

Environmental Assessment

NDOW Temporary Water Troughs in the Muddy Mountains and Bare Mountain

Prepared by
U.S. Department of the Interior
Bureau of Land Management
Southern Nevada District Office
Las Vegas, Nevada

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Chapter 1. Introduction

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1.1. Identifying Information:

1.1.1. Title, EA number, and type of project:

NDOW Temporary Water Troughs in the Muddy Mountains and Bare Mountain

DOI-BLM-NV-S010-2014-0073-EA

Wildlife

1.1.2. Location of Proposed Action:

The temporary water troughs would be installed in the following locations:

Muddy Mountains (18S 65E sect 22, 17S 66E sect 31, 18S 66E sect 10), Clark County, NV

Bare Mountain (13S 47E sect 2 and 11), Nye County, NV

1.1.3. Name and Location of Preparing Office:

Bureau of Land Management, Las Vegas Field Office

4701 North Torrey Pines Drive

Las Vegas, NV 89130

1.1.4. Applicant Name:

Nevada Department of Wildlife

1.2. Purpose and Need for Action:

The purpose of the action is to respond to the Nevada Department of Wildlife's (NDOW) request to install temporary water troughs in the Muddy Mountains and Bare Mountain throughout the upcoming summer months. NDOW is concerned, based on current rainfall patterns and past observations, that the existing water developments (big game guzzlers) in these areas will run dry and not provide sufficient water for the bighorn sheep herds in these areas in the summer. The need of the action is to help meet BLM's requirements under BLM Manual 6840 — Special Status Species Management. The bighorn sheep is a BLM sensitive species. The decision to be made is whether to authorize the use of BLM lands for NDOW to install temporary water troughs.

1.3. Scoping, Public Involvement and Issues:

Internal scoping to BLM specialists was performed and no issues were identified.

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Chapter 2. Proposed Action and Alternatives

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2.1. Description of the Proposed Action:

In response to drought conditions in the Muddy Mountains and Bare Mountain and the costs associated with water hauls to existing guzzlers by helicopter, the Nevada Department of Wildlife (NDOW) is proposing to add temporary water troughs at locations accessible by vehicle. Each trough location would contain 1 or 2 tanks with the dimensions of 8 ft. x 16 ft. x 3.5 ft. and a storage capacity of 1800 gallons. The troughs would be placed in previously disturbed areas accessible from existing roads and thus disturbance from the temporary structures would be minimal and would only involve the movement of some rocks, if needed, to create a mostly flat surface on which to place the troughs. Only loose rocks would be moved, no rocks would be excavated. A remote sensing camera would be mounted on a t-post at each location to monitor use by wildlife.

For the Muddy Mtns, NDOW identified 3 locations for temporary troughs: 1) the Colorock Quarry area, 2) in the Second Day Canyon, and 3) the Monocline Valley area (Table 1, Figs. 2.1, 2.2). None of the troughs would be inside of the Muddy Mountains Wilderness Area. For Bare Mountain, two locations were identified within the CR Reward mine area: 1) Good Hope, and 2) Bull Moose (Table 1, Figs. 2.3, 2.4). The addition of these 5 temporary locations would provide a reliable source of water for bighorn sheep across all of Muddy Mountains and Bare Mountain throughout the dry summer months.

The troughs would be installed at the end of May or early June 2014 and would be removed by November 30, 2014 or earlier if the areas receive sufficient monsoonal rains to replenish the existing permanent guzzlers. Each trough would take one to two days to install using one to two vehicles. Troughs would be inspected routinely to check water levels and to check for vandalism.

Table 2.1. GPS Locations of Proposed Temporary Water Troughs

| Site | GPS Coordinates (UTM 11 nad 83) |
|--------------------------------|---------------------------------|
| Colorock Quarry (Muddy Mtns) | 705391E 4026784N |
| Second Day Canyon (Muddy Mtns) | 714449E 4031485N |
| Monocline Valley (Muddy Mtns) | 709030E 4033295N |
| Good Hope Site (Bare Mtn) | 526838E 4077289N |
| Bull Moose Site (Bare Mtn) | 527359E 4075748N |

