



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

Red Rock-Sloan Field Office

Draft Environmental Assessment

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Blue Diamond Hills Trail Reroute and Signage At Red Rock Canyon National Conservation Area

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Chapter 1 Introduction

This Environmental Assessment (EA) has been prepared to disclose and analyze the environmental effects of the Proposed Action, which consists of constructing an approximately 0.3 mile trail reroute in the area known as Blue Diamond Hill on a designated trail called Bunny, and installing wayfinding signage along the designated trails in that area. This EA will assist the Bureau of Land Management (BLM) Red Rock-Sloan Field Office in project planning and ensuring compliance with the National Environmental Policy Act (NEPA), and in determining whether any significant effects could result from the analyzed actions. Following the requirements of NEPA¹, this EA describes the potential impacts of a No Action Alternative and the Proposed Action. If the BLM determines that the Proposed Action is not expected to have major effects, a Finding of No Significant Impact (FONSI) will be issued, and a Decision Record will be prepared. If significant effects are anticipated, the BLM will prepare an Environmental Impact Statement or select the No Action Alternative.

Purpose and Need

The purpose of this project is to reroute a section of popular, heavily used trail, to improve trail sustainability, and to avoid impacts to adjacent private property. The wayfinding signage would improve the overall visitor experience, alleviate use of social trails within the project area, and make it easier for the BLM to provide information to the public.

The need for these actions is informed by the Red Rock Canyon National Conservation Area (RRCNCA) designating legislation (PL 101-621) requiring the BLM to “...conserve, protect, and enhance for the benefit and enjoyment of present and future generations...” the many resources within RRCNCA, including recreation access.

Decision to be Made

The BLM will decide to implement the proposed actions as written, with modifications, or deny the proposed action.

Conformance Summary

Land Use Plan:	Red Rock Canyon National Conservation Area Resource Management Plan
Date Approved:	May 2005

¹ Executive Order 14154, *Unleashing American Energy* (Jan. 20, 2025), and a Presidential Memorandum, *Ending Illegal Discrimination and Restoring Merit-Based Opportunity* (Jan. 21, 2025), require the Department to strictly adhere to the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321 et seq. Further, such Order and Memorandum repeal Executive Orders 12898 (Feb. 11, 1994) and 14096 (Apr. 21, 2023). Because Executive Orders 12898 and 14096 have been repealed, complying with such Orders is a legal impossibility. The [bureau] verifies that it has complied with the requirements of NEPA, including the Department’s regulations and procedures implementing NEPA at 43 C.F.R. Part 46 and Part 516 of the Departmental Manual, consistent with the President’s January 2025 Order and Memorandum. The [bureau] has also voluntarily considered the Council on Environmental Quality’s rescinded regulations implementing NEPA, previously found at 40 C.F.R. Parts 1500–1508, as guidance to the extent appropriate and consistent with the requirements of NEPA and Executive Order 14154.

The Proposed Action is in conformance with the Red Rock Canyon National Conservation Area Resource Management Plan (RMP), May 2005. The emphasis of the 2005 Red Rock Canyon National Conservation Area RMP is to protect unique habitats for threatened, endangered, and special status species while providing areas for community growth, recreation, mineral exploration and development, and other resource uses. The specific objectives and management directions that allow for the actions proposed can be found in the 2005 Red Rock Canyon National Conservation Area RMP Record of Decision and include:

4D1.5 New trail proposals must be at least 1/4 mile from springs and riparian areas, unless specifically designed to interpret those resources. Where feasible, realign existing trails to avoid springs and riparian areas.

4D1.6 All commercial trail guiding (guiding for pay) requires a Special Recreation Permit issued by the Bureau of Land Management.

6A.7 Locate trails and human activities away from cultural and paleontological sites, so that physical damage does not occur. Inventory the known historic and prehistoric sites acquired in the 1994 additions to RRCNCA. Submit 36 CFR 60.4 National Register of Historic Places nominations for eligible sites.

Legal Land Description

T. 21 S, R. 58 E, sec. 24, NWNE

Chapter 2 Proposed Action and Alternatives

No Action Alternative

The No Action Alternative would mean the BLM continues to manage the trail network without updating or adding any wayfinding signage or maps. The portion of Bunny would not be rerouted off public land, and therefore maintenance would not occur.

Proposed Action

The BLM Red Rock/Sloan FO is proposing to construct an approximately 0.3 mile trail reroute in the area known as Blue Diamond Hill on a designated trail called Bunny, and install signage along the designated trails in that area. The Bunny trail is part of the Cowboy Trail Rides guided equestrian tour operation which is permitted by the BLM through a commercial special recreation permit. This trail is used by equestrians, hikers/trail runners, and mountain bikers. The reroute is being proposed for two reasons: to increase the overall sustainability of the Bunny trail, and to avoid a corner of private land. The trail reroute would also be open to equestrians, hikers/trail runners, and mountain bikers.

Trail design and construction would follow the latest industry standards for sustainable trail management. See Appendix B for diagrams of key construction terms. These standards include utilizing a 36" wide bench-cut trail tread with a 2-5% outslope, not exceeding the 50% rule, following a general elevation contour, utilizing rolling grade dips rather than water bars for water control, and maximizing contact on solid rock surfaces. It is not anticipated that additional trail hardening or support features such as rock walls would be needed on the trail reroute. Clinometers would be used to ensure the trail grade does not exceed the 50% rule and that the tread incorporates the proper outslowing to allow water to sheet across rather than down the trail.

Construction

The trail corridor has been GPS tracked and surveyed for cultural and paleontological resources. The exact trail alignment will be "tight-flagged" by the BLM prior to construction. Flagging ribbon would be temporarily tied to rocks or vegetation at 10 to 30-foot intervals marking the downhill edge of the trail. Pin flags could also be used as an alternative to flagging ribbon. The final alignment would be designed with sustainability, rather than user experience, as the primary motivation. Previous field visits indicate that the final alignment would be designed to avoid disturbing all cacti and yucca specimens, while maximizing contact with exposed bedrock to minimize soil loss and increase durability.

The trail reroute would be constructed using hand tools only. Tools utilized in this type of trail construction include:

- McCleod
- Flat-head shovel
- Rock bar

- Gravel rake
- Cutter mattock
- Pick mattock

Trail construction (e.g. ground disturbing activities) would be guided and supervised by qualified BLM staff, but would be conducted by volunteers. Construction would occur between November 1 and February 14 to avoid migratory bird breeding season and active tortoise season. However, if trail construction must occur between February 15 and October 31st to accommodate staffing, weather, or other operational constraints, an authorized biologist would be on site to monitor all ground disturbing actions and to ensure the project follows the mitigation measures listed in Chapter 3 and the Biological Opinion Terms and Conditions in Appendix C.

Restoration and Trail Signs

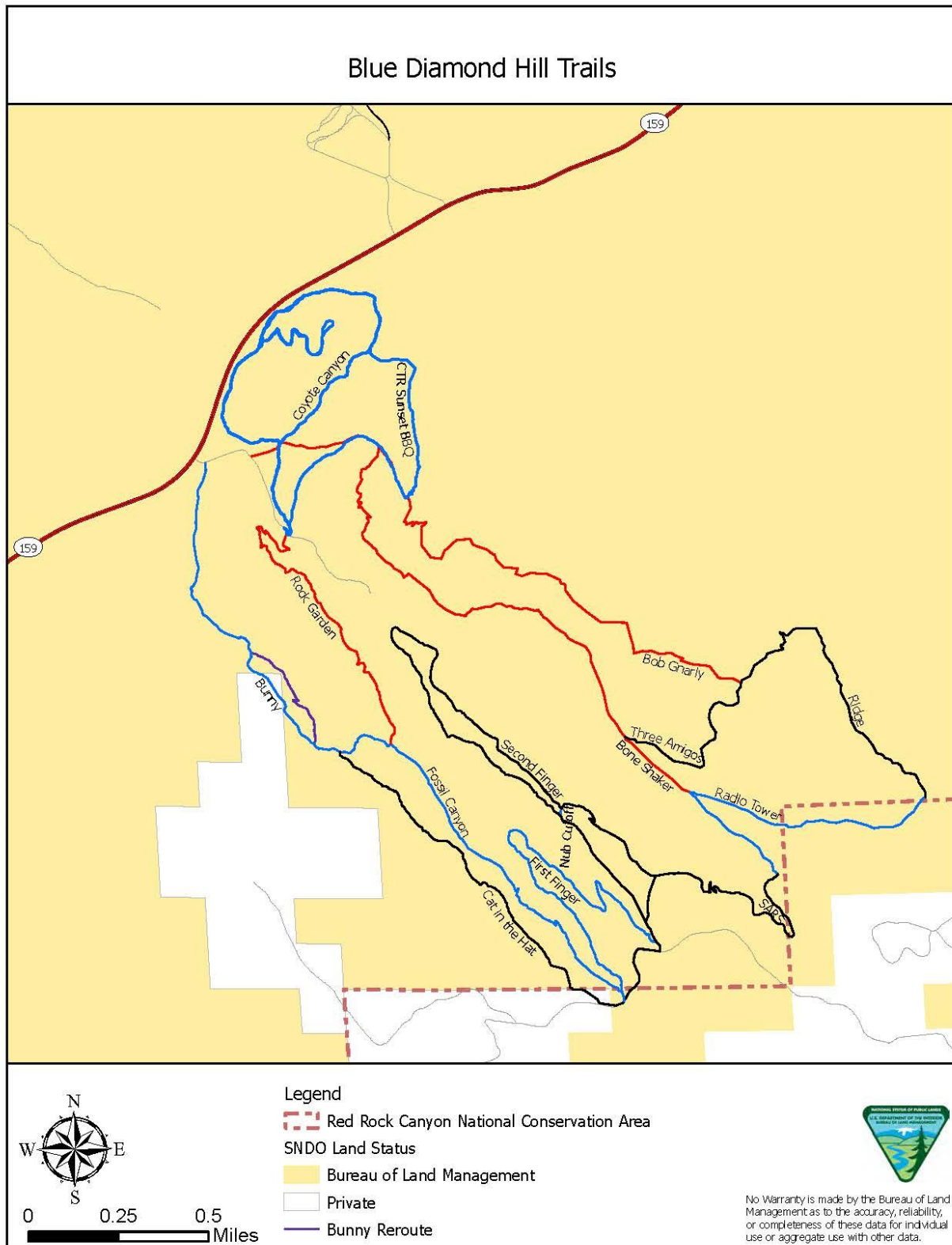
Approximately .2 miles of the old trail occurring on BLM land would be restored to a natural state using a combination of vertical mulching, reseeding, and transplanting live vegetation if feasible. Trail signs would be installed at each end of the new trail alignment to mark the reroute. Physical obstructions such as rocks, boulders, dead vegetation or signage would be used to prevent continued use of the original trail section and to prevent continued use on private property. The old trail on private land would not be restored by the BLM.

Approximately 20 trail signs would be installed on the designated trails in the Blue Diamond Hills trail network. These trails include the current trails used by Cowboy Trail Rides commercial guiding operation, with the addition of Cat in the Hat (see Map 1). The signs would include the trail name, observed difficulty, and direction to the trailhead if needed. Trail etiquette signage would be installed in areas where mountain bikers and equestrians are likely to encounter each other, and would include messaging about yielding to horses and watching rider speed. All signs would be installed at intersections in pre-disturbed areas. Signs would be made of durable materials such as wood or metal and would include the NLCS branded color scheme, symbols, and language.

Sun damaged, broken, and illegible carsonite (fiberglass) signposts are scattered throughout the trail network. These signs would be removed because they do not meet visitor needs for directional information, or BLM needs for ensuring appropriate use of the trail network.

A trailhead kiosk would be installed at the trailhead in pre-disturbed ground. The kiosk would include a map, visitor and trail use information, and resource protection guidance.

