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

BLM

Land Speed Record Challenger
North American Eagle, Inc.
Diamond Valley, Eureka County, Nevada

Final Environmental Assessment
DOI-BLM-NV-B010-2016-0018-EA

Preparing Office

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1.0 Introduction

This Environmental Assessment (EA) describes potential impacts of issuing a Special Recreation Permit (SRP) for the purpose of testing a land speed vehicle by North American Eagle, Inc. (NAE). NAE proposes to conduct Land Speed Record (LSR) attempts on the alkali flat of Diamond Valley, Eureka County, Nevada, using a vehicle equipped with a jet engine. The LSR would occur when the Playa is driest, ideally between late September and mid-October 2017. A Description of Proposed Action and Alternatives (DOPAA) was provided to the U.S. Bureau of Land Management (BLM), Battle Mountain District Office (BMDO), as part of an application to obtain an SRP to conduct land speed trials and activities. The project area would encompass approximately 2,502.1 acres entirely within the Mount Lewis Field Office (MLFO). Approximately 2,488 acres of the project area may experience ground disturbance. The Proposed Action is located in Sections 3 and 4 of Township (T) 23 North (N), Range (R) 53 East (E); Sections 2, 10, 11, 14, 15, 22, 23, 27, 33, and 34 of T24N, R53E; Sections 1, 9, 10, 11, 12, 13, 23, 24, 25, 26, and 35 of T25N, R53E; Section 6 of T25N, R54E; Section 36 of T26N, R53E; and Sections 19, 20, 29, 30, and 31 of T26N, R54E.

Project Area

The Proposed Action is within the administrative boundary of the BLM Battle Mountain District (BMD) in Nevada. This is within the Basin and Range Physiographic Province created by geological forces that resulted in topography characterized by abrupt changes in elevation with north-south trending mountain ranges alternating with low flat arid valleys or basins.

NAE wishes to utilize the alkali flat (Playa) in Diamond Valley, Eureka County, Nevada (Figure 1-1). The Project Area is located approximately 25 miles north of the town of Eureka. Diamond Valley is roughly elliptically-shaped, elongated in a northerly direction. The Sulphur Spring Range bounds the valley to the west, while the Diamond Mountains bound it to the east. The valley's southern end terminates in the Fish Creek Range south of Eureka, and the northern extent stretches to Garcia Flat and the Diamond Hills. The Playa or alkali flat is located towards the northern end of the valley at its lowest elevation and covers an area roughly 50,000 acres in size. The Playa is an area of flat, dried-up land, especially a desert basin from which water evaporates quickly. The Playa has an elevation nearly constant at 5,768 feet above mean sea level (amsl). Figure 1-2 shows the Project Area for the Proposed Action.

1.1 Purpose and Need for Action

The purpose of the Federal action is to respond to a request for a SRP to conduct LSR attempts on public lands administered by the BLM BMDO on portions of the Playa of Diamond Valley, Eureka County, Nevada. The BLM's action is to deny, approve, or approve with conditions an SRP for NAE's proposal.

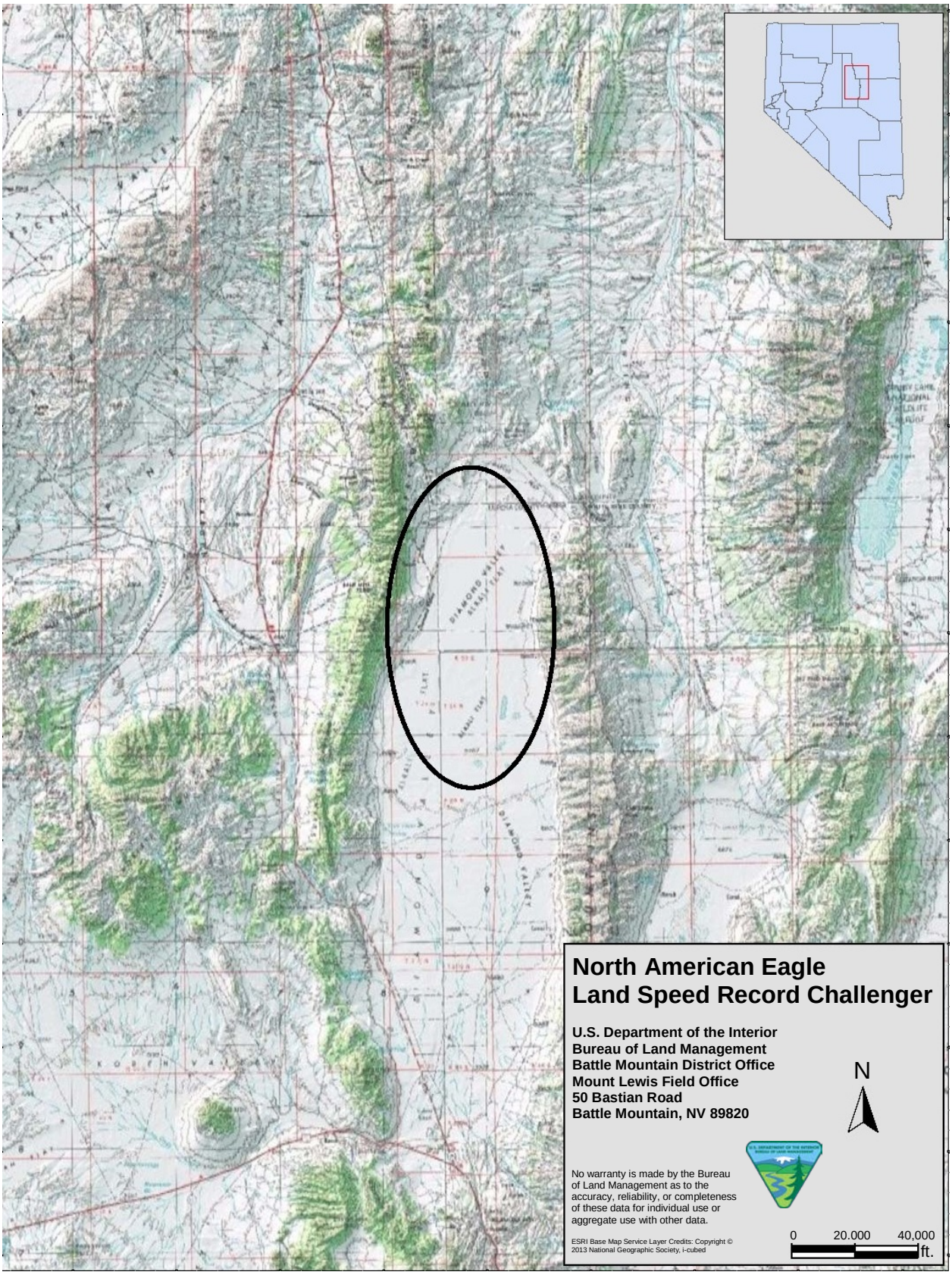

Figure 1-1: NAE Land Speed Record Location and Vicinity Map

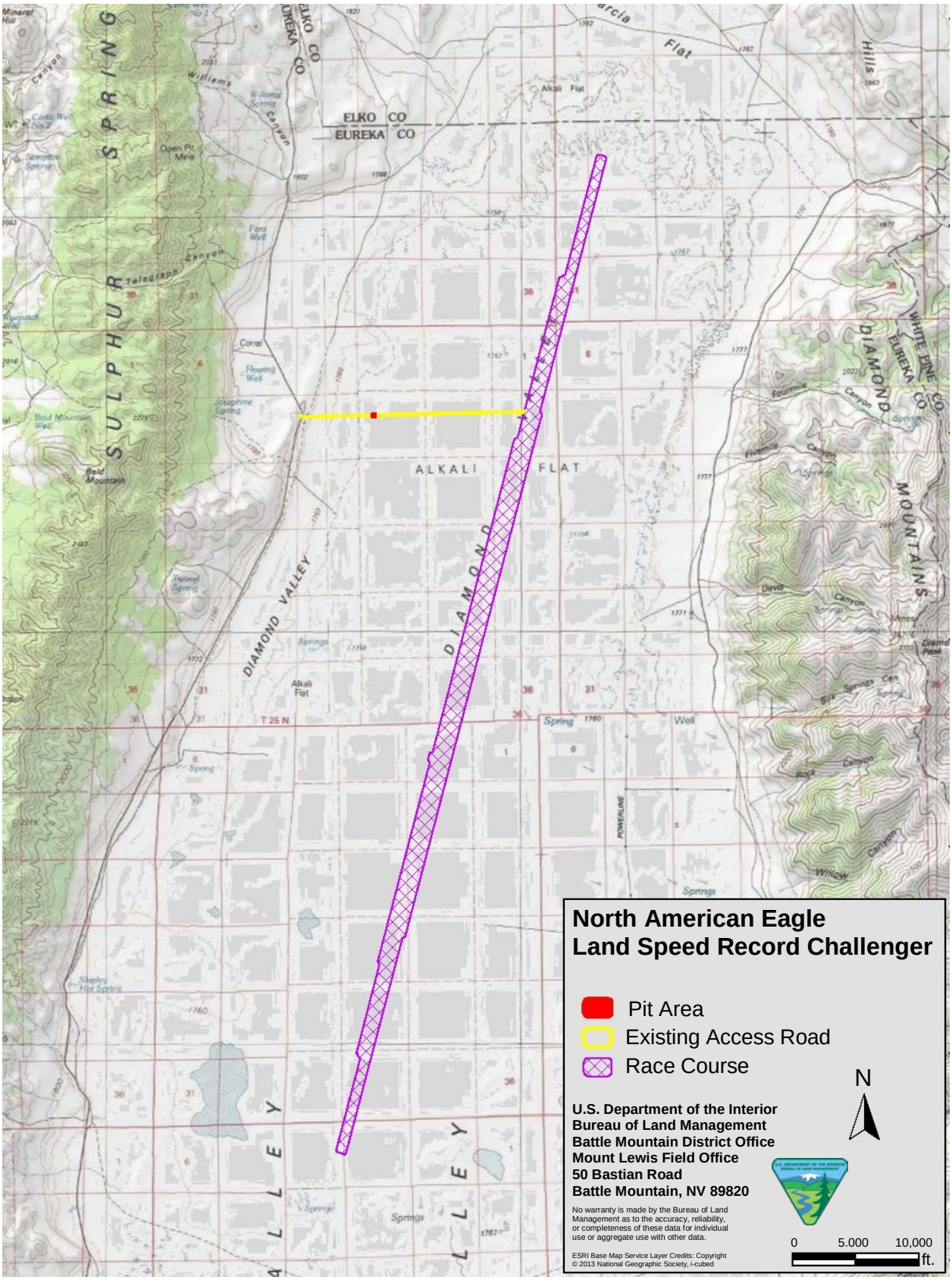

Figure 1-2: NAE Land Speed Record Location and Proposed Action

The need for action is established by the BLM's responsibility to respond to the request as authorized under 43 Code of Federal Regulations (CFR) 2930 Permits for Recreation on Public Lands and BLM Handbook H-2930-1 Recreation Permit Administration[1].

1.2 Decision to be Made

The decision to be made is whether or not the BLM will issue a SRP to NAE to conduct land speed record activities on the Playa, and if so, under what terms and conditions. The Mount Lewis Field Office Manager is the Authorized Officer and responsible official who will decide which alternative analyzed in the EA best meets the purpose and need for action based on the interdisciplinary analysis presented here. The decision will specify all terms and conditions intended to mitigate any regulatory or environmental effects of the Proposed Action.

1.3 Public Scoping Issues Identified

The interdisciplinary team identified the supplemental authority elements and other resources to be addressed in this document, as outlined in Section 3.2. Additionally, Appendix B provides copies of the Native American coordination letters and public comments received during the project outreach process.

The Nevada State Clearinghouse is the single point of contact for National Environmental Policy Act (NEPA) proposals statewide. Pursuant to NEPA, federal agencies must consult with the state and other agencies whenever a project or policy initiative is proposed on public lands. The Clearinghouse ensures that pertinent state agencies and other local governments are notified about the projects and then provides their comments back to the federal agencies to help facilitate the consultation process.

1.3.1 Relevant Issues

Key issues and concerns identified during the scoping process for this project include the following:

- Air Quality
- Cultural Resources
- Hazardous Waste
- Land Use
- Mineral Resources
- Noise
- Plants and Animals

[1] BLM 2014

- Public Services/Emergency Response
- Rangeland Resources
- Recreation
- Socioeconomics
- Soils
- Visual Resource Management
- Wetlands/Riparian Areas
- Wild Horses and Burros

1.4 BLM Responsibilities and Relationship to Planning

The BLM is required to comply with NEPA to analyze the impacts the Proposed Action and potential alternatives would have on the human environment. Resources analyzed include the standard required Critical Elements of the Human Environment, as defined by BLM, as well as additional issues identified by BLM staff. The scope of analyses is based on the requirements of the NEPA and the additional resources were identified by BLM staff.

1.4.1 Conformance to Plans, Statutes, and Regulations

The public lands administered by the BLM within the proposed project area and the surrounding vicinity are managed in accordance with the BLM's Shoshone-Eureka Resource Management Plan (RMP) of 1984[2] and approved in the Record of Decision of 1986[3] and the BLM's Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan Amendment (ARMPA) of 2015[4].

The RMP complies with the Federal Land Policy and Management Act (FLPMA) of 1976. This Proposed Action falls under the RMP section "Management Actions Not Expressly Addressed by the Resource Management Plan." Therefore, it is not inconsistent with the RMP and this EA has been prepared in conformance with the policy guidance provided in the BLM's NEPA Handbook (H-1790-1)[5]. The Proposed Action and alternatives shall be consistent with Federal, State, and local law, regulations, and plans.

The ARMPA amends all BLM land use plans in the area addressed, including the Shoshone-Eureka RMP. It identifies management decisions in order to conserve, enhance, and restore greater sage-grouse habitat.

[2] BLM 1984
[3] BLM 1986
[4] BLM 2015
[5] BLM 2008

Under the ARMPA, mapped habitat for greater sage-grouse is designated as Sagebrush Focal Area (SFA), Priority Habitat Management Area (PHMA), General Habitat Management Area (GHMA), or Other Habitat Management Area (OHMA). The Proposed Action includes small areas of GHMA and mostly areas of OHMA. The following Management Decisions (MDs) for Recreation are applicable:

> **MD REC 1:** Review Objective SSS [special status species] 4 and apply MDs SSS 1 through SSS 4 when analyzing projects and activities proposed in GRSG [greater sage-grouse] habitat.
>
> **MD REC 2:** Allow special recreation permits in PHMAs and GHMAs only if their effects on GRSG and its habitat are neutral or result in a net conservation gain.

Guidance and procedures for management and treatment of resources conforms to the following plans, statutes, and regulations:

- American Indian Religious Freedom Act of 1978 (42 USC 1996)
- BLM Shoshone-Eureka Resource Management Plan, as amended (2002)
- Bald and Golden Eagle Protection Act of 1940, as amended (16 USC 669-668d)
- Clean Water Act of 1977 (33 USC 1251 et seq.)
- Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (42 USC 9615)
- Diamond Valley Weed Control District (NRS [Nevada Revised Statutes] 555.202)
- Eureka County Master Plan, as amended (2010)
- Eureka County Water Resources Master Plan (2016)
- Executive Order 11988, Floodplain Management, as amended (1977)
- Executive Order 11990, Protection of Wetlands (1977)
- Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks (1997)
- Executive Order 13112, Safeguarding the Nation from Impacts of Invasive Species (1999)
- Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds (2001)
- Federal Land Policy and Management Act of 1976 (Pub.L. [Public Law] 94-579)
- Migratory Bird Treaty Act of 1918 (16 USC 703-711)
- National Environment Protection Act of 1976 (42 USC 4321)

- National Historic Preservation Act of 1966, as amended (16 USC 470 et seq.)
- Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan Amendment (2015)
- Resource Conservation and Recovery Act of 1976 (42 USC 6901 et seq.)
- Safe Drinking Water Act of 1977, as amended (42 USC 300f et seq.)

All BLM documents referenced in this EA are available for review at the BMDO during normal business hours.

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Chapter Two: Management Alternatives

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2.0 Introduction

This chapter will discuss the management alternatives analyzed in this programmatic environmental assessment. NEPA requires that all reasonable alternatives be explored and evaluated. In addition, alternatives that are eliminated from detailed study must be identified along with a brief discussion of the reasons for their elimination. For the purposes of this discussion, an alternative was considered "reasonable" only if it met these criteria. The two management alternatives analyzed are:

Proposed Action – Land Speed Record Attempt

Under this alternative BLM would issue a SRP to NAE to conduct land speed tests on the Playa of Diamond Valley, Eureka County, Nevada. The tests would utilize a vehicle equipped with a jet engine. The testing is to verify handling characteristics, aerodynamic characteristics, and gather data to validate computer simulations created by the NAE aerodynamics team.

No Action Alternative

Under this alternative no actions would be taken and the BLM would not issue a SRP to NAE.

2.1 Proposed Action: Land Speed Record Attempt

NAE proposes to conduct LSR activities on the Diamond Valley Playa with the purpose of setting a new LSR. This landform provides features uniquely suited to the Proposed Action including: an area of sufficient length for vehicle runs that could reach or exceed 800 miles per hour (mph); limited access points to the Playa, which is desirable for security and safety purposes; and soil conditions that are suited to this type of event.

For LSR attempt racing, the criteria are:

- The track should be flat, dry, and firm so that speeds in excess of 600 mph can be attained;
- The track should be unobstructed, have a nearly unmodified surface, and allow for safety-related control of other users at the time of the Proposed Action;
- Weather conditions should be clear with acceptably low wind speeds;
- A margin of safety along the ends of the track should be at least 2 miles; and
- A designated access route onto the Playa.

2.1.1 Vehicle Description

The vehicle that would be used to make LSR attempts would be equipped with a jet engine that would be timed for certified speed results, with the ultimate goal of at least 600 mph. The vehicle is 56 feet long with a 7-foot

wide body and weighs 14,000 pounds (lbs). The chassis is from an F-104 A-10 Star fighter with NAE design suspension and systems integration. The front, singular wheel is housed within the vehicle body and the rear two wheels protrude from the vehicle body and are 11 feet 6 inches apart. Tires are solid aluminum and are 6 inches wide. The engine has been recorded at full power at 120 A-weighted decibels (dBA); however, full power is limited to small segments of time lasting less than 120 dBA. At a distance of 1 mile, sound level decrease to 51.6 dBA, and to less than 30 dBA at 4.35 miles away. When starting out, the driver applies only partial throttle to avoid material getting caught up in the engine. At full throttle, the engine emits a 25-foot flame. After the vehicle comes to a stop, a tow dolly would be used to turn the vehicle around or tow it back to the "pit" area.

2.1.2 Course Description

The proposed race course would be approximately 15.6 miles long and 0.25 miles wide, or 2,487.1 acres. The length would allow for 5 miles of acceleration, 1 mile timed section, and 5 miles of deceleration. The remaining 2 miles on each end would provide a margin of safety for the vehicle and driver if additional deceleration distance would be needed. The proposed track would be at a 12-degree angle on the Playa, with a travel direction being from north to south. Trial runs will only be conducted during low to no-wind conditions, which is generally in the early morning hours.

Removal of pebbles and larger rocks by NAE personnel would be conducted by hand from the course area. Grading or compacting the Playa surface would not be necessary. Course markers are temporary banners made of polyvinyl chloride (PVC) pipe and orange plastic fencing and fastened to the surface with tent stakes. The markers are indicators for each mile of the track. At each quarter mile, there would be an orange highway pickle cone held in place by a heavy rubber base. The markers would leave no trace after removal. Marking the Playa would be temporary (i.e., no permanent features or facilities would be constructed). The actual timing system is done by satellite positioning through Global Navigation Satellite System, therefore there would be no need for timing lights, timing personnel, or timing tower. Upon completion of the NAE research project, all marker cones, mile marker signs, and other associated course material will be removed from the Playa.

The course would be on soil consisting of mostly stratified clay, silty clay or silty clay loam at least 60 inches deep. The soil is strongly saline-alkali affected and supports little to no vegetation.[6] The NAE vehicle weighs 14,000 lbs with an estimated 129.6 lbs per square inch (psi) of pressure. The course would be used when the soils are at their driest, which would make the soils more resistant to compaction. Additionally, NAE would not use the same path on the course twice and would run subsequent tests

[6] Archer 1980

adjacent to previous runs. Tracks left by the NAE vehicle would be 1 inch or less in depth and would barely break through to hard crust of the surface of the Playa. The Playa exhibits large, polygonal cracks on the surface when it is dry, indicating a high shrink-swell potential and high frost action.[7] The greater the shrink-swell potential and freeze/thaw cycles, the lower the duration of compaction. The Playa surface would be subject to the effects of the natural weathering cycle, which would remove any traces associated with the Proposed Action (i.e., vehicle tracks across the Playa surface). Figure 2-1 shows an example of tracks left by the NAE vehicle on the Alvord Desert in Oregon, an alkali flat similar to Diamond Valley.

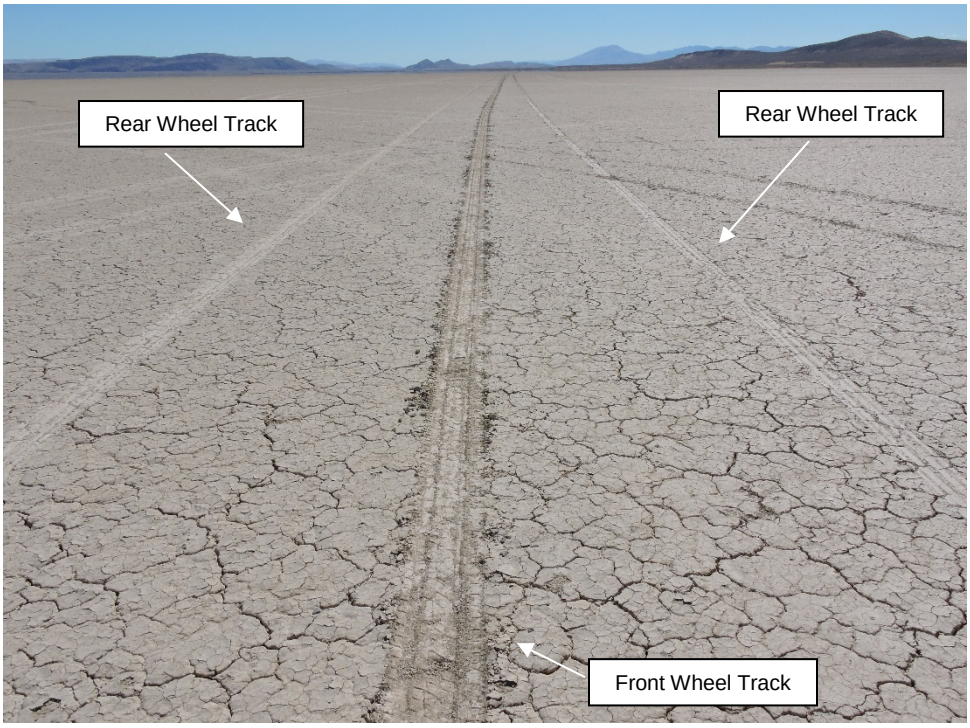

Figure 2-1: Example of Tracks Made by the NAE Vehicle on the Alvord Desert, Oregon

2.1.3 Access

Access to the Playa would be a well-used route by local ranchers and recreationalists to enter or cross the Playa from the Sadler Brown Road to the west. This road will provide access to the lakebed and proposed course, a distance of approximately 3.3 miles. The route currently consists of a 20-foot wide dirt road that becomes several parallel tracks up to 125 feet wide once it reaches the Playa. This 14.1-acre route would not need modification or improvement during the Proposed Action.

[7] Archer 1980

2.1.4 Staff Accommodations

The NAE team would unload and setup a pit area along the access road to the Playa. The pit area would consist of an area 200 by 200 feet (0.9 acres) centered on the access road to accommodate 10 to 12 campers, support vehicles, a semi-truck with a transporter trailer, and safety and communication operations.

The surface of the work area of the pit area would be covered by a heavy vinyl, 110 by 30-foot, liquid-proof floor mat. Once the vinyl floor mat is in place, the transporter trailer and the support trailer would be parked at opposite edges of the mat to help hold the mat in place. Kerosene used as a fuel would be stored in 55-gallon barrels inside the transporter trailer on fuel absorbent mats. Any fuel spilled would be contained immediately through the use of Environmental Protection Agency (EPA)-approved fuel mats with raised edges and a large enough area to capture any spilled fuel. Two temporary tents would be set up for NAE team comfort and feeding. This are would include folding chairs and trash bins with lids. Portable toilets would be set up on the opposite side of the transporter trailer and ratcheted tie-downs would secure the portable toilet structures to the trailer.

