Malheur Resource Area
100 Oregon Street
Vale, Oregon 97918

February 2009

Leslie Gulch ACEC Project

Environmental Assessment No. DOI-BLM-OR-V040-2009-005

BLM Vale District

NATIONAL SYSTEM OF PUBLIC LANDS

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BLM/OR/WA/PL-09/021+1792

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MALHEUR FIELD OFFICE

Finding of No Significant Impact

Leslie Gulch ACEC Project
Environmental Assessment Number DOI-BLM-OR-V040-2009-005

BACKGROUND

In response to a request from representatives of the Foundation for North American Wild Sheep (FNAWS), BLM will install certain fence and water development projects to protect California bighorn sheep habitat quality within the Leslie Gulch Area of Critical Environmental Concern (ACEC) and Honeycombs Wilderness Study Area (WSA) OR-3-77A. Bighorn sheep water quality improvement and protection of Leslie Gulch ACEC values impacted by wild horses constitute the principle issues needing resolution.

FINDING OF NO SIGNIFICANT IMPACT

On the basis of the information contained in the EA, and all other information available to me, it is my determination that: (1) the implementation of the Proposed Action will not have significant environmental impacts beyond those already addressed in the Proposed Southeastern Oregon Resource Management Plan and Final Environmental Impact Statement (SEORMP FEIS 2001 and (2) the Northern Resource Area Management Framework Plan (August 1979) and (3) the Proposed Action does not constitute a major federal action having a significant effect on the human environment. Therefore, an environmental impact statement or a supplement to the existing environmental impact statement is not necessary and will not be prepared.

This finding is based on my consideration of the Council on Environmental Quality's (CEQ) criteria for significance (40 CFR '1508.27), both with regard to the context and to the intensity of the impacts described in the EA or as articulated in the letters of comment.

Context
The presence of several important and sensitive resource values, as described in the EA, required that BLM make a well reasoned and justified decision to support the management actions considered. Potentially conflicting management directives and regulatory requirements relative to wild horses, riparian area management, special status species management, the Fundamentals of Rangeland Health (43 CFR 4180), and Wilderness Study Areas were all involved and were carefully considered in the proposed action. The proposed action has been shaped with involvement from BLM grazing permittees as well as individuals associated with the Oregon Natural Desert Association, Western Watersheds Project, Advocates For The West, Oregon Department of Fish and Wildlife, and the Foundation for North American Wild Sheep.

Intensity:
1) *Impacts that may be both beneficial and adverse.*
The EA has considered both the beneficial and adverse impacts of rangeland management actions involving fence construction and water development. On the whole and when fully implemented, the project will result in improved upland and riparian vegetative conditions in the Leslie Gulch ACEC and Honeycombs WSA and cause relatively little restriction to the Three Fingers wild horse herd or wildlife. Because of various BLM design features, the adverse impacts from water development and fence construction will cause short term adverse surface disturbances, but over the long term site recovery is expected. Under the

proposed action, BLM will be able to succeed in providing a quality water source for bighorn sheep and wild horses with some limited potential for adverse effects on livestock permittees.

2) *The degree to which the proposed action affects public health or safety.*
The proposed action will have little or no influence on public health and safety. The same types of rangeland development projects considered are common and well distributed on public land throughout the Vale District, BLM. Project development impacts to human safety are considered benign.

3) *Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.*
The project area is relatively unique in that the geologic formations, some soil types, and several special status plant species do not occur elsewhere in Malheur County, Oregon. As such, BLM has carefully weighed the potential environmental impacts of the actions considered. The context statement clearly shows that BLM has acknowledged special resource values by designating an ACEC and several adjoining WSAs.

4) *The degree to which the effects on the quality of the human environment are likely to be highly controversial.*
Ordinarily, BLM rangeland development actions within ACECs or WSAs attract attention and some level of controversy. However, given that state and private entities with strong interest in the welfare of Leslie Gulch have participated in forming the preferred alternative, the ensuing controversy over the proposed actions should be limited.

Because the Three Fingers wild horse HMA reduction discussed in the EA has already been exposed to public comment and analyzed in a land use plan amendment for the (1) Northern Malheur Management Framework Plan (MFP) and (2) it is included as part of the SEORMP ROD, it should not be new information for wild horse interest groups.

Some disagreement from BLM grazing permittees and wild horse interest groups may be expected because of the possible need to (1) reduce the Three Fingers AML and (2) reduce active livestock AUMs in the Three Fingers grazing allotment. However, downward wild horse or livestock grazing adjustments have been made elsewhere within the Vale District for a variety of resource protection reasons. Further, the burden of AUM reductions would be shared by wild horses and livestock if a reduction becomes necessary. Provided that timely horse gathers are accomplished, grazing permittees should not be adversely impacted by BLM actions and therefore grazing permit related controversy should likewise be limited.

5) *The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.*
It is possible that the proposed fencing remedy and water developments may not function as well as planned. However, aside from that uncertainty there are no unique or unknown risks associated with the BLM actions.

6) *The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.*
The BLM proposed action does not set a precedent for future actions that might occur within the analysis area. Where appropriate, BLM has in the past chosen to protect riparian resources within WSAs from cattle and wild horses by either installing fence exclosures or requiring specific livestock grazing system terms and conditions. Actions allowed in this EA are therefore no different from those that have occurred in the past or those that may occur in the future.

Because of the important and sensitive resource values at stake, each and every other potential management proposal for the Leslie Gulch ACEC or Honeycombs WSA will be subjected to additional environmental analyses. Each future action will have to stand on its own merits with due consideration given to the cumulative effects of previous actions taken.

7) *Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.*
There are no reasonably foreseeable additional rangeland developments proposed for the analysis area. Because of the limited amount of rangeland development present within the analysis area, the additional number and extent of projects proposed will not result in significant cumulative impacts.

8) *The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the NRHP or may cause loss or destruction of significant scientific, cultural, or historical resources.*
No districts, sites, highways, structures or objects listed in or eligible for listing in the National Register of Historic Places (NRHP) were identified in the project area and EA. The proposed action will not cause the loss or destruction of significant scientific, cultural or historical resources.

9) *The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the ESA of 1973.*
There are no federal Threatened or Endangered species associated with project development area and neither have any critical habitat designations been established within the analysis area. Thus, there will be no conflicts involving the ESA as a result of BLM action.

10) *Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.*
The proposed action will not violate or threaten to violate any Federal, State, or local law or requirement imposed for the protection of the environment.

1 Introduction

1.1.1 *Title*

Leslie Gulch ACEC Project.
Environmental Assessment (EA) No. DOI-BLM-OR-V040-2009-005

1.1.2 *Location of Proposed Action*

The proposed action is located within the Succor Creek Geographic Management Area (GMA), Malheur Resource Area, Vale District, Bureau of Land Management (BLM). Bureau of Reclamation (BoR) administered land surrounding Owyhee Reservoir is also included. Refer to Map 1, Leslie Gulch ACEC Project Overview

Other relevant Vale BLM activity planning units involved with the proposed action include the Honeycombs Wilderness Study Area (WSA) OR-3-77A, the Leslie Gulch Area of Critical Environmental Concern (ACEC), the Three Fingers Wild Horse Herd Management Area (HMA), and the Riverside pasture of the Three Fingers livestock grazing allotment (10503). Refer to Maps 1, 2, and 3.

1.1.3 *Name and Location of Preparing Office*

Bureau of Land Management
Vale District
Malheur Field Office
100 Oregon Street
Vale, OR 97918.

1.1.4 Purpose of and Need

The purpose of this EA is to determine which management action(s) would be appropriate to resolve ongoing resource conflicts involving riparian habitat, wild horses, [1]California bighorn sheep (*Ovis Canadensis ssp.*), and the Leslie Gulch Area of Critical Environmental Concern (ACEC). Under ongoing management, the analysis area considered is failing to meet certain plant and animal resource management objectives primarily due to wild horse grazing use. Section 7 Spring, the water source that is the focal point of this EA, is not functioning properly and as a result it is contributing towards California bighorn sheep mortalities for reasons related to blue-green algae poisoning.

For this EA, several complicated public land administration issues are raised including (1) rangeland project developments and use of motorized vehicles in the Honeycombs Wilderness Study Area (WSA) (2) wild horse and bighorn sheep access to limited drinking water sources (3) protection of relevant ACEC values where wild horse occupation has been excluded in an ACEC plan and the Southeastern Oregon Resource Management Plan and Record of Decision (SEORMP ROD 2002) (4) adverse wild horse social behavior towards bighorn sheep at water sources and (6) the need to improve riparian conditions at Section 7 Spring as directed by the Fundamentals of Rangeland Health (43 CFR § 4180).

Although several resource management considerations are at issue, bighorn sheep water needs triggered the need for this EA. The Leslie Gulch bighorn sheep population involved in the proposed action has declined substantially and the reason is believed to be at least partially due to poor water quality and limited water availability. In response to this decline, the Idaho and Oregon Chapters of the Foundation for North American Wild Sheep (FNAWS) have asked BLM to consider taking actions that would improve both the quality and availability of bighorn sheep drinking water.

[1] Because of recent genetic analyses conducted in California there is some question about the proper species delineations of wild sheep in North America. For now, the Oregon Department of Fish and Wildlife refers to wild sheep within the analysis area as California bighorn sheep.

In addition to the analysis of what would happen if current management were to continue, this EA analyzes in detail 2 different bighorn sheep habitat management options and how each one might address the problem FNAWS has raised. Out of necessity, the EA describes how each potential solution would impact wild horses, special status plants, the Honeycombs Wilderness Study Area (WSA), and livestock grazing use within the analysis area.

1.1.5 Scoping and Public Involvement

The proposed action has been shaped with involvement by BLM grazing permittees and individuals associated with the Oregon Natural Desert Association (ONDA), Western Watersheds Project (WWP), Advocates For The West (AW), Oregon Department of Fish and Wildlife (ODFW), and the Foundation for North American Wild Sheep (FNAWS). This proposed action represents one further step in a long line of management actions that have been taken since 1963 to protect and enhance bighorn sheep habitat in the vicinity of Leslie Gulch.

1.1.6 Conformance

The proposed action will be shown to be in conformance to the following:

- "Proposed Southeastern Oregon Resource Management Plan and Final Environmental Impact Statement" or PSEORMP FEIS (USDI BLM 2001)
- "Southeastern Oregon Resource Management Plan and Record of Decision" or SEORMP ROD (USDI BLM 2002), also called the land use plan.
- 43 CFR § 4180, "Fundamentals of Rangeland Health and Standards and Guidelines for Grazing Administration", (USDI BLM 1996)
- "Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Public Lands in Oregon and Washington", or the OR/WA S&Gs (USDI BLM 1997).
- The Wild Free-Roaming Horse and Burro Act of 1971
- BLM Manual Handbook H-8550-1, Interim Management Policy for Lands Under Wilderness Review. (USDI-BLM 1995).
- Final Leslie Gulch ACEC Management Plan Summary of Management Actions (USDI BLM November 1995). 33 p.

Based on the analysis provided in this EA, the Decision Record will describe how the BLM-proposed action and alternatives would meet the SEORMP ROD (USDI BLM 2002) objectives listed below.

- Rangeland Vegetation
- Special Status Plant Species
- Water Resources and Riparian/Wetlands
- Wildlife and Wildlife Habitat and Special Status Animal Species
- Wild Horses
- Rangeland/Grazing Use Management
- Recreation
- Areas of Critical Environmental Concern
- BLM Wilderness Interim Management Policy (IMP) for WSAs
- Cultural / Paleontological Resources

2 Proposed Action and Alternatives

For this EA, readers should pay close attention to the following major project design differences considered:

- Gap fencing in Alternative 2 versus continuous fencing with no gaps in Alternative 3.

- Permanent installation of white topped fence posts to make fences visible to wild horses in Alternative 2 versus temporarily flagged fence wire and all green fence posts in Alternative 3.
- The use of motorized vehicles[2] to facilitate fence construction in Alternative 2 versus no motorized vehicle use in Alternative 3.
- Avoidance of Section 7 Spring development in Alternative 2 versus development of Section 7 Spring with an associated pipeline and trough in Alternative 3.

2.1.1 Alternative 1 - (No Action)

Under Alternative 1, BLM would continue to take the minimum action necessary to protect the Leslie Gulch ACEC and Section 7 Spring from wild horse grazing impacts. BLM would continue to gather wild horses on a 4 year cycle so that the current Three Fingers Horse Management Area (HMA) Allowable Maximum Limit (AML) of 75 to 150 horses would not be exceeded.

2.1.2 *Alternative #2*

Under Alternative 2, BLM would take action to resolve ongoing resource conflicts involving bighorn sheep, the Leslie Gulch ACEC, and Section 7 Spring by installing about 5 to 6 miles of permanent gap fencing close to the northern boundary of the Leslie Gulch ACEC.

New fence construction would occur in segments from Steamboat Ridge to Owyhee Reservoir and it would be placed with the intent to deny wild horse and cattle access to the Leslie Gulch ACEC and Section 7 Spring. Under Alternative 2, BLM would take maximum advantage of steep landforms and rocky areas so that the least amount of fence[3] necessary to meet objectives would be built. There would be a continuous gap fence segment built between the existing fence near the Steamboat Ridge road west to the Yellow Jacket complex of spires and cliffs. From the Yellow Jacket complex and west to the Owyhee Reservoir, BLM would install an undetermined number of gap fences.

To minimize costs and surface disturbance impacts, BLM would not develop Section 7 Spring nor would BLM pipe Section 7 Spring water to a livestock trough.

BLM would construct gap fencing so it is not sky lined on the ridge top by placing it north of the Leslie Gulch ACEC boundary. Also, because Section 7 Spring is located about one quarter of a mile north of the Leslie Gulch ACEC boundary, new fencing would have to curve out to the north and then back to the south as shown on Map 1 and Appendix C.

Fence Construction, Design, and Maintenance Features
The eastern 2 miles of fencing material would be transported onsite by standard 4-wheel drive trucks, likely pulling trailers, originating from the existing Steamboat Ridge road, which serves as the east boundary of the Honeycombs WSA. Terrain limitations for the 4 miles of fence west of Sec. 7 spring would necessitate helicopter transport of material to stockpile sites. From the stockpile sites, all-terrain vehicles (ATVs) and pack animals would then transport posts and wire along the final fence location.

Prior to entering BLM lands, equipment used for earth disturbing activities would be thoroughly washed to remove all soil and plant material to avoid introduction of noxious weeds to the construction site. Cross country vehicle travel would be limited to the ridge top or, where required for driver's safety and/or to avoid undue surface damage, just down-slope to the north of the ridge top.

Fence construction would conform to design criteria known to allow safe passage by bighorn sheep and mule deer while excluding wild horses and cattle (BLM Manual H-1741-1). Spacing between the 4.5-foot

[2] Under both alternatives a helicopter would be used to deliver fencing materials to stockpile sites.
[3] Because project proponents did not indicate exactly where gap fence construction may occur, BLM cannot accurately describe how much fence material would be required under Alternative 2. Thus, the analysis provided makes the assumption that total fencing needs would be less than the 6 mile distance from Steamboat Ridge to Owyhee Reservoir, but probably more than 5 miles.

(above ground) steel green painted posts with white painted tops would be approximately 15 – 18 feet. See Appendix B.
Project layout would ensure the fence would not adversely affect either special status plant species or cultural sites.

White topped steel fence posts would be used for fence construction to make them visible to wild horses. Fences would be tied to rock outcrops wherever possible to minimize cost, resource impacts, and limit impediments to bighorn sheep. Fence corners and bends would be built with steel posts instead of wood or rock baskets to reduce visibility.

Future fence maintenance would be conducted via non-motorized transport.

2.1.3 *Alternative #3 - (Proposed Action)*

Under Alternative 3, BLM would take two discrete actions to resolve ongoing resource conflicts involving bighorn sheep, the Leslie Gulch ACEC, and Section 7 Spring (1) install about 6 miles of continuous, permanent fencing close to but outside of the northern boundary of the Leslie Gulch ACEC and (2) developing Section 7 Spring as described further below.