Map 1 Blue Diamond Hill Trail Map



Alternatives Considered but Eliminated from Detailed Analysis

No other alternatives were considered for detailed analysis.

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Chapter 3 Affected Environment and Environmental Effects

Resource Evaluation

The BLM Southern Nevada District Office resource specialists reviewed the Proposed Action and found the resources to be present with potential for impact, present with no potential for impact, or not present.

The following table is a list of all resources considered in the evaluation of the Proposed Action and alternative(s). The resources found that may be affected by this proposal have been carried forward for analysis and are discussed further in this chapter. The resources that are not present or found to not be impacted by the Proposed Action because they would be completely mitigated with the implementation of standard stipulations will not be discussed further.

Table 1. Resources Considered in the Evaluation of the Proposed Action and Alternatives

Resource	May be Impacted (carry forward for analysis)	Present and Not Impacted or Not Present	Rationale for Not Impacted	Digital Signature & Date
Areas of Critical Environmental Concern (ACECs)		X NP		
Air Quality		X NP		
National Monument or Conservation Lands		X	This action conforms with the designating legislation and RMP for RRCNCA.	JP 12/31/2024
Cultural Resources		X NP	Two Class III cultural resource inventories have been completed for the new trail route and Cat in the Hat Trail to be adopted. No cultural resources were identified.	AEB 1/13/2025
Socioeconomics		X	Per management review.	
Fish and Wildlife Excluding Federally Listed Species	X			MKDM 1/15/2025
Floodplains		X NP		BP 4/11/2025
Forestry		X NP		

Resource	May be Impacted (carry forward for analysis)	Present and Not Impacted or Not Present	Rationale for Not Impacted	Digital Signature & Date
Fuels and Fire Management		X	Minimum new disturbance, project area is already heavily used and reroute of trail will have no effect on Fuels and Fire Management. This trail reroute could make utilizing the Bunny Trail as a firebreak for fire management operations to keep fire East of adjacent private property easier. Attached Standard Stipulations are sufficient for the Proposed Action.	TJ 1/15/2025
Geology/Mineral Resources		X NP		
Green House Gas/Climate Impacts		X NP		
Hydrologic Conditions		X NP		BP 4/11/2025
Invasive Species/Noxious Weeds	X		Carried forward for analysis	MAB 4/9/2025
Lands and Realty		X	Reroute within NCA; no ROWs present	LS 2/7/25
Livestock Grazing		X NP		
Migratory Birds	X			MKDM 1/15/2025
Native American Concerns		X	Government-to-Government consultation letters were sent on 2/19/2025. One response was received from a Tribal Partner (Timbisha Shoshone Tribe) to schedule a site visit. Scheduling is ongoing. No other concerns were brought forth.	DN 04/29/2025
Paleontological Resources	X			AEB 1/13/2025
Recreation/Travel/Wild and Scenic Rivers		X	This action would not result in a change to existing recreation	JP 12/31/2024

Resource	May be Impacted (carry forward for analysis)	Present and Not Impacted or Not Present	Rationale for Not Impacted	Digital Signature & Date
			opportunities on Blue Diamond Hill.	
Soils	X			BP 4/11/2025
Threatened Endangered or Candidate Animal Species	X			MKDM 1/15/2025
Threatened Endangered or Candidate Plant Species		X NP		MAB 4/9/2025
Transmission Corridors		X NP		
Vegetation	X		Carried forward for analysis in the “vegetation” section	MAB 4/9/2025
Visual Resources		X	This action would occur entirely within Visual Resource Management Class IV which allows for the highest level of disturbance within the BLM VRM system. The trail reroute and signage would match the landscape in both form and line which would not cause a detriment to the visual characteristics of the landscape.	JP 12/31/2024
Wastes (hazardous or solid)		X NP		
Water Resources		X NP		BP 4/11/2025
Wetlands and Riparian Areas		X NP		BP 4/11/2025
Wild Horse and Burros		X	Any right-of-way fences that are cut during trail construction will need to be temporarily tacked up to prevent burros from accessing the roadway. After the project is completed, fences should be	AM 4/28/2025

Resource	May be Impacted (carry forward for analysis)	Present and Not Impacted or Not Present	Rationale for Not Impacted	Digital Signature & Date
			repaired to same or better condition.	
Wilderness/Wilderness Study Areas/Lands with Wilderness Characteristics		X NP		

Wildlife

Affected Environment

Migratory Birds

The Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 et. seq.) protects migratory birds and their nests; a list of MBTA-protected birds is found in 50 CFR 10.13. The list of birds protected under this regulation is extensive and habitat within and adjacent to the Proposed Action Area has potential to support many of these species, including BLM sensitive species, and their nests. Typically, the breeding season, which generally occurs from February 15 through August 31, is when these species are most sensitive to disturbance.

Migratory bird species commonly known to exist in the Proposed Action Area include the Black-chinned Sparrow (*Spizella atrogularis*), Northern Mockingbird (*Mimus polyglottos*), Costa's Hummingbird (*Calypte costae*), White-throated Swift (*Aeronautes saxatalis*), Woodhouse's Scrub-jay (*Aphelocoma woodhouseii*), and Golden Eagle (*Aquila chrysaetos*).

Fish & Wildlife, Excluding Federally Threatened & Endangered Species

The RRCNCA supports a diverse community of wildlife. Habitat adjacent to the Proposed Action Area supports and is adjacent to lands that support wildlife characteristic of the Mojave Desert. Biological diversity varies according to topography, plant community, and proximity to water, soil type, and season. Many of these species have adapted complex life strategies for survival in the desert environment. Wildlife species include small mammals, birds, reptiles, and invertebrates. Based on ecological sensitivity factors, groups of priority management concern are bats, raptors, reptiles and amphibians.

Several common species of reptiles are represented in the surrounding habitat types, including the Western Whiptail Lizard (*Aspidozelis tigris*), Common Side-blotched Lizard (*Uta stansburiana*), Long-nose Leopard Lizard (*Gambelia wislizenii*), Great Basin Collared Lizard (*Crotaphytus insularis bicinctores*), Red Racer (*Masticophis flagellum piceus*), Gopher Snake (*Pituophis catenifer*), Western Patch-nosed Snake (*Salvadora hexalepis*), and Panamint Rattlesnake (*Crotalus stephensi*).

Common bird species that are represented include the Rock Wren (*Salpinctes obsoletus*), Cactus Wren (*Campylorhynchus brunneicapillus*), Black-throated Sparrow (*Amphispiza quinquestriata*), Phainopepla (*Phainopepla nitens*), Northern Mockingbird (*Mimus polyglottos*), Mourning Dove (*Zenaida macroura*), Say's Phoebe (*Sayornis saya*), Woodhouse's Scrub-jay (*Aphelocoma woodhouseii*), Common Raven (*Corvus corax*), and Red-tailed Hawk (*Buteo jamaicensis*).

Common mammal species include the Coyote (*Canis latrans*), Kit Fox (*Vulpes macrotis*), Black-tailed Jackrabbit (*Lepus californicus*), Desert Cottontail (*Sylvilagus audubonii*), White-tailed Antelope Ground Squirrel (*Ammospermophilus leucurus*), and Merriam's Kangaroo Rat (*Dipodomys merriami*). Mule Deer (*Odocoileus hemionus*) and Desert Bighorn Sheep (*Ovis canadensis nelsoni*) are also found in RRCNCA, but are unlikely to be seen in disturbed areas where visitors gather.

Many BLM Nevada sensitive species have the potential to exist in and around the Proposed Action Area. Some sensitive species to note that have been recorded nearby include the Loggerhead Shrike (*Lanius ludovicianus*) and Common Chuckwalla (*Sauromalus ater*). BLM sensitive bat species such as the Townsend's Big-eared Bat (*Corynorhinus townsendii*) and Pallid Bat (*Antrozous pallidus*) that are known to occur in nearby caves also likely utilize the Proposed Action Area for foraging.

Federally Threatened, Endangered, & Candidate Species

Threatened and endangered species are placed on a federal list by the U.S. Fish and Wildlife Service (USFWS) and receive protection under the Endangered Species Act (ESA) of 1973, as amended. The only federally protected species known to occur in the vicinity of the Proposed Action Area is the threatened Mojave Desert Tortoise (*Gopherus agassizii*). The Proposed Action Area is not within designated critical habitat for this species. The Southwestern Willow Flycatcher (*Empidonax traillii extimus*), Western Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*), and Yuma Clapper Rail (*Rallus longirostris yumanensis*) are migratory bird species listed under the ESA that may use riparian habitats within RRCNCA (such as Red Spring or Ash Creek) as transients during migration on their way to breeding habitat. However, because riparian habitat is so limited within RRCNCA, the presence of these species within or nearby the Proposed Action Area is expected to be very rare. For this reason, these species were not carried forward for analysis. One candidate species for listing under the ESA could occur within the Proposed Action Area, the Monarch Butterfly (*Danaus plexippus*); the USFWS recently proposed a new rule to list this species as threatened under the ESA (December 2024).

The Mojave Desert Tortoise inhabits a variety of habitats, from flats and slopes dominated by Creosote Bush Scrub at lower elevations to rocky slopes in blackbrush (*Coleogyne ramosissima*) and juniper (*Juniperus* spp.) woodland transition zones at higher elevations (USFWS 2011). Within Nevada, it is found at elevations between 650 to 4,770 feet. It spends the majority of its life in underground burrows to escape extreme hot and cold desert temperatures. The Mojave Desert Tortoise is most active during spring and early summer when daytime temperatures are more mild and annual plants are most abundant, with additional activity during the warmer fall months when breeding activity and male-male competition can be observed. It eats a wide variety of herbaceous vegetation, especially grasses and the flowers of annual plants. It also is known to eat woody perennials, cacti, and nonnative species, such as red brome (*Bromus rubens*) and red-stem filaree (*Erodium cicutarium*). The Mojave Desert Tortoise has a sizable and permanent population within RRCNCA and the Proposed Action Area falls within tortoise habitat. In Nevada, the Mojave Desert Tortoise is considered active from approximately March 1 through October 31, though this window is flexible depending on environmental conditions.

The Monarch Butterfly, a species proposed for listing as "threatened" under the ESA, requires milkweed (*Asclepias* spp.) as a host plant for its eggs and caterpillars. In RRCNCA, there are three species of milkweed that may occur: *Asclepias asperula*, *Asclepias erosa*, and *Asclepias subulata*. *Asclepias subulata* occurs at lower elevation areas of the Mojave Desert, *Asclepias erosa* occurs in the lower-to mid-elevation areas, and *Asclepias asperula* occurs at higher elevations. Adult Monarch Butterflies will also use a variety of flowering plant species for nectar during migration and mating, especially thistles (*Cirsium* spp.). These plant species are very

important as food sources for the Monarch. This species is potentially active in RRCNCA year-round; it has been seen in Clark County, Nevada, during every month of the year, but most observations occur during the fall. There are no known breeding records for the Monarch Butterfly within RRCNCA, though a few records exist for higher elevations in the Spring Mountains.

Environmental Effects of the No Action Alternative

Under the No Action Alternative, continued habitat degradation is expected on the trail section that lies on private surface due to erosion, as this section will continue to deteriorate without maintenance. Due to the lack of signage improvements, the proliferation of social trails and trail braiding is also likely to continue under the No Action Alternative, leading to continued habitat degradation. Social trails lead to the trampling of sensitive vegetation, soil compaction that inhibits plant growth, increased human presence in areas that would otherwise have low human disturbance, and increased erosion, all of which are expected to negatively impact wildlife in the area.

