

DRAFT Environmental Assessment
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Barclay Allotment Project

Location: Lincoln County, Nevada

Applicant:
Arlin Hughes

Allotment Number 11004

Caliente Field Office
Caliente, Nevada
Phone: (775) 726-8100
Fax: (775) 726-8111





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SECTION 1 BACKGROUND & NEED FOR THE PROPOSED ACTION

BACKGROUND

This environmental assessment (EA) has been prepared to identify issues, analyze alternatives, and disclose the potential environmental impacts associated with the Barclay Allotment Project. The Bureau of Land Management (BLM) Caliente Field Office proposes to authorize the Barclay Allotment Project which consists of improvements to the existing Pine Wash Well, in cooperation with the livestock permittee, and maintain the existing Mahogany Knoll and Marble Reservoir habitat improvement projects (Map 1). The Barclay Allotment Project is located within the Clover Mountains of Lincoln County Nevada in the following legal description:

Pine Wash Well Improvement:

6S, R69E, Sec. 3, 10, and 21

T5S, R69E, Sec.34

Mahogany Knoll and Marble Reservoir Habitat Improvement Maintenance:

T55S, R9E, Sections 33, 34, and 35

T6S, R69E, Sections 2, 3, 4, 10, 11, 14

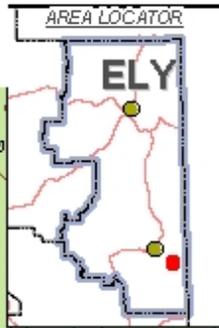
PURPOSE AND NEED FOR THE PROPOSED ACTION

The BLM's purpose and need is to implement the Barclay Allotment Project in accordance with FLPMA and BLM regulations, and other applicable federal laws. The BLM can, through the NEPA process, evaluate reasonable changes (changes that would mitigate impacts while still meeting the proponent's objective) to the proponent's proposal and decide to require those changes. The decision the BLM will make is whether or not to authorize the action, and if so, under what conditions.

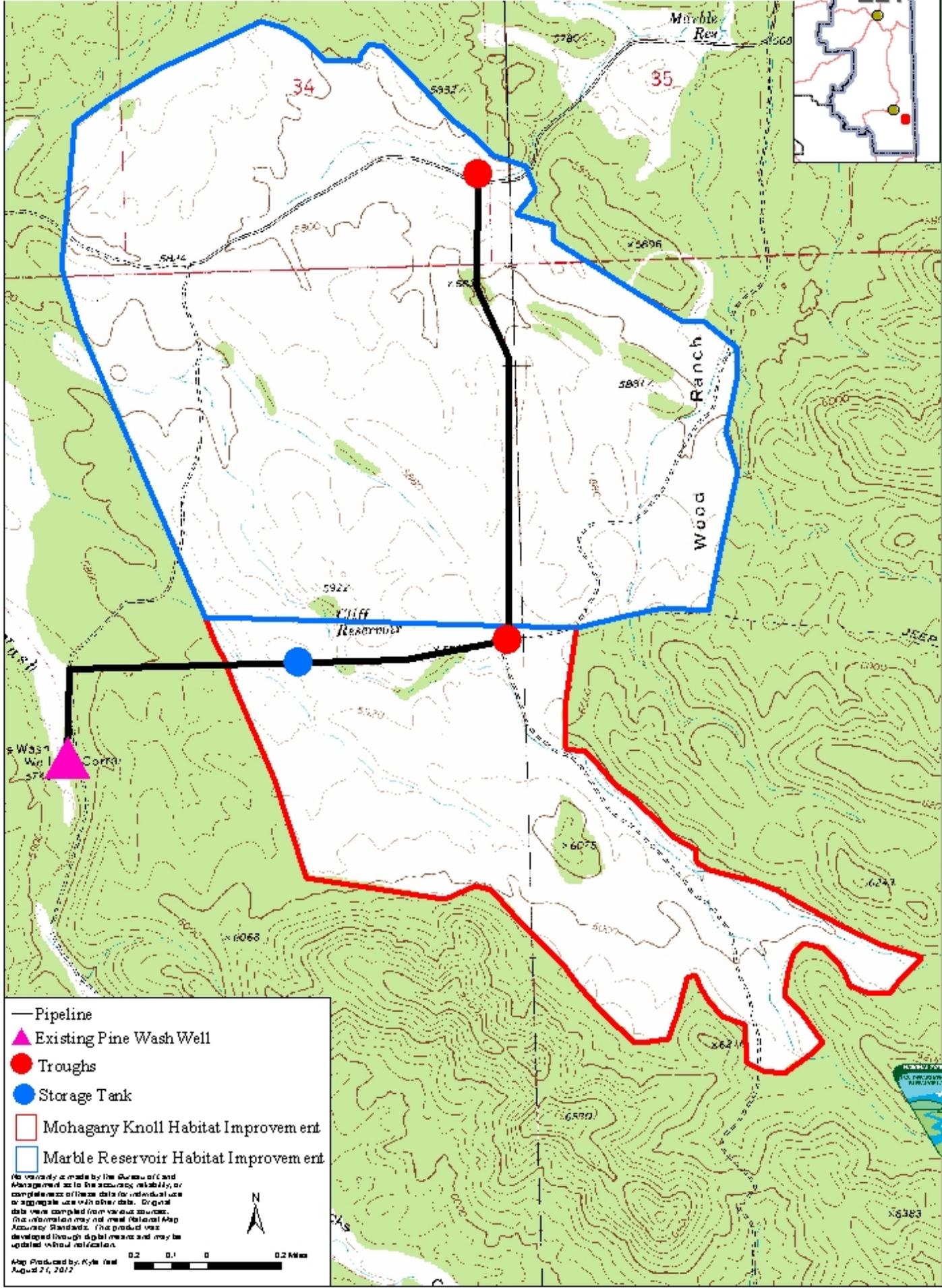
The purpose and need for the proposal is to achieve the following objectives:

- Achieve better distribution for livestock, and improve overall rangeland health.
- Move the project area toward FRCC 1 (Fire Regime Condition Class) with a mosaic of seral stages attaining the potential cover percentages of herbaceous state (65%), shrub state (25%) and tree state (10%) for the project area as outlined in the Ely District Record of Decision and Approved Resource Management Plan (RMP) (August 2008)
- Improve habitat for wildlife.

Map 1: Barclay Allotment Project



BLM



Ely District Office



The purpose of the Pine Wash Well improvements is to provide adequate, reliable water for livestock, and to encourage improved livestock distribution, as well as eliminate the need for temporary, intermittent droving of cattle and water hauling. The need for the action is to distribute grazing use across the allotment in order to continue progressing toward achieving the standards and guidelines for rangeland health as approved by Nevada's Mojave—Southern Great Basin Resource Advisory Council (RAC) Standards and Guidelines (2006).

The purpose and need of maintaining the existing Mahogany Knoll and Marble Reservoir habitat improvement projects is to move the project area towards a more ecologically sound condition of FRCC 1 and meet the objectives outlined in the RMP for existing nonnative seedings.

CONFORMANCE WITH BLM LAND USE PLAN(S)

The project is in conformance with the Ely District Record of Decision and Approved Resource Management Plan (August 2008). The proposals being considered in this EA would help in achieving the following resource management goals identified in the Ely RMP:

Livestock

To allow livestock grazing to occur in a manner and at levels consistent with multiple use, sustained yield, and the standards for rangeland health.