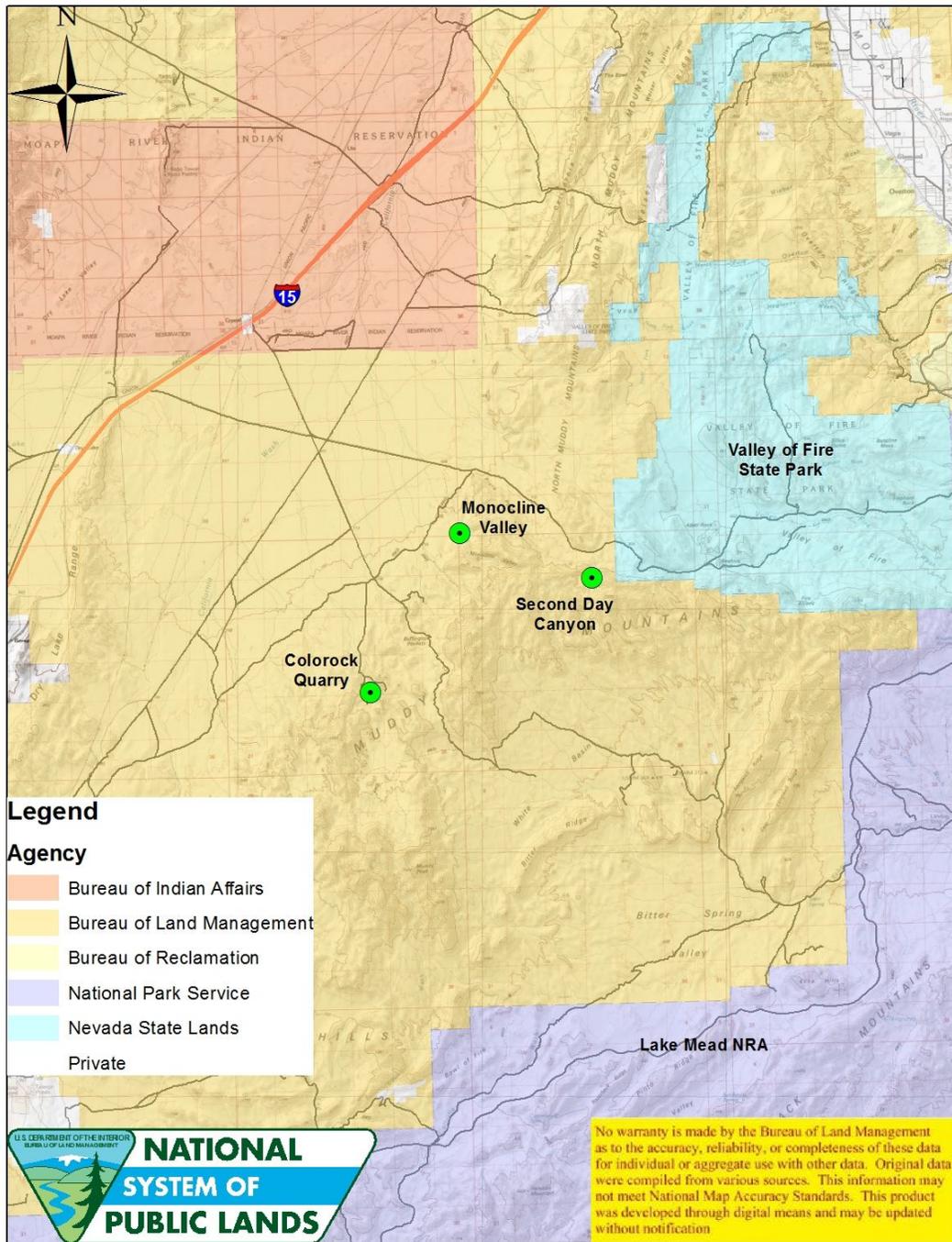


Figure 2.1. Overview of Temporary Water Trough Locations in Muddy Mountains

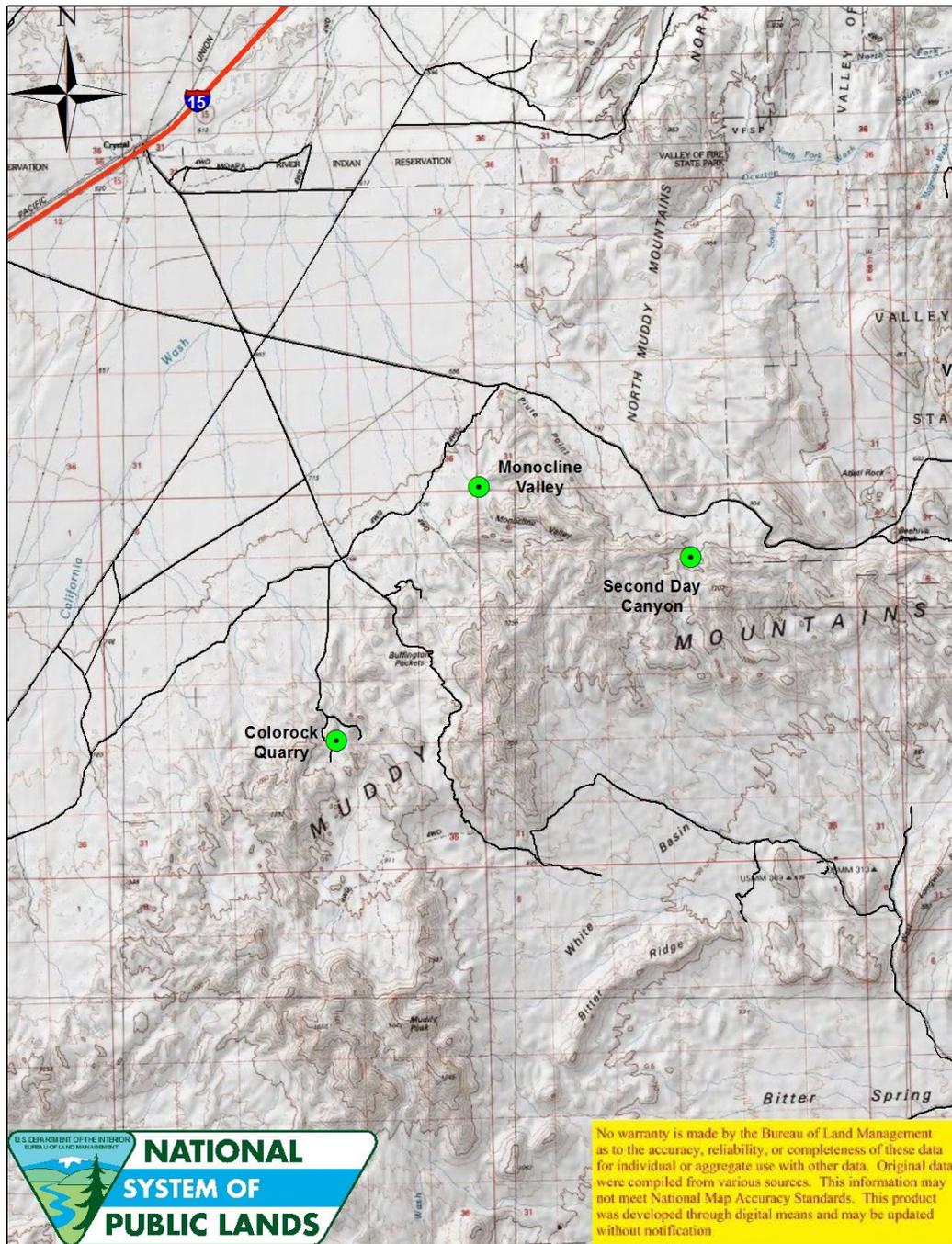


Figure 2.2. Temporary Water Trough Locations in Muddy Mountains

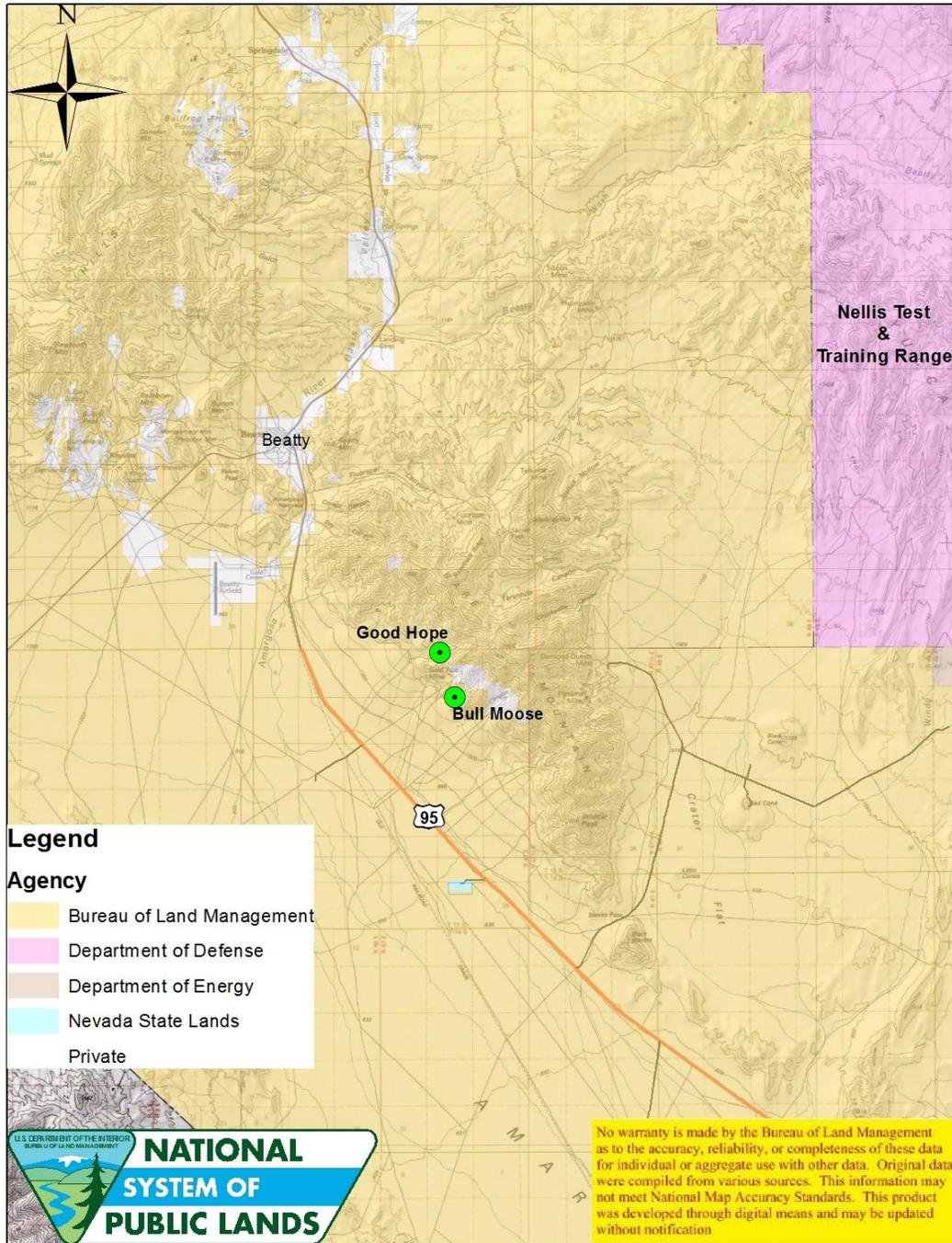


Figure 2.3. Overview of Temporary Water Trough Locations in Bare Mountain

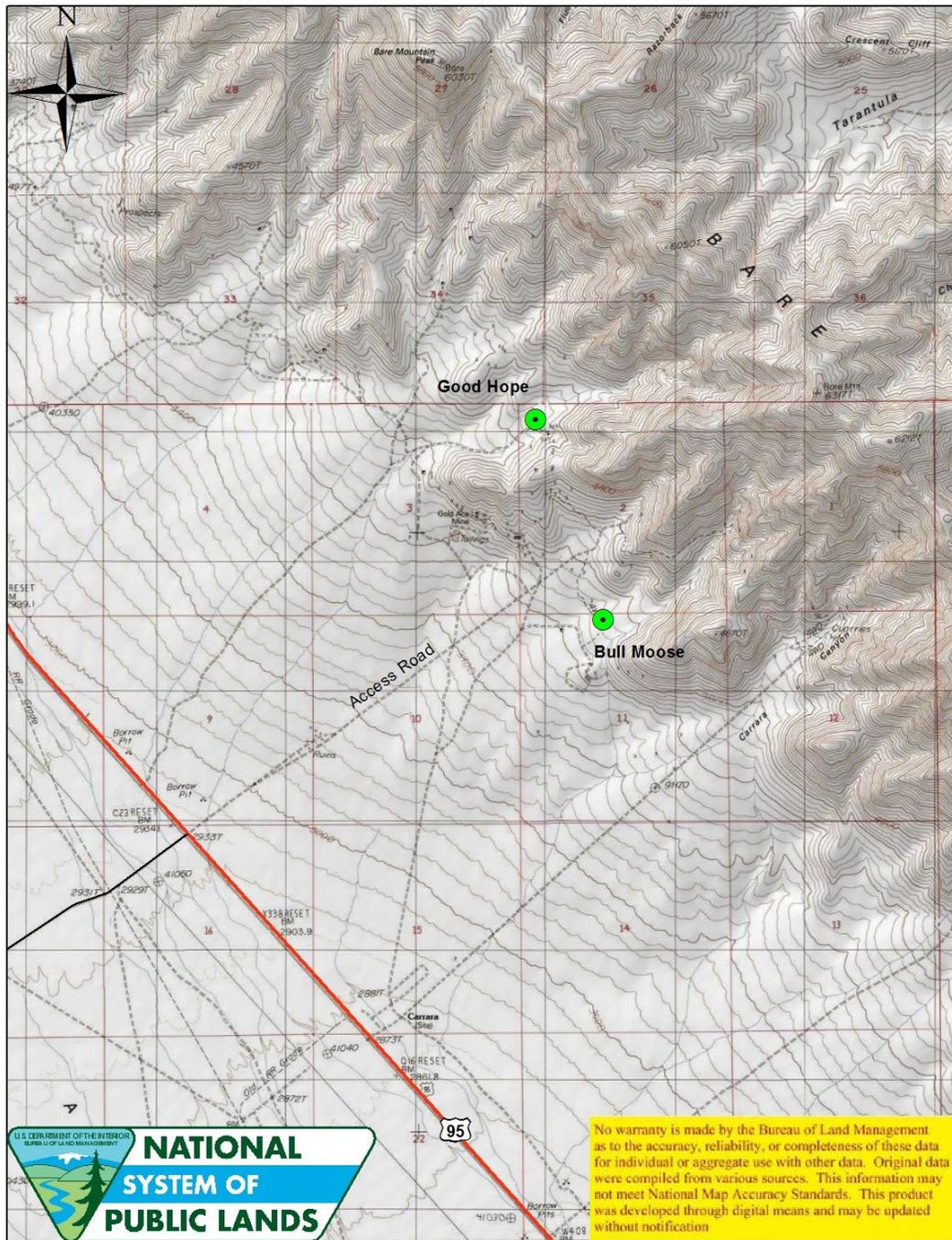


Figure 2.4. Temporary Water Trough Locations in Bare Mountain

2.2. No Action Alternative

Under the “No Action” alternative, the temporary water troughs would not be approved.

2.3. Alternatives Considered but not Analyzed in Detail

Because no issues were identified with the locations requested by NDOW, no other alternatives were considered.

2.4. Conformance

The EA is in conformance with the Las Vegas Resource Management Plan (RMP) (1998). Specifically:

Objective FW-1. Maintain or improve approximately 869,800 acres of current and potential bighorn sheep habitat toward full ecological potential.

Management Direction FW-1–a. Maintain and improve bighorn sheep habitat by maintaining existing water developments, constructing additional water developments, and protecting/improving springs, seeps and riparian habitat, consistent with BLM policy.

Management Direction FW-1–b. Evaluate discretionary activities proposed in bighorn sheep habitat and on a case-by-case basis.

The EA is also in conformance with the Endangered Species Act (ESA) and BLM Manual 6840.

Chapter 3. Affected Environment:

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The Affected Environment section describes the existing conditions of the environmental resources within the project area. Tables 1 contains the resources that were analyzed. Only those resources determined to be potentially impacted were further analyzed. Those resources determined to not be present or to not be impacted were not further analyzed.