Environmental Effects of the Proposed Action

Short-term effects of the Proposed Action include ground disturbance from rerouting the trail onto BLM surface, signage placement, and restoration activities on the closed portions of the trail that lie on BLM surface. These activities will likely lead to the short-term displacement and disturbance of wildlife in the area during project activities, though some individuals or species may be permanently displaced from the vicinity of the rerouted trail if they are very sensitive to human disturbance. To prevent disturbance of breeding and nesting activities for migratory birds, project activities will either take place outside of the nesting season (February 15-August 31), or a qualified biologist will conduct a survey for nesting birds prior to commencement of activities. If active nests are found, methods to reduce project impacts to nesting birds will be developed and implemented to prevent nest failure or abandonment. Impacts to the Mojave Desert Tortoise will also be mitigated – stipulations developed in coordination with the USFWS outlined in the Terms and Conditions of the Biological Opinion (see Appendix C) will be followed to ensure take is avoided and negative impacts to tortoise habitat are minimized.

In the long-term, the Proposed Action will control and limit erosion along the trail, as the reroute will allow continuing maintenance of the trail to prevent future habitat degradation in the trail's vicinity. The restoration of the closed trail sections that fall on BLM surface stands to improve long-term habitat quality for wildlife, including migratory birds, BLM sensitive species, and federally threatened and endangered species in the Proposed Action Area. Though the closed section of trail that lies on private surface will not undergo restoration actions, its degradation due to human impacts is expected to stall, with natural processes being allowed to direct its recovery. Signage improvements as part of this project will also deter the proliferation of social trails in the area, helping to limit ground disturbance, habitat degradation, and human impacts to wildlife in the area.

Mitigation Measures

See Appendix A (Sections 2, 11, and 12) for project stipulations and mitigation measures related to wildlife. See Appendix C for the terms and conditions of the Programmatic Biological

Opinion, which includes additional mitigation and minimization measures for the Mojave Desert Tortoise.

Paleontological

Affected Environment

Management of paleontological resources on federal land is detailed in the Paleontological Resources Preservation Act of 2009 (PRPA) and further defined for the Bureau of Land Management in 43 CFR Part 49. According to H-8270-1, “Compliance with NEPA requires consideration of impacts to resources and so may involve mitigation where vertebrate fossils, or noteworthy occurrences of invertebrate or plant fossils, are known.” Additionally, BLM Permanent Instruction Memorandum, PIM2022-009 outlines the implementation of the Potential Fossil Yield Classification System (PFYC). The PFYC describes classifications of fossils based on known geologic units and the potential for scientifically significant fossils.

The Proposed Action is located within a PFYC3, defined as having a moderate potential for scientifically significant localities. Invertebrate or plant fossils may be found in these areas. Under this Classification, management considerations include record searches, pre-disturbance field surveys, monitoring, mitigation, or avoidance. As the Proposed Action would involve ground disturbing activities, a pre-construction field survey was completed.

A paleontological survey of the Proposed Action revealed a diverse and dense invertebrate fauna characteristic of the Permian (Leonardian-Wolfcampian) Kaibab Limestone. Rock type is limestone with plentiful banded to noduled chert that typically appears black due to a coating of varnish. The fauna within this stratum identified at Red Rock Canyon National Conservation Area include algal boundstone, sponge ichnofossils, rare trilobites, fusulinid foraminifera, and multiple species of bryozoan, crinoid, and brachiopod. However, as these fossils are common and do not seem to represent any new species, unique faunal compositions, or exceptional modes of preservation, they are considered “common invertebrate fossils,” not “noteworthy occurrences” as defined by H-8270-1.

Fossils in this area may be damaged by trail use, unauthorized collection, and downstream erosion effects of trail work. However, as these fossils are neither vertebrates nor noteworthy occurrences, their protection is not a priority in NEPA compliance.

Environmental Effects of the No Action Alternative

Under the No Action Alternative, no changes to the existing fossil record would be anticipated.

Environmental Effects of the Proposed Action

Under the Proposed Action, previously undisturbed fossils would degrade more quickly than through natural processes, such as wind and water erosion. New impacts would be caused by visitor trail use, greater visibility to unauthorized collectors, and downstream effects of trail work. Some may be destroyed directly through trail construction. Additionally, new fossils may be uncovered during trail construction activities. However, no fossils are currently known in the Proposed Action area that are of scientific significance, and do not require protection or mitigations per PRPA (2009).

Mitigation Measures

As fossils in the affected area are not considered to be noteworthy occurrences as defined by BLM Handbook H-8270-1, and in accordance with 43 CFR Part 49. No mitigation measures are necessary, and the Proposed Action may proceed as is, and standard stipulations would apply.

Soils**Affected Environment**

Specific information on the soils in the project area is contained in existing data from the U.S. Department of Agriculture (USDA) and the Natural Resources Conservation Service (NRCS) 2006 Soil Survey of Clark County Area, Nevada.

Environmental Effects of the No Action Alternative

Under the No Action Alternative, no impacts to the local soils would be anticipated

Environmental Effects of the Proposed Action

Trail Construction activities would disturb and remove biological crusts through site preparation, grading, and construction. These activities would result in a total loss of the organisms within the soil crusts and ecosystem functions provided by biological soil crusts.

Analysis of Effects

Any adverse effects on biological soil crusts could adversely impact the desert ecosystem, as this soil type increases overall soil stability, fixes atmospheric nitrogen, increases water availability (for plant use), and aids seeding and germination of desert plants. Preliminary studies also suggest that the algae and lichens found in biological soil crusts, along with the vegetation that they help support, are sequestering as much CO₂ as temperate forests.

Direct Effects

Loss of biocrust, soil stability and increased erosion; both wind and water.

Indirect Effects

Loss and decrease in desert vegetation in the direct vicinity of the proposed trail due to lower nitrogen and water content in the soil.

Methodology for Analysis

Review of existing literature.

Cumulative Effects

The action will contribute to the cumulative impacts on soil resources in the planning area. The cumulative loss of soils for the project is small, but due to the nature and type of the variables cannot be adequately quantified (level of development within the Planning District).

Mitigation Measures

BMPs and erosion control techniques or other forms of mitigation would be required. Reduced erosion results in less impact on and less burial of biological soil crusts and reduces loss of growth material. Due to the small size of the area, and with mitigation activities these activities would have negligible impacts on soil resources.

Residual Effects

Loss of biocrust, nutrients and soil moisture on and along the trail system

Vegetation

Affected Environment

The proposed reroute is part of a popular mountain biking trail system located in the Blue Diamond Hills of the Red Rock Canyon National Conservation Area, near a large gypsum mine close to Las Vegas, Nevada. The trail system near the Proposed bunny reroute hosts two main vegetation communities: creosote bush-bursage scrub and the succulent scrub community. The latter covers a larger area of the site and is relatively rare in Nevada; it is the only instance present in Red Rock Canyon. Contrariwise, creosote bush-bursage scrub dominates vast tracts of land throughout the Mojave Desert at mid and low elevations. This community is characterized by annual precipitation averaging between 5 and 8 inches, occurring in an increasingly bimodal pattern—as one moves eastward, more falls during winter low-pressure frontal systems compared to the unpredictable convection-induced monsoonal thunderstorms. In Las Vegas, percentages between the winter to summer precipitation is usually 60% to 40%.

The two namesake plants are co-dominant and are an important component of the heterogeneous mosaic of shrub patches, desert pavement, dry washes, rocky outcrops, cliffs, and ruderal communities that characterizes much of the high desert, shaped by varying hydrology of the ecosystems most limited resource. Creosote bush-bursage scrub is the preferred vegetative association habitat type for the Desert Tortoise (*Gopherus agassizii*), which is a federally listed Endangered species. The Blue Diamond cholla (*Cylindropuntia multigeniculata*), an ex-candidate species for the federal Endangered or Threatened list, occurs exclusively within the creosote bush-bursage scrub community in all 5 locations it exists. The Blue Diamond Hill population is the type locality, however the area is primarily disturbed habitat.

The area has burned at least five times since 1980 due to the invasion of exotic grasses from the *Bromus* species. In 1979, over 1,100 acres burned due to fireworks, several hundred burned in 2005, and at least an additional 50 acres from various natural and anthropogenic causes since then. Furthermore, chronic disturbance from horseback riding, gypsum mining, illegal horticultural harvesting, and planned residential development are also prominent concerns.

The Blue Diamond cholla is protected under the *County Multiple Species Habitat Conservation Plan* and is classified as Critically Endangered and Threatened in Nevada. It is managed as a Sensitive or Special Status Species (SSS) on BLM-administered lands. The type population of this cactus is located at Blue Diamond Hill, which is the same general area as the proposed trail reroute. While there are currently no known occurrences of the Blue Diamond cholla on the bunny trail reroute, the area is considered optimal Critical Habitat for this cactus species.

Due to its significance to multiple levels of government, one or more entities have conducted in-depth presence-absence surveys every year for at least the past five years and sporadically over the past two decades. Approximately five years ago, the Nevada Division of Natural Heritage (NDNH) and the Clark County Desert Conservation Program (DCP) modeled Critical Habitat separately. This model was further refined for accuracy in 2022-2023 by DCP, which also produced data that enhanced our understanding of its habitat, including associated plants, soil characteristics, and diagnostic photos.

Designation of the area as Critical Habitat, along with the absence of any individuals, was confirmed with surveys conducted in March 2025, which utilized the DCP report from 2023. All known individuals occur further south, with the closest known plants located between 1-1.5 miles (1,600-2,400 m) from the nearest section of the proposed rerouted trail.

Despite its absence from the reroute, the Blue Diamond cholla is analyzed here due to the potential for significant residential development in the near future, the unusual methods surrounding its protection, its limited and changing geographic range, and its history of legal disputes. At one point, the Blue Diamond cholla had full legal protection under the federal Endangered Species Act of 1973 as a Candidate species, believed to only exist on Blue Diamond Hill. However, other populations have been discovered in Sloan Canyon NCA and Gold Butte NCA. The status of these lands as National Conservation Areas, along with Red Rock NCA, led to the plant being removed from its Candidate status.

While no longer under federal protection by the ESA, the Blue Diamond cholla is still a rare endemic to Clark County, prompting its status as Critically Imperiled the Nevada Division of Forestry. It also retains special status under the BLM. Roughly 17% of the type locality plants exist on private land associated with the gypsum mine; this land is split between the Las Vegas field office and Red Rock Canyon/Sloan field office. Rather than the cooperative agreement and land transfer that was originally intended, the *Clark County Multiple Species Habitat Conservation Plan* was approved. Unfortunately, this plan has effectively failed to protect the Blue Diamond cholla, diminishing promises made for its long-term viability (at the federal level). Since the state maintains some protection, the Nevada Division of Forestry must be notified of any projects that may impact the plant. Since no individuals are present on the reroute, no "take" form was submitted to the NDF. Nonetheless, following a discussion with a representative from the NDF, they noted the trail reroute to consider the cumulative effects of any potential negative impacts in future projects.

Other state-listed species, or BLM SSS species, are known to grow in proximity to the trail reroute, including:

- Spring Mountain Milkvetch (*Astragalus remotus*) – Species of Concern; (FWS, BLM, NDF)
- *Eriogonum heermannii* var. *clokeyi* – Species of Concern; (FWS, BLM, NDF)
- *Penstemon bicolor* ssp. *roseus* – Clark County MSHCP Watch List; (BLM)
- *Penstemon bicolor* ssp. *bicolor* – Species of Concern (FWS, BLM, NDF)

An unidentified species of *Penstemon* is also present on the proposed site, though identification will not be possible until flowering occurs, expected within days of this document's publication.

However, the density of the *Penstemon* makes them avoidable despite trail rerouting. Milkweeds can also be found in moderate relative densities. Although they are not SSS plants, *Asclepias* spp., which provide critical habitat for the Monarch butterfly (a candidate species for federal listing).

