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

NEVADA NORTH LITHIUM EXPLORATION PROJECT

Environmental Assessment

DOI-BLM-NV-E030-2025-0003-EA

FEBRUARY 2025

PREPARING OFFICE

U.S. Department of the Interior

Bureau of Land Management

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LIST OF ACRONYMS AND ABBREVIATIONS

ACEPMs	Applicant-Committed Environmental Protection Measures
AFA	Acre-Feet per Year
amsl	Above Mean Sea Level
APE	Area of Potential Effect
ARMPA	Approved Resource Management Plan Amendment
BAPC	Bureau of Air Pollution Control
BGEPA	Bald and Golden Eagle Protection Act
BLM	Bureau of Land Management
bls	Below Land Surface
BMPs	Best Management Practices
BMRR	Bureau of Mining Regulation and Reclamation
CAA	Clean Air Act
CCS	Conservation Credit System
CESA	Cumulative Effects Study Area
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CPT	Cone Penetration Testing
dBA	Decibels
DOI	Department of the Interior
EA	Environmental Assessment
EPA	United States Environmental Protection Agency
ESD	Ecological Site Descriptions
ET	Evapotranspiration
FLPMA	Federal Land Policy and Management Act of 1976
FY	Fiscal Year
GHG	Greenhouse Gas
GHMA	General Habitat Management Area
GIS	Geographic Information System
GMU	Game Management Unit
GRSG	Greater Sage-Grouse
GSI	GSI Environmental Inc.
HMAs	Habitat Management Areas
HQT	Habitat Quantification Tool
HUC	Hydrologic Unit Code
ID Team	Interdisciplinary Team of BLM
Kautz	Kautz Environmental Consultants
MBTA	Migratory Bird Treaty Act
Mining Law	General Mining Law of 1872, as amended
MLA	Mineral Leasing Act
MLRS	Mineral & Land Records System
MMt	million metric tons
MSHA	Mine Safety and Health Administration
NAAQS	National Ambient Air Quality Standards
NAC	Nevada Administrative Code
NDA	Nevada Department of Agriculture
NDEP	Nevada Division of Environmental Protection
NDCNR	Nevada Department of Conservation and Natural Resources
NDNH	Nevada Division of Natural Heritage

NDOW	Nevada Department of Wildlife
NDOT	Nevada Department of Transportation
NDWR	Nevada Division of Water Resources
NEPA	National Environmental Policy Act
NHD	National Hydrographic Dataset
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NRS	Nevada Revised Statutes
NV GOE	Nevada Governor's Office of Energy
NWI	National Wetlands Inventory
OHMA	Other Habitat Management Area
PFYC	Potential Classification Yield Classification
PILT	Payments in Lieu of Taxes
Plan	Exploration Plan of Operations
PM	Particulate Matter
Project	Nevada North Lithium Exploration Project
PUP	Pesticide Use Proposal
PVC	Polyvinyl Chloride
RFFA	Reasonably Foreseeable Future Action
RMP	Resource Management Plan
ROW	Right-of-Way
RPW	Relatively Permanent Water
SDS	Safety Data Sheet
SEC	Sagebrush Ecosystem Council
SEP	Sagebrush Ecosystem Program
SER	Supplemental Environmental Report
SETT	Sagebrush Ecosystem Technical Team
SHPO	State Historic Preservation Office
SO_2	sulfur dioxide
SPT	Standard Penetration Testing
Surge	Surge Battery Metals USA Inc.
SWreGAP	Southwest Regional Gap Analysis Project
TNW	Traditional Navigable Water
UES	UES Consulting Services, Inc.
USGS	United States Geological Survey
USFWS	United States Fish and Wildlife Service
VRM	Visual Resources Management
VWP	Vibrating Wire Piezometer
WB	Western Biological
WOTUS	Waters of the United States

CHAPTER 1. INTRODUCTION

Surge Battery Metals USA Inc. (Surge) proposes to conduct exploration activities at the Nevada North Lithium Exploration Project (Project or Proposed Action) located approximately 20 miles south-southeast of Jackpot, in Elko County, Nevada. The Project is located on public lands administered by the Bureau of Land Management (BLM) Wells Field Office. The Project Area can be accessed using the Wilkins Montello and Texas Springs roads from the south (via U.S. Highway 93 from Wells) and the Thousand Springs / Goose Creek / Jackpot roads to access the northern end of the Project Area. Figure 1-1 shows the Project location and access. Figure 1-2 shows the Project Area and land status. All figures are included in Appendix A.

Surge proposes to expand current lithium mineral exploration activities beyond the Notice-level 5-acre limit of disturbance (Texas Spring Notice NVNV105861474) to include phased exploration and surface disturbing activities on up to 250 acres over a 3-year period for data collection within the 7,819-acre Project Area.

Surge submitted an Exploration Plan of Operations # NVNV106332440 (Plan) describing the Proposed Action to the BLM and the Nevada Division of Environmental Protection (NDEP) Bureau of Mining Regulation and Reclamation (BMRR) on November 14, 2023, in accordance with BLM Surface Management Regulations 43 Code of Federal Regulations (CFR) 3809, as amended, and Nevada reclamation regulations at Nevada Administrative Code (NAC) 519A. The BLM provided comments to Surge on December 13, 2023. Surge submitted the revised Plan (Surge, 2024a), which incorporated BLM comments, on January 31, 2024. Consistent with the surface management regulations at 43 CFR 3809.411(a), the BLM reviewed the revised Plan and determined that the filed Plan meets the content requirements at 43 CFR 3809.401(b) on February 28, 2024.

1.1 IDENTIFYING INFORMATION

Name of the Proposed Action: Nevada North Lithium Exploration Project.

Environmental Assessment (EA) Number: DOI-BLM-NV-E030-2025-0003-EA.

Type of Project: Phased mineral exploration.

Location of the Proposed Action: The Project is located approximately 20 miles south-southeast of Jackpot, in Elko County, Nevada. The Project Area is in all or parts of Sections 11-15, 22-24, 25-27, 34-36 of Township 44 North (T44N), Range 65 East (R65E) and Sections 17-20, and 29-32 of T44N, R66E, and Section 6 of T43N, R67E (Figure 1-2).

Name and Location of Preparing Office: DOI, BLM Wells Field Office. 3900 Idaho Street Elko, Nevada 89801.

BLM Case File Number: NVNV106332440.

Applicant Name: Surge Battery Metals USA, Inc.

1.2 PURPOSE AND NEED

The exploration for locatable mineral deposits, including lithium, is regulated under the General Mining Law of 1872 (Mining Law) and the Federal Land Policy and Management Act of 1976 (FLPMA). The BLM manages both the surface and subsurface rights of public lands. Under the Mining Law, claimants are entitled to reasonable access to explore and develop mineral deposits on public lands that are open for mining. Surge, as the claimant for their unpatented mining claims, has the right to prospect, explore, locate, delineate and assess locatable lithium deposits within their claims.

The purpose of the proposed lithium exploration project on BLM-administered lands is to identify and assess potential lithium resources to support the growing demand for lithium. The need for allowing Surge to explore and delineate lithium deposits on public lands stems from a growing demand for lithium, which is essential for renewable energy technologies, particularly batteries for electric vehicles. As the United States transitions to innovative energy alternatives, securing domestic lithium resources is increasingly important for energy independence, economic growth, and technological advancement. The Proposed Action would facilitate the assessment and potential development of these critical mineral resources.

Under FLPMA and the BLM's Surface Management Regulations (43 CFR 3809), the BLM has a responsibility to evaluate and respond to Surge's Exploration Plan of Operations and ensure the proposed operations would not cause unnecessary or undue degradation of public lands.

1.3 DECISION TO BE MADE

BLM's decision, in accordance with the BLM Surface Management Regulations at 43 CFR 3809.411(d), includes the options of 1) approve the Plan as submitted; 2) approve the Plan subject to changes or conditions that are necessary to meet the performance standards of 43 CFR 3809.420 and to prevent unnecessary or undue degradation of public lands; or 3) disapprove or withhold approval of the Plan if it is found that the Plan does not meet the applicable content requirements at 43 CFR 3809.401 or proposes operations that would result in unnecessary or undue degradation of public lands.

1.4 CONFORMANCE SUMMARY

In addition to this National Environmental Policy Act (NEPA) analysis, implementation of the Proposed Action would require authorization from other federal, state, and local agencies with jurisdiction over certain aspects of the Project. Surge is responsible for amending existing permits, applying for, and acquiring additional permits and approvals determined necessary to comply with federal, state, and local government laws and regulations.

1.4.1 Wells Resource Management Plan

The Proposed Action described in Section 2.1 would be in conformance with the Goals and Objectives of the Wells Resource Management Plan (RMP) (BLM, 1985), under which: "*public lands will be managed in a manner which recognizes the Nation's needs for domestic sources of minerals* (page 25)."

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

In September 2015, the BLM issued the Nevada and Northeastern California Greater Sage-Grouse (GRSG) Approved Resource Management Plan Amendment (ARMPA) (BLM, 2015) to include specific management allocations, objectives, and management decisions within GRSG Habitat Management Areas (HMAs) to conserve, enhance, and restore GRSG habitat.

In May 2022, a Plan Maintenance Action No. 5 to the 2015 Nevada and Northeastern California Sub-Region GRSG Record of Decision and Approved Resource Management Plan Amendment was signed (BLM, 2022). This Maintenance Action consisted of two parts: updating the GRSG HMA map (2021 HMA map) with the latest data from the United States Geological Survey (USGS) and the State of Nevada and updating the habitat objectives for GRSG in line with the latest science.

The updated 2021 HMA map that this Plan Maintenance Action adopted includes additional areas in California that were not included in the 2016 map and removes some areas that no longer meet the definition of HMAs because they no longer support breeding GRSG, nor connect populations within HMAs. In addition, it adopts boundary modifications made by the State of Nevada to the 2016 map.

The Proposed Action would be consistent with all versions of the ARMPA including the approved 2015 ARMPA (BLM, 2015) and subsequent updates (BLM, 2020).

1.4.3 Relationship to Statutes, Regulations and Policy

The Proposed Action would be consistent with federal laws and regulations, state and local government laws and regulations, and other plans, programs, and policies, to the extent practicable within federal law, regulation, and policy. BLM has prepared this NEPA analysis in accordance with the following statutes and implementing regulations, policies, and procedures that govern BLM's actions including:

- NEPA (P.L. 91-190 as amended; 42 U.S.C. §4321 et seq.) [1]
- 2022 Council on Environmental Quality (CEQ) Regulations (40 CFR parts 1500-1508)
- Department of the Interior (DOI) NEPA Regulations (43 CFR part 46)
- BLM NEPA Handbook (H-1790-1), as updated (BLM, 2008a)
- General Mining Law of 1872, as revised
- Mineral Leasing Act (MLA) of 1920 as amended and supplemented (30 U.S.C. 181 et seq.)
- FLPMA (43 U.S.C. 1701 et seq)
- Mining and Mineral Policy Act of 1970 (30 U.S.C. 21a)
- Locatable Minerals Surface Management Regulations (43 CFR 3809)
- Use and Occupancy under the Mining Laws (43 CFR 3715)
- BLM Reclamation Standards as referenced in the BLM Manual Handbook H-3042-1 (BLM, 1992)
- BLM Special Status Species Management – BLM Manual 6840 (BLM, 2008b)
- Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-712)
- Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668-668d)
- Endangered Species Act (ESA) (16 U.S.C. 1531-1544)

1.4.4 Scoping, Public Involvement, & Issue Identification

During the Project Presentation and Baseline Kick-Off Meeting held on September 12, 2023, an Interdisciplinary Team of BLM (ID Team) resource specialists identified the elements associated with supplemental authorities and other resources and uses to be addressed in this NEPA analysis. The ID Team identified potential effects related to specific resources associated with the Proposed Action. The following resources were identified as present and potentially affected by Project activities and are analyzed in this NEPA analysis: Air Quality and Global Climate Change, Migratory Birds and Raptors, Native American Traditional Values, Noxious Weeds, and Non-Native Invasive Species, Paleontological Resources, Social and Economic Values, Soil, Special Status Species, Vegetation, Water Quality and Quantity, Wetlands and Riparian Zones, and Wildlife.

The Preliminary EA was made available for a 30-day public review and comment on December 20, 2024. In response, the BLM received 22 comment letters. All comments on the Preliminary EA that were received were read and given careful consideration. In some cases, the comments provided information or suggested changes that were incorporated into the EA. Appendix E presents all comments that were received on the Preliminary EA.

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

CHAPTER 2. PROPOSED ACTION & ALTERNATIVES

2.1 PROPOSED ACTION

The Proposed Action consists of exploration activities including: lithium mineral exploration and condemnation drilling; metallurgical characterization and testing via bulk sampling and test pitting and/or a large diameter drill core program; hydrogeologic investigations to support baseline characterization including installation of groundwater characterization wells, an exploration water supply well, Vibrating Wire Piezometers (VWPs), and surface water instrumentation; geotechnical investigations, including drilling and related sampling, bulk sampling of excavations, and test pits; infiltration testing via soil borings and test pitting; and reclamation of Project-related surface disturbance.

Surge expects to disturb no more than 250 acres within the 7,819-acre Project Area as part of the proposed Plan (Surge, 2024a). The proposed disturbance under Phase 1 is expected to create approximately 30 acres of new surface disturbance in addition to the authorized 4.82 acres of Notice-level surface disturbance under the Texas Spring Notice NVNV105861474for a total of 34.82 acres. The remaining 215.18 acres of proposed disturbance identified under subsequent phases would be conducted over approximately 3 years. Table 2-1 provides a breakdown of the proposed surface disturbance by category.

Table 2-1. Proposed Project Surface Disturbance

Exploration Activity	Proposed Phase 1 [1] (acres)	Subsequent Phases (acres)	Total (acres)
Notice[2]	4.82	215.18	250
Drill Sites	6		
Sumps	1.5		
New road construction	18		
Cross-country road construction	3.5		
Drill pad for water supply well	1		
Bulk sampling/test pit pads	0		
Geotechnical drill/test pit pads	0		
Infiltration drill/test pads	0		
Total Disturbance	**34.82**	**215.18**	**250**

Note: [1] Estimated area not-to-exceed
[2] Notice NVNV105861474

Phase 1 is anticipated to generally include:

- Mineral exploration drilling for lithium resource definition including development of drill sites and sumps, and road construction (new roads and cross-country roads).
- Drilling and installation of a water supply well for exploration activities.
- Installation of VWPs on select exploration drill holes.

The general disturbance area where activities would occur as part of Phase 1 is presented in Figure 2-1.

Surge proposes to use a phased approach to minimize environmental effects and to prevent unnecessary and undue degradation of public lands associated with currently authorized and future Project exploration activities (Surge, 2024a). Surge would submit Work Plans to BLM and BMRR prior to implementing the initial and each subsequent phase associated with mineral exploration, metallurgical sampling and testing, groundwater baseline characterization and supply well installation, geotechnical investigations, and infiltration testing for agency review and approval. These Work Plans would provide detailed information as to how Surge would perform activities, access road alignments and/or improvements, site locations, the number and type of drill rigs or other equipment expected, construction/drilling schedule and reclamation schedule, any changes to previously approved Work Plans, and any updates to the reclamation cost estimate and financial guarantee as determined necessary. Surge would track the acres of disturbed and reclaimed areas between the Work Plans to ensure the cost reclamation estimates and bonding are accurate. Surge would not commence surface disturbing activities in new locations included in the Work Plans until authorization is received from the BLM (Surge, 2024a). The locations of subsequent phased activities would be based on the success of previously completed exploration or baseline data collection activities and would also be included in future Work Plan submittals.

2.1.1 Proposed Phase 1 Activities

2.1.1.1 Mineral Exploration Drilling

Surge intends to continue activities authorized under Notice NVNV105861474and proposes to expand mineral exploration activities and/or perform condemnation drilling with associated surface disturbance including road construction, overland travel (cross-county road construction), drill site (drill pads) construction, and sumps.

Surge would use a tracked excavator (Komatsu PC228 or similar sized equipment) and CAT D8 dozer (or similar sized equipment), to construct the roads, drill sites, and sumps that would contain drill cuttings. The drill sites, which would be graded and stabilized, would be constructed to accommodate a safe working area. Each drill site would encompass an area of approximately 30 feet by 70 feet. Surge would stockpile growth media salvaged during initial disturbance associated with construction of drill sites and sumps within designated drill site disturbance limits (Surge, 2024a).

Surge proposes to construct new roads for exploration (10 feet wide) and overland travel (8-foot-wide cross-country roads). Surge would use overland travel instead of developing new roads, to the extent feasible, to reduce land disturbance associated with the Project. Surge may also conduct general road improvement activities (i.e., road grading, placement of gravel to improve subgrade, etc.) on existing roads to facilitate access for delivery vehicles and equipment, as needed. All road improvement work would be completed within the Project Area and within the existing road footprint. This road improvement work may involve culvert installation/replacement, if required.

Surge would drill using a Longyear LF 90 track and truck-mounted diamond (core) and rotary/reverse circulation drill rig(s) or similar sized equipment along with support vehicles, such as pipe trucks or trailers, mud tanks, and portable light plants/generators. A total of up to four drill rigs may be concurrently operating within the Project Area. The proposed drilling method (i.e., reverse circulation, sonic, or core) would be presented in the Work Plan for Phase 1. Drill depths used for mineral exploration and/or condemnation drilling are anticipated to range between 300 feet and 1,000 feet.

Surge would excavate sumps adjacent to the disturbance limits of the drill sites using a backhoe or tracked excavator (Komatsu PC228 or similar sized equipment). Each sump area would cover an area of approximately 10 feet by 25 feet. Sumps would be approximately 6 feet deep with a storage capacity of up to 10,000 gallons of drill cuttings and fluids from the drilling process (Surge, 2024a).

Surge would plug and abandon all exploration drill holes according to specifications NAC 534.4369 and NAC 534.4371. Exploration drill holes would be plugged before the drill rig moves from the drill site. Surge would not leave mineral exploration drill holes open during the life of the Project, including

between Work Plans. Surge would not have more exploration drill holes open than the maximum number of drill rigs (i.e., four) at any one time unless they are converted into baseline characterization wells.

2.1.1.2 Install Water Supply Well and Piezometers

Surge proposes to drill one exploration water supply well under a Waiver for Temporary Use of Ground Water for Mineral Exploration issued by the Nevada Division of Water Resources (NDWR). Surge proposes to install the water supply well within the northern area of general disturbance for Phase 1 (Figure 2-1). This waiver allows for the construction of a water well and total withdrawal of groundwater up to 5 acre-feet (1.629 million gallons) to be used as a water supply for the mineral exploration drilling program (Surge, 2024a). The well would be fitted with a flow meter that measures the accumulated volume of pumping, and a monthly total of pumping would be reported to NDWR for tracking purposes. An 8-inch diameter well is proposed for the exploration supply well, with an anticipated depth of approximately 700 feet. The depth of the completed well would be dependent on the depth at which sufficient groundwater yield is being produced. The well would have a sanitary seal of approximately 50 feet in depth from land surface.

The well would be drilled using conventional mud rotary or air rotary methods, with a minimum borehole diameter of 12-3/4 inches. Well casing would be steel or polyvinyl chloride (PVC) in compliance with State of Nevada well construction regulations (NAC 534).

Once the well is constructed, Surge would perform a one-time pumping test to confirm sufficient well yield for water supply purposes. The pumping test would consist of an approximately 8-hour step drawdown test, and an approximately 24-hour constant rate test. Up to three grouted VWPs would be constructed in mineral exploration drill holes at locations adjacent to the water supply well (within approximately 150 feet) and completed to a comparable depth to serve as observation wells. The VWPs would provide water level drawdown data to quantify the aquifer transmissivity and storage coefficient at that water supply well location (Surge, 2024a).

Surge would install VWPs at selected exploration drill sites to measure groundwater levels. The exploration drill holes that are completed with VWPs would be cemented/grouted-in and be functionally abandoned. Surge proposes installing up to 12 VWPs within mineral exploration drill holes as part of Phase 1. The conversion of exploration holes would be included in the Work Plan for Phase 1 and approved prior to the conversion taking place so that the reclamation cost estimate and financial guarantee are accurate.

Once the drill hole has reached the total depth, either 5/8-inch fiberglass tubing, or 1-inch flush threaded steel tubing with adequate tensile strength would be installed in the hole (Surge, 2024a). While installing the tubing, VWP instruments and wire would be banded onto the tubing at specified intervals to set instrumentation at planned depths. Depth placements of instruments would be based on observations of water during drilling and drill holes may be equipped with sensors at multiple depths to assess vertical gradients or possible perched groundwater conditions.

Once all equipment and tubing are installed in the hole, the hole would be plugged with a cement/bentonite slurry with approximately 5 to 15 percent bentonite. Cementing would occur in multiple lifts, working from the bottom upward, and each lift would be filled to a calculated depth that would not exceed the pressure rating of the VWP instrument (Surge, 2024a). The initial cement lift can be injected through the fiberglass or steel tubing, and all subsequent lifts would be through additional tubing. Once a cement lift has been installed, core rods would be pulled up to above the calculated cement volume, and the cement would be allowed approximately 24 hours to cure before the next lift of cementing occurs. After installation and prior to cementing, the VWPs would be tested to function properly, as well as after each cement lift. Once VWPs are successfully installed, 8-inch inner diameter steel pipe would be installed around the conductor casing, and cemented approximately 3 feet below land surface, would extend approximately 3 feet above land surface, and be fitted with a locking lid. The VWP terminal box

would be housed in the protective 8-inch diameter wellhead casing to allow for the downloading of groundwater elevation during monitoring events. The installation methods for VWPs would conform with State of Nevada statues for borehole plugging under NAC 534.

Surge anticipates that each drill pad for the exploration water supply well could be approximately 150 feet by 150 feet (Surge, 2024a).

2.1.2 Proposed Subsequent Phases

The actual locations of the proposed subsequent phased disturbance and timeframe would be determined by the results of the Phase I activities. Under subsequent phases, Surge would continue with the same types of surface disturbance described above, as well as potential bulk sampling, geotechnical investigation, and infiltration testing.

2.1.2.1 Metallurgical Characterization and Testing

Surge proposes to conduct metallurgical characterization and testing via bulk sampling, test pits, and/or a large diameter drill core program (i.e., core diameter up to 7.5 inches).

Each bulk sample excavation or test pit would occur within an exploration pad encompassing an area up to 250-foot by 250-foot. Surge would excavate within the limits of this pad area. Each test pit would be approximately 10 feet wide, 20 feet long, and 15 feet deep (with an estimated swell factor of 15 percent, the volume of material would be approximately 3,450 cubic feet). Surge anticipates that bulk excavations could be slightly larger. Surge would stockpile the excavated material adjacent to the test pit, within the pad area disturbance.

Surge would salvage and stockpile growth media and place the material in a separate stockpile from the excavated material. Excavated material would be stored to the side, or at the end of the test pit and replaced after samples have been collected. Surge would backfill the excavation and recontour the area to ensure that no depression is left in the ground. Surge would redistribute the growth media over the backfilled excavation. Surge would reclaim all excavations, including test pits, after the completion of sampling and logging and upon determination that the disturbance is no longer needed for exploration activities (usually the same day as they are excavated). All excavations and test pits that may remain open more than 1 day would be adequately fenced with a standard four-foot-high safety fence to preclude access.

Surge would use a tracked excavator (Komatsu PC228 or similar equipment) or other suitable equipment to complete the bulk sample excavation.

2.1.2.2 Hydrogeologic Investigations

Surge proposes installation of up to three baseline characterization monitoring wells to obtain preliminary groundwater chemistry in the Project Area. Surge would convert mineral exploration core holes into monitoring wells in lieu of plugging and abandonment. A Waiver for Observation or Monitoring Well would be obtained from NDWR for each monitoring well site. The monitoring wells would be constructed pursuant to State of Nevada NAC 534 regulations, including place of a sanitary seal (Surge, 2024a). Placement depth of the perforations would be based on observations of the lithology made during drilling, and different wells may screen aquifers located at different depths. The purpose of the wells would be to contribute to baseline data collection in support of potential subsequent mineral development activities that may occur in the Project Area, based on positive mineral exploration drilling results.

2.1.2.3 Geotechnical Investigations

Surge would perform geotechnical investigations such as drilling and test pit sampling to characterize the engineering properties of subsurface soil and identify other soil/material properties that would support planning and design of a future mining operation. Specific activities may include borehole drilling using one or more of the applicable methods such as solid stem and/or hollow stem auger, wireline coring,

rotary/reverse circulation, Cone Penetration Testing (CPT), and sonic drilling. Additional geotechnical investigations may include a geophysics program, such as ground penetrating radar, seismic refraction, or other non-invasive exploration methods (Surge, 2024a).

Sampling techniques may include Standard Penetration Testing (SPT), driven samplers such as split spoons or Modified California spoon samplers, and/or Shelby tubes. In-situ testing may include vane shear, pocket penetrometer readings, falling head, and/or Packer permeability testing. Borehole diameters would vary depending on the method selected, not to exceed 10 inches, and depth would be limited to no more than 150 feet. If necessary, additional disturbance may include a sump (maximum of 10 feet wide by 25 feet long and 6 feet deep) to capture drilling fluids for confinement and/or reuse in the drilling operation (Surge, 2024a). Surge would include any necessary sump disturbance in the Work Plan and reclamation cost estimate.

Equipment would include a backhoe or a tracked excavator (Komatsu PC228 or similar sized equipment) for test pits and bulk sampling, geotechnical drill rigs (solid stem or hollow stem auger, wireline coring, rotary/reverse circulation, CPT, or sonic drilling) and support vehicles such as all-terrain vehicles, pickup trucks, and water supply trucks.

For the geotechnical investigation, Surge assumes that drill pads and test pit pads would be 50 feet by 70 feet. Surge would drill/excavate within the limits of these pad areas. Each test pit excavation would be no more than 30 feet long, 15 feet wide, and 25 feet deep (approximately 13,000 cubic feet of material) and included within the test pit pad disturbance (Surge, 2024a).

Surge would plug the geotechnical soil borings in the manner prescribed for plugging a well in NAC 534.420 or authorized pursuant to NAC 534.422. Surge would ensure that a geotechnical soil boring is plugged once the boring is completed in line with the requirements under NAC 534.4371.

2.1.2.4 Infiltration Testing

Surge may also complete infiltration testing via soil borings (using auger drill) to a depth up to 150 feet or test pitting to approximately 10 feet to assess soil percolation rate. Surge would access the testing area(s) with an auger drill rig and trucks (Surge, 2024a).

Infiltration tests estimate the rate at which runoff would infiltrate, or pass through, native soil. Surge would drill the soil boring/excavate the test pit, fill the hole with water, and measure the drop in water level as water infiltrates the soil over time.

Surge assumes that drill pads and test pit pads would be 50 feet by 70 feet. Test pits would be 10 feet wide, 20 feet long, and 10 feet deep (approximately 2,300 cubic feet of material). Equipment would include a backhoe or a tracked excavator (Komatsu PC228 or similar sized equipment) for test pits and auger drill for boreholes (Surge, 2024a).

2.1.3 Hazardous and Petroleum Materials

Surge would transport, store, and use hazardous materials in accordance with federal, state, and local regulations and would train employees in the proper transportation, use, and disposal of hazardous materials. Surge would also ensure that Safety Data Sheets (SDSs) for all materials used onsite are stored and available to all employees. Temporary containment for stored materials would include sealed drums or other appropriate containers and would be at least 1.5 times the volume of the stored material (Surge, 2024a).