New fence construction would extend from Steamboat Ridge to Owyhee Reservoir and it would be designed with the intent to deny wild horse and cattle access to the Leslie Gulch ACEC and Section 7 Spring. Because BLM would construct the new barrier fence so it is not visually sky-lined on the ridge, it would be placed slightly north and down-slope of the Leslie Gulch ACEC boundary. In addition, because Section 7 Spring is located about one quarter of a mile north of the Leslie Gulch ACEC boundary, new fencing would have to extend out to the north and then back to the south as shown on Map 1. Under Alternative 3, BLM would take advantage of steep landforms and rocky areas as barriers to wild horse movement where it is possible, but the completed fence would have no gaps.

To achieve the proposed action purpose and need, the following water-related actions would also occur (1) development of Section 7 Spring (T26S, R45E, Sec. 7 NWNE) so that half of the spring flow is piped from a spring box to a metal trough outside of the ACEC (for cattle and horses) and the other half of the spring flow remains flowing from the spring source (for wildlife) (2) installation of a buried water pipeline connecting Section 7 Spring water to the new trough outside of the ACEC (3) installation of a 3 feet wide by 3 feet long concrete water basin[4] in the flow channel downstream of Section 7 Spring (for wildlife). Refer to Map 2, Leslie Gulch ACEC Project Proposals.

For the purpose of avoiding unnecessary and undue degradation to natural resources, the following other project [5]Design Features would be applied:

A. Fence Design Features

1. Fence materials would be delivered to stockpile sites along the ACEC boundary by helicopter. Stock animals would transport stockpiled materials along the fence line for installation.

2. Fence construction would conform to design criteria known to allow safe passage by bighorn sheep and mule deer while excluding wild horses and cattle (BLM Manual H-1741-1). See Appendix B. Spacing between the 4.5-foot (above ground) steel green painted posts would be approximately 15 – 18 feet

3. Project layout would ensure the fence would not adversely affect either special status plant species or cultural sites.

[4] By design, the concrete basin would allow continuous flow of Section 7 Spring water down its native channel.
[5] Design features are intended to reduce or eliminate adverse environmental impacts associated with the proposed action.

4. Instead of using white topped fence posts as in Alternative 2, BLM would hang flagging on fence wire strands (such as plastic surveyors tape or white textile) under Alternative 3 to make it temporarily visible to wild horses. After 2 years, all flagging would be removed. Wherever possible, fences would be tied to rock outcrops to minimize cost, resource impacts, and impediments to bighorn sheep movement.

B. Pipeline and Spring Development Design Features

1. Prior to entering BLM lands, equipment used for earth disturbing activities would be thoroughly washed to remove all soil and plant material so as to avoid introduction of noxious weeds to the construction site.

2. A preconstruction survey would ensure the pipeline, trough, and proximate area would not adversely affect special status plants or cultural sites.

3. A small rubber-tracked excavator would install the head box, pipeline, and trough. A small motorized trencher would bury and install the pipe if the excavator is not capable of performing the task or would otherwise impact soil surfaces greater than the trencher. Only one round trip per each/either of these motorized vehicles would be permitted within the WSA for project installation.

4. Cross country vehicle travel would be limited to the ridge top or, where required for driver's safety and/or to avoid undue surface damage, just down-slope to the north of the ridge top.

5. No more than 0.8 miles of pipeline from Section 7 Spring would be installed to transport water to a metal trough located near the middle of Sec. 6 (T26S, R45E). The buried pipeline would be comprised of 2-inch diameter, galvanized steel and schedule 80 polyethylene pipe. Overflow at the end of the new trough would be piped away and into the nearest native drainage channel.

6. While helicopter transported fuel for motorized vehicles would be preferred, allowance for a small ATV type vehicle would optionally be used to transport the fuel needed for them. The ATV would be limited to the least possible number of round trips to the vehicles, and for transport of fuel, only. No other surface travel motorized vehicles would enter the WSA.

7. Motorized vehicle travel would occur only during dry soil conditions. All land travel by any authorized motorized vehicle(s) would originate from and return to the east boundary of the WSA (Steamboat Ridge), would travel no further west than the site of the spring and its associated pipeline/trough locations, and would travel the shortest distance while allowing the least extent and degree of impacts to the soils and natural features of the WSA.

8. No surface cut or fill would occur for vehicle access, and none would be allowed at the spring/pipeline/trough work sites unless minimally required for operator safety.

9. Project supplies and equipment which the excavator and/or trencher cannot haul to and from the spring work site with their one round trip each would be transported either by domestic pack animals and/or helicopter.

10. Disturbance from head box construction would be confined to the immediate area of the head box. The pipe trench would cut a 12" wide strip of soil, which would be backfilled and cross-ditched. Either a rubber tire trough or metal trough (10 feet by 4 feet and 500 gallon capacity) would be installed at the end of the pipeline. At least 12± inches of the 22.5 inch trough height would be buried in the ground.

11. New water trough placement would include installation of an expanded metal wildlife escape ramp set inside the trough.

12. Surface disturbance during pipeline installation would be minimized as much as possible and reclaimed to a natural contour to obscure visual evidence of motorized vehicle activity. Surface disturbances would be seeded with appropriate native species to reduce short and long-term visual contrast impacts.

13. A Carsonite sign with a WSA sticker and a "No Motorized Vehicles Beyond this Point" type of sticker would be installed at the junction of the construction route's origin with the road on Steamboat Ridge when the vehicles have left the WSA.

C. Design Features for Transportation and Removal of Excess Materials

1. Excess construction materials will be removed upon completion. Visual evidence of mechanized travel on the access route would be reclaimed, to include surfacing to a natural contour, and seeding grass and planting shrubs where vegetation was disturbed along the access and pipeline route. Seed will be harrowed using an ATV or horse to facilitate site recovery and remove traces of mechanized travel.

D Project Construction, Maintenance and Inspection

1. Project construction costs would be borne by FNAWS and project material costs would be borne by BLM.

2. The Bureau of Reclamation would incur no maintenance or construction costs.

3. Project maintenance would be conducted cooperatively and jointly by individuals representing BLM, ODFW, FNAWS, and ONDA. All of the entities that have collaborated in forming the proposed action are facing limited budgets and limited staffing capabilities so it would be difficult for any one participant to take on full maintenance responsibility. The proposed action is not a government-initiated action and thus BLM would not be technically obligated to maintain it. However, BLM is nevertheless willing to pay for necessary fencing materials and assume partial maintenance responsibility in light of the multiple resource values found within analysis area.

4. Because livestock access into the Leslie Gulch ACEC from its north boundary is rare, Three Fingers grazing allotment permittees would not directly benefit from the protective fencing measures taken under the proposed action. Consequently, BLM permittees in Three Fingers grazing allotment would be invited to help (but not required to help) maintain proposed action projects.

5. Fence maintenance would be conducted without surface travel motorized vehicles within the WSA and on BoR-administered federal lands. Spring, pipeline and/or trough maintenance would be performed by applying WSA IMP minimum tool requirements and procedures, with use of surface travel motorized vehicles being the last resort and used only following BLM written approval and with required reclamation/mitigations applied. Any visual impacts caused by using motorized vehicles would be reclaimed immediately following maintenance tasks, and to the extent required to remove all evidence of visual impacts.

6. Project completion would occur after a final inspection and acceptance by BLM, ODFW, Permittees, and FNAWS representatives.

7. BLM and FNAWS representatives would perform a follow-up inspection in the 3rd and 5th season after project completion to determine if the desired results have been achieved.

E. Future wildlife water developments

1. Following implementation of the proposed action, BLM would allow no net gain in the number of wildlife water developments within the Leslie Gulch ACEC and the Honeycombs WSA to avoid further construction and maintenance disturbance to sensitive resource values. This requirement would not preclude maintenance of existing wildlife water development projects.

2.1.4 Topics Not Addressed in this EA

The following elements and issues are either not present or would not be affected by the proposed action or alternatives:

- Air Quality
- Global climate change
- Forest and Woodlands
- Native American Religious Concerns
- Wild and Scenic Rivers
- Hazardous Wastes
- Prime or Unique Farmlands
- Animal Damage Control
- Environmental Justice
- Federal or state species listed as Threatened or Endangered
- Actions to Expedite Energy-Related Projects (Executive Order No. 13212 of May 18, 2001)
- Land and Realty

2.1.5 Short term and long term assumptions common to all alternatives

This EA makes reference to short term and long term environmental consequences resulting from various BLM actions and wild horse impacts. For analysis purposes, short term refers to consequences that would end in less than 5 years and long term refers to consequences that would (1) begin at 5 years or more and (2) would continue out into the foreseeable future, barring some unforeseen change or management intervention.

2.1.6 *Alternatives Considered but Not analyzed in Detail*

2.1.6.1 **Build a fence exclosure around Section 7 Spring**

This alternative was initially considered as a possible remedy because (1) it would result in the least amount of financial expenditure (2) it would result in a very limited development footprint within the Honeycombs WSA and (3) spatial separation between wild horse and bighorn sheep drinking areas would be accomplished at Section 7 Spring. However, based on experience gained from other similar projects, wild horses typically gain access into small excluded water sources in spite of fencing. In addition, the need to protect Leslie Gulch ACEC from improper wild horse grazing use would not be achieved. Consequently, this alternative was not analyzed in detail because it would not achieve overall resource management objectives.

2.1.6.2 **Fence wild horses out of Section 7 Spring by building gap fences from Steamboat Ridge to the Yellowjacket**

BLM considered this alternative as away to protect Section 7 Spring and thereby improve water quality and riparian habitat conditions. However, by limiting the extent of fence construction from Steamboat Ridge to the Yellowjacket, this alternative had the following flaws (1) although the development footprint within Honeycombs WSA would be limited, the objective to deny wild horse access into the remainder Leslie Gulch ACEC would not be met because wild horses would still gain access into the west end of the Leslie Gulch ACEC and (2) BLM action would deny wild horse access to Section 7 Spring contrary to existing wild horse / water policy on public land.

3 Affected Environment and Environmental Consequences

3.1.1 *Climate/Topography*

The project area is located east of the Owyhee Reservoir and west of Succor Creek. The major ridge proposed for fence construction is broken by rock outcrops at the head of steep, dry, rocky canyons.

Elevation ranges from 2,675 feet AMS at Owyhee Reservoir full pool to 5,000± feet AMS on Steamboat Ridge. Shrub steppe vegetation communities in the area result from cold winters and hot dry summers. The long term average annual precipitation is between ten and twelve inches, dependent of elevation, aspect, and typical storm tracks. Precipitation occurs primarily as snowfall during the winter with occasional summer thunderstorms.

3.1.2 *Rangeland Vegetation*

Historically, the project area supported a wide variety of sagebrush/perennial grassland cover types. Disturbance factors such as wildfires, wild horses, historic grazing use, and invasive plants have converted large areas of shrub and perennial grass to annual grasses including cheatgrass (*Bromus tectorum*) and Medusahead (*Taeniatherum caput-medusae)* . Stands of bluebunch wheatgrass (*Pseudorogneria spicata*) occupy many north-facing slopes that have not been impacted by horses or fire. Wyoming big sagebrush (*Artemisia tridentata* ssp. *wyomingensis*) and basin big sagebrush (*Artemisia tridentata* ssp. *tridentata*) stands are common, generally associated with bluebunch wheatgrass, Thurber's needlegrass (*Stipa thurburiana*), Indian rice grass (*Achnatherum hymenoides*), needle and thread (*Stipa comata*), basin wildrye *(Leymus cinereus*), bottlebrush squirreltail (*Elymus elymoides*), and Sandberg bluegrass (*Poa secunda*). Pockets of low sagebrush (*Artemisia arbuscula*), primarily associated with Sandberg bluegrass and bluebunch wheatgrass are common on ridgetops along the fence route. Around Sec. 7 Spring, low seral conditions exist dominated by weedy annuals with comparatively few perennial grasses and forbs.

Both gray rabbitbrush (*Ericameria nauseosa*) and green rabbitbrush (*Chrysothamnus viscidiflorus*) are scattered throughout the area. Broom snakeweed (*Guterrizea sarothrae*) is ubiquitous. Cheatgrass is dispersed through most vegetation communities along with a number of other annual weedy species. Forbs on areas in mid to late seral conditions include hermit milkvetch (*Astragalus erimiticus*), Pursh's milkvetch (*Astragalus purshii*), Hood's phlox (*Phlox hoodii*), arrowleaf balsamroot (*Balsamorhiza sagitatta*), and showy penstemon (*Penstemon speciosus*).

A number of volcanic ash pockets occur in and near the proposed project location. Associated with these unusual soils are bare-stemmed buckwheat (*Eriogonum novonudum*), yellow phacelia (*Phacelia lutea*), and an annual atriplex (*Atriplex* sp).

A variety of noxious weeds and invasive annual plants of varying significance are scattered throughout Steamboat Ridge/Leslie Gulch area. Many disturbed areas support extensive blocks of annual/winter-annual grasses including cheatgrass/downy brome (*Bromus tectorum*) and medusahead rye. Invasive non-native annual forbs including clasping pepperweed (*Lepidium perfoliatum*), blue mustard (*Chorispora tenella*), *Sisymbrium* ssp., Russian thistle (*Salsola iberica*) and kochia (*Kochia scoparia*) are common. Halogeton (*Halogeton glomeratus*) is becoming established in the Shadscale Flat area just north of the proposed project. Scotch thistle (*Onopordum acanthium*), a biennial, is common along roadsides and disturbances caused by reservoirs and other human activities. Bull thistle (*Cirsium vulgare*) and Canada thistle (*Cirsium arvense*) are less common but found in wetter areas near reservoirs, springs, seeps and streams.

Several noxious, perennial weeds can be found in isolated patches. Whitetop, or hoary cress, (*Lepidium ssp.*) is mostly isolated to locations along roadsides. Saltcedar (*Tamarix ramossissima*), a deep-rooted perennial tree, may be found on springs, seeps and along ephemeral streams. Salt cedar becomes abundant in areas near the high water line of Owyhee reservoir. Perennial pepperweed (*Lepidium latifolium*), Russian knapweed (*Acroptilon repens*), dalmation toadflax (*Linaria genistifolia ssp. dalmatica*), diffuse knapweed (*Centaurea diffusa*), and yellow starthistle (*Centaurea solstitialis*) are or have been known to exist within a 10-mile radius of the project area. These noxious species are a particularly serious threat to the area because (1) they are easily moved about by various means including wind, water, human activities, livestock, wildlife, and wild horses and (2) they are often very difficult to kill and the products that will remove them are not available for use on public land in Oregon and (3) they may entirely replace native plants including special status species.

Refer to section 3.1.3 for a discussion about special status rangeland plants that occupy the analysis area.

3.1.2.1 **Alternative 1(No Action)**

Under Alternative 1, wild horse grazing impacts to rangeland communities inside and outside of the Leslie Gulch ACEC would continue to occur. Domestic livestock grazing impacts would remain slight or absent because of limitations including landform characteristics, drinking water availability, and the spring season of use when cattle are present[6]. Localized areas of intense wild horse grazing and trailing would continue to occur near existing water sources or other preferred use areas. Rangeland near Section 7 Spring would remain in an early ecological condition due to yearlong wild horse use and well established annual grass communities. Side slopes unused by wild horses and cattle would generally remain in good quality, mid to late ecological condition because of little or no grazing disturbance.

Noxious weed and invasive plant distributions would probably continue to change over time as a result of various transport mechanisms described in the existing environment. Surface disturbances from grazing animal use would continue to cause potential sources of weed seedling establishment and further weed expansion. Because bighorn sheep use is relatively dispersed and domestic livestock do not regularly graze near Section 7 Spring or Leslie Gulch ACEC, wild horse impacts would likely remain the most relevant and controllable disturbance factor over the long term. Although the cause of noxious weed and invasive plant dispersal cannot be exclusively placed upon wild horse activities, for this area the adverse impacts of wild horses may be substantially controlled by BLM management action and the other contributing factors cannot.