A specific area would be designated for those who would be camping at the compound. This area would be near the support trailer and consist of personal vehicles and motorhomes. Room and board for the rest of the NAE team would be provided by commercial operations in Eureka.

Upon completion of the NAE research project, the pit area would be swept clean. Figures 2-2 and 2-3 show the pit area set up on the Alvord Desert in Oregon; a similar set up would be used on the Diamond Valley Playa. Figure 2-4 presents the schematic plan of the pit area for this Proposed Action.

2.1.5 Schedule and Operations

The length of time for the LSR testing would occur over a two-week period. The first few days would be dedicated to cleaning the course of foreign objects and checking the surface for consistency. Trial attempts would occur when the Playa is driest, ideally between late September through mid-October 2017. Actual blocks of time would be dependent on weather, Playa wetness, and readiness of the LSR vehicle. The number of anticipated runs is from one to four per day. Speed runs are normally conducted in the morning hours, when wind is at its lowest. Wind speed and direction would be monitored and runs would only be conducted during low to no wind movement.

Figure 2-2: NAE Pit Area on the Alvord Desert, Oregon

Figure 2-3: NAE Pit Area on the Alvord Desert, Oregon

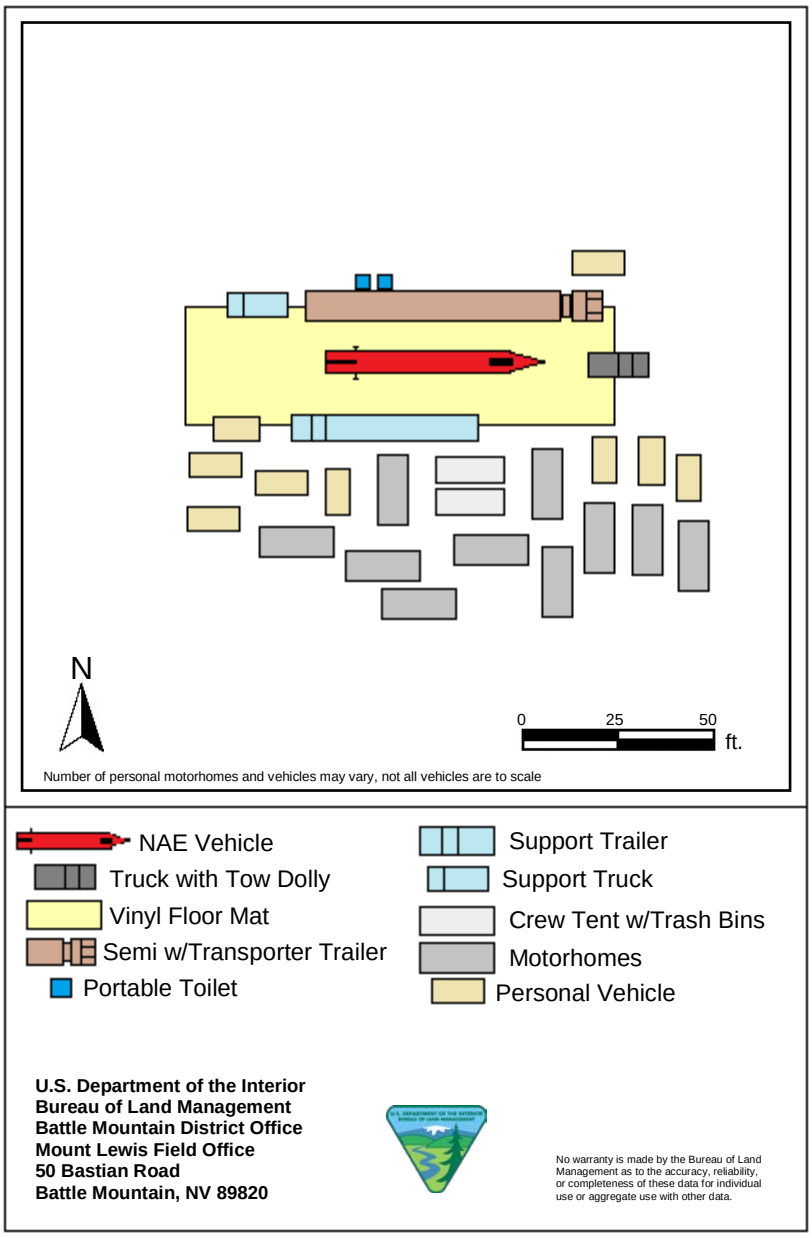

Figure 2-4: Schematic of NAE Pit Area for the Proposed Action

The daily schedule of operations would begin with a safety and work plan meeting with mandatory attendance by all team members and any observers. On days of scheduled test runs, a complete surveillance of the lakebed would be conducted by course marshals to ensure there are no campers or spectators located within the area of operation. A minimum of three hours prior to a run, NAE personnel would sweep the Playa to encourage all people and equipment not affiliated with the LSR activities to stand by and not cross the course way until the run event is completed.

Officers from the BLM and the Eureka County Sheriff's Department would be notified regarding trial run/race schedules and other important developments. On dates of runs, NAE personnel would be positioned at various locations along the course to monitor wind speed and direction and other safety considerations.

2.1.6 Communications

A coordination meeting would take place shortly after the arrival of the NAE team for each practice session or record-attempt session to coordinate radio communications between NAE, the Regional Emergency Medical Services Authority (REMSA), local law enforcement, and BLM personnel. A center or base station located at the pit area would monitor all radio frequencies. A frequency common to all entities would be established, and a protocol would be developed to ensure clear communication and to clear the channel for priority and emergency messages.

Communications for all team members would primarily be via FM radio with a designated HAM frequency for the duration of the testing session. Radios would be assigned to key individuals for monitoring and distribution of information throughout each day. The radio onboard the NAE land speed vehicle would have both single-sideband communications and ground to air radio communications. A center or base station would be located at the pit area and would monitor all radio frequencies. A clear protocol would be established and developed to ensure clear communication and to a focal point for all priority and emergency messages. Off-site communications will be via cellular telephone service.

2.1.7 Sanitation Facilities/Trash Control

NAE would provide rented portable toilets for the pit area. These would be maintained regularly by the rental company.

The NAE team would also place small trash cans with lids as needed at the pit area. NAE personnel would be responsible for servicing these trash cans and black trash bags, including transporting accumulated trash to the local waste disposal area in Eureka.

2.1.8 Safety Including Fire Protection

A clearly defined chain of command would be established for proposed NAE operations on the Playa. Law enforcement services have been offered to the NAE team by the Eureka County sheriff. If, for any reason it is deemed necessary, the sheriff of Eureka County will be contacted for support. Importantly, NAE team members would ensure that all the following are satisfactory before any run can take place:

- All support personnel (those not directly involved with the vehicle, timing, safety, or security) would be asked to move to safe zones on the edge of the Playa.
- Emergency equipment would be staged at both ends and at the center point of the track in order to be ready for response.
- All access points to the race course area would be monitored.
- All traffic would be stopped long enough to allow dust to settle or dissipate.
- Wind conditions over the entire race course would be within acceptable limits.

The following precautionary measures would be taken to prevent wildland fires:

- All vehicles would carry fire extinguishers.
- Adequate firefighting equipment, i.e., shovel, pulaski, extinguisher(s), and/or an ample water supply would be kept on hand.
- Vehicle catalytic converters would be inspected often and cleaned of all brush and grass debris.
- Welding operations would be conducted in an area free from vegetation. An ample water supply and shovel would be on hand to extinguish any fires created from the sparks. Extra personnel would be at the welding site to watch for fires created by welding sparks.
- NAE would have a fire watch during trial times plus meet the industrial fire precaution level (IFPL) requirements.
- Wildland fires would be reported immediately to the BLM Central Nevada Interagency Dispatch Center at (775) 623-3444.
- When conducting operations during the months of May through September, NAE would contact the BLM BMDO, Division of Fire and Aviation at (775) 635-4000 to find out about any fire restrictions in place for the area of operation and to advise the office of approximate beginning and ending dates for activities.

The following would be provided for fire protection of the race vehicle:

- Fire protection would be provided by two fire trucks equipped with an 80-gallon per minute, Class B, aqueous firefighting foam (AFFF), self-powered unit capable of extinguishing a spill or fire of all fuel on site including the car at a level range of 50 feet.
- Fire personnel would be equipped with standard rescue gear and fire suits.
- Fire truck and personnel would also be equipped with rescue cutting equipment suitable for the cockpit of the car.

2.1.9 Applicant-Committed Biological Environmental Protection Measures

NAE would commit to the following Environmental Protection Measures (EPMs) to prevent unnecessary or undue degradation to biological resources during the Proposed Action. To minimize or avoid potential impacts to fish, aquatic invertebrates, wildlife, special status species, migratory birds, raptors, and great sage-grouse that may occur in the Proposed Action area, mitigation measures would need to be implemented. These mitigation measures include:

Fish, Aquatic Invertebrates, and General Wildlife

- No riparian areas, wetlands, streams, or springs would be disturbed by the Proposed Action. All NAE proposed actions would take place when the Playa is dry.
- Limited compaction of the soil would take place. The course would be used when the soils are at their driest, which would make the soils more resistant to compaction. Additionally, NAE would not use the same path on the course twice and would run subsequent tests adjacent to previous runs.
- The proposed ground disturbance would occur in areas devoid of vegetation; therefore, no vegetation would be disturbed, destroyed, or removed by the Proposed Action. In addition, NAE would implement actions outlined in the Prevention Schedule and Best Management Practices published by the BMDO to prevent the spread of invasive non-native plants. NAE would also follow all applicable state and federal laws and regulations to prevent and suppress wildfires.
- A speed limit of no more than 1,500 mph would be utilized by NAE along the course.
- The Playa surface will be protected from hazardous waste spills by a heavy vinyl, liquid-proof floor mat.

Birds of Prey (Raptors)

- If LSR activities would occur during raptor nesting season (March 1 through July 31), a pre-clearance survey would be required by a qualified wildlife biologist within a 14-day period prior to anthropogenic activities and to determine status of any nest. If nests are found, a protective buffer zone would be established (depending on the species) by the biologist until the young birds are fledged. If the Proposed Action does not occur within 14 days of the migratory bird survey, then another survey would be necessary.

- NAE personnel will follow protections under the Bald and Golden Eagle Protection Act (BGEPA) of 1940, as amended, which prohibit the direct or indirect take of an eagle, eagle part or product, nest, or

egg. The term “take” includes “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb.”

BLM Sensitive Status Species

- No critical habitat has been identified within the Proposed Action.
- No special status or BLM sensitive status plant, fish, or wildlife species have been identified within the Proposed Action.
- No burrows or nests would be disturbed, destroyed, or removed during the Proposed Action.
- No LSR attempts would be made in the evening when bats and other nocturnal species are most active. No bat hibernacula or maternal roost sites were identified with the Proposed Action.

Migratory Birds

- NAE personnel will follow protections under the Migratory Bird Treaty Act of 1918, which prohibits take of any migratory bird and any action that might impact the breeding adults, the active nest, the eggs, and the nestlings until the fledge from the nest.
- If LSR activities would occur during migratory bird breeding season (April 1 through July 31), a pre-clearance survey would be required by a qualified wildlife biologist within a 14-day period prior to anthropogenic activities and to determine status of any nest. If nests are found, a protective buffer zone would be established (depending on the species) by the biologist until the young birds are fledged. If the Proposed Action does not occur within 14 days of the migratory bird survey, then another survey would be necessary.

Greater Sage-Grouse

- Currently, there is one known lek of unknown status within 4 miles of the Proposed Action boundary. The ARMPA establishes at least a 0.25-mile buffer from known leks for noise and related disruptive activities that do not result in habitat loss, including motorized recreational events.[8] The known lek location is approximately 2.5 miles from the Proposed Action.
- If LSR activities would occur during the lekking or nesting season (March 1 to June 30), LSR activities would not take place 2 hours before to 2 hours after both sunrise and sunset during the breeding season.
- NAE would implement the following Required Design Features (RDFs) for the Proposed Action, as outlined in Appendix C of the ARMPA:

[8] BLM 2015 Appendix B

RDF Gen 5: During project construction and operation, NAE would establish and post speed limits in GRSG habitat to reduce vehicle/wildlife collisions or design roads to be driven at slower speeds.

RDF Gen 11: NAE would equip temporary and permanent aboveground facilities with structures or devices that discourage nesting and perching of raptors, corvids, and other predators.

RDF Gen 12: NAE would control the spread and effects of nonnative, invasive plant species (e.g., by washing vehicles and equipment, minimize unnecessary surface disturbance.

RDF Gen 13: NAE would implement project site-cleaning practices to preclude the accumulation of debris, solid waste, putrescible wastes, and other potential anthropogenic subsidies for predators of GRSG.

RDF Gen 19: NAE would instruct all construction employees to avoid harassment and disturbance of wildlife, especially during the GRSG breeding (e.g., courtship and nesting) season. In addition, pets would not be permitted on site during construction.

2.2 No Action Alternative

Under the No Action Alternative, a BLM SRP would not be issued, and the LSR attempts would not occur. Conditions in the project area would not be modified.

2.3 Alternatives Considered but Eliminated from Further Analysis

Three alternatives to the Proposed Action were considered. These include use of the Black Rock Desert in Nevada, the Bonneville Salt Flats in Utah, and the Alvord Dry Lake in Oregon. The first two alternatives were found to be unacceptable and the third is limited to 10 miles but has similar characteristics.

2.3.1 Alternative 1: Black Rock Desert, Nevada

Alternative 1 would result in the LSR attempts being conducted on the Black Rock Desert (BRD) playa in Washoe County, Nevada. This is an area that has been used for similar activities in the past, and is where the current LSR was established in 1997. This site was considered because of the previous successful LSR and because it meets some of the site selection criteria (e.g., a surface that is dry and firm, suitable weather conditions, and available margins of safety around the actual race course). However, inspection by NAE personnel showed that the BRD playa has been used for so many permitted and unpermitted recreational uses that without significant and extensive modifications to the playa surface, a suitable distance is not available for a high-speed race car to safely attain the expected speeds. Additionally, the continued casual

recreational use by various kinds of vehicles on the BRD playa is likely to be unmanageable with respect to the control and removal of such users on the BRD playa for safety purposes at the time of racing activities. Adequate safety for racing participants and the other public users could not be assured. Therefore, this alternative was eliminated from further consideration.

2.3.2 Alternative 2: Bonneville Flats, Utah

Selection of Alternative 2 would result in the LSR attempts being conducted on the Bonneville Salt Flats in Utah. This site was considered based on previous uses for LSR racing, including previously established LSRs. The Bonneville Salt Flats are sufficiently dry and secure. However, the area is limited in the distances available and the surface is too rough for a high-speed race vehicle to safely attain expected speeds. Bonneville may be suitable for lower speed test runs but is eliminated from further consideration for the LSR attempts.

2.3.3 Alternative 3: Alvord Desert, Oregon

Selection of Alternative 3 is similar in description to Diamond Valley with the significant difference being a maximum of 10 miles in length. The NAE has conducted speed runs at the Alvord Desert within the last year with favorable results and maximum speed reached of 515 mph. The shorter distance would limit maximum speed to 600 mph. If the Diamond Valley Playa is not available, the NAE would conduct limited speed runs at Alvord Desert.

Chapter Three: Affected Environment and Environmental Consequences

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3.0 Affected Environment and Environmental Consequences

3.1 Effects Analysis

According to 40 CFR 1508.8 environmental effects include:

- Direct effects, which are caused by the action and occur at the same time and place; and
- Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

The terms “effects” and “impacts” as used in these regulations are synonymous. Effects include ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Effects may also include those resulting from actions which may have both negligible and detrimental effects, even if on balance the agency believes that the effect will be minimal.

The environmental effects of the Proposed Action and No Action Alternative described in this EA are primarily derived through the analysis of the expected changes that implementation of each alternative would have on the existing conditions of the resources described in the sections below.

3.2 Resources and Issues Considered for Analysis

To comply with NEPA, the BLM is required to address specific elements of the environment that are subject to requirements specified in statutes, regulations, or executive orders (EO). Table 3-1 outlines the resources that must be addressed in all environmental analyses and denotes if the Proposed Action or No Action Alternative have the potential to affect those resources. In the case of resources that are present in the project area but would not be affected by the Proposed Action, a rationale for why they would not be affected is provided in the table. The resources that are in the project area and that may be affected by the Proposed Action are further discussed in the EA.

Table 3-1: Resources Considered for this EA

Resource	Authority[9]	Not Present[10]	Present/ Not Affected[4]	Present/ May be Affected[11]	Rationale
Air Quality	Clean Air Act of 1973, as amended (42 USC 7401 et seq.), Section 176(c) CAA - General Conformity		X		The Proposed Action would not pose any significant air quality or climate change issues.
Areas of Critical Environmental Concern (ACEC)	Federal Land Policy and Management Act of 1976 (43 USC 1701 et seq.)	X			The Proposed Action is not located in or near any ACEC.
Birds of Prey (Raptors)	Bald and Golden Eagle Protection Act of 1940, as amended (16 USC 669-668d)			X	See Sections 3.12 and 4.2.9.
Cultural/Historic Resources	National Historic Preservation Act of 1966, as amended (16 USC 470)		X		Prior to NAE's SRP application, Class III cultural resources inventories were conducted in the entire proposed project area.[12] No cultural resources that are listed or evaluated as eligible for listing on the National Register of Historic Places (NRHP) would be affected by the Proposed Action.
Environmental Justice	EO 12898 "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" 2/11/94	X			No minority or low-income groups would be disproportionately affected by health or environmental effects of the Proposed Action.
Farm Lands (Prime or Unique)	Surface Mining Control and Reclamation Act of 1977 (30 USC 1201 et seq.); Farmland Protection Policy	X			There are no Prime or Unique Farmlands, as defined by the Farmland Protection Policy Act, in the

[9] See BLM NEPA Handbook H-1790 (January 2008) Supplemental Authorities to be Considered and Instruction Memorandum No. NV-2009-030

[10] Supplemental Authorities determined to be Not Present of Present/Not Affected need not be carried forward for analysis or discussed further in the document

[11] Supplemental Authorities determined to be Present/May be Affected must be carried forward for analysis in the document

[12] Bowers 2007, McQueen 2017

Resource	Authority[9]	Not Present[10]	Present/ Not Affected[4]	Present/ May be Affected[11]	Rationale
	Act (7 USC 4202 et seq)				Battle Mountain District.
Floodplains	EO 11988, as amended, "Floodplain Management" 5/24/77			X	See Sections 3.11 and 4.2.8.
Forests and Rangelands	Healthy Forests Restoration Act of 2003 (Pub.L. 108-148)	X			Resource not present.
Grazing Management			X		There would not be any loss of Animal Unit Months (AUMs) as a result of the Proposed Action.
Human Health and Safety (Herbicide Projects)	EO 13045 "Protection of Children from Environmental Health Risks and Safety Risk" 4/21/97			X	See Sections 3.4 and 4.2.1.
Land Use Authorization			X		The Proposed Action would stay clear of installed phone lines and power lines.
Migratory Birds	Migratory Bird Treaty Act of 1918 (16 USC 703-711); EO 13186 "Responsibilities of Federal Agencies to Protect Migratory Birds" 1/10/01			X	See Sections 3.12 and 4.2.9.
Minerals			X		The Proposed Action would stay clear of a gravel pit owned by Eureka County.
Native American Cultural and Religious Concerns	American Indian Religious Freedom Act of 1978 (42 USC 1996)			X	See Sections 3.5 and 4.2.2.
Noise			X		The noise generated from the Proposed Action would have a duration of less than 2 minutes per run.

Resource	Authority[9]	Not Present[10]	Present/ Not Affected[4]	Present/ May be Affected[11]	Rationale
					This would have a short-term and minimal effect of the small amount of private residences in the area. Speed record attempts would be conducted from north to south to minimize any annoyance to the local ranchers near the southernmost boundaries of the lakebed.
Noxious Weeds, Invasive and Non-Native Species	EO 13112 "Safeguarding the Nation from Impacts of Invasive Species" 2/3/99			X	See Sections 3.6 and 4.2.3.
Paleontological Resources		X			Resource not present.
Recreation				X	See Sections 3.7 and 4.2.4.
Social and Economic Values		X			There would be benefits to some local businesses, such as toilet rental companies and law enforcement officers, but the economic benefits would not be measurable.
Soils				X	See Sections 3.8 and 4.2.6.
Special Status Species (Plants and Wildlife)				X	See Sections 3.9 and 4.2.85
Threatened and Endangered Species (Plants and Animals)	Endangered Species Act (ESA) of 1973, as amended (16 USC 1531)	X			There are no known federally-listed Endangered or Threatened species or species proposed for listing under the ESA or designated critical habitat within the project area.
Vegetation			X		No new roads are proposed. All proposed activities would be in areas

Resource	Authority[9]	Not Present[10]	Present/ Not Affected[4]	Present/ May be Affected[11]	Rationale
					devoid of vegetation or would not disturb existing vegetation communities.
Visual Resources			X		The Proposed Action is in an area designated as Visual Resource Management (VRM) Class IV. The temporary nature of the Proposed Action would not affect the existing character of the landscape.
Wastes (Hazardous or Solid)	Resource Conservation and Recovery Act of 1976 (42 USC 6901 et seq.); Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (42 USC 9615)			X	See Sections 3.10 and 4.2.7.
Water Quality (Surface/Ground)	Safe Drinking Water Act of 1974, as amended (42 USC 300f et seq.); Clean Water Act of 1977 (33 USC 1251 et seq.)			X	See Sections 3.11 and 4.2.8.
Wetlands/Riparian Zones	EO 11990 "Protection of Wetlands" 5/24/77			X	See Sections 3.11 and 4.2.8.
Wild and Scenic Rivers	Wild and Scenic Rivers Act of 1968, as amended (16 USC 1271)	X			The Proposed Action is not located in or near any designated Wild and Scenic Rivers.
Wild Horses and Burros	The Wild Free-Roaming Horses and Burros Act of 1971 (Pub.L. 92-195)	X			Just north of the Proposed Action is the Diamond Mountain Range Complex for wild horses. This area is recognized as a complex because wild horse populations move

Resource	Authority[9]	Not Present[10]	Present/ Not Affected[4]	Present/ May be Affected[11]	Rationale
					and intermingle within the three Herd Management Areas (HMAs) within the Diamond Mountain Range. The Proposed Action would have no impact on wild horsed because the HMA is on the opposite side of the Playa.
Wilderness and Wilderness Study Areas (WSAs)	Wilderness Act of 1964 (16 USC 1131 et seq.); Federal Land Policy and Management Act of 1976 (43 USC 1701 et seq.)	X			The Proposed Action is not within or near a designated Wilderness or WSA.
Wildlife				X	See Sections 3.12 and 4.2.9.

3.3 Project Area Description

The Project Area is in Eureka County, Nevada, within the northeastern portion of the BMD boundaries. This portion of the district is administered by the MLFO and is characteristic of a cooler, semi-arid Great Basin Desert ecotype. The BMD is generally characterized as “Basin and Range” topography with broad bedrock pediments and fault block mountain ranges predominantly running in a north-south orientation separating vast, flat playa sinks or alluvial valley bottoms. Valley and playa elevations range from 4,000 to 5,000 feet amsl with an average annual precipitation of 2 to 9 inches. Mountain range elevations extend from 7,500 to 9,500 feet amsl, with 10 to 20 inches of annual precipitation.

Central Basin and Range (EPA Ecoregion 13)

The project area is located in north-central Nevada within the Central Basin and Range Ecoregion, or EPA Ecoregion 13. This area is between the Sierra Nevada to the west, the Wasatch and Uinta Mountains to the east, the Northern Basin and Range to the north, and the Mohave Basin and Range to the south. The Central Basin and Range, is composed of northerly trending fault-block ranges and intervening drier basins. Valleys, lower slopes, and alluvial fans are either shrub- and/or grass-covered. Higher-elevation mountain slopes support woodland, mountain brush, and scattered forests. Ecoregion 13 is internally drained by rivers flowing off the east slopes of the Sierra Nevada and by the Humboldt River, one of the longest internally-drained river systems in North America. In general, Ecoregion 13 is drier than the Sierra Nevada, cooler than the Mojave Basin and Range, and

warmer and drier than the Northern Basin and Range. The land is primarily used for grazing and some irrigated cropland is found in valleys near mountain water sources.