Vegetation Resources

Manage vegetation resources to achieve or maintain resistant and resilient ecological conditions while providing for sustainable multiple uses and options for the future across the landscape

Fish and Wildlife

Provide habitat for wildlife (i.e. forage, water, cover, and space) and fisheries that is of sufficient quality and quantity to support productive and diverse wildlife and fish populations, in a manner consistent with the principles of multi-use management, and to sustain the ecological, economic, and social values necessary for all species.

Fire

Return fire to its natural role in the ecological system and implement fuels treatments, where applicable, to aid in returning fire to the ecological system.

The project is in conformance with the following specific objectives and management decisions:

Livestock Resources

LG-5: Maintain the current grazing preference, season-of-use, and kind of livestock until the allotments that have not been evaluated for meeting or making progress toward meeting the standards or are in conformance with the policies are evaluated . Depending on the results of the standards assessment, maintain or modify grazing preference, seasons-of-use, kind of livestock, and grazing management practices to achieve the standards for rangeland health. Changes, such as improved livestock management, new range improvement projects, and changes in the amount and kinds of forage permanently available for livestock use, can lead to changes in preference, authorized season-of-use, or kind of livestock. Ensure changes continue to meet the RMP goals and objectives, including the standards for rangeland health.

Vegetation Resources

VEG-1: Emphasize treatment areas that have the best potential to maintain desired conditions or respond and return to the desired range of conditions and mosaic upon the landscape, using all available current or future tools and techniques.

VEG-4: Design management strategies to achieve plant composition within the desired range of conditions for vegetation communities, and emphasize plant and animal community health at the midscale (watershed level).

Parameter – Nonnative Seedings (Existing)

VEG-25: Implement actions to attain the desired vegetation states shown in below:

Desired Range of Conditions of Seedings (Distribution of Phases and States)

Habitat Type	Herbaceous State	Shrub State	Tree State	Altered State (Annual Invasive)
Approved RMP	65%	25%	10%	0%

VEG-26: Include the following integrated treatments:

1. Use of ecological site descriptions as references for identifying appropriate management of non-seeded species on the sites.
2. Management of seedings to allow sagebrush, perennial grasses, and forbs to become established on the site.

Fire

FM-4: Incorporate and utilize Fire Regime Condition Class as a major component in fire and fuels management activities. Use Fire Regime Condition Class ratings in conjunction with vegetation objectives (see the discussion on Vegetation Resources) and other resource objectives to determine appropriate response to wildland fires and to help determine where to utilize prescribed fire, wildland fire use, or other non-fire (e.g., mechanical) fuels treatments. FM-5: In addition to fire, implement mechanical, biological, and chemical treatments along with other tools and techniques to achieve vegetation, fuels, and other resource objectives.

FM-5: In addition to fire, implement mechanical, biological, and chemical treatments along with other tools and techniques to achieve vegetation, fuels, and other resource objectives.

RELATIONSHIPS TO STATUTES, REGULATIONS AND OTHER PLANS

The proposed action is in compliance with the following laws, regulations, Executive Orders, county public land plans, and other plans:

- The National Environmental Policy Act of 1969 (42 U.S.C. §§ 4321-4347, January 1, 1970, as amended 1975 and 1994)
The Federal Land Policy and Management Act of 1976 (43 U.S.C. §§ 1701-1782, October 21, 1976, as amended 1978, 1984, 1986, 1988, 1990-1992, 1994 and 1996) County Land Use Plans
- Lincoln County Public Land and Natural Resource Management Plan (1997).
- Lincoln County Public Lands Policy Plan (2010)
- The Lincoln County Elk Management Plan (1999 Revision)

Wildlife, Special Status Species, and Migratory Birds

- Migratory Bird Treaty Act (16 U.S.C. §§ 703-712, July 3, 1918, as amended 1936, 1960, 1968, 1969, 1974, 1978, 1986 and 1989).
- Executive Order 13186: Responsibilities of Federal Agencies to Protect Migratory Birds (2001).
- State Protocol Agreement between the Bureau of Land Management, Nevada and the Nevada State Historic Preservation Office for Implementing the National Historic Preservation Act (2009)
- Mojave-Southern Great Basin Resource Advisory Council (RAC) Standards and Guidelines (September, 2006)

TIERING

This document is tiered to the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (RMP/EIS) released in November 2007. This document is also tiered to the Barclay Allotment Environmental Assessment (NV-045-08-004 August 14, 2008, Grazing Permit Issuance for Fenton Bowler).

SECTION 2 DESCRIPTION OF ALTERNATIVES

INTRODUCTION

The previous chapter presented the Purpose and Need for the proposed projects. This EA focuses on the Proposed and No Action Alternatives. The No Action alternative is considered and analyzed to provide a baseline for comparison of the impacts of the proposed action. These alternatives are presented below. The potential environmental effects resulting from the implementation of each alternative are then analyzed in Chapter 3 for each of the identified issues in Table 1. “Supplemental Authorities and Ely District Additional Resources to Consider”.

PROPOSED ACTION

The proposed action is to 1) implement improvements on the existing Pine Wash Well and 2) maintain the existing Mahogany Knoll and Marble Reservoir habitat improvement projects.

Pine Wash Well Improvements

This portion of the proposed action is to install a solar pump, construct approximately 2.75 miles of pipeline, install a 20,000 gallon (10 feet height X 16 feet diameter) storage tank and connect 2 troughs to the pipeline (Map 1). All of these improvements would be connected to the existing Pine Wash Well. Authorization and construction of the improvements would be contingent upon all title holders for the permit to comply with the State of Nevada Water Law. Generally, construction activities for the project would not occur between May 15th and July 15th to avoid potential disturbance to nesting migratory birds. However, if any construction is necessary during this period, then a survey of the area to be disturbed would be completed prior to construction by a wildlife biologist to identify any nesting migratory birds. If nesting migratory birds are discovered within the disturbance area then construction activities would not occur.

Proposed Pipeline and Storage Tank: A solar-powered submersible pump would be installed in the existing Pine Wash well. A storage tank would be located approximately halfway along the new pipeline at the highest point of the traverse in order to provide volume storage and gravity feed to the existing water troughs serving as an on-site water source for livestock (Map 1). Pipeline construction would include installation of standard specification 2 inch diameter pipe below ground by trenching machinery (i.e. dozer with a ripper, tractor with blade attached or backhoe in steep terrain). The equipment with the ripper/trencher/backhoe would dig a trench approximately 8-15 inches wide and 36 inches deep for the length of the pipeline. This would equal approximately 4 tenths acre of soil being dug out and replaced for the pipeline. In addition to the trench, the equipment would run over the vegetation on either side of the pipeline for the length of the pipeline. This area of disturbance is anticipated to be approximately 10 feet wide (5 feet on each side of the pipeline) or approximately 3 1/3 acres. Approximately two miles of road would be created as a result of installing the pipeline. This new road will occur on the footprint where the pipeline is installed and would not create any additional disturbance. The road would be used for maintenance of the pipeline in the future.

Installation of the storage tank, would disturb approximately one tenth (0.10) acre. The troughs connected to the pipeline, would be located at previously disturbed sites. The proposed pipeline

would deliver water via pump to the storage tank, then by gravity flow to the water troughs. The troughs would be equipped with escape ramps as well as floating and manual shut-off valves in order to regulate and stop the flow of water to the troughs and conserve water.

The Pine Wash well improvements would have a total disturbance of approximately 3.43 acres.