3.1.2.2 **Alternative 2**

Under Alternative 2, drift fence construction would temporarily reduce but probably not fully prevent wild horses from gaining access to rangeland into the Leslie Gulch ACEC. Over the long term, yearlong wild horse grazing impacts would likely become similar to those described for Alternative 1. In addition, some increased competition for forage between livestock and wild horses may temporarily occur because the same number of wild horses (75 to 150 head) would occupy only 90% of the original Three Fingers HMA. Thus, without some reduction in the wild horse AML for the Three Fingers HMA, future over-obligation of forage resources cause by cattle and wild horses may occur in the Riverside Pasture. These effects would be most likely to occur as the Three Fingers horse herd approaches or exceeds the AML.

3.1.2.3 **Alternative 3 Impacts (Proposed Action)**

Under Alternative 3, wild horse grazing impacts to rangeland vegetation within the Leslie Gulch ACEC and Section 7 Spring would be greatly reduced if not completely eliminated because of new fence construction. Cattle and wildlife grazing impacts would probably not change substantially.

The likelihood of livestock and wild horse competition for forage would be increased because the same number of wild horses (75 to 150 head) would occupy only 90% of the original Three Fingers HMA. Thus, it may be necessary to reduce the wild horse AML for the Three Fingers HMA, because of the combined effects of cattle and wild horse grazing in the Riverside Pasture.

Under Alternative 3, BLM proposed projects would result in short term surface disturbance to upland and riparian vegetation. However, because of project design features and other factors described below, long term adverse impacts would be substantially limited.

1. Rangeland plant composition along most of the proposed fence-line has already been altered by a variety of disturbances. Thus, fence installation activities would not substantially change the amount or distribution of invasive annuals. Further, equipment cleaning should reduce if not eliminate opportunities for noxious weed establishment caused by the proposed action.

2. Pipeline installation and wild horse water trough placement would occur within an area already disturbed and dominated by invasive annual grasses and forbs. Thus, changes in long term upland

[6] Cool spring temperatures and water availability in ephemeral drainages limits the need for cattle to seek water at Section 7 Spring.

range condition resulting from water development would not be expected and the anticipated changes to rangeland vegetation would not be very noticeable over the long term.

3. Although rangeland surrounding Section 7 Spring would no longer be impacted by wild hose use, ecological conditions would not be expected to change substantially over the long term. Invasive species such as cheatgrass and annual mustards often dominate rangeland indefinitely until action is taken to seed the area with desirable, highly competitive plants. The proposed action only foresees seeding native plants into surface disturbed areas resulting from project developments. There is no plan to re-seed the entire general area around Section 7 Spring back to native species.

4. Removal of wild horse use would diminish the chances of key perennial grass decline (e.g. bluebunch wheatgrass or Idaho fescue) in the Leslie Gulch ACEC for reasons described under the existing environment (refer to section 3.1.7 Wild Horses).

5. Alternative 3 project design features were crafted to minimize ground disturbances and thus further expansion of noxious weeds and invasive plants would also be limited. Compared to current management, rangeland susceptibility to weeds north of the proposed protective fence (outside of the Leslie Gulch ACEC) would not change. However, noxious weed and invasive plant weed risks to public land south of the protective fence (inside the Leslie Gulch ACEC) would decline substantially because wild horse trailing and grazing activity would cease.

3.1.3 *Special Status Plants*

Resulting from its geographic isolation and exposed volcanic soils, Leslie Gulch provides habitat for a diverse and highly specialized community of native and six special status plants. Three special status plants known to occur near the proposed project area are Owyhee clover (*Trifolium owyheense*), listed as Endangered by the state of Oregon, sterile milkvetch (*Astragalus sterilis*) and Packard's mentzelia (*Mentzelia packardiae*), both of which are listed by the state of Oregon as Threatened and upheld as a Species of Concern (SOC) by the U.S. Fish and Wildlife Service. Additional special status plants currently known to occur in Leslie Gulch and the project vicinity are Hooker's wild buckwheat (*Eriogonum hookeri*), a Bureau Sensitive species, Errter's senecio (*Senecio ertterae*) and Grimy ivesia (*Ivesia rhypara* var. *rhypara*) both maintaining SOC by the U.S. Fish and Wildlife Service, with listings as Candidate for the former and Endangered for the latter by the state of Oregon.

As stated on page 14 of the Final Leslie Gulch ACEC Management Plan (1995) "This MFP amendment removes the Leslie Gulch ACEC from the Three Fingers Herd Management Area. Any horses which move into the ACEC will be relocated to the HMA or gathered and removed for adoption". This management action is intended to protect special status plants within the ACEC from disturbance impacts of wild horses. The Final Leslie Gulch ACEC Management Plan (1995) recognized that, while wild horse use of the ACEC was then minimal, the animals had used the area in the past and would reoccupy the area and special status plant sites could therefore be adversely impacted by herbivory and surface disturbance. That scenario now presents itself.

3.1.3.1 **Alternative 1 (No Action)**

Continued access of wild horses into Leslie Gulch ACEC would likely have direct adverse impacts on special status plants through herbivory and indirect adverse effects on plant habitat via surface disturbance to fragile volcanic soils. Soil disturbance within Leslie Gulch soil types can create an avenue for weed invasion, competition, and potentially increased wildland fire susceptibility. Entry of wild horses into Leslie Gulch ACEC contradicts the Leslie Gulch ACEC Management Plan (1995) which promotes pro-active conservation of special status plants.

3.1.3.2 **Alternative 2**

Because clearance surveys would be completed prior to any fence and water development construction, adverse impacts to special status plant species would be avoided. While this project would likely alleviate Leslie Gulch ACEC of some wild horse pressure, it is likely that wild horse traffic would only be partially

prevented due to their ability to navigate around gap fencing into the ACEC. Consequently, adverse impacts to special status plant species would be very similar to those described in Alternative 1.

3.1.3.3 **Alternative 3 (Proposed Action)**

Elimination of wild horses would alleviate Leslie Gulch ACEC of any special status plant habitat degradation created by wild horses and support management actions prescribed in the Leslie Gulch ACEC Management Plan (1995). Although the presence of special status species at Section 7 Spring is unlikely, due to historical wild horse use, the site would be surveyed accordingly along with all other proposed construction projects within the plan in order to avoid all adverse impacts to special status plants. The exclusion of wild horses from Leslie Gulch ACEC and consequently their impacts would further protect special status plant species. No long-term negative effects to special status plant species would be anticipated as a result of Alternative 3.

3.1.4 Water Resources and Riparian/Wetland Areas

Section 7 Spring is the only perennial water source within a mile of the project development area. Although it was not specifically identified as a riparian area in the SEORMP ROD, applicable riparian management objectives are to attain proper functioning condition and improve riparian habitat, where needed.

Sec. 7 Spring and its associated riparian area drains into a tributary of Craig Gulch and then into the Owyhee Reservoir. This spring and associated drainage is an interrupted perennial system. There are remnant riparian obligate plants present within the area that would be excluded from wild horse grazing use. There has been upland vegetation encroachment into the riparian area, which has been subjected to extreme wild horse grazing. There is an extensive amount of trampling damage at Section 7 Spring because it is a primary watering source for wild horses. Yearlong use by wild horses is preventing riparian plant growth. See Appendix D for two photos illustrating resource conditions existing at Section 7 Spring.

3.1.4.1 **Alternative 1 (No Action)**

Under Alternative 1, wild horses, livestock, and wildlife including bighorn sheep would all continue to cause grazing disturbances at Sec. 7 Spring. Currently degraded riparian resource conditions would not change. Ongoing grazing and trampling damage caused mainly by wild horses would result in failure to meet the SEORMP ROD objective for riparian habitat and water quality. Section 7 Spring would remain susceptible to cyanobacteria blooms because of warm temperatures and soil sediments.

3.1.4.2 **Alternative 2**

Under Alternative 2, riparian habitat and water quality would temporarily improve because gap fencing would exclude persistent wild horse grazing and occasional cattle grazing impacts at Section 7 Spring. Wildlife grazing use and water consumption at Section 7 Spring would not change. Over the long term, the impacts of Alternative 2 would be similar to Alternative 1 because, based on experience elsewhere in Vale the District, wild horses typically find ways around gap fences. And in this case, wild horses are causing the most significant damage to riparian habitat at Section 7 Spring. Therefore, BLM action under Alternative 2 would only temporarily address water quality and riparian habitat conflicts. Over the long term BLM would fail to meet the SEORMP ROD objective for riparian habitat and fail to resolve water quality problems related to cyanobacteria blooms.

3.1.4.3 **Alternative 3 (Proposed Action)**

Under Alternative 3, riparian function and water quality at Section 7 Spring would be substantially improved because persistent wild horse use and occasional cattle use would be eliminated. Bighorn sheep grazing and trampling impacts to Section 7 Spring would be expected to continue. However, the limited intensity and duration of bighorn impacts would be expected to still allow for proper functioning riparian conditions. Thus, although total spring protection and total avoidance of occasional cattle and wild horse trespass may not be attained under the proposed action, the improvements expected would conform to the SEORMP ROD.

Installation of the proposed concrete basin for wildlife watering would require riparian habitat disturbances and some short term increases in soil sediment transport from Section 7 Spring. This outcome would be expected because the basin structure would be placed within the Section 7 Spring flow channel. Nevertheless, full site recovery would be likely over the long term because of moisture availability, riparian obligate plants already onsite, and removal of wild horse grazing and trampling impacts. Because of continuous cool water flow through the concrete basin, cyanobacteria formation at a developed watering site would be discouraged. Finally, good quality water would be provided at the new livestock trough fed from Section 7 Spring and its new pipeline.

3.1.5 Wildlife and Wildlife Habitat

Wildlife in the proposed project area are typical of Wyoming big sagebrush/bluebunch wheatgrass and sagebrush/cheatgrass disturbed habitat types in the northern Great Basin and Owyhee Uplands communities. Big game in the project area includes pronghorn antelope, California bighorn sheep, mule deer, and mountain lion. The precipitous rock outcrops provide important escape habitat for California bighorn sheep. Chukar partridge and California quail are year-round residents. Small mammals include black-tailed jackrabbits, deer mice and woodrats. Reptiles include bull snakes, western rattlesnakes, and several species of lizard. Numerous neotropical migratory birds and several raptor species common to southeast Oregon live throughout the area.

[7]California bighorn sheep present in Leslie Gulch are recognized as an important game species of wildlife by ODFW and BLM. They are, in fact, the focal species of concern for the proposed action. California bighorn sheep are no longer considered a BLM special status species and they are also no longer candidates for potential listing under the federal Endangered Species Act (ESA). However, because they are a prized big game animal and a wildlife species emblematic of eastern Oregon canyon-lands, they still hold a high level of management importance.

The existing Leslie Gulch bighorn herd addressed in this EA was established in 1965 with the reintroduction of 17 animals from Hart Mountain National Wildlife Refuge. The herd initially increased to 300± animals in 1992. Subsequently, numbers have declined despite conservative population management and supplemental transplants. The Bureau of Reclamation (BoR) Owyhee Reservoir Management Plan (2-26) estimated the 1994 population at 225 animals and by 2004 it had declined to about 125. ODFW's September 2001 through May 2003 study documented that 17 of 43 observed sheep mortalities (40%) were attributable to water-borne cyanobacteria poisoning. Losses of such a magnitude preclude herd recovery**.** BLM, the Bureau of Reclamation, ODFW, and sporting groups have since invested thousands of dollars in guzzler installations, radio telemetry studies, and other efforts to recover bighorn sheep. Successful bighorn recovery is jeopardized, in part, by competition with and habitat degradation caused by wild horses.

Water is a critical summer resource for wildlife and horses in the project area. Natural water sources near the project area are ephemeral seeps, Shadscale Flat Spring, the spring at the mouth of Dago Gulch, and Owyhee Reservoir. Big game and wild horses can subsist on snow water. During the dry seasons, bighorns may drink every day, but typically will visit water every 3-5 days. Lactating ewes have higher water needs than rams. Stagnant water sources, including the Owyhee Reservoir, grow blue-green algae during periods of hot temperatures that produce lethal toxins caused by decomposition. ODFW has documented numerous bighorn sheep mortalities associated with the reservoir and seeps. It is believed that by improving riparian conditions at Section 7 Spring and thereby restoring water flow where it is limited by wild horse use, toxic algal growth can be discouraged. Bighorn sheep mortalities from Section 7 Spring may then be reduced if not completely eliminated.

Water development for the benefit of bighorn sheep has been a BLM and ODFW priority for quite some time. In total, 20 BLM and ODFW wildlife guzzlers currently exist between the Birch Creek Ranch and the

[7] Because of recent DNA analyses conducted in California there are some question about the species delineations of wild sheep in North America. Nevertheless, at the present time ODFW recognizes wild sheep in Malheur County as California bighorn sheep, (*Ovis canadensis californiana*).

north end of Owyhee Reservoir. The first BLM developments were initiated as a result of the Leslie Gulch Bighorn Sheep Habitat Management Plan (USDI BLM 1980) and subsequently, BLM approved a project to improve riparian conditions at Shadscale Flat Spring (USDI BLM 2003). The most recent effort along this line includes 10 additional wildlife guzzlers and removal of one existing guzzler in canyon lands associated with Owyhee Reservoir (USDI BLM 2005). Four of the 10 recently approved projects occur within the Honeycombs WSA (Doe, North Three Fingers, South Carlton, and Bensley) and 2 projects are located within the Leslie Gulch ACEC (Spring Creek and Saddle).

Horse grazing use and repeated watering activity at Sec. 7 Spring year-round has eliminated riparian vegetation at the spring and depleted perennial upland vegetation over an extensive area away from the spring, greatly reducing wildlife forage and hiding cover. Horses appear to be adversely impacting bighorn sheep, deer, and antelope use of Sec. 7 Spring and its associated habitats.

ODFW personnel believe that by excluding wild horses from Sec. 7 Spring and allowing unfettered bighorn sheep access to water, sheep population recovery would be facilitated because of (1) reduced competition for drinking water and (2) reduction in cyanobacteria formation, which is known to kill bighorn sheep. Competition for water between wild horses and bighorn sheep is especially intense during hot summer months.

3.1.5.1 **Alternative 1 (No Action)**

The impacts of existing wildlife water improvements created by BLM and ODFW would continue to benefit bighorn sheep and other species because wildlife drinking water is limited in most of eastern Oregon. Nevertheless, yearlong wild horse access to Section 7 Spring and rangeland within the Leslie Gulch ACEC would continue to cause long term adverse impacts to wildlife forage, cover, water quality and water availability.

Under current management, adverse impacts to wildlife habitat values would continue to occur including the following (1) periodic denial of bighorn sheep drinking water at Section 7 Spring because of aggressive wild horse social behavior (2) improperly functioning spring conditions mainly caused by wild horse grazing and trampling (3) continuation of potential bighorn sheep cyanobacteria poisoning at Section 7 Spring (4) loss of an opportunity to contribute towards enhancing Leslie Gulch bighorn sheep herd productivity (5) degradation and loss of Leslie Gulch ACEC rangeland plants used as forage by wildlife and (6) continued risk of further noxious weed and invasive plant influences cause by wild horse trailing and grazing.

Continued BLM inaction to resolve wildlife and wild horse conflicts would result in failure to meet the existing land use plan objective to “Facilitate the maintenance, restoration, and enhancement of bighorn sheep populations and habitat on public land” (ROD p 55), “Manage upland habitats in forest, woodland, and rangeland vegetation types so that the forage, water, cover, structure, and security necessary for wildlife are available on the public land” (ROD p 51) and “Maintain, restore, or enhance riparian areas and wetlands so they provide diverse and healthy habitat conditions for wildlife” (ROD p 50)..

3.1.5.2 **Alternative 2**

Under Alternative 2, the impacts of existing wildlife water improvements created by BLM and ODFW would continue to benefit bighorn sheep and other species as described in Alternative 1. Nevertheless, Section 7 Spring water quality and riparian habitat quality would remain degraded over the long term as described under Water Resource and Riparian/Wetlands because of wild horse trampling and grazing impacts.

Alternative 2 fence hazards to wildlife would increase slightly because of new gap fence construction. Wildlife mortalities or injuries are often associated with fences which can result in collisions or entanglement, and injury or death. In spite of this added risk, BLM fence design requirements would be expected to substantially limit adverse fence-related impacts to wildlife, especially big game species. One advantage of Alternative 2 gap fencing would be that bighorn sheep would likely find ways to move freely north or south through barrier fence gaps. Big game may be able to travel through fence gap locations

comprised of talus, scree or boulder fields. Also, because Alternative 2 fence construction is not proposed within close proximity to highly important wildlife use areas (e.g. big game winter range or greater sage-grouse leks) so adverse impacts to highly important seasonal wildlife habitats would be avoided.