During the Pleistocene era, the western portion of the region was inundated below 4,400 feet elevation by Lake Lahontan. Pluvial Lake Diamond filled Diamond Valley, with a high stand of about 6,000 feet amsl 13,000 years ago. At its fullest, Lake Diamond overflowed at Railroad Pass into the Humboldt River drainage and the Lake Lahontan System. Evidence of these now desiccated lakes consist of nearly flat playas covered by fine textured, alkaline or saline deposits.

3.4 Human Health and Safety

Human health and safety management is intended to protect public health and safety on BLM-administered public lands, to comply with applicable federal and state laws, to prevent waste contamination, and to minimize physical hazards due to any BLM-authorized actions or illegal activities on public lands. When health and safety hazards are identified, they are reported, secured, or cleaned up according to federal and state laws and regulations, including the federal Comprehensive Environmental Response, Compensation, and Liability Act. Parties responsible for contamination are liable for cleanup and resource damage costs, as prescribed by law.

3.4.1 Affected Environment

Safety concerns for the Proposed Action include those regarding time trial emergencies (i.e., crashes) and the safety of staff, spectators, and local populations. Vehicle emergencies may be caused by collisions with objects, weather difficulties like sudden changes in wind speeds, or direction or loss of control of the vehicle.

Health concerns for the Proposed Action include those regarding contaminant spills associated with the vehicles and other equipment used during the LSR attempts.

Definitions of Intensity Levels of Effects for Human Health and Safety

Negligible: Effects are barely noticeable and resolve within a few minutes with little to no intervention needed; resumption of work activities can occur almost immediately.

Minor: Effects are noticeable; minimal intervention would be needed and could be provided on-site with a resumption of work activities within a few minutes to an hour.

Moderate: Effects are noticeable and may need a few hours to be resolved. Intervention would be needed and could be provided on-site. Resumption of work activities could occur the next day or within two days.

Major: Effects are very noticeable and professional medical intervention would be needed and would likely be provided off-site. Resumption of work activities would not occur for two or more days.

Duration

Short-term: One day or less.
Long-term: Two or more days.

Context

Localized: Affecting persons working directly on the project.
Regional: Affecting persons beyond the project area.

3.4.2 Environmental Consequences of the Proposed Action

A Safety Plan for the Proposed Action has been created by NAE and submitted to the BLM. The Safety Plan outlines standard protocols for potential emergencies. The Proposed Action would not be conducted without adequate emergency and safety equipment and personnel on site. During LSR attempts, all personnel would be asked to move to safe zones on the edge of the Playa. Emergency equipment would be staged at both ends and at the center of the race course area. All activity on the Playa would be monitored and access by non-NAE personnel would be discouraged.

Although fire risk is minimal due to the small volume of fuel used by the LSR car, NAE would make provisions for fire suppression. All vehicles would be equipped with fire extinguishers and adequate firefighting equipment, such as a shovel, pulaski, extinguisher(s), and an ample water supply would be kept on hand. All vehicle catalytic converters would be inspected often and kept clear of brush and grass debris. All welding operations would be conducted in an area free from vegetation. NAE would make its own arrangements for standby ambulance and fire suppression services and does not expect to need the services from the town of Eureka or Eureka County.

The Playa would be protected from hazardous spills in the pit area by a large, liquid-proof mat. These would be EPA-approved fuel mats with raised edges and a large enough area to capture any spilled fuel. Any spills would be wiped up immediately and disposed of in accordance with all applicable federal, state, and local regulations. Fuel transfers would be done only by trained and approved NAE team members in order to minimize the chance of spillage. The transfer of fuel to the LSR vehicle may be done at any location of the approved race course and in the pit area. In all instances, absorbent materials would be deployed on the ground between the NAE vehicle and the fuel vehicle. In the event of spillage reaching the Playa, trained NAE personnel would immediately remove and place any contaminated absorbent media into sealed metal drums and the materials would be disposed of in accordance with all applicable federal, state, and local regulations. Larger spills would be

cleaned up by a Nevada-approved hazardous materials contractor, to be retained by NAE.

Surfaces of the vehicle to be repaired would be mechanically prepared and painted; this activity would occur only within the pit area. No uses of solvent or other chemicals would be planned.

Overall, adverse effects to human health and safety are anticipated to be negligible to minor, short-term, and localized.

3.4.3 Environmental Consequences of the No Action Alternative

Under the No Action Alternative, no LSR attempts would occur, posing no threat to human health and safety.

3.5 Native American Religious Concerns

Numerous laws and regulations require the BLM to consider Native American concerns. These include:

- American Indian Religious Freedom Act (AIRFA) of 1978, as amended
- Archaeological Resources Protection Act (ARPA) of 1979
- Executive Order 13007 of 1996 (Indian Sacred Sites)
- Executive Order 13175 of 2000 (Consultation and Coordination with Tribal Governments)
- FLPMA of 1976 (Pub.L. 94-579)
- NEPA of 1969 (Pub.L. 91-190)
- National Historic Preservation Act (NHPA) of 1966, as amended
- Native American Graves Protection and Repatriation Act (NAGPRA) of 1990

Through consultation with area tribes, the BLM must attempt to identify specific traditional/cultural/spiritual sites, activities, and resources, and limit, reduce, or possibly eliminate any negative impacts. The BLM also utilizes Handbook H-1780-1 Improving and Sustaining BLM-Tribal Relations, Manual 1780 Tribal Relations, and the National Register Bulletin 38 Guidelines for Evaluating and Documenting Traditional Cultural Properties. Order No. 3317, issued in December 2011, updates, expands and clarifies the Department of Interior's policy on consultation with Indian Tribes.

The AIRFA and Executive Order 13007 apply to sites used for religious ceremonies or sacred sites. These authorities do not specify criteria for determining whether a project would affect such places. For purposes of the analysis in this EA, locations used for religious ceremonies and sacred sites, a project effect is considered

substantial if it restricts access to such sites; impedes the exercise of ceremonies at such sites in some way or form; or affects the physical integrity of such sites. Traditional Cultural Properties (TCPs), which may or may not be sacred sites, have similar substantial project effects thresholds, plus damage to the setting or physical integrity of the TCP.

3.5.1 Affected Environment

The Proposed Action is located within the traditional territory of the Western Shoshone. Traditional social activities important to the Western Shoshone include pine nut gathering, edible and medical plant gathering, hunting and fishing, and spiritual/ceremonial practices. Such sites of importance include, but are not limited to, existing antelope traps; certain mountain tops used for vision questing and prayer; medicinal and edible plant gathering locations; prehistoric and historic village sites and gravesites; sites associated with creation stories; hot and cold springs; material used for basketry and cradle board making; locations of stone tools such as projectile points and grinding stones; toolstone quarries; hunting sites; sweat lodge locations; locations that of consistent pine nut harvesting and ceremonies; boulders used for offerings and medicine gathering; rock shelters; and petroglyph locations; and tribally identified TCPs.

Definitions of Intensity Levels of Effects for Native American Traditional Cultural Resources

Negligible: There are no traditional cultural resources, or these resources exist but the action would not affect them.

Minor: There would be an effect on traditional cultural resources, but the effect would not adversely diminish the resources' physical integrity or access to them.

Moderate: Access to a traditional gathering or ceremonial area may be temporarily denied during the project, but would be restored once the action is complete. The action would not adversely diminish the resources' physical integrity.

Major: There would be a significant alteration to the physical integrity of traditional cultural resources or access to resources would no longer be available. This would be irreversible and permanent. Adverse effects may be resolved through development of a project specific Memorandum of Agreement (MOA) or a Programmatic Agreement among the project proponent, the State Historic Preservation Office (SHPO), the Advisory Council on Historic Preservation (ACHP), and other consulting or concurring parties, such as American Indian tribes (36 CFR 800.6). The agreement would specify the mitigating actions that must be taken to resolve the adverse effects, and the implementation and documentation protocols to be followed. The agreement must be executed by all required

signatories (i.e., consulting parties) before implementation of a proposed action can be initiated.

Duration

Short-term: Temporary, such as one month or shorter.
Long-term: Longer than one month, perhaps permanently.

Context

Localized: Effects would be limited to traditional cultural resources within the project area.
Regional: Effects would occur to traditional cultural resources outside of the project area.

3.5.2 Environmental Consequences of the Proposed Action

On August 2, 2017, the BLM BMDO sent a consultation initiation letter, via certified mail, to the following entities: South Fork Band Council, Duckwater Shoshone Tribe. Follow up phone calls on August 9, 2017, resulted in few issues/concerns being identified, mainly due to limited cultural use sites and major archaeological sites being present in flat, lower elevation, Playa areas. In addition, the Duckwater Shoshone Tribe issued a letter, dated December 3, 2010 to NAE, supporting the LSR attempt.

As a result of consultation, adverse effects to traditional cultural resources are anticipated to be negligible, localized, and short-term. Consultation and coordination would be on-going.

3.5.3 Environmental Consequences of the No Action Alternative

Under the No Action Alternative, the BLM would not have a federal action and conditions would remain the same as existing conditions. Therefore, there would be no adverse effects to Native American traditional cultural resources under this alternative.

3.6 Noxious Weeds, Invasive and Non-native Species

Noxious weeds, invasive, and non-native species are highly competitive, aggressive and spread easily. They typically establish and infest disturbed sites, along roadsides, and waterways. Changes in plant community composition from native species to non-native species can change fire regimes, adversely affect habitat quality, biodiversity, and ecosystem structure and function. Laws and regulations mandate the prevention and control of non-native invasive species due to their

potential to cause economic harm, environmental harm, or harm to human and animal health.

Executive Order 13112 instructs federal agencies to prevent introductions of non-native invasive species, control their spread in a cost-effective and environmentally sound manner, and minimize the economic, ecological, and human health impacts that invasive species cause. The BLM's policy relating to the management and coordination of noxious weeds and invasive plant species is set forth in the BLM Manual 9015.[13] The BLM's primary focus is on providing adequate capability to detect and treat smaller weed infestations before they have a chance to spread. Noxious weed control is based on a program of prevention, early detection, and rapid response.

A current list of noxious weeds is designated and categorized by the State of Nevada Department of Agriculture (NDA) statute. The NDA assigns a rating to the species, which reflects their view of the statewide importance of the noxious weed, the likelihood that eradication or control efforts would be successful, and the present distribution of noxious weeds within the state. These three categories are:

Category A Weeds that are generally not found or that are limited in distribution throughout the state.

Category B Weeds that are generally established in scattered populations in some counties of the state.

Category C Weeds that are generally established and generally widespread in many counties of the state.

3.6.1 Affected Environment

In Eureka County, the BLM has an established partnership with the Diamond Valley Weed Control District to better facilitate weed management activities. The Diamond Valley Weed Control District encompasses nearly all of Diamond Valley and many areas adjacent to Diamond Valley. Any activities within this district would need to comply with applicable requirements. The Diamond Valley Weed Control District lists at least 30 noxious weeds and three other weed species as being subject to control within the district (Table 3-2). The district identifies weeds belonging to the mustard family (hoary cress and perennial pepperwood) and the sunflower family (thistles and knapweeds) as posing the most immediate threat. Currently, there are no known infestations of invasive non-native plants within the Proposed Action or in the vicinity.

[13] BLM 2007

Table 3-2: Invasive Plants Listed by the Diamond Valley Weed Control District

Common Name	Scientific Name
CATEGORY A	
Austrian Fieldcress	*Rorippa austriaca*
Austrian Peaweed/Swainsonpea	*Sphaerophysa salsula, Swainsona salsula*
Camelthorn	*Alhagi camelorum*
Dalmatian Toadflax	*Linaria dalmatica*
Iberian Star-thistle	*Centaurea iberica*
Klamath Weed/Common St. Johnswort	*Hypericum perforatum*
Purple Star-thistle	*Centaurea calcitrapa*
Sow Thistle	*Sonchus arvensis*
Yellow Star-thistle	*Centaurea solstiltialis*
CATEGORY B	
Carolina Horse Nettle	*Solanum carolinense*
Diffuse Knapweed	*Centaurea diffusa*
Mediterranean Sage	*Salvia aethiopis*
Medusa Head Rye	*Elymus caput-medusae*
Musk Thistle	*Carduus nutans*
Russian Knapweed	*Acroptilon repens*
Scotch Thistle	*Onopordum acanthium*
White Horse Nettle/Silverleaf Nightshade	*Solanum elaeagnifolium*
CATEGORY C	
Canada Thistle	*Cirsium arvense*
Hoary Cress	*Cardaria draba*
Johnson Grass	*Sorghum halepense*
Leafy Spurge	*Euphorbia esula*
Perennial Pepperweed	*Lepidium latifolium*
Poison Hemlock	*Conium maculatum*
Puncturevine	*Tribulus terrestris*
Salt Cedar (Tamarisk)	*Tamarix* spp.
Water Hemlock	*Cicuta douglasii*
UNKNOWN NDA CATEGORY	
American Licorice	*Glycyrrhiza lepidota*
Columbus Grass	*Sorghum almum*
Perennial Sweet Sudan	*Sorghum* spp.
OTHER WEEDS	
Field Bindweed	*Convolvulus arvensis*
Foxtail Barley	*Hordeum jubatum*
Poverty Weed	*Iva axillaris*

Definitions of Intensity Levels of Effects for Noxious Weeds, Invasive and Non-Native Species

Negligible: There is a barely-perceptible increase in noxious weeds, invasive and non-native plant species as a result of implementing the Proposed Action; mitigation efforts would be small and success would be almost guaranteed.

Minor: There is a slight increase in noxious weeds, invasive and non-native plant species as a result of implementing the Proposed Action;

however, effects can be easily managed and controlled through mitigation and the probability of success would likely be moderate to high.

Moderate: There is a measurable increase in noxious weeds, invasive and non-native plant species as a result of implementing the Proposed Action; mitigation efforts would need to be implemented repeatedly and there would be a slight risk of failure and increased proliferation.

Major: There is a measurable and noted increase in noxious weeds, invasive and non-native plant species as a result of implementing the Proposed Action, affecting large areas; mitigation efforts would likely fail and there would be a high risk of increased proliferation over more geographic areas.

Duration

Short-term: Effects would not alter the existing vegetation community, or would last three years or less.
Long-term: Effects would alter the existing vegetation community and last for longer than three years.

Context

Localized: Effects would be limited to the treatment site.
Regional: Effects would occur beyond the treatment site.

3.6.2 Environmental Consequences of the Proposed Action

One of the more common methods of introduction and the spread of invasive plants to an area include the movement of contaminated vehicles and equipment across areas of disturbed soil or soil areas that may become disturbed. Thus, the areas that would be most susceptible to potential infestations of noxious weeds or invasive non-native plants are those along the access road. Vehicles traveling along the access road to the Playa edge could carry seeds from unwanted vegetation which could subsequently drop from the vehicle onto the disturbed soil and germinate. Implementation of the Prevention Schedule and Best Management Practices (BMPs) published by the BMDO would help prevent the spread of invasive non-native plants. Several activities identified in the BMDO's Prevention Schedule would be implemented since they are applicable to this project. These activities include:

- Cleaning all off-road vehicles and equipment of all mud, dirt, and plant parts before moving into invasive plant free areas.
- Provide invasive plant identification and awareness training for all field-going employees and awareness training for managers.
- Distribute invasive plant information to the public.

The BMPs that would need to be implemented from the BMDO's list are:

- Removing invasive plant sources from vehicles and equipment prior to leaving infested areas and prior to entering into infestation free areas.
- Ensure that areas under special use permits have on-site invasive plant awareness, prevention, and control programs.
- Ensure that areas under special use permits for lands (e.g., right-of-way) have on-site invasive plant awareness, prevention, and control programs.

Overall, adverse effects from noxious weeds, invasive and non-native species are anticipated to be negligible to minor, short-term, and localized.

3.6.3 Environmental Consequences of the No Action Alternative

Under the No Action Alternative, there would be no direct effects to noxious weeds and non-native invasive species and current conditions would remain the same.

3.7 Recreation

The BLM BMD encompasses 10.5 million acres of public lands in Esmeralda, Eureka, Lander, and Nye counties. A wide variety of recreation opportunities ranging from primitive to rural settings can be enjoyed on these public lands. Recreation activities include motorcycle and off-highway vehicle (OHV) riding, horseback riding, pack trips, mountain bicycling, camping, driving for pleasure, hiking, hunting, rockhounding, photography, rock climbing, nature study, wildlife/wild horse/burro viewing, picnicking, cross-country skiing, snowmobiling, and four-wheel driving.

3.7.1 Affected Environment

The Proposed Action area is generally isolated and undeveloped with no facilities. Recreation activities within the area primarily consist of OHV use, dirt bike riding, horseback riding, hunting, and camping, which all typically occur during the Playa dry season. The Proposed Action would not change existing access to the public lands within the project area for recreational use.

Definitions of Intensity Levels of Effects for Recreation

Negligible: The majority of recreationists would not notice any effects or changes in recreation patterns and levels and the effects would not change their experience of recreation resources and values. Mitigation would not be necessary.

Minor: Recreationists might be able to detect the effects of changes in recreation patterns and levels, and the changes might have a slight but detectable effect on their experience of recreation resources and values. If mitigation was needed to offset adverse effects to the recreation experience, it would be relatively simple to implement and would likely be successful.

Moderate: Recreationists would be aware of the effects of changes in recreation patterns and levels, as well as the effects on their experience of recreation resources and values. Some recreationists might feel displaced and need to pursue their desired activity in another recreation area. Mitigation measures would probably be necessary to offset adverse effects and would likely be successful.

Major: The majority of recreationists would be highly aware of the effects associated with changes in recreation patterns and levels, as well as the effects on their experience of recreation resources and values. Many recreationists would feel displaced and need to pursue their desired activity in other areas. Mitigation measures to offset adverse effects would be needed, they would have to be extensive, and their success could not be guaranteed.

Duration

Short-term: The effect is transitory or that largely disappears over a period of hours or days
Long-term: The effect lasts more than 3 weeks, or months or years

Context

Localized: Effects would be limited to the project area.
Regional: Effects would extend beyond the project area.

3.7.2 Environmental Consequences of the Proposed Action

Due to the short-term nature of the Proposed Action the impact to current recreational uses in the area are expected to be minimal. The only impacts to recreational users from the Proposed Action would occur occasionally in 2-week periods beginning in September through October 2017. Security personnel posted at Playa access points would inform visitors of the Proposed Action and would strongly discourage (but not prohibit) them from accessing the Playa during LSR attempts for recreational purposes. Because of safety concerns and potential conflicts with non-NAE users during race events, the distribution of recreational use could be altered. This may result in traditional use areas not being utilized during LSR attempts.

No annual commercial or competitive Special Recreation Permit events occur within this area so there would be no conflicts between organized recreational events and the Proposed Action.

Overall, adverse effects to recreation are anticipated to be negligible to minor, short-term, and localized.

3.7.3 Environmental Consequence of the No Action Alternative

Under the No Action Alternative, the existing recreational resources and opportunities located in, or near, the proposed project would remain as they currently exist and no temporary restrictions would occur on the Playa.

3.8 Soils

3.8.1 Affected Environment

Information regarding soils within the Project Area was obtained from the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) and soil surveys of Diamond Valley.[14] The soils within the Proposed Action include Playas, Playas-Dianev complex, Dianev silt loam, Sader loam, and Hayeston-Silverado association).

Playas (PL) comprises most of the proposed race course (2,153.6 acres) and access road (10.2 acres), and the entire pit area (0.9 acres). Only the pit area and course will experience ground disturbance; the access road will not be modified or improved. This soil is comprised of at least 60 inches deep of silty clay with very strong salinity. The soil occurs on 0 to 1 percent slopes in slightly depressed, nearly level basins that lack surface outlets. Playa soils are very poorly drained and ponding is frequent for short periods, especially in early spring, but the erosion hazard is slight. Water dissipates slowly through evaporation or percolation, which frequently leaves salt crusts and deposits on the surface. Playa soils are generally barren of vegetation and are not suited for crops, livestock grazing, or wildlife habitat.[15]

The Playas-Dianev complex (PS) occurs in the northern portion of the proposed race course way (333.5 acres) and a small portion is crossed by the access road (0.5 acres). Only the course will experience ground disturbance; the access road will not be modified or improved. This soil complex is comprised of 50 percent Playas, 40 percent Dianev and similar soils, and 5 percent of Bicondoa. The Playas soil is slightly depressional and nearly barren, while the Dianev soil is in slightly raised areas and supports vegetation.[16] Vegetation in the Dianev soil is mainly black greasewood, alkali sacaton, and inland saltgrass on the strongly salt and sodium affected areas, and bluejoint ryegrass, basin wildrye,

[14] Archer 1980, NRCS 2016

[15] Archer 1980

[16] Ibid

bottlebrush squirreltail, and rubber rabbitbrush where the soil is drained and less salt and sodium affected. Bicondoa soils can be used for irrigated meadow production, with vegetation predominantly being rushes, sedges, and salt grasses in more saline-sodic affected areas. The Playas-Dianev complex is at least 60 inches deep of silty clay with strong salinity. Occurring on 0 to 1 percent slopes around the edge of large playas, this complex is very poorly drained and experiences frequent ponding, but the hazard of erosion is slight. Playas-Dianev complex soils can be used for limited cattle grazing and wildlife habitat, but are not suited for crops.

Sader loam (SA) occurs at the western end of the access road (1.8 acres). No ground disturbance will occur on the access road. This soil is comprised of 95 percent Sader and 5 percent Bicondoa. It consists of 0 to 5 inches of loam overlain on silty clay loam from 5 to 25 inches deep that transitions to clay to at least 60 inches deep. The soil has a slight to moderate salinity. Vegetation is principally rubber rabbitbrush, black greasewood, basin wildrye, big sagebrush, and bottlebrush squirreltail. This soil occurs on 0 to 2 percent slopes on low lake terraces and lake plains where ponding does not take place and flooding is rare, thus the hazard of erosion is slight. If reclaimed, Sader loam can be used for irrigated crops, but it is more suited for cattle grazing and wildlife habitat.

A very small portion of Dianev silt loam (DN) is crossed by the access road (0.9 acres). No ground disturbance will occur on the access road. This soil is comprised 95 percent Dianev and 5 percent Playas. The soil consists of 0 to 2 inches of silt loam overlain on 40 inches of silty clay loam that transitions to stratified loamy sand to clay to at least 60 inches deep. Salinity ranges from moderate to strong. Vegetation is mainly black greasewood, alkali sacaton, and inland saltgrass on strongly salt and sodium affected areas, and bluejoint ryegrass, basin wildrye, bottlebrush squirreltail, and rubber rabbitbrush where the soil is drained and less salt and sodium affected. Dianev silt loam occurs on 0 to 2 percent slopes around and parallel to playas on low lake terraces. The soil is somewhat poorly drained, but does not experience frequent ponding and rarely floods. The erosion hazard is slight. This soil can be used for native hay, livestock grazing, and wildlife habitat.

The Hayeston-Silverado (HE) association exists at the intersection of Sadler Brown Road and the access road (0.7 acres). This portion of the Proposed Action will receive no ground disturbance. This soil association is comprised of 50 percent Hayeston and 30 percent Silverado. Hayeston soils include vegetation of mainly Wyoming big sagebrush, Indian ricegrass, needle-and-thread, bottlebrush squirreltail, and bluegrass. Silverado soils support principally big sagebrush, bottlebrush squirreltail, and Douglas rabbitbrush. The Hayeston-Silverado association consists of 0 to 27 inches of gravelly fine sandy loam that transitions to stratified very gravelly loamy sand and extremely gravelly sand at depths of 27 to 60 inches. The soils are found on long narrow strips that follow old lake terraces and beaches. Occurring on 2 to 4 percent slopes, these soils are well-drained and do not experience frequent ponding or flooding. The

hazard of erosion is slight on the Hayeston soil and slight to moderate on the Silverado soil. The association can be used for irrigated crops, livestock grazing, and wildlife habitat.

The NRCS provides ratings for erosion hazards from water and wind. Factor K indicates the susceptibility of the soil to sheet and rill erosion by water, rated in tons per acres per year. Erosion factor Kf (rock free) indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size. Erosion factor Kw (whole soil) indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and saturated hydraulic conductivity (Ksat). Values of K range from 0.02 to 0.69; the higher the value the more susceptible the soil is to sheet and rill erosion by water. The T factor is an estimate of the maximum average annual rate of soil erosion by wind and/or water that can occur without affecting crop productivity over a sustained period. Values of T range from 1 to 5 tons per acre per year and are based on depth of soil to bedrock and the type of bedrock.

A Wind Erodibility Group consists of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. Ranging from Group 1 to 8, those soils assigned to Group 1 are the most susceptible to wind erosion and those assigned to Group 8 are the least susceptible. The Wind Erodibility Index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion. Soils ranked in the Proposed Action have a relatively low to moderate wind and water erosion hazard (Table 3-3).

