W2SW 34 and could be constructed at a later date if the need is identified.

This water development would consist of one large poly apron on the ground to catch rain and snow (approx. 20'x100') and an associated apron fence (approx. 40' x 120'). The apron will funnel catchment water through a Johnson Screen and 2" diameter buried polyethylene pipe to two 1,800 gallon Boss Tanks (43"x102"x192") with drinkers in the corners. The apron will be fenced with standard BLM four-strand barbed-wire. The drinker tanks will be fenced with a metal pipe rail fence to exclude livestock and wild horses and will be approximately 60'x 60'. A rubber-tired backhoe will be used to smooth a location for the apron, which consists of removing surface vegetation and mounding soil to approximately 1' high at the apron edges to create a catchment. The tanks will be partially buried in the ground, with approximately 2' protruding above soil surface. Approximately 40' of pipe will be buried 3' underground to convey water from apron to tanks.

Equipment and materials will be located on site the week prior to the volunteer day, and it is anticipated that the entire project could be completed in one day with adequate pre-planning and coordination. Access would be on existing two-track roads and no new road construction would be needed. Installation of the wildlife water developments would result in  $\leq 1/4$  acre of total surface disturbance each. Access to the sites for subsequent annual inspections and routine maintenance would be on foot.

No field surveys were conducted for this project. Instead the Ely District weed inventory data was consulted. There are currently no documented weed infestations in the project areas. Also, no documented weed infestation are found along roads and drainages within three miles leading to the project area. The Southwestern Regional Gap data does identify invasive annual grasses at the second site. While not officially inventoried the following weeds probably occur in or around the project areas: cheatgrass (*Bromus tectorum*), bur buttercup (*Ceratocephala testiculata*), field bindweed (*Convolvulus arvensis*), halogeton (*Halogeton glomeratus*), horehound (*Marrubium vulgare*), and Russian thistle (*Salsola kali*). This area was last inventoried for noxious weed in 2006.

**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 Moderate (4) at the present time. The ground disturbance created by the excavation of the site and the use of heavy machinery could lead to the introduction of new weed infestations to the project area.

**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 weed infestations establish within the project area this could have an adverse impact those native plant communities since the areas are currently considered to be weed-free. Also, an 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 (32). This indicates that the project can proceed as planned as long as the following measures are followed:

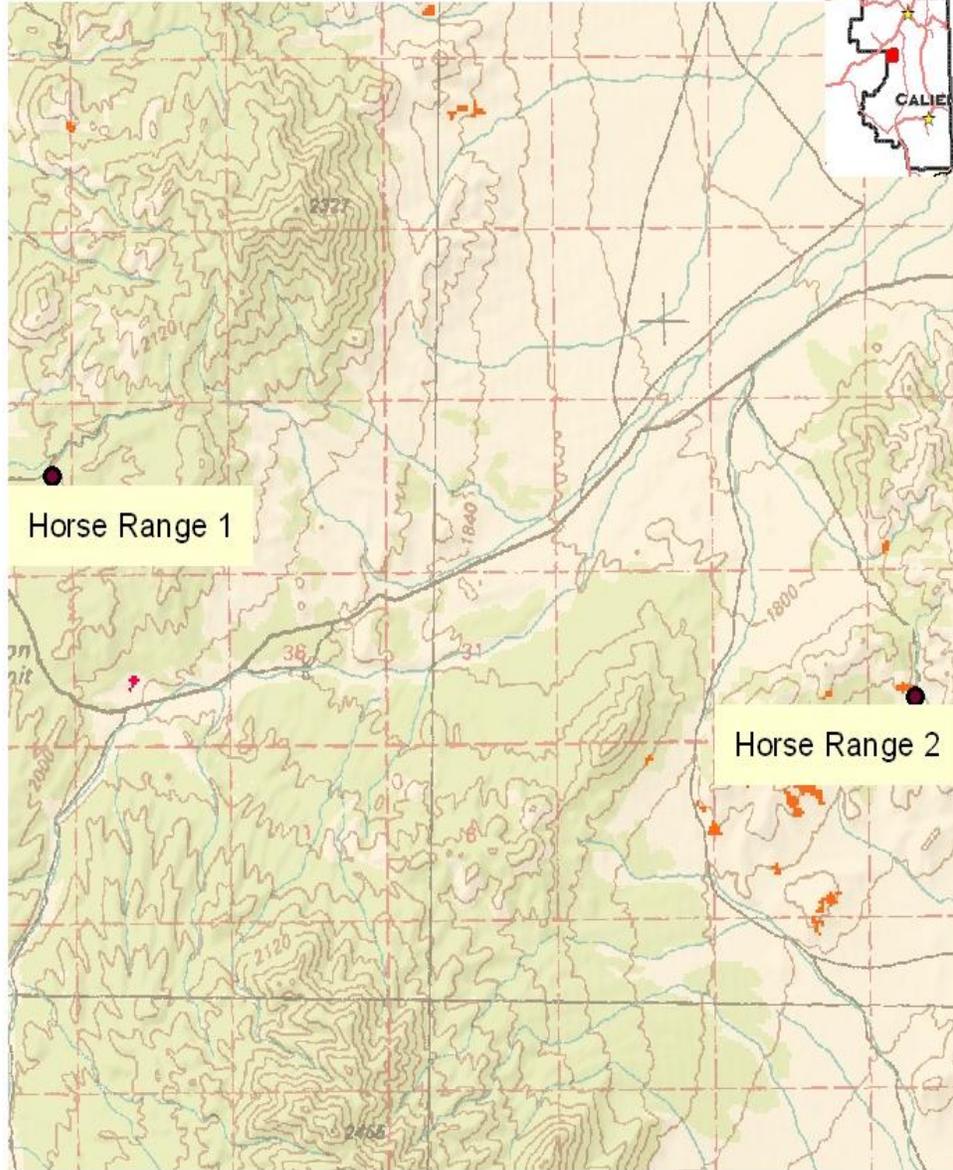
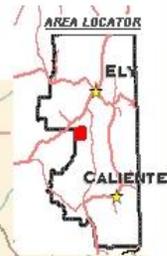
- Prior to the entry of vehicles and equipment to a planned disturbance area, a weed scientist or qualified biologist will identify and flag areas of concern. The flagging will alert personnel or participants to avoid areas of concern.
- Prior to entering public lands, the contractor, operator, or permit 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 and heavy equipment 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 and equipment 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.