Exploration drilling would require using water and/or toxic or non-toxic drilling fluids, such as abantonite®, Alcomer® 120L, bentonite, EZ-mud®, polyplus®, and super plug, as necessary. The Spill Contingency Plan (Surge, 2024b) developed for the Project provides all SDSs for materials and fluids used for exploration. These products would be stored at the drill sites within the Project Area. Exploration activities would consume hazardous materials such as diesel fuel, gasoline, and lubricating grease. Surge

would label all hazardous substances containers and would handle the material in accordance with the Nevada Department of Transportation (NDOT) and the Mine Safety and Health Administration (MSHA).

A pickup truck would deliver fuel to drill rigs and support equipment. The truck would be equipped with 150 gallons steel transfer tanks with an electric fuel pump designed for this purpose. Fueling would take place over a portable containment vessel of sufficient size to capture any spillage. Surge and its contractor would keep spill kits (including leak pans, rags, granular sorbents, and/or blotters) at the staging area and on the fueling truck to clean any leaks, spills, or drips. In the event hazardous or regulated materials, such as diesel fuel, were spilled, Surge would take appropriate measures to control the spill, and would notify the BLM, NDEP, and/or the Emergency Response Hotline, as required. Surge would clean up in a timely manner any oil, hazardous material, or chemicals that spill during exploration activities. After cleaning, the oil, toxic fluids, or chemicals and any contaminated material would be removed from the site and disposed of at an approved disposal facility. Contract drillers would maintain spill kits on site for use in case of a spill. Surge would follow measures described in the Spill Contingency Plan for the Project (Surge, 2024b).

2.1.4 Project Schedule

The estimated duration of the exploration project is 3 years. Drilling activities would occur 24 hours per day. Surge would mobilize mineral exploration equipment and install the water storage tank in April and remove all equipment and water storage tank in late October for the proposed 3 years of exploration (estimated timeframe based on weather and road conditions). Surge does not anticipate drilling during the winter months (generally from November to March, depending on snow cover and access) and would schedule activities to avoid damaging access roads due to soft ground conditions (i.e., avoid rutting).

2.1.5 Equipment and Personnel

Table 2-2 provides a list of equipment that Surge may use to complete exploration activities covered under this Plan.

Table 2-2. Proposed Exploration Equipment

Type of Equipment	Projected Quantity of Equipment
CAT D8 dozer	1
Komatsu PC228 excavator	1
Backhoe	1
Four-wheel drive vehicles	8
Pipe truck or trailer	4
Exploration Drill rigs (track-, truck- or skid-mounted core rigs)	4
Geotechnical drill rig (auger or sonic or CPT, truck- or track-mounted)	1
Mud mixing tank and pump	4
Circulation tank	4
Water Truck (5,000 gallons)	4
Potable Light Plant / Generator	4
Grader	1

Type of Equipment	Projected Quantity of Equipment
Forklift	1
Generator (water well)	1
Back-up (inactive) generator	1

Source: Surge, 2024a

Core drills would usually operate 24 hours per day, and the rotary drills 12 or 24 hours per day. Typically, Project geologist(s) and/or engineer(s) would be on site while activities are underway to oversee drilling and excavation activities.

A maximum of up to 35 individuals (3 contract personnel per drill rig crew on 2 shifts [24], 1 Surge geologist per drill rig [4], 2 lead geologists supporting mineral exploration [2], 2 core loggers [2], and additional individuals as equipment operators [3], as needed) could be in the Project Area at the same time during exploration activities (Surge, 2024a).

2.1.6 Water Management Plan

Surge proposes to source water for exploration and dust suppression via a water right point of diversion under an exploration water supply waiver (location shown on Figure 2-1). Surge would plug this well as prescribed in NAC 534.420 or authorized pursuant to NAC 534.422 within 3 days after the completion of the Project. The water supply well would be included as part of Work Plan 1 for agency approval. Under the waiver granted by NDWR, Surge may pump and use up to 5 acre-feet (1.63 million gallons) of water for exploration drilling purposes. Daily water requirements could be as much as 24,000 gallons per day if all four drill rigs are operational and dust suppression on roads is required. Surge is proposing to use a water tank placed next to the water supply well to store water.

Surge may also purchase water required for exploration activities and dust suppression from the Salmon Falls Ranch, the town of Jackpot or other sources until the water supply well is functional. Surge proposes to continue to use the small transfer area to the east at the intersection of the Texas Spring Road and the California Trail Backcountry Byway (authorized under the Notice) as a water transfer and temporary parking area (Figure 1-2) until the exploration water supply well is functional (Surge, 2024a).

Surge would manage drilling fluids with the use of sump constructed at each drill site. Surge may use water with toxic or non-toxic drilling fluid additives, as necessary (Surge, 2024b), based on exploration drilling methods. Surge and its contractor would only use fluids approved for drilling.

Surge would use stormwater Best Management Practices (BMPs) at the exploration sites such as check dams (e.g., certified weed-free hay bales), filter fences, and drainage structures where necessary to prevent or minimize erosion and sedimentation. Drainage structures would consist of, but not be limited to, water bars, borrow ditches, contour furrows, and culverts sized to handle maximum seasonal water flows.

As outlined in the Plan (Surge, 2024a), Surge would minimize the potential effects to surface water quality from petroleum fluids, oils, and chemical spills by implementing measures presented in the Spill Contingency Plan (Surge, 2024b).

Surge would use BMPs for sediment control as needed during construction, operation, and reclamation of exploration activities to minimize sedimentation of disturbed areas and to prevent unnecessary or undue degradation to the environment. The BMPs would limit erosion and reduce sediment in precipitation runoff from Project facilities and disturbed areas during exploration and reclamation activities. BMPs may include, but are not limited to, diversion and routing of stormwater using accepted engineering practices and the placement of erosion control devices such as sediment traps, check dams, and rock and

gravel cover. The actual locations and number of stormwater and sediment controls would be determined where appropriate during exploration activities.

2.1.7 Surface Occupancy

Surge proposes to place a water storage tank near the exploration water supply well to ensure adequate water supply is maintained during exploration activities and to minimize traffic associated with water supply/delivery to and from the Project Area. Surge would also place a mobile trailer-mounted generator and a self-contained, portable, chemical toilet in the area.

The water tank would consist of a frac tank, also known as a mobile storage tank. The heavy-gauge steel tank would have a storage capacity of up to approximately 21,000 gallons. The tank would be approximately 46 feet long and 9 feet wide (Surge, 2024a). Smaller steel or plastic storage tanks or bladders occupying about the same footprint may be substituted for logistical reasons. Surge would install four reflective bollard sleeves (or similar features) around the exploration water supply well to protect it from contact with light/heavy equipment. The portable toilet would be serviced on a regular (e.g., weekly) basis. Surge would take the portable toilets off site for service and maintenance, or a contractor may service the facilities on site.

Surge would remove the water tank, mobile trailer-mounted generator, and portable toilet prior to demobilizing from the Project Area in late fall and would move the features back to this location in April of each exploration year (depending on weather).

Figure 2-2 presents a detailed map that identifies the general site location and the placement of the features. The general site location is situated adjacent to the main road within the Project Area in the NW ¼ of Section 14, T44N, R65E. This area has been previously disturbed and is located within the proposed general area for activities associated with Phase 1.

As part of this occupancy, Surge would prevent and avoid unnecessary or undue degradation of public lands and resources. Surge's occupancy would conform to all applicable federal and state environmental standards. Surge would ensure all required state and federal permits are obtained before occupancy.

Occupancies must be authorized by the District/Field Manager under the Use and Occupancy Regulations at 43 CFR 3715.

2.1.8 Applicant-Committed Environmental Protection Measures

Surge is committed to developing and implementing Applicant-Committed Environmental Protection Measures (ACEPMs) as described in the Plan to prevent unnecessary and undue degradation while conducting exploration and reclamation activities within the Project Area. Surge would perform exploration activities with a focus on reducing or eliminating potential environmental effects and employing reclamation practices using proven methods which do not require ongoing maintenance. Surge would follow the general requirements established in the BLM's Surface Management Regulations under 43 CFR 3809 and BMRR's reclamation regulations, as well as applicable water, air quality, and other environmental protection regulations. A list of ACEPMs specific to resources and resource use is included in Appendix B.

2.1.9 Reclamation

The detailed reclamation plan for the Project is included in the Exploration Plan of Operations (Surge, 2024a). Surge would reclaim surface disturbance associated with exploration activities in accordance with BLM regulations 43 CFR 3809.420 and Nevada reclamation regulations listed in NAC 519A. Surge would design reclamation activities to stabilize disturbed areas to a safe condition and protect both disturbed and undisturbed areas from unnecessary and undue degradation. Additional details about proposed reclamation activities can be found in the Plan (Surge, 2024a).

Surge would return disturbed areas to a condition which would support land uses similar to what existed prior to the onset of exploration activities; these land uses include grazing, wildlife habitat, recreation, and mineral exploration.

Since exploration success determines the reclamation schedule for exploration roads and drill holes, Surge would perform reclamation activities concurrently with exploration activities when that exploration disturbance and access to that specific drill pad is no longer needed. Surge would begin reclamation in exploration areas considered inactive, without potential, or completed at the earliest practicable time.

Earthwork and revegetation activities are limited to the time of year during which they can be effectively implemented. Site conditions and/or yearly climatic variations may require that the schedule be modified to achieve revegetation success. Surge would coordinate reclamation activities with the BLM and BMRR, as necessary.

Surge would complete the reclamation of exploration disturbances no longer required or inactive (e.g., test pits and bulk excavations) under individual Work Plans within 1 year. Surge would complete the reclamation of all disturbance areas authorized under individual Work Plans (e.g., new roads) within 2 years of completion of exploration activities (i.e., authorized disturbance associated with each Work Plan would be reclaimed within 2 years). Revegetation success would be evaluated 3 years after the time of seeding to gauge attainment of the revegetation standards established in the *Guidelines for Successful Revegetation for the NDEP, BLM, and USDA Forest Service* (NDEP, 2016) and approval by the BLM.

2.1.9.1 Handling of Growth Media

Surge would salvage and side cast soils that are suitable for use as growth media within proposed disturbance areas. In addition to the soil, Surge would salvage as much of the soil organic matter as possible to minimize compaction and promote aeration.

2.1.9.2 Drill Hole Plugging

Surge would plug all drill holes (i.e., boreholes) prior to a drill rig moving from the drill site in accordance with Nevada Revised Statutes (NRS) 534, NAC 534.4369, and NAC 534.4371 except for drill holes collared with a reverse-circulation drill rig and completed with a core rig. In this instance, drill holes would be plugged prior to the core rig moving from the drill site. The reclamation cost estimate would include, at a minimum, the estimated cost of plugging four exploration drill holes that may be open at any one time (Surge, 2024a). Surge may convert up to three exploration drill holes completed as groundwater baseline characterization wells. This would be reflected in the reclamation cost estimate once included in a Work Plan.

In the unlikely event that a drill hole produces artesian flow, the drill hole would be contained pursuant to NRS 534.060 and NAC 534.378 and would be sealed by the method described in Subsection 2 of NAC 534.4371. If the casings are set in a drill hole, either the drill hole must be completed as a well and plugged pursuant to NAC 534.420 or the casings would be completely removed from the drill hole and then plugged according to NAC 534.4369 and NAC 534.4371. Geotechnical auger holes would be backfilled with drill cuttings and surface material.

2.1.9.3 Regrading and Reshaping

Surge would regrade and reshape all drill sites, exploration roads, test pits/excavation areas, transfer area, or other exploration-related disturbance areas to approximate the surrounding topography, to the extent possible. Surge would use a dozer or backhoe to regrade and reshape exploration roads and drill sites. Drill pads and tire tracks (trails created by track rigs) from overland travel would be lightly scarified (i.e., the process of breaking up hardened soil layers to improve conditions for reseeding) and left in a rough state as necessary to relieve compaction, inhibit soil loss from runoff, and prepare the seed bed. Generally, the final surface of backfilled sumps and scarified overland roads would be left in rough condition to hold seed and to optimize germination (Surge, 2024a).

Surge would regrade and reshape the surface occupancy area when the water tank is removed to avoid any ground depression. Surge would backfill all excavations immediately after completion and would backfill geotechnical auger holes from the geotechnical investigations with drill cuttings and surface material. Surge would seed the areas disturbed by excavations and auger drilling as described in Section 2.1.9.4.

Surge would pull fill material consisting largely of growth media onto the roadbeds to fill the road cuts and restore the slope to natural contours. For overland travel roads or pads that do not require placement of side cast material, Surge would scarify the area with an excavator bucket or a dozer to knock down and smooth any ruts and loosen compacted tire tracks. This would "roughen" the soil and facilitate successful revegetation. Following the completion of earthwork, all disturbed areas would be reseeded as outlined in Section 2.1.9.4 below.

Should any drainages be disturbed, Surge would reshape the area to pre-construction contours to the extent feasible. The resulting channels would be of similar capacity as up and downstream reaches and would be made non-erosive by use of surface stabilization techniques (rip-rap) where necessary, and ultimately revegetated (Surge, 2024a).

Where the overland roads become powdered and the vegetation is damaged, Surge would reclaim the roads to the original grade by ripping and/or recontouring and would seed the area.

2.1.9.4 Revegetation

Generally, seedbed preparation and seeding would take place in the fall after regrading of disturbed areas or as advised by BLM. The suggested time to seed disturbances for the highest chance of successful revegetation is between October 1 and March 31. Surge would broadcast seed in all reclaimed areas using a cyclone-type bucket spreader or a mechanical blower and cover the seeds by harrowing, raking, or other site-specific appropriate methods as necessary to provide seed cover and enhance germination. Surge would leave reclaimed surfaces in a textured or rough condition (e.g., small humps, pits, etc.) to enhance moisture retention and revegetation success while minimizing erosion potential.

Surge would revegetate the surface occupancy area once the exploration project is complete. The seed list and application rate provided by the BLM Wells Field Office under the current Notice and listed in Table 2-3 is based on known soil and climactic conditions and was selected to establish a plant community that would support the post-exploration land use (Surge, 2024a). The mix is designed to ensure completion of reclamation per 43 CFR 3809.420 (b)(3)(ii)(d) and provide species that can exist in the Project Area, and/or are native species found in the plant communities prior to disturbance.

Table 2-3. Proposed Revegetation Seed Mixture

Common Name[1]	Scientific Name	Application Rate (pounds per acres Pure Live Seed)
Bluebunch Wheatgrass	*Pseudoroegneria spicata*	9.0
Thurber's Needlegrass	*Achnathernum thurberianum*	5.5
Indian Ricegrass	*Achnatherum hymenoides*	3.5
Bottlebrush Squirreltail	*Elymus elymoides*	2.0
Sherman Big Bluegrass	*Poa ampla*	0.5
Blue Flax	*Linum perenne*	0.5
Black Sagebrush	*Artemisia nova*	0.25

Source: Surge, 2024a

Note: [1] Seed mixtures may change from time to time during concurrent and final reclamation. The changes would be based on targeting specific soil/disturbance types and experience gained during concurrent reclamation during the life of the Project, and changes in agency recommendations.

Changes and/or adjustments to the reclamation plant list and/or application rate would be completed with consultation and approval from the BLM and BMRR.

Surge does not propose to utilize fertilizer or mulch. Final revegetation would be consistent with NDEP (2016) and with post-exploration land uses such as grazing, wildlife habitat, and recreation.

Operators are responsible for the introduction and spread of noxious weeds caused by their operations on public lands. Operators should be familiar with noxious weeds in the operating area and take measures to avoid contributing to the spread of noxious weeds. Surge would monitor revegetation success and the presence of noxious weeds on an annual basis until bond release. Weed control would be performed by Surge during the appropriate season to eradicate infestations of noxious weeds, if necessary.

2.2 PROJECT ALTERNATIVES

2.2.1 No Action Alternative

The objective of the No Action Alternative is to describe the effects that would result if the Project were not implemented. The No Action Alternative forms the baseline for which the effects of all other alternatives can be measured.

Under the No Action Alternative, the Project would not be approved by the BLM and Surge would not expand their lithium mineral exploration project. The Project Area would remain available for other multiple use activities as approved by BLM and NDEP. Surge would continue Notice-level exploration activities under the Texas Spring Project Notice (NVNV105861474) on public land in the Project Area. The area would remain available for future mineral exploration and mining activities or for other purposes, as approved by the BLM and/or NDEP.

2.2.2 Alternative Considered but Eliminated from Detailed Analysis

2.2.2.1 Use Only Existing Roads Alternative

Under this alternative, Surge would only use existing roads, including cross country/overland tracks, in the Project Area to conduct exploration activities and would not construct new roads to access drill targets. Using existing roads only would restrict access and eliminate a large portion of the Project Area available for lithium mineral exploration, denying Surge the opportunity to fully evaluate and characterize the mineral potential.

This alternative is dismissed under this NEPA analysis since it does not meet the definition of a "reasonable alternative" in the CEQ regulations at 40 CFR 1508.1(hh) (i.e., had to meet the Purpose and Need for the Proposed Action and be technically and economically feasible).

CHAPTER 3. AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND CUMULATIVE EFFECTS

3.1 RESOURCE ANALYSIS

This chapter of the NEPA analysis describes the existing environment of the Project areas of analysis that would be affected by the implementation of the Proposed Action or the No Action Alternative and discloses the potential for environmental consequences (i.e., effects) and cumulative effects from implementation of the Proposed Action or the No Action Alternative.

The BLM reviewed potentially affected resources to determine if they may be significantly impacted by the Proposed Action. The analysis of effects is disclosed under each affected resource and focuses on potential effects remaining after the implementation of the ACEPMs as described in the Plan and included in Appendix B. The general effect definitions for resources carried forward for analysis were based on intensity, duration, and context as provided in Table 3-1. Resource-specific effect definitions are included in Supplemental Environmental Reports (SERs) developed for resources carried forward for analysis.

Table 3-1. Effect Definitions

Attribute	Term	Description
Intensity (severity or levels of magnitude of an effect)	Negligible	Effects may occur, but they would be so slight as to not be measurable using normal methods. Resources would not be significantly altered.
	Minor	Effects would occur and be slightly measurable using normal methods. Effects would be minimized with implementation of ACEPMs.
	Moderate	Effects would occur and would be measurable. Mitigation beyond ACEPMs may be necessary to reduce or rectify adverse effects, but these measures would most likely be effective.
	Major	Effects would occur and would be easily measurable and detectable. Mitigation beyond the ACEPMs may be necessary, but these measures would need to be monitored to determine their effectiveness.
Duration (the length of time an effect would occur)	Temporary	Effects are anticipated to last no longer than one year.
	Short-Term	Effects would occur over the duration of the Project's exploration activities (3 years).
	Long-Term	Effects would extend 10 years or more beyond the duration of the Project.
	Permanent	Effects would remain after reclamation and effects on resources would be permanent
Context (effect[s] of an action must be analyzed within a framework, or within physical or conceptual limits)	Localized	Effects would occur within the area of analysis.
	Regional	Effects would extend beyond the area of analysis.

The BLM is required to consider specific resources/resource uses that are subject to requirements specified in statutes, regulations, or by Executive Orders (Supplemental Authorities). In addition to resources covered by Supplemental Authorities that require consideration in NEPA documents, the BLM considers other resources and resource uses that may be affected by the Proposed Action and alternatives. Table 3-2 lists the resources covered by Supplemental Authorities and other resources.

The BLM reviewed each resource/resource use to determine the potential effects of the Project (i.e., Not Present, Present and Not Affected, or Present and May be Affected). Resources identified as Present May be Affected are discussed in the effects analysis. Table 3-2 provides the rationale for determinations of effect analysis and the relevant section for the description of effects.

Table 3-2. Resources and Resources Uses Under Supplemental Authorities

Resources or Resources Uses	Not Present	Present / Not Affected	Present / May be Affected	Rationale for NEPA Analysis
Air Quality and Climate Change			X	Section 3.3.1.
Areas of Critical Environmental Concern	X			Not present in the Project Area.
Cultural Resources		X		This resource is not further analyzed in this NEPA analysis. See Section 3.2.1.
Environmental Justice				President Trump has issued Executive Order 14154, Unleashing American Energy (Jan. 20, 2025) and a Presidential Memorandum, Ending Illegal Discrimination and Restoring Merit-Based Opportunity (Jan. 21, 2025). The Order and Memorandum repeal Executive Orders 12898 (Feb. 11, 1994) and 14096 (Apr. 21, 2023), which had directed agencies to consider non-legislated "environmental justice" considerations when undertaking environmental analysis. Executive Order 14154 and the Presidential Memorandum require the Department to strictly adhere to NEPA, 42 U.S.C. §§ 4321 et seq. Further, such Order and Memorandum repeal Executive Orders 12898 (Feb. 11, 1994) and 14096 (Apr. 21, 2023). Because Executive Orders 12898 and 14096 have been repealed, complying with such Orders is a legal impossibility.
Farmlands (Unique or Prime)	X			Not present in the Project Area.
Fire Management		X		This resource is not further analyzed in this NEPA analysis. See Section 3.2.2.
Floodplains	X			Not present in the Project Area.

Resources or Resources Uses	Not Present	Present / Not Affected	Present / May be Affected	Rationale for NEPA Analysis
Forests and Rangelands			X	Discussed under Vegetation Section 3.3.9.
Geology and Minerals		X		This resource is not further analyzed in this NEPA analysis. See Section 3.2.3.
Grazing Management		X		This resource is not further analyzed in the NEPA analysis. See Section 3.2.4.
Human Health and Safety		X		This resource is not further analyzed in this NEPA analysis. See Section 3.2.5.
Land Use		X		This resource is not further analyzed in this NEPA analysis. See Section 3.2.6.
Migratory Birds and Raptors			X	Section 3.3.2.
Native American Traditional Values			X	Section 3.3.3.
Noise (Effect to Humans)		X		This resource is not further analyzed in this NEPA analysis. See Section 3.2.7.
Noxious Weeds, and Non-Native Invasive Species			X	Section 3.3.4.
Paleontological Resources			X	Section 3.3.5.
Recreation		X		This resource is not further analyzed in this NEPA analysis. See Section 3.2.8.
Social and Economic Values			X	Section 3.3.6.
Soil			X	Section 3.3.7.
Special Status Species (Including Noise Effects on Wildlife)			X	Section 3.3.8.
Threatened or Endangered Species	X			Not present in the Project Area.
Vegetation			X	Section 3.3.9.
Visual Resources		X		This resource is not further analyzed in this NEPA analysis. Section 3.2.9.
Wastes, Hazardous Material/Solid Waste		X		This resource is not further analyzed in this NEPA analysis. See Section 3.2.10.
Water Quality and Quantity			X	Section 3.3.10.
Wetland and Riparian Zones			X	Section 3.3.11.
Wilderness and Wilderness Study Areas	X			Not present in the Project Area.
Wild Horses and Burros	X			Not present in the Project Area.
Wildlife			X	Section 3.3.12.

Cumulative effects are the sum of all past, present, and Reasonably Foreseeable Future Actions (RFFAs) resulting primarily from mineral exploration, mining, commercial activities, and public uses. RFFAs are defined as federal and non-federal activities not yet undertaken, but sufficiently likely to occur that a Responsible Official of ordinary prudence would take such activities into account in reaching a decision (43 CFR § 46.30). These federal and non-federal activities that must be considered in the analysis of cumulative effects include, but are not limited to, activities for which there are existing decisions, funding, or proposals identified by the BLM.

The purpose of this cumulative analysis is to evaluate the Proposed Action's and the No Action Alternative's incremental contributions to the environment within the Cumulative Effects Study Area (CESA) identified for the specific resource.

The boundaries of the CESAs vary by resource. Cumulative effects should be evaluated in terms of the specific resource, ecosystem, and human community being affected. To determine the size of the CESAs, each environmental resource was analyzed to determine the extent to which the environmental effects from the Proposed Action and No Action Alternative may be reasonably detected. The geographical areas considered for the analysis of cumulative effects are illustrated on the CESA figures for each resource (Appendix A; Figure 3-1, Figure 3-2, Figure 3-6, Figure 3-9, and Figure 3-12) and described in Appendix C. The CESA boundaries vary in size and shape to reflect each evaluated resource. Acres of disturbance from past, present, and RFFAs within each CESA are presented in Appendix C (Table C-1).

3.2 RESOURCES NOT CARRIED THROUGH FOR FURTHER ANALYSIS

3.2.1 Cultural Resources

Kautz Environmental Consultants (Kautz) completed a Class III cultural resources inventory between August and November 2023 (Harmon and LeBlanc, 2024). The Area of Potential Effect (APE) consisted of approximately 7,956 acres and included the entire Project Area and associated access routes. The inventory resulted in the documentation of 339 newly identified archaeological sites, one update to a previously recorded archaeological site, and three newly recorded architectural resources.

There were also 220 isolated finds within the APE. Of the 340 total archaeological sites, 15 prehistoric sites were recommended eligible for the National Register of Historic Places (NRHP) under Criterion D, for their data potential, and 26 prehistoric sites remain unevaluated pending additional investigation. The remaining 299 sites and the three architectural resources were recommended not eligible for NRHP listing under any evaluation criteria. All 220 isolated finds are considered categorically exempt from NRHP evaluation according to the State Protocol Agreement between the BLM and the Nevada State Historic Preservation Office (SHPO) for Implementing the National Historic Preservation Act (BLM and SHPO, 2014).

The Proposed Action has been designed to avoid disturbance and associated effects to cultural resource sites. As part of the Project ACEPMs included in the Plan, Surge has committed to avoiding the NRHP-eligible and unevaluated sites and notifying BLM of such discoveries (Appendix B). No further (or additional) analysis of this element/resource is provided in this NEPA analysis.

3.2.2 Fire Management

While the Project Area is in a geographic area with a relatively high probability of rangeland fire given an ignition (USDA Agriculture Research Service, 2024), Surge would implement ACEPMs to minimize the risk of wildfire associated with proposed exploration activities, including both prevention and control measures (Appendix B). No further (or additional) analysis of this element/resource is provided in this NEPA analysis.

3.2.3 Geology and Minerals

There would be no changes in mineral rights and there would be no mineral extraction as part of the Proposed Action. Only a small amount of material would be removed from drill holes and would not affect potential mineral resources in the ground. No further (or additional) analysis of this element/resource is provided in this NEPA analysis.

3.2.4 Grazing Management

The Proposed Action would occur within the BLM Salmon River Grazing Allotment. Although surface disturbance would result in a loss to forage available for grazing there would be no changes to grazing permit animal unit months. Project activities would use and maintain roads but would not block access or otherwise conflict with grazing authorizations. No further (or additional) analysis of this element/resource is provided in this NEPA analysis.

3.2.5 Human Health and Safety

The Proposed Action would operate in compliance with MSHA safety regulations. Surge would implement ACEPMs to maintain public safety as presented in Appendix B. No further (or additional) analysis of this element/resource is provided in this NEPA analysis.

3.2.6 Land Use

The Project would occur on lode claims owned by Surge. The Project would not require changes to the names of claimants, Right-of-Way (ROW) holders, or private landowners within the Project Area. The Proposed Action would use and maintain roads but would not block access or otherwise conflict with other land use authorizations. No further (or additional) analysis of this element/resource is provided in this NEPA analysis.

3.2.7 Noise (Effect to Humans)

GSI Environmental Inc. (GSI) completed a desktop analysis to identify human noise receptors (i.e., residences, schools, etc.) located in the vicinity of the Project Area that could be potentially affected by the proposed lithium mineral exploration activities (GSI, 2024a).