Table 3-3: Soil Associations and Erosion Ratings within the Proposed Action

Soil Association	Kf Factor Rating	Kw Factor Rating	T Factor Rating	Wind Erodibility Group	Wind Erodibility Index	Acres of Proposed Action	Percent of Proposed Action
Playas (PL)	0.28	0.32	N/A	4	86	2164.7 acres	86.52 percent
Playas-Dianev complex (PS)	0.28	0.32	N/A	4	86	334 acres	13.34 percent
Sader loam (SA)	0.32	0.43	2	6	48	1.8 acres	0.07 percent
Dianev silt loam (DN)	0.43	0.43	2	4L	86	0.9 acres	0.04 percent
Hayeston-Silverado association (HE)	0.32	0.17	3	5	56	0.7 acres	0.03 percent
Total						**2502.1 acres**	**100 percent**

Major Land Resource Areas and Ecological Sites

Major Land Resource Areas (MLRAs) are geographically associated land resource units used in statewide and regional planning. MLRAs are delineated by the NRCS and characterized by a particular pattern that combines soils, water, climate, vegetation, land use, and type of farming. Within each MLRA are numerous ecological sites that provide a consistent framework for classifying and describing rangeland and forestland soils and vegetation, thereby delineating land units that share similar capabilities to respond to management activities or disturbance. Ecological Site Descriptions (ESDs) are reports written for individual ecological sites that comprise the larger MLRA units. ESDs provide detailed information is needed by land managers to evaluate the land as to its suitability for various land-uses, capability to respond to different management activities or disturbance processes, and ability to sustain productivity over the long term[17].

The Proposed Action is located within the Central Nevada Basin and Range resource area, or MLRA 28B. Four ESDs within MLRA 28B are included in the Proposed Action; only two of these are provisional and available to the public through NRCS. Provisional status represents the lowest tier of documentation that is releasable to the public. Provisional means the reports have undergone both quality control and quality assurance protocols, with the expectation that they will continue to be refined towards an approved status. The NRCS classifies playas as a "miscellaneous area," which is an area that has essentially no soil, and describes playas as barren flats. Additional information on ESDs not available through the NRCS was obtained from the University of Nevada's Agricultural Experiment Station.[18] The ESDs and their associated soils are listed in Table 3-4.

Soil test pits were dug by hand in three areas of the Proposed Action: one within the pit area, one at the north end of the course, and one at the south end of the coarse. These sites were chosen to identify the soil series within the proposed ground disturbance of the Proposed Action at these locations, which occur in both Playas and Playas-Dianev Complex soil series. The soil pits were dug with a sharpshooter spade. Soils were classified to the series level, and samples were obtained from each horizon for purposes of characterizing the horizon and to determine suitability of the soil for plant growth. Each soil sample was compressed to prepare a soil ribbon between the thumb and forefinger. The length and feel of the soil ribbon were used to determine soil texture. The data was then transcribed onto datasheets. Samples from all three of soil test pits correspond to Playas. No biotic crusts were present.

The following describes the environmental consequences for consideration of direct and indirect effects to soils. The direct and indirect analysis includes soil resources found within the Project Area.

[17] NRCS 2017
[18] Stringham et al. 2015

Table 3-4: Soil Associations and ESDs of the Proposed Action

Soil Association	Ecological Site Name, ID, and Status	ESD Characteristics
Playas (PL)	Playas (100 percent): None	No rangeland or forestland ecological site data available.
Playas-Dianev complex (PS)	Playas (50 percent): None	Occurs on alluvial flats and lake plains; slope gradients of less than 2 percent; elevations of 4,700 to 6,200 feet; soils are very deep, poorly drained, and formed in mixed alluvium and lacustrine sediments; upper profile is strongly salt and sodium affected due to capillary movement of dissolved salts upward from the groundwater; high salt concentrations and periods of ponding reduce seed viability and germination. Dominated by black greasewood and alkali sacaton. Vegetation is restricted to coppice mound areas that are surrounded by nearly level, playa-like depressions that are usually barren. These communities often exhibit the formation of microbiotic crusts within the interspaces. These crusts influence the soils and their ability to reduce erosion and increase infiltration, and may also alter the soil structure and possibly increase soil fertility. Finer textured soils tend to support more microbiotic cover than coarse texture soils. Production ranges from 150 to 500 pounds per acre. Potential vegetation composition is about 15 percent grasses, 5 percent forbs, and 80 percent shrubs.
	Dianev (40 percent): Sodic Flat 5-8 P.Z. (R028BY020NV) Provisional	
	Biocondoa (5 percent): Saline Meadow (R028BY002NV) Not available	
Dianev silt loam (DN)	Dianev (95 percent): Saline Bottom (R028BY004NV) Not Available	Occurs on lakeplains, alluvial flats, and on margins of axial-stream floodplain; slopes range from 0 to 4 percent; elevations of 5,300 to 6,200 feet; soils are normally strongly salt and sodium-affected and poorly drained; seed viability, germination, and available water holding capacity is reduced due to saline condition; surface layer will crust and bake upon drying, inhibiting water infiltration and seedling emergence. Dominated by black greasewood, basin wildrye, alkali sacton, and perennial grasses.
	Playas (5 percent): None	
Sader loam (SA)	Sader (95 percent): Saline Bottom (R028BY004NV) Not available	Occurs on lakeplains, alluvial flats, and on margins of axial-stream floodplain; slopes range from 0 to 4 percent; elevations of 5,300 to 6,200 feet; soils are normally strongly salt and sodium-affected and poorly drained; seed viability, germination, and available water holding capacity is reduced due to saline condition; surface layer will crust and bake upon drying, inhibiting water infiltration and seedling emergence. Dominated by black greasewood, basin wildrye, alkali sacton, and perennial grasses.
	Biocondoa 5 percent): Saline Meadow (R028BY002NV) Not available	
Hayeston-Silverado association (HE)	Hayeston (50 percent): Loamy 8-10 P.Z. (R028BY010NV) Provisional	Occurs on fan remnants; slopes gradients of 2 to 10 percent; elevations of 5,000 to 6,5000 feet; soils are very deep, well-drained, and derived from mixed alluvium with high volume of rock fragments and an ochric epipedon. Dominated by Wyoming big sagebrush, Indian ricegrass, and needle-and-thread. Production ranges from 400 to 800 pounds per acre.
	Silverado (50 percent): Loamy 8-10 P.Z. (R028BY010NV) Provisional	

Indicators

Soil types were quantitatively assessed based on NRCS ratings for erosion hazards relative to anticipated effects of proposed surface disturbance acres. Adverse effects would include soil loss due to erosion by wind and water.

Definitions of Intensity Levels of Effects for Soils

Negligible: Adverse impacts to soils, including biological crusts, would not be perceptible or measurable. Beneficial impacts would improve the condition of soils at minute levels. Any changes to soil productivity, integrity, stability, or fertility would be imperceptible.

Minor: Beneficial or adverse effects to soils and biological crusts would be barely perceptible or measurable. Any adverse impacts to soil productivity, integrity, stability, or fertility would be small and reversible. Beneficial effects would improve the condition of soils slightly. If mitigation was needed to offset adverse effects, it would be relatively simple to implement and would likely be successful. A beneficial effect would slightly reduce the level of mitigation needed.

Moderate: Beneficial or adverse impacts to soils and biological crusts would be readily perceptible and measurable. Effects to soil productivity, integrity, stability, or fertility would be readily apparent, and they would result in a change to the soil character. Mitigation measures would be necessary to offset adverse effects and would likely be successful. Beneficial effects would substantially improve the condition of soils, greatly reducing the amount of necessary mitigation.

Major: Adverse impacts to soils and biological crusts would be readily perceptible, measurable, and constitute a substantial change from natural conditions. Effects to soil productivity, integrity, stability, or fertility would be readily apparent and would substantially change the character of the soils. Mitigation measures to offset adverse effects would be needed, they would be extensive, and their success would not be guaranteed. Beneficial effects would return soils back to natural conditions, and mitigation would not be necessary.

Duration

Short-term: One year or less and soils return to pre-disturbance condition the next year.
Long-term: Greater than one year.

Context

Localized: A single site or project area.
Regional: Beyond the project area.

3.8.2 Environmental Consequences of the Proposed Action

The hard, durable crust over the surface of the Playa is formed when the water that inundates the area in the winter evaporates and the sediments dry out. As the sediments dry out, polygonal desiccation cracks occur. The majority of impacts to the soil resources would be the result of vehicle traffic, which would break up the hard Playa surface exposing the softer underlying soil to potential wind erosion. However, the impacts to soils produced by the Proposed Action would be temporary and similar to other vehicular traffic on the Playa. The NAE vehicle weighs 14,000 pounds with an estimated 129.6 psi of pressure. With normal seasonal flooding the Playa surface would be subject to the effects of the natural weathering cycle, which would remove any impacts associated with the Proposed Action (i.e., vehicle tracks across the Playa surface).

Overall, adverse effects to soils are anticipated to be minor, short-term, and localized.

3.8.3 Environmental Consequences of the No Action Alternative

Under the No Action Alternative, there would be no disturbance of soils and conditions would remain the same.

3.9 Special Status Species (Plants and Wildlife)

Threatened, Endangered, and Candidate Species

The purpose of the Endangered Species Act (ESA) of 1973, as amended, is to provide a means for conserving the ecosystems upon which threatened and endangered species depend, and to provide a program for protecting these species. The ESA defines an endangered species as one that is at risk of extinction throughout all or a major portion of its range. A threatened species is defined as any species that is likely to become an endangered species within the foreseeable future throughout all or a major portion of its range. The ESA also addresses species that have been proposed for listing as either threatened or endangered, but for which a final determination has not been made. These so-called “candidate” species are those for which the U.S Fish and Wildlife Service (USFWS) has sufficient information on their biological status and threats to propose them as endangered or threatened under the ESA, but for which development of a proposed listing regulation is precluded by other, higher priority listing activities. Critical habitat is a specific area or type of area that is considered to be essential for the survival of a species, as designated by the USFWS under the ESA. The BLM is required by the ESA to ensure that no action on public lands jeopardizes a threatened, endangered, candidate, or proposed or endangered species, or one that is proposed as a candidate for protection under the ESA.

BLM Sensitive Status Species

BLM sensitive status species (SSS) are defined as those plant and animal species for which species and population viability is a concern, as evidenced by a significant current or predicted downward trend in population numbers or density or a significant current or predicted downward trend in habitat capability that would reduce the species' existing distribution. These animals are protected under provisions of the ESA or under BLM Manual 6840 Special Status Species Management. In addition, there is a Nevada State Protected Animal List that the BLM has incorporated, in part, into the special status species list. BLM SSS designated as Bureau sensitive must be native species found on BLM-administered lands for which BLM has the capacity to significantly affect the conservation status of the species and habitat through management decisions. According to BLM Manual 6840, a Bureau sensitive species must meet the following factors by which a native species may be listed as "sensitive":

- Could become endangered or extirpated from a state or within a significant portion of its range in the near future;
- Is under status review by the USFWS and/or National Marine Fisheries Service;
- Is undergoing significant current or predicted downward trends in: (1) habitat capability that would reduce a species' existing distribution; and/or (2) population or density such that federally listed, proposed, candidate, or state-listed status may become necessary;
- Typically consists of small and widely dispersed populations;
- Inhabits ecological refugia, or specialized or unique habitats;
- Is state-listed, but which may be better conserved through application of BLM sensitive species status.

Greater Sage-Grouse

The greater sage-grouse is protected under the 2015 Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan Amendment and Record of Decision. The ARMPA designates sage-grouse habitat as Sagebrush Focal Area (SFA), Priority Habitat Management Area (PHMA), General Habitat Management Area (GHMA), or Other Habitat Management Area (OHMA). The Proposed Action includes small areas of GHMA and mostly areas of OHMA. GHMAs are BLM-administered lands where some special management will apply to sustain sage-grouse populations. These areas are habitat occupied seasonally or year-round outside of PHMA. OHMAs are BLM-administered lands identified as unmapped habitat that are within the planning area and contain seasonal or connectivity habitat areas.

3.9.1 Affected Environment

The northern portion of Diamond Valley consists of a mixture of vegetation, ranging from small irrigated agricultural fields to salt desert scrub surrounded by sagebrush communities. The adjacent mountain ranges host pinyon-juniper forests. Vegetation types are distributed based

on topography, elevation, and associated precipitation. The lower and drier elevations consist of saltbush, greasewood, sagebrush and a variety of annual and perennial grasses and wildflowers. Shrub density varies from low to medium with an average plant height of one to two feet tall. Many of the soils within the area are affected by salt, and therefore, are relatively low in forage productivity. The wetter, higher elevations consists of primarily of pinyon pine and juniper trees, mountain mahogany, low sagebrush, bitterbrush, serviceberry and snowberry.

The desert salt scrub provides nesting structure and protection from predators and the weather. Soils tend to be loose and are often easy to dig, providing important denning and burrowing habitat. Small and medium mammals that forage in the brush serve as prey for raptors. The sagebrush communities provide important habitat for nesting and foraging, and protection from predators and the weather. The deep, often sandy or loose soils are easy to dig, and burrowing and denning species are common. Sagebrush range in good condition typically supports a lush undergrowth of bunchgrasses and forbs.

Ground disturbance associated with the Proposed Action would occur on the desert playa habitat of Diamond Valley. This area has silt clay soils with very strong salinity. The soils of the nearly level basin are poorly drained and ponding is frequent for short periods. Water dissipates slowly through evaporation or percolation, which frequently leaves salt crusts and deposits on the surface. When flooded, the Playa provides a seasonal habitat for migratory birds. The Playa is mostly devoid of vegetation.

A reconnaissance level biological baseline survey of the Proposed Action was conducted in August 2017.[19] This included the pit area and the course, and the portion of access road that connects the two. Habitat for the majority of species is not present. Special status species occurring or potentially occurring within the Proposed Action were also identified using the following sources of information:

- The Nevada Natural Heritage Program (NNHP) database
- The Nevada Department of Wildlife (NDOW) database
- The Nevada USFWS database
- The BLM Battle Mountain District Threatened and Endangered/Sensitive Status Species list dated February 17, 2017

Threatened, Endangered, and Candidate Species

There are no Endangered, Threatened, Candidate, or Proposed Threatened species located within the Proposed Action, and there are no critical habitats within the project area. The closest Threatened or Endangered species to the project area is the Lahontan cutthroat trout (*Oncorhynchus clarkii henshawi*), a federal-listed threatened species

[19] Schleicher 2017

under the ESA. This species does not exist within the Proposed Action since there are no perennial stream present; however, potential habitat for Lahontan cutthroat trout is in Henderson Creek 9 miles to the west.[20] There are no critical habitats within the Proposed Action.

BLM Sensitive Status Species

The BLM lists a total of 156 BLM SSS within the Battle Mountain District.[21] Of these, 22 species are known to occur or have the potential to occur within the Proposed Action area (Table 3-4).

There is no habitat present for sensitive plant, insect, fish, reptile, or amphibian species. No roosting habitat is within the Proposed Action and no bats were observed during the reconnaissance level biological baseline survey. Current conditions on the Playa are not conducive to bat foraging activity.

Birds

Bald Eagle (Haliaeetus leucocephalus)

Bald eagles are found throughout Nevada as part of the species' winter range. Bald eagles roost preferentially in large conifers or other sheltered sites in winter and typically select the larger, more accessible trees. Nesting pairs are occasionally found in the northern part of the state. Bald eagles primarily eat fish and try to find places with open water during the winter, but can be opportunistic and prey on small mammals and birds, steal food from other birds of prey, and often eat carrion. Major threats to bald eagles include ingestion of contaminants, ingestion of lead, collisions with stationary and moving objects, degradation of shoreline habitat, and disturbance at nest and roost sites.

Habitat for bald eagles exists within the Proposed Action, but none were observed during the biological baseline survey in August 2017. They may fly over the Proposed Action and winter in the area.[22] Bald eagles have been directly observed in the vicinity of the project area.[23]

Black Rosy-Finch (Leucosticte atrata)

Black rosy-finches winter in central Nevada. During winter this species occurs in open fields, cultivated lands, brushy areas, and around human habitation. Black rosy-finches usually nest in rock crevices or in holes in cliffs above snow fields, although it may nest in old abandoned buildings, mine shafts, or other protected sites. The black rosy-finch forages on the ground for seeds and insects. Threats towards the species may include negative impacts on their habitat from nest predation, mining, and grazing.

[20] NDOW 2017, USFWS 2017

[21] BLM 2017

[22] Schleicher 2017, USFWS 2017

[23] NDOW 2017

Table 3-5: BLM Sensitive Species Potentially in Proposed Action

Common Name	Scientific Name	Status	Habitat Present?	Comment
BIRDS				
Bald Eagle	*Haliaeetus leucocephalus*	BLM Sensitive	Yes	May fly over, winter use
Black Rosy-Finch	*Leucosticte atrata*	BLM Sensitive	No	In USFWS assessment area
Brewer's Sparrow	*Spizella breweri*	BLM Sensitive	No	In USFWS assessment area
Burrowing Owl	*Athene cunicularia*	BLM Sensitive	No	May fly over
Ferruginous Hawk	*Buteo regalis*	BLM Sensitive	No	May fly over
Golden Eagle	*Aquila chrysaetos*	BLM Sensitive	No	May fly over
Gray Vireo	*Vireo vicinor*	BLM Sensitive	No	In USFWS assessment area
Greater Sage-Grouse	*Centrocercus urophasianus*	BLM Sensitive	No	In USFWS and NDOW assessment areas
Loggerhead Shrike	*Lanius ludovicianus*	BLM Sensitive	No	In USFWS assessment area
Long-billed Curlew	*Numenius americanus*	BLM Sensitive		In USFWS assessment area
Northern Goshawk	*Accipiter gentilis*	BLM Sensitive	No	May fly over
Peregrine Falcon	*Falco peregrinus*	BLM Sensitive	No	May fly over
Pinyon Jay	*Gymnorhinus cyanocephalus*	BLM Sensitive	No	In USFWS assessment area
Prairie Falcon	*Falco mexicanus*	BLM Sensitive	No	In NDOW assessment area
Sage Thrasher	*Oreoscoptes montanus*	BLM Sensitive	No	In USFWS assessment area
Short-eared Owl	*Asio [Strix] flammeus*	BLM Sensitive		In USFWS and NDOW assessment areas
Snowy Plover	*Charadrius alexandrinus*	BLM Sensitive	Yes	Possible breeding, migratory stop
Swainson's Hawk	*Buteo swainsoni*	BLM Sensitive	No	May fly over
Willow Flycatcher	*Empidonax traillii*	BLM Sensitive	No	In USFWS assessment area
MAMMALS				
Dark Kangaroo Mouse	*Microdipodops megacephalus*	BLM Sensitive	Yes	Year-round
Pale Kangaroo Mouse	*Microdipodops pallidus*	BLM Sensitive	Yes	Year-round
Pygmy Rabbit	Brachylagus idahoensis	BLM Sensitive	No	In NDOW and NNHP assessment areas

No habitat exists within the Proposed Action area for black rosy-finch and none were observed during the biological baseline survey. The surrounding area may provide year-round habitat.[24]

[24] USFWS 2017

Brewer's Sparrow (Spizella breweri)

Brewer's sparrows occur throughout western North America, with breeding areas covering most of Nevada. The preferred habitat in the winter range is to the south, composed of sagebrush shrub lands and desert dominated by saltbrush vegetation and creosote. Sagebrush is the preferred nesting habitat. Brewer's sparrows are primarily a ground forager, consuming more heavily on grains and seed during the winter than insects. Winter population densities seem to be negatively influenced by changes in habitat correlated with summer precipitation indicating the potential for food-limitations to occur. Threats include the loss, fragmentation, and degradation of sagebrush habitat.

No habitat exists within the Proposed Action area for Brewer's sparrow and none were observed during the biological baseline survey. They may use the area during breeding season.[25]

Burrowing Owl (Athene cunicularia)

Burrowing owls are found across much of western north America and spend spring and summer in northern Nevada. Burrowing owls are found in open dry shrub/steppe grasslands, agricultural and range lands, and desert habitats associated with burrowing animals. They typically nest and roost in burrows abandoned by grounds squirrels, badgers, fox, and tortoise, although they occasionally excavate fresh burrows. Burrowing owls primarily eat insects and small mammals, but will also consume reptiles, amphibians, birds, and even bats. Threats include forms of habitation destruction through intense cultivation of grasslands and urbanization, and contamination by carbofuran and other environmental toxins.

No habitat exists within the Proposed Action area for burrowing owls, and none were observed during the biological baseline survey. They may fly over the Proposed Action and use the area during breeding season.[26] A burrowing owl's nest was observed in 2004 within 10 miles of the project area.[27]

Ferruginous Hawk (Buteo regalis)

Ferruginous hawks are year-round and breeding residents in central Nevada. Habitat includes open country, sagebrush, saltbush-greasewood shrub land, and the periphery of pinyon-juniper and other woodland and desert communities. In Nevada, ferruginous hawks nest primarily in live juniper trees. Mammals are the primary prey during the breeding season, although birds, amphibians, reptiles, and insects are also taken. Habitat loss, specifically loss of nest cavities through removal of dead trees, is a threat.

[25] USFWS 2017

[26] Ibid

[27] NDOW 2017

No habitat exists within the Proposed Action area for ferruginous hawks and none were observed during the biological baseline study; however, they may fly over the Proposed Action.[28] Seven ferruginous hawk's nests were observed in 1992 and one nest was observed in 2015 within 10 miles of the project area.[29]

Golden Eagle (Aquila chrysaetos)

Golden eagles are year-round residents of Nevada, but their home ranges, densities, and activity patterns can shift seasonally. They are generally found in a variety of open to semi-open landscapes, especially in hilly or mountainous regions, and avoid heavily forested areas. This species typically nests on rock ledges or occasionally in large trees. Golden eagles feed mainly on small mammals, although they are opportunistic and may also eat insects, snakes, birds, young deer or pronghorn antelope, and carrion. Prey densities and availability of nest sites near suitable prey populations are key limiting factors for the golden eagle populations.

No habitat exists within the Proposed Action area for golden eagles and none were observed during the biological baseline survey; however, they may fly over the Proposed Action.[30] Golden eagles have been directly observed in the vicinity of the project area.[31]

Gray Vireo (Vireo vicinor)

Gray vireos breed in the southwestern U.S., which covers southern and eastern Nevada. They winter on the southern half of the Baja Peninsula, as well as the northwestern edge of Mexico. Gray vireos are short-distance migrants, withdrawing completely from most of their breeding range by early autumn and returning in early spring. They are found in desert scrub, mixed juniper or pinyon pine and oak scrub associations, and chaparral in hot arid mountains and high plains scrubland. The main diet of gray vireos are arthropods, including large grasshoppers, cicadas, and caterpillars. Threats are minimal to gray vireos since their breeding and wintering ranges are relatively remote; however, some habitat loss has reduced numbers and distribution.

No habitat exists within the Proposed Action area for gray vireos, and none were observed during the biological baseline survey. They may use the area during breeding season.[32]

Loggerhead Shrike (Lanius ludovicianus)

Loggerhead shrikes are a year-round resident throughout Nevada. This species breeds in open country with scattered trees and shrubs, savanna, desert scrub, and occasionally in open woodlands. Nesting habitat

[28] Schleicher 2017

[29] NDOW 2017

[30] Schleicher 2017

[31] NDOW 2017, NNHP 2017

[32] USFWS 2017

includes shrubs and small trees, including cholla cactus and sagebrush. Loggerhead shrike feed primarily on large insects, small birds, lizards, frogs, and rodents, and will occasionally scavenge. Threats include ingestion of pesticide-laced prey, collision with vehicles, urban development, and conversion of hayfields and pastureland.

No habitat exists within the Proposed Action area for loggerhead shrikes, and none were observed during the biological baseline survey. The surrounding area may provide year-round habitat.[33]

Long-billed Curlew (Numenius americanus)

The breeding range for long-billed curlews cover much of the western U.S. Spring and summer habitat includes northern Nevada, while wintering range includes costal and central portions of California, coastal Baja California, the gulf coast of Texas, and much of Mexico. Nests occur in moist meadows, on ground usually in a flat area with short grass, sometimes on more irregular terrain, often near a rock or other conspicuous objects. In Nevada, nesting has been documented in unharvested wet meadows as well as in short grass adjacent to wet meadows when meadows were flooded. Long-billed curlew feed on various types of insects, some berries, and crayfish, crabs, snails, and toads. Threats include pesticides and chemicals possibly picked up from wintering areas, as well as degradation of habitat.