The Nevada Division of Forestry and the BLM Nevada Forestry Program regulate the removal and possession of cacti and yucca for personal or commercial use. These species are protected from disturbances unless a collection permit is obtained from the Nevada Division of Forestry. Yucca and cacti are typically sparsely to moderately distributed within the creosote bush-bursage scrub community; however, certain unique factors, particularly edaphic, contribute to conspicuously higher densities. Even higher numbers can be found in the succulent community. Eastern Joshua trees (*Yucca jaegeriana*), banana yuccas (*Y. baccata*), Mojave yuccas (*Y. schidigera*), soap tree yucca (*Yucca elata*), Bigelow's nolina (*Nolina bigelovii*), and Utah Agaves (*Agave utahensis*) grow within the project area. Almost all of the common species of cactus in southern Nevada reside here. There are particularly nice specimens of the following in the project area:

- *Escobaria chlorantha*
- *E. vivipara*
- *Echinocactus polycephalus*
- *Echinocereus engelmannii*
- *Ferocactus cylindraceus*
- *Cylindropuntia acanthocarpa*
- *C. echinocarpa*
- *C. ramosissima*
- *C. multigenticulata*
- *Opuntia diploursina*
- *O. basilaris*
- *O. polyacantha* var. *erinacea*
- *O. phaeacantha*
- *Homalocephalus polycephala*
- *Cochemia tetrancistra*

No further analysis of forestry species is necessary due to the careful management that will be exercised to prevent accidental take of these species.

Effects of No Action

If no action occurs, then the trail will not be rerouted, to divert away from private land owned by the gypsum mine. In this case, no new disturbance would be caused by the BLM because the paths will not move. However, the area is unsigned and difficult to navigate. A lack of BLM presence in the area makes permissible a cavalier attitude among recreators who use it regularly. They will continue to create their own social trails, often without sustainable features in place. These inevitably widen and contribute to erosion which results in both the direct and indirect loss of vegetation.

Effects of Proposed Action

None of these SSS species should experience any loss of individuals; however, the genera *Penstemon* and sometimes *Eriogonum* have known preferences for colonizing disturbed sites. Because of this and other conditions favorable for germination including warmer ambient temperatures, several days of precipitation, and the time of year, it is advisable that a BLM botanist be present during trail work to easily recognize potential seedlings or overlooked adults. If germination occurred since last site visit, the botanist would direct work away from the plants. Although not anticipated, if avoidance is not feasible, the botanist would be able to transplant with the greatest chance of success to a nearby area, resulting in limited effects due to the proposed action.

Asclepias spp. but especially *A. erosa*, like *Penstemon* species, readily colonizes areas like trail sides road shoulders, old roads and social trails, and, according to iNaturalist, has been growing in the area for the recorded history of the site. Milkweeds are the only host plant to the Federally endangered Monarch butterfly. If milkweeds colonize the area before trail work begins, limited impact would occur by first avoiding, then mitigating with transplantation and seed collection outside of the butterfly migration timing.

Despite the elevated density of succulent species in this area (all of which are protected under Nevada laws, including standing dead individuals), no "take" form is expected to be necessary because the trail rerouting has sufficient leeway to avoid forestry species. Should accidental damage occur, a BLM botanist will be present to salvage any affected plants, maximizing the chances for successful nearby transplantation.

Cumulative Impacts

The cumulative impact of rerouting the trail away from private land and onto BLM land is expected to result in a net loss of vegetation generally; however, forestry products and special status species should remain relatively unaffected. Any loss will be mitigated by restoring the trail section leading up to the trail that trespasses onto private land. Even if the private land remains unrestored by the landowner, passive restoration may still occur in this area at an accelerated rate, benefitting from the nearby active restoration efforts.

The obliteration and restoration of the closed trail section is designed to positively impact the protected status lands, thereby helping with mitigation and offsetting some unavoidable (0.4 acres) damage. By focusing the restoration efforts on portions of the trail visible from main paths, the BLM aims to reduce future disturbances caused by recreationists creating new routes. Overall, restoration will improve desert tortoise habit and pollinator habitat, starting a positive feedback loop that further feeds healthy vegetation. Any direct or indirect increase in native vegetation—achieved through vertical mulching, seeding, and planting—will lower the visibility of disturbances, making it less likely and less convenient for recreators to disturb the area again. The proposed activities will protect sensitive species and provide additional non-fragmented habitat, despite a minor reduction in critical habitat in the short term.

Residual Effects

For the general area, baseline conditions and long-term post-proposal conditions are expected to be nearly equivalent. The proposed action may actually contribute to increased connectivity of habitat. Over time, further restoration efforts may be needed. Revegetation, if carefully

implemented will greatly facilitate its own success and hasten the natural recovery of nearby areas as well.

Efforts to preserve a functioning ecosystem are crucial given the current socio-political climate; planned developments may significantly impact several species of concern. Since this area is recognized as optimal critical habitat, the continued existence of these species may depend on successful colonization of the land adjacent and between these trails in the very near future.

Mitigation Measures

All forestry product species will be avoided, regardless of life stage.

Restoration methods will sustainably harvest materials used for vertical mulching. No branches of yucca or cactus that are not fully disconnected will be taken away to be used as mulch.

No more than 15-20% of dead material will be removed from any given area to be used as vertical mulching.

Cactus cuttings may be used for restoration purposes. These must be properly harvested:

1. Cut off a small section of 2-3 pads at a node with a sharp and sterilized knife.
2. Allow the cutting to sit out and the wound to dry.
3. Plant the cutting shallowly in the soil, cut side down. Tamp down the soil to remove air pockets.
4. Water thoroughly and tamp back down as the air bubbles are made more apparent.
5. Create a small barrier around the plant, using rocks, plant cages, or dead woody material.
6. Maintain a watering schedule, depending on the season. Consult with Botanist.

If excessive damage from recreation continues along obliterated trails, more stringent measures such as temporary fencing must be used to protect the burgeoning plants and critical habitat. Monitor for invasive species.

Weeds

Affected Environment

A history of fire has led to a consistently heavy invasion of exotic annual grasses in the *Bromus* genus. Burning *Bromus* begets more *Bromus*, and so decades seeing at least 6 but likely many more burns have been a part of the history of the area. Weeds can displace native species, supplant food plants or other wildlife habitat elements (e.g., cover), alter natural habitat structure and ecological function, alter natural wildfire patterns, or displace special-status plant occurrences and habitat (Zouhar et al. 2008; Lovich and Bainbridge 1999). Due to this damage to habitat and natural systems, these plants are considered “weeds” or “pest plants” when they invade natural landscapes (Bossard et al. 2000). The spread of invasive plants is a serious threat to biological resources in the Nevada desert. Human activities, including the proposed action, can affect weed distribution and abundance in two ways: they can introduce new weed species to an area, and they can facilitate propagation and spread of weeds already present or introduced.

Noxious weeds are designated by “federal or state law as generally possessing one or more of the following characteristics: aggressive and difficult to manage; parasitic; a carrier or host of

serious insects or disease; or non-native, new, or not common to the U.S. known noxious weeds at the project site are:

Silverleaf nightshade (*Solanum eleagnifolium*)

Puncturevine (*Tribulus terrestris*)

Sahara Mustard (*Brassica tournefortii*)

Other undesirable invasive plants are also present but occur “desert-wide” thereby effectively graduating off the designated list, where instead of efforts to eradicate, instead is focused on control. These species include Mediterranean grass (*Schismus* spp.), and Russian thistle (*Salsola tragus*).

Effect of No Action Alternative

Although there would be no new disturbance that upturns the soil and creates prime catchment for weed seeds and crannies to successfully germinates, the proliferation of unapproved social trails will facilitate their spread further as time passes. Because these trails would remain unlisted, the likelihood of them receiving a consistent and thorough monitoring and treatment regimen is unlikely.

Effects of the Proposed Action

Any soil disturbance inevitably creates a hospitable environment for colonization by invasive plant species, especially in areas with average areal cover percentages under reference conditions. These plants take advantage of the empty space, and if only partial restoration occurred. The most important effect of weeds on natural resources is invasion into natural habitats. Despite this, the creation of sustainable trail features, signage, and simply is designation will allow for not only simply recognition, but also follow-through.

The best method for halting weed spread and proliferation is through identifying then and the extent of their population as early as possible and then quickly and thoroughly eliminating them. This well-substantiated method, termed “early detection, rapid response”, works best with a robust monitoring program: During the trail reroute and just prior to it, a secondary weeds assessment will be conducted, and, if seasonally appropriate, the weeds will subsequently be removed or controlled; immediately following activities, an inventory of the non-native plants, including their estimated areal percent covers will be conducted. At appropriate times throughout the following three years the same methodology will be repeated resulting on temporally comparable data. A series of robust and research-backed Standard Operating Procedures (SOP), Best Management Practices (BMP) will be required during trail rerouting.

Mitigation Measures

On Site Lead shall limit the size of any vegetation and/or ground disturbance to the absolute minimum necessary to perform the activity safely and as designed. Workers will avoid creating soil conditions that promote weed germination and establishment by upturning more soil than necessary without revegetation.

Project operations shall begin in weed free areas, whenever feasible, before operating in weed-infested areas. Equipment shall be cleaned prior to moving out of the area.

Supplies, equipment storage, machine and vehicle parking must be staged in areas that are relatively weed-free. Workers shall avoid or minimize all types of travel through weed-infested areas or restrict major activities to periods of time when the spread of seed or plant parts are least likely.

Project related equipment and tools (this includes the nooks and crannies of undercarriages) will be cleaned using compressed air or water to remove mud, dirt and plant parts before moving into and from relatively weed-free areas. Seeds and plant parts will be collected, bagged and deposited in dumpsters destined for local landfills.

Workers shall inspect, remove, and dispose of weed seed and plant parts found on their clothing and personal equipment, bag the product and dispose of in a dumpster for deposit in local landfills.

Lead shall evaluate options, including area closures, to regulate the flow of traffic on sites where native vegetation needs to be established.

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Chapter 4 Consultation and Coordination

Scoping and Public Participation

Internal scoping for this project was held on 8/13/2024. No public scoping was conducted for this Proposed Action. A summary of the Proposed Action is provided for public review on the National NEPA Register.

The BLM worked with community partners in the equestrian and mountain biking communities to determine the scope of trail signage and messaging that should be displayed.

Summary of Consultation

Consultation was conducted with local Native American tribes to help assess impacts on Native American Traditional Cultural Properties. These interactions are detailed below in Table 4.1, List of Tribal Outreach, Contact and Consultation.

Table 4.1. List of Tribal Outreach, Contact, and Consultation

Date	Type	Parties
2/19/2025	Consultation Letter	Big Pine Paiute Tribe of the Owens Valley Bishop Paiute Tribe Chemehuevi Indian Tribe Colorado River Indian Tribes Fort Independence Indian Reservation Fort Mojave Indian Tribe Hualapai Tribe Kaibab Band of Piute Indians Las Vegas Paiute Tribe Lone Pine Paiute-Shoshone Tribe Moapa Band of Paiutes Paiute Indian Tribe of Utah San Juan Southern Paiute Tribe The Hopi Tribe Timbisha Shoshone Tribe Twenty-Nine Palms Band of Mission Indians Utu Utu Gwaitu Paiute Tribe
3/24/2025	On-Site Monitor and Site Visit Request	The Timbisha Shoshone Tribe and BLM are coordinating a time for a site visit prior to trail construction.

Table 4.2, List of Persons, Agencies and Organization Consulted, outlines consultations with additional agencies and individuals.

Table 4.2. List of Persons, Agencies and Organizations Consulted

Name	Purpose & Authorities for Consultation or Coordination	Findings & Conclusions
Cowboy Trails Trail Rides	Coordinate trail realignment and determine trail sign information	Ensure user safety and trail etiquette messaging is included on signs regarding mountain bike and equestrian interactions
Southern Nevada Mountain Biking Association	Determine trail sign information	Use popular trail names as displayed on crowd-sourced internet databases

It was determined no additional consultation was required during preparation of this environmental assessment based on the scope of the Proposed Action.