The nearest cluster of residences are in the unincorporated community of Contact, Nevada situated along U.S. Highway 93 (Great Basin Highway), approximately 10 miles northwest of the northwestern edge of the Project Area (GSI, 2024a). The second nearest residence is located approximately 12 miles west of the Project Area in the unincorporated community of Henry, Nevada. Other residential buildings are located south and southwest of the Project Area; approximately 19 miles and 22 miles, respectively. Based on the topography and sheer distance between the edge of Project Area boundaries and nearest noise receptors, there would be no effects on human health and safety associated with the ambient noise levels due to the Proposed Action. The Project would not generate noise levels that increase above ambient conditions resulting in activity interference and annoyance or exceed EPA's noise levels (EPA, 1972). No further (or additional) analysis of this element/resource is provided in this NEPA analysis.

3.2.8 Recreation

There are no designated recreational areas within the Project Area, but dispersed recreation activities are known to occur. Dispersed recreation includes off-highway vehicle use, camping, hunting, rock and mineral collecting, and hiking. With the Proposed Action, the public would temporarily not be able to recreate within specific disturbance areas associated with ongoing mineral exploration activities. Project activities would not block existing public road access. No further (or additional) analysis of this element/resource is provided in this NEPA analysis.

3.2.9 Visual Resources

The interim Visual Resources Management (VRM) Class for the Project Area is VRM Class III and VRM Class IV (GSI, 2024b). The objective of VRM Class III is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape. The objective of VRM Class IV is to provide for management activities which require major modifications of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the effect of these activities through careful location, minimal disturbance, and repeating the basic elements. Surge would implement the ACEPMs included in Appendix B.

The mineral exploration activities associated with the Proposed Action would be within the VRM Class III and Class IV objectives. No further (or additional) analysis of this element/resource is provided in this NEPA analysis.

3.2.10 Wastes, Hazardous Material/Solid Waste

Surge would implement ACEPMs to prevent effects from solid and hazardous waste (Appendix B). including BMPs included in the Spill Contingency Plan for the Project (Surge, 2024b). All regulated wastes, including hazardous and miscellaneous solid wastes, would be removed from the Project area, and disposed of in a state, federal, or local designated area. No further (or additional) analysis of this element/resource is provided in this NEPA analysis.

3.3 RESOURCES CARRIED THROUGH FOR DETAILED ANALYSIS

3.3.1 Air Quality and Global Climate Change

3.3.1.1 Affected Environment

The regulatory framework for air quality includes state and federal rules, regulations, and standards. The United States Environmental Protection Agency (EPA) codifies the air quality framework and delegates the NDEP, Bureau of Air Quality Planning, and the Bureau of Air Pollution Control (BAPC) to implement and enforce the state and federal rules, regulations, and standards. The Clean Air Act (CAA) requires the EPA to establish the National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment.

The EPA has established national ambient air quality standards for criteria pollutants, which include carbon monoxide (CO), nitrogen dioxide, ozone, particulate matter (PM_{10} and $PM_{2.5}$), sulfur dioxide (SO_2), and lead. The EPA developed a classification system for distinct air pollution control regions pursuant to the CAA. In Nevada, the regions are based on geographical boundaries and hydrographic basins. Each region has been classified as Attainment, Non-Attainment, or Unclassified for each of the criteria air pollutants. Attainment status means that concentrations for criteria pollutants are below the applicable state and federal ambient air quality standards. The proposed Project Area is not within a non-attainment area or areas where total suspended particulates or other criteria pollutants exceed NAAQS and Nevada air quality standards.

3.3.1.2 Environmental Consequences

Proposed Action

GSI completed an air emissions inventory for the Project (GSI, 2024c). A summary of the inventory is included in Appendix D. Estimated emissions from the Project are below the NDEP Environmental Evaluation threshold of 25 tons per year for all regulated pollutants except CO, and CO is less than the 50 ton-per-year threshold BLM considers for remote locations. These results indicate that no further analysis

is required to demonstrate that the Project is unlikely to cause air quality impacts or interfere with compliance with state and federal air quality standards. Project activities would result in negligible short-term effects to air quality in the form of vehicle and equipment emissions and fugitive dust associated with land disturbance and travel. Surge would implement ACEPMs described in the Plan and included in Appendix B to minimize fugitive dust. Adherence to the ACEPMs, combined with compliance with applicable state and federal regulations and permits should maintain potential effects on air quality at a negligible level.

Use of heavy equipment, light vehicles, and drill rigs would produce greenhouse gases (GHGs) through combustion of fossil fuels during exploration and reclamation activities. The air emissions inventory (Appendix D) includes a summary of the GHG emissions inventory for the Project based on a worst-case scenario, assuming all vehicles/equipment would operate simultaneously. Total GHG emissions for the Project are estimated at 8,724 tons per year (7,914 metric tons of carbon dioxide equivalent [MMt CO_2e]) (CO_2 being the main GHG pollutant of concern) (Appendix D). This is the equivalent to GHG emissions from 1,845 gasoline-powered passenger vehicles driven for one year or the annual energy usage of 1,063 households.

In 2022, total gross U.S. GHG emissions were 6,343.2 MMt CO_2e (EPA, 2024). Gross total GHG emissions for the state of Nevada were 45.4 MMt CO_2e in 2021, with sequestration reducing the total by 8.2 MMt CO_2e, for a net total of 37.2 MMt CO_2e (NDEP, Nevada Department of Conservation and Natural Resources [NDCNR], Nevada Governor's Office of Energy [NV GOE]; 2024).

The Proposed Action's estimated annual GHG emissions (using a worst-case scenario) would equal approximately 0.00013 percent of the total gross GHG emissions for the U.S. (2022 values) and 0.021 percent of the net total Nevada GHG emissions (2021 values). The estimated Project emissions would have negligible contribution to the overall carbon footprint of the country and in Nevada.

The main impacts of climate change in Nevada are increasingly severe and more frequent extreme high-temperature days, altering the water cycle and changing precipitation patterns. These high-temperature days lead to heat waves, drought, and wildfires, which in turn can lead to changes in snowmelt and an increase in extreme rain and flooding events (NDEP, NDCNR, NV GOE; 2024).

No significant effects are expected due to the short duration of the Proposed Action in consideration of climate change. Surge would implement ACEPMs associated with stormwater and erosion control and fire prevention and control (Appendix B) to minimize potential effects of climate change over the 3-year Project.

No Action Alternative

Under the No Action Alternative, Surge would continue exploration activities on up to 5 acres of surface disturbance within the Project Area under Notice-level exploration activities. As with the Proposed Action, the No Action Alternative would not be expected to air quality and global climate change.

3.3.1.3 Cumulative Effects

Based on the guidance in Section 6.8.3.1 of BLM's NEPA Handbook H-1790-1 (BLM, 2008a), if a Proposed Action or alternatives have no direct or indirect effects on a resource, a cumulative effects analysis is not required. The analysis for air quality and global climate change does not identify measurable Project-specific direct or indirect effects; therefore, a cumulative analysis is not included in this NEPA analysis.

There would be no incremental effects/cumulative effects from the Project to ambient air quality or climate change considering all past, present, and RFFAs since environmental consequences of the Proposed Action and No Action Alternative would be negligible.

3.3.2 Migratory Birds and Raptors

The area of analysis for migratory birds is the 7,819-acre Project Area; the focus of the 2023 baseline field surveys. The area of analysis for raptor- and eagle-specific aerial surveys was extended to include a 4-mile buffer encompassing the Project Area. Additional information on the regulatory framework and affected environment can be found in the Migratory Birds and Raptors SER (BLM, 2025a).

3.3.2.1 Affected Environment

Nevada Division of Natural Heritage (NDNH), Nevada Department of Wildlife (NDOW), United States Fish and Wildlife Service (USFWS), and BLM Nevada Elko District were contacted to request information regarding known raptor nest locations, critical habitat, and occurrences of migratory birds within a 4-mile buffer of the Project Area (Western Biological [WB], 2024a). The NDOW Sensitive Data Request Response yielded multiple historic raptor nest locations within the raptor survey buffer. The NDNH data request resulted in no recorded occurrences of at-risk taxa within the Project Area, though records of golden eagle nests occur within the general vicinity.

Raptor and eagle nest monitoring aerial surveys were conducted April and May of 2023 to identify in-use raptor nests, and to comply with recommended buffers between exploration activity and in-use nests to avoid any accidental "take" of birds protected by the Bald and Golden Eagle Protection Act (BGEPA) and/or Migratory Bird Treaty Act (MBTA). Raptor and eagle survey protocols were provided by BLM and USFWS. All historic nest locations were visited during field surveys, and searches for new nests occurred during flights. Of the 10 historic nest locations, only one was located in 2023. Two new nests were located during the 2023 aerial surveys (totaling three nests visually surveyed). One of the three nests was confirmed as in-use by the presence of a downy chick in June; however, the species could not be confirmed as no adults were observed (WB, 2024a).

A total of 13 nests were observed during 2024 raptor and eagle flight surveys (WB, 2024b), of which 10 are new nest locations. Of the 13 nests, two are active golden eagle (*Aquila chrysaetos*) nests, nine are inactive nests, and two are documented as unknown. Of the nine inactive nests, six are of unknown species, one golden eagle, one prairie falcon (*Falco mexicanus*), and one red-tailed hawk (*Buteo jamaicensis*). Five golden eagle territories are estimated to be within the survey area, of which one is within the Project Area. This territory is comprised of one inactive nest and one unknown status nest, estimated to be golden eagle nests. Additional information is provided in the Migratory Birds and Raptors SER (BLM, 2025a).

Migratory bird surveys were conducted concurrent with pedestrian general wildlife surveys on June 4-9, July 25, and September 22-24, 2023. Twenty-six migratory birds were recorded within the Project Area by auditory clues and/or direct observation (Table 3-3). Of the 26 migratory birds, two are BLM special status species: brewer's sparrow (*Spizella breweri*) and sage thrasher (*Oreoscoptes montanus*) (shown in bold in Table 3-3). Special status avian species are further discussed in Section 3.3.8, and the Special Status Species SER (BLM, 2025b).

Table 3-3. Migratory Birds Recorded in the Project Area

Scientific Name	Common Name	Observation Type
Agelaius phoeniceus	Red-winged blackbird	Auditory, Direct Observation
Baeolophus ridgwayi	Juniper titmouse	Auditory, Direct Observation
Buteo jamaicensis	Red-tailed hawk	Auditory, Direct Observation
Catherpes mexicanus	Canyon wren	Auditory
Charadrius vociferus	Killdeer	Direct Observation
Chondestes grammacus	Lark sparrow	Auditory
Chordeiles minor	Common nighthawk	Auditory, Direct Observation

Scientific Name	Common Name	Observation Type
Circus cyaneus	Northern harrier	Direct Observation
Colaptes auratus	Northern flicker	Auditory, Direct Observation
Corvus corax	Common raven	Auditory, Direct Observation
Dendroica petechia	Yellow warbler	Auditory, Direct Observation
Eremophila alpestris	Horned lark	Auditory, Direct Observation
Euphagus cyanocephalus	Brewer's blackbird	Auditory, Direct Observation
Falco sparverius	American kestrel	Auditory, Direct Observation
Icteria virens	Yellow-breasted chat	Auditory, Direct Observation
Icterus bullockii	Bullock's oriole	Auditory, Direct Observation
Melospiza lincolnii	Lincoln's sparrow	Auditory, Direct Observation
Myiarchus cinerascens	Ash-throated flycatcher	Auditory, Direct Observation
Oreoscoptes montanus [1]	**Sage thrasher**	**Direct Observation**
Pipilo maculatus	Spotted towhee	Auditory, Direct Observation
Polioptila caerulea	Blue-gray gnatcatcher	Auditory, Direct Observation
Turdus migratorius	American robin	Auditory, Direct Observation
Salpinctes obsoletus	Rock wren	Auditory
Spizella breweri [1]	**Brewer's sparrow**	**Auditory, Direct Observation**
Spizella passerine	Chipping sparrow	Auditory, Direct Observation
Zenaida macroura	Mourning dove	Auditory, Direct Observation

Source: WB, 2024a

Note: [1] BLM special status species

3.3.2.2 Environmental Consequences

Proposed Action

Surface disturbance of up to 250 acres and associated removal of vegetation within the Project Area due to implementation of the Proposed Action could potentially result in the destruction of native nests or disturb the breeding behavior of migratory bird and raptor species. Vegetation removal, ground disturbance, and noise associated with proposed Project activities would result in a long-term reduction of approximately 250 acres of foraging and breeding habitat for migratory birds and foraging habitat for raptors within the Project Area. Due to the phased nature of the exploration activities associated with the Project, not all 250 acres would be disturbed concurrently.

Exploration activities, including the construction of roads, drill sites, and cross-country roads, would disturb migratory birds and raptors due to the presence of humans and by creating noise and dust. Surge would implement the ACEPMs (Appendix B) which would minimize or reduce the effects of Project activities on migratory birds and raptors and their habitat. Baseline field and aerial surveys were conducted in 2023 and 2024 (WB, 2024a; WB, 2024b) to locate both active and inactive raptor nests. Surge has committed to providing a qualified biologist to conduct nest surveys prior to any surface disturbing activities associated with exploration during the migratory bird breeding season (April 1 to July 31 for most migratory bird species; February 15 to May 15 for pinyon jays). Surge would also conduct annual diurnal raptor nest surveys to detect the presence of active raptor nests (January 1 to August 31) and as described in the ACEPMs in Appendix B. If active nests are detected during clearance surveys, Surge would implement protective buffers as defined in the ACEPMs (Appendix B). These measures would reduce the likelihood that direct effects to migratory birds and raptors would occur due to Project activities. Direct effects to migratory birds and raptors would be minor, long-term, and localized.

The maximum proposed surface disturbance covers approximately 3 percent of the entire Project Area (250 acres out of 7,819 acres). Direct effects from vegetation removal would lead to spatial redistribution of individuals or habitat-use patterns over the long-term. Given the small, proposed disturbance area in relation to the entire Project Area, it is unlikely that Project implementation would result in a decline in local or regional migratory bird and raptor populations because migratory birds and raptors would likely redistribute to suitable habitat within and encompassing the Project Area.

After exploration activities have concluded, reclamation would involve regrading disturbed areas to approximate the surrounding topography and reseeding with a BLM-authorized noxious weed-free seed mix (Table 2-3). Concurrent reclamation would return disturbed areas to a condition which would support land uses which existed prior to the onset of exploration activities such as grazing, wildlife habitat, recreation, and mineral exploration. Reclamation would be completed no later than 2 years after the completion of activities under the Proposed Action, with monitoring for revegetation success continuing until revegetated areas are reestablished and bond is released. Effects associated with the loss of migratory bird and raptor habitat are considered minor, long-term, and localized.

No Action Alternative

Under the No Action Alternative, up to 5 acres of surface disturbance would continue within the Project Area under Notice-level exploration activities. As with the Proposed Action, the No Action Alternative would result in the long-term loss of migratory bird and raptor nesting or foraging habitat. Reclamation of disturbed areas would gradually eliminate potential effects to migratory birds and raptors. Effects to migratory birds and raptors under the No Action Alternative would be similar, but proportionally less than the Proposed Action (approximately 5 acres of surface disturbing activities versus up to 250 acres associated with the Proposed Action).

3.3.2.3 Cumulative Effects

The CESA for analyzing cumulative effects to migratory birds and raptors is the Hydrologic Unit Code (HUC) 10 watershed boundary (Figure 3-1). This CESA encompasses approximately 197,311 acres of which 7,819 acres (approximately 4 percent of the CESA) comprise the Project Area.

Cumulative Effects of the Proposed Action

Quantifiable past and present actions and RFFA disturbance in the CESA (presented in Appendix C) totals approximately 1,108 acres, or 0.56 percent of the 197,311-acre CESA (Figure 3-1). Combined with up to 250 acres of disturbance (temporary nesting and/or foraging habitat removal) associated with the Proposed Action, total disturbance in the CESA would be approximately 1,358 acres, or 0.69 percent of the total CESA.

Cumulative effects from the Proposed Action in combination with past, present, and RFFAs would include loss of habitat. Implementation of ACEPMs (Appendix B) would mitigate the effects of temporary nesting and/or foraging habitat removal from the Proposed Action. Consistent with BLM regulations 43 CFR 3809.420, concurrent reclamation would return disturbed areas to a condition which would support land uses which existed prior to the onset of exploration activities. Based on the above analysis and findings, incremental effects to migratory birds and raptors and their habitat as a result of the Proposed Action, when combined with the effects from the past and present actions and RFFAs, are expected to be minor, long-term, and localized.

Cumulative Effects of the No Action Alternative

The total of the quantifiable past and present actions (including the Notice-level exploration activities) and RFFA disturbance within the CESA is 1,108.6 acres, or 0.56 percent of the CESA. The No Action alternative would not add any more measurable effects to the CESA that aren't already occurring or have occurred.

3.3.3 Native American Traditional Values

The area of analysis for Native American traditional values is the 7,819-acre Project Area. Additional information on the regulatory framework and affected environment can be found in the Native American Traditional Values SER (BLM, 2025c).

3.3.3.1 Affected Environment

The BLM Wells Field Office administrative boundary is located within the traditional territories of the Western Shoshone and contains spiritual, traditional, and cultural resources, and sites to engage in social practices that aid in maintaining and strengthening the social, cultural, and spiritual integrity of the Tribes. Recognized Tribes with known interests near the Project Area include the Confederated Tribes of the Goshute Reservation, Ely Shoshone Tribe, Northwestern Band of the Shoshone Nation, Shoshone-Bannock Tribes of the Fort Hall Reservation, Shoshone-Paiute Tribes of the Duck Valley Reservation, and Te-Moak Tribe of Western Shoshone Indians of Nevada.

The Western Shoshone practiced a highly pragmatic, flexible, seasonal cycle of population movement, often covering considerable areas. These seasonal movements were informed by generations of passed-down knowledge about the land and occurred in response to the relatively predictable availability of plant and animal foods found throughout the year at different elevations and locations. Areas with particularly abundant, reliable resources, often were the location of winter villages. Social organization usually was quite flexible, responding to the dynamics of particular times and circumstances. The ethnographic account of Western Shoshone lifeways has provided a powerful metaphor for discussing prehistoric and ethnohistoric cultural adaptations characterizing Great Basin native peoples.

Though the Project Area was primarily occupied by bands of Western Shoshone, it was likely also occasionally utilized by bands of Northern Shoshone-Bannock. The Northern Shoshone-Bannock were highly mobile, having acquired the horse for bison hunting likely by the late 1600s, and gathered pine nuts in northwest Utah and roots, berries, and game from southern Idaho and northeastern Nevada while bands of Western Shoshone likely traveled north into Southern Idaho along Salmon Falls Creek to the Snake River for salmon fishing. No known winter camps are located in the vicinity of the Project Area, with larger camps located along the Humboldt River to the south and along the Snake River to the north, though smaller 19th century villages or camps were documented north, near the town of Jackpot, Nevada, and southeast near the confluence of Thousand Springs Creek and Rock Spring Creek.

3.3.3.2 Environmental Consequences

Proposed Action

Primary issues pertaining to properties of traditional religious and cultural importance, Traditional Cultural Properties (TCPs), or sacred sites include ground-disturbing activities associated with the Project, and illegal collecting of artifacts, and inadvertent damage to areas of tribal concern. BLM sent notification letters of the Proposed Action to Tribes listed above on August 10, 2023 and October 4, 2024. To date, no Tribal concerns have been identified for the Project at this time.

TCPs, designated by the Tribes, are not known to exist in or within the vicinity of the Project Area. The BLM continues to solicit input from local tribal entities and coordinates with the Tribes to identify any other sites or artifacts, or cultural, traditional, and spiritual use resources and activities that might be affected as a result of the Proposed Action. If any TCPs, tribal resources, and/or sacred sites, are identified within or near the Project Area, a protective “buffer zone” may be acceptable, if doing so satisfies the needs of the BLM, the proponent, and the affected Tribe. The size of any “buffer zone” would be determined through coordination and communication between all participating entities.

Specific spiritual and religious use locations within the Project Area have not been identified or disclosed. If previously undisclosed places of spiritual and religious use become known within the Project Area, the BLM would consult with the Tribes to determine potential effects.

Surge would implement ACEPMs (Appendix B) in the event any cultural properties, items, or artifacts are encountered, including inadvertently discovering Native American gravesites.

BLM did conduct government-to-government consultation through attendance at tribal council meetings to present and discuss the NNLEP proposed action, address any concerns, and offer opportunity to visit the area if the tribes so choose. However, no concerns, issues, or other comments were provided through these in-person meetings. At this time, no concerns related to Native American traditional values have been identified by the Tribes and no measurable effects are anticipated from the Project. However, Tribal consultation would continue throughout the life of the Project.

No Action Alternative

Under the No Action Alternative, up to 5 acres of surface disturbance would continue within the Project Area under Notice-level exploration activities. Effects to Native American traditional values under the No Action Alternative would be similar, but potentially less than the Proposed Action (up to 5 acres of surface disturbing activities versus 250 acres associated with the Proposed Action).

3.3.3.3 Cumulative Effects

Based on the guidance in Section 6.8.3.1 of BLM's NEPA Handbook H-1790-1 (BLM, 2008a), if a Proposed Action or alternatives have no direct or indirect effects on a resource, a cumulative effects analysis is not required. The analysis for Native American traditional values does not identify measurable Project-specific direct or indirect effects; therefore, a cumulative analysis is not included in this NEPA analysis.

There would be no incremental effects/cumulative effects from the Project to Native American traditional values considering all past, present, and RFFAs since environmental consequences of the Proposed Action and No Action Alternative would be negligible (no measurable change).

3.3.4 Noxious Weeds, and Non-Native Invasive Species

The area of analysis for noxious weeds, invasive and non-native species is the 7,819-acre Project Area. Additional information on the regulatory framework and affected environment can be found in the Noxious Weeds, and Non-Native Invasive Species SER (BLM, 2025d).

3.3.4.1 Affected Environment

Field surveys conducted in 2023 consisted of a pedestrian survey of the Project Area. The Nevada Department of Agriculture (NDA) Noxious Weeds List was used to determine species with the potential to occur. A desktop review was conducted using EddMaps to determine if there were any documented noxious weed occurrences in the Project Area. Any new occurrences of noxious weeds were documented, and the species and size of infestation were recorded. According to EddMaps, there are no documented noxious weeds within the Project Area; however, Canada thistle (*Cirsium arvense*) was observed within the Project Area during 2023 field surveys. Canada thistle was isolated within and east of Texas Creek Spring (WB, 2024a). In Nevada, Canada thistle is categorized as a Class C weed, a noxious weed that is "generally established and generally widespread in many counties in the State" (NDA, 2021).

Four non-native invasive plant species were recorded during 2023 field surveys. Cheatgrass (*Bromus tectorum*) was found intermittently within the Project Area, concentrated along roadways and previously disturbed areas (WB, 2024a). Additional non-native invasive species observed throughout the Project Area include cross flower (*Chorispora tenella*), desert alyssum (*Alyssum desertorum*), and Burr buttercup (*Ceratocephala testiculata*).

3.3.4.2 Environmental Consequences

Proposed Action

Surface exploration disturbance of approximately up to 250 acres within the Project Area could increase the potential for the spread and establishment of noxious weeds, invasive and non-native species. Ground disturbance would occur incrementally and would be dispersed throughout the Project Area. Due to the phased nature of the exploration activities associated with the Project, not all 250 acres would be disturbed concurrently.

Canada thistle was observed in the Texas Creek Spring area adjacent to the private land inclusion. There is potential to spread to the downstream drainage within the Project Area. Project-related activities increase the potential for spread of the non-native species (cheatgrass, cross flower, desert alyssum, and Burr buttercup) observed throughout the Project Area, further affecting the biological value of native plant communities.

Effects would be minimized with implementation of the ACEPMs outlined in Appendix B. Should a new population of noxious weeds and non-native invasive species be detected, or noxious weeds/non-native invasive species infestations require the use of herbicide application for eradication, Surge would coordinate with the BLM noxious weeds specialist on methods for weed management and completion and submittal of a Pesticide Use Proposal (PUP) prior to herbicide application. Effects from noxious weeds, invasive and non-native species would be minor, short-term, and localized.

After exploration activities are completed, reclamation would involve reseeding with a BLM-authorized noxious weed-free seed mix appropriate for the vegetation type (Table 2-3). Reclamation would be completed no later than two years after the completion of activities under the Proposed Action, with monitoring for revegetation success (as defined in NDEP, 2016) continuing until revegetated areas are reestablished and released from bonding.

No Action Alternative

Under the No Action Alternative, up to 5 acres of surface disturbance could continue within the Project Area under Notice-level exploration activities. As with the Proposed Action, effects associated with the No Action Alternative could result in the spread or establishment of noxious weeds, invasive and non-native species. With the use of BMPs (e.g., reseeding) to prevent establishment or spread, effects from noxious weeds, invasive and non-native species would be reduced. Under the No Action Alternative, effects would be proportionately less than the Proposed Action (approximately 5 acres of surface disturbing activities versus up to 250 acres associated with the Proposed Action).

3.3.4.1 Cumulative Effects

The CESA for analyzing cumulative effects from noxious weeds, invasive and non-native species is comprised of the 7,819-acre Project Area (Figure 3-2).

Cumulative Effects of the Proposed Action

Quantifiable past and present actions and RFFA disturbance in the CESA totals 5.82 acres (0.07 percent of the CESA). The Proposed Action (approximately up to 250 acres of surface disturbance over the 3-year life of the Project) would affect 3.2 percent of the CESA, for a combined total of 255.82 acres or 3.3 percent of the CESA. Implementation of the ACEPMs (Appendix B) would mitigate the effects of disturbance from the Proposed Action. Consistent with BLM regulations 43 CFR 3809.420, concurrent reclamation would return disturbed areas to a condition which would support similar land uses that existed prior to the onset of exploration activities such as livestock grazing, wildlife habitat, recreation, and mineral exploration. Incremental effects from spread of noxious weeds, invasive and non-native species as a result of the Proposed Action, when combined with the effects from the past and present actions and RFFAs, are expected to be minor, short-term, and localized.

Cumulative Effects of the No Action Alternative

The quantifiable past and present actions (including the Notice-level exploration activities) and RFFA disturbance within the CESA total 5.82 acres (0.07 percent of the CESA). The No Action Alternative would not add any more measurable effects to the CESA that aren't already occurring or have occurred.

3.3.5 Paleontological Resources

The area of analysis for paleontological resources is the 7,819-acre Project Area. Additional information on the regulatory framework and affected environment can be found in the Paleontological Resources SER (BLM, 2025e).

3.3.5.1 Affected Environment

The Potential Classification Yield Classification (PFYC) system allows BLM to make initial assessments of paleontological resources to analyze potential effects of a proposed action. The PFYC is created from available geologic maps and assigns a class value to each geological unit, representing the potential abundance and significance of paleontological resources that occur in that geological unit.

A desktop evaluation was conducted for the Project analyzing the paleontological resource potential of the Project Area based on the regional geology, underlying lithologic units, and previously documented fossil localities (Scherzer and Clifford, 2024). The Project Area has been evaluated in accordance with the BLM's PFYC between 1 (very low) and 3 (moderate). No fossil localities have been documented in the Project Area. The most common lithologic unit in the Project Area, equivalent to the Humboldt Formation, has produced remains of terrestrial mammals and fossilized wood in the Project vicinity, and has a recommended PFYC 3 (moderate), which means paleontological resources may occur intermittently, but these occurrences are widely scattered. Other volcaniclastic and marine lithologic units in the Project Area are potentially fossiliferous, but have not produced fossils in the Project vicinity, and have a recommended PFYC 1 (very low) to PFYC 2 (low), which means the units are not likely to contain recognizable paleontological resources. The recommended PFYC of geologic units underlying the Project Area are depicted on Figure 3-3.