A cooperative agreement has been entered into for construction and maintenance of the Pine Wash Well Improvements. The permittee would supply the necessary materials for the pipeline, pump, troughs and storage tank; this may be contingent on receiving funding from U.S. Department of Agriculture. The permittee has agreed to complete the Pine Wash Well improvements in accordance with BLM specifications and best management practices (RMP, 2008).

Occasional maintenance of the pipelines may be required to repair broken portions of the pipeline or troughs. This would require excavating the portions of the pipeline to be repaired with heavy equipment (backhoe or similar equipment) which would then be re-buried. This would also require the use of existing two-tracks and possibly driving over a small area of recovered vegetation along the pipeline to be repaired. These activities would require prior authorization from the Bureau's authorized officer (see Appendix 1, p.26).

Mahogany Knoll and Marble Reservoir Habitat Improvement Projects

The proposed action is to conduct maintenance on the existing Mahogany Knoll and Marble Reservoir Habitat Improvement Projects (Map 1). These habitat improvement projects were completed in the early 1960's using mechanical methods to remove the pinyon and juniper trees. Total project area is approximately 2,044 acres; the Mahogany Knoll area (607 acres) the Marble Reservoir project (1,437 acres). Trees would be removed on up to 90 percent (1,837 acres) of the project area. This would result in trees not part of the original project and areas or pockets of regenerating trees being left in a mosaic pattern.

Maintenance of these projects would consist of removing trees through manual (chainsaw) and/or mechanical methods that masticates the trees or cuts them whole. Slash/biomass removal would depend on the type of method used. A portion of the slash/biomass created from manual methods or equipment which provides whole tree cutting methods would be used to cover trails created by tree removal equipment. The remaining slash could be scattered or consolidated into piles and disposed of later through prescribed burning or chipping, left whole on site to degrade by natural means or hauled off site for use as biomass. Slash/chips from mastication equipment would be left on site to degrade by natural means. Prescribed burning would take place during the winter when there is snow on the ground and/or following a precipitation event. Biomass could take the form of firewood, posts, chips, and various other products. It is anticipated that fuel wood would be the main biomass taken from the project area.

Project implementation could begin in 2012 and proceed as funding is available until completed. Timing of project implementation during a specific year would vary depending on the method employed. Implementation of the habitat maintenance would vary depending on the method employed. When manual (chainsaw) methods are utilized implementation could take place year-

round. During the migratory bird nesting season (May 15 to July 15) visual inspection of trees to insure that nests are not present would take place by the cutting personnel. If a nest is located that tree would be avoided. Utilization of mechanical methods would occur outside migratory bird nesting season (May 15 to July 15). A list of bird species that may be present in the area is included in Appendix 3. No population level effects are anticipated Snags located within the project area would also be avoided. When the ground is saturated to where ruts could be created, project implementation would cease until the ground dries out sufficiently.

Noxious and Invasive Weeds

A weed risk assessment was conducted in conjunction with this project. The stipulations listed in the weed risk assessment (see 0 (p. 26)) would be followed during implementation of the project.

Monitoring

Monitoring will be conducted in the form of compliance checks during and after implementation of the project. Rangeland monitoring data will continue to be collected in accordance with the Ely District Approved Resource Management Plan (August 2008).

NO ACTION ALTERNATIVE

The No Action Alternative represents the status quo. Under the no action alternative, the Barclay Allotment Project would not be implemented. Current management strategies for the area would continue.

ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL

- Water Hauling and/or herding was identified as an alternative to the proposed action, but the current livestock operator has been employing these methods for a number of years; it is inefficient and also has not been successful distributing livestock to the extent needed within the Barclay Allotment.

SECTION 3

AFFECTED ENVIRONMENT & ENVIRONMENTAL CONSEQUENCES

GENERAL SETTING

The project area is located on the west side of the Barclay allotment (Map 2). The Barclay allotment includes approximately 164,394 acres of public land acres and 2,400 private land acres. The Allotment is located in the Caliente Field Office, within the Clover Mountains and entirely within Lincoln County, Nevada, approximately 15 miles southeast of Caliente, NV. See Map 2, for a locational map of the allotment.

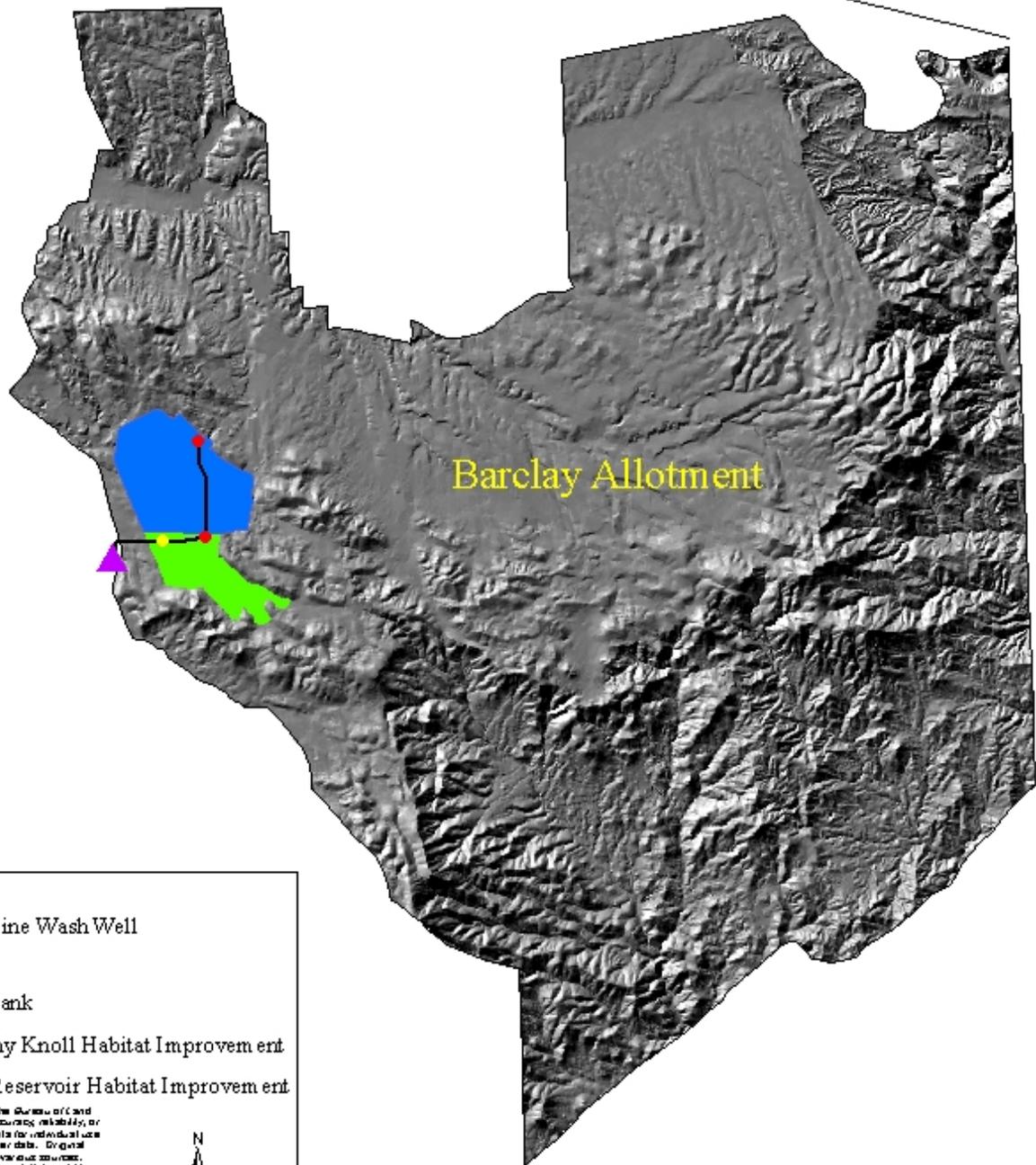
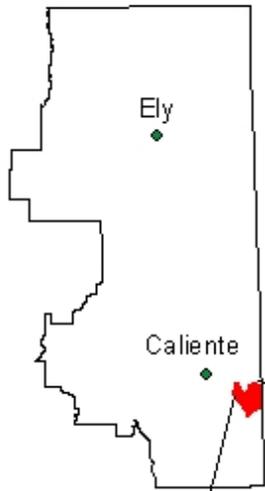
The Barclay Allotment is characterized by rolling to steep hills and benches covered predominantly by Wyoming big sagebrush and black sagebrush dominated ecological sites with Pinyon/Juniper encroaching into them. Elevation ranges from 5,200 feet above sea level in Clover valley to approximately 7,500 feet above sea level along the foothills of the Clover Mountain Range. Generally the precipitation level is between 8-10 inches on the lower benchland 10-12 inches in the foothills. Precipitation occurs primarily as winter snow or spring/fall thunderstorms and rains. The southern portions of the allotment are steep and rugged woodlands with scattered burned areas. Vegetation types on the allotment include Wyoming big sagebrush, Black sagebrush, and Pinyon/juniper communities.