No habitat exists within the Proposed Action area for long-billed curlew, and none were observed during the biological baseline survey. They may use the area during breeding season.[34]

Northern Goshawk (Accipiter gentilis)

Northern goshawks breed and winter throughout Nevada. Nests are generally constructed in the largest trees in dense, large tracts of mature or old growth stands. The northern goshawk diet may vary depending on season and region, but generally consists of a combination of small rodents, squirrels, large songbirds, and small to medium-sized game birds. The primary threat is thought to be loss of its preferred nesting habitat for purposes of timber harvest and through other types of habitat alteration.

No habitat exists within the Proposed Action area for northern goshawks and none were observed during the biological baseline survey; however, they may fly over the Proposed Action.[35] A northern goshawk's nest was observed in 2000 within 10 miles of the project area.[36]

[33] USFWS 2017

[34] Ibid

[35] Schleicher 2017

[36] NDOW 2017

Peregrine Falcon (Falco peregrinus)

Peregrine falcons migrate and winter in several areas of northern Nevada, and are found year-round in the southern part of the state. They use various open environments, including desert shrub habitats usually in close association with suitable nesting cliffs. Peregrine falcons can also be found in mountainous, open forested regions, and human population centers. They feed primarily on birds, ranging in size from medium songbirds to small waterfowl. They may also hunt small mammals such as bats, squirrels and rats, lizards, fish, and insects. Threats to peregrine falcons include degradation of habitat, collisions with stationary or moving objects, pesticides, and illegal shooting.

No habitat exists within the Proposed Action area for peregrine falcons and none were observed during the biological baseline survey; however, they may fly over the Proposed Action.[37] The surrounding area may provide year-round habitat.[38]

Pinyon Jay (Gymnorhinus cyanocephalus)

Pinyon jays are a year-round resident in most of Nevada. They can be found in pinyon-juniper woodland, sagebrush, scrub oak, and chaparral communities, and sometimes in pine forests. Pinyon jays nest in shrubs or trees when adequate numbers of pine seeds are available. The pinyon jay diet consists of pine nuts, some acorns, juniper berries, wild berries, small seeds, grain, insects, lizards, snakes, nestling birds, and small mammals. Destruction of pinyon-juniper habitat to create grazing land for cattle resulted in the loss of many jays. Additionally, changes in fire regimes have resulted in loss of many pinyon pines, threatening pinyon jay populations.

No habitat exists within the Proposed Action area for pinyon jays and none were observed during the biological baseline survey. The surrounding area may provide year-round habitat.[39]

Prairie Falcon (Falco mexicanus)

Prairie falcons occur in northern Nevada year-round. They prefer landscapes with cliffs adjacent to arid valleys with low vegetation. They are often observed foraging over a variety of sagebrush, salt desert, and Mojave scrub lands throughout the year, and they also occur in agricultural lands, especially during the winter months. Prairie falcons nest in well-sheltered ledges on rocky, vertical cliff or steep earth embankments, although they may nest in man-made excavations. They generally prefer to forage over open areas of low vegetation and bare ground. Prairie falcons are opportunistic, feeding on small mammals, lizards, snakes, and birds. Threats include human disturbances near nest sites that cause nest abandonment and impacts to prey populations by

[37] Schleicher 2017

[38] USFWS 2017

[39] Ibid

livestock grazing in shrublands or heavy infestations of cheatgrass and other weeds.

No habitat exists within the Proposed Action area for prairie falcons, and none were observed during the biological baseline survey. Prairie falcons have been directly observed in the vicinity of the project area.[40]

Sage Thrasher (Oreoscoptes montanus)

Sage thrashers occupy the northern region of Nevada during the spring and summer. They breed exclusively in sagebrush habitats, transitioning to grasslands with scattered shrubs and open pinyon-juniper woodlands during migration and winter. Sage thrashers feed on a wide variety of insects, including grasshoppers, beetles, weevils, ants, and bees, as well as fruits and berries. Threats include degradation of sagebush habitat via grazing, development, fragmentation, and invasive plants.

No habitat exists within the Proposed Action area for sage thrashers, and none were observed during the biological baseline survey. They may use the area during breeding season.[41]

Short-eared Owl (Asio [Strix] flammeus)

The range of the short-eared owl generally spans the entire U.S. Although they are present year-round in most of Nevada, the species exhibits pronounced seasonal movements and is migratory in some parts of its range. Short-eared owls favor broad expanses of open land with low vegetation, including fresh and saltwater marshes, grassy plains, old fields, river valleys, meadows, and open woodland. They prey on small mammals, small birds, and insects, and their population and locations follow spatial and temporal variations in the abundance of prey. Short-eared owls may be at particular risk from predation because they are ground nesters. Another main threat is habitat loss from human activity.

No habitat exists within the Proposed Action area for short-eared owls, and none were observed during the biological baseline survey. The surrounding area may provide year-round habitat.[42]

Snowy Plover (*Charadrius alexandrinus*)

Western snowy plovers are a migratory bird species that are often seen on alkali playas near standing pools of shallow water. They rely heavily on artesian wells and springs that spill water onto the dry playas during times of drought. Snowy plovers nest generally on recently exposed alkaline flats where vegetation is sparse or absent and are typically created beside or under an object on the ground (rock, plant, etc.). Snowy plovers usually depend on standing water for food, preying on insects, small crustaceans, and other minute invertebrates. Threats include

[40] NDOW 2017

[41] USFWS 2017

[42] Ibid

habitat alteration, increased use of recreational beaches, and predation by other animals resulting in a high rate of clutch loss.

Diamond Valley can be and has been used for nesting ground by the snowy plover. Habitat exists within the Proposed Action for snowy plovers for possible breeding and as a migratory stop, and they have been observed in the vicinity.[43] None were observed during the 2017 reconnaissance level biological baseline survey, but six adult snowy plovers were observed in June 2007 at two springs within 2 miles of the proposed course; the plovers were displaying foraging behavior but not breeding behavior during the 2007 observation.[44]

Swainson's Hawk (Buteo swainsoni)

Swainson's hawks are a spring and summer resident of Nevada. Their ideal landscape consists of large riparian nesting trees, agricultural fields, and open shrublands within relatively close proximity. Swainson's hawks feed mainly on small mammals, insects, snakes, lizards, birds, amphibians, and some carrion. Threats to the species include pesticides and illegal shooting.

No habitat exists within the Proposed Action for Swainson's hawks and none were observed during the biological baseline survey; however, they may fly over the Proposed Action and use the area during breeding season. [45]

Willow Flycatcher (Empidonax traillii)

The willow flycatcher breeds in much of the western and northern U.S. and winter along the coasts of Central America and the bottom half of Mexico's western coast. They breed in moist shrubby areas, often with standing or running water. Willow flycatcher nests are built low in a bush or small tree near water on the outer edge of shrubs. They eat mostly insects. Degradation of habitat is the biggest threat to willow flycatcher conservation, with collisions with towers during migration also a source of mortality.

No habitat exists within the Proposed Action for willow flycatchers, and none were observed during the biological baseline study. They may use the area during breeding season.[46]

Mammals

Dark Kangaroo Mouse (Microdipodops magacephalus)

Dark kangaroo mice are found throughout Nevada. They prefer lose sands and gravel in shadscale scrub, sagebrush scrub, and alkali sink plan communities, but may also be found in sand dunes near margins of

[43] Schleicher 2017, NNHP 2017

[44] Schleicher 2007

[45] Ibid, USFWS 2017

[46] USFS 2017

their range. Seeds are the primary food source, although dark kangaroo mice will also eat some insects. They are nocturnal and appear to be most active from March to October, they may hibernate. Threats to the dark kangaroo mouse include habitat alteration through cultivation or natural shifts in vegetation zones.

Habitat exists within the Proposed Action for dark kangaroo mice, but none were observed during the biological baseline survey. The area provides year-round habitat.[47]

Pale Kangaroo Mouse (Microdipodops pallidus)

Pale kangaroo mice are found in west-central and south-central Nevada. They inhabit mostly fine sands in alkali sinks dominated by desert scrub and often burrow in areas of soft, windblown sand piled at the base of shrubs. Pale kangaroo mice store and eat seeds during much of the year, and also eat insects and green vegetation. They are nocturnal. Some populations of pale kangaroo mice have declined due to the introduction of weedy grasses and extreme habitat alteration from cultivation and natural shifts in vegetation zones.

Habitat exists within the Proposed Action for pale kangaroo mice, but none were observed during the biological baseline survey. The area provides year-round habitat.[48]

*Pygmy Rabbit (*Brachylagus idahoensis*)*

Pygmy rabbits are North America's smallest rabbits and are found throughout Nevada. They typically inhabit stands of tall, dense sagebrush in locations with deep, loose soils. They are the only rabbits that are known to commonly construct their own burrows. Pygmy rabbits are dependent on the sagebrush community and their decline is probably closely related to loss and degradation of these habitats.

No habitat exists within the Proposed Action for pygmy rabbits, and none were observed during the biological baseline survey. The surrounding area does provide habitat and pygmy rabbits have been observed in the vicinity.[49]

Greater Sage-Grouse

The greater sage-grouse (*Centrocerus urophasianus*) is found throughout northern Nevada. The sage-grouse is an omnivore and eats mainly sagebrush and insects. It is almost completely reliant on this plant and cannot survive where this plant does not occur. Areas with riparian/meadow habitat are vitally important for brood-rearing, especially during the summer and early fall as forbs desiccate on upland areas. Forbs are an essential part of the diet of young sage-grouse. Hens that nest at lower elevations could move their brood considerable distances

[47] Schleicher 2017

[48] Ibid

[49] NNHP 2017, NDOW 2017

seeking riparian/meadow areas that provide succulent forbs at mid to higher elevations. Greater sage-grouse populations have declined, probably due to a combination of factors such as drought, habitat loss, and habitat fragmentation. The most crucial habitats for sage grouse are nesting areas, brood rearing areas, strutting grounds (leks), nest sites, and upland meadows which provide forage.

Habitat for greater sage-grouse was not identified during the reconnaissance level biological baseline survey in August 2017. NDOW identifies the Proposed Action area as primarily "other" greater sage-grouse habitat. General habitat also exists in the vicinity. Greater sage-grouse activity in the vicinity of the Proposed Action has been documented by 73 tracking locations generated by at least 31 radio-marked birds. There is one known lek site of unknown status within 4 miles of the Proposed Action; it was last surveyed in 2009.[50]

Definitions of Intensity Levels of Effects for Special Status Species

No Impact: The project (or action) is outside suitable habitat and there would be no disturbance or other direct or indirect impacts on the species. The action would not affect special status species or designated critical habitat.

May Affect, Not Likely to Adversely Affect: The project (or action) occurs in suitable habitat or results in indirect impacts on the species, but the impact on the species is likely to be entirely beneficial, discountable, or insignificant. The action may pose impacts on special status species or designated critical habitat but given circumstances or mitigation conditions, the impacts may be discounted, insignificant, or completely beneficial. Insignificant impacts would not result in take. Discountable impacts are those that are extremely unlikely to occur. Based on best judgment, a person would not (1) be able to meaningfully measure, detect, or evaluate insignificant impacts or (2) expect discountable impacts on occur.

May Affect, Likely to Adversely Affect: The project (or action) would have an adverse impact on a special status species as a result of direct, indirect, interrelated, or interdependent actions. An adverse impact on a listed species may occur as a direct or indirect result of the proposed action or its interrelated or interdependent actions and the impact is not: discountable, insignificant, or beneficial.

Duration

Short- term: One year or less for individual or habitat; five years or less for a population

Long- term: Greater than one year for individual or habitat; greater than five years for a population

[50] NDOW 2017

Context

Localize: Impacts are confined to a small part of the population, habitat, or range

Regional: Impacts would affect a widespread area of suitable habitat or the range of the population or species

3.9.2 Environmental Consequences of the Proposed Action

Threatened, Endangered, and Candidate Species

No species listed as threatened or endangered under the ESA occur on the Playa. The Lahontan cutthroat trout, a federal-listed threatened species, is potentially located 9 miles from the Proposed Action.

Therefore, adverse effects on threatened, endangered, and candidate species from the Proposed Action are anticipated to be no impact, short-term, and localized.

BLM Sensitive Status Species

Habitat for bald eagle, snowy plover, and dark and pale kangaroo mice were observed within the Proposed Action, and other BLM SSS may occur in the vicinity. The Proposed Action may result in disturbance to sensitive species habitat, but it is not anticipated to contribute to a loss of viability for any particular sensitive species.

To minimize or avoid potential impacts to BLM SSS that may occur in the Proposed Action area, environmental protection measures would minimize direct and indirect impacts. These protection measures include:

- No burrows or nests would be disturbed, destroyed, or removed.
- No LSR attempts would be made in the evening when bats and other nocturnal species are most active.

Overall, the Proposed Action may affect, but not likely to adversely affect special status species. It is anticipated to be short-term and localized.

Greater Sage-Grouse

Currently, there is one known lek of unknown status within 4 miles of the Proposed Action boundary. The ARMPA establishes at least a 0.25-mile buffer from known leks for noise and related disruptive activities that do not result in habitat loss, including motorized recreational events.[51] The known lek location is approximately 2.5 miles from the Proposed Action. No habitat for greater sage-grouse is located in the biological assessment area.

[51] BLM 2015 Appendix B

To minimize or avoid potential impacts to greater sage-grouse that may occur in the Proposed Action area, the following General Required Design Features in the 2015 ARMPA would be applied:

- **RDF Gen 5:** During project construction and operation, establish and post speed limits in GRSG habitat to reduce vehicle/wildlife collisions or design roads to be driven at slower speeds.
- **RDF Gen 11:** Equip temporary and permanent aboveground facilities with structures or devices that discourage nesting and perching of raptors, corvids, and other predators.
- **RDF Gen 12:** Control the spread and effects of nonnative, invasive plant species (e.g., by washing vehicles and equipment, minimize unnecessary surface disturbance. All projects would be required to have a noxious weed management place in place prior to construction and operations.
- **RDF Gen 13:** Implement project site-cleaning practices to preclude the accumulation of debris, solid waste, putrescible wastes, and other potential anthropogenic subsidies for predators of GRSG.
- **RDF Gen 19:** Instruct all construction employees to avoid harassment and disturbance of wildlife, especially during the GRSG breeding (e.g., courtship and nesting) season. In addition, pets shall not be permitted on site during construction.

Additionally, no LRS attempts would be made during greater sage-grouse lek or nesting activities. This includes the period from March 1 through June 30.

Overall, the Proposed Action may indirectly affect, but not likely to adversely affect greater sage-grouse. It is anticipated to be short-term and localized.

3.9.3 Environmental Consequences of the No Action Alternative

Under the No Action Alternative, current habitat conditions and noise levels would continue to exist, and there would be no impacts to special status species.

3.10 Wastes (Hazardous or Solid)

The Resource Conservation and Recovery Act (RCRA) of 1976 governs the disposal of solid and hazardous waste. RCRA set national goals for protecting human health and the environment from the potential hazards of waste disposal, conserving energy and natural resources, reducing the amount of waste generated, and ensuring that wastes are managed in an environmentally-sound manner. The Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended,

provides for liability, compensation, cleanup, and emergency response for hazardous substances released into the environment and the cleanup of inactive hazardous waste disposal sites.

3.10.1 Affected Environment

The site and vicinity of the Proposed Action is the Diamond Valley Playa and margins. Past and present Playa activities include salt mining (historic), fenced areas for livestock, and casual recreational access. There are no hazardous material storage facilities in the Project Area and no hazardous materials are known to be routinely used in the Project Area. The transport and handling of hazardous materials in Nevada are subject to numerous federal and state laws and regulations.

The Proposed Action would include time trials on the designated race course; support for the vehicle from the pit area; the presence of support staff at the compound; the storage and use of fuel, paint, and lubrication oil at the pit area; and ingress and egress from the pit area and race course area by necessary support vehicles.

Definitions of Intensity Levels of Effects for Wastes (Hazardous or Solid)

Negligible: There is a barely-perceptible increase in wastes (hazardous or solid) as a result of implementing the Proposed Action; mitigation efforts would be small and success would be almost guaranteed.

Minor: There is a slight increase in wastes (hazardous or solid) as a result of implementing the Proposed Action; however, effects can be easily managed and controlled through mitigation and the probability of success would likely be moderate to high.

Moderate: There is a measurable increase in wastes (hazardous or solid) as a result of implementing the Proposed Action; mitigation efforts would need to be implemented repeatedly and there would be a slight risk of failure and increased proliferation.

Major: There is a measurable and noted increase in wastes (hazardous or solid) as a result of implementing the Proposed Action, affecting large areas; mitigation efforts would likely fail and there would be a high risk of increased proliferation over more geographic areas.

Duration

Short-term: Effects would not alter the existing conditions, or would last one year or less.

Long-term: Effects would alter the existing conditions and last greater than one year.

Context

Localized: Effects would be limited to the treatment site.
Regional: Effects would occur beyond the treatment site.

3.10.2 Environmental Consequences of the Proposed Action

The impacts of the Proposed Action would not include generation of any hazardous wastes or permanent deposit of solid wastes within the project area. Solid wastes generated during the time trial events would include human sanitary waste and discarded materials from vehicle support processes. None of these materials would be regulated or hazardous wastes. The sanitary wastes would be collected in portable toilets placed in the pit area. Suitable numbers of toilets would be provided and serviced as needed by a contract service vendor, who would properly dispose of the waste at an off-site location.

Vehicle support personnel would generate solid waste in the form of waste paper, disposable food containers, miscellaneous plastics, etc. These wastes would be placed in waste containers and collected for disposal by NAE personnel. Small waste containers would be placed in the pit area. NAE personnel would transport the accumulated waste from these containers to the county landfill.

The LSR activities would include the use of kerosene. Up to 200 gallons of kerosene fuel would be needed for each run of the NAE vehicle. Fuel transfers into the vehicle would be conducted by trained and approved NAE team personnel in order to minimize the chance of spillage. Fuel transfers may be done at any location of the approved race course and in the pit area. Absorbent materials would be deployed on the ground between the NAE vehicle and the fuel vehicle during each fuel transfer event. In the event of fuel spillage, trained NAE personnel would immediately remove and place any contaminated absorbent media into U.S. Department of Transportation (USDOT) approved metal drums, and the materials would be disposed of in accordance with all applicable federal, state, and local regulations. In the event any spillage reaches the ground, affected soil would be immediately removed and placed into USDOT approved metal drums and would be disposed of in accordance with all applicable federal, state, and local regulations. USDOT approved drums would be identified with USDOT labels. Larger spills would be cleaned up by a Nevada-approved hazardous materials contractor, to be retained by NAE. In the event that there is a crash, the same cleanup procedures would be implemented. A Nevada Certified Environmental Manager would oversee any spill responses whether large or small.

Paint maintenance activities would occur only within the pit area. No uses of solvent would be planned. Surfaces to be repaired would be mechanically prepared and the paint applied. Any waste containers would be removed from the Playa and disposed of in accordance with all

applicable federal, state, and local regulations after the LSR activities are finished.

Overall, adverse effects from wastes (hazardous or solid) are anticipated to be negligible to minor, short-term, and localized.

3.10.3 Environmental Consequences of the No Action Alternative

Under the No Action Alternative, no activities would be undertaken and no potential for waste materials would occur.

3.11 Water Resources

Water Quality (Surface/Ground)

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the act was significantly reorganized and expanded in 1972. "Clean Water Act" became the Act's common name with amendments in 1972.

The CWA requires that federal actions comply with state water quality standards and do not impair surface or ground waters. Standards are established in relation to the use provided, such as human consumption, irrigation, fisheries, livestock, or recreation. The natural quality and composition of water is driven by soil interactions, transported solids, rocks, vegetation, groundwater and the atmosphere.

The Nevada Water Pollution Control Law provides the state the authority to maintain water quality for public use, wildlife, existing industries, agriculture, and economic development. The Nevada Division of Environmental Protection (NDEP) defines waters of the state to include surface water, waterways, drainage systems, and underground water.

Floodplains

Executive Order 11988 requires federal agencies to avoid to the extent possible the long and short-term adverse impacts associated with the occupancy and modification of flood plains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative.

A floodplain is defined as a lowland and relatively flat area adjoining a river, stream, or creek that is subject to a 1 percent or greater chance of flooding in any given year. Federal agencies are required to take action to reduce the risk of flood loss; to minimize the impact of floods on human safety, health and welfare; and to restore and preserve the natural and beneficial values served by floodplains.

Wetlands and Riparian Zones

The purpose of Executive Order 11990 is to minimize the destruction, loss, or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands. To meet these objections, the order requires federal agencies to consider alternatives to wetland sites and limit potential damage if an activity affecting a wetland cannot be avoided.

Wetlands are defined by the U.S. Army Corps of Engineers (USACE) and EPA as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands provide a variety of functions including groundwater recharge and discharge; flood flow alteration; sediment stabilization; sediment and toxicant retention; nutrient removal and transformation; aquatic and terrestrial diversity and abundance; and uniqueness. Three criteria are necessary to define wetlands: vegetation (hydrophytes), soils (hydric), and hydrology (frequency of flooding or soil saturation). Hydrophytic vegetation is classified by the estimated probability of occurrence in wetland versus upland (non-wetland) areas throughout its distribution. Hydric soils are those that are saturated, flooded, or ponded for sufficient periods during the growing season and that develop anaerobic conditions in their upper horizons (i.e., layers). Wetland hydrology is determined by the frequency and duration of inundation and soil saturation; permanent or periodic water inundation or soil saturation is considered a significant force in wetland establishment and proliferation.

Riparian zones are the interface between land and a flowing surface water body. Plant communities along the water body margins are called riparian vegetation, characterized by hydrophilic plants. Riparian zones occur in many forms including grassland, woodland, wetland, or even non-vegetative. Some are dominated by short or tall grass and grass-like species, by willows and other shrubs, by cottonwood, aspen, and other trees or by varying mixtures of trees, shrubs, grasses and forbs. Healthy riparian zones play a vital role in commercial uses of rangeland ecosystems, for example, by providing abundant forage and shade for livestock; reducing the impact of upland sources of pollution by trapping, filtering, and converting sediments, nutrients, and other chemicals; and improvement for both surface runoff and water flowing into streams through subsurface or groundwater flow.

3.11.1 Affected Environment

Water Quality (Surface/Ground)

The Diamond Valley Hydrographic Basin (Basin 153) is part of the larger Diamond Valley regional flow system, which also includes Monitor, Antelope, and Kobeh valleys and Stevens Basin. The principal aquifers of the flow system are in basin-fill deposits that occupy structural basins comprised of carbonate rocks, siliciclastic sedimentary rocks, igneous intrusive rocks, and volcanic rocks. Prior to irrigation development in the 1960s, ground-water flow in Diamond Valley was from valley margins

toward the valley axis and then northward to a large discharge playa at the north end of the valley. After 40 years of irrigation pumping, a large area of ground-water decline has developed in the southern portion of the valley around the irrigated area.[52] This over pumping of ground water has prompted the Diamond Valley Hydrographic Basin to be the only basin in the state designated as a Critical Management Area in 2015.

Floodplains

A review of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) for Diamond Valley indicates that the northern portion of the valley, which includes the Playa, is designated as Special Flood Hazard Area (SFHA) Zone A. This means it is subject to inundation by the 1-percent-annual-chance flood event determined using appropriate methodologies, but no Base Flood Elevations (BFEs) have been determined for this area through a detailed hydraulic analysis. Garden Pass Creek flows into the southwestern portion of Diamond Valley where it terminates at a few springs at the edge of the alkali flat.

Wetlands and Riparian Zones

The USFWS identifies three main types of wetlands in Nevada: emergent wetlands, scrub/shrub wetlands, and forested wetlands. Wetland types are not necessarily restricted to specific categories and can vary depending on diversity of vegetation. For example, the playa wetland subtype is non-vegetated, saline-alkaline affected and undrained shallow basins also known as intermittent lakes or alkali flats. Playa wetlands contain water for short periods in the winter and spring or following summer thunderstorms. These types of wetlands have a fringe of scrub/shrub or emergent vegetation.

According to the National Wetland Inventory (NWI) maps of the USFWS, several wetland types are located in northern Diamond Valley. NWI maps for the area indicate that the Playa is primarily “lake,” surrounded by smaller freshwater emergent and freshwater forested/shrub wetlands. The wetlands are all classified as seasonally flooded, meaning surface water is present only for extended periods, especially early in the growing season, but is absent by the end of the growing season in most years. No riparian zones were mapped by the USFWS. The Proposed Action is only within the lake wetland, which is characterized as lacking any trees, shrubs, persistent emergents, or emergent mosses or lichens with greater than 30 percent areal coverage.