Based on the literature review and museum records search results, the paleontological resource potential of geologic units mapped within the Project Area were assessed in accordance with the BLM's PFYC system (BLM, 2023). The Project Area is underlain by phenorhyolitic and phenodacitic flows and domes (Tr_3), which have a recommended PFYC 1 (very low paleontological potential); ignimbrite, tuff, and sedimentary rocks (Tts), the Pequop Formation (Pp), and limestone, shale, chert, orthoquartzite, and quartz siltite (PMl), which have a recommended PFYC 2 (low paleontological potential); and sedimentary and volcanic rocks equivalent to the Humboldt Formation (Ts_3), which have a recommended PFYC 3 (moderate paleontological potential).

3.3.5.2 Environmental Consequences

Proposed Action

Under the Proposed Action, Surge could disturb up to 250 acres in the Project Area to support exploration activities. As presented in the Plan (Surge, 2024a), exploration activities would occur using a phased approach. Surge would provide Work Plans to the agencies prior to implementing each exploration phase that would provide details on the activities and identifies the locations of the planned activities, acres of disturbance, and proposed reclamation practices.

The Paleontological Resources Preservation Act protects fossilized remains that are of paleontological interest and inform the history of life on earth. In general, the potential for a given project to result in negative effects to paleontological resources is directly proportional to the amount and depth of ground disturbance associated with a project. The higher the amount of ground disturbances and greater depth of disturbance within geological deposits with a known paleontological sensitivity, the greater the potential for negative effects to paleontological resources.

The Nevada State Museum does not have any previously recorded fossil localities within the Project Area and did produce one fossil locality from the Humboldt Formation approximately 3 miles from the Project Area, but no fossil localities in other underlying geologic units within the Project vicinity (Bonde, 2024). Table 3-4 presents the acreage for the very low (PYFC 1), low (PYFC 2), and moderate (PFYC 3) paleontological resources potential area within the Project Area.

Table 3-4. Acreage for Each Potential Fossil Yield Classification in the Project Area

PFYC	Acres	Percent of Project Area
Very Low - 1	1,007	13
Low - 2	275	4
Moderate - 3	6,537	84
Total	**7,819**	**100**

Source: BLM, 2025e

Surface disturbance in geological units with moderate potential could affect paleontological resources. At the most (i.e., assuming that all 250 acres of proposed disturbance are located within the moderate [PFYC 3] paleontological resources potential area) approximately 4 percent of the moderate (PFYC 3) paleontological potential area would be affected. Considering that geologic units within a PYFC 3 would vary in fossil content and significance, abundance, and predictable occurrence, the potential to affect paleontological resources would be even less than this percentage.

The proposed exploration disturbances (i.e., drill pads, roads, etc.) would consist of relatively small, localized disturbances within the Project Area. Surface disturbances would be mostly surficial (developed at no major depth), and drill holes would remove a negligible amount of rocks at a deeper horizon. Only a small amount of material would be removed from drill holes and would not affect potential paleontological resources in the ground.

As outlined in Appendix B, Surge would not knowingly disturb, alter, injure, or destroy scientifically important paleontological deposits to prevent unnecessary or undue degradation during construction, operation, and reclamation of the Project. If previously undiscovered paleontological resources are discovered by Surge representatives, the item(s) or condition(s) would be left intact and immediately brought to the attention of the BLM Authorized Officer. Effects to paleontological resources are anticipated to be minor, permanent, and localized.

No Action Alternative

Under the No Action Alternative, up to 5 acres of surface disturbance would continue within the Project Area under Notice-level exploration activities. Effects to paleontological resources under the No Action Alternative would be similar, but proportionally less than the Proposed Action (approximately 5 acres of surface disturbing activities versus up to 250 acres associated with the Proposed Action).

3.3.5.3 Cumulative Effects

The CESA for analyzing cumulative effects on paleontological resources is comprised of the 7,819-acre Project Area (Figure 3-2).

Cumulative Effects of the Proposed Action

Quantifiable past and present actions and RFFA disturbance in the CESA that could affect paleontological resources totals 5.82 acres (0.07 percent of the CESA). The Proposed Action (approximately up to 250 acres of surface disturbance over the 3-year life of the Project) would affect an additional 3.2 percent of the CESA (Figure 3-2). Total disturbance in the CESA would be 255.82 acres or 3.3 percent of the CESA. As a worst-case scenario, all proposed disturbances associated with mineral exploration would be

located within the moderate (PYFC 3) paleontological resources potential area within the Project Area. PYFC 3 area encompasses approximately 6,537 acres or 84 percent of the CESA.

Implementation of the ACEPM (Appendix B) would mitigate the effects of disturbance from the Proposed Action. Incremental effects to paleontological resources as a result of the Proposed Action, when combined with the effects from the past and present actions and RFFAs, are expected to be negligible, permanent, and localized.

Cumulative Effects of the No Action Alternative

The total of the quantifiable past and present actions and RFFA disturbance within the CESA is 5.82 acres (0.07 percent of the CESA). The No Action alternative would not add any more measurable effects to the CESA that aren't already occurring or have occurred.

3.3.6 Social and Economic Values

The area of analysis for social and economic values for the Project (Socioeconomic Study Area) consists of Elko County (Figure 1-1). Additional information regarding the regulatory framework and existing environment can be found in the Social and Economic Values SER (BLM, 2025f). The data reported includes statistics from Elko County with supplemental statistics for certain topics from the primary urban population in the Socioeconomic Study Area (City of Elko, Nevada). The reference community for this analysis was identified as the State of Nevada. These data layers were selected because they are proximal to the Project Area and contain populations that the Project may directly and/or indirectly affect. Data sources included the City-level, County-level and state reference data obtained from the U.S. Department of Labor, the Bureau of Labor Statistics, the U.S. Department of Commerce, local area unemployment statistics, and the U.S. Census Bureau, as compiled by Headwaters Economics for the BLM.

3.3.6.1 Affected Environment

There are over 11 million total acres within the Socioeconomic Study Area (Elko County). Of those, nearly 8 million acres (72.5 percent) are federally owned and managed lands. BLM manages nearly 6.9 million acres (62.6 percent) of Elko County's total land area. Other federal agencies, including the U.S. Forest Service, manage nearly 1.1 acres collectively (9.9 percent) of Elko County's total land area. Within this same area, there are over 2.8 million acres (25.8 percent) under private ownership. Tribal lands include 160,231 acres (1.5 percent), and State, county, city, and other non-federal agencies manage 22,413 acres (0.2 percent) of Elko County, respectively (Headwaters Economics, 2024a).

In fiscal year (FY) 2019 the federal government paid state and local governments associated with the Socioeconomics Study Area a total of $5,146,109 (in FY2023 dollars). Of those payments, $4,287,613 (83.3 percent) were Payments in Lieu of Taxes (PILT) and $798,829 (15.5 percent) were from the BLM Payments (revenue sharing) (Headwaters Economics, 2024b). BLM revenue sharing payments in Elko County were minimal through FY2008, increasing sharply in FY2009 and continuing similar to current FY2019 levels since that time period.

In 2022 the total population of the Socioeconomic Study Area was 53,600. The population in this area increased by 5,893 people during the period of 2010 to 2022. This represents an increase of 12.4 percent over that period.

In 2022, 15,508 people (28.9 percent) Elko County self-identified as a member of a minority group. This is compared to a total minority percentage of 44.2 percent in the reference area (State of Nevada). In that same year, 13,424 people (25.0 percent of Socioeconomic Study Area population) identified as Hispanic or Latinx and 2,703 persons (5.0 percent) self-identified as Native American or indigenous alone. This is compared to a total Latinx population of 29.6 percent and a total Native American or indigenous alone population of 1.3 percent in the reference area.

The total number of full- and part-time jobs (as defined by the U.S. Department of Commerce) in 2022 totaled 29,770. This represents an increase of 5,779 employed persons (24 percent) from 2001 to 2022 (Headwaters Economics, 2024c). This is consistent with the increasing population trends outlined above.

It is estimated that in 2022, 5,814 jobs (19.5 percent) in Elko County were in non-services related sectors compared to 11 percent in the reference area (State of Nevada). Within the non-service sector, mining (including fossil fuels) (2,562 jobs, 8.6 percent of total jobs) and construction (2,115 jobs, 7.1 percent of total jobs) were the largest employers.

Within this same area, there were an estimated 20,116 jobs (67.6 percent) in service-related employment sectors compared to 80.2 percent in the reference area. Within the service sector, accommodation and food services (5,014 jobs, 16.8 percent of total jobs) and retail trade (3,369 jobs, 11.3 percent of total jobs) were the largest employers. Additionally, there were 3,840 jobs (12.9 percent) in the government sector compared to 8.8 percent in the reference area (Headwaters Economics, 2024a)

From 2001 to 2022, jobs in non-service sector industries grew from 3,737 jobs to 5,814, or by nearly 56 percent. During that period jobs in the service sector industries grew from 16,506 to 20,116, nearly a 22 percent increase (Headwaters Economics, 2024c).

In 2022, 5,473 people in the Socioeconomic Study Area (10.4 percent) were living in poverty, representing a 3.3 percent increase since 2010. This compares to 12.7 percent for the state of Nevada as a whole (6.1 percent increase since 2010). In the same year 12.5 percent of the population living in poverty were under 18 years of age and 10.5 percent were 65 years and older (Headwaters Economics, 2024d).

In 2022, there were 830 families (6.4 percent, 0.6 percent increase since 2010) living in poverty in the Socioeconomic Study Area. This same area has 718 families in poverty with children (5.5 percent of population, 1.3 percent increase since 2010); 401 (3.1 percent of population, 0.1 percent increase since 2010) are single mother families in poverty. Approximately 3.8 percent of the population in the Socioeconomic Study Area is in “deep poverty” (Headwaters Economics, 2024e).

Elko County is generally rural, with economies based primarily on mining and agriculture, including grazing, along with a range of service industries. Residents often value being in nature, not surrounded by people and noise. Publicly managed lands in the Socioeconomic Study Area, such as the Ruby Mountains area (Elko County, 2024) are important recreational resources for residents and visitors alike supporting a range of activities such as hiking, fishing, horseback riding, camping, hunting, wildlife observation, water activities and winter sports. Elko County also points to its history and culture as important resources, including but not limited to scenic drives, historic sites, and museums (Explore Elko, 2024). Whereas these activities cannot necessarily be easily assessed in terms of market values and quantified, they are nonetheless important aspects to living in the area and valued by residents.

3.3.6.2 Environmental Consequences

Proposed Action

Public land management decisions may have greater effects in areas with a large federal land ownership percentage. In these landscapes, communities are more likely to be culturally and economically connected to public land resources. Elko County has a considerable federal presence. Approximately 72.5 percent of the Socioeconomic Study Area (Elko County) consists of federally managed land.

Between 2010 and 2022, the population in Elko County increased by approximately 12.4 percent, while the population of the reference area increased by approximately 17.9 percent during that same period (Headwaters Economics 2024c). The population of the City of Elko (representing 38.3 percent of the population in Elko County in 2022) increased by 15.3 percent from 2010 to 2022. Long-term, steady population growth in the Socioeconomic Study Area is an indication of a healthy economic region and a community with a positive sense of place.

Surge would hire up to 35 workers to complete the Project from late April to early November (seasonally, weather dependent) for a period of up to 3 years. Assuming the worst-case scenario that all 35 workers would be sourced from outside Elko County; this would represent less than 0.1 percent of the 2022 Socioeconomic Study Area population. The effects of the Project on population and demographics would be negligible, short-term, and localized.

From 2001 to 2022, jobs in non-service sector industries in Elko County grew by nearly 56 percent. Mining (8.6 percent of total jobs) and construction (7.1 percent of total jobs) represent the larger employers within the non-service sector industries in Elko County. The Project's maximum employment requirements (up to 35 workers) would represent 0.1 percent of the 29,770 people working in Elko County. The Project would have a negligible (little to no measurable) effect on employment, income, and poverty in Elko County.

A small number of drillers, geologists, and support crew would travel from other locations over the 3-year period of the Proposed Action and temporarily reside in hotels or short-term rental properties in nearby communities. It is unlikely that every worker would be non-local, but it is assumed for the purpose of showing the maximum demand for housing generated by the Project. Assuming most workers would be non-local, they would place a negligible, short-term (seasonal) demand for local, temporary housing resources.

Due to the short-term nature of the Proposed Action, the Project's temporary and seasonal workforce would have a negligible effect on public or private services and public schools, the permanent housing market, or other services otherwise associated with permanent workers. There would be small beneficial economic effects that may result from the use of short-term lodging and other accommodations in Elko County.

The increased temporary and seasonal workforce would not be expected to increase the need for additional law enforcement, fire protection or emergency medical services. The Project would generate public revenues from sales and use taxes, personal and real property taxes, and from business taxes. Because of the low number of contractors to be hired, the effects are not expected to be of a measurable level.

The Project would result in additional disturbance, temporary and seasonal employment, and traffic generation that may affect the social values and cultural landscapes of the largely rural area of Elko County. The Proposed Action is in a remote area with no nearby residents. Access to particular social values, including access to nature, recreational activities, and livestock grazing would be negligible, and would return to pre-Project levels after reclamation is completed.

Overall, the effects on social and economic values in Elko County would be negligible, short-term, and localized due to the relatively low number of workers required to support the Proposed Action and the short duration of the Project.

No Action Alternative

Under the No Action Alternative, Surge would continue exploration activities on up to 5 acres of surface disturbance within the Project Area under Notice-level exploration activities. As with the Proposed Action, the No Action Alternative would not be expected to affect social and economic values in Elko County.

3.3.6.3 Cumulative Effects

Based on the guidance in Section 6.8.3.1 in BLM's NEPA Handbook H-1790-1 (BLM, 2008a), if a Proposed Action and alternatives have no direct or indirect effects on a resource, a cumulative effects analysis is not required. The effect analysis for social and economic values does not identify Project-specific direct or indirect effects; therefore, a cumulative analysis is not included in this NEPA analysis.

There would be no measurable incremental effects/cumulative effects from the Project to social and economic values considering all past, present, and RFFAs since environmental consequences of the Proposed Action and No Action Alternative would be negligible.

3.3.7 Soil

3.3.7.1 Affected Environment

The area of analysis for soil is the 7,819-acre Project Area. Information regarding soils within the Project Area was obtained from the US Department of Agriculture Natural Resources Conservation Service (NRCS). According to NRCS web soil survey, the Project Area includes 10 soil associations as shown in Figure 3-4 and Table 3-5.

Table 3-5. NRCS Soils Within the Project Area

Map Units Symbol and Name	Acres Within Project Area	Percent of Project Area
Main Project Area		
943-Hundraw-Puett-Cobre association	4,123	52.7
412-Coser-Coser, moderately steep-Lerrow association	1,541	19.7
822-Cotant-Chen-Graley association	1,216	15.6
239-Shalcleav-Tweener-Rock outcrop association	521	6.7
411-Coser-Coser, moderately steep-McIvey association	149	1.9
423-Quopant-Coser-Lerrow association	105	1.3
701-Xica-Xica, steep-Agort association	85	1.1
948-Hundraw-Puett-Trinidad association	63	0.8
3012-Tecomar-Kram-Amtoft association	9	0.1
808-Gollaher-Cleavage-Hapgood association	6	0.1
Total	**7,818**	**100**
East Area		
121-Peeko-Dewar-Peeko, moderately steep association	0.6	60
170-Enko-Kelk-Enko, nearly level association	0.4	40
Total	**1**	**100**

Source: NRCS, 2017

3.3.7.2 Environmental Consequences

Proposed Action

The Proposed Action would disturb up to 250 acres of soil within the Project Area (or approximately up to 3 percent of the Project Area) using a phased approach. Potential effects would include modifications to soil structures and horizon through mechanical disturbance and gravel addition during road construction, compaction from equipment traffic and operations, and wind erosion from exposed disturbed soils. Potential indirect effects to soil resources may include off-site dust generation and potential increase in sedimentation from water erosion.

Disturbance of 250 acres of land at one given time would not occur within the Project Area. The proposed disturbance would generally consist of isolated smaller areas such as drill pads and roads; land disturbance would not cover large contiguous portions of land. Surge would implement ACEPMs associated with soil resources as described in Appendix B such as inspecting all sediment and erosion control structures periodically, and performing repairs as needed. Where feasible, Surge would conduct

activities on frozen or dry ground conditions; operations would be restricted when saturated and soft soil conditions exist. Surge would manage surface soil and alluvium as a growth media resource (where suitable) and remove, stockpile, and replace during reclamation. Additionally, disturbance would be reclaimed and reseeded. Surge would perform reclamation activities concurrently with exploration activities when that exploration disturbance and access to that specific drill pad is no longer needed. Surge would begin reclamation in exploration areas considered inactive, without potential, or completed at the earliest practicable time.

As a result of the implementation of the ACEPMs in Appendix B including dust control practices and implementation of BMPs to reduce erosion, and concurrent reclamation efforts, soil loss due to surface disturbing activities associated with implementation of the Proposed Action would be negligible for the duration of the Project (seasonally and up to 3 years) and localized to authorized disturbance areas.

No Action Alternative

Under the No Action Alternative, up to 5 acres of surface disturbance would continue within the Project Area under Notice-level exploration activities. The potential for wind and water erosion of disturbed soils would be similar but proportionally less than the Proposed Action (approximately 5 acres of disturbed soils versus up to 250 acres associated with the Proposed Action).

3.3.7.3 Cumulative Analysis

Based on the guidance in Section 6.8.3.1 in BLM's NEPA Handbook H-1790-1 (BLM, 2008a), if a Proposed Action or alternatives have no direct or indirect effects on a resource, a cumulative effects analysis is not required. The effect analysis for soil does not identify measurable effects that would significantly affect soil; therefore, a cumulative analysis is not included in this NEPA analysis.

There would be no incremental effects/cumulative effects from the Project to soil considering all past, present, and RFFAs since environmental consequences of the Proposed Action and No Action Alternative would be negligible (no measurable change).

3.3.8 Special Status Species

The area of analysis for special status species is the 7,819-acre Project Area. The area of analysis for GRSG (*Centrocercus urophasianus*), pygmy rabbit (*Brachylagus idahoensis*), raptors, and eagles aerial and/or field surveys consist of the Project Area with an additional 4-mile buffer (Figure 3-5).

Additional information regarding the regulatory framework, survey protocols, and affected environment related to special status species can be found in the Special Status Species SER (BLM, 2025b).

3.3.8.1 Affected Environment

Special Status Plant Species

Pedestrian surveys of the Project Area were conducted between June 4-9, June 21-25, and July 25, 2023, for special status plant species. Within the Project Area, there was limited habitat for Eastwood milkweed (*Asclepias eastwoodiana*), Elko rockcress (*Boechera falcifructa)*, Deeth buckwheat (*Eriogonum nutans var. glabratum*), Beatley's buckwheat (*Eriogonum beatleyae*), Lewis' buckwheat (*Eriogonum lewisii*), and broad fleabane (*Erigeron latus*); however, none of these special status species were located during field surveys (WB, 2024a).

Special Status Wildlife Species

General wildlife species surveys were conducted within the Project Area between June 4-9, June 21-25, July 25, and September 22-24, 2023, in which special status wildlife species were observed. As outlined in Section 3.3.2, two BLM special status wildlife species were observed within the Project Area (Table 3-6).

Table 3-6. Special Status Wildlife Species Observed within the Project Area

Scientific Name	Common Name	Observation Type
Spizella breweri	Brewer's sparrow	Auditory, Direct Observation
Oreoscoptes montanus	Sage thrasher	Visual, Direct Observation

Source: WB, 2024a

Species-specific wildlife surveys (encompassing a 4-mile buffer area around the Project Area) were conducted for raptor, eagle, pygmy rabbit, and GRSG. Additionally, an analysis of acoustic effects at the nearest known lek sites near to the Project Area was performed by Saxelby Acoustics (2024).

In 2023, USFWS determined that there is substantial scientific or commercial information indicating that the pinyon jay may warrant ESA protections (88 FR 55991). The listing status of pinyon jay is "under review" (Federal Register [FR], 2023). It is acknowledged that potential habitat for pinyon jays exist within the Project Area; therefore, presence of pinyon jays is assumed. However, there were no recorded observations of pinyon jays within the Project Area during general wildlife and MBTA surveys. Several other species have potential habitat in the area.

Raptors and Eagles

As outlined in Section 3.3.2, raptor and eagle nest monitoring aerial surveys were conducted in 2023 (WB, 2024a) and 2024 (WB, 2024b) to identify in-use raptor nests, and to comply with recommended buffers between exploration activity and in-use nests to avoid any accidental "take" of birds protected by the BGEPA and/or MBTA. One of the 10 historic nests and two new nests were located during the 2023 aerial surveys. One of the three nests was confirmed as in-use by the presence of a downy chick in June; however, the species could not be confirmed as no adults were observed (WB, 2024a). A total of 13 nests were observed during 2024 raptor and eagle flight surveys, of which 10 are new nest locations. Of the 13 nests, two are active golden eagle (Aquila chrysaetos) nests, nine are inactive nests, and two are documented as unknown. Of the nine inactive nests, six are unknown species, one golden eagle, one prairie falcon, and one red-tailed hawk. Five golden eagle territories are estimated to be within the survey area, of which one is within the Project Area. This territory is comprised of one inactive nest and one unknown status nest, estimated to be golden eagle nests (WB, 2024b). Raptors and eagles are discussed in more detail in the Migratory Birds and Raptors SER (BLM, 2025a).

Bats

While the BLM did not request that bat surveys be included in the baseline survey for the Project, bat habitat assessments were completed per voluntary request by Surge. Bat habitat for cave- and cliff-roosting species (i.e., big brown bats [*Eptesicus fuscus*], Brazilian free-tailed bats [*Tadarida brasiliensis*], California myotis [*Myotis californicus*]) was found to be available but limited within the Project Area, accounting for approximately 165 acres (2 percent) of the Project Area (WB, 2024a). Habitat for forest-associated bat species (i.e., hoary bats [*Lasiurus cinereus*], long-eared myotis [*Myotis evotis*], silver haired bats [*Lasionycteris noctivagans*]) was determined to be more available, accounting for approximately 3,642 acres (46 percent) of the Project Area (WB, 2024a). However, the limiting factor for most bat species is limited riparian areas (approximately 0.3 percent of the Project Area as presented in Section 3.3.11.2) or water sources within the Project Area.

Pygmy Rabbits

Areas of potential habitat for pygmy rabbits were noted during the 2023 baseline surveys and were recommended by the BLM to be revisited to search for signs of occupancy. Potential habitats for pygmy

rabbits were determined using a multi-scale approach and BLM-recommended protocols were used to conduct field surveys.

Areas of tall, dense sagebrush (suggestive of pygmy rabbit habitat) were observed within the wide valley near Texas Springs within the Project Area during species-specific surveys. This area was revisited in fall 2023, and intensive surveys were conducted to determine whether the area was inactively or historically occupied by pygmy rabbits. When rabbit scat was encountered, biologists remained in the area until a direct sighting could be made so as not to confuse scat with other species (i.e., cottontails). There were no observations of scat that meet the description of pygmy rabbit scat (i.e., a carpet or small grouping of evenly sized, small pellets near a burrow entrance under sagebrush). No direct sightings of pygmy rabbits or active burrows were recorded during the 2023 surveys (WB, 2024a).

Reptiles

Two special status reptiles have the potential to occur within the Project Area (suitable habitat exists): Great Basin collared lizard (*Crotaphytus bicinctores*) and Greater short-horned lizard (*Phrynosoma hernandesi*). Although specific reptile surveys were not conducted as part of baseline, there were no observations of the two special status reptiles during the 2023 general wildlife surveys (WB, 2024a).

Butterflies and Milkweed

While specific surveys for monarch butterfly (*Danaus plexippus Plexippus*) and Mattoni's blue butterfly (*Euphilotes pallescens mattonii*) were not requested by BLM, the host plant(s), milkweed (*Asclepias sp*.) and slender buckwheat (*Eriogonum microthecum*) were documented when encountered. Several small and sparse populations of slender buckwheat were found within the Project Area. One population of pallid milkweed (*Asclepias cryptoceras var. cryptoceras*) was observed within the Project Area. Based on the small size of the populations, it was determined that additional surveys for butterflies were not needed (WB, 2024a).

Greater Sage-Grouse

Land within the Project Area is located in a General Habitat Management Area (GHMA) and Other Habitat Management Area (OHMA) for GRSG (Figure 3-5). There are two known leks within 4 miles of the Project Area: Corral Canyon 1 lek and Texas Springs lek. In consultation with NDOW, acoustic monitoring took place in June 2023 at the nearest GRSG lek to the Project Area (Corral Canyon 1 lek) to establish ambient noise levels at three representative locations to analyze project-related exploration drilling noise levels at the nearest GRSG lek to the Project Area (Corral Canyon 1 lek) (Saxelby Acoustics, 2024). Saxelby Acoustics (2024) determined L90 baseline noise levels for a 24-hour period at the Corral Canyon 1 lek were 13.6 dBA. The L90 represents the sound level exceeded 90 percent of the time for each hour during the monitoring period.

Multiple helicopter and ground-based lek surveys were conducted at the Corral Canyon 1 and Texas Springs leks during the breeding season (March 15 – May 15, 2023) using the NDOW Lek Monitoring Protocol. No GRSG or sign were seen during lek surveys conducted by Western Biological at either location in 2023 (WB, 2024a) or 2024 (WB, 2024c). On April 19, 2024, NDOW biologists documented five GRSG (three males and two females) on the Corral Canyon 1 lek during regularly scheduled regional lek surveys (NDOW, 2024). As included in the ACEPMs (Appendix B), Surge would continue annual GRSG lek surveys at the Corral Canyon 1 and Texas Springs Lek throughout the duration of the exploration project.

3.3.8.2 Environmental Consequences

Proposed Action

Direct effects to special status wildlife species as a result of the Proposed Action would consist of vegetation (habitat) removal, disturbance from human activity and noise, or potentially direct mortality from proposed Project activities (e.g., vegetation clearing). Indirect effects would consist of

development—induced effects related to changes in land use and related effects on air and water and other natural resources. Up to 250 acres would be disturbed over the potential 3-year life of the Project. Due to the phased nature of the exploration activities associated with the Project, not all 250 acres would be disturbed concurrently, and disturbance would be dispersed throughout the Project Area.

Localized, long-term effects to special status wildlife species habitat are likely to occur within the Project Area. Mortality or injury could result from collisions with equipment or vehicles by Project-related traffic along roads and by crushing or compaction during vegetation removal and soil excavation. Mortality or injury from crushing would be more likely to occur to less mobile special status wildlife such as reptiles. Large and intermediate-sized special status wildlife would be better able to avoid equipment and less likely to experience direct mortality from exploration activities. Mortality of an individual in a localized area and the effects on a population would be typically negligible. To help mitigate mortality of special status wildlife from falling into sumps, Surge would install a fence (standard 4-foot-high safety fence) around sumps at the drill sites and would construct the sump such that there is a slope at one end to allow wildlife egress. In the event wildlife accesses the sump, the animal would be able to exit the sump via the sloped egress. Electric fences would not be used due to a potential water supply contained in the sump and the risk of electrocution to wildlife.