RESOURCES/CONCERNS CONSIDERED FOR ANALYSIS

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

The affected environment was considered and analyzed by an interdisciplinary team as documented in the following Table 1. The checklist indicates which resources of concern are either not present, in the project area or would not be impacted to a degree that requires detailed analysis. Resources which could be impacted to a level requiring further analysis are described and those impacts on these resources are analyzed below.

Map 2: Barclay Allotment



- Pipeline
- ▲ Existing Pine Wash Well
- Troughs
- Storage Tank
- Mohagany Knoll Habitat Improvement
- Marble Reservoir Habitat Improvement

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data. Original data were compiled from various sources. The information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.



0.2 0.4 0 0.2 Miles

Map Produced by Kyle Neal
August 21, 2017



Table 1. Supplemental Authorities And Ely District Additional Resources To Consider.		
Resource/Concern	Issue(s) Analyzed (Y/N)	Rationale for Dismissal from Detailed Analysis or Issue(s) Requiring Detailed Analysis
Air Quality	N	Short-term dust and smoke during project implementation would be limited in time and duration No overall affect to Air Quality.
Areas of Critical Environmental Concern (ACEC)	N	No ACEC's occur within or adjacent to project area.
Cultural Resources	N	Cultural resources would be avoided or mitigated prior to ground disturbing activities.
Environmental Justice	N	No minority or low-income groups would be disproportionately affected by health or environmental effects. Concern is not present.
Fish and Wildlife	N	The project area contains general habitat for elk and mule deer. Wildlife may be temporarily displaced or disturbed during implementation. However, this project will have no overall effects on populations.
Floodplains	N	Resource not present.
Forest Health	N	Resource is not present within project area.
Lands and Realty	N	There are no conflicting Right-of-Ways within project area.
Migratory Birds	N	Measures were outlined in the proposed action to avoid impacts to migratory birds. For a list of bird species that may be present in the project area see Appendix 3.
Mineral Resources	N	No mineral operations occur within the project area.
Native American Religious Concerns and other concerns	N	No traditional religious or cultural sites have been identified within or adjacent to the proposed project area.
Noxious and Invasive Weed Management	N	The design features (weed stipulations) of the proposed action would help minimize the spread of weeds, (see Appendix 2). No further analysis is necessary.
Paleontological Resources	N	Currently there are no identified resources within this allotment.
Prime and Unique Farmlands	N	There are no Unique Farmlands within the project area.
Recreation Uses	N	Project is near one of the major truck and buggy race courses; construction will require timing and coordination. Design features of the proposed action, would result in no effects on recreational uses.
Special Status Plant Species, other than those listed or proposed by the FWS as	N	Resource not known to be present.

Table 1. Supplemental Authorities And Ely District Additional Resources To Consider.		
Resource/Concern	Issue(s) Analyzed (Y/N)	Rationale for Dismissal from Detailed Analysis or Issue(s) Requiring Detailed Analysis
Threatened or Endangered		
Threatened or Endangered Species or critical habitat.	N	There are no Threatened or Endanger species listed or proposed for listing known to occur within the project area.
Visual Resource Management (VRM)	N	No direct or cumulative impacts to visual resources would occur.
Wastes, Hazardous or Solid	N	The proposed action or alternatives would not produce hazardous or solid waste.
Water Resources	N	The proposed action is not expected to lead to a measurable change in the surface and subsurface water sources, water rights, and quantity of water that occurs in the analysis area. The appropriation of water is the responsibility of the Nevada State Water Engineer.
Wilderness	N	No Wilderness occurs within or adjacent to the project area. No further analysis is necessary.
Lands with Wilderness Characteristics	N	Lands with Wilderness Characteristics are not present within or adjacent to the project area.
Wetlands/Riparian Zones	N	No riparian areas and/or wetland zones are present in the proposed project area.
Wild Horses	N	Barclay Allotment is not within a Herd Management Area (HMA).
Wild and Scenic Rivers	N	No Wild and Scenic Rivers occur within or adjacent to the project area.
Rangeland Health	Y	The proposed action is intended to improve rangeland health of the project area; a detailed analysis is provided in Sections 3 & 4 of this document.
Special Status Animal Species, other than those listed or proposed by the FWS as Threatened or Endangered	N	Special status bird species, such as pinyon jay (<i>Gymnorhinus cyanocephalus</i>) and loggerhead shrike (<i>Lanius ludovicianus</i>) may be present within or near the project area. Adherence to the minimization measures in the proposed action, would avoid impacts to Special Status avian species. No effects to special status species are anticipated.
Soil Resources	Y	Direct impacts to soils during construction and indirect impacts due to changes in livestock use are expected. Analyzed in EA.
Vegetation Resources	Y	Direct impacts to vegetation during construction and indirect impacts due to changes in livestock use are expected. Analyzed in EA.

The affected environment for those resources that could be potentially affected is described below.

Rangeland Health

It has been determined that the Standards and Guidelines for Rangeland Health are not being achieved but are making progress toward being met on the Barclay Allotment. For a narrative of this finding see Appendix 4. The following is a summary of the 2008 Standards Determination Document for Barclay Allotment.

Table 2 Summary of Standards Achievement Statements Barclay Allotment: Number 11004		
Standard 1: Upland Sites	Standard 2: Riparian & Wetland Sites	Standard 3: Habitat Standard
Not achieving the Standard, but making significant progress towards Existing livestock management is not a contributing factor. Failure to meet the standard is related to other issues or conditions.	Not achieving the Standard, but making significant progress towards Existing livestock management is not a contributing factor. Failure to meet the standard is related to other issues or conditions.	Not achieving the Standard, but making significant progress towards Existing livestock management is not a contributing factor. Failure to meet the standard is related to other issues or conditions.
(From the Barclay Allotment Environmental Assessment NV-045-08-004 August 14, 2008, Grazing Permit Issuance for Fenton Bowler on the Barclay Allotment.)		

The Barclay allotment encompasses approximately 164,394 acres of public land acres and 2,400 private land acres. There are three permittees with permitted use on the Barclay Allotment.