Table 3.1. Resources Analyzed

| Determination | Resource | Rationale for Determination |
|---|--|---|
| Not Impacted (NI) | Air Resources | No issues |
| Not Present (NP) | Areas of Critical Environmental Concern | The proposed project area is not within an ACEC or any critical desert tortoise habitat. |
| NP | BLM Natural Areas | Resource not present. |
| NI | Cultural Resources | This action not subject to Section 106 review. (Appendix C.2 of the State Protocol Agreement with the Nevada State Historic Preservation Office). |
| NI | Greenhouse Gas Emissions | Currently there are no emission limits for suspected Greenhouse Gas (GHG) emissions, and no technically defensible methodology for predicting potential climate changes from GHG emissions. However, there are, and will continue to be, several efforts to address GHG emissions from federal activities, including BLM authorized uses. |
| NI | Environmental Justice | No minority or low income group would be disproportionately impacted by health or environmental effects. |
| NP | Farmlands (Prime or Unique) | There are no prime or unique farmland designations in the District. |
| NI (general wildlife)/ Potentially Impacted (PI) (bighorn sheep) | Fish and Wildlife Excluding Federally Listed Species | <p>Wildlife species in the general area include small mammals, rodents, birds, and reptiles. Additionally, the BLM sensitive species desert bighorn sheep, western burrowing owl, chuckwalla, banded Gila monster, Nevada shovel-nosed snake, Mojave shovel-nosed snake, desert glossy snake, and Mojave Desert sidewinder may be present in the general area. The primary direct impacts of the proposed action on wildlife would be killing or maiming of ground dwelling animals and less mobile species (such as reptiles) during trough placement, displacement of individuals, and increased potential for harassment of wildlife. Additional impacts associated with the mortality from vehicular traffic may also be realized. Wildlife species in the general area are common and widely distributed throughout the area and the loss of some individuals and/or their habitat would have a negligible impact on populations of the species throughout the region.</p> <p>The site is located within year-round desert bighorn sheep range. Placement of the temporary water troughs will have a positive impact on wildlife species as it will provide additional water sources. Desert bighorn sheep present in the area may be temporarily impacted by human activity in the area. These species are generally shy of humans and will leave an area and not return until after humans leave. As trough placement and filling should be completed quickly,</p> |

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| | | impacts will be minor. Impacts to BLM Sensitive Species are not anticipated to lead to further decline of the species range-wide as the total footprint for this project is minimal. |
| NP | Floodplains | None of the troughs will be placed within a floodplain. |
| NI | Fuels/Fire Management | Standard weed BMP's must be implemented during construction and maintenance of the project. If noxious weed infestations are found on site they should be reported to the BLM Weed Coordinator. |
| NI | Geology / Mineral Resources/Energy Production | Mining claims are present. The temporary nature of this action will have no impact on mining claims. There are no mining operations present. Mineral materials will not be severed from the property by this action or imported to the property. |
| NI | Hydrologic Conditions | Project location and size will not impact hydrologic conditions of the area. |
| NI | Invasive Species/Noxious Weeds | Compliance with fire restrictions current at time of project implementation will mitigate any risks introduced by the proposed actions. Specific, noncompliant activities may be waived on a case by case basis by a line officer after review and approval by the Fire Management Officer. |
| NI | Lands/Access | As long as access to install and maintain the troughs is accessible by vehicle and existing access roads are used, there are no issues. If a trough needs to be located in an area where there is no existing road, use an alternate method to install, maintain, and remove it (eg. walk, helicopter) |
| NP | Livestock Grazing | The proposed action area is not located in any authorized grazing allotments. |
| NI | Migratory Birds | As there will be no new surface/vegetation disturbance associated with the proposed action, there will be no impact on migratory birds. |
| NI | Native American Religious Concerns | There will be no new disturbance in the areas |
| NP | Paleontology | These are previously disturbed areas with no known paleontological resources present. |
| NP | Rangeland Health Standards | The proposed action does not include any additional surface disturbance; therefore there will be no impacts to rangeland health. |
| NI | Recreation | Proposed action would not change recreation in this area. |
| NI | Socio-Economics | This project will not disproportionately impact social or economic values. |
| NI | Soils | Even though the proposed action will cause some disturbance, these disturbances should not cause significant negative impacts to soils. |
| NP | Threatened, Endangered or Candidate Plant Species | Not present. |