Special status wildlife would be directly affected by the loss or modification of habitat types through reduced habitat functionality, such as the ability of an area to provide adequate forage and cover. Loss or modification of habitat types would also contribute to habitat fragmentation into smaller, isolated patches. For example, exploration activities would result in the long-term fragmentation of the sagebrush habitat type. The shift in habitat type from sagebrush to grasses would change the species composition in localized disturbance areas as sagebrush-dependent species would decline in abundance while grassland and shrub species would increase. Modification of the existing habitat types to a disturbance habitat type would reduce the diversity of habitat types in disturbed areas and ultimately reduce the diversity of special status wildlife that use the reclaimed area.

Reclamation would result in a grassland habitat type in the short-term for the 250 acres of disturbance. Shrubs would also be seeded during reclamation. Shrubs would establish in the years and decades following reclamation. Reclamation would be designed to return disturbed lands to a level of productivity comparable to pre-exploration levels. Surge would complete reclamation of exploration disturbances no longer required or inactive (e.g., test pits and bulk excavations) consistent with the timelines outlined in Section 2.1.9.

Special status wildlife that could avoid exploration activities and the immediate work area would experience disturbances from noise and human/equipment activity that could result in dispersal movements away from exploration activities. Human-caused displacement results in unnecessary energy expenditure and potential disruptions in behavior that could ultimately affect reproductive success and survival. However, foraging activities within the Project Area could continue considering proposed surface disturbance would cover approximately 3 percent of the entire Project Area (250 acres out of 7,819 acres) under a phased approach. Reclamation monitoring would ensure that BLM and NDEP reclamation standards are met (NDEP, 2016), including ensuring post-exploration land uses are compatible with larger land use objectives, including special status wildlife habitat.

As discussed in Section 3.3.4, no noxious weed species were identified within the Project Area; however, Canada thistle was observed in the Texas Creek Spring. Four invasive plant species (not on the state noxious weed list) observed within the Project Area include: cheatgrass, cross flower, desert alyssum, and Burr buttercup. These invasive plant species reduce the habitat quality for special status wildlife species. Invasive plants take over land from native plant species and eventually reduce the number of native animals in the area (Fletcher et al., 2019). Project-related activities including construction of roads and drill sites could increase the potential for spread of noxious and non-native invasive species, further reducing the quality of special status wildlife habitat in the Project Area. Surge would implement the

ACEPMs for noxious weeds outlined in Appendix B, which would minimize or reduce the effect of noxious weeds and invasive plants to special status wildlife habitat.

Effects to specific special status wildlife groups are discussed in more detail below.

BLM Sensitive Avian Species

Although only two special status avian species, Brewer's sparrow and sage thrasher, were observed throughout the Project Area during the 2023 field surveys, several other species have potential habitat in the area. Project-related activities would directly affect potential habitat through removal or revegetation in areas proposed for surface disturbance. Up to approximately 250 acres of habitat would be directly removed over the 3-year Project life as a result of new surface disturbing activities associated with implementation of the Proposed Action. Potential effects to breeding birds could include possible direct loss of nests (e.g., crushing from construction activities) or indirect effects (e.g., abandonment) from increased noise and human presence in proximity to an active nest site. Implementation of the ACEPMs (Appendix B) for migratory birds would ensure that prior to surface disturbance, a nesting survey for special status avian species (including migratory birds and raptors) would be conducted and nests avoided if exploration activities occur during the avian breeding season. Vegetation removal would result in a reduction of breeding habitat for BLM special status avian species in the Project Area. This acreage would not all be disturbed at one time due to incremental disturbance and concurrent reclamation of the surface exploration disturbance. Effects to special status avian species are considered to be minor, long-term, and localized.

Bats

Fourteen sensitive bat species have the potential to occur within the area (WB, 2024a). Suitable habitat for forest-dwelling and limited habitat for cliff- and rock-roosting species exists; however, the limiting factor for most bat species is a lack of riparian areas or water sources within the Project Area. Riparian areas comprise approximately 2 acres (0.02 percent) of the Project Area. Surge has committed to implementing mitigation measures, such as avoiding open holes in drill rig areas and shielding drill rig lights to minimize effects to potential bat species within the Project Area in the event exploration activities are conducted near riparian areas (Appendix B). Effects to bat species and their habitat would be confined to small areas of suitable roosting habitat and available range. The overall viability of a bat species population or subpopulation would not be affected. Effects to bat species are considered minor, long-term, and localized.

Pygmy Rabbit and Special Status Small Mammals

Due to surface disturbing activities, there would be a potential of mortality for small mammals (e.g., being crushed by vehicles or equipment). Surface disturbing activities would also affect pygmy rabbit habitat by removing vegetation and potentially crushing burrows. Disturbed habitat would be reseeded with the BLM-approved reclamation seed mix (Table 2-3) that includes forage species for small mammals. Although mortality of pygmy rabbit could occur, there were no direct observations or sign of pygmy rabbit within the Project Area during 2023 surveys. Surge has committed to implementing ACEPMs, such as conducting pre-clearance surveys (Appendix B) to reduce the potential for effects.

The Project is centralized within the distribution range of pygmy rabbit and within a large area modeled as high for habitat suitability (Dilts et al., 2023); therefore, effects to habitat and corridor connectivity would not result in a decline in the local or regional population. Since the pygmy rabbit is a sagebrush obligate species, and sagebrush habitat types are slow to regenerate, effects to pygmy rabbit (including all special status small mammal species) and their habitat would be considered minor, long-term, and localized.

Reptiles

Surface disturbance would remove potential areas for reptile species to lay eggs or could destroy eggs laid within disturbance areas. Loss of vegetative cover and burrows could result in greater mortality due to predators. The distribution range of reptile species is widespread throughout the West; therefore, potential effects would not result in a decline in the local or regional population. Effects to reptile species are considered minor, long-term, and localized.

Greater Sage-Grouse

Mineral exploration activities associated with the Proposed Action would result in new surface disturbance of up to 250 acres over the 3-year Project life, resulting in the long-term loss of mapped sage-grouse GHMA. According to the 2019 Nevada GRSG Conservation Plan, the Project Area occurs on land mapped as GHMA and OHMA (Sagebrush Ecosystem Program [SEP], 2019). Residual unavoidable impacts would be mitigated through compensatory mitigation via the Nevada Conservation Credit System (CCS), as stipulated by Nevada State Regulation NAC 232.400 – 232.480.

Specifically, in consultation with the Sagebrush Ecosystem Technical Team (SETT), the Project would be subject to mitigation for GRSG habitat using the Nevada CCS. Surge would complete a debit assessment using the Habitat Quantification Tool (HQT) to determine effects on GRSG habitat within the Project Area. Surge would purchase credits to offset the calculated debits ahead of any land disturbance (at least 1/3 of credits would be acquired before any Project disturbance) as determined by Nevada CCS.

Two leks are located within a 4-mile buffer from the Project Area: the Corral Canyon 1 lek is located 2.1 miles south of the Project Area and the Texas Spring lek is located 3.6 miles from the Project Area. During the 2023 and 2024 helicopter and ground-based surveys conducted by Western Biological, no GRSG were observed at either lek. However, on April 19, 2024, NDOW biologists documented five GRSG (three males and two females) on the Corral Canyon 1 lek during regularly scheduled regional lek surveys (NDOW, 2024). In addition to compliance with the SETT, Surge would also comply with the ACEPMs (Appendix B) to minimize disturbance to GRSG and their habitat.

Noise from mineral exploration and other anthropogenic sources has been demonstrated to negatively affect sage-grouse abundance, stress levels, and behaviors (Patricelli et al., 2012). BLM has established a management objective for noise from discretionary activities, which is that noise levels within 0.25-mile of an active or pending active lek should not exceed 10 dBA over ambient noise levels during the breeding season (BLM, 2015). The Project is considered non-discretionary under 43 CFR 3809 regulations; therefore, a noise management objective is not required. A Project objective for noise, including noise assessments, is considered voluntary. The environmental noise assessment conducted at the Corral Canyon 1 lek in June 2023, calculated drilling setback distances that would be required stay below the 10 dBA over ambient noise levels using modeled project noise (drilling). Based on the modeled conditions, the proposed Project is not predicted to cause noise levels to exceed the 10 dBA over ambient noise level at any lek based on the operational assumptions and drilling setbacks used at the Corral Canyon 1 lek location (Saxelby Acoustics, 2024). The effects to sage-grouse and their habitat as a result of implementation of the Proposed Action are considered minor, long-term, and localized.

No Action Alternative

Under the No Action Alternative, up to 5 acres of surface disturbance would continue within the Project Area under Notice-level exploration activities. Reclamation of existing surface disturbance would gradually eliminate effects to special status wildlife species. Effects to special status wildlife species under the No Action Alternative would be similar, but proportionally less than the Proposed Action (approximately 5 acres of surface disturbing activities versus up to 250 acres associated with the Proposed Action).

3.3.8.3 Cumulative Effects

This NEPA analysis used different CESA to analyze cumulative effects for special status species and GRSG. The CESA for analyzing cumulative effects to special status species is the HUC 10 watershed boundary (Figure 3-1). This CESA encompasses approximately 197,311 acres of which 7,819 acres (approximately 4 percent of the CESA) comprise the Project Area.

The CESA for analyzing cumulative effects to GRSG is comprised of NDOW GRSG Gollaher Population Management Unit (Figure 3-6). This CESA encompasses approximately 944,705 acres of which 7,819 acres (0.8 percent of the CESA) comprise the Project Area.

Cumulative Effects of the Proposed Action

Special Status Species: Quantifiable past and present actions and RFFA disturbance in the CESA totals approximately 1,108 acres, or 0.56 percent of the 197,311-acre special status species CESA. Combined with up to 250 acres of disturbance (0.13 percent) associated with the Proposed Action, total disturbance would be approximately 1,358 acres, or approximately 0.7 percent of the total CESA. Since limited quantifiable data exists for all activities within the CESA, this calculation is a conservative analysis of the potential incremental increase due to implementation of the ACEPMs (Appendix B) combined with concurrent reclamation. Incremental effects to special status species as a result of the Proposed Action are expected to be negligible, long-term and localized relative to the combined effects from past and present actions and RFFAs.

GRSG: Quantifiable past and present actions and RFFA disturbance in the CESA totals approximately 13,800 acres, or 1.46 percent of the 944,705-acre special status species CESA. Combined with up to 250 acres of disturbance (0.03 percent) associated with the Proposed Action, total disturbance would be approximately 14,050 acres, or approximately 1.49 percent of the total CESA.

Consistent quantifiable data for past and present activities within the CESA is limited to authorized and expired activities tracked within the BLM's Mineral & Land Records System (MLRS) database. This calculation is a conservative analysis of the potential incremental increase due to implementation of the ACEPMS (Appendix B) combined with concurrent reclamation. Incremental effects to special status species as a result of the Proposed Action are expected to be negligible, long-term and localized relative to the combined effects from past and present actions and RFFAs.

Cumulative Effects of the No Action Alternative

Special Status Species: The total of the quantifiable past and present actions (including the Notice-level exploration activities) and RFFA disturbance within the special status species CESA is approximately 1,109 acres (0.56 percent of the CESA). The No Action alternative would not add any more measurable effects to the CESA that aren't already occurring or have occurred.

GRSG: The total of the quantifiable past and present actions (including the Notice-level exploration activities) and RFFA disturbance within the GRSG CESA is approximately 13,800 acres (1.46 percent of the CESA). The No Action Alternative would not add any more measurable effects to the CESA that aren't already occurring or have occurred.

3.3.9 Vegetation

The area of analysis for vegetation is the 7,819-acre Project Area. Additional information regarding the regulatory framework, survey protocols, and affected environment can be found in the Vegetation SER (BLM, 2025g).

3.3.9.1 Affected Environment

Vegetation Communities

Land cover data was downloaded from the Southwest Regional Gap Analysis Project (SWreGAP) prior to field surveys. The land cover types developed by the SWReGAP are general and inclusive of a wide range of species, many of which do not occur in the Project Area. SWreGAP land cover descriptions are discussed in detail below. Refer to Appendix B of the Biological Baseline Report (WB, 2024a) for a complete list of plant species observed throughout the Project Area during field surveys.

The following 11 land cover descriptions were verified within the Project Area during the 2023 field surveys: Great Basin Pinyon-Juniper Woodland; Inter-Mountain Basins Big Sagebrush Shrubland; Inter-Mountain Basins Montane Sagebrush Steppe; Great Basin Xeric Mixed Sagebrush Shrubland; Inter-Mountain Basins Cliff and Canyon; Inter-Mountain Basins Big Sagebrush Steppe; Inter-Mountain Basins Semi-Desert Grassland; Colorado Plateau Pinyon-Juniper Shrubland; Great Basin Foothill and Lower Montane Riparian; Inter-Mountain Basins Curl-leaf Mountain Mahogany; and Colorado Plateau Pinyon-Juniper Woodland.

Great Basin Pinyon-Juniper Woodland

The Great Basin Pinyon-Juniper Woodland system was the largest vegetation type in the Project Area, covering approximately 3,641 acres (47 percent). This vegetation type is widely distributed, though predominantly concentrated in the northern and eastern portions of the Project Area, occurring in broad basins between foothills. The woodlands are dominated by single-leaf pinyon (*Pinus monophyla*) and Utah Juniper (*Juniperus osteosperma*). Littleleaf mountain mahogany (*Cercocarpus intricatus*) is a common associate. Understory layers are variable. Associated species include shrubs such as low sagebrush (*Artemisia arbuscula*), black sagebrush (*Artemisia nova*), and bunchgrasses including needle and thread (*Hesperostipa comata*), bluebunch wheatgrass (*Pseudoroegneria spicata*), basin wild rye (*Leymus cinereus*), and Sandberg bluegrass (*Poa secunda*). Severe climatic events are thought to limit the distribution of woodlands to relatively narrow altitudinal belts on mountainsides.

Inter-Mountain Basin Big Sagebrush Shrubland

The Inter-Mountain Basins Big Sagebrush Shrubland accounted for 2,096 acres (27 percent) of the Project Area. This vegetation type was found in the northern portion and along the Texas Spring drainage within the Project Area. These shrublands are dominated by mountain big sagebrush (*Artemisia tridentata* spp. *vaseyana*) and/or Wyoming big sagebrush (*Artemisia tridentata* spp. *Wyomingensis*). Scattered Utah juniper, greasewood *(Sarcobatus vermiculatus*), and saltbush (*Atriplex* spp.) may be present in some stands. Rubber rabbitbrush (*Ericameria nauseosa*), green rabbitbrush (*Chrysothamnus viscidiflorus*), antelope bitterbrush (*Purshia tridentata*), or mountain snowberry (*Symphoricarpos oreophilus*) may co-dominate disturbed stands. Perennial herbaceous components typically contribute less than 25 percent of vegetative cover. Common graminoid species include Indian ricegrass (*Achnatherum hymenoides)*, needle and thread, basin wild rye, western wheatgrass (*Pascopyrum smithii*), and Sandberg bluegrass.

Inter-Mountain Basins Montane Sagebrush Shrubland

The Inter-Mountain Basins Montane Sagebrush Steppe system accounted for 1,275 acres (16 percent) of the Project Area. This vegetation type was primarily concentrated along the western portion of the Project Area. In general, this system shows an affinity for mild topography, fine soils, and a source of subsurface moisture. It is composed primarily of mountain big sagebrush and related taxa such as Wyoming big sagebrush. Antelope bitterbrush may co-dominate or even dominate some stands. Other common shrubs include snowberry (*Symphoricarpos* spp.)*,* serviceberry (*Amelanchier* spp.*),* rubber rabbitbrush*,* wax currant *(Ribes cereum),* and green rabbitbrush. Most stands have an abundant perennial herbaceous layer (over 25 percent cover), but this system also includes mountain big sagebrush shrublands. Common graminoids include Indian ricegrass, bottlebrush squirreltail (*Elymus elymoides*), and Sandberg bluegrass.

In many areas, frequent wildfires maintain an open herbaceous-rich steppe condition; although at most sites, shrub cover can be unusually high for a steppe system (over 40 percent), with the moisture providing equally high grass and forb cover.

Great Basin Xeric Mixed Sagebrush Shrubland

The Great Basin Xeric Mixed Sagebrush Shrubland system accounted for 537 acres (7 percent) and scattered throughout the western portion of the Project Area. Shrublands are dominated by black sagebrush (mid and low elevations) and low sagebrush (higher elevation) and may be co-dominated by Wyoming big sagebrush or green rabbitbrush. Other shrubs that may be present include shadscale (*Atriplex confertifolia),* Mormon tea (*Ephedra* spp.)*,* Goldenbush (*Ericameria* spp.), spiny hopsage (*Grayia spinosa),* greasewood*,* and horsebrush *(Tetradymia* spp.). The herbaceous layer is likely sparse and composed of perennial bunch grasses such as Indian ricegrass*,* Thurber's needlegrass *(Achnatherum thurberianum),* bottlebrush squirreltail*,* or Sandberg's bluegrass*.*

Inter-Mountain Basins Cliff and Canyon

The Inter-Mountain Basins Cliff and Canyon system accounted for 165 acres (2 percent). This ecological system is found on barren and sparsely vegetated landscapes (typically less than 10 percent cover), cliff faces, canyons, scree fields, and outcrops. Widely scattered trees and shrubs may include white fir (*Abies concolor),* single-leaf pinyon*,* juniper *(Juniperus* spp*.),* mountain big sagebrush*,* bitterbrush*,* mountain mahogany*,* Mormon tea*,* ocean spray *(Holodiscus discolor)*, and other species often common in adjacent plant communities.

Inter-Mountain Basins Big Sagebrush Steppe

Inter-Mountain Basins Big Sagebrush Steppe accounted for 73 acres (less than 1 percent) of the Project Area. This shrub-steppe is dominated by perennial grasses and forbs (>25 percent cover) with basin big sagebrush*,* Wyoming big*,* Threetip sagebrush (*Artemisia tripartita* ssp. *tripartita)*, and/or antelope bitterbrush dominating or codominating the open to moderately dense (10 – 40 percent cover) shrub layer. Shadscale*,* green rabbitbrush*,* rubber rabbitbrush, horsebrush, or prairie sagewort (*Artemisia frigida)* may be common especially in disturbed stands. Associated graminoids include Indian ricegrass*,* thickspike wheatgrass (*Elymus lanceolatus* ssp. *Lanceolatus),* Idaho fescue (*Festuca idahoensis*)*,* rough fescue (*Festuca campestris),* Sandberg bluegrass, and bluebunch wheatgrass. Common forbs are hooded phlox (*Phlox hoodii),* sandwort *(Arenaria* ssp.), and milkvetch (*Astragalus* spp.).

Inter-Mountain Basins Semi-Desert Grassland

The Inter-Mountain Basins Semi-Desert Grassland system accounted for 20 acres (less than 1 percent) of the Project Area. The dominant perennial bunch grasses and shrubs within this system are largely drought-resistant plants. These grasslands are typically dominated or co-dominated by Indian ricegrass, three-awn *(Aristida* spp*.),* needle and thread grass*,* galleta grass (*Pleuraphis jamesii)*, and may include scattered shrubs and dwarf-shrubs of species of sagebrush (*Artemisia* spp.), saltbush*,* blackbrush *(Coleogyne* spp*.),* Mormon tea*,* snakeweed *(Gutierrezia sarothrae),* and winterfat *(Krascheninnikovia lanata)*.

The remaining native landscape classifications accounted for less than 10 acres each: Colorado Plateau Pinyon-Juniper Shrubland (4.5 acres), Great Basin Foothill and Lower Montana Riparian (1.9 acres), Inter-Mountain Basins Curl-leaf Mountain Mahogany (1.2 acres), and Colorado Plateau Pinyon-Juniper Woodland (0.4 acres).

Ecological Site Descriptions

Ecological Sites within the Project Area were visited during 2023 field surveys (WB, 2024a) to assess soil texture, landform, and vegetation community as compared to the published Ecological Site Descriptions (ESD). Plant communities were verified based on percent cover by species (WB, 2024a). Of the 22 potential Ecological Sites found in the Project Area, 4 Ecological Sites accounted for the most acreage in

the Project Area (WB, 2024a). A description of the dominant Ecological Sites is provided below. For a detailed description of data collection methodology and results, refer to the Biological Baseline Survey Report (WB, 2024a) prepared for the Project.

Thin Surface Juniper (F025XY060NV) occurs on dissected alluvial fan remnants, hills, and lower mountain side slopes of all aspects. Slopes range from 8 to 75 percent but are typically 30 to 50 percent. Elevations are 5,500 to 7,500 feet above mean sea level (amsl). Average annual precipitation is 10 to 12 inches. Mean annual air temperature is 45 to 50 degrees F. The average growing season is 100 to 120 days. This site is dominated by Utah juniper. Wyoming big sagebrush is the principal understory shrub. Thurber's needlegrass, bluebunch wheatgrass, Indian ricegrass, and bluegrasses are the most prevalent understory grasses. Phlox (*Phlox spp.*) and milkvetch are common understory forbs. In the Project Area, this Ecological Site was dominated by Utah juniper and Wyoming sagebrush.

Claypan 12-16' P.Z. (R025XY017NV) occurs on summits and sideslopes of mountains, hills, erosional fan remnants and rock-pediments on all aspects. Slopes range from 4 to 50 percent, but slope gradients are typically less than 30 percent. Elevations are 6,000 to 8,000 feet amsl. The plant community is dominated by Idaho fescue, bluebunch wheatgrass, and low sagebrush. Potential vegetation composition is about 60 percent grass, 15 percent forbs, and 25 percent shrubs. Total annual air-dry production in a normal year is approximately 700 pounds/acre.

Shallow Calcareous Loam 10-14" P.Z. (R028AY043NV) occurs in association with bedrock outcroppings on summits and sideslopes of hills and mountains on all exposures. Slopes range from 4 to 75 percent, but slope gradients of 15 to 50 percent are most typical. Elevations are 7,000 to 8,500 feet amsl. The plant community is dominated by curl leaf mountain mahogany (*Cercocarpus ledifolius*). Mountain big sagebrush is the principal understory shrub. Bluebunch wheatgrass, Idaho fescue, and needlegrass are the most prevalent understory grasses. Total overstory canopy cover is less than 25 percent (± 15 percent). Total annual air-dry production in a normal year is approximately 900 pounds/acre. Within the Project Area, this Ecological Site was dominated by Utah juniper, mountain big sagebrush, and several species of grasses, including Idaho fescue and bluebunch wheatgrass.

Shallow Clay Loam 10-14" P.Z. (R025XY057NV) occurs on summits and upper backslopes of hills and lower mountains on all aspects. Slopes range from 4 to 70 percent, but slope gradients of 4 to 15 percent are most typical. Elevations are 5,500 to 7,000 feet. The plant community is dominated by Thurber's needlegrass, bluebunch wheatgrass, and black sagebrush. Potential vegetative composition is about 55 percent grasses, 10 percent forbs, and 35 percent shrubs. Total annual air-dry production in a normal year is approximately 500 pounds/acre. In the Project Area, this Ecological Site was dominated by bluebunch wheatgrass and black sagebrush.

3.3.9.2 Environmental Consequences

Proposed Action

Approximately up to 250 acres of vegetation would be disturbed in phases over the approximate 3-year Project life due to implementation of the Proposed Action. Surface disturbance would be created incrementally and could occur in any of the vegetation communities in the Project Area. The maximum potential surface disturbance to each vegetation community associated with Project implementation is shown in Table 3-7. The acreages listed in Table 3-7 were derived using SWReGAP land cover data and were verified during field surveys, as described in the Biological Baseline Survey Report (WB, 2024a) for the Project.

Table 3-7. Potential Surface Disturbance to Land Cover Type in the Project Area

Land Cover Type	Acres in Project Area	Potential Surface Disturbance[1]	
		Acres	Percent
Great Basin Pinyon-Juniper Woodland	3,641	0 to 250	0 to 7
Inter-Mountain Basins Big Sagebrush Shrubland	2,096	0 to 250	0 to 12
Inter-Mountain Basins Montane Sagebrush Steppe	1,275	0 to 250	0 to 20
Great Basin Xeric Mixed Sagebrush Shrubland	537	0 to 250	0 to 47
Inter-Mountain Basins Cliff and Canyon	165	0 to 165	0 to 100
Inter-Mountain Basins Big Sagebrush Steppe	73	0 to 73	0 to 100
Inter-Mountain Basins Semi-Desert Grassland	20	0 to 20	0 to 100
Colorado Plateau Pinyon-Juniper Shrubland	5	0 to 5	0 to 100
Great Basin Foothill and Lower Montane Riparian	2	0 to 2	0 to 100
Inter-Mountain Basins Curl-leaf Mountain Mahogany	1	0 to 1	0 to 100
Colorado Plateau Pinyon-Juniper Woodland	< 1	< 1	0 to 100

Source: WB, 2024a

Note: [1] Up to 250 acres of vegetation would be disturbed in phases over the approximate 3-year Project life due to implementation of the Proposed Action; thus, the potential surface disturbance acreage listed is the maximum acreage (and percentage) by vegetation community that could occur. Values in this column are not intended to be summed.

Regeneration of long-lived woody species (e.g., sagebrush) in dryland ecosystems is a complex ecological process that is limited by numerous variable factors (e.g., soil type, exotic annual grass invasion). Sagebrush seedlings grow slowly, increasing in size and dominance over time and eventually leading to late successional communities represented by a mosaic of sagebrush and perennial grasses in approximately 20 to 45 years (Pyke, 2011). Ecosystems that lack resilience may revert to alternative communities that differ in structure and function from the original. Human intervention, including control of undesirable species or reintroduction of previously dominant species, would likely be required for regeneration success (Pyke, 2011).

Surface disturbance associated with exploration activities within the Project Area would be reclaimed and reseeded concurrently whenever feasible. Any surface disturbance related to the Proposed Action would not result in the loss of any unique vegetation community but would still result in a temporary loss of vegetation. Reclamation associated with the Proposed Action would continue until completion of exploration activities using a BLM-authorized seed mixture (Table 2-3). Monitoring would ensure that the revegetation meets reclamation standards (NDEP, 2016). Effects to vegetation as a result of surface disturbing activities associated with implementation of the Proposed Action would be minor, long-term, and localized.

No Action Alternative

Under the No Action Alternative, up to 5 acres of surface disturbance would continue within the Project Area under Notice-level exploration activities. Reclamation of surface disturbance, including reseeding,

associated with Notice-level exploration activities, would minimize effects to vegetation. Under the No Action Alternative, effects would be similar but proportionally less than the Proposed Action (approximately 5 acres of surface disturbing activities versus up to 250 acres associated with the Proposed Action).

3.3.9.3 Cumulative Effects

The CESA for analyzing cumulative effects to vegetation is comprised of the 7,819-acre Project Area (Figure 3-2).

Cumulative Effects of the Proposed Action

Quantifiable disturbance from past, present, and RFFAs in the CESA totals 5.82 acres (0.07 percent of the CESA). The Proposed Action (up to 250 acres of surface disturbance including vegetation removal over the 3-year life of the Project) would affect approximately 3.2 percent of the CESA (Figure 3-2) for a combined total of 255.82 acres or 3.3 percent of the CESA.

Implementation of the ACEPMs (Appendix B) would mitigate the effects of disturbance from the Proposed Action. Consistent with BLM regulations 43 CFR 3809.420, concurrent reclamation would return disturbed areas to a condition which would support land uses which existed prior to the onset of exploration activities including livestock grazing, wildlife habitat, recreation, and mineral exploration. Based on the above analysis and findings, incremental effects to vegetation as a result of the Proposed Action, when combined with the effects from the past and present actions and RFFAs, are expected to be minor, long-term, and localized.