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Chapter 5 List of Preparers

Table 5.1 List of Preparers

Name	Title	Resource
Annette Bennett	Archaeologist	Cultural Resources and Paleontology
Mary Boyle	Natural Resource Specialist	Forestry, T&E Plant Species, Vegetation (including SSS Species), and Invasive Species
Marissa Dowalter-Miracle	Biologist	Fish and Wildlife Excluding Federally Listed Species, Migratory Birds, Threatened Endangered or Candidate Animal Species
Justin O'Dell	Interpretive Ranger	Paleontology
Boris Poff	RRCNCA Manager	Soils
Jon Prescott	Project Lead, Outdoor Recreation Planner	Chapters 1 and 2
Susan Farkas	Planning and Environmental Coordinator	Chapters 1 and 2
Colleen Cepero Rios	Planning and Environmental Coordinator	Chapters 1,2 and 3

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Chapter 6 References

- BLM Manual H-8270-1, General Procedural Guidance for Paleontological Resource Management, 1998. Electronic resource: <https://www.blm.gov/sites/default/files/docs/2024-09/H-8270-1%20rel%208-69.pdf>
- Bossard, C.C., J.M. Randall, and M.C. Hoshovsky (eds.). 2000. Invasive plants of California's wildlands. University of California Press (Berkeley, CA): 366 pgs.
- Bureau of Land Management (2005). Red Rock Canyon National Conservation Area Resource Management Plan and Record of Decision.
- Clark County Department of Comprehensive Planning, U.S. Fish and Wildlife Service, RECON (prep.). 2000. Clark County Multiple Species Habitat Conservation Plan and Environmental Impact Statement for Issuance of a Permit to Allow Incidental Take of 79 Species in Clark County, Nevada: 271 pgs.
- Lovich, J.E., and D. Bainbridge. 1999. Anthropogenic degradation of the Southern California desert ecosystem and prospects for natural recovery and restoration. *Environmental Management* 24(3):309-326.
- Natural Resources Conservation Service (NRCS). 2006. United States Department of Agriculture. "Soil Survey of Clark County Area, Nevada."
- Paleontological Resources Preservation Act (PRPA), 2009. 16 U.S.C. § 470aaa-11.
- Permanent Instruction Memorandum PIM2022-009, Implementing the Paleontological Resources Preservation Act of 2009 (PRPA), issued August 1, 2022. Electronic resource: <https://www.blm.gov/policy/pim2022-009>
- U.S. Fish and Wildlife Service. 2011. Revised recovery plan for the Mojave population of the desert tortoise (*Gopherus agassizii*). U.S. Fish and Wildlife Service, Pacific Southwest Region, Sacramento, California. 222 pp.
- Zouhar, K., J.K. Smith, S. Sutherland, and M.L. Brooks. 2008. Wildland Fire in Ecosystems: Fire and Nonnative Invasive Plants; General Technical Report. USDA Forest Service Rocky Mountain Research Station (Ogden, Ut).

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Appendix A

Stipulations and Mitigation Measures

For

Blue Diamond Hills Trail Reroute and Signage
At Red Rock Canyon National Conservation Area

NEPA #: DOI-BLM-NV-S020-2025-0006-EA

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Appendix A

Stipulations and Mitigation Measures

The following stipulations and mitigation measures must be implemented unless they are not applicable to the Proposed Action. Those stipulations and mitigation measures that include “if applicable, if used, or if constructed” are to be implemented if the Proposed Action includes that activity or design.

1. General Resource Stipulations

- 1.1. The Holder shall comply with all applicable local, state, and federal laws and regulations for the protection of resources and the environment, to include but not limited to air, cultural, hazmat, soil, vegetation, water, wildlife.
- 1.2. As part of project reclamation, the Holder will be responsible for ensuring that any boreholes, wells, or other openings in the ground are backfilled and properly covered, according to the Nevada Regulatory Statutes.
- 1.3. The Holder shall remove from public land and properly dispose of any and all trash, litter, debris, waste, excess materials, including flagging and signs, or other substances and materials resulting from the use under this authorization. All trash and food items shall be promptly contained within closed, raven-proof containers.

2. Threatened, Endangered or Candidate Animal Species

- 2.1. Compliance with the special stipulations below will help to ensure desert tortoises are not impacted:
 - 2.1.1. A speed limit of 25 miles per hour shall be required for all vehicles travelling on existing roads.
 - 2.1.2. Should a desert tortoise enter the area of activity, all activity shall cease until such time the animal leaves the area of its own accord.
 - 2.1.3. All drivers must check underneath vehicles and equipment before moving to ensure no tortoise has taken cover underneath parked vehicles.
- 2.2. The Holder will comply with the terms and conditions of the Biological Opinion File #1-5-04-F-526) for this project. The Biological Opinion is on file at the Bureau of Land Management, Southern Nevada District Office. The terms and conditions are attached.
- 2.3. The Holder, upon completion of the Proposed Action, must submit Appendix G. Please forward Appendix G to the BLM, Attn: Wildlife Biologist, 4701 N. Torrey Pines Drive, Las Vegas, Nevada 89130. Failure to abide by the terms and conditions of the grant and Biological Opinion, could result in temporary suspension of all activities within your ROW area per 43 CFR 2807.16 and 43 CFR 2807.17.

3. Cultural and Paleontological Resources

- 3.1. Any cultural and/or paleontological resources (historic or prehistoric site or object) discovered by the Holder, or any person working on his behalf on public or federal lands shall be immediately reported to the Authorized Officer. Holder shall immediately suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. The Holder will make every effort to protect the site from further impacts, including looting, erosion, or other

human or natural damage. In some cases, this may delay activity at the site until the discovery may be recovered, or the project is modified to avoid impacting the find.

- 3.2. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or paleontological values. Any decision regarding suitable mitigation measures will be made by the Authorized Officer after consulting with the Holder. The Holder will be responsible for the cost of evaluation. Holder shall be responsible for the resultant mitigation costs.

4. Hazardous Materials

- 4.1. If hazardous materials/substances are used or present within the authorized area, the Holder shall immediately notify the Authorized Officer of any release (leaks, spills, etc.) of hazardous substances, toxic substances, or hazardous waste. As required by law, Holder shall have responsibility for and shall take all action(s) necessary to respond to and fully remediate releases (leaks, spills, etc.) within the authorized area. A copy of any report required or requested by any federal, state, or local government agency as a result of a reportable release or spill of any hazardous substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved federal, state, or local government agency.

5. Survey Monuments

- 5.1. Holder shall protect all survey monuments found within the authorization area. Survey monuments include, but are not limited to, General Land Office and Bureau of Land Management Cadastral Survey Corners, reference corners, witness points, U.S. Coast and Geodetic Survey benchmarks and triangulation stations, military control monuments, and recognizable civil (both public and private) survey monuments. If any of the above are to be disturbed during operations, the Holder shall secure the services of a Professional Land Surveyor or Bureau cadastral surveyor to perpetuate the disturbed monuments and references using surveying procedures found in the Manual of Instructions for the Survey of the Public Lands of the United States and Nevada Revised Statutes, Chapter 329, Perpetuation of Corners. The Holder shall record such survey in the appropriate county and send a copy to the Authorized Officer. If the Bureau cadastral surveyors or other federal surveyors are used to restore the disturbed survey monuments, the Holder shall be responsible for the survey cost.

6. Fire and Fuels

- 6.1. Compliance with fire restrictions is mandatory while fire restrictions are in effect (43 CFR 9212). Fire restrictions are generally enacted May through October. Fire restriction orders are available for review at BLM district offices and on the BLM website.
- 6.2. The use of standard fire prevention measures should be practiced at all times (43 CFR 2805.12). Conditions that support wildfires can occur any time of the year in Southern Nevada.

- 6.3. The Holder shall immediately report fires to 911 or (702) 631-2350 and make all accommodations to allow immediate safe entry of firefighting apparatus and personnel.
- 6.4. An Origin and Cause Investigation will be carried out on any human caused fire by BLM law enforcement or their designated representative. To minimize disturbance of potential evidence located at the fire scene, the applicant/proponent shall properly handle and preserve evidence in coordination with the BLM. The BLM shall pursue cost recovery for all costs and damages incurred from human-caused fires on BLM lands when the responsible party(s) has been identified and evidence of legal liability or intent exists. Legal liability includes, but is not limited to, negligence and strict liability (including statutory and contractual liability), products liability, etc.

7. Vegetation

- 7.1. Restoration – for any habitat-disturbing activities (ground disturbance outside of maintenance in roads, permanently-disturbed areas, etc.):
 - 7.1.1. For temporary habitat disturbance, the holder/permittee/assignee/proponent is responsible for filling out BLM's Restoration Plan Template, which describes how temporary disturbance will be restored, to BLM for approval prior to issuance of authorization of habitat-disturbing activities.
 - 7.1.2. For permanent habitat disturbance, the holder/permittee/assignee/proponent is responsible for developing a decommissioning plan, following BLM's Restoration Plan Template, to be approved by BLM prior to issuance of authorization of habitat-disturbing activities, which describes how permanent disturbance will be restored.
 - 7.1.3. Disturbances will not be released from restoration requirements until the standards are met as described in BLM's Restoration Plan Template. Limit disturbance as much as possible to reduce restoration timelines. Weed Management stipulations must be followed.
 - 7.1.4. Any use of seed or native plant materials will be approved by BLM in advance, and plant materials must originate from the appropriate Seed Transfer Zone and have appropriate seed tags, evidence of permits, and be weed free.
- 7.2. Cacti, Yucca, and Succulent Species:
 - 7.2.1. For temporary habitat disturbance, cacti, yucca, or other succulent species that cannot be avoided must be salvaged by a BLM-approved contractor, stored appropriately during construction, and then planted back into the disturbed area in natural patterns and densities after construction. Survival standard is 80%. Coordinate with BLM.
 - 7.2.2. For permanent habitat disturbance, cacti, yucca, or other succulent species in permanent disturbance areas must be salvaged by a BLM-approved contractor and moved to a BLM storage facility; in some circumstances when there are too many plants to be used, BLM may issue a forestry permit for destruction of these species. Coordinate with BLM.
- 7.3. ***Additional Vegetation mitigation measures specific to the Blue Diamond Hills Trail Reroute and Signage at Red Rock Canyon National Conservation Area Project:***
 - 7.3.1. All forestry product species will be avoided, regardless of life stage.

- 7.3.2. Restoration methods will sustainably harvest materials used for vertical mulching. No branches of yucca or cactus that are not fully disconnected will be taken away to be used as mulch.
- 7.3.3. No more than 15-20% of dead material will be removed from any given area to be used as vertical mulching
- 7.3.4. Cactus cuttings may be used for restoration purposes. These must be properly harvested:
 - 7.3.4.1. Cut off a small section of 2-3 pads at a node with a sharp and sterilized knife.
 - 7.3.4.2. Allow the cutting to sit out and the wound to dry.
 - 7.3.4.3. Plant the cutting shallowly in the soil, cut side down. Tamp down the soil to remove air pockets.
 - 7.3.4.4. Water thoroughly and tamp back down as the air bubbles are made more apparent.
 - 7.3.4.5. Create a small barrier around the plant, using rocks, plant cages, or dead woody material.
 - 7.3.4.6. Maintain a watering schedule, depending on the season. Consult with Botanist.
- 7.3.5. If excessive damage from recreation continues along obliterated trails, more stringent measures such as temporary fencing must be used to protect the burgeoning plants and critical habitat.
 - 7.3.5.1. Monitor for invasive species.