Definitions of Intensity Levels of Effects for Water Resources

Negligible: Effects to the water resources would not result in detectable effects. Chemical, physical, or biological changes to water quality and hydrology would not be measurable.

[52] Tumbusch and Plume 2006

Minor: Effects to water resources would result in detectable effects, but would be temporary. Chemical, physical, or biological changes to water quality would be detectable, but would be within historical baseline or desired water quality conditions and the resource would return to pre-impact condition within one day or less. Impacts on hydrology, such as an increase or decrease in surface or groundwater flow, would be detectable, but the resource would return to pre-impact conditions within one year or less. If mitigation were needed to offset adverse effects, it would be relatively simple to implement.

Moderate: Effects to water resources would result in detectable effects; these changes would not be permanent, and the resource would rebound to pre-impact conditions after one season. Chemical, physical, or biological changes to water quality would be detectable, but historical baseline or desired water quality conditions would only be temporarily altered. Impacts on hydrology would be readily apparent. Mitigation would probably be necessary to offset adverse effects.

Major: Effects to water resources would result in detectable effects which would likely result in long-term to permanent changes. In extreme cases, species may be extirpated due to loss of habitat. Chemical, physical, and biological changes to water quality would represent a major degradation from historical baseline water quality conditions. Alternations could be long-term. Impacts on hydrology would be readily apparent and would substantially change the hydrologic regime over the area.

Duration

Short-term: One day or less for water quality; one year or less for water resources.
Long-term: Greater than one day for water quality; greater than one year for water resources.

Context

Localized: A single seep, spring, wetland, or tributary.
Regional: Aquatic and water resources covering several seeps, springs, wetlands and tributaries.

3.11.2 Environmental Consequences of the Proposed Action

The Proposed Action would not have any adverse effects on water quality, resources, floodplains, wetlands, or riparian zones. This Proposed Action would not take place if any wetness or ponding is present and would not include the construction of buildings or facilities or require the alteration, modification, or development of the Playa for LSR attempts. Travel of the NAE vehicle on the Playa would produce similar tracks to other personal vehicles that use the alkali flat for recreation. Tracks left on the Playa surface from the NAE vehicle are 1 inch or less in depth and barely break to surface crust. With normal seasonal inundation, the Playa

surface would be subject to the effects of the natural weathering cycle, which would return the Playa to pre-race conditions.

The overall adverse effects of the Proposed Action to water resources are anticipated to be negligible to minor, short-term, and localized.

3.11.3 Environmental Consequences of the No Action Alternative

Under the No Action Alternative, no impacts would occur and current conditions would continue.

3.12 Wildlife

Fish, Aquatic Invertebrates, and General Wildlife

Through a Memorandum of Understanding (MOU) established in 1971, the BLM and NDOW cooperatively manage wildlife and fish resources and their habitats on public lands. The BLM commits to manage wildlife and fisheries resource habitat, and NDOW manages populations. The BLM meets its obligations by managing public lands to protect and enhance food, shelter, and breeding areas for wild animals. NDOW assures healthy wildlife numbers through a variety of management tools including wildlife and fisheries stocking programs, hunting and fishing regulations, land purchases for wildlife management, cooperative enhancement projects, and other activities.

Migratory Birds

Migratory birds, which include any species or family of birds that live, reproduce, or migrate within or across international/state borders at some point during the year, are protected by the Migratory Bird Treaty Act of 1918 (MBTA). Currently, there are over 800 species on the list. The MBTA protects bird species naturally occurring in the United States and any ground clearing or other vegetation-disturbing action during the migratory bird nesting season risks a violation of the MBTA. The statute makes it unlawful without a waiver to pursue, hunt, take, capture, kill, or sell birds listed therein as migratory birds. The term “take” includes “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb.” The statute does not discriminate between live or dead birds and grants full protection to any bird parts including feathers, eggs, and nests.

Executive Order 13186 directs executive departments and agencies to take certain actions to further implement the MBTA and to conserve migratory birds. The 1999 Nevada Partners in Flight Bird Conservation Plan and 2012 Nevada Wildlife Action Plan identifies “priority” bird species associated with primary habitat types. An MOU between the BLM and the USFWS was finalized in 2010 to help promote conservation and protection of migrating birds. The 2013 BLM Strategic Plan for Migratory Bird Conservation is the follow-up document to the MOU. Due diligence suggests that proposed actions on BLM-managed lands consider annual migratory

bird surveys and pre-clearance surveys prior to anthropogenic activities to assure protection during the sensitive migratory bird breeding period (April 1 through July 31) in the BMD. The BLM and USFWS suggest buffer zones that are species-specific that help conserve, protect, and manage migratory birds. Coordination and consultation with the BLM is required to determine buffer zones. These surveys are adequate for up to 14 days. Additional surveys must be conducted after 14 days have elapsed if the project has not been implemented.

Birds of Prey (Raptors)

Raptor species are protected by state and federal laws. The BGEPA of 1940, as amended, applies primarily to taking, hunting, and trading activities that involve any bald or golden eagle. The act prohibits the direct or indirect take of an eagle, eagle part or product, nest, or egg. The BGEPA protects all nests—active and inactive. Consultation and permitting is required to relocate nests or take of eagles.

3.12.1 Affected Environment

The northern portion of Diamond Valley consists of a mixture of vegetation, ranging from small irrigated agricultural fields to salt desert scrub surrounded by sagebrush communities. The adjacent mountain ranges host pinyon-juniper forests. Vegetation types are distributed based on topography, elevation, and associated precipitation. The lower and drier elevations consist of saltbush, greasewood, sagebrush and a variety of annual and perennial grasses and wildflowers. Shrub density varies from low to medium with an average plant height of one to two feet tall. Many of the soils within the area are affected by salt, and therefore, are relatively low in forage productivity. The wetter, higher elevations consists of primarily of pinyon pine and juniper trees, mountain mahogany, low sagebrush, bitterbrush, serviceberry and snowberry.

The desert salt scrub provides nesting structure and protection from predators and the weather. Soils tend to be loose and are often easy to dig, providing important denning and burrowing habitat. Small and medium mammals that forage in the brush serve as prey for raptors. The sagebrush communities provide important habitat for nesting and foraging, and protection from predators and the weather. The deep, often sandy or loose soils are easy to dig, and burrowing and denning species are common. Sagebrush range in good condition typically supports a lush undergrowth of bunchgrasses and forbs.

The Proposed Action would occur on the desert playa habitat of Diamond Valley. This area has silt clay soils with very strong salinity. The soils of the nearly level basin are poorly drained and ponding is frequent for short periods. Water dissipates slowly through evaporation or percolation, which frequently leaves salt crusts and deposits on the surface. When flooded, the Playa provides a seasonal habitat for migratory birds. The Playa is mostly devoid of vegetation.

A reconnaissance level biological baseline survey of the Proposed Action was conducted in September 2017.[53] This included the pit area and the course, and the portion of access road that connects the two. Habitat for the majority of species is not present. Wildlife species, migratory birds, and raptors occurring or potentially occurring within the Proposed Action were also identified using the following sources of information:

- The NNHP database
- The NDOW database
- The Nevada USFWS database

Fish

There is no suitable fish habitat in the Proposed Action. The USFWS lists the Lahontan cutthroat trout (*Oncorrhynchus clarkia henshawi*) within their 10-mile assessment area of the project. The Lahontan cutthroat trout is a federally-protected fish species under the ESA. The closest habitat for this species occurs approximately 9 miles to the west of the Proposed Action, within Henderson Creek.

Aquatic Invertebrates

Temporary pools of water on the Playa after storm events may be utilized by shorebirds, waterfowl, and other migratory birds, especially in the winter and spring. When flooded, the Playa may support phytoplankton, microbes, and crustaceans that are a rich food source for these migratory birds. Playa soils may also support aquatic invertebrates that are specially adapted to the prolonged drought and occasional inundation cycle of the Playa.[54] Persisting as cysts encased in dry playa soil, these aquatic invertebrates wait until sufficient precipitation occurs to hatch, reproduce, and complete their life cycle before desiccation occurs again. Four different branchiopods are common and widely distributed throughout Great Basin playas: two types of fairy shrimp (*Branchinecta mackini* and *B. gigas*), tadpole shrimp (*Lepidurus lemmoni*), and water flea (*Moina* sp.).[55]

General Wildlife

Based on the results of the reconnaissance level biological baseline survey and information provided by NDOW and USFWS, the following wildlife species are likely to be present or utilize the area within or in the vicinity of the Proposed Action.

Big Game Wildlife

Occupied pronghorn antelope (*Antilocapra americana*) distribution exists throughout the entire project area, and occupied mule deer (*Odocoileus*

[53] Schleicher 2017
[54] Adams and Sada 2010
[55] Ibid

hemionus) distribution exists within portions of the project area. Occupied Rocky Mountain elk (*Cervus canadensis*) distribution exists outside of the project area and barely in the assessment area (4 miles). No known occupied bighorn sheep (*Ovis canadensis*) distribution exists in the vicinity.

Mule deer use a variety of vegetation types and habitats seasonally in their pursuit of forage, thermal cover, and escape cover for seasonal needs. Vegetation important for mule deer includes serviceberry, snowberry, mountain mahogany, sagebrush, aspen, cottonwood, willow, chokecherry, wild rose, singleleaf pinyon pine, Utah juniper, eriogonum, arrowleaf balsamroot, penstemon, phlox, sorrel, hawksbeard, lupine, and numerous forbs. Riparian vegetation along streams, meadow areas, and aspen stands are important fawn-rearing areas. No mule deer were observed in the project area.

The Proposed Action is within habitat for pronghorn antelope, which can be year-round ranges in northern and central Nevada. Pronghorn migration times are variable and depend on environmental conditions. Pronghorn prefer gentle rolling to flat, wide-open topography with low understory that allows them to see great distances and to move quickly to avoid predators. The vegetative cover within this habitat includes salt desert shrub, greasewood, grassland, agriculture, and sagebrush steppe. No pronghorn antelope or signs of pronghorn antelope were identified in the project area.[56]

Small Game/Non-Game Wildlife

According to NDOW, the following species have been observed in the vicinity of the Proposed Action: black-tailed jackrabbit (*Lepus californicus*), pygmy rabbit (*Brachylagus idahoensis*), mountain lion (*Puma concolor*), coyote (*Canus latrans*), chukar (*Alectoris chukar*), common raven (*Corvus corax*), wood duck (*Aix sponsa*), fingernail clam (*Musculium* spp.), crestless column snail (*Pupilla hebes*), depressed Rocky Mountainsnail (*Oreohelix strigosa*), gyro snail (*Gyraulus* spp.), pond snail (*Lymnaeidae* spp.), and western glass snail (*Vitrina pellucida*). There are no water developments in the vicinity of the Proposed Action. Habitat for amphibians does not exist. Habitat for reptiles, such as snakes and lizards, does exist within the vegetated portion along the access road. The pygmy rabbit is considered a BLM sensitive status species and is described in the special status species section above.

Migratory Birds

Migratory birds depend on seasonal water that accumulates on playas due to impermeable clay layers. Some migratory birds may forage, nest, or otherwise use the Playa of Diamond Valley seasonally. In addition, salt-desert scrub and sagebrush scrub surrounding the Playa provide shelter and foraging habitat for migratory bird species. Migratory bird breeding season in the BMD is from April 1 through July 31.

[56] Ibid

Various species of migratory birds, which use diverse habitat types, may reside in the vicinity of the Playa. These include bald eagle (*Haliaeetus leucocephalus*), black rosy-finch (*Leucosticte atrata*), Brewer's sparrow (*Spizella breweri*), burrowing owl (*Athene cunicularia*), calliope hummingbird (*Stellula calliope*), chukar (*Alectoris chukar*), eared grebe (*Podiceps nigricollis*), fox sparrow (*Passerella iliaca*), gray vireo (*Vireo vicinior*), greater sage-grouse (*Centrocerus urophasianus*), green-tailed towhee (*Pipilo chlorurus*), loggerhead shrike (*Lanius ludovianus*), long-billed curlew (*Numenius americanus*), olive-sided flycatcher (*Contopus cooperi*), peregrine falcon (*Falco peregrinus*), pinyon jay (*Gymnorhinus cyanocephalus*), rufous hummingbird (*Selasphorus rufus*), sage thrasher (*Oreoscoptes montanus*), short-eared owl (*Asio flammeus*), Swainson's hawk (*Buteo swansoni*), Virginia's warbler (*Vermivore virginae*), western grebe (*Aechmophorus occidentalis*), Williamson's sapsucker (*Sphyrapicus thyroideus*), willow flycatcher (*Empidonax trallii*), and wood duck (*Aix sponsa*). These birds have distribution ranges that include the Proposed Action area and within a 4-mile assessment area. The bald eagle has all been directly observed in the vicinity of the Proposed Action.

Birds of Prey (Raptors)

Various species of raptors may reside in the vicinity of the Playa. These include American kestrel (*Falco sparverius*), bald eagle (*Haliaeetus leucocephalus*), barn owl (*Tyto alba*), burrowing owl (*Athene cunicularia*), common raven (*Corvus corax*), Cooper's hawk (*Accipiter cooperii*), ferruginous hawk (*Buteo regalis*), flammulated owl (*Psiloscops flammeolus*), golden eagle (*Aquila chrysaetos*), great horned owl (*Bubo virginianus*), long-eared owl (*Asio Otus*), merlin (*Falco columbarius*), northern goshawk (*Accipiter gentilis*), northern harrier (*Circus cyaneus*), northern saw-whet owl (*Aegolius acadicus*), osprey (*Pandion haliaetus*), peregrine falcon (*Falco peregrinus*), prairie falcon (*Falco mexicanus*),red-tailed hawk (*Buteo jamaicensis*), rough-legged hawk (*Buteo Lagopus*), sharp-skinned hawk (*Accipiter striatus*), short-eared owl (*Asio flammeus*), Swainson's hawk (*Buteo swansoni*), turkey vulture (*Cathartes aura*), and western screech owl (*Otus kenni-cottii*). These birds have distribution ranges that include the Proposed Action area and within a 4-mile assessment area. Bald eagle, golden eagle, prairie falcon, red-tailed hawk, and rough-legged hawk have all been directly observed in the vicinity of the Proposed Action.

Raptor (including eagles) breeding season in the BMD is from March 1 through July 31. NDOW identified 40 known raptor nests within 10 miles of the Proposed Action over the last 42 years. These include one burrowing owl nest, six buteo/corvid nests, two corvid nests, 17 eagle nests, two eagle/buteo nests, two falcon nests, nine ferruginous hawk nests, and one northern goshawk nest.[57]

[57] NDOW 2017

Definitions of Intensity Levels of Effects for Wildlife

Negligible: Wildlife would not be affected, or effects would not result in a loss of individuals or habitat.

Minor: Effects on wildlife would be measurable or perceptible and local; however, the overall viability of the population or subpopulation would not be affected and without further adverse effects the population would recover. Impacts, such as displacement of nests or dens or obstruction of corridors, would be detectable. If mitigation is needed to reduce or rectify adverse effects, it would be relatively simple to implement.

Moderate: Effects would be sufficient to cause a change in the population or subpopulation (e.g., abundance, distribution, quantity, or viability); however, the effect would remain local. The change would be measurable and perceptible, but the negative effects could be reversed. Mitigation would probably be necessary to reduce or rectify adverse effects.

Major: Effects would be substantial, highly noticeable, and could be permanent in their effect on population or subpopulation survival without active management. Extensive mitigation would likely be necessary to reduce or rectify adverse effects, and its success could not be guaranteed.

Duration

Short-term: One year or less for individuals or habitat; five years or less for a population.

Long-term: Greater than one year for individuals or habitat; greater than five years for a population.

Context

Localized: Impacts are confined to a small part of the population, habitat, or range.

Regional: Impacts would affect a widespread area of suitable habitat or the range of the population or species.

3.12.2 Environmental Consequences of the Proposed Action

Fish, Aquatic Invertebrates, and General Wildlife

Activities on the Playa itself may temporarily disturb wildlife. Noise sampling taken during NAE speed attempts at the Alvord Desert in Oregon resulted in 51.6 dBA measured from a 1-mile distance with the vehicle passing at full power. Sound measurements taken from a 2.4-mile distance indicated levels of sound at 45 dBA, and nearly imperceptible

levels of sound of less than 30 dBA at 4.35 miles away.[58] LSR attempts would last approximately 2 minutes per run. Dust levels are anticipated to be moderate and localized, and expected to dissipate quickly after each LSR attempt. Elevated levels of noise and dust as a result of the LSR attempts may frighten wildlife and could displace or disrupt foraging, roosting, and nesting activities, but wildlife would likely return to the area in the evening/night or soon after the LSR activities are completed. It is anticipated that such short-term displacement would not affect individual health or population levels. Diligent efforts would be made to prevent collisions with wildlife. Use of a single access road and the presence of course marshals would reduce this likelihood.

Only the western portion of the access road runs through vegetation, consisting of sagebrush and salt desert shrub communities. No improvements or modifications of the access road would be planned, nor would any vegetation disturbance or removal occur. NAE personnel would also avoid driving or parking vehicles in the vegetation. Use of the road is not likely to disturb or displace any wildlife species present in the Proposed Action area.

No permanent water resources are located in the Proposed Action and no springs or other water bodies would be impacted by the activities. Use of the NAE vehicle and pit area on the Playa will compact playa soils and possibly disturb branchiopod eggs that are likely concentrated in the upper 15 millimeters (0.59 inches) of the soil. The race course and pit area consists of approximately 1,921 acres, or 3.8 percent of the 50,000-acre Playa. The Proposed Action would have a minimal impact on brachiopod egg abundance and would not adversely affect wildlife from potential degradation of this food source. The Proposed Action would not adversely affect the Playa water chemistry or water quantity requirements that support the hatching, growth, or reproduction of brachiopods.

To minimize or avoid potential impacts to fish, aquatic invertebrates, and general wildlife species that may occur in the Proposed Action area, environmental protection measures would minimize direct and indirect impacts. These protection measures include:

- No riparian areas, wetlands, streams, or springs would be disturbed by the Proposed Action. All NAE proposed actions would take place when the Playa is dry.
- Limited compaction of the soil would take place. The course would be used when the soils are at their driest, which would make the soils more resistant to compaction. Additionally, NAE would not use the same path on the course twice and would run subsequent tests adjacent to previous runs.
- The proposed ground disturbance would occur in areas devoid of vegetation; therefore, no vegetation would be disturbed, destroyed, or removed by the Proposed Action. In addition, NAE would implement

[58] See Appendix C of this EA

actions outlined in the Prevention Schedule and Best Management Practices published by the BMDO to prevent the spread of invasive non-native plants. NAE would also follow all applicable state and federal laws and regulations to prevent and suppress wildfires.

- A speed limit of no more than 1,500 mph would be utilized by NAE along the course.
- The Playa surface will be protected from hazardous waste spills by a heavy vinyl, liquid-proof floor mat.

The overall adverse effects of the Proposed Action to fish, aquatic invertebrate, and general wildlife species are anticipated to be negligible to minor, short-term, and localized.

Migratory Birds

The Proposed Action would occur when the Playa is dry and would not coincide with a time when migratory birds may be using the Playa lake for feeding and would be outside of their nesting period.

To minimize or avoid potential impacts to migratory birds that may occur in the Proposed Action area, seasonal and spatial restrictions would be implemented to minimize direct and indirect impacts. These environmental protection measures include:

- No LSR attempts would be made during raptor or migratory bird nesting periods. This includes the period from March 1 through July 31.
- NAE personnel will follow protections under the MBTA, which prohibits take of any migratory bird and any action that might impact the breeding adults, the active nest, the eggs, and the nestlings until they fledge from the nest.
- If LSR activities would occur during migratory bird breeding season (April 1 through July 31), a pre-clearance survey would be required by a qualified wildlife biologist within a 14-day period prior to anthropogenic activities and to determine status of any nest. If nests are found, a protective buffer zone would be established (depending on the species) by the biologist until the young birds are fledged. If the Proposed Action does not occur within 14 days of the migratory bird survey, then another survey would be necessary.

BLM Sensitive Status Species

- No critical habitat has been identified within the Proposed Action.
- No special status or BLM sensitive status plant, fish, or wildlife species have been identified within the Proposed Action.

- No burrows or nests would be disturbed, destroyed, or removed during the Proposed Action.
- No LSR attempts would be made in the evening when bats and other nocturnal species are most active. No bat hibernacula or maternal roost sites were identified with the Proposed Action.

Greater Sage-Grouse

- Currently, there is one known lek of unknown status within 4 miles of the Proposed Action boundary. The ARMPA establishes at least a 0.25-mile buffer from known leks for noise and related disruptive activities that do not result in habitat loss, including motorized recreational events.[59] The known lek location is approximately 2.5 miles from the Proposed Action. No LSR attempts would be made during greater sage-grouse lek or nesting activities. This includes the period from March 1 through June 30.
- NAE would implement the following Required Design Features (RDFs) for the Proposed Action, as outlined in Appendix C of the ARMPA:

  RDF Gen 5: During project construction and operation, NAE would establish and post speed limits in GRSG habitat to reduce vehicle/wildlife collisions or design roads to be driven at slower speeds.

  RDF Gen 11: NAE would equip temporary and permanent aboveground facilities with structures or devices that discourage nesting and perching of raptors, corvids, and other predators.

  RDF Gen 12: NAE would control the spread and effects of nonnative, invasive plant species (e.g., by washing vehicles and equipment, minimize unnecessary surface disturbance.

  RDF Gen 13: NAE would implement project site-cleaning practices to preclude the accumulation of debris, solid waste, putrescible wastes, and other potential anthropogenic subsidies for predators of GRSG.

  RDF Gen 19: NAE would instruct all construction employees to avoid harassment and disturbance of wildlife, especially during the GRSG breeding (e.g., courtship and nesting) season. In addition, pets would not be permitted on site during construction.

Birds of Prey (Raptors)

The noise and human activity from the Proposed Action may temporary disturb raptors, but this would not result in loss of foraging habitat or the disturbance to nest sites.

[59] BLM 2015 Appendix B

To minimize or avoid potential impacts to raptors that may occur in the Proposed Action area, seasonal and spatial restrictions would be implemented to minimize direct and indirect impacts. These environmental protection measures include:

- No LSR attempts would be made during raptor nesting periods. This includes the period from March 1 through July 31.
- NAE personnel will follow protections under the Bald and Golden Eagle Protection Act of 1940, as amended, which prohibit the direct or indirect take of an eagle, eagle part or product, nest, or egg. The term "take" includes "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb."

Overall, adverse effects to raptors is anticipated to be negligible to minor, short-term, and localized.

3.12.3 Environmental Consequences of the No Action Alternative

Under the No Action Alternative, current habitat conditions and noise levels would continue to exist, and there would be no impacts to wildlife species, special-status species, or migratory birds and raptors.

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Chapter Four: Cumulative Impacts Analysis

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4.0 Introduction

For the purpose of this EA, the cumulative impacts are analyzed as the sum of all past and present actions, the Proposed Action, and reasonably foreseeable future actions (RFFAs).

The Council on Environmental Quality (CEQ) regulations for implementing NEPA (40 CFR 1508.7) define cumulative impacts as follows:

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

4.1 Past, Present, and Reasonably Foreseeable Future Actions

Past actions in the area include historic sodium chloride extraction in the late 1800s and early 20th century for the mining industry, oil and gas drilling (second half of the 1900s), and casual access by the public. Wildfires have also occurred. Current uses include ranching and livestock grazing in the vegetated fringes of the Playa, and casual public access. RFFAs may include invasive weed treatment, fence construction, wildfire suppression and rehabilitation, vegetation rehabilitation, oil and gas lease development, and recreational activities.

Because of the remote location and the limited access to the Playa, it is unlikely that an increase in use of the Playa and adjacent non-BLM lands would result from the Proposed Action. Future LSR attempts are possible. If other LSR attempts occur in the future, it is likely that impacts would be similar to the current Proposed Action. Any projects proposed in the future would be analyzed separately under NEPA determined by the scope of the project.

4.2 Cumulative Impacts

4.2.1 Cumulative Effects Study Area

For a cumulative effects analysis, potentially-affected resources are considered in terms of the area in which effects pf past, present, or RFFAs could overlap with those of the Proposed Action, i.e., the effects could be noticed in the same place and at the same time. This area is called the Cumulative Effects Study Area (CESA) and varies by resource. The CESA as defined for both the Proposed Action and the No Action Alternative is the course, access road, and pit area as described in this document (Figure 4-1).