Cumulative Effects of the No Action Alternative

The total of the quantifiable past and present actions and RFFAs disturbance within the CESA is 5.82 acres (0.07 percent of the CESA). The No Action Alternative would not add any more measurable effects to the CESA that aren't already occurring or have occurred.

3.3.10 Water Quality and Quantity

The area of analysis for the water resources desktop survey included hydrologic resources within the 7,819-acre Project Area and the surrounding area extending 5 miles from the boundary (Water Resources Study Area) (Figure 3-7). Additionally, field inspections of springs and stream channels within 0.5-mile of the Project Area were completed in September 2023 and expanded to cover a 1-mile buffer from the Project Area (Water Resource Inventory Area) in May 2024 (UES Consulting Services, Inc. [UES], 2024a) to confirm hydrologic conditions and provide additional information on these resources. Additional information regarding the regulatory framework, survey protocols, and water resources quality and quantity are included in the Water Resources SER for the Project (BLM, 2025h).

3.3.10.1 Affected Environment

Surface Water Resources

The Project is located primarily in the Thousand Springs Valley Toano-Rock Spring Area hydrographic basin (HA – 189B), with a smaller portion of the northwest part of the Project located in the Salmon Falls Creek Area hydrographic basin (HA 040) as defined by NDWR. Figure 3-7 shows the surface water features and hydrographic basins for the Water Resources Study Area.

Within the Thousand Springs Valley Toano-Rock Spring Area hydrographic basin, surface and subsurface water drains off the eastern slopes of Knoll Mountain and flows generally east until reaching Rock Springs Creek where it flows southwest to the confluence of Thousand Springs Creek in Thousand Springs Valley. The Project is located on a hydraulic divide, so surface water further northwest in the Project Area flows north into Trout Creek and eventually into Salmon Falls Creek that flows into Idaho.

Two perennial streams (Trout Creek and Knoll Creek) and six Trout Creek's tributaries in the Salmon Falls Creek Area hydrographic basin are present in the Water Resources Study Area. All other tributaries to Trout Creek are classified as intermittent or ephemeral. In the Thousand Springs Valley Toano-Rock Spring Area of the Water Resources Study Area, only one creek (Sulphur Creek) is classified as intermittent. All other drainages in this area are classified as ephemeral. Directly west of the Water Resources Study Area is Salmon Falls Creek, which eventually flows into the Snake River in Idaho. Texas Spring Creek and upper tributaries to Trout Creek are classified by the National Hydrographic Dataset (NHD) as ephemeral or intermittent.

Within the Water Resources Study Area, there are 84 identified NHD springs, including Texas Spring, Emigrant Springs, Chicken Springs, and 21 unnamed springs in the Thousand Springs Valley Toano-Rock Spring Area hydrographic basin. Opal Spring, Knoll Creek Springs, Noh Springs, Tiser Spring, Hice Spring, and 54 unnamed springs are located in Salmon Falls Creek Area hydrographic basin. Texas Spring, Opal Spring, and 29 unnamed springs are located within a 2-mile radius of the Project Area and the rest are located within a 5-mile radius. Texas Spring and 16 other unnamed springs are located within the Project or within 1 mile of the Project Area, also known as the Water Resource Inventory Area (Figure 3-7).

Groundwater Resources

Groundwater recharge in the Water Resources Study Area occurs during precipitation events and spring snowmelts in higher elevation areas (generally above 6,000 feet amsl). Recharge is distributed directly from the surface into alluvial aquifers or along deep bedrock flow paths into hard rock aquifers. Ephemeral streams may distribute some runoff to lower elevation alluvial fans where it infiltrates and contributes to groundwater recharge.

In the Thousand Springs Valley Toana-Rock Spring Area segment of the Project Area, groundwater discharge occurs primarily at the base of the alluvial fan further downslope from the Project Area and in the Thousand Springs Valley through evapotranspiration (ET) by phreatophyte vegetation and subsurface and surface flow into Rocky Butte Area sub-hydrographic basin (189C). In the Salmon Falls Creek Area, shallow groundwater discharge occurs to the north through ET, well pumping, re-entering surface flow to Salmon Falls Creek, or moves north through the basin as groundwater.

Most of the Project Area is part of the regional Great Salt Lake Desert flow system (Harrill and Prudic, 1998). Groundwater from Thousand Springs Valley Toana-Rock Spring Area hydrographic basin eventually moves into and ends in the Great Salt Lake Desert as the lowest place in the groundwater flow system. The northwestern side of the Project Area within the Salmon Falls Creek Area hydrographic basin is part of the Snake River region flow system. Groundwater and surface water in this part of the Project Area flows into Trout Creek and then Salmon Falls Creek, eventually moving into the Snake River in Idaho and then the Columbia River in Oregon, ultimately reaching the Pacific Ocean.

There are no historical records of publicly available data on discharge from surface water, springs, or groundwater levels within the Water Resources Study Area (USGS, NDWR).

Based on the NDWR well log database (NDWR, 2022), three wells exist within 5 miles of the Project Area (Figure 3-8). Two are stock water wells to the south and southeast of the Project Area and one is a domestic well to the west of the Project Area. Upon completion of the well installations, the stock water wells had a static water level of 212 and 235 feet below land surface (bls) and the domestic well had a static water level of 90 feet bls. However, the stock wells were drilled in 1958 and 1965, respectively, and the domestic well was drilled in 1981. No data exists in the NDWR database for water levels measured since then.

Water Quality

Rush (1968) collected four water samples within the Toano-Rock Creek Area of Thousand Springs Valley from one well and three creeks. All water was of calcium bicarbonate type with medium to high salinity hazard, low to medium alkalinity hazard, and specific conductance ranging from 408 to 833. Water samples indicate water for the most part is suitable for agricultural use, with some samples indicating water is suitable for domestic use. There are no other historical or current public data (USGS, National Water Information System, NDWR) available on water quality for sites within the Water Resources Study Area.

To provide preliminary data to characterize water quality at the Water Resources Study Area, 11 spring sites and one stream site were sampled for general water chemistry analyses during September 2023 field inspections and an additional 5 spring sites within a 1-mile radius of the Project Area were sampled in May 2024 (UES, 2024a). The chemistry of the springs and stream site were high quality, with only Spring 5 (SBM-SPG-5) having maximum contaminant level exceedances for iron and manganese. Water types are primarily calcium-bicarbonate with Spring 9 and Spring 10 having calcium-sulfate-bicarbonate water type.

Water Rights

Thousand Springs Valley Toano-Rock Springs Area

Water rights within the basins are administered by NDWR. A perennial yield of 2,600 acre-feet per year (AFA) has been established by NDWR as an estimate of the quantity of groundwater that can be sustainably pumped from the basin without causing continued long-term declines in groundwater levels and storage. Committed groundwater rights within the basin total 1,562.25 AFA, and Thousand Springs Valley Toano-Rock Springs Area is a designated basin, which means permitted groundwater rights approach or exceed the estimated annual perennial yield of the basin (NDWR, 2023). Designated basins allow the State Engineer additional authority in the administration of future water rights.

According to the hydrographic area summary of Thousand Springs Valley Toano-Rock Spring Area hydrographic basin (NDWR,2023), the primary manner of groundwater use within the basin is irrigation, which constitutes a duty of 1,045.45 AFA (66.9 percent) of the committed groundwater rights. Other groundwater duties in the basin include stock water (505.11 AFA) and quasi-municipal (5.47 AFA).

Salmon Falls Creek Area

A perennial yield of 7,400 AFA has been established by NDWR (2023) as an estimate of the quantity of groundwater that can be sustainably pumped from the basin without causing continued long-term declines in groundwater levels and storage. Committed groundwater rights within the basin total 6,712.80 AFA, and Salmon Falls Creek Area is a designated basin (NDWR, 2023).

According to the hydrographic area summary of Salmon Falls Creek Area hydrographic basin (NDWR, 2023), the primary manner of groundwater use within the basin is irrigation, which constitutes a duty of 3,304.53 AFA (49.2 percent) of the committed groundwater rights. Other groundwater duties in the basin include municipal (2,112.14 AFA), commercial (647.37 AFA), stock water (290.95 AFA), mining, milling, and dewatering (286.61 AFA), quasi-municipal (31.38 AFA), and others (39.82 AFA).

Only one underground water right (groundwater) is currently active within the Water Resources Study Area. There are 44 spring water rights and 14 stream-classified rights within the Water Resources Study Area.

Floodplains

The majority of surface waters within the Water Resources Study Area are either ephemeral drainages or perennial or intermittent tributaries that drain to basins with no outflow. Trout Creek (on the northwestern side of the Project Area) is a perennial waterway that contributes surface water to Salmon Falls Creek, the

Salmon River, the Columbia River, and eventually the Pacific Ocean. These waters may be classified as jurisdictional water of the United States and be subject to federal Clean Water Act protections.

According to the local hazard mitigation plan for Elko County, Nevada, Texas Spring Canyon and Bell Canyon just outside of the Project Area are listed as "Zone A – special flood hazard areas with no base flood elevations determined". Both areas are within the 2-mile radius of the Project and overlap the access roads to the Project Area (Texas Spring Canyon Road and Rock Springs Road). Additionally, Trout Creek to the north of the Project Area is listed as a "Zone A special flood hazard area." This zone is located outside of the 2-mile buffer but within the 5-mile buffer. All areas within the Project Area are listed as "Zone D – an area of undetermined flood hazard". Due to no Specific Flood Hazard Areas, floodplains or repetitive loss properties for the Project, FEMA has not developed or conducted a Flood Insurance Study that includes the Project Area.

A review of the National Wetlands Inventory (NWI) revealed that the Project Area contains primarily seasonally flooded streams as determined by USFWS. The same types of stream features are located immediately surrounding the Project Area. Within a 5-mile buffer of the Project Area, Trout Creek is located to the west and northwest and is classified as a perennial stream in the NHD. UES conducted field reconnaissance of Trout Creek in September 2023 (UES, 2024a) and confirmed that Trout Creek appears to be perennial as surface water was present.

3.3.10.2 Environmental Consequences

Proposed Action

Surge may disturb up to 250 acres over the potential 3-year Project life. The surface exploration disturbance would be created incrementally and would be dispersed throughout the 7,819-acre Project Area.

Surface Water

During planning of drill pad locations, new road construction alignment, and other disturbances associated with exploration activities (as part of the phased approach), Surge would avoid disturbing areas where surface water streams, springs, or inundated/saturated soils are present. There would be no indirect effects to riparian/wetlands areas and associated vegetation since Surge would avoid disturbance within these areas.

As outlined in Section 2.1.6, Surge would manage drill cuttings and drilling fluids with the use of sumps constructed at each drill site. Surge would use water with toxic or non-toxic drilling fluid additives, as necessary, based on the exploration drilling methods (Surge, 2024b). Surge and its contractor would only use fluids approved for drilling.

Surge would use stormwater BMPs at the exploration sites as described in Section 2.1.6. Surge would use BMPs and ACEPMs (Appendix B) for sediment control as needed during reclamation of exploration activities to minimize sedimentation of disturbed areas and to prevent unnecessary or undue degradation to the environment. Surge would also minimize the potential effects to surface water quality from petroleum fluids, oils, and chemical spills by implementing measures presented in the Spill Contingency Plan (see Section 2.1.6) (Surge, 2024b). The potential impacts to surface water quality from sedimentation would be minimized by the implementation of the ACEPMs. Potential effects to surface water are anticipated to be minor, short-term, and localized.

Groundwater

Surge proposes to source water for exploration and road dust suppression via a water right point of diversion under an exploration water supply waiver granted by NDWR (see Section 2.1.6). Installation of the water supply well would be included as part of Phase 1 for agency approval. Under the waiver granted by NDWR, Surge may pump and use up to 5 acre-feet (1.63 million gallons per year) of water for

exploration drilling purposes. Surge would use a mobile water storage tank with a capacity of 21,000 gallons to store water near the supply well.

Surge would not use more water from the supply well than authorized under the NDWR waiver. As outlined in Section 2.1.6, Surge has identified other commercial water sources (Section 2.1.6) to supplement water needs, if required. Effects to groundwater quantity and quality would be negligible, short-term, and localized. The Proposed Action would not affect beneficial uses in the basin nor groundwater levels.

Under the Proposed Action Surge would continue to use the small transfer area to the east at the intersection of the Texas Spring Road and the California Trail Backcountry Byway (authorized under the Texas Spring Notice NVNV105861474) as a water transfer and temporary parking area. If Surge uses other sources for exploration water supply, indirect effects could include increased traffic from a water truck associated with transportation/delivery of these alternative water supply sources to the transfer area and/or to the water storage tank.

Drill depths used for mineral exploration and/or condemnation drilling are anticipated to range between 300 feet and 1,000 feet. Drilling would likely be conducted below the water table and could affect groundwater by intersecting aquifers and causing contamination. Surge would install a casing and cement drill holes to prevent the vertical movement of groundwater down the hole. As outlined in Section 2.1.9.2, Surge would plug all drill holes prior to the drill rig moving from the drill site in accordance with NRS 534, NAC 534.4369, and NAC 534.4371 to reduce potential effects. Should the drill holes encounter groundwater, the holes would be plugged in accordance with NAC 534.4369 and 534.4371. Effects to groundwater quality would be negligible, localized, and short-term.

No Action Alternative

Under the No Action Alternative, up to 5 acres of surface disturbance could continue within the Project Area under Notice-level exploration activities. With the use of BMPs to prevent erosion and sediment transport, effects to surface water quality would not be anticipated. Should the drill holes encounter groundwater, the holes would be plugged in accordance with NAC 534.4369 and 534.4371. The potential effects from the No Action Alternative would be similar to those described for the Proposed Action but on a smaller scale due to the smaller area of authorized disturbance.

3.3.10.3 Cumulative Effects

The CESA for analyzing cumulative effects to water resources is comprised of a 5-mile buffer area from the Project Area (Figure 3-9). This CESA encompasses approximately 109,776 acres of which 7,819 acres comprise the Project Area.

Cumulative Effects of the Proposed Action

Quantifiable past and present actions and RFFA disturbance in the CESA totals approximately 24,978 acres, or 22.7 percent of the 109,776-acre CESA (Figure 3-9). Combined with up to 250 acres of disturbance associated with the Proposed Action, total disturbance in the CESA would be approximately 25,228 acres, or 22.9 percent of the total CESA.

Implementation of the ACEPMs (Appendix B) combined with concurrent reclamation consistent with BLM regulations 43 CFR 3809.420 would minimize potential effects of disturbance from the Proposed Action. Incremental effects to water resources due to implementation of the Proposed Action, when combined with the effects from the past and present actions and RFFAs, are expected to be negligible, short-term, and localized.

Cumulative Effects of the No Action Alternative

The total quantifiable past and present actions and RFFA disturbance within the CESA is approximately 24,987 acres (22.7 percent of the CESA). The No Action alternative would not add any more measurable effects to the CESA that aren't already occurring or have occurred.

3.3.11 Wetlands and Riparian Zones

The area of analysis for wetland and riparian areas is the 7,819-acre Project Area plus the surrounding area extending 1-mile from the Project Area boundary on which the 2024 baseline field surveys supporting the Aquatic Resources Screening Report (UES, 2024b) were conducted (21,682 acres total).

Additional information regarding the regulatory framework, survey protocols, and wetlands and riparian areas affected environment can be found in the Wetland and Riparian Area SER (BLM, 2025i).

3.3.11.1 Affected Environment

There are 46 field-mapped wetlands totaling 89.6 acres within the wetland and riparian area of analysis. Nineteen (19) of these wetlands (10.6 acres) are isolated without connection to Traditional Navigable Water (TNW), interstate water, or any other (A)(1) water. Twenty-seven (27) of these wetlands (79.0 acres) maintain connection to TNW or interstate water.

The field investigation also identified and delineated 35 Relatively Permanent Waters (RPWs) totaling 135,503 linear feet. Four of these RPWs, totaling 18,342 linear feet, lack downstream connection to a TNW, interstate water, or other (A)(1) water, and it is the professional opinion of UES that these are not Waters of the United States (WOTUS). Thirty-one (31) of these RPWs, totaling 117,160 linear feet, are tributaries to a TNW or interstate water and it is the professional opinion of UES that these are WOTUS (UES, 2024b). Figure 3-10 presents the mapped wetlands within the area of analysis.

A total of approximately 205.6 acres of riparian area were identified within the area of analysis. Dominant vegetation types within the riparian areas include ten categories: Mixed Deciduous, Mixed Evergreen, Mixed Deciduous and Mixed Evergreen, Sagebrush, Mixed Deciduous and Sagebrush, Mixed Emergent, Mixed Evergreen and Mixed Emergent, Sagebrush and Mixed Emergent, Willow, and Willow and Mixed Emergent. Figure 3-11 shows the mapped riparian areas within the area of analysis.

3.3.11.2 Environmental Consequences

Proposed Action

Riparian and wetland habitats are fragile resources often among the first landscape features to reflect effect from management activities and are commonly used as indicators of overall land health and watershed condition. Effects on wetlands and riparian areas could alter the various functions they perform including: (1) nutrient removal and transformation, (2) sediment and toxicant retention, (3) shoreline and bank stabilization, (4) flood flow alteration, (5) groundwater recharge, (6) production export, (7) aquatic diversity and abundance, and (8) wildlife diversity and abundance (Schneider & Sprecher, 2000).

Within the area of analysis, there are approximately 89.6 acres of field-mapped wetlands (79.0 acres of which are potentially jurisdictional), 135,503 linear feet of RPWs, and 205.6 acres of riparian areas (Figures 3-10 and 3-11). Within the Project Area, a total of approximately 3.2 acres of wetlands (0.04 percent of Project Area), 18,973 linear feet of RPWs (14 percent of total RPWs), and 22.9 acres of riparian areas (0.3 percent of Project Area) are located along a tributary to Cave Creek on the west side of the Project Area, and along Texas Spring Canyon on the east side of the Project Area. Riparian areas are also located in the southwest corner and in the central area of the Project Area (Figure 3-11). As described in the ACEPMs (Appendix B), Surge would avoid any disturbance that overlaps the mapped wetland and riparian areas; therefore, no measurable effects to wetland and riparian areas from the Proposed Action would occur.

The Project is not anticipated to affect groundwater quantity or quality or impact beneficial uses, as detailed in the Water Resources SER (BLM, 2025h).

Exploration activities, including the construction and maintenance of roads, drill sites, cross-country road construction, and associated increased traffic could indirectly affect adjacent or downslope wetland and riparian areas due to fugitive dust, erosion, and sedimentation over the potential 3-year Project life. Riparian areas serve as buffers that filter and moderate adverse effects from upland land use activities (Wyman et al., 2006). Surge has committed to controlling surface water drainage by diverting stormwater using engineering practices and the placement of control devices (e.g., borrow ditches, filter fences, etc.) to control erosion and sedimentation. These measures would reduce the likelihood that indirect impacts to wetland and riparian areas would occur due to Project Activities. Indirect impacts to wetland and riparian areas from erosion and sedimentation would be negligible, short-term, and localized.

No Action Alternative

Under the No Action Alternative, up to 5 acres of surface disturbance would continue within the Project Area under Notice-level exploration activities. Impacts to wetland and riparian areas under the No Action Alternative would be similar, but proportionally less than the Proposed Action (approximately 5 acres of surface disturbing activities versus up to 250 acres associated with the Proposed Action).

3.3.11.3 Cumulative Effects

Based on the guidance in Section 6.8.3.1 of BLM's NEPA Handbook H-1790-1 (BLM, 2008), if a Proposed Action or alternatives have no direct or indirect effects on a resource, a cumulative effects analysis is not required. The analysis for wetland and riparian areas does not identify measurable Project-specific direct or indirect effects; therefore, a cumulative analysis is not included in this NEPA analysis.

There would be no incremental effects/cumulative effects from the Project to wetland and riparian areas considering all past, present, and RFFAs since environmental consequences of the Proposed Action and No Action Alternative would be negligible (no measurable change).

3.3.12 Wildlife

The area of analysis for wildlife species is the 7,819-acre Project Area; the focus of 2023 baseline field surveys for various resources (WB, 2024a). The area of analysis for special status wildlife species was extended to include a 4-mile buffer encompassing the Project Area where species-specific aerial surveys were conducted.

Additional information regarding the regulatory framework, survey protocols, and wildlife affected environment can be found in the Wildlife SER (BLM, 2025j).

3.3.12.1 Affected Environment

NDNH, NDOW, USFWS, and BLM Nevada Elko District were contacted to request information regarding big game species and critical habitat within a 4-mile buffer of the Project Area.

Pedestrian wildlife field surveys were conducted June 4-9, June 21-25, July 25, and September 22-24, 2023. Five general wildlife species were directly observed or detected in the Project Area by sign (i.e., tracks, burrows, scat). The mammals, excluding big game, detected during the surveys included least chipmunk (*Tamias minimus*) and mountain cottontail (*Sylvilagus nuttallii*). Two reptiles were observed including sagebrush lizard (*Sceloporus graciosus*) and western fence lizard (*Sceloporus occidentalis*). Migratory birds observed within the Project Area are discussed in Section 3.3.2, and in the Migratory Birds and Raptors SER (BLM, 2025a). Potential habitat is present for other wildlife species although these were the species observed during the field surveys.

The Project Area is located in Game Management Unit (GMU) 76. NDOW reported occupied elk (*Cervus canadensis*), mule deer (*Odocoileus hemionus*), and pronghorn antelope (*Antilocapra americana*) habitat throughout the Project Area and 4-mile buffer (NDOW, 2023). Mule deer were observed within the Project Area during pedestrian surveys, but elk and pronghorn antelope were not (WB, 2024a).

3.3.12.2 Environmental Consequences

Proposed Action

Direct effects to wildlife would consist of disturbance from human activity and noise as well as habitat loss. Up to 250 acres would be disturbed over the potential 3-year Project life. The surface exploration disturbance would be created incrementally and would be dispersed throughout the 7,819-acre Project Area.

After exploration activities have concluded, reclamation would involve regrading disturbed areas to their approximate original contour, and reseeding with a BLM-authorized noxious weed-free seed mix (Table 2-3). Surge would complete reclamation of exploration disturbances following the schedule presented in Section 2.1.9. Surge would install a fence (standard four-foot-high safety fence) around the perimeter of the sumps as described in Appendix B and Section 3.3.8.2.

Exploration activities, including the construction of roads, drill sites, and cross-country roads, would disturb wildlife due to the presence of humans and by creating noise and dust. Wildlife would likely continue to use the Project Area since the proposed surface disturbance activities cover approximately 3 percent of the entire Project Area (250 acres out of 7,819 acres).

As described in Section 3.3.8.2, invasive plant species reduce the habitat quality for wildlife. Surge would implement ACEPMs (Appendix B) which would minimize or reduce the effect of noxious weeds and invasive plants to wildlife habitat.

Effects to specific wildlife groups are discussed in more detail below.

Small Mammals

The effects on small mammals would be similar to those described in Section 3.3.8.2 and would be considered minor, long-term, and localized.

Large Mammals

Large mammals, such as mule deer, elk, and pronghorn antelope, may avoid the Project Area due to noise and human activity generated by the Project. The surface disturbance and exploration activities associated with the Proposed Action would only occur on 3 percent of the Project Area over 3 years (seasonally as described in Section 2.1.4), providing a large area for large mammals to disperse until activities are completed. These effects would temporarily reduce the available habitat area for large mammals. Effects to these large mammals would be considered minor, long-term, and localized.

Wildlife could enter or jump over the fence around the drill sumps. As outlined in the ACEPMs (Appendix B) associated with drill sites would be built with an incline on one end so animals that enter the sump would be able to exit the sump, and fences would be constructed as necessary around sumps that would restrict wildlife access.

Reptiles

Two lizard species were observed in the Project Area during the 2023 field surveys; however, habitat is available for other reptile species. Effects to reptile species are considered minor, long-term, and localized as described in Section 3.3.8.2.

Upland and Migratory Game Birds

Human presence or movement across the landscape would flush birds off nests and could potentially lead to abandonment when done within the breeding season and depending upon the length of time humans are present around nests. Activities associated with NDOW GMU 76 would create noise and disturbance to migratory birds or remove or alter habitat. The effect would be increased during the hunting seasons for each species within the hunt area.

Direct effects from vegetation removal would lead to temporary spatial redistribution of individuals or habitat-use patterns over the potential 3-year Project life. It is unlikely that Project implementation would result in a decline in local or regional upland migratory game bird populations because upland migratory game birds would likely redistribute to suitable habitat within and encompassing the Project Area. Surge would conduct reclamation concurrent with exploration activities when portions of the disturbed areas are no longer needed. Reclamation would be completed no later than 2 years after the completion of activities under the Proposed Action, with monitoring for revegetation success continuing until revegetated areas are reestablished and bond is released. Effects to upland and migratory game birds in the Project Area would be minor, long-term, and localized.

No Action Alternative

Under the No Action Alternative, up to 5 acres of surface disturbance could continue within the Project Area under Notice-level exploration activities. Reclamation of existing surface disturbance could gradually eliminate effects to wildlife. Effects to wildlife under the No Action Alternative would be similar, but proportionally less than the Proposed Action (approximately 5 acres of surface disturbing activities versus the maximum 250 acres associated with the Proposed Action)

3.3.12.3 Cumulative Effects

The CESA for analyzing cumulative effects to wildlife is comprised of NDOW GMU 76 (Figure 3-12). This CESA encompasses approximately 447,150 acres of which 7,819 acres (1.7 percent of the CESA) comprise the Project Area.

Cumulative Effects of the Proposed Action

Quantifiable disturbance from past, present, and RFFAs in the CESA totals 12,111 acres (2.7 percent of the CESA). The Proposed Action (up to 250 acres of surface disturbance including vegetation removal over the 3-year life of the Project) would affect approximately 0.06 percent of the CESA (Figure 3-12) for a combined total disturbance of the CESA of 12,361 acres or 2.8 percent of the CESA.

Since there is limited quantifiable data for all activities within the CESA, this calculation is a conservative analysis of the potential incremental increase due to proposed activities. Implementation of ACEPMs (Appendix B) would mitigate the effects of disturbance from the Proposed Action. Consistent with BLM regulations 43 CFR 3809.420, concurrent reclamation would return disturbed areas to a condition which would support land uses which existed prior to the onset of exploration activities including grazing, wildlife habitat, recreation, and mineral exploration. Therefore, based on the above analysis and findings, incremental effects to wildlife species and their habitat as a result of the Proposed Action, when combined with the effects from the past and present actions and RFFAs, are expected to be minor, long-term, and localized.

Cumulative Effects of the No Action Alternative

The total of the quantifiable past and present actions (including the Notice-level exploration activities) and RFFA disturbance within the CESA is 12,111 acres (2.7 percent of the CESA). The No Action Alternative would not add any more measurable effects to the CESA that aren't already occurring or have occurred.

CHAPTER 4. CONSULTATION AND COORDINATION

4.1 NATIVE AMERICAN CONSULTATION

BLM sent the initial consultation invitation letters of the Proposed Action on August 10, 2023 to the following tribes:

- Confederated Tribes of the Goshute Reservation
- Ely Shoshone Tribe
- Northwestern Band of the Shoshone Nation
- Shoshone-Bannock Tribes of the Fort Hall Reservation
- Shoshone-Paiute Tribes of the Duck Valley Reservation
- Te-Moak Tribe of Western Shoshone Indians of Nevada

A second consultation letter was sent to the tribes on October 4, 2024. No comments have been received to date. BLM conducted government-to-government consultation through attendance at tribal council meetings to present and discuss the proposed action, address any concerns, and offer opportunity to visit the area if the tribes so choose. However, no concerns, issues, or other comments were provided through these in-person meetings. Tribal consultation is ongoing.