8. Non-Native and Invasive Species and Noxious Weeds

- 8.1. Weed Management Plan - is required for any ground-disturbing activities greater than 1 acre:
 - 8.1.1. The holder/permittee/assignee/proponent is responsible for filling out BLM's Weed Management Plan Template, to be approved by BLM prior to issuance of authorization of initial habitat-disturbing activities, which describes how weed treatment will be conducted.
- 8.2. The holder/permittee/assignee/proponent is, for the lifetime of the responsibility for the disturbance or ROW, responsible for:
 - 8.2.1. Surveying for, and treating, all noxious weeds within the disturbed area during biologically appropriate times and before the noxious weeds have gone to seed.
 - 8.2.2. Surveying for, and treating, non-native weeds within the disturbed area during biologically appropriate times and before the non-native weeds have gone to seed. Non-native weeds that were common in the project area prior to disturbance must be kept at levels (cover and density) less than or equal to pre-disturbance. Non-native weeds that were not common or non-existent in the project area prior to disturbance must all be treated (this also applies to new introductions that spread off the disturbed area/ROW).
 - 8.2.3. Monitoring for, and reporting to BLM, non-native and noxious weeds occurrence, spread, and treatment (providing treatment data).
- 8.3. Any new detections of non-native or noxious weeds shall be reported to the SNDO Weed Management Specialist immediately (702-515-5000) to determine best course for treatment.

- 8.4. The use of pesticide treatment requires the holder/permittee/assignee/proponent to coordinate with the BLM SNDO weed management specialist (702-515-5000) and prepare, submit, obtain, and maintain a pesticide use proposal (PUP) to utilize pesticides for project activities. The proponent shall submit a new PUP 6 months prior to their current PUP's expiration date.
- 8.5. In order to reduce the accidental spread of non-native and noxious weeds, the holder/permittee/assignee/proponent and any contractors shall avoid or minimize all types of travel through a state listed noxious weed-infested areas that can be carried to the project area. In order to minimize the threat of spreading noxious weeds project-related equipment (i.e. undercarriages and wheel wells) should be cleaned of all mud, dirt, and plant parts before moving into relatively weed-free areas or out of relatively weed-infested areas. Project workers shall inspect, remove, and dispose of weed seed and plant parts found on their clothing and personal equipment, bag the product, and dispose of it in a dumpster. If you have questions, consult with the BLM SNDO noxious weed coordinator.
- 8.6. During construction and maintenance activities the holder/permittee/assignee/proponent shall:
 - 8.6.1. Review the annual weed inventory prior to any ground disturbance.
 - 8.6.2. Limit the size of any vegetation and/or ground disturbance to the absolute minimum necessary to perform the activity safely and as designed.
 - 8.6.3. Begin activities in weed free areas whenever feasible before operating in weed-infested areas.
 - 8.6.4. Locate equipment storage, machine and vehicle parking or any other area needed for the temporary placement of people, machinery and supplies in areas that are relatively weed-free.
 - 8.6.5. Avoid or minimize all types of travel through weed-infested areas or restrict major activities to periods of time when the spread of seed or plant parts are least likely.
 - 8.6.6. If landscaping is part of the project design, the Holder/permittee/assignee/proponent will ensure that landscaping does not contain non-native species or state-listed noxious weeds, such as fountaingrass (*Pennisetum setaceum*).
- 8.7. ***Additional Non-Native and Invasive Species and Noxious Weeds mitigation measures specific to the to the Blue Diamond Hills Trail Reroute and Signage at Red Rock Canyon National Conservation Area Project:***
 - 8.7.1. On Site Lead shall limit the size of any vegetation and/or ground disturbance to the absolute minimum necessary to perform the activity safely and as designed. Workers will avoid creating soil conditions that promote weed germination and establishment by upturning more soil than necessary without revegetation.
 - 8.7.2. Project operations shall begin in weed free areas, whenever feasible, before operating in weed-infested areas. Equipment shall be cleaned prior to moving out of the area.
 - 8.7.3. Supplies, equipment storage, machine and vehicle parking must be staged in areas that are relatively weed-free. Workers shall avoid or minimize all types of travel through weed-infested areas or restrict major activities to periods of time when the spread of seed or plant parts are least likely.
 - 8.7.4. Project related equipment and tools (this includes the nooks and crannies of

undercarriages) will be cleaned using compressed air or water to remove mud, dirt and plant parts before moving into and from relatively weed-free areas. Seeds and plant parts will be collected, bagged and deposited in dumpsters destined for local landfills.

8.7.5. Workers shall inspect, remove, and dispose of weed seed and plant parts found on their clothing and personal equipment, bag the product and dispose of in a dumpster for deposit in local landfills.

8.7.6. Lead shall evaluate options, including area closures, to regulate the flow of traffic on sites where native vegetation needs to be established.

9. Mineral Resources

- 9.1. If construction activities produce excess mineral materials from within the boundaries of the project area, the excess mineral materials must be used within the boundaries of the project area or stockpiled within the boundaries of the project area for future disposal by the BLM.
- 9.2. If construction activities require that excess mineral materials be exported from the boundaries of the project area during or after construction activities take place, a written authorization, Contract for the Sale of Mineral Material (Contract), Free Use Permit (FUP), etc. must be obtained from the BLM by the Holder prior to exporting the excess mineral materials from the boundaries of the project area.
- 9.3. If excess mineral materials are to be stockpiled on site for a future disposal, specific BLM use authorization in the form of a written authorization, Contract, FUP, etc. must be obtained from the BLM prior to exporting the excess mineral materials from the boundaries of the project area.

10. Migratory Birds

- 10.1. Projects that require ground disturbance or actions that could affect nesting birds, should try to be scheduled outside of the bird breeding season. Breeding season in the SNDO generally occurs from February 15 to August 31. If a project cannot be schedule outside of those dates, a qualified biologist may be required to conduct a survey for nesting birds prior to commencement of activities, as determined by BLM. If active nests are found, methods to reduce project impacts to nesting birds will be developed in coordination with the BLM, such as an appropriately sized buffer area must be established and maintained until the young birds fledge. If feasible, the buffer area should connect to suitable, undisturbed habitat. As the above dates are a general guideline, any active nests that are observed outside this range, must be avoided as described above.
- 10.2. Any infrastructure for projects will be designed and constructed in a manner that does not allow open pipes that birds or other wildlife could be trapped in. This includes fencing, gates, or other materials with open holes. All open pipes will be capped or secured so that wildlife cannot access.

11. Fish and Wildlife, Excluding Federally Listed Species

- 11.1. Permittee shall not damage, collect, or introduce plants or animals at any location within RRCNCA without permission from the Authorizing officer.
- 11.2. The Permittee and participants will not harass, feed, or collect wildlife or plants while in RRCNCA.
- 11.3. Construction of any infrastructure would be designed to prevent wildlife from becoming trapped in open pipes or any other materials with open holes. All pipes would be capped to prevent access by wildlife.
- 11.4. Project materials and equipment will be inspected for wildlife prior to moving said material/equipment to reduce potential injury to wildlife. Materials and equipment that cannot be inspected, or from which wildlife cannot escape, will be covered, or otherwise made secure from wildlife intrusion and entrapment at the end of each workday.
- 11.5. If any Gila monster are encountered during project construction, they must be reported immediately to the Nevada Division of Wildlife at (702) 486-5127.

12. Wild Horse and Burro

- 12.1. If wild horse and/or burro are encountered in or near the authorized area do not feed, harass, or otherwise interact with the animal. Report sick or injured animals, or violations to animals to the BLM immediately.

13. Recreation

- 13.1. Unless expressly stated, a land use authorization does not create an exclusive right of use of an area by the holder. The holder shall not interfere with other valid uses of the federal land by other users, such as casual recreationists.

14. Soils

- 14.1. BMPs and erosion control techniques or other forms of mitigation would be required. Reduced erosion results in less impact on and less burial of biological soil crusts and reduces loss of growth material. Due to the small size of the area, and with mitigation activities these activities would have negligible impacts on soil resources.

Appendix B

Figures

For

Blue Diamond Hills Trail Reroute and Signage At Red Rock Canyon National Conservation Area

NEPA #: DOI-BLM-NV-S020-2025-0006-EA

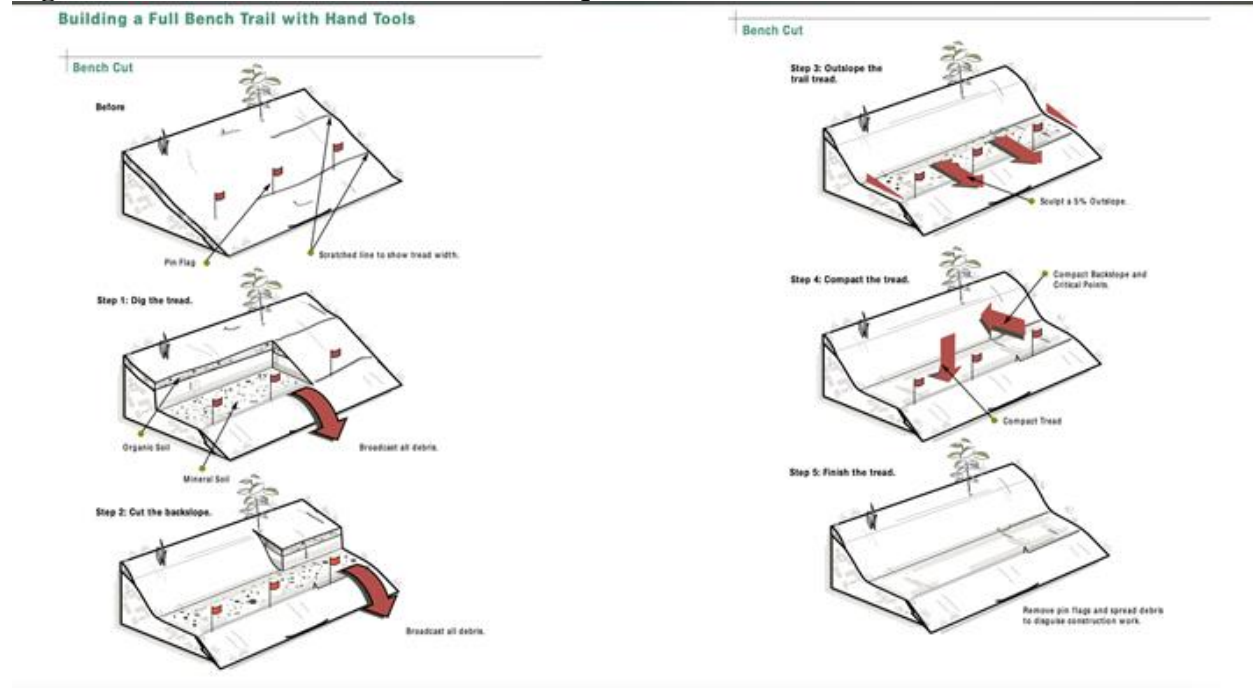
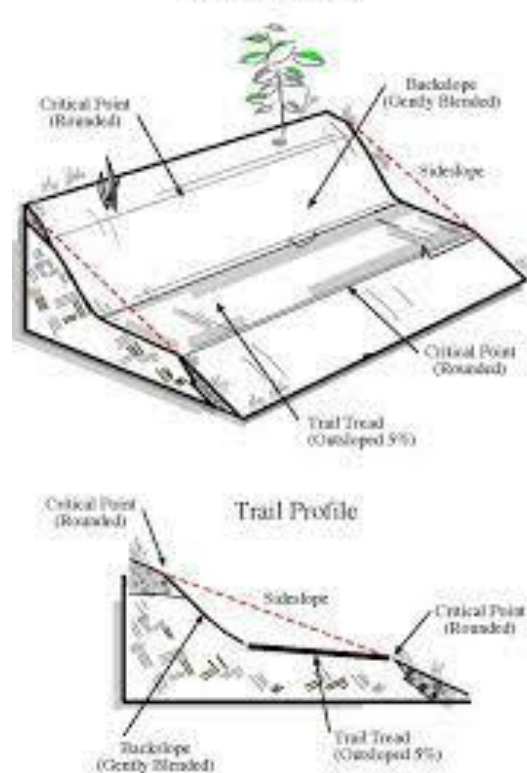
Figure 2 Full Bench Construction Technique**Figure 3 Full Bench Profile**