- 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.
- Include noxious and invasive weed detection in all monitoring activities. If the spread of noxious or invasive 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.

Reviewed by: /s/Mindy Seal  
Mindy Seal  
Natural Resource Specialist

11/23/2009  
Date

HORSE RANGE WATER DEVELOPMENT PROJECT  
DOCUMENTED NOXIOUS & INVASIVE WEED INFESTATIONS



Legend

- ◆ Horse\_Range
  - BLM
  - Private
- Southwest Regional Gap Analysis**
- Southwest Regional Gap Analysis**
- Invasive Annual and Biennial Forbland
  - Invasive Annual Grassland
  - Invasive Perennial Grassland



No warranty is made by the Bureau of Land Management as to the accuracy, reliability or completeness of these data.

BLM

Ely District Office

**RISK ASSESSMENT FOR NOXIOUS & INVASIVE WEEDS**  
**Giroux Wash Wildlife Water Development**  
**White Pine County, Nevada**

On February 11, 2009 a Noxious & Invasive Weed Risk Assessment was completed for the two wildlife water development projects in Giroux Wash in White Pine County, NV. BLM proposes to partner with NDOW, Robinson Mine, Rocky Mountain Elk Foundation, and local volunteers to construct these projects southwest of Robinson Mine, within the Giroux Wash Allotment. Access would be on existing two-track roads and no new road construction would be needed. This water development will consist of two large poly aprons (each approx. 20' x 100') on the ground to catch rain and snow. Each apron will funnel water through a Johnson Screen and pipe to a 1,800 gallon Boss Tank with drinker in one corner. An overflow from these main tanks will be piped into a second tank for an overall capacity of 7,200 gallons for the four tanks combined. The large capacity of water storage is needed to support use by elk for an extended period of time during late summer and fall. The two aprons will be placed side by side and fenced with a four strand barbed-wire fence. The four tanks will be placed in a series of two main tanks and two overflow tanks with a pipe rail fence around them to exclude livestock and wild horses. Robinson Mine proposes to provide heavy equipment labor in the form of a rubber-tired backhoe with operator to install aprons and tanks. The agencies and Robinson Mine will organize a group of local volunteers from within and from the interested public to assist with construction and fencing. Equipment and materials will be located on site a day prior to the volunteer day, and it is anticipated that the entire project could be completed in one day with adequate pre-planning and coordination.

No field surveys were conducted for this project. Instead the Ely District weed inventory data was consulted. There are currently no documented weed infestations in the project areas. The following species are found along roads and drainages leading to the project area:

<i>Acrotilon repens</i>	Russian knapweed
<i>Centaurea squarrosa</i>	Squarrose knapweed
<i>Centaurea stoebe</i>	Spotted knapweed
<i>Cirsium vulgare</i>	Bull thistle
<i>Lepidium draba</i>	Hoary cress
<i>Lepidium latifolium</i>	Tall whitetop
<i>Tamarix spp.</i>	Salt cedar

While not officially inventoried the following weeds probably occur in or around the allotment: cheatgrass (*Bromus tectorum*), bur buttercup (*Ceratocephala testiculata*), field bindweed (*Convolvulus arvensis*), halogeton (*Halogeton glomeratus*), horehound (*Marrubium vulgare*), and Russian thistle (*Salsola kali*). This area was last inventoried for noxious weed in 2006.

**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 Moderate (4) at the present time. The ground disturbance created by the excavation of the site and the use of heavy machinery could lead to the introduction of new weed infestations to the project area.

**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 weed infestations establish within the project area this could have an adverse impact those native plant communities since the areas are currently considered to be weed-free. 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 (32). This indicates that the project can proceed as planned as long as the following measures are followed:

- Prior to the entry of vehicles and equipment to a planned disturbance area, a weed scientist or qualified biologist will identify and flag areas of concern. The flagging will alert personnel or participants to avoid areas of concern.
- 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 and heavy equipment 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 and equipment 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.
- 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.
- Include noxious and invasive weed detection in all monitoring activities. If the spread of noxious or invasive 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.

Reviewed by:  /s/Bonnie M. Million  
 Bonnie M. Million  
 Ely District Noxious & Invasive Weeds  
 Coordinator

2/11/2009  
 Date