Table 3 Barclay Allotment: Number_11004				
Permittee #	Livestock Kind	Period of Use	Permitted Use (AUMs)	# of Livestock
2705038	CATTLE	5/16-11/15	73	12
2705098	CATTLE	5/16-11/15	1555	257
2705050	CATTLE	5/16-11/15	363	60

The Barclay Allotment is characterized by rolling to steep hills and benches covered predominantly by advancing Pinyon/Juniper woodlands. The Northwest portion of the Barclay allotment is made up of private and state parks lands fenced off to livestock grazing. The southern portions of the Barclay allotment are steep and rugged woodlands with scattered burned areas. These areas are used by livestock during the late fall on their way to winter pastures

within the Tule Desert and again in the spring on the way back to the Barclay allotment. The livestock trail over existing county and two track roads.

Water within the Barclay Allotment is supplied by three wells, seven reservoirs and several springs scattered throughout the allotment. Most reservoirs are dry by July; some are dry by May including the endpoint of this (Pine Wash) pipeline project. A perennial stream flows from Schroeder Reservoir down the Beaver Damn Wash in the northeast corner on the allotment. In the northwest corner of the allotment, the Clover Creek drainages flow year round. The springs are located in rocky outcrops within the center of the allotment that are inaccessible to livestock due to pasture fencing and formidable terrain. The limiting factor with the springs' productivity is pinyon/juniper encroachment into the watersheds and yearly fluctuations in precipitation.

Livestock use on the allotment is generally in the spring season at the end of the critical growing season to Fall (May to November). Currently, livestock distribution throughout the allotment is acceptable but limited by water availability as early as May and June through September. Either water hauling occurs during this time, or livestock are removed and returned to the allotment from October through November. These seasons of use are mainly due to the lack of adequate, reliable year-round water sources throughout the allotment.

Vegetation Resources

Landfire biophysical settings (BPS) indicated that the project area is primarily dominated by Wyoming big sagebrush and Black sagebrush communities, along with a chaparral type community including Gambels oak, Turbinella oak, Cliffrose, and Skunkbrush, and scattered Pinyon/juniper communities along the rockier areas. Biophysical setting (BPS) models describe the vegetation, geography, biophysical characteristics, succession stages, disturbance regimes and assumptions for each vegetation type (Havlina et al, 2010). Presently pinyon and juniper are encroaching back into the project area due to the lack of maintenance on the existing habitat improvement project.

One of the tools used to make the assessment of vegetation condition is Fire Regime Condition Class (FRCC), which is an interagency, standardized tool based on scientific and peer reviewed literature for determining the degree of departure from a reference vegetation condition within a given biophysical setting (BPS). More information regarding this tool can be found at the following website: <http://www.frcc.gov>. Assessing FRCC can help guide management objectives and set priorities for treatments. The classification is based on a relative measure describing the degree of departure from the historical natural disturbance regime for a given BPS. This departure is described as changes to one or more of the following ecological components: vegetation characteristics (species composition, structural stages, stand age, canopy closure and mosaic pattern); fuel composition; fire frequency, severity and pattern; and other associated disturbances (e.g. insects and disease mortality, grazing and drought). There are three FRCC classes used to describe the departure from reference BPS conditions. The three classes are based on low (0-33% departure; FRCC1), moderate (34-66% departure; FRCC2) and high (67-100% departure; FRCC3) departure from central tendency of the natural (historical) regime. Low departure is considered to be within the natural (historical) range of variability, while moderate and high departures are outside the range of variability. The FRCC rating is accompanied by indicators of the potential risks that may result. Biophysical setting models have

been developed for most major vegetation types. These models describe the vegetation, geography, biophysical characteristics, succession stages, disturbance regimes, and assumptions for each vegetation type (Havlina et al, 2010). Reference conditions described in the BPS models are compared to actual conditions for purposes of determining the current FRCC rating. A FRCC rating is determined for a particular area by determining the weighted average of all major vegetation FRCC ratings. FRCC 1 is desired for each BPS and for the entire area. A departure from FRCC 1 (reference condition) to FRCC 2 or FRCC 3 serves as an indicator that changes need to be affected. Currently the project area is in FRCC 3, which suggests that the risk of losing key ecosystem components is considered high and management actions are needed to move the area toward a more ecologically sound condition.

Soil Resources

The surface layer of soils in the Barclay Allotment generally has a high amount of gravels, cobbles or stones. The fine fraction of the surface layers are generally coarse sandy loams, sandy loams, loams, clay loams and sandy clay loams. Cryptogammic crust formations do exist within the allotment in places where formations are favorable. Precipitation zones range from approximately 8” on the lower benches to 14” in the upper benches. The average annual air temperature ranges from 42 to 50 degrees Fahrenheit. Frost free days average from 85 to 150 days.

ENVIRONMENTAL CONSEQUENCES

RANGELAND HEALTH

Proposed Action

The construction activities of the Pine Well improvements would temporarily crush and remove vegetation and disturb soil on approximately 3 ½ acres. This is approximately .002 percent of the 164,394 acre Barclay allotment. Maintenance of the existing habitat improvement projects would also temporarily disturb vegetation and soil on approximately 1,840 acres or approximately 1 percent of the Barclay allotment. The impacts from this disturbances would also be lessened due to adequate vegetation, both standing and litter, remaining on or immediately adjacent to, the sites to assist in stabilizing the disturbed areas. These activities would not inhibit the achievement or progression towards the rangeland health standards.

Implementation of the proposed action would aid in achieving the rangeland health standards on the allotment by increasing distribution and more uniform use throughout the allotment and decreasing constant and repeated or overuse of herbaceous vegetation, riparian areas or water sources in particular areas of the allotments. Livestock are often reluctant to travel long distances (1-2 miles, depending on terrain) to water. Maintaining existing water sources in areas that are further than two thirds (2/3) mile from existing water sources usually increases forage use nearby and improves the overall uniformity of grazing (Bailey, 2004). Additional water sources would also increase the flexibility of the seasons of use and pattern of use on the Barclay allotment by providing a more reliable year-round source of water with broader distribution. This could likely lead to alternating the use or areas of use in the allotment which would likely improve the overall vegetation and soil resource health.

The proposed action would not directly affect riparian areas within the Barclay Allotment but some indirect benefits would likely occur. Research has shown that riparian areas can benefit from off-site water sources. Water developments have been useful for protecting riparian areas in that an off-stream water source will decrease grazing pressure in the riparian zone, especially early in the grazing season when forage was plentiful (Bailey, 2004).

No Action Alternative

With the No Action Alternative, the need for proposed action would not be met. The current conditions would likely continue to occur (see Affected Environment section above). This action would continue to limit distribution and flexibility of use on the Barclay allotments. Drifting of livestock would likely continue. Although the current management plans for this grazing allotment have been designed to continue to progress towards the achievement or achieve the rangeland health standards and maintain healthy and productive rangelands and wildlife habitat, this action does not provide the opportunities that the proposed action does to improve soil, riparian and vegetation conditions.