Because gap fencing would probably not fully prevent wild horse access into the Leslie Gulch ACEC and Section 7 Spring, wildlife habitat values would also continue to be degraded by wild horses over the long term as described in Alternative 1. Under Alternative 2, continued wild horse conflicts would result in failure to meet the existing land use plan objectives as described in Alternative 1.

3.1.5.3 **Alternative 3 (Proposed Action)**

Under Alternative 3, the impacts of existing wildlife water improvements created by BLM and ODFW would continue to benefit bighorn sheep and other species. Alternative 3 actions would further contribute towards improved wildlife habitat conditions because yearlong wild horse access to Section 7 Spring and rangeland within the Leslie Gulch ACEC would be substantially eliminated. Because BLM would allow no net increase in the number of existing wildlife water developments within the Honeycombs WSA and Lelsie Gulch ACEC, future opportunities for additional wildlife water enhancements would be foregone.

Under Alternative 3, the following beneficial Alternative 3 impacts to wildlife would occur: (1) periodic denial of bighorn sheep drinking water by wild horses at Section 7 Spring would be limited or avoided (2) improperly functioning spring conditions mainly caused by wild horse grazing would recover and improve over the short and long term (3) potential for bighorn sheep cyanobacteria poisoning at Section 7 Spring would be reduced or eliminated following placement of a small concrete water basin (4) BLM action would further contribute towards enhancing Leslie Gulch bighorn sheep herd productivity (5) degradation and loss of Leslie Gulch ACEC rangeland plants used as forage by wildlife would be avoided and (6) risks of further noxious weed and invasive plant influences cause by wild horse trailing and grazing would be reduced. Small wildlife entrapment would be substantially limited because of water trough escape ramp installation.

Because wild horses can be expected to occasionally gain access to Section 7 Spring and the Leslie Gulch ACEC, habitat values for wildlife would periodically be impacted by wild horse use. The social behavior and consequence of wild horse population fluctuations cannot be fully controlled by BLM and therefore the proposed actions may not guarantee consistent wildlife habitat protection. From a wildlife habitat standpoint, occasional trespass events would not be considered fatal flaws or reason to abandon the proposed action.

Due to BLM Design Features associated with the proposed action and the short term nature of adverse wildlife habitat impacts expected, unnecessary adverse impacts to wildlife and their habitats would be avoided. Under Alternative 3, BLM action to resolve wildlife habitat conflicts associated with wild horses would meet the existing land use plan objective to “Facilitate the maintenance, restoration, and enhancement of bighorn sheep populations and habitat on public land” (ROD p 55), “Manage upland habitats in forest, woodland, and rangeland vegetation types so that the forage, water, cover, structure, and security necessary for wildlife are available on the public land” (ROD p 51) and “Maintain, restore, or enhance riparian areas and wetlands so they provide diverse and healthy habitat conditions for wildlife” (ROD p 50)..

3.1.6 Livestock Grazing Use

Livestock grazing use potentially impacted by the proposed action occurs within the southern boundary of the Three Fingers Allotment (10503) and within the Succor Creek Geographic Management Area (GMA). Boundaries of the Three Fingers Allotment are roughly defined by Leslie Gulch to the south, Owyhee Reservoir to the west, Iron Mountain to the north, and Succor Creek Road to the east.

No fences or topographic barriers in the Riverside Pasture of Three Fingers allotment prevent cattle grazing within the Leslie Gulch ACEC. Cattle access [8] to Leslie Gulch ACEC from the Riverside Pasture is nearly non-existent because of distances to water and because of the spring season of livestock use when surface drinking water is abundant. Nevertheless, livestock access into the Leslie Gulch ACEC has occurred occasionally from BoR land next to Owyhee Reservoir and from a 40 acre private in-holding at the confluence of Dago Gulch and Leslie Gulch. Cattle trespass events from BLM land have been caused by livestock grazing in pastures south and west of the Leslie Gulch ACEC. See Map 2.

BLM proposed actions would occur within the Riverside Pasture of Three Fingers Allotment (10503) which is grazed annually by cattle from March 1st to May 1st. Public land livestock grazing within the analysis area involves 4 permittees and 9,981 AUMs of active preference. When livestock do occasionally seek water at Section 7 Spring, wild horse social behavior may discourage cattle (especially calves) from drinking. Reasons for this adverse social interaction are described in more detail under the Wild Horse section of the EA.

3.1.6.1 **Alternative 1 (No Action)**

Under Alternative 1, livestock grazing use in Three Fingers Allotment would not change in any way. Cattle using public land within the Riverside Pasture would infrequently gain access into Leslie Gulch ACEC and Section 7 Spring would continue to be used by cattle infrequently because it is not an important livestock watering source. Livestock AUMs available to BLM permittees would not change and BLM actions relative to livestock grazing use in riparian areas would remain in conformance with 43 CFR § 4180.

3.1.6.2 **Alternative 2**

Under Alternative 2, gap fences would stop occasional cattle grazing use at Section 7 Spring and within the Leslie Gulch ACEC. However, livestock AUMs available to BLM permittees may temporarily decrease due to the possibility of increased forage competition between cattle and wild horses. Because of gap fence protection, BLM actions relative to livestock grazing use in riparian areas would remain in conformance with 43 CFR § 4180.

3.1.6.3 **Alternative 3 (Proposed Action)**

Under Alternative 3 livestock grazing use in Three Fingers Allotment would probably not immediately change in any substantial way. Cattle using public land within the Riverside Pasture would be prevented from gaining access into Leslie Gulch ACEC and Section 7 Spring because of new barrier fence construction along the Leslie Gulch ACEC boundary. This limitation would not be an issue for BLM permittees because under current management cattle grazing in the Riverside pasture does not normally occur within the Leslie Gulch ACEC or at Section 7 Spring. BLM actions relative to livestock grazing use in riparian areas would remain in conformance with 43 CFR § 4180.

Over the long term Alternative 3 may present some potential for adverse impacts to livestock grazing use because (1) wild horses may become forage competitors with cattle in Riverside Pasture due to the fact that horses would occupy only 90% of their former range and (2) additional wild horse and cattle forage competition may require a proportionate reduction in active livestock AUMs and wild horse AUMs (see ROD page 56). Wild horse gathers and rangeland forage production may be sufficient to preclude the necessity for a downward livestock active AUM adjustment. However, avoidance of a downward livestock AUM adjustment would be dependent upon favorable rangeland monitoring information and/or a reduction in the wild horse herd AML.

3.1.7 Wild Horses

By law, it is the policy of Congress that wild free-roaming horses and burros shall be protected from capture, branding, harassment, or death; and to accomplish this they are to be considered in the area where presently found, as an integral part of the natural system of the public lands (The Wild Free-Roaming

[8] On occasion, cattle from BLM grazing allotments south of the Leslie Gulch ACEC have ventured in to the Leslie Gulch ACEC.

Horse and Burro Act of 1971, PUBLIC LAW 92-195). Wild horses involved in this EA occupy the Three Fingers Herd Management Area (HMA) which is a land mass encompassing about 62,500 acres. The Three Fingers horse herd is managed and periodically reduced (gathered) by the BLM so that horse numbers remain within their Appropriate Management Level (AML) of 75 to 150 animals (SEORMP ROD 2002). Recognizing the possibility that existing AMLs may not be able to maintain an "ecological balance", the SEORMP ROD (2002) described a process whereby "decreases in wild horse AMLs and authorized livestock use" may be needed as part of the adaptive management process (ROD page 56).

Based on field data collected over the years, wild horses increase at a rate of approximately 22% per year which means they may nearly double about every 3 or 4 years. Routine BLM horse herd gathering, to stay within approved AML levels, is scheduled in the Vale District on a 4 year cycle. Budget constraints or higher national budget priorities beyond the control of Vale BLM have in the past resulted in wild horse herds temporarily exceeding their AML. When this does occur, horse herd expansion outside HMA boundaries often results because of territorial horse behavior[9].

Owyhee Reservoir and a few springs or seeps are the only natural perennial water sources within the Three Fingers HMA. While much of Owyhee Reservoir is not used regularly by horses due to limited access, there is a well worn horse trail down the bottom of Craig Gulch to the reservoir edge. Water limits animal distribution throughout the Three Fingers HMA, so the few perennial water sources are used year-round. Snow drifts, seasonal seeps, springs, reservoirs, and drainages are water sources used in the winter and early spring.

In the past, wild horses occupied Leslie Gulch as their traditional winter range. However, under the existing land use plan wild horses are not allowed to occupy the Leslie Gulch ACEC portion of the original Three Fingers HMA. This amounts to about 7,000 acres or 10% of the Three Fingers HMA. As stated on page 14 of the Final Leslie Gulch ACEC Management Plan (1995) "This MFP amendment removes the Leslie Gulch ACEC from the Three Fingers Herd Management Area. " Based on observation, there is no doubt that wild horses have regularly gained access to land within the boundary of the Leslie Gulch ACEC. Their trailing and other surface disturbance impacts have been observed by BLM staff and others familiar with this analysis area.

Because wild horse use impacts to the Leslie Gulch ACEC values have already been addressed in the Leslie Gulch ACEC Management Plan, they will not be described in detail in this EA. Suffice it to say that wild horses have the capacity to severely damage rangeland plants and cause a variety of adverse impacts because of (1) yearlong access to public rangeland (2) high forage demand and (3) their upper incisors (teeth) which allow them to clip plants very close to the ground. As described below, wild horse social behavioral characteristics may also lead to other adverse impacts to wildlife such as bighorn sheep; a relevant and important value of the Leslie Gulch ACEC.

Potential adverse wild horse, wildlife, and domestic livestock interactions at water sources
Under certain circumstances, horses may show territorial and aggressive social behavior toward their own kind and other animals. For instance, stallion behavior may include infanticide against unrelated colts. This equid trait is sometimes used by individuals when they employ guard donkeys to protect farm animals from predators.

According to some, such as Nevada Department of Wildlife Director William Molini[10], "Horses guard water". Clements (2006)[11] observed "wild horses chase away any wildlife that tries to … get water." These

[9] When wild horse numbers substantially exceed the established AML, experience has shown that less dominant horses are driven out into other adjoining areas and that is often when grazing allotment or exclosure boundary fence damage occurs.

[10] William Molini at p. 76 in "Honest Horses – Wild horses in the Great Basin". Paula Morin (2006). University of Nevada Press.
[11] Charlie Clements, Wildlife biologist (ibid) at p. 98.

general observations were supported by Ostermann-Kelm, et al (2008)[12] who studied overlapping populations of native bighorn sheep (*Ovis canadensis*) and wild horses (*Equus caballus*). In their study, they quantified horse and bighorn sheep spatial and temporal overlap to determine whether horses interfered with use of water by bighorn sheep. They demonstrated that bighorn sheep avoided sites with horses nearby. The presence of domestic horses near a watering site preferred by bighorn sheep resulted in a 76% reduction in the number of groups of bighorn sheep coming to water at that location and a concomitant increase in the number of bighorn sheep watering at other sites.

While it has not been demonstrated conclusively that wild horses in this analysis area always and necessarily prevent bighorn sheep and other species from watering at Section 7 Spring, there is certainly the potential for this interaction to occur. The likelihood is no doubt increased under (1) periods of low precipitation (2) late summer-fall use periods and (3) episodes of horse numbers exceeding their AML. In light of this potential at an important watering source, it would be prudent for BLM to take action to reduce the chances of adverse wild horse and bighorn sheep social interactions at Section 7 Spring.

3.1.7.1 **Alternative 1 (No Action)**

Under Alternative 1, wild horse access to public land including the Leslie Gulch ACEC and Section 7 Spring would continue to occur. According to the SEORMP ROD (2002) and the [13]Leslie Gulch ACEC Management Plan (1995) wild horses are not allowed in the Leslie Gulch ACEC portion of the Three Fingers HMA. Therefore, Alternative 1 would continue to allow unauthorized wild horse occupation of a [14]high profile BLM special management area. The only remedy left to BLM under Alternative 1 would be to continue wild horse herd gathers every 4 years within the Leslie Gulch ACEC when the Three Fingers wild horse AML has been exceeded.

3.1.7.2 **Alternative 2**

Under Alternative 2, slightly more than 10% of the original Three Fingers HMA would become unavailable for wild horse use because BLM would build a series of gap fences north of the Leslie Gulch ACEC boundary and north of Section 7 Spring. Alternative 2 would be a temporary remedy, in terms of its conformance to the SEORMP ROD and the Leslie Gulch ACEC plan, because over the long term wild horses would be expected to regain access back into the Leslie Gulch ACEC and Section 7 Spring.

Because Alternative 2 would reduce the amount of land that has been available to wild horses, the Three Fingers wild horse herd would temporarily be confined to a smaller area than under current management. As a result, additional wild horse and cattle competition for forage may then occur in the Riverside Pasture of Three Fingers grazing allotment.

Alternative 2 would not conform to BLM water policy for wild horses because under current agency direction BLM will not deny wild horse access to existing drinking water sources unless it first provides an alternate watering location. Although wild horse drinking water would remain available in other parts of the Three Fingers HMA, Alternative 2 would not and cannot fulfill this specific water replacement requirement.

Permanent white-topped gap fencing material would alert wild horses to the presence of a new barrier. Based on experience learned within the Three Fingers HMA, white topped fence posts reduce the potential for wild horse fence-related injuries.

Over the long term, Alternative 2 would not meet the intent of the Leslie Gulch ACEC Plan because of unauthorized and improper wild horse grazing use.

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[12] Osterman-klein, et al. 2008. "Interactions between Feral Horses and Desert Bighorn Sheep at Water." J.Mammalogy Vol. 89, Issue 2 (April 2008) pp. 459-466.

[13] Funding limitations have to this point prevented BLM from constructing the barrier fence needed to exclude horses from the Leslie Gulch ACEC.

[14] Leslie Gulch receives substantial annual public visitation and the resources present have been the subject of magazine articles and television programs.

3.1.7.3 **Alternative 3 (Proposed Action)**

Under Alternative 3, wild horse access to land within the Three Fingers HMA would be reduced by about 10% because BLM would build a continuous fence barrier north of the Leslie Gulch ACEC boundary and north of Section 7 Spring. This action would be consistent with the SEORMP ROD (2002) and Leslie Gulch ACEC Management Plan (1995) relative to wild horses. For reasons described under Livestock Grazing Use, additional competition for forage between cattle and wild horses may occur in the Riverside Pasture of the Three Fingers grazing allotment.

In spite of the new fence barrier it is probable that some wild horses would still periodically gain access back into the Leslie Gulch ACEC and Section 7 Spring. This outcome would be likely over the long term as a result of compounding annual horse population growth and predictable wild horse social behavior. Periodic horse herd reductions back to the low AML number would be expected to limit but not fully remove the potential for adverse wild horse impacts south of the new boundary fence. On balance, these limitations under Alternative 3 would still improve resource conditions substantially enough to make the proposed action worthwhile.

Compared to current management, wild horses would no longer be able to drink directly from Section 7 Spring but they would also have access to more water and cleaner drinking water. This outcome would likely occur because BLM would provide a replacement drinking source accessible to wild horses immediately north of the Leslie Gulch ACEC. Under Alternative 3, horses would no longer be forced to drink water at a trampled and muddy spring source. Also, development and protection of Section 7 Spring would potentially yield more water because wild horse trampling impacts would be eliminated. Similar increased water flow consequences have been observed elsewhere within Vale District.

Because BLM would hang flagging material on new fence wire, wild horses would be alerted to the additional obstruction placed before them. Thus, potential for fence-related wild horse injury or mortality would be reduced temporarily during and after fence construction was completed. Over the long term, fence-related horse injuries may occur because BLM would avoid use of white topped fence posts and the temporary flagging would be removed. Even though wild horses may become aware of new fences without flagging or white fence tops, under stressful circumstances they may bolt through fencing and sustain injury. Based on experience learned within the Three Fingers HMA, white topped fence posts would be better for reducing potential wild horse fence-related injuries compared to fence flagging.