Figure 4 Half Rule

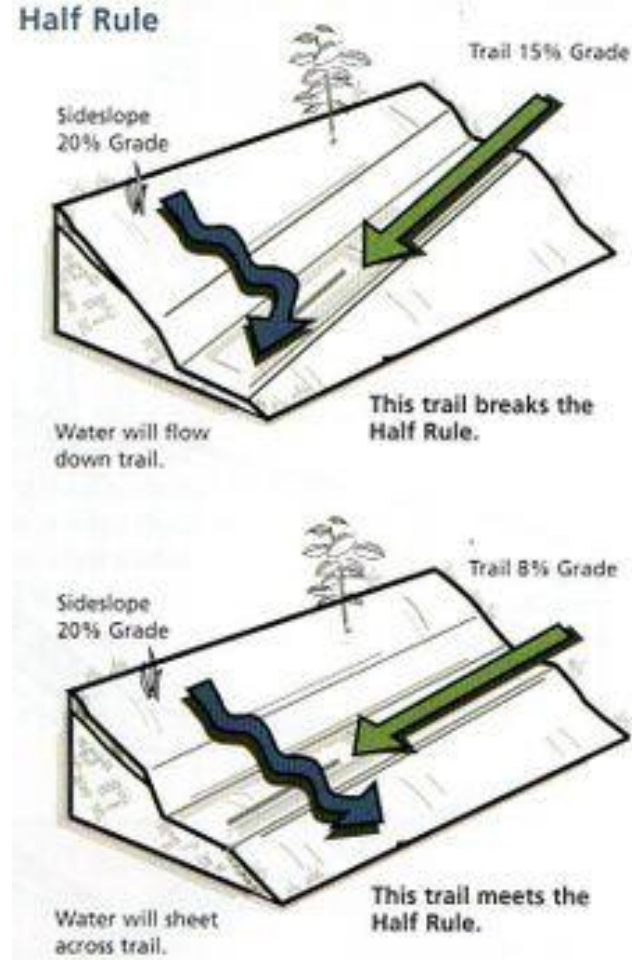


Figure 5 Grade

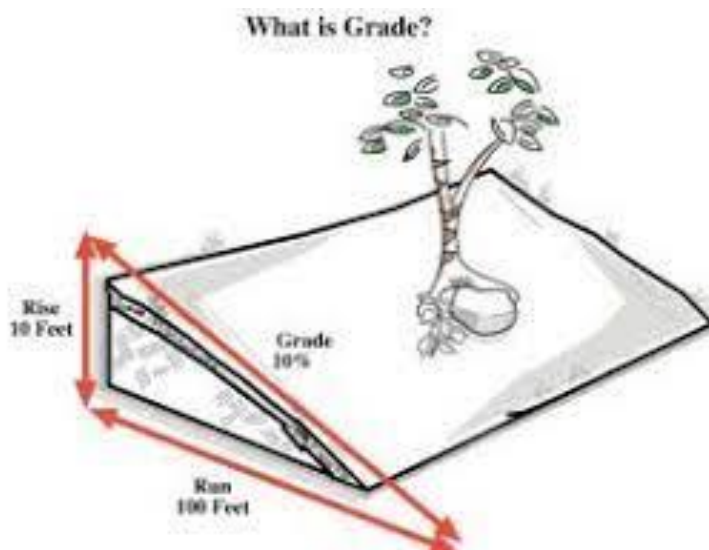


Figure 6 Outslope

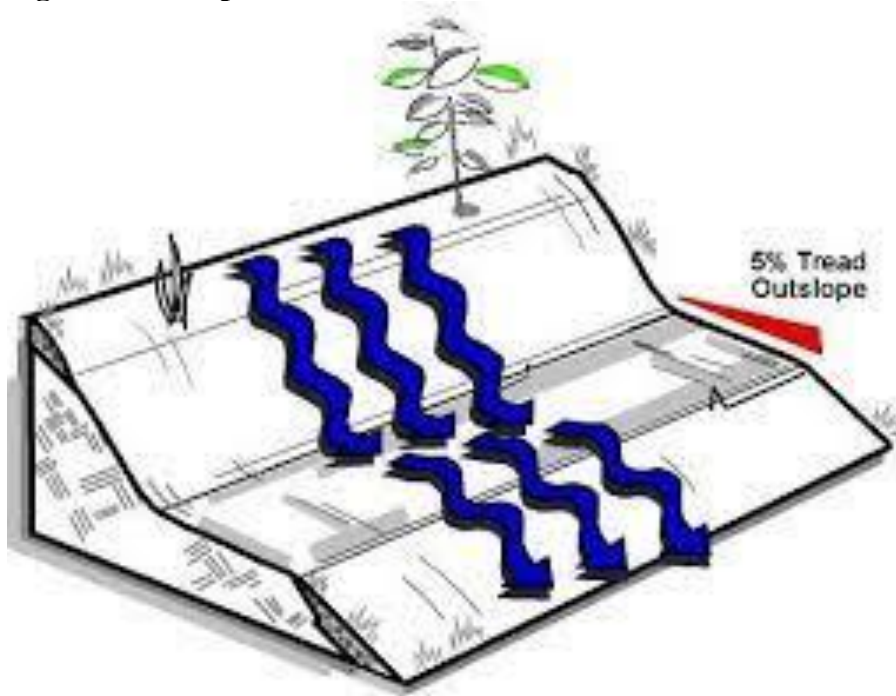
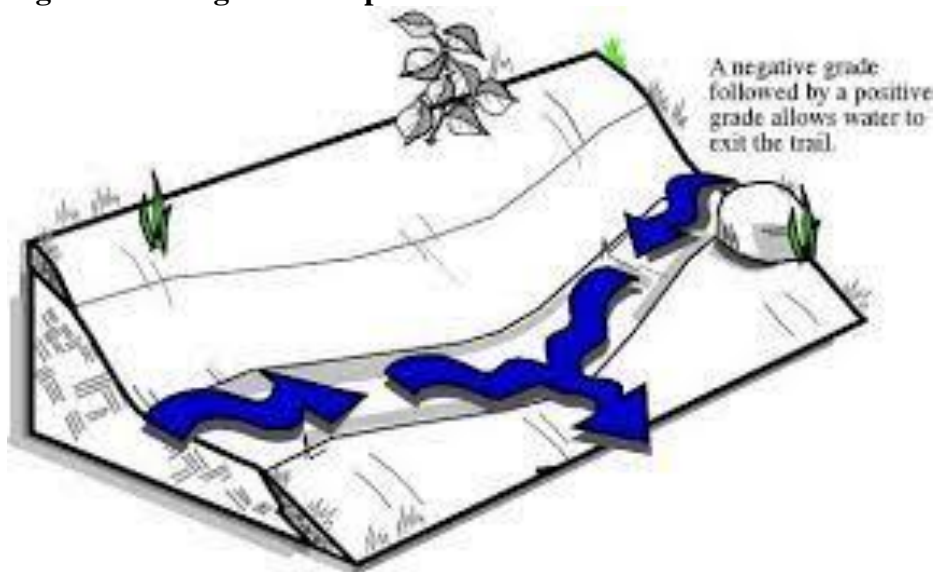


Figure 7 Rolling Grade Dip



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Appendix C

Biological Opinion Terms and Conditions

For

**Blue Diamond Hills Trail Reroute and Signage
At Red Rock Canyon National Conservation Area**

NEPA #: DOI-BLM-NV-S020-2025-0006-EA

Biological Opinion for Red Rock National Conservation Area File No. 1-5-04-F-526

Terms and Conditions for Blue Diamond Hills Trail Reroute and Signage at Red Rock Canyon National Conservation Area

DOI-BLM-NV-S020-2025-0006-EA

Section 7 Log #: NV-052-25-014

Measures Proposed to Minimize the Effects of the Proposed Action:

1. Speed limit: Within Clark County, the speed limit is 25 miles-per-hour on unposted County roads; this speed will be established for all activities at all times unless otherwise designated.
2. Vehicles: All project/event-related individuals shall check underneath stationary vehicles before moving them.
3. Vehicle traffic: Shall be restricted to existing access roads, unless otherwise authorized by BLM and the Service.
4. Litter-control: Will be implemented and enforced by the project proponent or BLM. Trash containers shall remain covered, must be raven-proof, and emptied frequently enough to prevent overflow of materials. Trash, litter, project debris, etc. shall be transferred to a designated solid waste disposal facility. Vehicles hauling trash must be secured to prevent litter from blowing out along the road.
5. Tortoise mortality/injury: BLM wildlife staff (702/515-5000) and the Service (702/515-5230) must be notified of any desert tortoise death or injury due to the project implementation by close of business on the following workday. In addition, the Service's Division of Law Enforcement shall be notified in accordance with the reporting requirements of this biological opinion.
6. Tortoise activity: The period of greatest tortoise activity is generally defined as March 1 – Oct 31. However, unseasonably warm weather and/or precipitation outside this period may result in tortoise activity, particularly by hatchling and juvenile tortoise, and thus warrant adherence to requirements established for periods of greater activity. Similarly, BLM may determine that additional measures are appropriate for projects planned for the end or beginning of either period if conditions are suitable for desert tortoises to be active.
7. Education Program: A BLM/Service-approved biologist (as defined below) shall present a tortoise education program to all foremen, workers, permittees and other employees or participants involved on projects covered under this opinion. The program will consist of either a presentation or fact sheet as determined by project level consultation between BLM and the Service. The program or fact sheet will include information on the life

history of the desert tortoise, legal protection for desert tortoises, penalties for violations of Federal and State laws, general tortoise activity patterns, reporting requirements, measures to protect tortoises, terms and conditions of the biological opinion, and personal measures employees can take to promote the conservation of desert tortoises. The definition of "take" will also be explained. Workers and project associates will be encouraged to carpool to and from the project sites. Specific and detailed instructions will be provided on the proper techniques to capture and move tortoises which appear onsite if appropriate, in accordance with Service-approved protocol. Currently, the Service-approved protocol is Desert Tortoise Council 1994, revised 1999.

8. Biologist approval: BLM and Service wildlife staff must approve the biologists to be used to implement the terms and conditions of the biological opinion, or permit issued by BLM. Any biologist and/or firm not previously approved must submit a statement of qualifications in the Service-developed format and be approved by the wildlife staff before authorized to represent BLM in meeting compliance with the terms and conditions of the biological opinion. Other personnel may assist with implementing conservation measures, but must be under direct field supervision by the authorized biologist.
9. Biologist qualifications: In accordance with Procedures for Endangered Species Act Compliance for the Mojave Desert Tortoise (Service 1992), an authorized desert tortoise biologist should possess a bachelor's degree in biology, ecology, wildlife biology, herpetology, or closely related fields as determined by BLM and the Service. The biologist must have demonstrated prior field experience using accepted resource agency techniques to survey for desert tortoises and tortoise sign, which should include a minimum of 60 days field experience. All tortoise biologists shall comply with the Service-approved handling protocol (Desert Tortoise Council 1994, revised 1999). In addition, the biologist shall have the ability to recognize and accurately record survey results and must be familiar with the terms and conditions of the biological opinion that resulted from project level consultation between BLM and the Service.
10. Tortoise in harm's way: If a tortoise is found within the project/activity site in harm's way, all potentially harmful activity shall cease until the tortoise moves or is moved out of harm's way by an authorized biologist. If a desert tortoise is in imminent danger, the tortoise shall be moved out of harm's way and on to adjacent BLM land, using techniques described in the tortoise education program.
11. Moving tortoises: Tortoises that are moved offsite and released into undisturbed habitat on public land, must be placed in the shade of a shrub, in a natural unoccupied burrow similar to the hibernaculum in which it was found, or in an artificially constructed burrow in accordance with the tortoise handling protocol. Tortoises encountered shall be treated in a manner consistent with the appropriate measures in this biological opinion.
12. Permits: All appropriate State and Federal permits, including NDOW and Service permits for handling desert tortoises or their parts, must be acquired by the tortoise biologists or other personnel before project initiation and prior to handling any desert tortoise or their parts, or conducting any activity requiring a permit.