VEGETATION RESOURCES

Proposed Action

Implementation of the well improvement portion of the proposed action would temporarily disturb through crushing and limited removal of vegetation on approximately 3 ¾ acres or .002 percent of the Barclay allotment. A slight increase in grazing and trampling near the new water troughs could also occur. However, overall grazing and trampling would be reduced as a result of the well improvements resulting in better distribution of livestock use within the allotment. Implementation of the habitat maintenance portion of the proposed action would remove pinyon and juniper from sagebrush ecological sites on approximately 1,840 acres. This would assist in improving ecological conditions within the project area. It is expected that the plant species diversity and the plant species composition would be in better balance with native wildlife. The expansion of pinyon and juniper woodlands have reduced the overall health, vigor, recruitment and production of a variety of grass and shrub species and disrupted the desired plant succession. The proposed treatment would help the project area meet FRCC 1 by reducing fuel loading and continuity. Residual woody vegetation which would consist of slash/biomass created from mastication equipment or scattered slash from felling would provide protection to regenerating grasses. Felled and scattered slash would also continue to provide protective cover for wildlife species. The decomposition of woody plant material would also improve soil nutrient content which would enhance the recruitment, establishment and long-term viability of the grass and shrub community.

No Action Alternative

With the No Action Alternative, vegetation would not be disturbed by construction and overall vegetation conditions are expected to remain the same for the short-term and decline in condition over the long-term. Livestock use would not be distributed more efficiently throughout the allotment resulting in the continued uneven distribution. The establishment of pinyon and juniper onto sagebrush ecological sites within the project area would continue and the older,

decadent even-aged shrub communities would further decline in health and vigor affecting the recruitment and establishment of new grasses, forbs and shrubs which are important for grazing, browsing, soil protection, soil stability and other watershed values.

SOIL RESOURCES

Proposed Action

Implementation of the Pine Wash Well improvements would include the compaction of soils from equipment travel in areas outside of existing roads and soil displacement from excavation activities associated from pipeline burial. Proposed trough locations would be sited in areas previously disturbed and compacted and as such would not contribute to additional effects. The effects of soil compaction from the equipment would be temporary and may be reduced by conducting the off-road travel on dry soils. The displacement of soil and the resultant mixing of soil physical characteristics would not be expected to lead to a loss of soil productivity due to the relatively shallowness of the pipeline trenches and the small degree of overall soil disturbance. Any slight or immeasurable change in compaction or displacement may affect localized water infiltration or percolation rates. Effects are expected to be localized to the pipeline track only and are not expected to affect other soil resources.

Indirect effects to soil would include the short-term effect of an increased susceptibility to wind erosion due to the removal of vegetation along the proposed pipeline course. The effect would be expected to last for about one season until such time that either vegetation is reestablished or until the finest soil particles are winnowed away. The width of the proposed pipeline and extent of potential vegetation resource disturbance greatly reduce the possibility of any increased risk to wind erosion being any more than a minor possibility.

There would be minimal soil erosion expected from implementation of the existing habitat maintenance portion of the proposed action. Only pinyon and juniper trees would be targeted for removal. This would result in the existing grass and shrub communities remaining on site and providing for soil protection and stability. The scattered slash would provide a protective layer for soils from erosion and promote soil fertility by increasing organic matter over time through decomposition. The recruitment and establishment of perennial grasses and native shrubs following the treatment would further promote soil health over the long term along with assisting the ecological sites in achieving site potential. Over the long term, plant density is expected to increase and plant biomass or litter is expected to increase which would stabilize and protect the soil resource. Off-road travel would occur during the implementation of the proposed action.

No Action Alternative

No new ground disturbing activity would occur as a result of not implementing the Pine Wash Well improvements. Soil compaction, displacement, and water retention characteristics would not change from existing conditions. Results from not implementing the habitat maintenance portion of the proposed action are:

- pinyon and juniper trees continue to establish on sagebrush ecological sites and the perennial grass and shrub component would continue to be reduced, thus allowing more bare soil exposed to erosion.

SECTION 4 CUMULATIVE IMPACTS

CUMULATIVE EFFECTS

This section analyzes potential cumulative impacts from past, present, and reasonably foreseeable future actions combined with the Proposed Action or alternatives. As defined by the Council on Environmental Quality (CEQ) Regulations for Implementing NEPA, Cumulative Effects (40 CFR 1508.7); “The impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.”

The Cumulative Effects Study Area (CESA) is limited to the Barclay Allotment. In addition to the site specific analysis included below, a comprehensive cumulative effects analysis can be found in Section 4.28 of the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (November 2007).

Past, Present, and Reasonably Foreseeable Future Actions

Past Actions

Past actions in the area include grazing, prospecting, recreation, hunting, fuels treatments (generally chainings and mowings), range improvement projects, and OHV use. Livestock and wild horse grazing has a long history in this region dating back to the late 1800’s. Throughout its history, livestock grazing has been characterized by localized areas of intense use due to absence of water supply. Limited use by livestock in other areas of Pine Wash is compounded due to pinyon pine and juniper encroachment.

Hunting, trapping, wildlife viewing, and other recreational activities have occurred within the project area for many years. OHV use has occurred on the roads and two-tracks within the area. Approximately 47 wildfires (approximately 9,815 acres) have occurred within the CESA during the last 30 years; 42 fires were less than 10 acres (approximately 277 acres) and 5 large fires greater than 10 acres have occurred (approximately 9,538 acres). Range and /or habitat improvement projects have occurred in the area to improve grazing management and include fencing, Pinyon Juniper Chaining, and perennial run-off impoundments (i.e., frequently dry reservoirs).

Present Actions

Present actions include wildfire management, prospecting, recreation, grazing, OHV use and hunting. Current livestock grazing management can be characterized as light to moderate use of the available forage. Hunting, trapping, wildlife viewing, and other recreational activities occur within the project area occasionally throughout the year. This includes the use of the several existing two-track and developed roads in the area as well as cross-country hiking. OHV use currently occurs on the roads and two-tracks within the project area. Maintenance of range

improvements is ongoing and generally includes repairing fences, water hauling, and stock water troughs. These maintenance activities generally require the use of existing two-track and developed roads.

Reasonably Foreseeable Future Actions

Reasonably foreseeable future actions include hunting, recreation, grazing, OHV use, and wildfire management. The Clover Creek North and South Watershed Restoration Plan will be developed for this area and will incorporate vegetation and other treatments targeted to improve the health of the landscape. It is anticipated that hunting, trapping, wildlife viewing, and other recreational activities would continue to occur within the project area year round. Slightly increased OHV use is likely to occur on the roads and two-tracks within the project area. Maintenance of range improvements would continue and new range improvement projects are considered on an annual basis and analyzed on a site-specific basis. It is anticipated that livestock grazing would likely continue at current levels.

CUMULATIVE EFFECTS ANALYSIS

Rangeland Health Proposed Action

It is anticipated that the proposed action, in combination with the past, present and reasonably foreseeable future actions, would continue to achieve or progress towards achieving the rangeland health standards and guidelines within the CESA and could provide for the desired habitat and rangeland health conditions over the long term. The proposed action would improve livestock management and increase distribution and more uniform use within the vicinity of the Barclay Allotment Project with slight effect throughout the allotment.

Maintenance of the existing habitat improvement projects would likely increase the amount of herbaceous vegetation in the areas that would be treated on the Barclay Allotment and create more desirable habitat for wildlife and would assist in the achievement of the rangeland health standards. The impacts from maintenance activities would be negligible compared to the overall area of the CESA and the overall functionality of the storage tank, pipelines and troughs to maintain livestock control and adequate, reliable water sources for the overall achievement of the rangeland health standards.