Alternative 3 would allow wild horse use to proceed in a manner consistent with the SEORMP ROD (2002) and the Leslie Gulch ACEC Management Plan. Alternative 3 fencing action would also remove the least amount of rangeland available to wild horses that is needed to protect the Leslie Gulch ACEC and improve riparian habitat conditions. Following fence construction, the wild horse AML for the Three Fingers horse herd may need to be reduced to a level consistent with the size of the new HMA boundary so as to maintain an "ecological balance", consistent with the SEORMP ROD (2002). This follow-up HMA action may be needed because the Leslie Gulch ACEC Final Plan states on page 14 that "This amendment does not change the numbers of horses that will be maintained within the HMA".

3.1.8 Recreation and Visual Resources

Dispersed recreational use in this remote area is primarily hunting, day hiking and photography. Primary hiking access is to the affected rim of the project area is from the Leslie Gulch road up Juniper Canyon and also from the road between the reservoir and east to the Yellow Jacket topographic features of the WSA/ACEC. From north of the project area, primitive vehicle routes associated with the Shadescale Flats and Craig Gulch areas of the Honeycombs WSA also provide for non-motorized access points to the project area. These primitive vehicle access routes limit travel to high clearance/four-wheel drive vehicles, and only when roads are dry. Some equestrian use, as well as cross-country backpacking and associated camping occurs in the area. Annual visitation to the general area of the proposed project is estimated to be about 200-400 visitors.

The Honeycombs, Slocum Creek, and Upper Leslie Gulch WSAs (462,134 acres combined) comprise BLM's Owyhee Complex Special Recreation Management Area (SRMA). Management objectives for the

SRMA's specified in the SEORMP Record of Decision, are to preserve outstandingly remarkable and high-quality scenic, recreational, geologic, wildlife, botanic, and cultural values and to enhance opportunities for high quality outdoor recreation experiences, environmental education and scientific studies while maintaining the integrity of the area's natural systems and cultural resources within the existing primitive, semiprimitive nonmotorized, semiprimitive motorized and roaded natural recreation opportunity settings (SEORMP, Appendix H).

Respective to management t of visual values on public land, BLM designates WSAs in land use plans (e.g., SEORMP) as Visual Resource Management (VRM) Class I areas. The VRM objective for Class I is to preserve the existing character of the landscape by providing for natural ecological changes, and it allows limited management activity. The level of change should be very low and must not attract attention. Class I is assigned to those areas where a management decision has been made to preserve a natural landscape. This includes areas such as WSAs, wild sections of National Wild and Scenic Rivers, and other congressionally and administratively designated areas.

3.1.8.1 **Alternative 1 (No Action)**

Ongoing recreational use, use opportunities, and visual resource qualities would not change. Evidence of riparian area degradation at Section 7 Spring would continue and wild horse trails and grazing use within Leslie Gulch ACEC would remain apparent.

3.1.8.2 **Alternative 2**

Temporary disruption of various dispersed recreation activities may occur during the period of fence development. This impact would be brief (a few weeks) and minor in scope relative to the size of the overall analysis area. The dispersed recreation activities would remain available, with the new fence line a minor inconvenience to traverse or circumvent.

Impacts of gap fence installation would cause long term evidence of motorized vehicular travel and human activity such as tire imprints and foot traffic soils disturbance. Even with mitigation efforts of scraping the vehicle tracks by some means, due to the nature of the soils and vegetation, the tracks caused by truck sized vehicles and their trailers along the gap fence's route would scar the surface for several years. This is further complicated with the creation of at least a third linear impact along the gap fence locations created by the use of the ATV with its narrower axle. The adverse visual impacts caused by the use of truck sized vehicles, or the combined use of such vehicles and an ATV, would fail to meet VRM Class I objectives.

The use of steel fence corners (painted to blend with the landscape) would minimize color contrasting. If close enough to the project area, an average visitor to the area would notice the linear appearance of the rangeland fence atop or near the top of the ridgeline and, depending on the specific vantage point, would be seen against the skyline in some locations. Because of design features, however, new fence material would not be seen by observers traveling on the Leslie Gulch Road.

Skylined contrasting lines and shapes would not occur because by design BLM would install fencing materials below the skyline. The linear appearance would be broken up due to its absence where fencing is not installed, thus lessening the extent of the fence's adverse visual impact.

Over the long term, the white painted top of the fence posts would be a long term visual distraction by causing an increased degree of visual attraction to the casual observer. Fences with white tops or of other contrasting color which does not blend with the colors of the natural surroundings is contrary to and would fail to meet VRM Class I objectives.

There would be visual evidence of wild horse trailing along the fenceline. This evidence would become less pronounced over time as the animals become familiar with the fence.

Overall, due to the limited linear extent and broken continuity of the gap fencing, the fenced segments – individually and collectively-- would meet VRM Class I objectives. However, due to long term vehicular

travel disturbances and use of white topped fences , BLM action would fail to meet VRM Class 1 objectives.

Over the short term, the visual appearance of the spring's immediate setting would appear less trampled and likely a bit more vegetated due to the lack of wild horse and livestock access to it. Nevertheless, because gap fencing would not likely prevent wild horse access into Leslie Gulch ACEC and Section 7 Spring over the long term, degraded riparian conditions would return as described in Alternative 1.

3.1.8.3 **Alternative 3 (Proposed Action)**

Short term disruption of various dispersed recreation activities may occur during the period of project development. This impact would be temporary, brief (a few weeks) and minor in scope relative to the size of the overall analysis area. The dispersed recreation activities would remain available, with the new fence line a minor inconvenience to traverse or circumvent.

Re-contouring along the pipeline trench route and vehicle access route would assist mitigation of on-site visual, topographic, and linear contrasts caused by such surface disturbing actions. The temporary evidence of de-vegetated segments of the pipeline trench line would disappear as re-vegetation fills in. Short term, a linear visual contrast would be noticeable by a casual observer of the spring's project site. Visual evidence of motorized travel at the spring site, itself, would be less apparent upon completion of the project due to employing only low impact tracked equipment. Short term, there would be a visual zone of trampled vegetation at the new water trough site and along the pipeline route. These described impacts, with project design and mitigation as stated under Alternative 3 (Proposed Action), above, would result in temporary visual change at the project site. Surface disturbances and visual changes at the spring site would meet the Class I VRM objective.

Impacts of fence development and its presence would be similar to that described under Alternative 2, with the follow exception: the extent of linear contrast and appearance of the fence would be greatest under this alternative. Flagging placed on fence wire would cause a temporary visual intrusion for two years. Flagging would cause distraction to an average visitor since the draped material would be more apparent and not blend with the natural colors of the landscape setting.

Given the winding nature of the fence along the ridgeline, there would likely be as many if not more fence cribs along the fence's length. This visual contrast would be minimized by installing the fence without the use of motorized vehicles. Overall, short term visual impacts of fence installation would be largely mitigated, while the long-term visual impact of the fence's presence, itself, would be minimal with all design features employed, relative to the project's setting and the larger landscape setting. Class I VRM objectives would be met, relative to the fence.

The highest visual impact associated with the project, at large, would be the impacts caused by the multiple trips of the ATV across the terrain between the Steamboat Ridge road east to the spring site. Given the nature and natural properties associated with the ridgeline, employed reclamation and mitigation measures would, themselves, be visual contrasting for up to several years. The only way adequate healing can occur – and to avoid potentially evitable vehicle use of people seeing the linear impact as viewed from the Steamboat Ridge road – is to insure adequate signage and monitoring of this the reclaimed travel route. Otherwise, damage to vegetation and compression of soils by repeated, unauthorized use of vehicles could result in long term scaring associated with the route, and cause further hampering of adequate reclamation of the traveled route.

Due to the exclusion of wild horses and livestock at the spring and within the ACEC, the presence of the fence benefits the visual improvement of the Sec. 7 Spring riparian zone and the Leslie Gulch ACEC by enhancing natural appearances and health of the project site's vegetative state. The degree and extent of site-specific visual impacts associated with loitering animals at the trough and trough overflow would be less than is now occurring at Sec. 7 Spring.

With design features and mitigation measures employed and monitored for effectiveness, the actions under this alternative – individually and collectively – would meet Class I VRM objectives.

3.1.9 Cultural Resources

Pre-European contact Native American peoples were extremely well adapted to their environment. The subsistence economy was strongly oriented toward gathering and collecting because plant foods were more abundant and dependable than fowl, fish or mammals. Mammals provided skins, furs, tools and many other by-products of aesthetic and practical value. Insects were often eaten. Beetles, grasshoppers, locusts, crickets, ants and caterpillars were consumed, as well as most eggs and larva. Historic documents indicate that several hundred plants were used by the Indians of the Great Basin for medicinal purposes, fiber sources and food. The Native people of the Great Basin, who practiced the ancestral lifeways into the 19th century were heirs to an extremely ancient cultural tradition with a technology both effective and efficient, with many multi-functional, light-weight and expendable tools.

Exploration into this area during the Historic period began with the expeditions of John Jacob Aster, after he heard the stories from the Lewis and Clark Expedition of 1804-1806. The first written observations of southeastern Oregon can be found in journals kept by men involved in the expansion of fur trapping territory. Trapping occurred along the major and minor tributaries in the area: Owyhee, Snake, Malheur, North Fork Malheur and South Fork Malheur Rivers. The era of the fur trade provided the basis for American families to travel west. For Native Americans, increased use of the Oregon Trail burdened grazing resources, killed off game, and displaced resident bands.

The Malheur Reservation located north of Juntura covered 1,778,560 acres and extended east almost to Westfall. The Reservation was established at Fort Harney in 1872, to contain "all the roving and straggling bands" in southeastern Oregon after the ending of hostilities in 1868. However, the area was only occupied between 1871 and 1878 when through a series of circumstances, groups abandoned the locality to participate in the Bannock War of 1878. Those who participated in the war and some who did not were interned for several years on the Yakima Reservation. On May 21, 1883, the president issued an order restoring to the public domain the Malheur reservation except 320 acres on which the old military post of Camp Harney stands. The reservation went on the market and was sold to Euro-American livestock ranchers in 1883.

Cultural resource surveys conducted in adjacent areas have been limited to areas where surface disturbing projects have been proposed. The diverse geomorphology and perennial water sources provide habitat for a variety of floral and faunal species that would have been attractive to Native Americans and settlers alike. Prior to construction of Owyhee Dam in the 1930's, there were many ranches adjacent to the Owyhee River. The community of Watson was located upriver from the project area. Watson and several schools were connected by dirt roads paralleling the river.

3.1.9.1 **Alternative 1 (No Action)**

Cultural and paleontological materials subject to displacement or damage by grazing animals and soil erosion would continue to occur at the same rate.

3.1.9.2 **Alternative 2**

For reasons already described under Rangeland Vegetation and Wild Horses, impacts to cultural materials would be the same as Alternative 1. Because BLM would conduct surveys and avoid unnecessary disturbance to cultural or paleontological materials prior to fence, water trough, and pipeline installation, unnecessary adverse impacts to cultural and paleontological resources would be avoided. Discovery of cultural materials may conceivably result in adjustment to the planned locations of rangeland developments.

3.1.9.3 **Alternative 3 (Proposed Action)**

Under Alternative 3, soil erosion caused by wild horse trailing in the Leslie Gulch ACEC and adverse impacts to Section 7 Spring would be eliminated. Consequently, the rate of cultural and paleontological

displacement or damage in those areas would also be reduced. Because BLM would conduct surveys and avoid unnecessary disturbance to cultural or paleontological materials prior to fence, water trough, and pipeline installation, unnecessary adverse impacts to cultural and paleontological resources would be avoided. Discovery of cultural materials may conceivably result in adjustment to the anticipated locations of rangeland developments.

3.1.10 Wilderness Study Areas (WSAs)

This analysis area includes Honeycombs Wilderness Study Area (WSA), OR 3-77A. The WSA is a 39,000 acre public land block recommended by BLM as suitable for federal Wilderness designation. Only Congress can designate federal lands as Wilderness. This WSA is amongst many which Congress has yet to act on. Until Congress does act, all WSAs are managed in accordance and compliance with the proposals that were submitted by BLM and thus the projects proposed in this EA must conform to BLM manual H-8550-1, Interim Management Policy for Lands Under Wilderness Review (WSA IMP). Under the WSA IMP, BLM is required to manage each WSA in a manner so as not to impair its suitability to be designated by Congress as a component of the National Wilderness System. The most relevant aspects of WSA IMP prescriptions applicable to this EA are included for readers in Appendix A.

The Honeycombs WSA is predominately natural in appearance. It is affected primarily by the forces of nature with the imprint of man's work substantially unnoticeable to the average visitor. It possesses outstanding opportunities for solitude and primitive and unconfined types of recreation such as hiking, backpacking, hunting (including for bighorn sheep), sightseeing, photography and wildlife viewing. Natural wilderness-related values also include, but are not limited to, outstanding geologic scenery including outcrops, rims, spires, pinnacles and other "honeycombed" eroded features in a highly diverse and largely rugged canyon-carved landscape. The Honeycombs WSA also supports supplemental wilderness values including California bighorn sheep, six special status plant species (including three near the project area); winter range for the northern bald eagle; and deer winter range.

Forty-seven interior and unnatural features (human imprints) were originally inventoried by BLM in the late 1970's, which collectively and visually influence about six percent of the WSA. Unnatural features inventoried include (1) motorized vehicle ways (i.e., primitive motorized vehicle routes), (2) small earthen domestic livestock reservoirs, (3) developed springs, (4) one pipeline, (5) rangeland fences, (6) mining scars, (7) one wild horse trap, (8) remnants of old abandoned wild horse traps, and (9) 4 functional wildlife guzzlers.

Since WSA designation by BLM in 1980, BLM has authorized additional wildlife water developments within the Honeycombs WSA as part of the Leslie Gulch Bighorn Sheep Habitat Management Plan (USDI BLM 1980) and to protect Shadscale Flat Spring (USDI BLM 2003). Most recently in 2005, BLM approved the installation of 10 additional wildlife guzzlers and removal of one existing guzzler associated with BLM public lands located east and adjacent to the BoR-administered Owyhee Reservoir (USDI BLM 2005). The one removed guzzler and four of the 2005 new guzzler projects occur within the Honeycombs WSA (Doe, North Three Fingers, South Carlton, and Bensley). Two (Spring Creek and Saddle) of the remaining 6 new guzzlers are located within the Leslie Gulch ACEC, but outside of Honeycombs WSA.

Cherry-stem (dead-end) roads, including the Shadscale Flat road, are elements of the Honeycombs WSA's boundary. The WSA boundary goes around the surface disturbance of these roads. Per BLM's WSA IMP and the SEORMP ROD, motorized vehicle travel within WSAs is limited year-long to designated inventoried vehicular ways. As provided in the WSA IMP, driving a motorized vehicle cross country within a WSA is a permissible exception when (in meeting the definition of a "off-road vehicle" [Title 43, part 8340 of Code of Federal Regulations]) it is determined by BLM, on a case-by-case basis, to be the minimum management tool needed to perform a given BLM-approved task or activity for the purpose of protection of the land's resources and enhancement of wilderness values while meeting the non-impairment criteria for maintaining an area's wilderness suitability.

3.1.10.1 **Alternative 1 (No Action)**

With the Honeycombs WSA, degradation of soils resulting in accelerated erosion and cutting proximate of Section 7 Spring by wild horses, bighorn sheep, and livestock would continue. BLM inaction would also endanger the integrity of certain special status plant species and their habitat within areas of ongoing wild horse activities of the WSA, and likely be inconsistent with the WSA IMP which states the BLM "must still endeavor to make every effort not to allow [wild horse] populations within WSAs to degrade wilderness values, or vegetative cover as it existed [15] on the date of the passage of FLPMA" (IMP p 42-43).

3.1.10.2 **Alternative 2**

Under Alternative 2, gap fence construction would be allowed and new man-made developments within the Honeycombs WSA would occur. The total extent of fence development impacts would exceed those that were present at the time the Honeycombs WSA was established in Oregon.