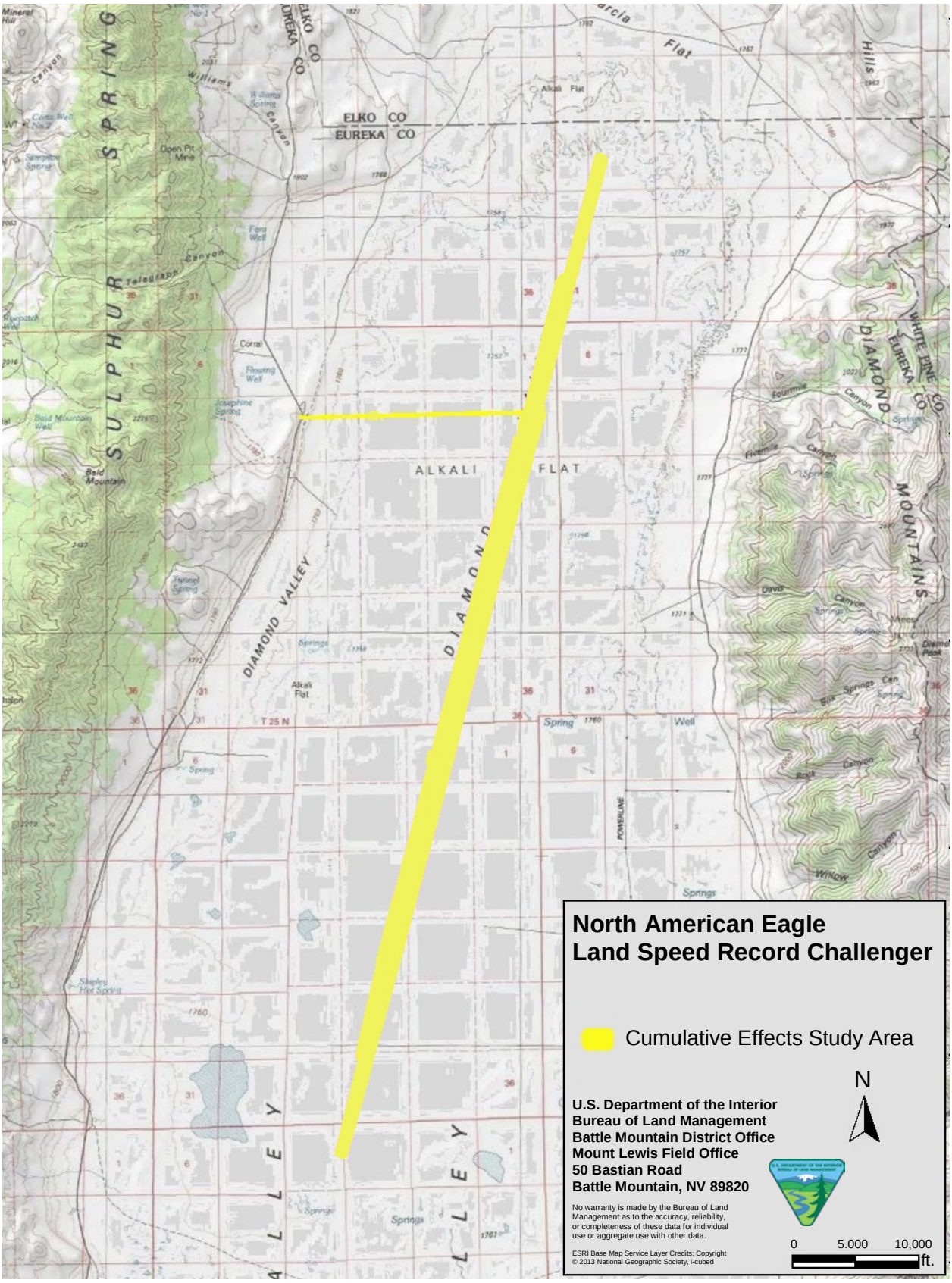

Figure 4-1: NAE Land Speed Record Cumulative Effects Study Area

4.2.2 Human Health and Safety

Past and Present Actions

Past and present activities and events which may have affected human health and safety in the area include mining, oil and gas drilling, ranching, recreation, and wildfires.

RFFAs

Potential impacts on human health and safety as a result of mining, oil and gas drilling, ranching, recreation, and wildfires are expected to continue at current levels.

Cumulative Impacts of the Proposed Action Alternative

Implementing the Proposed Action combined with past, present, and RFFAs would not have any adverse cumulative or incremental effects on human health and safety.

4.2.3 Native American Religious Concerns

Past and Present Actions

Past and present activities and events which may have affected Native American traditional cultural resources or religious concerns include mining, oil and gas drilling, ranching, livestock grazing, recreation, and wildfires.

RFFAs

Potential impacts on Native American traditional cultural resources and religious concerns as a result of mining, oil and gas drilling, ranching, livestock grazing, recreation, and wildfires are expected to continue at current levels.

Cumulative Impacts of the Proposed Action Alternative

No properties of traditional cultural significance of religious concern have been identified in the project area, making any cumulative impacts to these sites nonexistent. Implementing the Proposed Action combined with past, present, and RFFAs would not have an impact to Native American traditional cultural resources of religious sites.

4.2.4 Noxious Weeds, Invasive and Non-Native Species

Past and Present Actions

Past and present actions likely to contribute to the presence or spread of noxious weeds, invasive and non-native species include disturbance, vegetation removal, and movement of vehicles and equipment caused by mining, oil and gas drilling, ranching, livestock grazing, recreation, and wildfires. The Diamond Valley Weed Control District currently manages the valley and monitors the existence and spread of noxious, invasive and non-native plant species.

RFFAs

Potential activities, such as mining, oil and gas drilling, ranching, livestock grazing, recreation, and wildfires that impact the presence and spread of noxious, invasive and non-native plant species are expected to continue at current levels.

Cumulative Impacts of the Proposed Action Alternative

The Proposed Action would not result in soil disturbance, which provides noxious weeds, invasive and non-native species the opportunity to become established, often at the expense of native vegetation. No cumulative impacts from the spread invasive non-native species are anticipated from the Proposed Action due to implementation of the Prevention Schedule and BMPs. Therefore, cumulative and incremental effects from noxious weeds, invasive and non-native species as a result of the Proposed Action, when combined with past, present and RFFAs, would not have an adverse effect.

4.2.5 Recreation

Past and Present Actions

Past and present activities and events which may have affected recreation include oil and gas drilling, ranching, livestock grazing, and wildfires.

RFFAs

Potential effects on recreation from oil and gas drilling, ranching, livestock grazing, and wildfires are expected to continue.

Cumulative Impacts of the Proposed Action Alternative

Access, aesthetics, and relative solitude attract OHV enthusiasts, campers, and other recreationalists to spend their free time in the project area. As previously described, the Proposed Action would have only a temporary impact on these activities and are of a short duration and occupy relatively small areas. Implementation of the Proposed Action combined with the past, present, and RFFAs are expected to be negligible and would not have any adverse cumulative or incremental effect on recreation.

4.2.6 Special Status Species (Plants and Wildlife)

Past and Present Actions

Activities and events which may have adversely affected special status species include mining, oil and gas drilling, ranching, livestock grazing, recreation, and wildfire.

RFFAs

Potential impacts on special status species from mining, oil and gas drilling, ranching, livestock grazing, recreation, and wildfire are expected to continue at the current level.

Cumulative Impacts of the Proposed Action Alternative

The impacts to special status species would be short-term, localized, and negligible. Temporary displacement of species could occur because of the noise created during LSR attempts and because of human presence in the project area. The noise impact is light to moderate and would be no greater than the occasional thunderstorm passing through the area. After LSR activities cease, it is expected that special status species would return to the area. Further, the required mitigation measures would be followed. Therefore, no cumulative or incremental adverse effect to special-status species would occur from implementation of the Proposed Action when combined with past, present, and RFFAs.

4.2.7 Soils

Past and Present Actions

Activities and events which may have adversely affected soils include mining, oil and gas drilling, ranching, livestock grazing, recreation, and wildfire.

RFFAs

Potential impacts on soils from mining, oil and gas drilling, ranching, livestock grazing, recreation, and wildfire are expected to continue at the current level.

Cumulative Impacts of the Proposed Action Alternative

The Proposed Action would result in short-term localized soil compaction, but soil erosion rates are not expected to increase. There is little appreciable potential for the Proposed Action to have substantial cumulative or incremental impacts to soils when combined with past, present, and RFFAs.

4.2.8 Wastes (Hazardous or Solid)

Past and Present Actions

The are no known past or present wastes, hazardous or solid, in the area. Potential causes for waste may include mining, oil and gas drilling, ranching, livestock grazing, illegal dumping, and recreation.

RFFAs

Potential effects of wastes from mining, oil and gas drilling, ranching, livestock grazing, illegal dumping, and recreation are expected to continue at the current levels.

Cumulative Impacts of the Proposed Action Alternative

With the implementation of the mitigation measures previously outlined, no solid or hazardous waste impacts would occur under the current Proposed Action. Therefore there would be no cumulative or incremental impacts from wastes (hazardous or solid) as a result of the Proposed Action when combined with past, present, or RFFAs.

4.2.9 Water Resources

Past and Present Actions

Past activities which may have affected water resources (surface and groundwater, floodplains, wetlands, and riparian areas) in the area include mining, oil and gas drilling, ranching, livestock grazing, and wildfires. Water management, especially groundwater, is currently in place for Diamond Valley users.

RFFAs

Potential impacts on water resources as a result of mining, oil and gas drilling, ranching, livestock grazing, and wildfires are expected to continue at current levels.

Cumulative Impacts of the Proposed Action Alternative

Natural seasonal flooding would return the Playa to normal conditions after LSR attempts. Therefore, when combined with past, present, and RFFAs the impacts associated with the Proposed Action (i.e., vehicle tracks) would be temporary and would not constitute a cumulative impact on water resources, floodplains, wetlands, or riparian zones.

4.2.10 Wildlife

Past and Present Actions

Activities and events which may have affected fish, aquatic invertebrates, wildlife, migratory birds, and raptors include mining, oil and gas drilling, ranching, livestock grazing, recreation, and wildfire.

RFFAs

Potential effects on fish, aquatic invertebrates, wildlife, migratory birds, and raptors from mining, oil and gas drilling, ranching, livestock grazing, recreation, and wildfire are expected to continue at current levels.

Cumulative Impacts of the Proposed Action Alternative

The impacts to fish, aquatic invertebrates, wildlife, migratory birds, and raptors would be short-term, localized, and negligible. Temporary displacement of wildlife could occur because of the noise created during LSR attempts and because of human presence in the project area. The noise impact is light to moderate and would be no greater than the occasional thunderstorm passing through the area. After LSR activities cease, it is expected that wildlife would return to the area. Further, the required mitigation measures would be followed. Therefore, no cumulative or incremental adverse effect to fish, aquatic invertebrates, wildlife, migratory birds, and raptors would occur from implementation of the Proposed Action when combined with past, present, and RFFAs.

4.3 Cumulative Effects of the No Action Alternative

Under the No Action Alternative, there would be a continuation of the current conditions which have existed for many decades. There would be no impacts to any existing land uses which currently include grazing and occasional casual recreational activities. The RFFAs described in Section 4.2 could still conceivably occur whether

the LSR activities were conducted or not. Any actions proposed in the future within the CESA would be analyzed at the time they are proposed under a separate site-specific environmental analysis.

Recreational opportunities and visual resources would not change. There is only very limited access to the area and a continuation of current conditions would create no new impacts. Wildlife, whether special status, resident or migratory, currently use the area for food, shelter, and water. These uses would continue without creating any new impacts to the area. There are no known populations of invasive or noxious plant species at the site of the Proposed Action. Under the No Action Alternative, no impacts would occur to existing plant species and populations and conditions would remain the same. The area currently experiences no known utilization by Native Americans for religious purposes and prehistoric or historic cultural resources would not be impacted if conditions remained as they are now.

Chapter Five: Consultation and Coordination

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5.0 Consultation and Coordination

5.1 Persons, Groups, and Agencies Consulted

Appendix B provides copies of coordination letters mailed to Native American Tribes asking for their participation in identifying potential areas of concern that may be associated with the Proposed Action. Below is a list of these Native American tribes:

- Battle Mountain Band of Western Shoshone
- Duckwater Shoshone Tribe
- Ely Shoshone Tribe
- South Fork Band of Western Shoshone
- Te-Moak Tribe of Western Shoshone
- Western Shoshone Defense Project
- Yomba Shoshone Tribe

5.2 Federal and State Agencies Consulted

- Eureka County Board of Commissioners
- Nevada Department of Wildlife (NDOW)
- Nevada Natural Heritage Program (NNHP)
- Nevada U.S. Fish and Wildlife Service (USFWS)

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Chapter Six: List of Preparers

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6.0 List of Preparers

The following is a list of individuals in the Mount Lewis Field Office, Battle Mountain District, BLM, that prepared or assisted in the preparation of this EA:

- Paul Amar: Recreation/VRM, Wilderness/WSA
- Maggie Corbari: Outdoor Recreation, NEPA Technician
- William Coyle: Minerals
- David Davis: Wildlife, Migratory Birds, Threatened and Endangered Species
- Christine Gabriel: Planning and Environmental Coordination, Public Outreach
- Jimmie Harris: Hydrology (Groundwater)
- Kyle Hendrix: Public Outreach
- Steven Highland: Cultural Resources, Paleontology
- Amanda Holmes: Range, Vegetation, Soils
- Jonathan Kramer: Lands and Realty
- Juan Martinez: Native American Coordination and Consultation
- Anna O'Brien: Noxious Weeds, Invasive and Non-native Species
- Shawna Richardson: Wild Horses and Burros
- Jon Sherve: Field Manager
- Richard Singer: Hazmat
- Kim Walton: Minerals
- Russell Webb: Lands and Realty

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Chapter Seven: References

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7.0 References

Adams, Kenneth D., and Donald W. Sada. 2010. Black Rock Playa, Northwestern Nevada: Physical Processed and Aquatic Life. Desert Research Institute, Reno, Nevada.

Archer. Warren M. 1980. *Soil Survey of Diamond Valley Area, Nevada. Parts of Elko, Eureka, and White Pine Counties*. Soil Conservation Service, U.S. Department of Agriculture and the Bureau of Land Management, U.S. Department of Interior in cooperation with the Agricultural Experiment Station, University of Nevada.

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Nevada Natural Heritage Program (NNHP). 20017. Letter to Carter Schleicher (CSCON) regarding the known or potential occurrence of endangered, threatened, candidate, and/or at risk plant and animal taxa recorded within or near the North American Eagle project, May 31. State of Nevada, Department of Conservation and Natural Resources, Carson City.

Schleicher, Carter. 2017. Reconnaissance Level Wildlife Survey Report. North American Eagle's (NAE) Land Speed Record Challenger. CSCON Consulting, Carson City, Nevada.

Stringham, T. K., P. Novak-Echenique, P. Blackburn, C. Coombs, D. Snyder, and A. Wartgow. 2015. *Final Report for USDA Ecological Site Description State-and-Transition Models, Major Land Resource Area 28A and 28B Nevada*. University of Nevada Reno, Nevada Agricultural Experiment Station Research Report 2015-01.

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Appendices

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Appendix A: Acronyms and Abbreviations

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ACEC Areas of Critical Environmental Concern

ACHP Advisory Council on Historic Preservation

AFFF Aqueous Firefighting Foam

AIRFA American Indian Religious Freedom Act

amsl Above Mean Sea Level

ARMPA Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan Amendment

ARPA Archaeological Resources Protection Act

AUMs Animal Unit Months

BFEs Base Flood Elevations

BGEPA Bald and Golden Eagle Protection Act

BLM Bureau of Land Management

BMD Battle Mountain District

BMDO Battle Mountain District Office

BMPs Best Management Practices

BRD Black Rock Desert

CESA Cumulative Effects Study Areas

CEQ Council on Environmental Quality

CFR Code of Federal Regulations

CWA Clear Water Act

dBA A-weighted decibel

DOPAA Description of Proposed Action and Alternatives

DN Dianev silt loam soils

E East

EA Environmental Assessment

EO Executive Order

EPA Environmental Protection Agency

EPMs Environmental Protection Measures

ESA Endangered Species Act

ESDs Ecological Site Descriptions

FEMA Federal Emergency Management Agency

FIRM Flood Insurance Rate Maps

FLPMA Federal Land Policy and Management Act

GHMA General Habitat Management Area

GRSG Greater sage-grouse

HE Hayeston-Silverado association soils

HMA Herd Management Area

IFPL Industrial Fire Precaution Level

lbs Pounds

LSR Land Speed Record

MBTA Migratory Bird Treaty Act

MDs Management Decisions

MLFO Mount Lewis Field Office

MLRAs Major Land Resource Areas

MOA Memorandum of Agreement

MOU Memorandum of Understanding

mph Miles per hour

N North

NAE North American Eagle, Inc.

NAGPRA Native American Graves Protection and Repatriation Act

NDA Nevada Department of Agriculture

NDEP Nevada Division of Environmental Protection

NDOW Nevada Department of Wildlife

NEPA National Environmental Policy Act

NHPA National Historic Preservation Act

NNHP Nevada Natural Heritage Program

NRCS Natural Resources Conservation Service

NRHP National Register of Historic Places

NRS Nevada Revised Statutes

NWI National Wetland Inventory

OHMA Other Habitat Management Area

OHV Off-highway Vehicle

PHMA Priority Habitat Management Area

PL Playas soil

PS Playas-Dianev complex soils

psi Pounds per square inch

Pub.L. Public Law

PVC Polyvinyl Chloride

R Range

RCRA Resource Conservation and Recovery Act

RDFs Required Design Features

REMSA Regional Emergency Medical Services Authority

RFFA Reasonably Foreseeable Future Actions

RMP Resource Management Plan

SA Sader loam soils

SFA Sagebrush Focal Area

SFHA Special Flood Hazard Area

SHPO State Historic Preservation Office

SRP Special Recreation Permit

SSS Special Status Species

T Township

TCP Traditional Cultural Property

USACE U.S. Corps of Engineers

USC United States Code

USDOT U.S. Department of Transportation

USFWS U.S. Fish and Wildlife Service

VRM Visual Resource Management

WSA Wilderness Study Area

Appendix B: Consultation and Coordination

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U.S. Fish and Wildlife Service

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Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Reno Fish And Wildlife Office
1340 Financial Boulevard, Suite 234
Reno, NV 89502-7147
(775) 861-6300

Project Summary

Consultation Code: 08ENVD00-2017-SLI-0412

Event Code: 08ENVD00-2017-E-00938

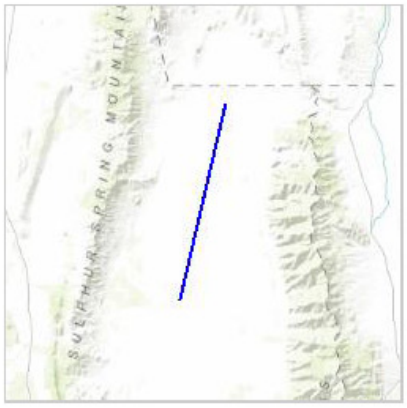
Project Name: North American Eagle GER

Project Type: ** OTHER **

Project Description: Modeling research on air dynamics on vehicles.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/40.022036589156905N115.96103668212892W



Counties: Eureka, NV

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area. Please contact the designated FWS office if you have questions.

Fishes

NAME	STATUS
Lahontan Cutthroat Trout *(Oncorhynchus clarkii henshawi)*	Threatened

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/3964

Critical habitats

There are no critical habitats within your project area.

USFWS National Wildlife Refuges And Fish Hatcheries

Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuges or fish hatcheries within your project area.

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any activity that results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service[3]. There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

---

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The migratory birds species listed below are species of particular conservation concern (e.g. Birds of Conservation Concern) that may be potentially affected by activities in this location. It is not a list of every bird species you may find in this location, nor a guarantee that all of the bird species on this list will be found on or near this location. Although it is important to try to avoid and minimize impacts to all birds, special attention should be made to avoid and minimize impacts to birds of priority concern. To view available data on other bird species that may occur in your project area, please visit the AKN Histogram Tools and Other Bird Data Resources. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

NAME	SEASON(S)
Eared Grebe *(Podiceps nigricollis)*	On Land: Breeding
Green-tailed Towhee *(Pipilo chlorurus)* https://ecos.fws.gov/ecp/species/9444	On Land: Breeding
Fox Sparrow *(Passerella iliaca)*	On Land: Breeding
Williamson's Sapsucker *(Sphyrapicus thyroideus)* https://ecos.fws.gov/ecp/species/8832	On Land: Breeding
Bald Eagle *(Haliaeetus leucocephalus)* https://ecos.fws.gov/ecp/species/1626	On Land: Wintering
Black Rosy-finch *(Leucosticte atrata)* https://ecos.fws.gov/ecp/species/9460	On Land: Year-round

Brewer's Sparrow *(Spizella breweri)* https://ecos.fws.gov/ecp/species/9291	On Land: Breeding
Burrowing Owl *(Athene cunicularia)* https://ecos.fws.gov/ecp/species/9737	On Land: Breeding
Gray Vireo *(Vireo vicinior)* https://ecos.fws.gov/ecp/species/8680	On Land: Breeding
Greater Sage-grouse *(Centrocercus urophasianus)* https://ecos.fws.gov/ecp/species/8159	On Land: Year-round
Loggerhead Shrike *(Lanius ludovicianus)* https://ecos.fws.gov/ecp/species/8833	On Land: Year-round
Long-billed Curlew *(Numenius americanus)* https://ecos.fws.gov/ecp/species/5511	On Land: Breeding
Olive-sided Flycatcher *(Contopus cooperi)* https://ecos.fws.gov/ecp/species/3914	On Land: Breeding
Peregrine Falcon *(Falco peregrinus)* https://ecos.fws.gov/ecp/species/8831	On Land: Year-round
Pinyon Jay *(Gymnorhinus cyanocephalus)* https://ecos.fws.gov/ecp/species/9420	On Land: Year-round
Sage Thrasher *(Oreoscoptes montanus)* https://ecos.fws.gov/ecp/species/9433	On Land: Breeding
Short-eared Owl *(Asio flammeus)* https://ecos.fws.gov/ecp/species/9295	On Land: Year-round
Swainson's Hawk *(Buteo swainsoni)* https://ecos.fws.gov/ecp/species/1098	On Land: Breeding
Virginia's Warbler *(Vermivora virginiae)* https://ecos.fws.gov/ecp/species/9441	On Land: Breeding
Western Grebe *(aechmophorus occidentalis)* https://ecos.fws.gov/ecp/species/6743	On Land: Breeding
Willow Flycatcher *(Empidonax traillii)* https://ecos.fws.gov/ecp/species/3482	On Land: Breeding
Calliope Hummingbird *(Stellula calliope)* https://ecos.fws.gov/ecp/species/9526	On Land: Migrating
Rufous Hummingbird *(selasphorus rufus)* https://ecos.fws.gov/ecp/species/8002	On Land: Migrating

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Conservation measures for birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Year-round bird occurrence data http://www.birdscanada.org/birdmon/default/datasummaries.jsp

Wetlands

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

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Native American Coordination Letters

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United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Mount Lewis Field Office
50 Bastian Road
Battle Mountain, Nevada 89820
Phone: 775-635-4000 Fax: 775-635-4034
https://www.blm.gov/nevada

In Reply Refer To:
2932 (NVB0100)
DOI-BLM-NV-B0000-2016-0005-EA

AUG 0 2 2017

CERTIFIED MAIL: 7015 0640 0007 1161 5787 RETURN RECEIPT REQUESTED

Rodney Mike - Chair
Duckwater Shoshone Tribe
PO Box 140068
Duckwater, NV 89314

Dear Chairman Mike:

North American Eagle, Inc. (NAE) proposes to conduct Land Speed Record (LSR) attempts on the alkali flat of Diamond Valley, Eureka County, Nevada, using a vehicle equipped with a jet engine. The Project Area is located approximately 25 miles north of the town of Eureka.

NAE has applied for a Special Recreation Permit (SRP) to conduct the land speed trials and activities. The project area would encompass approximately 2,020 acres entirely within the Mount Lewis Field Office (MLFO). The proposed course would be approximately 15.6 miles long and 0.25 miles wide. The LSR would occur when the Playa is driest, ideally between late September and mid-October 2017 over a two-week period. All disturbance would be temporary in Nature and no permanent structures or ground disturbance would not be authorized. Tracks left by the NAE vehicle would be 1 inch or less in depth and would barely break through to hard crust of the surface of the Playa

In compliance with the National Environmental Policy Act of 1969, as amended (NEPA), and the Federal Land Policy and Management Act of 1976, as amended, the Bureau of Land Management (BLM) Mount Lewis Field Office, Battle Mountain, Nevada, intends to prepare a Environmental Assessment (EA) for the SRP

The BLM values your knowledge, concerns, and perspectives relating to the project area. In accordance with Executive Order 13175, the BLM asks for your participation in identifying potential areas of concern that may be associated with the project.