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| NI | Threatened, Endangered or Candidate Animal Species | <p>The above action has a may affect determination for the threatened desert tortoise (<i>Gopherus agassizii</i>). This project will have no effect on any other federally listed species or designated critical habitat.</p> <p>Temporary troughs will be located in previously disturbed areas, but the placement will occur within elevations between 2900 and 3200 feet. Historical survey data indicate that the area within and surrounding the project sites is in very low to moderate density tortoise habitat.</p> <p>This project will create no new surface disturbance, but the trough areas are adjacent to undisturbed, contiguous habitat wherein potential corridors for tortoise entry exist. Since undisturbed habitat exists in and adjacent to the project sites, there is potential for tortoises to wander into the project area. If not noticed and avoided during trough placement and pad building activities, desert tortoises could be either injured or killed (by crushing) or harassed (by being moved out of harm's way). Since no new surface disturbance will be created, no remuneration fees are required. Section 7 Consultation for this project is covered under the Programmatic Biological Opinion (84320-2010-F-0365.R002) contingent on compliance with terms and conditions. This project will require an authorized desert tortoise biologist, monitor, or other approved by the BLM to present an education program (see Term and Condition 1e). A tortoise monitor is required to be onsite during the tortoise active season at the Monocline Valley location per Terms and Conditions provided, since it will be using a John Deere 110 backhoe to build an elevated trough pad. BLM will approve an NDOW biologist to be a tortoise monitor as requested.</p> <p>Terms and conditions and minimization measures in the above Biological Opinion contain measures to reduce potential impacts, including take, to desert tortoise. A copy of the terms and conditions has been uploaded to ePlanning (Sec 7 Log # NV-052-14-112). This notice will serve as the Section 7 Determination and no additional paperwork will be provided.</p> |
| NP | Wastes (hazardous or solid) | Not Present, but do include the standard stipulations in the grant document. |
| NI | Water Resources/Quality (drinking/surface/ground) | The Proposed Action will not cause any major changes in the runoff characteristics of the site and will not use local water resources. |
| NP | Wetlands/Riparian Zones | Proposed action does not occur in a wetland/riparian zone. |
| NP | Wild and Scenic Rivers | Not present |

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| NI/NP | Wilderness/WSA | <p>The proposed action at Colorock Quarry is located just north and outside of Muddy Mountains Wilderness. In the project description, NDOW states the colorock quarry location “would provide a reliable source of water for bighorn sheep inhabiting the northern portion of the Muddy Mountains Wilderness.” There are no buffer zones around wilderness and the fact that non-wilderness activities or uses can be seen or heard from areas within wilderness does not preclude the conduct of those activities outside the boundary. However, the proposed colorock quarry location would result in an indirect negative impact to wilderness characteristics of untrammeled and naturalness in that supplementing water is a human manipulation of ecological processes that alters natural distribution and populations of native wildlife. So long as the proposed action is temporary in nature and localized, impacts would occur to the degree that more detailed analysis is not required.</p> <p>NOTE: In regards to the colorock quarry location NDOW states “We expect human visitation, and potential vandalism, to be minimal because there is no outlet for vehicle access.” From my experience, this area is quite popular and receives a notable amount of day and overnight use (as evidenced by the vehicle routes and campfires) so be advised that chances for vandalism are probably moderate.</p> <p>WSAs are not present.</p> |
| NI | Woodland / Forestry | Cactus and yucca are considered government property and regulated under the BLM Nevada forestry program. Because the proposed action is limited to existing roads and disturbed areas, no new impacts to cactus and yucca, acacia trees and other forestry products are expected. |
| NI | Vegetation Excluding Federally Listed Species | There are known occurrences of BLM sensitive plant species threecorner milkvetch (<i>Astragalus geyeri</i> var. <i>triquetrus</i>) in the general area for the Muddy Mtns. However, because the proposed action is restricted to existing roads and disturbed areas, no new impacts to BLM special status plants are expected. Sites that are not accessible from existing roads will be reached by hiking, there will be no cross county travel. There will be no surface disturbance. |
| NI | Visual Resources | This project occurs within VRM class class II and III areas, if the proponent for this temporary project uses the standard BLM colors no long term impacts to visual would be observed. |
| NI | Wild Horses and Burros | The proposed water hauling is not located in an active herd management area, if there are any wild horses or burros remaining in the Muddy Mountains HMA they may find and utilize the temporary troughs. |
| NP | Lands with Wilderness Characteristics | There are no designated lands with wilderness characteristics in the planning area. |
| | | |

3.1. Bighorn Sheep

The desert bighorn sheep (*Ovis canadensis*) is a species of management concern that is found mainly along desert mountain ranges in Nevada and California to west Texas and south into Mexico. Bighorn sheep are gregarious, sometimes forming herds of over 100 individuals, but small groups of 8-10 are more common. Mature males usually stay apart from females and young for most of the year in separate bachelor herds. They usually migrate seasonally, using larger upland areas in the summer and concentrating in sheltered valleys during the winter. Most of the project area is within year round ranges for desert bighorn sheep, with some areas within winter ranges.

Bighorn sheep habitat preference includes open, usually treeless vegetation types with plant communities containing grasses, sedges, and forbs for foraging, typically in close proximity to steep rocky terrain for predator escape, on which they exhibit remarkable agility. Moisture is primarily derived through their diet of a variety of desert plants, however, surface waters are a vital component of their survival and important to population health.