4.2 INDIVIDUAL, ORGANIZATION OR AGENCY COORDINATION

BLM contacted 10 entities to serve as cooperating agencies on the Project. Those that accepted are:

- Nevada Department of Wildlife (NDOW)
- Sagebrush Ecosystem Technical Team (SETT)
- Elko County
- Ely Shoshone Tribe

4.3 LIST OF PREPARERS

4.3.1 Bureau of Land Management

Table 4-1. BLM Interdisciplinary Team

Name	Title	Area of Responsibility
Aili Gordon	Geologist	Project Lead, Geology, Minerals
Melissa Fisher	Field Manager	NEPA Review, Native American Concerns
Kelly Michelsen	Planning and Environmental Coordinator	NEPA Compliance
Sam Phillips	Wildlife Biologist	Wildlife, Migratory Birds, Sensitive Species, Aquatic Species, Riparian/Wetlands/Fisheries
Frank Giles	Air Resource Specialist	Air Quality, Greenhouse Gases, Human Noise Receptors
Joe McConnell	Archaeologist	Cultural Resources, Paleontological Resources
Harley Gordon	Geologist	Paleontological Resources
Jeff Moore	Supervisory Rangeland Management Specialist	Vegetation, Rangeland Management, Soils
Sarah McGowan	Rangeland Management Specialist	Vegetation, Rangeland Management, Soils
Kyle Martin	Weeds Specialist	Noxious/Invasive Weeds

Name	Title	Area of Responsibility
Mike Alberti	Outdoor Recreation Planner	Recreation, Visual Resources
Kayla Cox	Lands and Realty Specialist	Lands, Realty
Craig Hoover	Natural Resource Specialist	Forestry
Brian Howard	Natural Resource Specialist	Vegetation, Special Status Species
Justin Ferris	Hydrogeologist	Water Resources, Wetlands
Matt Fockler	Great Basin Socioeconomic Specialist	Social and Economic Values
Brady Owens	Assistant Field Manager for Nonrenewables	NEPA Review

4.3.2 Third-Party Consultants

Table 4-2. Third-Party Consultants – GSI Environmental Inc.

Name	Role
Marie-Hélène Paré	Project Manager, Lead Author
Laura Pfister	Social and Economic Values
Meghan Wirth	Biological Resources
Sally Staley	Figure Production, Data Management
Melissa Huntington	Technical Editor

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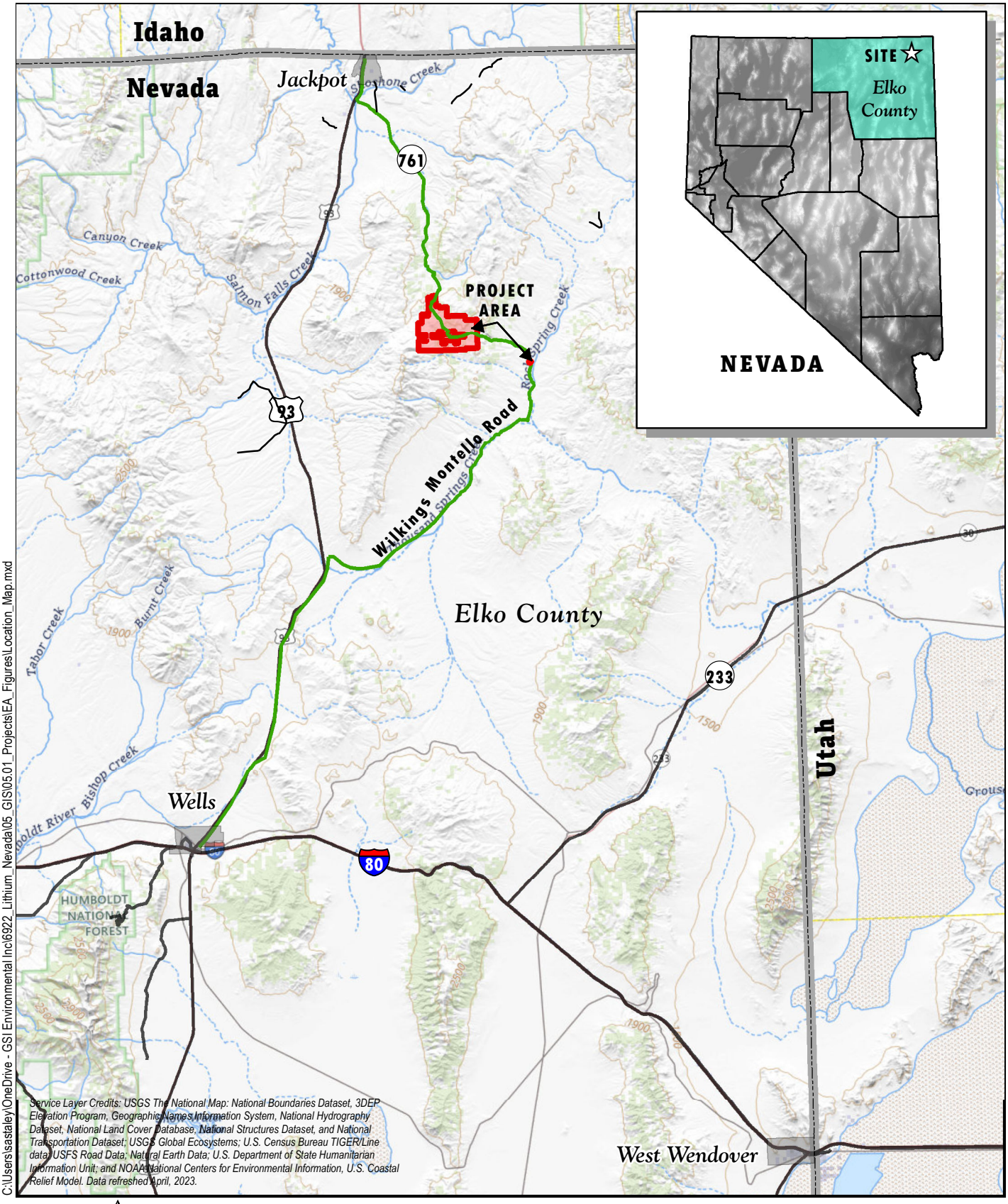
Appendix A Figures



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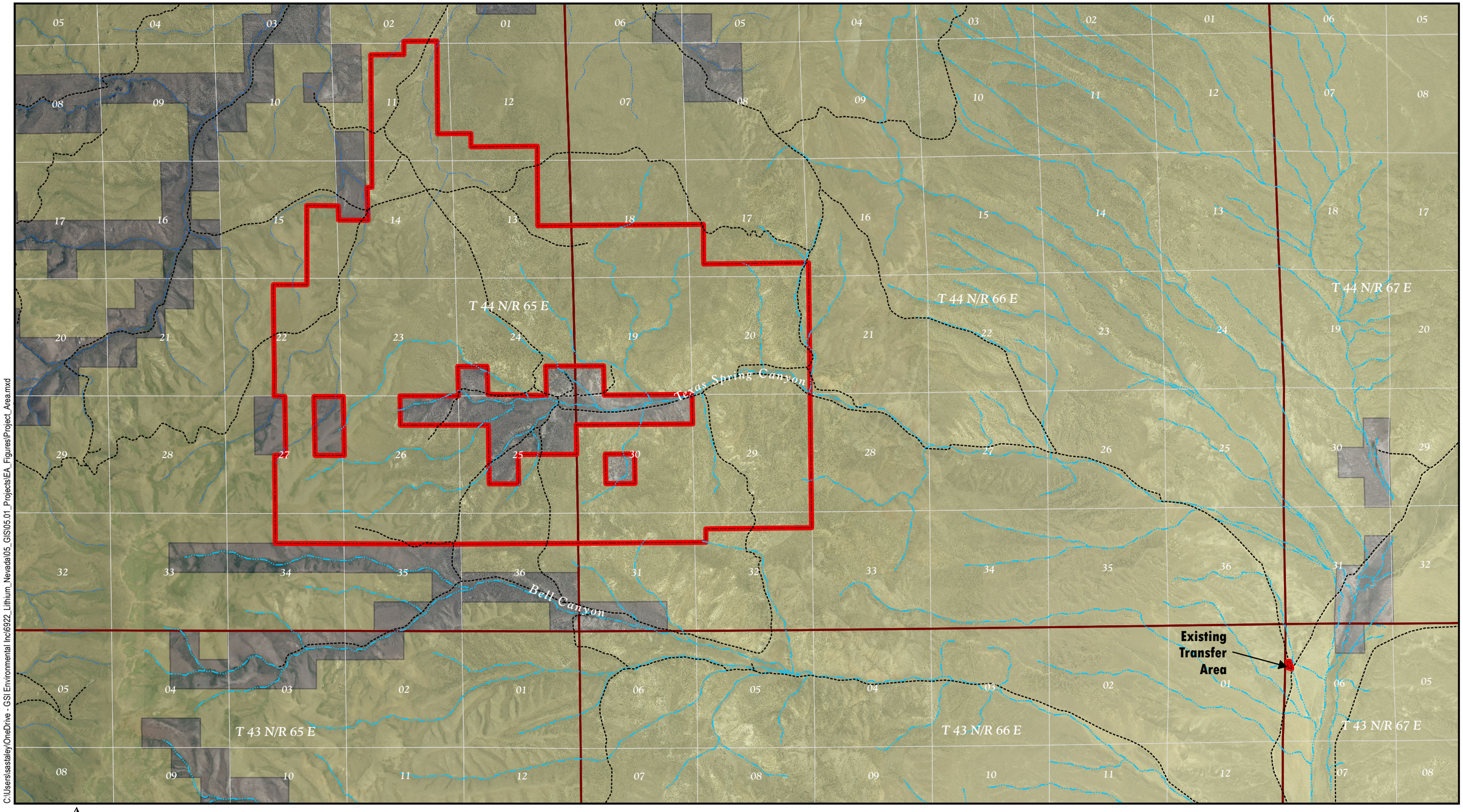
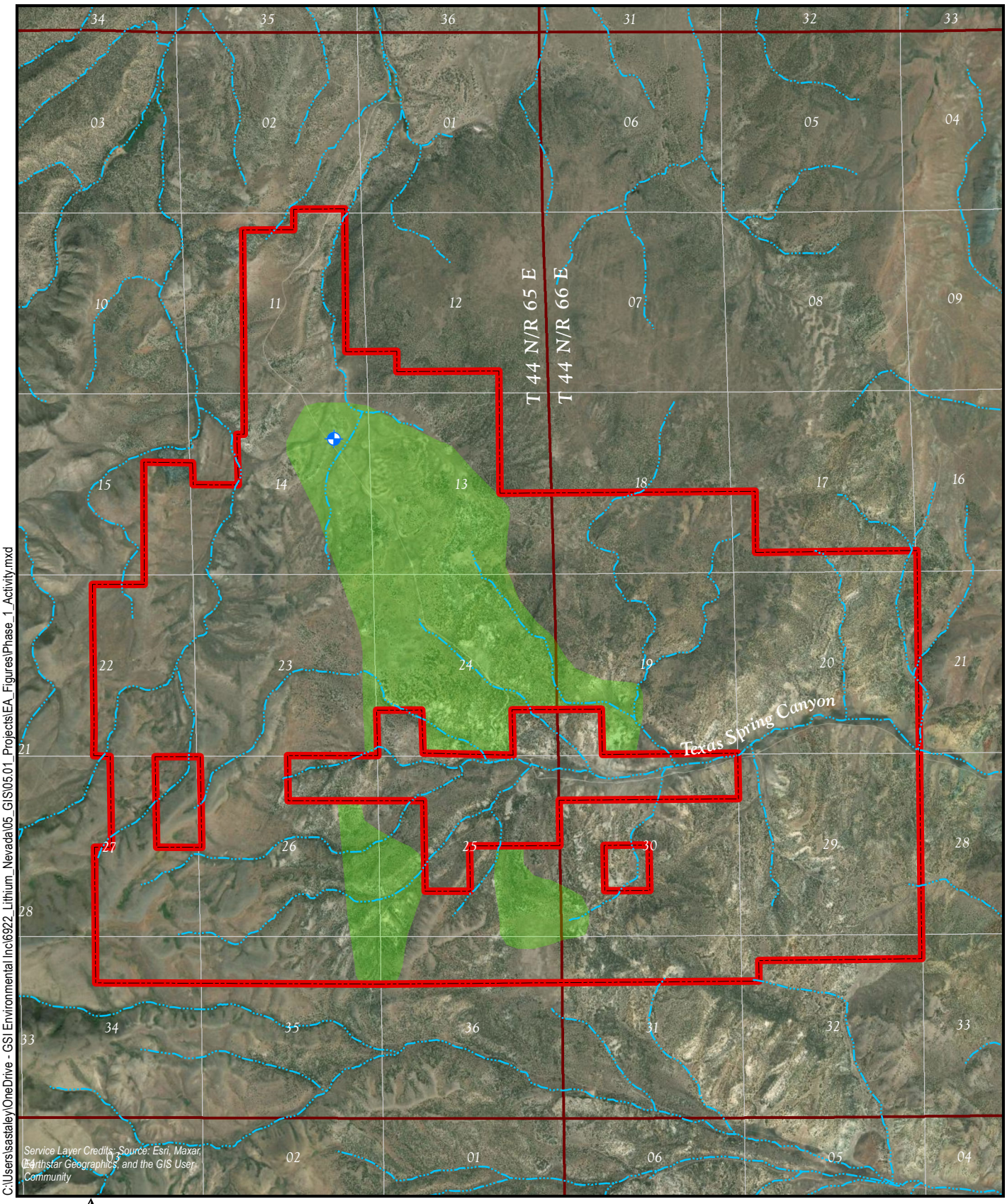
Project Access Roads

Location Map
Nevada North Lithium Exploration Project
Environmental Assessment
Elko County, Nevada
FIGURE 1-1



C:\Users\sastaley\OneDrive - GSI Environmental Inc\6922_Lithium_Nevada\05_GIS\05.01_Projects\EA_Figures\Project_Area.mxd

Project Area and Land Status
Nevada North Lithium Exploration Project
Environmental Assessment
Elko County, Nevada
FIGURE 1-2



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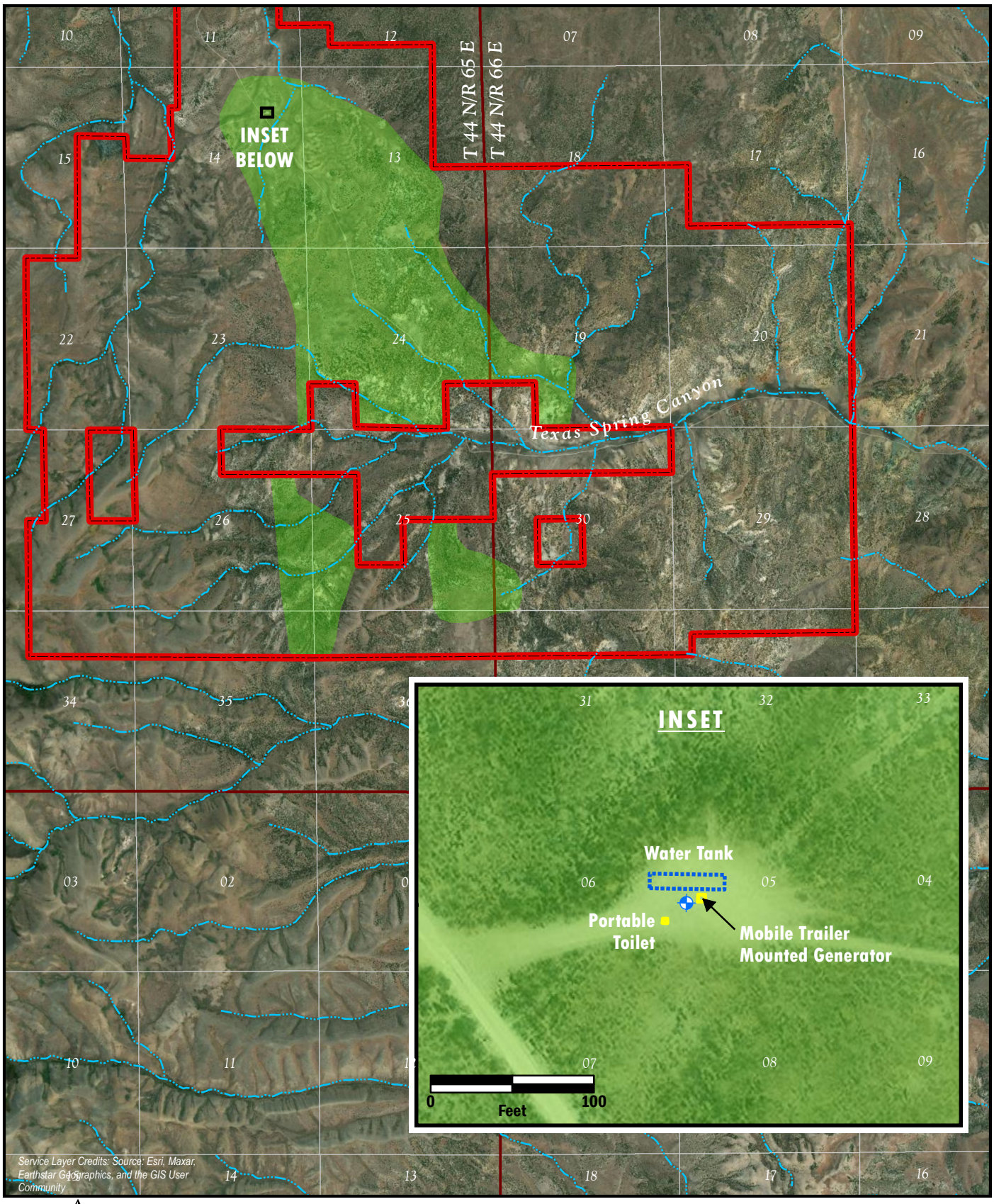
N

0 4,000
Feet

Project Area
Streams
Proposed Water Supply Well
Phase 1 General Area for Activities

General Disturbance Area Phase 1
Nevada North Lithium Exploration Project
Environmental Assessment
Elko County, Nevada
FIGURE 2-1



C:\Users\sastaley\OneDrive - GSI Environmental Inc\6922_Lithium_Nevada\05_GIS\05.01_Projects\EA_Figures\Surf_Occupancy_Area.mxd

0 4,000 Feet

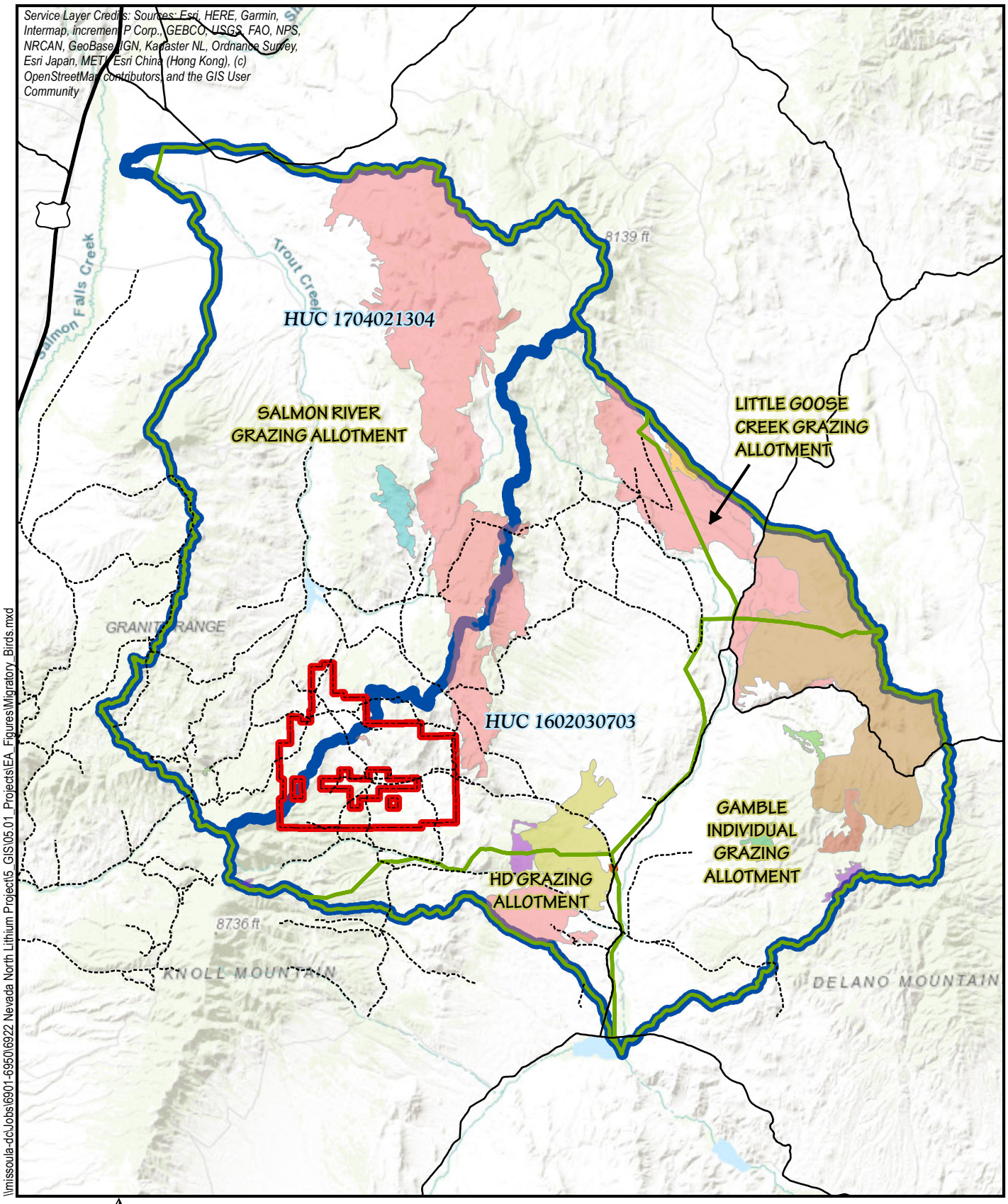
Project Area

Streams

Phase I General Area for Activities

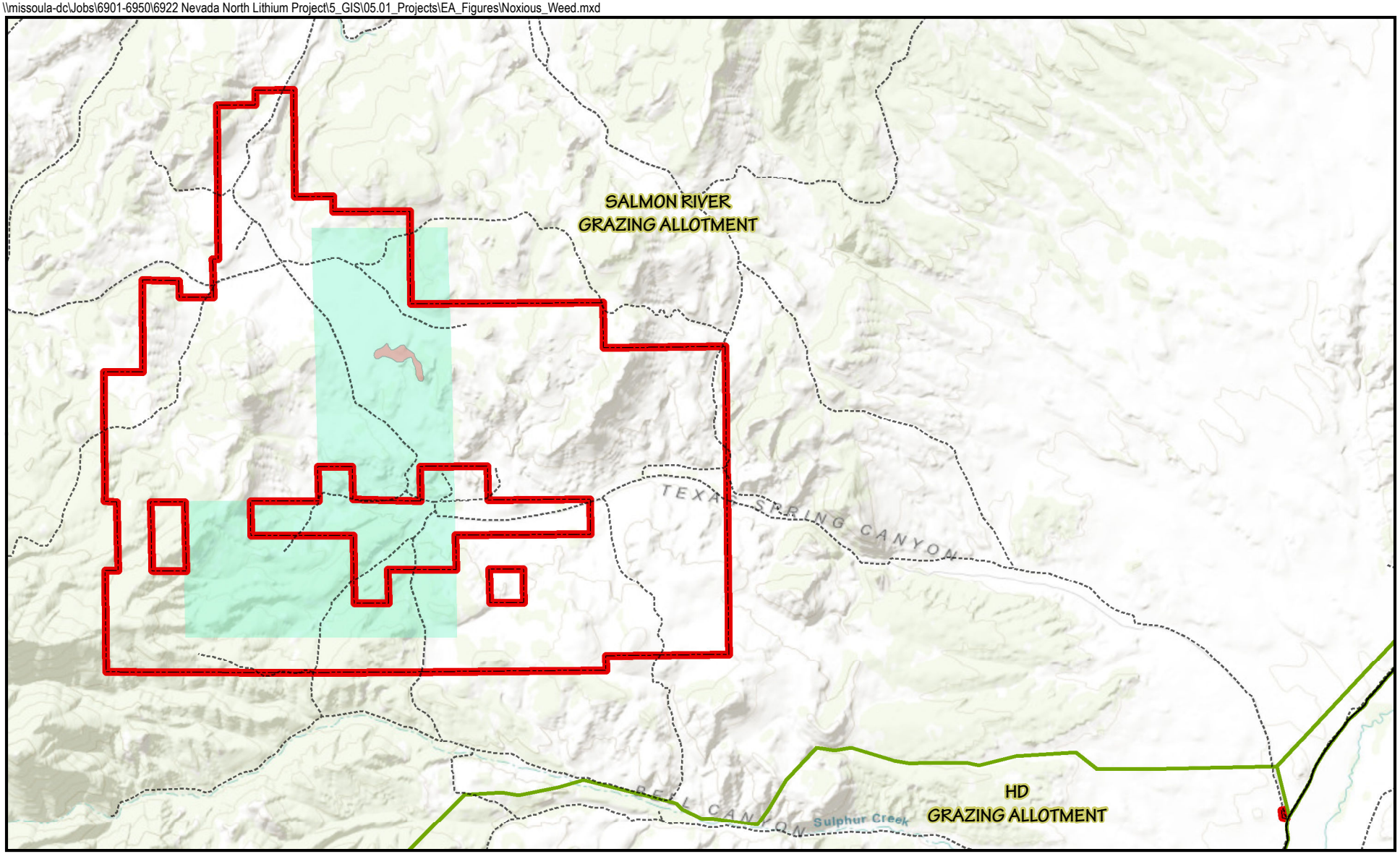
Proposed Water Supply Well

Surface Occupancy
Nevada North Lithium Exploration Project
Environmental Assessment
Elko County, Nevada
FIGURE 2-2



Migratory Birds and Raptors
Special Status CESA
Nevada North Lithium
Exploration Project
Environmental Assessment
Elko County, Nevada
FIGURE 3-1

\\missoula-dc\Jobs\6901-6950\6922 Nevada North Lithium Project\5_GIS\05.01_Projects\EA_Figures\Noxious_Weed.mxd