Your information will be considered in the decision making process. The BLM looks forward to working cooperatively to address your concerns in a thoughtful and respectful manner.

Please feel free to contact Juan Martinez at 775-635-4092 if you have any questions or wish to arrange a meeting or field visit. I ask that you please respond within 30 days upon your receipt of this letter. Thank you for your time and consideration.

Sincerely,

For Jon D. Sherve
Field Manager
Mount Lewis Field Office

Enclosure:
Project Area Map

cc:
Tribal Administrator
Environmental Coordinator

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Mount Lewis Field Office
50 Bastian Road
Battle Mountain, Nevada 89820
Phone: 775-635-4000 Fax: 775-635-4034
https://www.blm.gov/nevada

In Reply Refer To:
2932 (NVB0100)
DOI-BLM-NV-B0000-2016-0005-EA

AUG 0 2 2017

CERTIFIED MAIL: 7015 0640 0007 1161 5770 RETURN RECEIPT REQUESTED

Tyler Reynolds - Chair
South Fork Band of Western Shoshone
21 Lee Unit B13
Spring Creek, NV 89815

Dear Chairman Reynolds:

North American Eagle, Inc. (NAE) proposes to conduct Land Speed Record (LSR) attempts on the alkali flat of Diamond Valley, Eureka County, Nevada, using a vehicle equipped with a jet engine. The Project Area is located approximately 25 miles north of the town of Eureka.

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Please feel free to contact Juan Martinez at 775-635-4092 if you have any questions or wish to arrange a meeting or field visit. I ask that you please respond within 30 days upon your receipt of this letter. Thank you for your time and consideration.

Sincerely,

FOR Jon D. Sherve
Field Manager
Mount Lewis Field Office

Enclosure:
Project Area Map

cc:
Tribal Administrator
Environmental Coordinator

Appendix C: Noise Propagation Study, Alvord Desert, Oregon 2014

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Noise Propagation Study, Alvord Desert, Oregon 2014
Steven G. Wallace, Engineer, North American Eagle LLC

On 9/21/2014 a test was conducted by Steven G. Wallace at the Alvord Desert in southeastern Oregon to validate a phenomenon discussed by Daniel A. Russell, Ph.D. from Pennsylvania State University[1] whereby air temperature decreases with height above the desert floor, creating a sound speed gradient. The sound speed gradient exists as long as the desert temperature is rising due to solar heating. This gradient causes sound waves to travel faster at ground level and slower above the ground, bending the sound propagation vector upward. This phenomenon creates a "sound shadow", with marked attenuation beyond the expected 6dBa loss per doubled distance as measured near the ground. If shown to be true, and as long as this gradient exists, operations conducted by the North American Eagle in the Alvord desert could be accomplished without disturbing sensitive Western Snowy Plover[3] habitat near the ground, at, and beyond the shoreline.[2]

As a simple test, sound levels were measured near ground-level, as a sound pulse source presented sound pulses at various distances from the microphone. The sound pulse source used in this study was the discharge of a 20-gauge shotgun. (See Figure 1)

The attenuation curve established by these tests, when applied to the sound level of the North American Eagle throttle set at "full afterburner", at 50 feet, results in the sound level dropping below the background noise at 4.35 miles offset distance. A 12 dBa rise to 45 dBA sound level (similar to noise through grass from a gentle breeze) would occur at an offset distance of 2.4 miles.

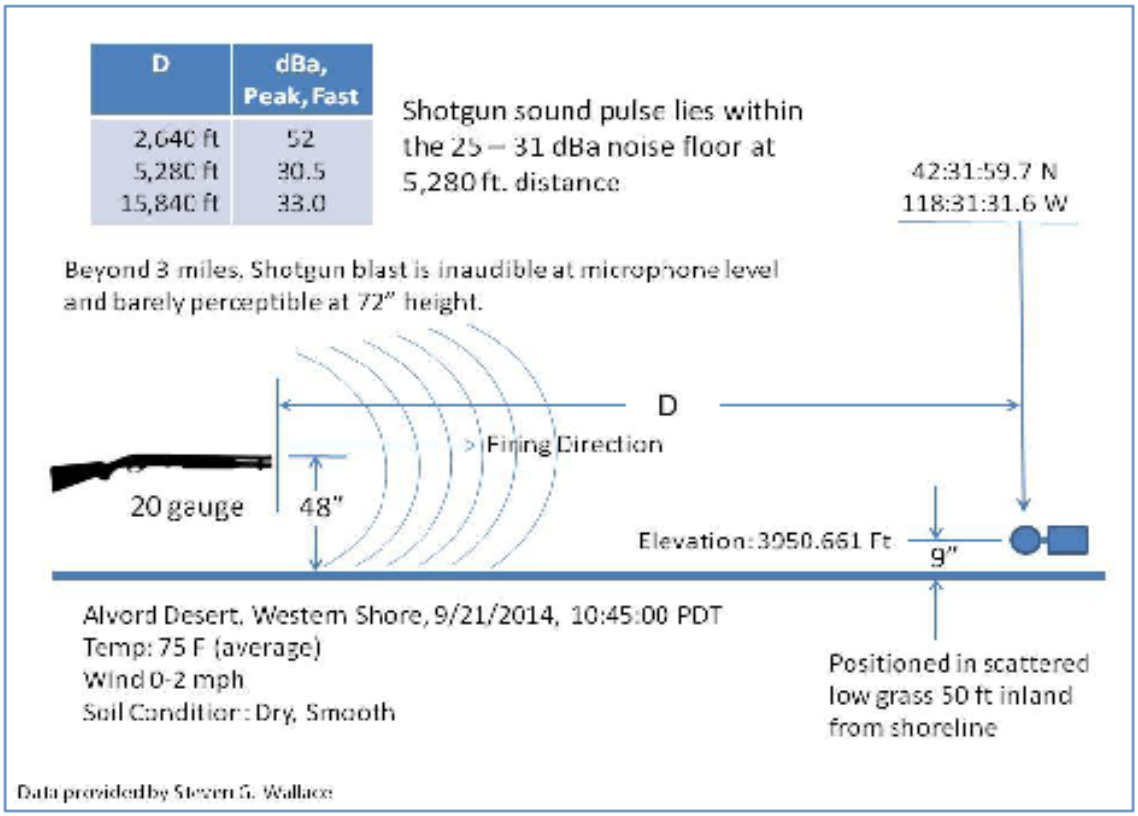

Figure 1
Test Setup

Noise Propagation Study, Alvord Desert, Oregon 2014
Steven G. Wallace, Engineer, North American Eagle LLC

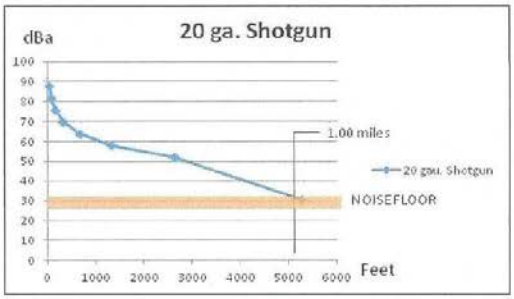

Figure 2, Shotgun Baseline

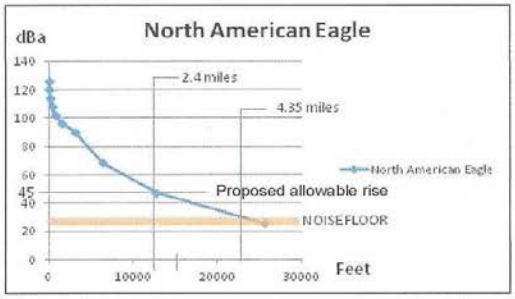

Figure 3, NAE Applied Condition

Figure 4, Field Setup

Recommendation:

That approval is granted from the BLM for operating the North American Eagle as follows:

1. Any day during the year under specific atmospheric and noise source conditions:
    a. The average hourly ambient air temperature, as measured 48 inches above the surface shall be rising with time.
    b. All operations that generate noise levels above 120 dBa as measured 50 feet from the source, shall be conducted a minimum of 2.4 miles from the shoreline[2].

[1] http://www.acs.psu.edu/drussell/Demos/refract/refract.html
[2] as defined by the existence of sparse patches of marsh grass, typifying the nesting habitat of the Western Snowy Plover[3]
[3] http://www.westernsnowyplover.org/about_plovers.html

Appendix D: Response to Public Comments Received

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NAE EA Public Comments and Response
DOI-BLM-NV-B010-2016-0018-EA

Comment Number	Commenter	Comment Date	Comment	Response to Comment
1	Larry P. Schramm	Nov. 3, 2017	I have read information on the challenge for the land speed record at Diamond Valley salt flats. This run(s) should be allowed to done as it is these types of tests of technology that can breed valuable lessons for the real world.	Thank you for your comment.
2	Bruce Couch	Nov. 6, 2017	I was a big fan of this speed attempt and I am a frequent visitor to Nevada and Oregon deserts. Shortly after their speed run last year I went camping on the Alvord playa and was surprised and disappointed to find garbage left on the playa by the NAE group. I took photos and sent them to NAE and they accused me of putting the garbage there. Obviously I didn't. In fact the 10 mile marker pictured was shown on their FB cover shot with the car driving past it. After posted the photos they deleted that image. I am writing to ask you to deny the permit.	BLM has a no-trace left behind policy regarding the use of public lands for recreation. NAE personnel have assured BLM that they will take precautions to ensure that they leave the Diamond Valley Playa in the same condition as it was found prior to the event. All debris associated with the event will be collected and disposed of properly and any cleared stones from the course will be distributed back into the playa. Additionally, BLM personnel and volunteers will be on hand during and after the event to ensure the pristine nature of the resource.
3	Tom Healy	Nov. 6, 2017	One of my favorite places in Oregon is the Alvord Desert and in the last 2 years I have been there over 3 dozen times to document and photograph this unique landscape. When I heard that the NAE project had selected the Alvord I was happy that they wanted to share in this unique land. However, upon arriving on the Playa shortly after they had left the area my friends and I discovered a significant amount of junk that they left behind. They had placed mile markers out of PVC pipe and piled rocks up in a line along the track. What we discovered (and what you can see in the attached photographs) was that they left the 10 mile marker sign and several piles of rocks on the playa. Given the amount of traffic on the desert floor and the height of these rock formations, these were very dangerous piles of junk to leave behind. My fellow photographers and I cleaned it up and scattered the rocks and disposed of the garbage at the Alvord Hot Springs. When we posted on the NAE facebook page pointing it out to them, they denied	Please see response to Comment 2 above.

Comment Number	Commenter	Comment Date	Comment	Response to Comment
			that it was their junk and tried to accuse us of falsely staging the photographs. When we pointed out that the mile marker was the exact same thing that they had in their promotional photographs they deleted the photographs and kicked us from their page. In the end, I don't care that they do their land speed tests but I do very much care about the condition of the lands they leave behind. I was raised to leave no trace and respect the land that I use. The junk and behavior of the North American Eagle project last year and their further actions this year denying their wrongdoing have resulted in me writing you this letter and asking you to deny their permit to use the Diamond Valley area for their next speed test. Our public lands should be available to all but that has to come with a basic respect to leave the lands better than you found them and NAE simply does not do this.	
4	J. J. Goicoechea, Chairman, Eureka County Board of Commissioners	Nov. 6, 2017	Consistency with Eureka County plans and policies requires coordination with the Eureka County Sheriff on any law enforcement or assistance on any lands in Eureka County. We are appreciative that the EA references coordination with the Eureka County Sheriff for any law enforcement and assistance during the event. We ask that the Sheriff be actively engaged before and during the event.	NAE personnel will coordinate with the Eureka County Sheriff prior to and during the event.
5	J. J. Goicoechea, Chairman, Eureka County Board of Commissioners	Nov. 6, 2017	The EA does not analyze impacts to grazing management and states that this resource is present but not affected based on simply that “there would not be any loss of Animal Unit Months (AUMs) as a result of the Proposed Action.” (pg. 29). But, livestock actively graze along the margins of the playa near the access road and pit area. While there would not be any loss of AUMs, there may be displacement or stressing of livestock if any are grazing in the area during the event. We ask NAE and BLM to work with the grazing permittees to implement actions that would not displace or stress livestock grazing near the access road and pit area.	The impacts to livestock are anticipated to be less than negligible and this topic does not warrant further analysis in the EA. Nevertheless, NAE and BLM personnel will coordinate with local grazing permittees prior to and during the event.

Comment Number	Commenter	Comment Date	Comment	Response to Comment
6	Moira Kolada, Eastern Region Habitat Biologist, Nevada Department of Wildlife (NDOW)	Nov. 9, 2017	Overall, NDOW does not have serious concerns with this project, though we did notice a few discrepancies within the EA. First is the EA mentions the Nevada State Clearinghouse being the single point of contact for National Environmental Policy Act (NEPA) proposals statewide. However, this EA is not listed on the Nevada State Clearinghouse website, which indicates that this EA was not provided to the Clearinghouse. The second discrepancy is that the in the Schedule and Operations section it states that the trial attempts will be made in late September through mid-October 2017. This should be 2018 since this timeframe has already passed for 2017.	A copy of the EA has since been provided to the Nevada State Clearinghouse. The schedule for the Proposed Action has been changed to “ideally between late summer through early winter.”
7	Moira Kolada, Eastern Region Habitat Biologist, Nevada Department of Wildlife (NDOW)	Nov. 9, 2017	The EA states that in the Applicant-Committed Biological Environmental Protection Measures that a speed limit of no more than 1,500 mph will be utilized. While NDOW sees the humor in this, we would disagree that this provides any additional protection measure to the environment.	As part of the Required Design Features (RDFs) for activities in greater sage-grouse habitat, RDF Gen 5 stipulates that during construction and operation of the project that speed limits be established and posted. An arbitrary limit of 1,500 mph was established for the Proposed Action.

NAE_LandSpeed_EA, BLM <blm_nae_landspeed_ea@blm.gov>

North American Eagle Land Speed Record Challenger EA

1 message

Larry Schramm <Larry.Schramm@outlook.com> Fri, Nov 3, 2017 at 6:46 PM
To: "blm_nae_landspeed_ea@blm.gov" <blm_nae_landspeed_ea@blm.gov>

Dear Ms. Gabriel,

I have read information on the challenge for the land speed record at Diamond Valley salt flats. This run(s) should be allowed to done as it is these types of tests of technology that can breed valuable lessons for the real world.

Sincerely,

Larry P. Schramm

3298 Summit Ridge Dr

Rochester Hills, MI 48306

NAE_LandSpeed_EA, BLM <blm_nae_landspeed_ea@blm.gov>

Fwd: North American Eagle Diamond Lake permit

1 message

[redacted]

---------- Forwarded message ----------
From: **Bruce Couch** <bodiegroup@mac.com>
Date: Mon, Nov 6, 2017 at 10:44 AM
Subject: North American Eagle Diamond Lake permit
To: nvsoweb@blm.gov

Hi,

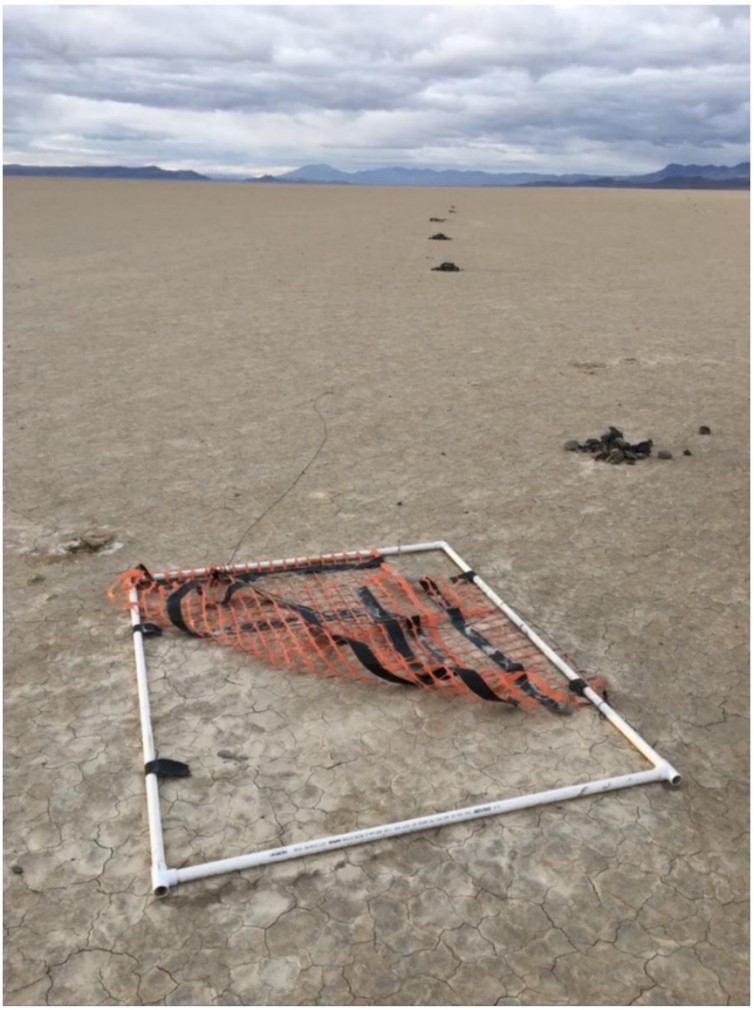
I am an Oregon resident. North America Eagle has announced that they are moving their speed record run from Alvord Desert to Diamond Lake. I was a big fan of this speed attempt and I am a frequent visitor to Nevada and Oregon deserts. Shortly after their speed run last year I went camping on the Alvord playa and was surprised and disappointed to find garbage left on the playa by the NAE group. I took photos and sent them to NAE and they accused me of putting the garbage there. Obviously I didn't. In fact the 10 mile marker pictured was shown on their FB cover shot with the car driving past it. After posted the photos they deleted that image.

I am writing to ask you to deny the permit.

Thanks,
Bruce

Here is an image of the car driving past one of the other markers.

Here are a couple of the photos of what we shot out there. the second one has the piles of black rocks they stacked out there and didn't disperse.



bruce couch
troublemaker
bodie | group inc
541-678-5333 studio
530.570.3900 cell (yes it's 530)

If you believe everything you read, you better not read. ::Japanese Proverb

please do not print this e-mail unless you really need to.

[redacted]

NAE_LandSpeed_EA, BLM <blm_nae_landspeed_ea@blm.gov>

Fwd: Diamond Valley permit for NAE land-speed

1 message

[redacted]

---------- Forwarded message ----------
From: **Tom Healy** <healy@nwgeeks.com>
Date: Mon, Nov 6, 2017 at 3:07 PM
Subject: Diamond Valley permit for NAE land-speed
To: nvsoweb@blm.gov

Hello,

My name is Tom Healy. I am a Photographer in Oregon and I want to share with you some information about the last place that the North American Eagle used for their land-speed record test.

One of my favorite places in Oregon is the Alvord Desert and in the last 2 years I have been there over 3 dozen times to document and photograph this unique landscape. When I heard that the NAE project had selected the Alvord I was happy that they wanted to share in this unique land. However, upon arriving on the Playa shortly after they had left the area my friends and I discovered a significant amount of junk that they left behind.

They had placed mile markers out of PVC pipe and piled rocks up in a line along the track. What we discovered (and what you can see in the attached photographs) was that they left the 10 mile marker sign and several piles of rocks on the playa. Given the amount of traffic on the desert floor and the height of these rock formations, these were very dangerous piles of junk to leave behind. My fellow photographers and I cleaned it up and scattered the rocks and disposed of the garbage at the Alvord Hot Springs. When we posted on the NAE facebook page pointing it out to them, they denied that it was their junk and tried to accuse us of falsely staging the photographs. When we pointed out that the mile marker was the exact same thing that they had in their promotional photographs they deleted the photographs and kicked us from their page.

In the end, I don't care that they do their land speed tests but I do very much care about the condition of the lands they leave behind. I was raised to leave no trace and respect the land that I use. The junk and behavior of the North American Eagle project last year and their further actions this year denying their wrongdoing have resulted in me writing you this letter and asking you to deny their permit to use the Diamond Valley area for their next speed test. Our public lands should be available to all but that has to come with a basic respect to leave the lands better than you found them and NAE simply does not do this.

Thank you for your time.
Tom Healy
Portland, Oregon

[redacted]

5 attachments

NAE_AlvordJunk05.JPG
640K

NAE_AlvordJunk04.JPG
852K

NAE_AlvordJunk02.jpg
14K

NAE_AlvordJunk01.jpg
15K

NAE_AlvordJunk03.jpeg
115K

EUREKA COUNTY BOARD OF COMMISSIONERS
J.J. Goicoechea, Chairman ♦ Mike Sharkozy, Vice Chair ♦ Fred Etchegaray, Member
PO Box 694, 10 South Main Street, Eureka, Nevada 89316
Phone: (775) 237-7211 ♦ Fax: (775) 237-5212 ♦ www.co.eureka.nv.us

RECEIVED-MAILROOM
2017 NOV 13 P 2:06
BUREAU OF LAND MANAGEMENT
BATTLE MOUNTAIN
DISTRICT OFFICE

November 6, 2017

Jon Sherve
Bureau of Land Management – Mount Lewis Field Office
50 Bastian Road
Battle Mountain, NV 89820

RE: SRP-NVB0000-16-05; North American Eagle Land Speed Record Challenger EA

Dear Sherve:

We have reviewed the EA for the North American Eagle (NAE) Land Speed Record Challenger Proposal. Based upon our review, we did not identify any major issues with the EA or proposed action. We provide our general support of the proposal and request that BLM move forward with approving it.

Below, we have identified a couple comments that we believe need to be addressed by BLM and NAE.

Consistency with Eureka County plans and policies requires coordination with the Eureka County Sheriff on any law enforcement or assistance on any lands in Eureka County. We are appreciative that the EA references coordination with the Eureka County Sheriff for any law enforcement and assistance during the event. We ask that the Sheriff be actively engaged before and during the event.

The EA does not analyze impacts to grazing management and states that this resource is present but not affected based on simply that "there would not be any loss of Animal Unit Months (AUMs) as a result of the Proposed Action." (p. 29). But, livestock actively graze along the margins of the playa near the access road and pit area. While there would not be any loss of AUMs, there may be displacement or stressing of livestock if any are grazing in the area during the event. We ask NAE and BLM to work with the grazing permittees to implement actions that would not displace or stress livestock grazing near the access road and pit area.

Thanks you for considering our input. We look forward to seeing the proposal be approved and having this land speed record attempt take place in Diamond Valley.

Sincerely,

J.J. Goicoechea, DVM, Chairman
Eureka County Board of Commissioners

cc: Eureka County NRAC
North American Eagle, Inc

BRIAN SANDOVAL
Governor

STATE OF NEVADA
DEPARTMENT OF WILDLIFE
6980 Sierra Center Parkway, Suite 120
Reno, Nevada 89511
Phone (775) 688-1500 • Fax (775) 688-1595

TONY WASLEY
Director
LIZ O'BRIEN
Deputy Director
JACK ROBB
Deputy Director

9 November 2017

RE: North American Eagle Land Speed Record Challenger Environmental Assessment (EA)
DOI-BLM-NV-B010-2016-0018-EA

Dear Ms. Gabriel

Thank you for the opportunity to review and provide comments on the North American Eagle Land Speed Record Challenger EA. The Nevada Department of Wildlife (NDOW) is concerned with impacts to fish and wildlife resources and their associated habitats within the proposed area.

Overall, NDOW does not have serious concerns with this project, though we did notice a few discrepancies within the EA. First is the EA mentions the Nevada State Clearinghouse being the single point of contact for National Environmental Policy Act (NEPA) proposals statewide. However, this EA is not listed on the Nevada State Clearinghouse website, which indicates that this EA was not provided to the Clearinghouse.

The second discrepancy is that the in the Schedule and Operations section it states that the trial attempts will be made in late September through mid-October 2017. This should be 2018 since this timeframe has already passed for 2017.

The EA states that in the Applicant-Committed Biological Environmental Protection Measures that a speed limit of no more than 1,500 mph will be utilized. While NDOW sees the humor in this, we would disagree that this provides any additional protection measure to the environment.

Should you need clarification on any of the information provided, or require additional information, please contact me.

Sincerely,

Moira Kolada

Moira Kolada
Eastern Region Habitat Biologist
Nevada Department of Wildlife
1218 N. Alpha St.
Ely, NV 89301
775-289-1655 ext 29
mkolada@ndow.org

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BLM

BLM
Battle Mountain District Office
50 Bastian Road
Battle Mountain, NV 89820