Rangeland Health No Action Alternative

It is anticipated that the no action alternative in combination with the past, present and reasonably foreseeable future actions, would not improve rangeland health. The current conditions would continue to occur. Current livestock management plans are designed to continue to achieve or progress towards achieving the rangeland health standards with the current conditions. It can be assumed that the no action alternative would also continue to achieve or progress towards achieving the rangeland health standards. This action would continue to limit distribution and flexibility of use on the Barclay Allotment. Livestock would also likely continue to drift as described in Section 3, and continue to affect localized areas of intense use.

Vegetation Resources Proposed Action

The proposed action would distribute livestock use in the CESA, thus reducing impacts to vegetation in the Barclay Allotment as a whole and move the project area towards an FRCC 1. This reduction in stress to plants would increase plant resilience, so that vegetation recovers following various soil disturbances as described in Section 3 and the past, present and reasonably foreseeable future actions.

Vegetation Resources No Action Alternative

It is anticipated that the no action alternative in combination with the past, present and reasonably foreseeable future actions, would result in the current conditions continuing.

Soil Resources Proposed Action

The potential amount of soil disturbed by the Proposed Action in the analysis area is minimal compared to the total area, (1843.5 Acres versus 164,394Acres or approximately 1% of the CESA). Erosion effects associated with the Proposed Action would not be discernible from past, present, or future actions or from the natural range of variability associated with the landscape, topography, or prevalent climatic variability.

Soil Resources No Action Alternative

No difference would be discernible from the cumulative effects analysis for the Proposed Action and the No Action Alternative.

MITIGATION

A weed risk assessment was conducted in conjunction with this project. The stipulations listed in the weed risk assessment (see **Error! Reference source not found.** (p.27)) will be followed during construction of the storage tank, pipeline, and troughs. These stipulations will mitigate and ameliorate any residual impacts resulting from soil and vegetation disturbance.

SECTION 5

SUMMARY OF PERSONS, GROUPS AND AGENCIES CONSULTED

Scoping, Public Involvement and Issues.

Internal scoping was conducted by a BLM interdisciplinary (ID) team on May 8, 2012 to identify any resource concerns or issues associated with the proposed action. The preliminary issues identified were how the alternatives would affect Vegetation Resources.

The Nevada Department of Wildlife and the Natural Resources Conservation Service were briefed on the internal scoping of this project. NRCS provided extensive input.

An external scoping period from November 19th, 2012 through December 3rd, 2012 allowed those publics interested in range improvements to comment on the proposed action. Comments were received from and were considered in the authoring of this EA.

A summary of the project was posted on the eGov for Planning and NEPA (ePlanning Front Office) website on 2012. No additional comments were received.

The preliminary EA was posted on the eGov for Planning and NEPA (ePlanning Front Office) Website November 16th, 2012 for a 15 day public review. In addition, the preliminary EA was sent to those interested publics that requested information regarding range improvement projects on 2012 for a 15 day public review.

Elvis Wall, Native American Coordinator for the Caliente Field Office mailed certified Tribal Coordination Letters November 2011, inviting federally recognized tribes to assist BLM in identifying any traditional religious and cultural sites of importance in compliance with the National Historic Preservation Act. The BLM will accept any comments or concerns or issues regarding this proposed undertaking.

No other Comments were received for evaluation and consideration.

SECTION 6

LIST OF PREPARERS

<u>Name</u>	<u>Title</u>	<u>Resource Represented</u>
<u>Lisa Domina</u>	<u>Outdoor Recreation Planner</u>	<u>Recreation, Travel Management, Visual Resources</u>
<u>Travis Young</u>	<u>Planning and Environmental Coordinator</u>	<u>Project Lead, Air Quality, Environmental Justice, NEPA</u>
<u>Cameron Boyce</u>	<u>Rangeland Management Specialist</u>	<u>Rangelands Standards and Guidelines, Livestock Grazing Riparian/Wetlands, Noxious and Invasive Species</u>
<u>Mark D'Aversa</u>	<u>Hydrologist</u>	<u>Water Resources, Soil Resources, Watershed</u>
<u>Alicia Styles</u>	<u>Wildlife Biologist</u>	<u>Fish and Wildlife, Special Status Species</u>
<u>Benjamin Noyes</u>	<u>Wild Horse Specialist</u>	<u>Wild Horses</u>
<u>Nick Pay</u>	<u>Archaeologist</u>	<u>Cultural Resources, Paleontological Resources</u>
<u>Tye Chamberlain</u>	<u>Realty Specialist</u>	<u>Lands/Energy</u>
<u>Alan Kunze</u>	<u>Geologist</u>	<u>Mineral Resources</u>
<u>Kyle Teel</u>	<u>Fire Ecologist</u>	<u>Fuels, Forest Health, Forest/Woodland Products</u>
<u>Erica H Husse,</u>	<u>Rehabilitation Manager</u>	<u>Emergency Stabilization and Rehabilitation</u>
<u>Sam Styles</u>	<u>Wilderness Ranger</u>	<u>Special Designations</u>
<u>Melanie Peterson</u>	<u>Environmental Protection Specialist</u>	<u>Wastes, Hazardous and Solid, Human Health and Safety</u>
<u>Elvis Wall</u>	<u>Native American Coordinator</u>	<u>Native American Concerns</u>

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APPENDIX 1.

PIPELINE MAINTENANCE

Normal maintenance for the troughs is defined as:

- 1) Draining and cleaning stock trough yearly or as needed.
- 2) Drain System: Repair all leaks, breaks, or clogs in drain pipe.
- 3) Ensure proper attachment of bird ladders in stock trough.
- 4) Repair leaks in stock trough.
- 5) Repair or replace trough braces as needed
- 6) Replacing dirt, or gravel, or rock fill around trough, when necessary.
- 7) Replacing those items above ground which require replacement due to normal use.
- 8) Allow animals (wildlife, wild horses) to use the water along with authorized livestock.

Normal maintenance for the pipelines, troughs and storage tanks is defined as:

The labor and materials required annually to keep a pipeline in a condition adequate to satisfy the proper distribution and maintenance of livestock. This includes but is not limited to the following:

1. Repair of broken or split pipe that can be accomplished with hand tools.
2. Ensure proper attachment of bird ladder in stock trough.
3. Repair leaks in stock trough.
4. Repair or replace trough braces.
5. Replacing dirt, gravel or rock fill around trough(s).
6. Replacing those items above ground which will require replacement due to normal use.
7. Maintaining the improvement according to original Bureau Standards.
8. Repair requiring motorized or heavy equipment and ground disturbing activities will require prior Bureau authorization.

APPENDIX 2.

RISK ASSESSMENT FOR NOXIOUS & INVASIVE WEEDS

Pine Wash Well Stock Water Lincoln, Nevada

On September 9, 2012 a Noxious & Invasive Weed Risk Assessment was completed for the Pine Wash Well Stock Water Project to implement range improvements in Lincoln County, NV. The Bureau of Land Management (BLM) Caliente Field Office proposes to authorize the Barclay Allotment Project which consists of improvements to the existing Pine Wash Well, in cooperation with the livestock permittee, and maintain the existing Mahogany Knoll and Marble Reservoir habitat improvement projects (Map 1). The Barclay Allotment Project is located within the Clover Mountains of Lincoln County Nevada.

The Ely District weed inventory data was consulted in addition to field visits of the project area. There are currently no mapped weed infestations within the project area.

However, there is likely to be undocumented weeds found scattered along roads leading to the project area. The project area was last inventoried for noxious weeds in 2009.