13. Project oversight: A BLM representative(s) shall be designated who will be responsible for overseeing compliance with the reasonable and prudent measures, terms and conditions, reporting requirements, and reinitiation requirements contained in this biological opinion. The designated representative shall provide coordination among the permittee, project proponent, BLM, and the Service.
14. Desert tortoise burrows: Will be avoided whenever possible; if not, the burrow will be cleared in accordance with the measures set forth in this biological opinion.
15. Heat stress: Desert tortoises encountered experiencing heat stress will be placed in a tub, by an authorized tortoise biologist, with one inch of 76-90°F water for at least 20 minutes or until heat stress symptoms are no longer evident.
16. Temperature restrictions: Desert tortoises shall be treated in a manner to ensure that they do not overheat, exhibit signs of overheating (e.g., gaping, foaming at the mouth, etc.), or are placed in a situation where they cannot maintain surface and core temperatures necessary to their well-being. Desert tortoises shall be kept shaded at all times until it is safe to release them. No desert tortoise shall be captured, moved, transported, released, or purposefully caused to leave its burrow for whatever reason when the ambient air temperature is above 95°F (35°C). Ambient air temperature shall be measured in the shade, protected from wind, at a height of 2 inches (5 centimeters) above the ground surface. No desert tortoise shall be captured if the ambient air temperature is anticipated to exceed 95°F (35°C) before handling and relocation can be completed. If the ambient air temperature exceeds 95°F (35°C) during handling or processing, desert tortoises shall be kept shaded in an environment that does not exceed 95°F (35°C), and the animals shall not be released until ambient air temperature declines to below 95°F (35°C).
17. Reporting: The project proponent, permittee, or project lead if an internal action, must submit a document to BLM wildlife biologist within 30 days of completion of the project showing the number of acres disturbed, remuneration fees paid, and number of tortoises observed or taken, which includes capture and displacement, killed, injured, or harassed by other means, during implementation of programmatic actions.
18. Previous disturbance: Overnight parking and storage of equipment and materials, including stockpiling, shall be within previously disturbed areas or within areas cleared by a tortoise biologist to minimize habitat destruction.
19. Project boundaries: Project activity areas will be clearly marked or flagged at the outer boundaries before the onset of construction. All activities shall be confined to designated areas. When new access routes have been identified for development, routes will be flagged by the tortoise biologist prior to surface disturbance.

Proposed Measures for Actions Involving Ground Disturbance:

20. Blading of vegetation: Will occur only to the extent necessary and shall be limited to areas designated for that purpose by BLM or tortoise biologist.
21. Fees: Prior to issuance of authorization, and prior to any surface-disturbing activity associated with the proposed project, the project proponent shall pay a remuneration fee of \$1,135 for each acre of surface disturbance, if paid prior to March 1, 2026. This rate will be indexed annually for inflation based on the Bureau of Labor Statistics Consumer Price index for All Urban Consumers (CPI-U). Information on the CPI-U can be found on the internet at <http://stats.bls.gov/news.release/cpi.nws.htm>. An exception is made if the disturbance for the project is less than 0.25 acre of disturbance or for activities that result in a long-term benefit for the species (e.g., trail realignment to minimize habitat impacts). Fees shall be submitted as directed in the attached form (Attachment C).
22. Notification: The project applicant/BLM lead shall notify BLM wildlife staff at least 10 days before initiation of the project. Notification shall be made to BLM's wildlife staff representative responsible for NEPA review of the project at (702) 515-5000.
23. Clearance: All project areas, fence lines, staging areas, etc. will be cleared of tortoises by an authorized biologist immediately before the start of ground disturbance using 100-percent coverage survey techniques. During the tortoise active season, an authorized tortoise biologist will be onsite during fence construction to ensure that no tortoises are harmed. Burrows found outside the area to be disturbed will be flagged and avoided. Clearance will involve excavating nests; relocating eggs; flagging avoidable burrows; collapsing unavoidable; unoccupied burrows; and relocating tortoises in accordance with the Service-approved protocol for handling desert tortoises (Desert Tortoise Council 1994, revised 1999). If disturbance is planned to occur during a period when tortoise are not anticipated to be active, surveys may be conducted earlier as determined during project-specific consultation.
24. Fencing: The height of all tortoise-proof fencing will be a minimum of 18 inches above ground. Fencing may be permanent or temporary as determined on a project-level basis. Temporary fence design should consist of 1-inch mesh or 1-inch horizontal by 2-inch vertical mesh (hardware cloth or plastic) and be installed flush with ground. Temporary tortoise-proof fencing should not be buried unless otherwise directed by BLM. Permanent tortoise-proof fencing will consist of 1-inch horizontal by 2-inch vertical wire mesh. Where feasible, the fence will be buried 6 to 12 inches below ground. In situations where it is not feasible to bury the fence, the lower 12 inches of the fence shall be bent at a 90-degree angle towards the potential direction of encounter with tortoise and covered with cobble or other suitable material to ensure that tortoise or other animals cannot dig underneath and create gaps through which tortoises may traverse.
25. Clearance following fence construction: Prior to the commencement of project activities, all desert tortoises shall be removed from the site. An authorized biologist shall oversee the survey for and removal of tortoises using techniques providing 100-percent coverage of all areas. Two complete passes of 100-percent coverage will be accomplished. If on

the second pass, additional tortoises are encountered, a third pass will be conducted. Clearance of the fenced area will involve activities described in Measure 23 above.

During Ground Disturbing Activities:

26. Fence inspection/maintenance: Fencing will be inspected daily and zero clearance will be maintained between the bottom of the fence and the ground and to ensure any bent portions are properly covered. Additional monitoring and maintenance shall include regular removal of trash and sediment accumulation and checking for rodent damage or other breeches when using temporary tortoise proof fencing.
27. On-site biologist: Unless the area has been fenced and cleared, or the Service and BLM have determined an onsite biologist is not necessary through project-level consultation, the project will require an authorized biologist(s) onsite for project construction during the period of greatest tortoise activity (e.g., March 1 through October 31), and on-call at other times.

Following Termination of Ground Disturbing Activities:

28. Fence removal: Temporary fencing will be removed at the end of the construction activity. Permanent fencing may be removed upon termination and reclamation of the project, or when it is determined by BLM and the Service that the fence is no longer necessary.
29. Restoration: Temporary disturbance areas will be restored in accordance with the restoration protocols for the project.

Proposed Measures for Activities that Involve Maintenance or Modification of Existing Sites and Limited to Existing Disturbed Areas Adjacent to Tortoise Habitat:

30. Clearance- barren/unsuitable areas: All project areas that are barren or unsuitable for tortoises but occur adjacent to creosote-bursage or Mojave mixed scrub vegetation, will be cleared by an authorized biologist before the start of maintenance or modification using 100-percent coverage survey techniques no more than 3 days before the initiation of construction. Areas within blackbrush will be cleared only if reconnaissance surveys reveal tortoise sign within the project area.
31. Fence high-risk areas: If activities are expected to occur during the tortoise active season, and it is determined there is a high risk to tortoises (e.g., a tortoise has been found within 1,000 feet of the project area or heavy machinery is used), the project area will be fenced with tortoise-proof fencing in accordance with Measures 23, 24, 25, 27, and 31 above.
32. On-site biologist: Unless the project area has been fenced and cleared; a survey has been conducted and determined that no tortoises or active burrows are within 1,000 feet of the project area; or the Service and BLM have determined an onsite biologist is not

necessary, the project will require an authorized biologist(s) onsite for project construction during the period of greatest tortoise activity (e.g., March 1 through October 31), and on-call at other times.

Proposed Measures for Commercial or Competitive Events, Film, Research/Monitoring Permits:

- 33. Unauthorized introductions: *Not applicable.*
- 34. Existing disturbance: *Not applicable.*
- 35. Marking/infrastructure: *Not applicable.*
- 36. Removal of materials: *Not applicable.*
- 37. Compliance: *Not applicable.*
- 38. Reports: *Not applicable.*
- 39. Provide data: *Not applicable.*
- 40. Weed-free hay: *Not applicable.*
- 41. Temporary water troughs: *Not applicable.*
- 42. Staging/veterinarian checks, etc.: *Not applicable.*

Proposed Measures for Restoration Activities and Mechanical Weed Treatments:

- 43. Clearance: All sites including cross-country access routes and staging areas, will be cleared in accordance with Measure 23 and/or 30.
- 44. On-site biologist or fence/clearance: For restoration actions and weed treatment when mechanical treatments are employed, an authorized biologist must be present during periods of tortoise activity (generally from March 1 through October 31) to ensure that desert tortoises are not inadvertently harmed. As an alternative to having a biologist onsite, the area may be temporarily fenced with tortoise-proof fencing. If temporary fencing is constructed, the fence line shall be surveyed by a tortoise biologist before construction of the fence. The area within the fence will be surveyed for, and cleared of, desert tortoises after construction of the fence to ensure that no tortoises are trapped inside the fence.
- 45. Project access, vehicles: All vehicle traffic will be restricted to existing access roads where possible. New access routes will be created only when absolutely necessary and disturbance will be minimized by using the minimum tool needed for the job (i.e., the bobcat would result in less surface disturbance driving into a site than would the

backhoe). If no access to the site exists, it would not be treated or restored unless it is a hazard to desert tortoises (e.g., pits or holes which may trap animals).

Proposed Measures for Wild Horse and Burro Management Activities:

- 46. Vehicles, access roads: *Not applicable.*
- 47. Habitat: *Not applicable.*
- 48. Habitat: *Not applicable.*
- 49. Utilization: *Not applicable.*
- 50. Trap sites: *Not applicable.*
- 51. Management objectives: *Not applicable.*
- 52. Disturbances: *Not applicable.*

Proposed Measures for Wildlife Management Activities:

- 53. Vehicles, access: *Not applicable.*
- 54. Disturbance: *Not applicable.*

Limitations and Standard Operating Procedures for Casual/Dispersed Recreation:

- 55. SRPs: *Not applicable.*
- 56. Mountain bikes: *Not applicable.*
- 57. Equestrian use: *Not applicable.*
- 58. New trails: *Not applicable.*
- 59. Trail monitoring: *Not applicable.*
- 60. Cross-country travel: *Not applicable.*

Attachment 1 SECTION 7 LAND DISTURBANCE FEE PAYMENT FORM

Biological Opinion File Number: 1-5-04-F-526
Biological Opinion Issued By: Nevada Fish and Wildlife Office, Reno, Nevada
Species: Desert Tortoise (*Gopherus agassizii*) (Mojave population)
Project Name: Blue Diamond Hills Trail Reroute and Signage at Red Rock Canyon National Conservation Area
NEPA #: DOI-BLM-NV-S020-2025-0006-EA
Case File/Serial #:
BLM Sec 7 log: NV-052-25-014
Project Proponent: BLM
Phone Number:

Payment Calculations:	Clark County		County		County	
	Critical habitat	Non-critical habitat	Critical habitat	Non-critical habitat	Critical habitat	Non-critical habitat
# acres anticipated to be disturbed on federal land	0	<0.25				
Fee rate (per acre)	1135	1135				
Total cost/habitat type (per county)	\$ 0	\$ 0	\$ -	\$ -	\$ -	\$ -
Total cost per county	\$ 0		\$ -		\$ -	

Total payment required (all counties): \$ 0

Amount paid: _____ **Date:** _____ **Check/Money Order #:** _____

Authorizing agencies: Bureau of Land Management, _____ Las Vegas, _____ Nevada

Make check payable to: Bureau of Land Management

Deliver check to: **Physical Address**
 Bureau of Land Management
 4701 N Torrey Pines Drive
 Las Vegas, NV 89130

Credit Card Payments: Contact BLM Southern Nevada District Office at 702-515-5000

Process check to:

Contributed Funds-All Other
WBS: LVTFFX000800

Remarks: LLNV934000 L71220000.JP0000 LVTFFX000800
Desert Tortoise Conservation Program