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Chapter 4. Environmental Effects:

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4.1. Bighorn Sheep

4.1.1. Impacts from Proposed Action

The sites are located within year-round desert bighorn sheep range. Placement of the temporary water troughs will have a positive impact on bighorn sheep as it will provide additional water sources. Other wildlife species have also been documented utilizing guzzlers and thus could also benefit by the additional water sources. Desert bighorn sheep present in the area may be temporarily displaced by human activity in the area. These species are generally shy of humans and will leave an area and not return until after humans leave. As trough placement and filling should be completed quickly, impacts will be minor.

4.1.2. Impacts from No Action

If the temporary water troughs are not approved and the existing guzzlers do go dry during the summer, the bighorn sheep herds in these areas could be negatively impacted due to lack of water and the need to travel further distances to find water. Having to travel further to find water sources could lead to increased stress on the animals. This could lead to the potential increase in mortality and an increase in competition with other sheep and other wildlife for the limited available water.

4.2. Cumulative Impacts

The installation of the temporary water troughs combined with the previously installed permanent guzzlers will have a cumulative positive impact on the bighorn sheep herds in the two areas. The temporary troughs will help supplement the existing guzzlers. Because the temporary guzzlers will be easier to fill with water when needed, they will provide a more reliable water source throughout the summer.

4.3. Mitigation Measures

The following mitigation measures have been identified to help reduce the potential impacts of the proposed action.

1. The project will require an authorized desert tortoise biologist, monitor, or other approved by the BLM to present a desert tortoise education program.
2. A tortoise monitor is required to be onsite during the tortoise active season at the Monocline Valley location in the Muddy Mountains during trough installation.
3. Vehicles and equipment shall be cleaned with a high pressure washer prior to arrival in desert tortoise habitat and prior to departure from areas of known invasive weed and nonnative grass infestations to prevent or at least minimize the introduction or spread these species.
4. Should there be concentrated areas of noxious weeds within the project area, additional spraying of equipment may be required to prevent the contamination of uninfested areas.
5. Vehicle speed on project-related access roads without posted speed limits and in the work area will not exceed 15 mph.

6. Cross-country travel outside designated areas shall be prohibited. All equipment, vehicles, and construction materials shall be restricted to the designated areas.
7. All project/event-related individuals shall check underneath stationary vehicles before moving them. Tortoises often take cover under vehicles. All vehicle use will be restricted to existing roads. New access roads will be created only when absolutely necessary and only when approved by BLM. Workers shall not drive or park vehicles where catalytic converters can ignite dry vegetation and to exhibit care when smoking in natural areas. Fire protective mats or shields shall be used during grinding or welding.
8. Hazardous and toxic materials such as fuels, solvents, lubricants, and acids used during construction will be controlled to prevent accidental spills. Any leak or accidental release of hazardous and toxic materials will be stopped immediately and cleaned up at the time of occurrence. Contaminated soils will be removed and disposed at an approved landfill site.

Chapter 5. List of Preparers

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Table 5.1. List of Preparers

| Name | Title | Responsible for the Following Section(s) of this Document |
|-----------------|---------------------------|--|
| Mathew Hamilton | Wildlife Biologist — LVFO | All |
| Melanie Cota | Wildlife Biologist — PFO | Document review |

Table 5.2. Internal Review by Resource Specialists

| Name | Resource/Specialty |
|-------------------|--|
| Lisa Christianson | Air Quality, GHG, Hazardous Wastes |
| Carla Wise | ACECs, Fish and Wildlife, Migratory Birds, T&E Wildlife |
| Sendi Kalcic | Wilderness, WSA, BLM Natural Areas, Lands with Wilderness Characteristics |
| Stanley Plum | Cultural, Paleontology |
| Gayle Marrs-Smith | Environmental Justice, Sociology |
| Krystal Johnson | Wildhorse and Burro, Farmlands, |
| Boris Poff | Floodplains, Hydrology, Soils, Water Resources, Wetlands/Riparian |
| Ben Klink | Fuels, Fire Management, Invasive Species |
| Evan Allen | Geology — LVFO |
| Dave Fanning | Geology — PFO |
| Kerri-Anne Thorpe | Lands — LVFO |
| Erica Pionke | Lands — PFO |
| Katie Kleinick | Livestock Grazing, Rangeland Health, T&E Plants, Woodland/Forestry, Vegetation |
| Marilyn Peterson | Recreation, Wild and Scenic Rivers |
| Chris Linehan | Visual Resources |