A list of species undocumented in the District's follows:

<i>Arctium minus</i>	Common burdock
<i>Bromus diandrus</i>	Ripgut brome
<i>Bromus rubens</i>	Red brome
<i>Bromus tectorum</i>	Cheatgrass
<i>Ceratocephala testiculata</i>	Bur buttercup
<i>Convolvulus arvensis</i>	Field bindweed
<i>Elaeagnus angustifolia</i>	Russian olive
<i>Erodium cicutarium</i>	Filaree
<i>Kochia scoparia</i>	Kochia
<i>Halogeton glomeratus</i>	Halogeton
<i>Marrubium vulgare</i>	Horehound
<i>Salsola kali</i>	Russian thistle
<i>Sysimbrium altissimum</i>	Tumble mustard
<i>Tragopogon dubius</i>	Yellow salsify
<i>Ulmus pumila</i>	Siberian elm
<i>Verbascum thapsus</i>	Common mullein

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

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

For this project, the factor rates as Low (2) at the present time. This is based on the fact that there are no known noxious weeds within or immediately adjacent to the project area. However, because there is ground disturbing activity, there is a potential for noxious weeds to become established in the project area.

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

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

This project rates as Moderate (4) at the present time. This is based on the potential for weeds to alter ecological functions of the area. The area does not contain any critical habitat or species of special interest. Also, with the exception of high density juniper stands, the plant communities in the area are resilient and resistance in their current condition.

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

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

For this project, the Risk Rating is Moderate (8). This indicates that the project can proceed as planned as long as the following measures are followed:

- Continue to use integrated weed management to treat weed infestations and use principles of integrated pest management to meet management objectives and to reestablish resistant and resilient native vegetation communities.
- Develop weed management plans that address weed vectors, minimize the movement of weeds within public lands, consider disturbance regimes, and address existing weed infestations.
- When manual weed control is conducted, remove the cut weeds and weed parts and dispose of them in a manner designed to kill seeds and weed parts.
- All straw, hay, straw/hay, or other organic products used for reclamation or stabilization activities, must be certified that all materials are free of plant species listed on the Nevada noxious weed list or specifically identified by the Ely District Office.
- Where appropriate, vehicles and heavy equipment used for the completion, maintenance, inspection, or monitoring of ground disturbing activities; for emergency fire suppression; or for authorized off-road driving will be free of soil and debris capable of transporting weed propagules. Vehicles and equipment will be cleaned with power or high pressure equipment prior to entering or leaving the work site or project area. Vehicles used for emergency fire suppression will be cleaned as a part of check-in and demobilization procedures. Cleaning efforts will concentrate on tracks, feet and tires, and on the undercarriage. Special emphasis will be applied to axels, frames, cross members, motor mounts, on and underneath steps, running boards, and front bumper/brush guard assemblies. Vehicle cabs will be swept out and refuse will be disposed of in waste receptacles. Cleaning sites will be recorded using global positioning systems or other mutually acceptable equipment and provided to the Ely District Office Weed Coordinator or designated contact person.
- Determine seed mixes on a site specific basis dependant on the probability of successful establishment. Use native and adapted species that compete with annual invasive species or meet other objectives.
- Keep removal and disturbance of vegetation would be kept to a minimum through construction site management (e.g. using previously disturbed areas and existing easements, limiting equipment/materials storage and staging area sites, etc.)
- Certify that all interim and final seed mixes, hay, straw, and hay/straw products are free of plant species listed on the Nevada noxious weed list.
- Respread weed-free vegetation removed from the right-of-way to provide protection, nutrient recycling, and seed source.
- Do not conduct noxious and invasive weed control within 0.5 mile of nesting and brood rearing areas for special status species during the nesting and brood rearing season.
- Whenever possible, hand spraying of herbicides is preferred over other methods at heavily used recreation sites (i.e. campgrounds, trailheads, etc.).

Reviewed by: _____

Cameron Boyce
Ely District Noxious & Invasive Weeds Coordinator

_____ Date

APPENDIX 3.

Wildlife for Pine Wash EA 8/13/12 Highlighted species are BLM Sensitive Species in Nevada.
From Ely RMP & NV Natural Heritage Data & NDOW Diversity Data:

General wildlife

Mule deer (*Odocoileus hemionus*) general habitat

Elk (*Cervus canadensis*) general habitat

Migratory birds

The following data reflect survey blocks and/or incidental sightings of bird species within the project area boundaries from the Atlas of the Breeding Birds of Nevada (Floyd et al. 2007). These data represent birds that were confirmed, probably, or possibly breeding within the project area boundaries. These data are not comprehensive, and additional species not listed here may be present within the project area boundary. No survey blocks were located within the project area.

Ash-throated flycatcher (*Myiarchus cinerascens*)

Loggerhead shrike (*Lanius ludovicianus*)

Bewick's wren (*Thryomanes bewickii*)

Western kingbird (*Tyrannus verticalis*)

Say's phoebe (*Sayornis saya*)

Bushtit (*Psaltriparus minimus*)

Black-throated sparrow (*Amphispiza bilineata*)

Blue-gray gnatcatcher (*Polioptila caerulea*)

Gambel's quail (*Callipepla gambelii*)

Black-headed grosbeak (*Pheucticus melanocephalus*)

Gray vireo (*Vireo vicinior*)

Pinyon jay (*Gymnorhinus cyanocephalus*)

Rock wren (*Salpinctes obsoletus*)

Western scrub-jay (*Aphelocoma californica*)

Juniper titmouse (*Baeolophus ridgwayi*)

Black-chinned sparrow (*Spizella atrogularis*)

APPENDIX 4.

Summary of the finding that Standards and Guidelines for Rangeland Health are not being achieved but are making progress toward being met on the Barclay Allotment . From the Barclay Allotment Environmental Assessment NV-045-08-004 August 14, 2008, Grazing Permit Issuance for Fenton Bowler on The Barclay Allotment

1. Upland Sites Standard (Not Meeting the Standard, but making significant progress towards).
2. Riparian and Wetland Sites Standard (Not Meeting the Standard, but making significant progress towards).
3. Habitat Standard (Not Meeting the Standard, but making significant progress towards).

Existing livestock management is not a contributing factor to not meeting the habitat standard on Barclay Allotment. Failure to meet the standard is related to pinyon/juniper encroachment due to lack of natural disturbance within the community.

Conclusions: Standard #1: Soils

Standard not met (not achieved). The majority of the allotment is meeting or making progress towards achieving the standard. The areas of concern are not meeting the standard and should continue to be monitored. Vegetation treatments should be considered to maintain the resiliency of the Wyoming big sagebrush, woodland range sites, restore the appropriate cover and composition of understory grasses, forbs, shrubs, and small trees, and prevent crossing the advanced threshold leading to a closed canopy of pinyon and juniper trees and the resulting loss to the soil resource. The closed canopy of trees could lead to catastrophic fire events which have been shown to result in invasive plant species spread and other negative range impacts.

Standard #2: Ecosystem Components

Standard not met (not achieved). Existing grazing management and levels of grazing are not a causal factor. Pinyon and juniper trees surrounding the springs have a high evapotranspiration rate; hand cutting around the spring could increase the spring flow and improve riparian vegetation composition, area and structure.

Standard #3: Habitat and Biota

Standard not met (not achieved). Existing grazing management and levels of grazing use on crested wheat seedings within the Barclay allotment is not significant causal factors in failing to achieve the habitat standard. Utilization data shows the seedings have generally been grazed moderate or less for the recent past years. In these areas, the current grazing management system conforms to the guidelines. The failure to achieve the habitat standard on native range is more attributable to fire suppression or the lack of wildfire, and drought.