The gap fencing would be a new permanent human imprint within the WSA. It being an action of reclamation to mitigate pre-FLPMA impacts (deterioration of a natural spring source caused by human actions), the fencing would meet the WSA IMP non-impairment requirement. The addition of gap fencing, and as described, designed and mitigated would result in a minimal additional impact to the state of naturalness of wilderness character within Honeycombs WSA. The extent of the additional gap fences -- individually and collectively with the other existing human imprints present in the WSA -- would result in the WSA, overall, still being affected primarily by the forces of nature with the imprint of man's work being substantially unnoticeable to the average visitor.

Nonetheless, while this is the case, the use of larger 4-wheel drive types of trucks (with or without a towed trailer), as well as the combined use of both that type of vehicle and an ATV, would not meet the minimum tool concept (see Appendix A) for management of a WSA. The extent and duration of adverse impacts on soils and vegetation along the fence line caused by such larger vehicles, trailers and/or the combined use of them with an ATV would be beyond what is reasonably needed or required to install fence within a WSA. Additionally, these vehicles, although used to install segments of gap fence, would need to traverse the entire 6 miles of the ACEC's north boundary to access the various gap fence installation segments. Thus, there would be the additional impact of the use of such vehicles in locations where no fence would be located. The cumulative severity of adverse surface impacts caused by the vehicles would be further exacerbated by there being no limit on the number of incrementally accumulated round trips the vehicles could take, either from drop sites of fence material (performed by the helicopter) and/or from the Steamboat Ridge road. Finally, as addressed under the subsection of Recreation and Visual Resources, above, the use and extent of use of the vehicles as described herein would not meet the management objective of VRM Class I due to the long term timeframe for surface reclamation efforts to be accomplished.

Thus, due to the use and nature of use of vehicles supporting the project under this alternative, this BLM action would not be in compliance with the SEORMP ROD. Per BLM management direction WSAs are designated VRM Class I. The use of a helicopter would meet the minimum tool concept because of the very minimal, short term and temporary physical impact to naturalness characteristics of the WSA.

Opportunities for solitude would remain outstanding with the presence of the new gap fences due to the nominal extent of the fences relative to the size, configuration and highly diverse topographic features which provide exceptional screening to enable and enhance the sense of being isolated and secluded. Helicopter use would be audibly disruptive to any visitors who may be in the proximity, but this adverse impact would be very brief in duration.

[15] Ongoing wild horse degradation of rangeland existed at the time the Honeycombs WSA was originally established. However, this fact does not mean BLM is compelled to maintain degraded conditions as a function of IMP guidance.

The gap fences, though an inconvenience to negotiate when a visitor is participating in dispersed recreational activities available within the WSA, would not preclude or hamper to any significant extent the existing outstanding opportunities for primitive and unconfined recreation because of the fence's small imprint relative to the size and configuration of the WSA and the vast distribution, availability and physical accessibility of and for such outstanding opportunities throughout the WSA.

Protection and enhancement of wilderness characteristics would result by resolving use conflicts between wild horses and bighorn sheep at the spring with preference to bighorn sheep, a supplemental wilderness value of the WSA. The gap fences – individually, collectively, and in combination with existing human imprints present in the WSA -- would not impair the WSA's suitability to be preserved for designation by Congress as a component of the National Wilderness System for the reasons stated above.

If the proposed gap fencing were able to effectively control wild horse grazing impacts in the Leslie Gulch ACEC, the additional fence impacts could possibly be justified under the wilderness IMP because WSA improvement would truly be possible. However, BLM believes gap fencing would not be an effective deterrent to wild horse use in the northwestern portion of the Leslie Gulch ACEC and therefore substantial resource improvements within the Honeycombs WSA would not be accomplished.

3.1.10.3 **Alternative 3 (Proposed Action)**

Impacts to wilderness characteristics of Honeycombs WSA would be as described under Alternative 2, except for the following.

The extent of naturalness would be affected by the increased length of new rangeland fence, by the placement of the pipeline, trough, and small concrete catchment basin at/near Section 7 Spring. Although each project element would be a new permanent development, the mitigations and design features would substantially reduce their adverse impacts within the WSAs. Because of the type of developments and their physical placement relative to the project area's topography, these actions (individually and collectively including existing human imprints within the WSA) would result in the WSA still being affected primarily by the forces of nature. The imprint of man's work would be substantially unnoticeable to the average visitor. This would be due to the relatively minor visual imprint resulting from the project's design features, the scope and size of the project relative to overall size of the WSA, the limited number, types, extent, spatial placement, and locations of human imprints presently within the WSA.

Under this alternative, the management objective for VRM Class I would be met due to the numerous employed design features and installation mitigation actions associated with the project. Outstanding opportunities for solitude and primitive and unconfined recreation would remain available within the WSA for the same reasons provided under Alternative 2. Protection and enhancement of wilderness characteristics would result by exclusion of wild horse use of special status plant species and their habitat within the WSA, and by resolving use conflicts between wild horses and bighorn sheep while providing water to both species.

Under this alternative, although more extensive in actions than under Alternative 2, the approximate 6 miles of fence and development of Section 7 Spring – individually, collectively, and in combination with existing human imprints present in the WSA -- would not impair the WSA's suitability to be preserved for designation by Congress as a component of the National Wilderness System.

3.1.11 Areas of Critical Environmental Concern (ACECs)

Through its land use planning process, BLM can designate ACECs where ACEC relevance and importance criteria for natural and cultural values are met and special management attention is required to protect the values identified. The Leslie Gulch ACEC involved in this analysis area was established to protect relevant and important values including high scenic values associated with the colorful ash talus cliffs, California bighorn sheep and habitat, and five special status plant species (SEORMP ROD, p. 80). Portions of three WSA's comprise about 92% of Leslie Gulch ACEC: Upper Leslie Gulch WSA (3-74), Honeycombs WSA (3-77A), and Slocum Creek WSA (3-75). The project proposal is affiliated with that portion of the ACEC located within the Honeycombs WSA.

The Final Leslie Gulch ACEC Management Plan (1995) (and an element of the SEORMP ROD), removes the ACEC from the Three Fingers Wild Horse Management Area and requires removal of wild horses from the ACEC if they enter it (1995:14). Plan decisions also include closure of the ACEC to livestock grazing (except for that portion of the Bannock Pasture located within the ACEC and which is not affected by the proposal herein being assessed). Some locations along the ACEC's north ridgeline boundary consist of near vertical to vertical rock cliff outcrops and spires (most notable its Yellow Jacket complex) or with slopes so steep to adequately serve as natural barriers to wild horses and livestock from entering the ACEC. The topography of the remainder of the ACEC's north ridgeline boundary and the adjacent federal lands administered by the BoR is not adequate to prevent wild horses from entering the ACEC. Presently, wild horses drift into the ACEC at various locations along its north ridgeline boundary (and likely livestock when proximate to Section 7 Spring), contrary to plan decisions.

3.1.11.1 **Alternative 1 (No Action)**

Ongoing risks of resource damage of certain special status plants and habitat and further expansion of noxious weeds and invasive plants carried and spread by wild horses and livestock would occur within the Leslie Gulch ACEC. These actions and adverse impacts conflict with meeting management objectives associated with the ACEC. Relevant and important values of the Leslie Gulch ACEC including special status plants and animals would remain threatened for reasons explained under Wildlife and Wildlife Habitat, Special Status Plants, and Rangeland Vegetation by BLM inaction.

3.1.11.2 **Alternative 2**

Impacts addressed similar to those described under Alternative 1 would continue, due to installed gap fencing not likely being adequate to preclude future wild horse entry into the northwestern portion of the ACEC, from its north boundary located west of the Yellow Jacket complex of spires and cliffs to the reservoir. Under this alternative, the continuous gap fence placement east of the Yellow Jacket area to the existing fence on Steamboat Ridge would result in keeping livestock use north of the ACEC and Section 7 Spring, as well, which located north of the ACEC's north boundary.

3.1.11.3 **Alternative 3 (Proposed Action)**

The proposed action would be in accordance with the Leslie Gulch ACEC Management Plan and the SEORMP ROD, by precluding otherwise unauthorized wild horse and livestock entry into the ACEC. The new fence would protect the important and relevant natural values identified with the Leslie Gulch ACEC, thus meeting plan management objectives and decisions.

4 *Cumulative* Impacts

BLM has no other reasonably foreseeable proposed projects that would potentially impact the Honeycombs WSA beyond those considered in this EA. The Council on Environmental Quality (CEQ) defines cumulative effects as 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 (40 CFR 1508.7). A June 2005 CEQ memorandum states:

The environmental analysis required under NEPA is forward-looking, in that it focuses on the potential impacts of the proposed action that an agency is considering. Thus, review of past actions is required to the extent that this review informs agency decision making regarding the proposed action. This can occur in two ways:

First, the effects of past actions may warrant consideration in the analysis of the cumulative effects of a proposal for agency action. CEQ interprets NEPA and CEQ's NEPA regulations on cumulative effects as requiring analysis and a concise description of the identifiable present effects of past actions to the extent that they are relevant and useful in analyzing whether the reasonably foreseeable effects of the agency proposal for action and its alternatives may have a continuing, additive and significant relationship to those effects. In determining what information is necessary for a cumulative effects analysis, agencies should use

scoping to focus on the extent to which information is "relevant to reasonably foreseeable significant adverse impacts," is "essential to a reasoned choice among alternatives," and can be obtained without exorbitant cost (40 CFR 1502.22). Based on scoping, agencies have discretion to determine whether, and to what extent, information about the specific nature, design, or present effects of a past action is useful for the agency's analysis of the effects of a proposal for agency action and its reasonable alternatives. Agencies are not required to list or analyze the effects of individual past actions unless such information is necessary to describe the cumulative effect of all past actions combined. Agencies retain substantial discretion as to the extent of such inquiry and the appropriate level of explanation (Marsh v. Oregon Natural Resources Council, 490 U.S. 360, 376-77 [1989]). Generally, agencies can conduct an adequate cumulative effects analysis by focusing on the current aggregate effects of past actions without delving into the historical details of individual past actions.

Second, experience with and information about past direct and indirect effects of individual past actions may also be useful in illuminating or predicting the direct and indirect effects of a proposed action. However, these effects of past actions may have no cumulative relationship to the effects of the proposed action. Therefore, agencies should clearly distinguish analysis of direct and indirect effects based on information about past actions from a cumulative effects analysis of past actions.
Past Actions

The identifiable present effects of past actions result from the construction of fences, spring developments, and pipelines similar to the ones that BLM would implement in this proposed action. As stated in the environmental consequences section of this EA (page 13), disturbance to soils and watershed resources would create short-term (1-2 years) sediment to downstream channel systems and localized site disturbance to the reservoir storage areas until vegetation becomes established. After this period of time, a more natural contour would be established, thereby negating the residual effects of reservoir construction. In other words, the effects of the proposed action, when added to the present effects of past actions, would result in a sum of effects less than those observed currently. Similarly, the effects to vegetation, from the proposed action will, in the same time frame, reestablish a more natural vegetation cover, thereby negating effects to this resource that resulted from construction of the reservoirs.

Present Actions
Within the geographic scope of this analysis, no known actions (by BLM or other parties) were in progress at the time this EA was written. No known actions would be occurring during the period of this proposed action. For this reason, there are no effects from present actions that would have a cumulative relationship with the effects of this proposed action.

4.1.1.1 **Alternative 1 (No Action)**

The cumulative impacts of Alternative 1 actions would result in no new rangeland development intrusions on public land, including the Honeycombs WSA. However, compared to when the Honeycombs WSA was originally established in 1980, the total number of rangeland development and maintenance impacts would still increase because BLM has already approved 4 new wildlife guzzler installation projects in 2003 and one other exclosure and pipeline development at Shadscale Spring in 2005.

Under Alternative 1, continuation of current management would also be expected to (1) eventually lead to adverse wild horse-related impacts to special status plants within Leslie Gulch ACEC (2) potentially result in long term forage competition problems between bighorn sheep and wild horses (3) violate the wild horse exclusion decision included in the Leslie Gulch ACEC Management Plan and the SEORMP ROD (2002) (4) result in periodic denial of bighorn sheep access to limited water because of wild horse social behavior (5) result in continued violation of the Fundamentals of Rangeland Health (43 CFR 4180) because of wild horse use on Section 7 Spring and (6) likely contribute towards bighorn sheep mortalities caused by cyanobacteria poisoning.

The cumulative effects of Alternative 1 would simply fail to meet a majority of BLM management concerns associated with the analysis area, especially for Section 7 Spring and the Leslie Gulch ACEC.

4.1.1.2 **Alternative 2**

The cumulative impacts of Alternative 2 actions, when compared to when the Honeycombs WSA was originally established in 1980, would increase the total number of rangeland development and maintenance impacts as described under Alternative 1. More fence related impacts would occur on public land including potential for additional wildlife injuries or mortalities. However, because of fence design features, the adverse impacts to wildlife would be substantially limited.

Effective denial of wild horse access into Leslie Gulch ACEC would probably not occur under Alternative 2 because, based on experience, gap fencing does not deter wild horses. Similar gap fencing attempts in the Cold Springs and Sheepheads HMAs have proven to be unsuccessful.

The cumulative effects of Alternative 2 would add to the amount of fencing present on public land, but fail to meet a majority of BLM management concerns raised under the Purpose and Need for the EA. Section 7 Spring and the Leslie Gulch ACEC would remain vulnerable to wild horse problems and new fencing within the Honeycombs WSA would occur with only temporary success in meeting resource objectives. Alternative 2 would cost more than Alternative 1 in financial terms, but the outcomes of Alternative 1 and 2 would be about the same.

4.1.1.3 **Alternative 3 (Proposed Action)**

The cumulative impacts of Alternative 3 would result in about 6 additional miles of fence-related impacts including some new visual intrusions and wildlife hazards within the Honeycombs WSA. Fence development impacts would exceed those that were present at the time the Honeycombs WSA was established. However, the proposed action fence design features would be expected to substantially limit new wildlife hazards and placement of new fencing below the skyline visible from Leslie Gulch road would substantially limit visual impacts within the Honeycombs WSA. Also, the short term construction impacts within the Honeycombs WSA would all be considered consistent with the WSA IMP.

The Three Fingers HMA would be reduced in size but only to the minimum amount necessary to meet other management objectives. Although new fencing would reduce the Three Fingers HMA, wild horse movements would not be unduly restricted because 90% of their range of movement would remain open to use. Further, instead of drinking poor quality water at Section 7 Spring, wild horses would drink clean water out of a livestock water trough made available for their use. Small wildlife entrapment would be substantially limited because of water trough escape ramp installation.

Water development impacts would increase within the Honeycombs WSA because BLM has already approved water development actions in 5 locations from 1980 through 2003. The buried pipeline needed to deliver water to wild horses would definitely be considered a new development intrusion but it would not be visible to most public land visitors and surface disturbance necessary for its installation would occur within rangeland already dominated by invasive annual plants. Thus, the surface disturbances associated with the proposed action would not invite more invasive annual plants. Finally, re-contouring and seeding along the pipeline after construction would result in conditions that would be substantially unnoticeable over a period of several years.

BLM removed the Shadscale Flat big game guzzler from the Honeycombs WSA in 2005. Therefore, the new proposed water tank for wild horses may be considered the replacement of a prior existing water development that was functional at the time Honeycombs WSA was designated in 1980.

The small cement water catchment for bighorn sheep drinking near Section 7 Spring would cause little or no new adverse impacts caused by wildlife use because surface water already exists where it would be constructed. Recovery of spring development and water catchment installation disturbances would be rapid because of available soil moisture for plant growth. With greatly diminished grazing use impacts, site recovery at Section 7 Spring would be substantial within a few years and riparian function would be restored in accordance with the Fundamentals of Rangeland Health (43 CFR 4180).

Under Alternative 3, the bighorn sheep water source at Section 7 Spring would be developed and excluded from wild horse grazing impacts. Consequently, it is very likely that (1) uninterrupted flow of cool spring water into the cement catchment would either avoid or greatly reduce bighorn sheep cyanobacteria poisoning (2) bighorn sheep would be able to drink from a scarce water source that was likely unavailable to them periodically because of aggressive wild horse behavior and (3) BLM actions would directly assist ODFW in recovery of declining bighorn sheep populations.

In summary, Alternative 3 would not maximize protection of all resource values considered within the analysis area because of conflicting requirements. Given the circumstances and issues at hand, it would be virtually impossible to fully meet all resource objectives at one time. However, the cumulative impacts of Alternative 3 actions would likely meet most BLM management objectives in a way that is compatible with public desires, BLM policies, and public land regulations. The combined actions associated with Alternative 3 would not preclude Congress from designating the Honeycombs WSA as a component of the National Wilderness System and naturalness within the WSA would be enhanced according to the BLM WSA IMP.

5 Mitigating Measures

For the purpose of offsetting new fence construction under the proposed action, BLM would consider removing an equal amount (6 miles) of unneeded existing permanent fence located elsewhere in Malheur or Jordan Resource Areas. By taking this action, the net amount of permanent fence on public land (inside or outside of WSAs) would not change after the proposed action is fully implemented. This mitigating action is in no way directly connected with the Purpose and Need of this EA; it is considered a plausible proposal that may help bring the proposed action to completion.

BLM would be willing to consent to this mitigation in a final decision provided that fence removal could occur within a 3 year window after the decision for this EA is signed. BLM would make a good faith effort to identify fences to be removed within high natural value locations such as sage-grouse nesting or strutting habitat, WSAs, Wild and Scenic River corridors, or the like. Because this consideration was not clearly articulated until late in the EA writing process, BLM is not able at this time to identify the total 6 miles of fence that might be removed.

6 Irreversible or Irretrievable Commitment of Resources

There would be no irreversible or irretrievable commitments of resources associated with the proposed action. If it were to become necessary, all of the permanent proposed project developments could easily be removed and their impact areas could be substantially restored to conditions that existed prior to development.

7 List of Preparers

John Caywood	(retired BoR) Range, Recreation, & Realty Specialist, Soil Scientist, Forester
Mitch Thomas	Rangeland Management Specialist
Eric Mayes	Planning and Environmental Coordinator
Jim Johnson	Wild Horse Specialist
David Draheim	Outdoor Recreation Planner, Wilderness
Gillian Wigglesworth	Botanist
Diane Pritchard	Archaeologist
Shaney Rockefeller	Soil Scientist
Michelle Caviness	Wildlife Biologist
Lynne Silva	Range Technician, Weeds
Susie Manezes	Realty Specialist
Pat Ryan	Field Manager, Malheur Resource Area
Bob Patterson	Range Technician

Bob Alward	Contract Consultant (retired BLM)
Jon Sadowski	Contract Consultant (retired BLM)
Jon Westfall	Geologist

8 List of Agencies, Organizations, and Persons Notified

Ada Fish and Game League
Advocates For The West
American Donkey and Mule Society
American Mustang and Burro Association
American Society for Prevention of Cruelty to Animals
Animal Protection Institute
Animal Welfare Institute
Associated Humane Societies
Audubon Society of Portland
Bureau of Reclamation Snake River Office

Burns Paiute Tribe
Colorado Wild Horse and Burro Coalition
Committee for the Preservation of Wild Horses
Committee for Idaho's High Desert
Confederated Tribes of the Umatilla Reservation
Fort McDermitt Shoshone-Paiute Tribes
Fund for Animals
Grazing permittees; Three Fingers Allotment
Heid Brothers
Idaho Conservation League

Idaho Power Company
International Society for the Protection of Mustangs and Burros
Jaca Brothers Inc.
JR Land and Livestock
Kiger Mesteno Association
Malheur County Court Judge and Commissioners
Malheur County Grazing Advisory Board
Mariposa Images
National Mustang Association
National Wild Horse Association

Native Plant Society of Oregon, High Desert Chapter
Northwest Environmental Defense Center
Oregon Environmental Council
Oregon Department of Fish and Wildlife
Oregon Natural Desert Association
Oregon Natural Heritage Advisory Council
Oregon Natural Heritage Program
Oregon Wild (formerly Oregon Natural Resources Council)
Oregon State Historical Preservation
Oregon Trout

Oregon Wildlife Federation
Pacific River Council
Pacific Wild Horse Club
Range Ecology Group
Sierra Club, Washington D.C.
Sierra Club, Oregon Chapter, High Desert Wilderness Committee

Skinner Ranches Inc
Ten Mile Ranch LLC
The Nature Conservancy
Tom Davis Livestock Inc
Western Watersheds Project; Interested Public
Wilderness Society
Wilderness Watch
Zimmerman Family Limited Partnership

A file search completed November 1, 2008 identified no additional requests by members of the public to be considered an interested public.

9 Literature Cited

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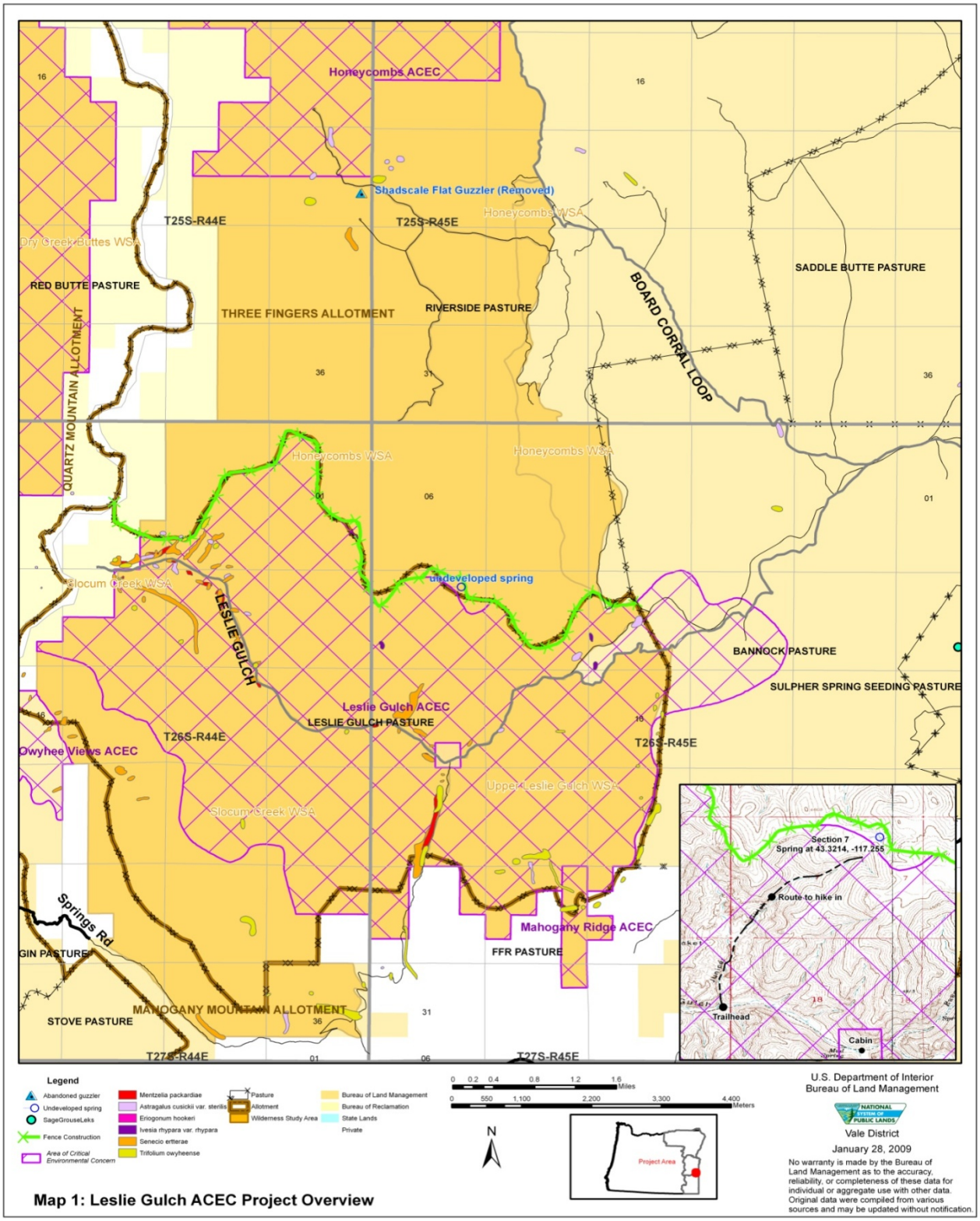
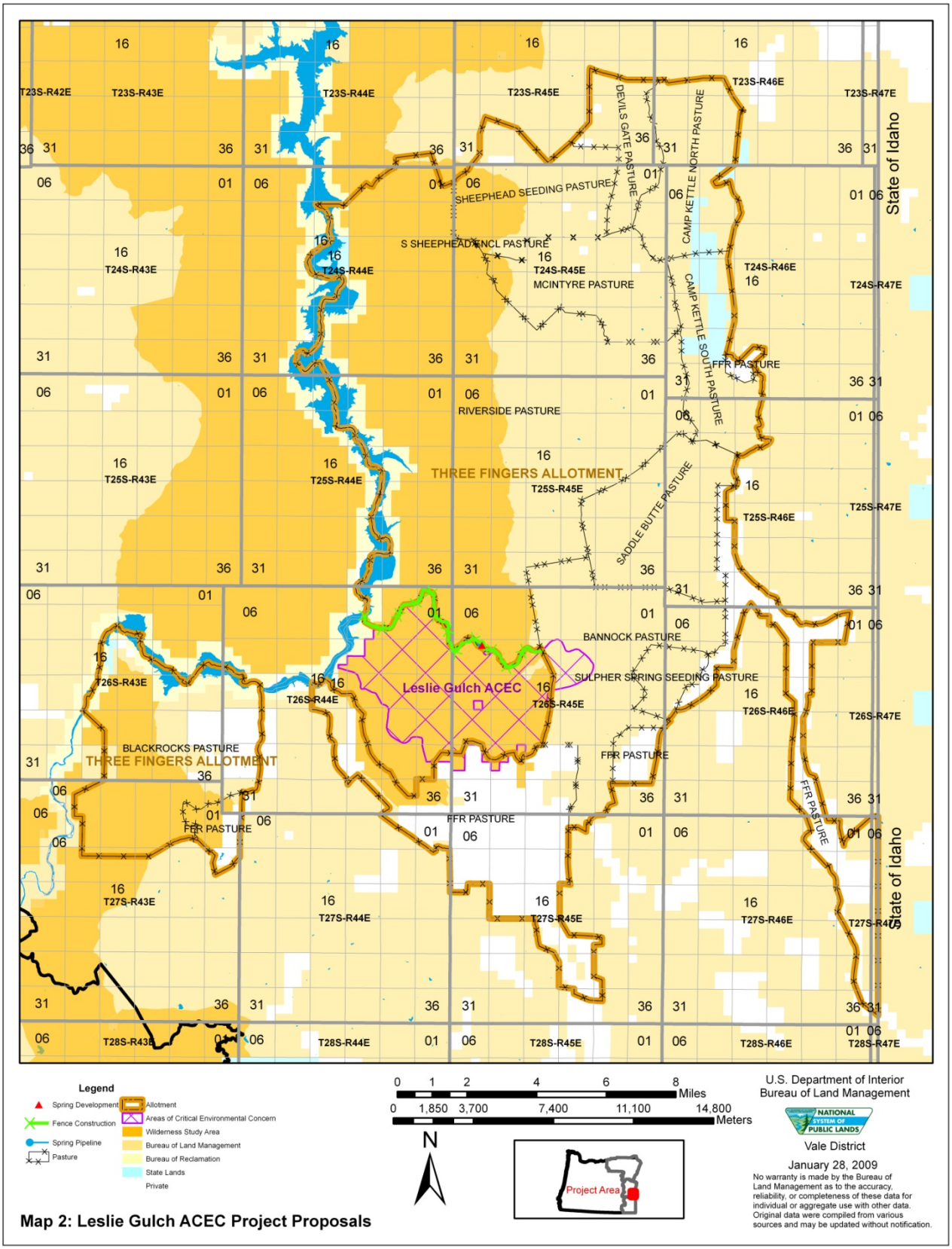
Osterman-klein, et al. 2008. Interactions between Feral Horses and Desert Bighorn Sheep at Water. J.Mammalogy Vol. 89, Issue 2. pp. 459-466.

Paula Morin (2006). William Molini at p. 76 in Honest Horses – Wild horses in the Great Basin. University of Nevada Press. Charlie Clements, Wildlife biologist (ibid) at p. 98.

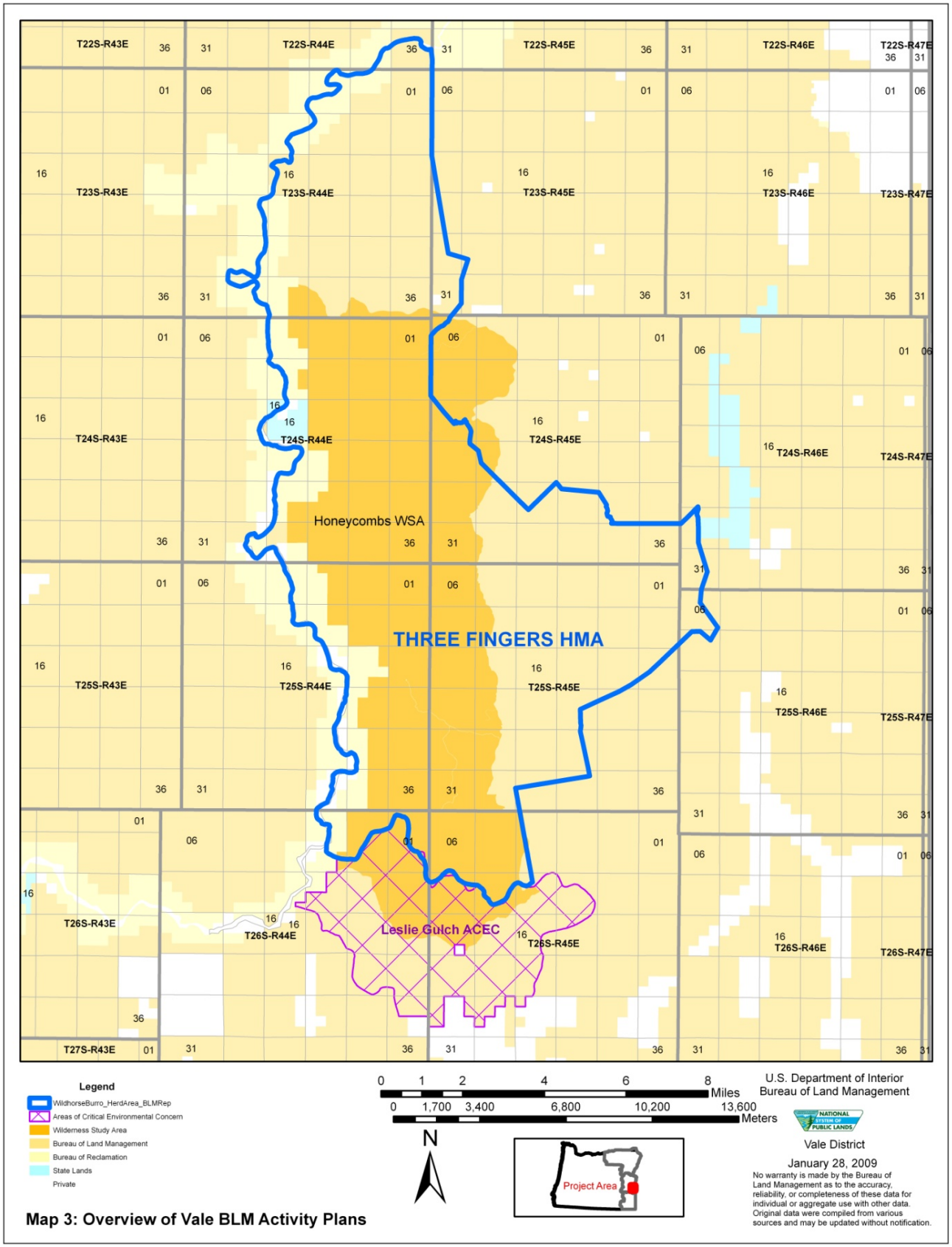
The Wild Free-Roaming Horse and Burro Act of 1971. PUBLIC LAW 92-195

10 Maps


Honeycombs ACEC
Shadscale Flat Guzzler (Removed)
T25S-R44E
T25S-R45E
Honeycombs WSA
Dry Creek Buttes WSA
RED BUTTE PASTURE
THREE FINGERS ALLOTMENT
RIVERSIDE PASTURE
SADDLE BUTTE PASTURE
BOARD CORRAL LOOP
QUARTZ MOUNTAIN ALLOTMENT
Honeycombs WSA
Honeycombs WSA
Undeveloped spring
Slocum Creek WSA
LESLIE GULCH
BANNOCK PASTURE
SULPHER SPRING SEEDING PASTURE
Leslie Gulch ACEC
LESLIE GULCH PASTURE
T26S-R44E
T26S-R45E
Owyhee Views ACEC
Upper Leslie Gulch WSA
Slocum Creek WSA
Springs Rd
Mahogany Ridge ACEC
GIN PASTURE
FFR PASTURE
MAHOGANY MOUNTAIN ALLOTMENT
STOVE PASTURE
T27S-R44E
T27S-R45E
Section 7
Spring at 43.3214, -117.255
Route to hike in
Trailhead
Cabin
Legend
Abandoned guzzler
Undeveloped spring
SageGrouseLeks
Fence Construction
Area of Critical Environmental Concern
Mentzelia packardiae
Astragalus cusickii var. sterilis
Eriogonum hookeri
Ivesia rhypara var. rhypara
Senecio ertterae
Trifolium owyheense
Pasture
Allotment
Wilderness Study Area
Bureau of Land Management
Bureau of Reclamation
State Lands
Private
Miles
Meters
N
Project Area
U.S. Department of Interior
Bureau of Land Management
Vale District
January 28, 2009
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources and may be updated without notification.
Map 1: Leslie Gulch ACEC Project Overview



Map 2: Leslie Gulch ACEC Project Proposals



Map 3: Overview of Vale BLM Activity Plans

11 Appendices

Appendix A - Relevant Excerpts - BLM Manual H-8550-1 Interim Management Policy for Lands Under Wilderness Review (BLM WSA IMP)

This EA incorporates by reference the entire H-8550-1 manual. Following are certain referenced excerpts of the BLM Manual Handbook 8550-1, Interim Management Policy for Lands Under Wilderness Review (commonly addressed as the WSA IMP or IMP in this EA) to assist a reader to relate what is BLM's management policy for Wilderness Study Areas (WSA) for the primary subject addressed in this EA. The content of this appendix is not designed either to be fully inclusive of or to serve as a complete substitution for any given section or subsection of the WSA IMP, nor of any WSA IMP content which may be directly or indirectly associated with subjects included in this EA. To reference the entire BLM WSA IMP, a hard copy is available at the Vale District BLM office, or visit the following website for an electronic copy of the WSA IMP: http://www.blm.gov/ca/pa/wilderness/wilderness_pdfs/wsa/ManualTransmittalShe.pdf

Chapter 1, Management Policy for Lands Under Wilderness Review, A. General Policy

(page 9) 2. Nonimpairment. BLM will review all proposals for uses and/or facilities within WSAs to determine whether the proposal meets the criteria below. Uses and/or facilities found to be nonimpairing may be permitted on lands under wilderness review. Uses and/or facilities found to be impairing will be denied.

The following criteria are referred to hereafter as the "nonimpairment criteria".

a. The use, facility, or activity must be temporary. This means a temporary use that does not create surface disturbance or involve permanent placement of facilities may be allowed if such use can easily and immediately be terminated upon wilderness designation. "Temporary" means the use or facility may continue until the date of wilderness designation, at which time the use must cease and/or the facility must be removed. "Surface disturbance" is any new disruption of the soil or vegetation, including vegetative trampling, which would necessitate reclamation. The term "surface disturbance" is discussed further in Specific Policy Guidance, Section 3 below. Decisions to allow or deny proposed actions based on the nonimpairment criteria will be included in appropriate decision documents.

b. When the use, activity, or facility is terminated, the wilderness values must not have been degraded so far as to significantly constrain the Congress's prerogative regarding the area's suitability for preservation as wilderness. The wilderness values to be considered are those mentioned in Section 2c of the Wilderness Act of 1964 (see Introduction, and/or Appendix B).

The only permitted exceptions to the above rules are:

(1) Emergencies such as suppression activities associated with wildfire or search and rescue operations;
(2) Reclamation activities designed to minimize impacts to wilderness values created by IMP violations and emergencies;
(3) Uses and facilities which are considered grandfathered or valid existing rights under the IMP;
(4) Uses and facilities that clearly protect or enhance the land's wilderness values or that are the minimum necessary for public health and safety in the use and enjoyment of the wilderness values; and,
(5) Reclamation of pre-FLPMA impacts.

3. Surface Disturbance. Surface disturbance is any new disruption of the soil or vegetation requiring reclamation within a WSA. Uses and facilities necessitating reclamation (i.e., recontouring of the topography, replacement of topsoil, and/or restoration of native plant cover) are definitely surface disturbing and must be denied. Cross-country vehicle use off boundary roads and existing ways is surface

disturbing because the tracks created by the vehicle leave depressions or ruts, compact the soils, and trample or compress vegetation. Certain activities recognized as acceptable within a WSA, such as recreational hiking, use of pack stock, or domestic livestock grazing, are allowable within a WSA although in the strictest sense, they cause surface disturbance.

(page 10) 4. Supporting Activities. Some activities that in themselves are nonimpairing may require supporting facilities or activities that could impair wilderness suitability. For example: A boat launching ramp and associated parking as supporting facilities for boating, or the cross-country use of motor vehicles to retrieve sailplanes or hang gliders. When this is the case, the supporting activity will be limited as necessary to meet the nonimpairment criteria. If the supporting activity cannot be done in a nonimpairing manner, then the principal activity will not be approved.

6. Enhancing Wilderness Values. Wilderness values were identified in Section 2c of the Wilderness Act of 1964. The BLM Wilderness Inventory Handbook (Organic Act Directive No. 78-61, dated 9/19/78) further defined wilderness values as: roadlessness, naturalness, solitude, primitive and unconfined recreation, size, and supplemental values. Actions that clearly benefit a WSA's wilderness values through activities that restore, protect, or maintain these values are allowable. Though they may enhance wilderness values, these allowable actions must still be carried out in a manner which is least disturbing to the site.

In order to determine whether a proposed action enhances wilderness values within a given WSA, one must refer to the original wilderness inventory for baseline or benchmark data concerning the particular wilderness values being affected. During the wilderness inventory, the Bureau described in detail the state or condition of each wilderness value or characteristic. If the proposed action would result in a positive or beneficial change in the state or condition of the wilderness values as described, assessed, or calculated on the date of approval of the intensive inventory, then the wilderness value would be enhanced by the proposed action. Conversely, if the proposed action would result in a negative or detrimental change in the state or condition of the wilderness value(s) then that wilderness value would be degraded or impacted and the proposed action must not b allowed.

(page 15) 11. Motor Vehicles.Aircraft and Mechanical Transport. Motor vehicles and mechanical transport may be allowed off boundary roads and existing ways for these purposes only:

a. in emergencies and search and rescue operations as described in Section 12, below;
b. for official purposes by the BLM and other Federal, State, and local agencies and their agents when necessary and specifically authorized by the BLZ4 for protection of human life, safety, and property; for protection of the lands and their resources; and,
c. to build or maintain structures and installations authorized in this document, as long as such use of vehicles is determined to satisfy the nonimpairment criteria and is only along routes authorized and specified by the BLM. No grading, blading, or vegetative disturbance will be permitted as this would constitute surface disturbance and thus not meet the nonimpairment criteria.

(page 18) 18. Minimum Tool Concept. The "minimum tool" concept relates to the management of designated wilderness areas, but the concept can be useful as a guide when applied to the interim management of WSAs. Under the "minimum tool" concept, managers should scrutinize every proposed action to determine
if the action is necessary to protect the physical, biological, and cultural resources, as well as the quality of the wilderness experience. If the planned action is deemed necessary, it should be accomplished using methods and equipment that have the least impact on the quality of an individual or group's wilderness experience, as well as the physical, biological, and cultural resources within the WSA. In a WSA, how one carries out management actions is as important as the end product.

For example, if a decision is made to develop a water source for bighorn sheep within a WSA because this would enhance wilderness values, and the preference is for construction of a bighorn sheep guzzler, management should first consider and analyze other "minimum tool" alternatives that would accomplish the same management objectives with less degradation to wilderness values. Some possible minimum tool options in this example might include:

a. Restoration of existing springs and seeps that have been altered by domestic livestock grazing or wild horses and burros;
b. Removal of domestic livestock or wild horses and burros from water sources frequented by bighorn sheep;
c. Designing a very short, substantially unnoticeable fence that would segregate bighorn sheep from livestock and wild horses and burros in order that all may share the same water source;
d. Elimination of salt cedar infestations that may have reduced or eliminated the above-ground flow of water available to bighorn sheep;
e. Constructing one or more small slick rock, concrete and rock catchments or dams; and,
f. Upgrading of potholes for greater water-holding capacity by utilizing native stone and tinted concrete.

Chapter III, Policies for Specific Activities

(page 38) C. Watershed Rehabilitation and Vegetative Manipulation

1. Watershed Rehabilitation. Measures required for watershed rehabilitation, including structures, will be permitted only if they satisfy the non-impairment criteria. Land treatments e.g., trenching, ripping, pitting, terracing, plowing will not be permitted on lands under wilderness review.

(page 42) D. 3. c. Rangeland Management . Livestock Developments , New, Permanent Livestock Developments

New, permanent livestock developments may be approved if, after completing a similar analysis as required in Section 2.a, above, they truly enhance wilderness values, and the developments are substantially unnoticeable. New, permanent developments must not require motorized access if the area were designated as wilderness. This requirement must be noted in the case file, in the stipulations, and the grazing permit.

(page 42) D. 4. c. Specific Guidelines for Livestock Developments, Fences.

New, permanent fences may be built and maintained if they meet the criteria in Section 3.c, above.

(page 42) E. Wild Horse and Burro Management

Taking into account the fact that wild horse and burro numbers fluctuate dramatically within WSAs due to a variety of factors, the Bureau must still endeavor to make every effort not to allow populations within WSAs to degrade wilderness values, or vegetative cover as it existed on the date of the passage of FLPMA. Wild horse and burro populations must be managed at appropriate management levels as determined.

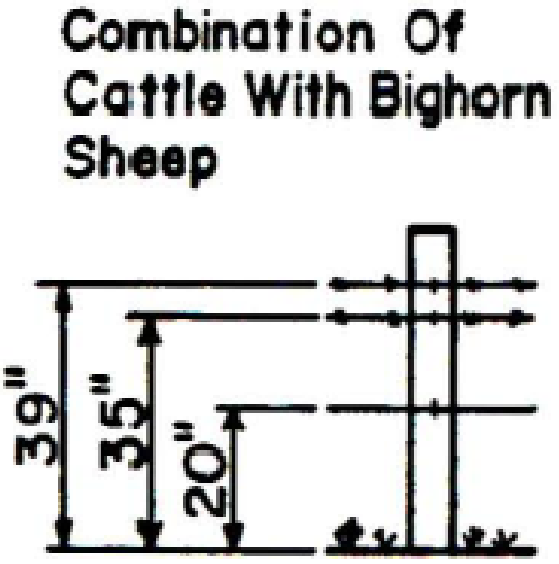
(page 44) G. 4. Wildlife. Permanent Installations.

Certain permanent installations may be permitted to maintain or improve conditions for wildlife and fish, if the benefitting native species enhance wilderness value. Enhancing wilderness values in this context means that a natural distribution, number, and interaction of indigenous species will be sought; natural processes will be allowed to occur as much as possible; and, wildlife species should be allowed to maintain a natural balance with their habitat and with each other.

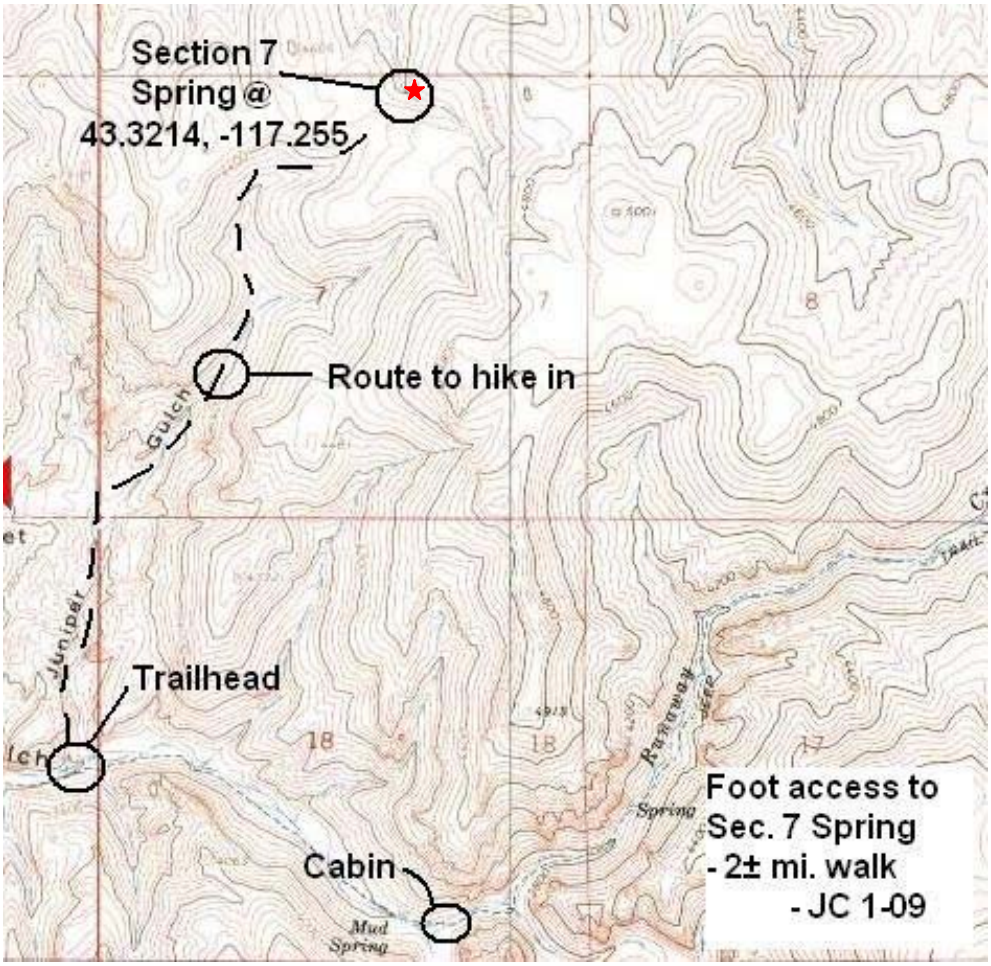
If healthy, viable, self-sustaining populations of native species presently exist within the WSA, then a natural distribution, number, and interaction has already been achieved. It is not permissible, therefore, to artificially manipulate natural processes to increase the population of a native species beyond a natural balance with the habitat within a WSA. While the existence of a native species may enhance wilderness values, it is not the intent of the IMP to optimize population numbers or reach carrying capacities that rely on artificial installations for subsistence.

Permanent installations to protect sources of water on which native wildlife depend, such as exclosures and protective fencing, may be built if they enhance wilderness values, are substantially unnoticeable, and cannot be located outside the WSA boundary. Permanent riparian, wetland, and aquatic enhancement installations may be permitted as long as their purpose is to enhance wilderness values, protect or maintain natural conditions, and restore deteriorated habitat. These installations must also be substantially unnoticeable.

Appendix B – Ridgeline Fence Wire Spacing for Leslie Gulch ACEC Project
Source: BLM Manual Handbook H-1741-1, Fencing



Appendix C – Section 7 Spring Location on USGS Quadrangle



Appendix D – Section 7 Spring Images

Figure 1 Section 7 Spring

Figure 2 Section 7 Spring