0 Miles 1.5

Noxious Weeds and Invasive Non-Native Species CESA and Project Area

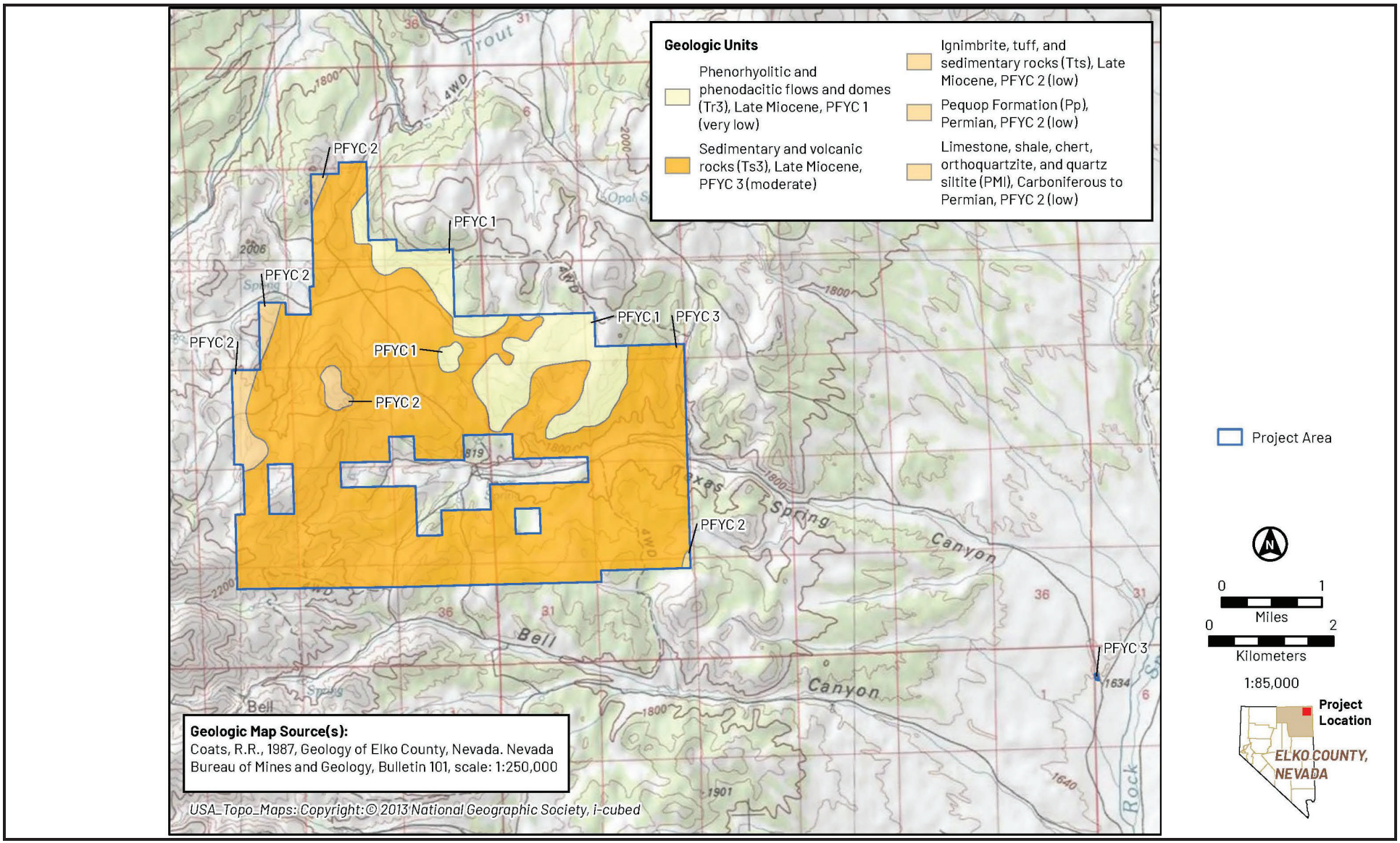
Grazing Allotments (BLM)

MLRS Past and Present Mineral Action Area

Fire History (BLM)

2007

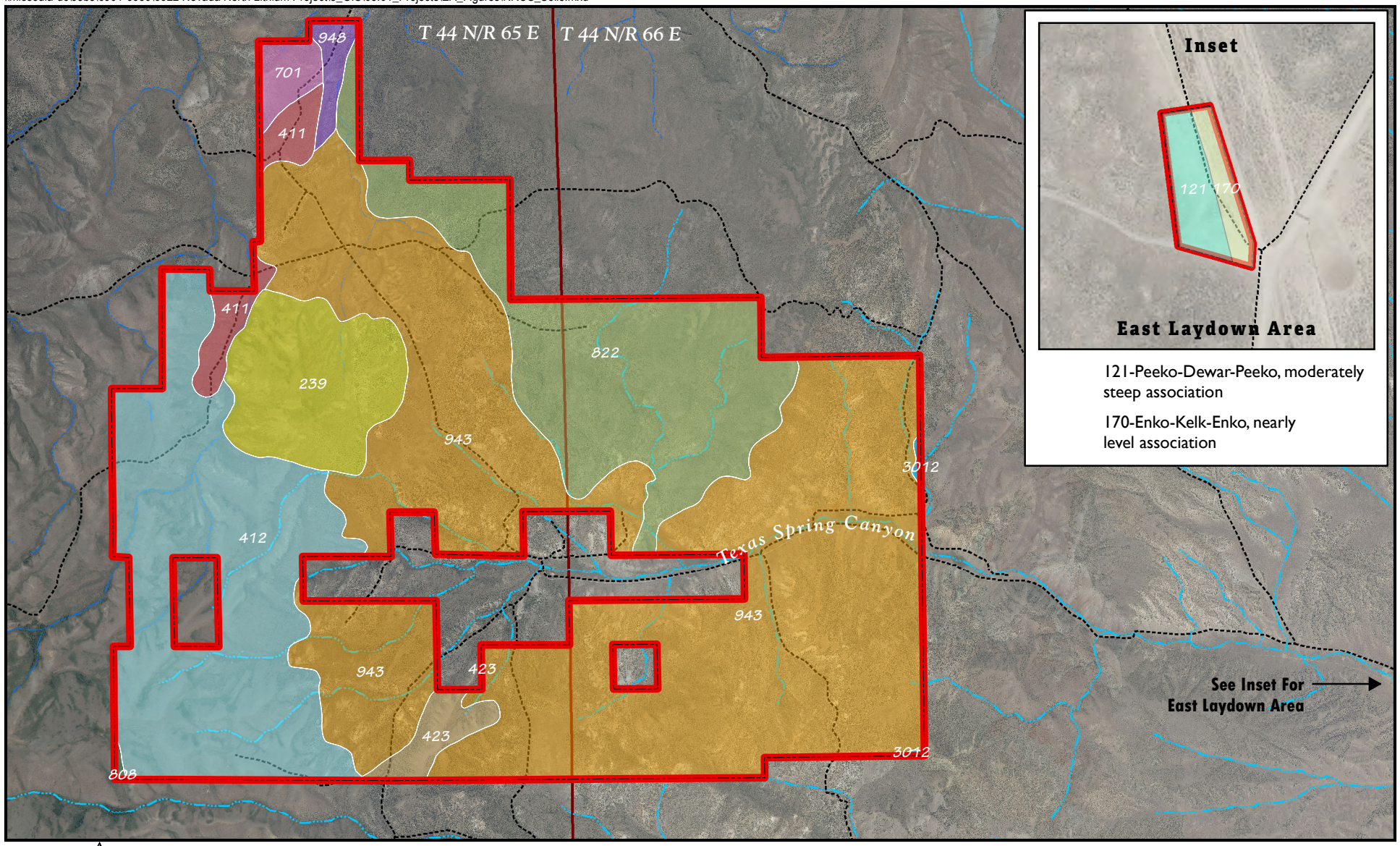
Noxious Weeds, Invasive Non-Native Species, Paleontological Resources, and Vegetation CESA
Nevada North Lithium Exploration Project
Environmental Assessment
Elko County, Nevada
FIGURE 3-2



Source: Scherzer, B., and H. Clifford, 2024

Potential Fossil Yield Classification in the Project Area
Nevada North Lithium Exploration Project
Environmental Assessment
Elko County, Nevada
FIGURE 3-3

\\missoula-dc\Jobs\6901-6950\6922 Nevada North Lithium Project\5_GIS\05.01_Projects\EA_Figures\NRCS_Soils.mxd



N

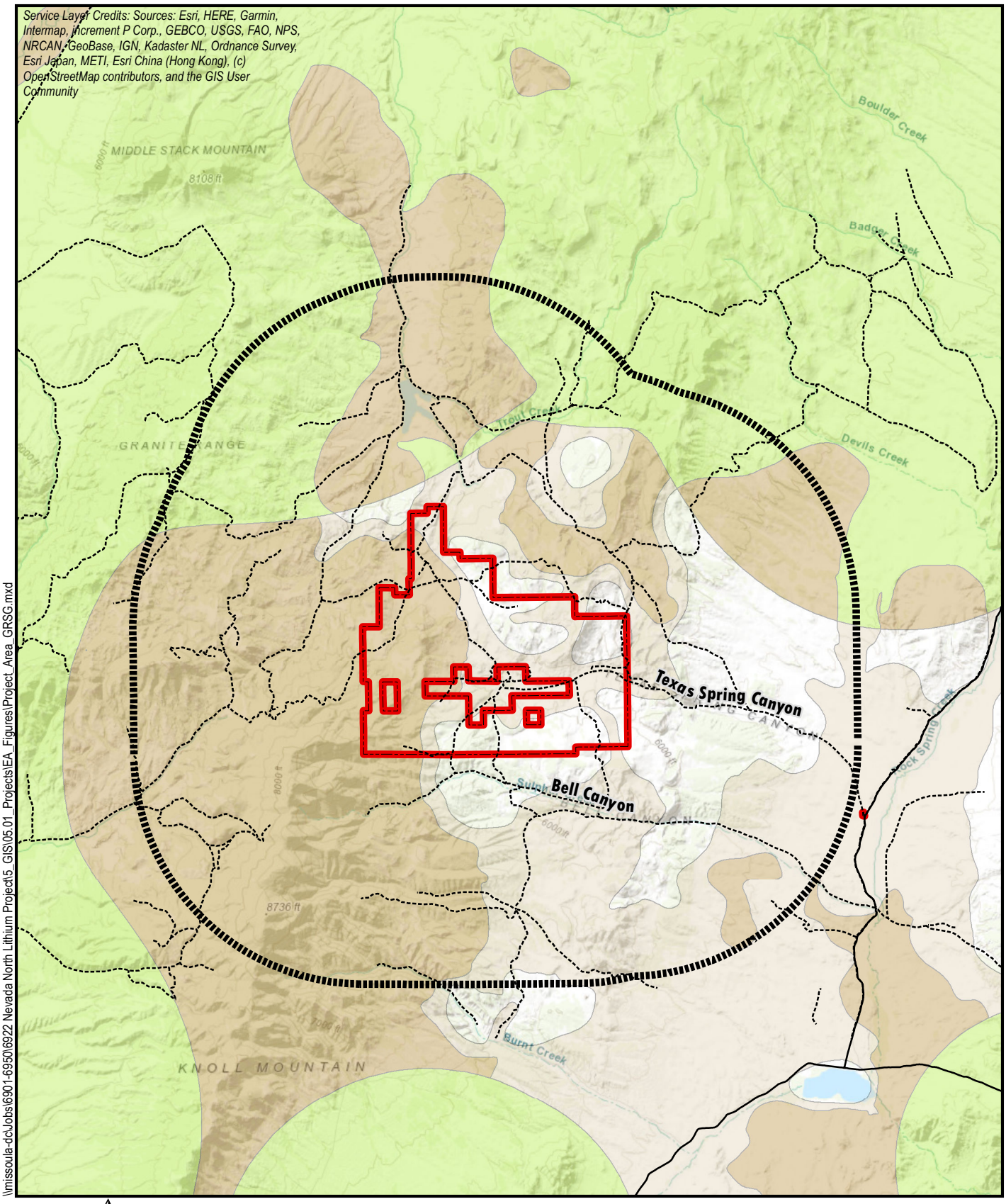
0 Miles 1

Project Area
Roads
Streams

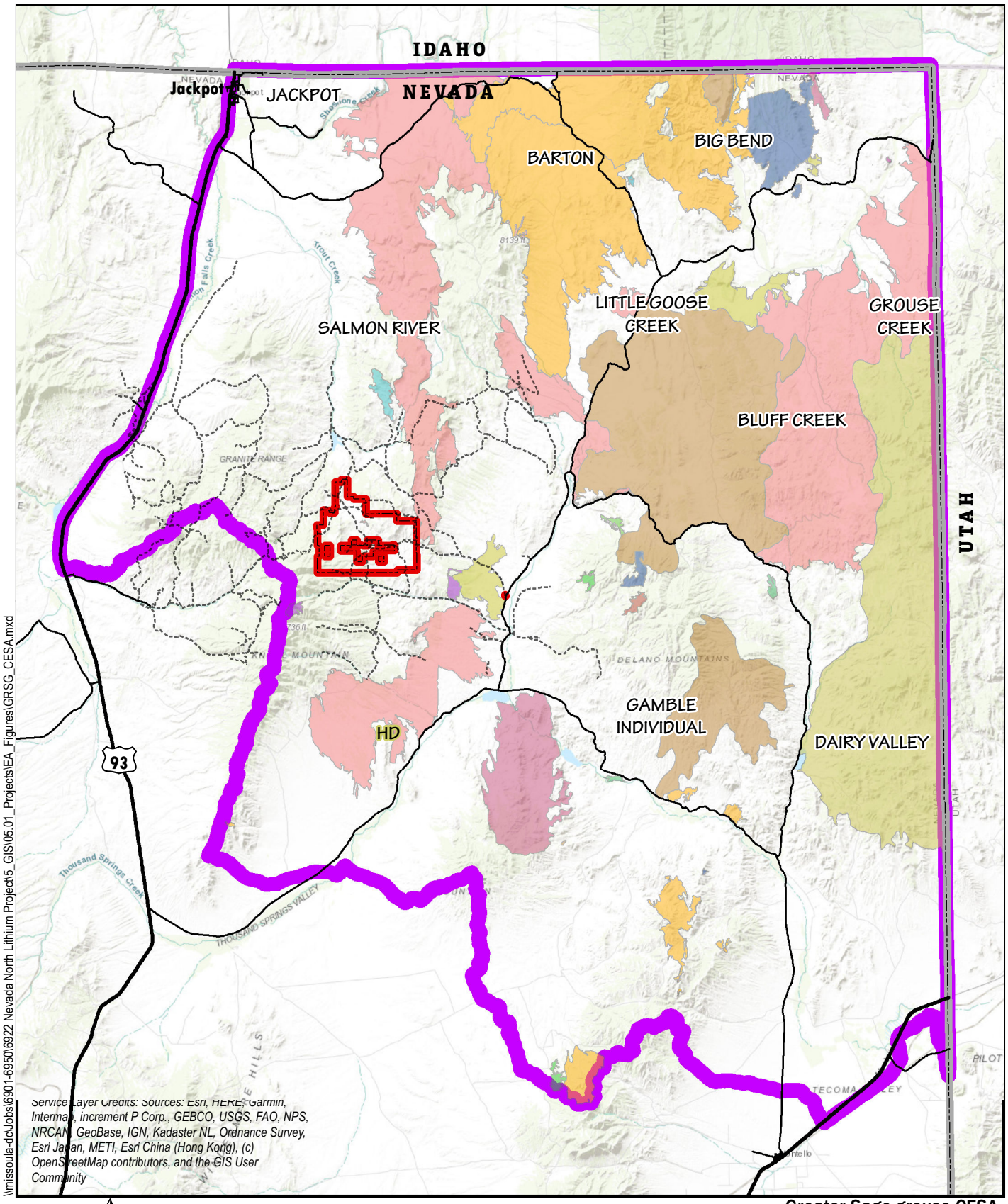
Soil Map Units - NRCS Symbol and Description

- 239-Shalcleav-Tweener-Rock outcrop association
- 3012-Tecomar-Kram-Amtoft association
- 411-Coser-Coser, moderately steep-McIvey association
- 412-Coser-Coser, moderately steep-Lerrow association
- 423-Quopant-Coser-Lerrow association
- 701-Xica-Xica, steep-Agort association
- 808-Gollaher-Cleavage-Hapgood association
- 822-Cotant-Chen-Graley association
- 943-Hundraw-Puett-Cobre association
- 948-Hundraw-Puett-Trinidad association

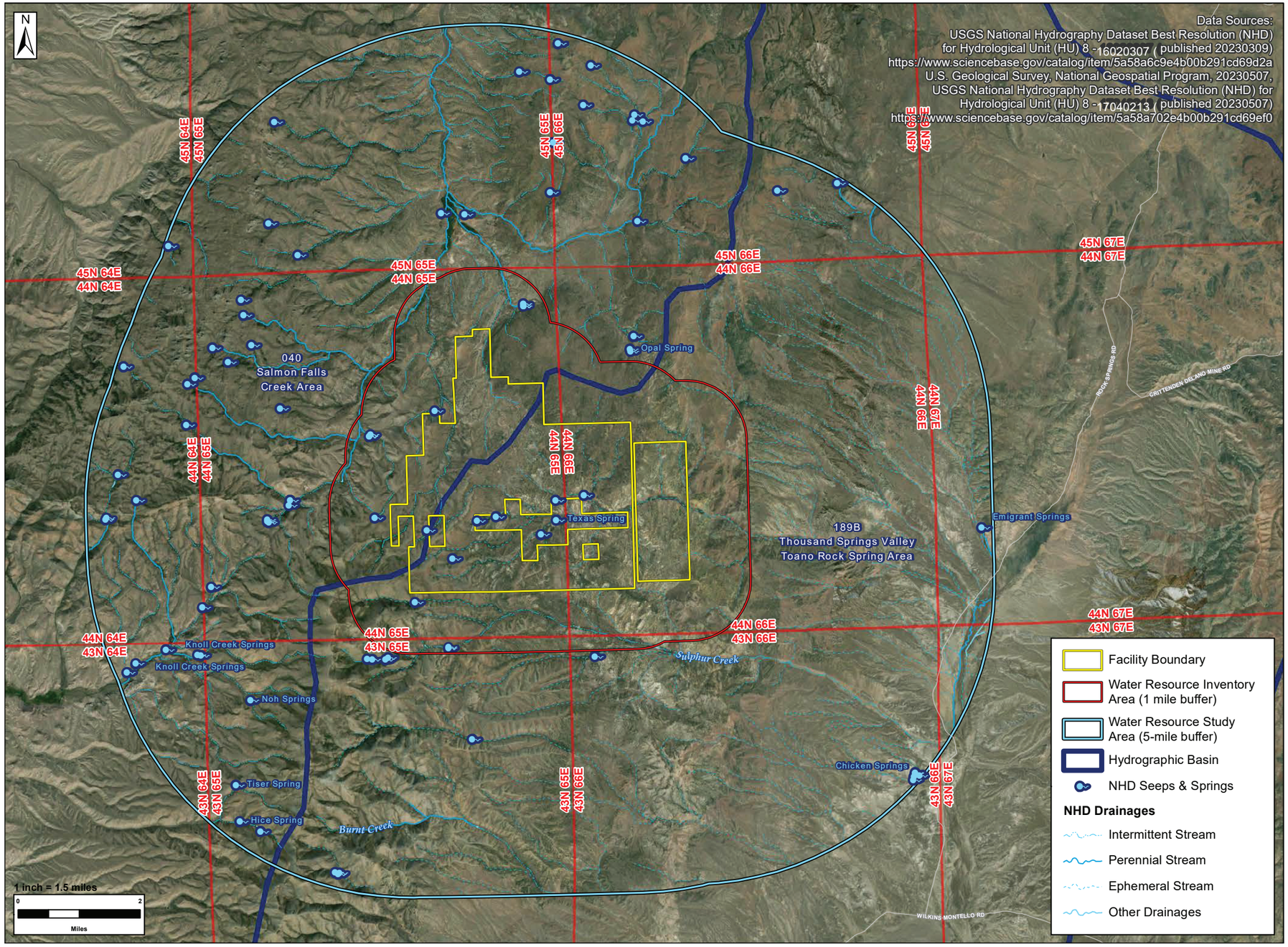
NRCS Soil Units
Nevada North Lithium
Exploration Project
Environmental Assessment
Elko County, Nevada
FIGURE 3-4



Greater Sage-grouse Habitat
in Vicinity of the Project Area
Nevada North Lithium Exploration Project
Environmental Assessment
Elko County, Nevada
FIGURE 3-5

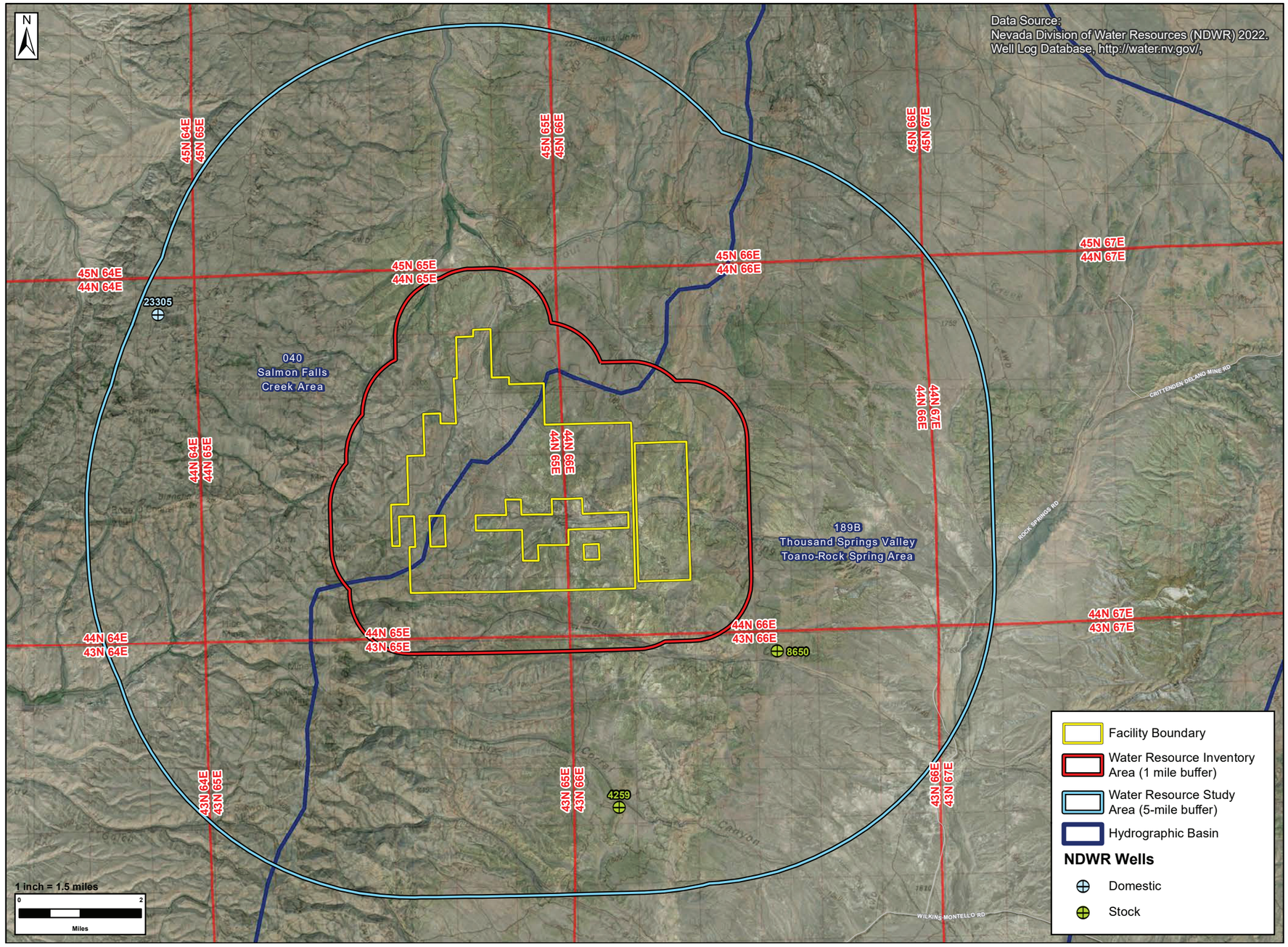


Greater Sage-grouse CESA, Grazing Allotments and Fire History
Nevada North Lithium Exploration Project
Environmental Assessment
Elko County, Nevada
FIGURE 3-6



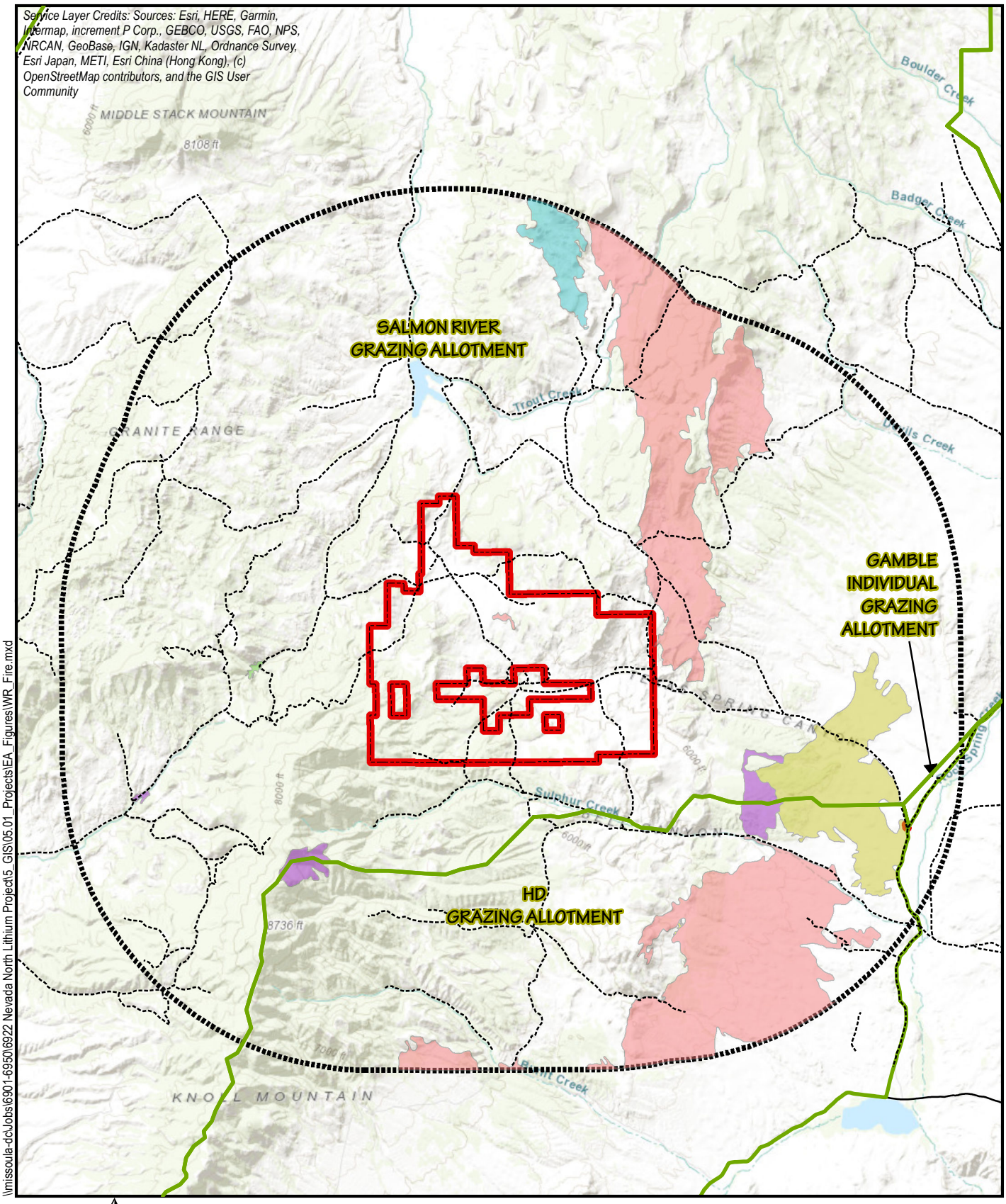
Source: UES, August 2024

Water Resources Study Area
Nevada North Lithium Exploration Project
Environmental Assessment
Elko County, Nevada
FIGURE 3-7



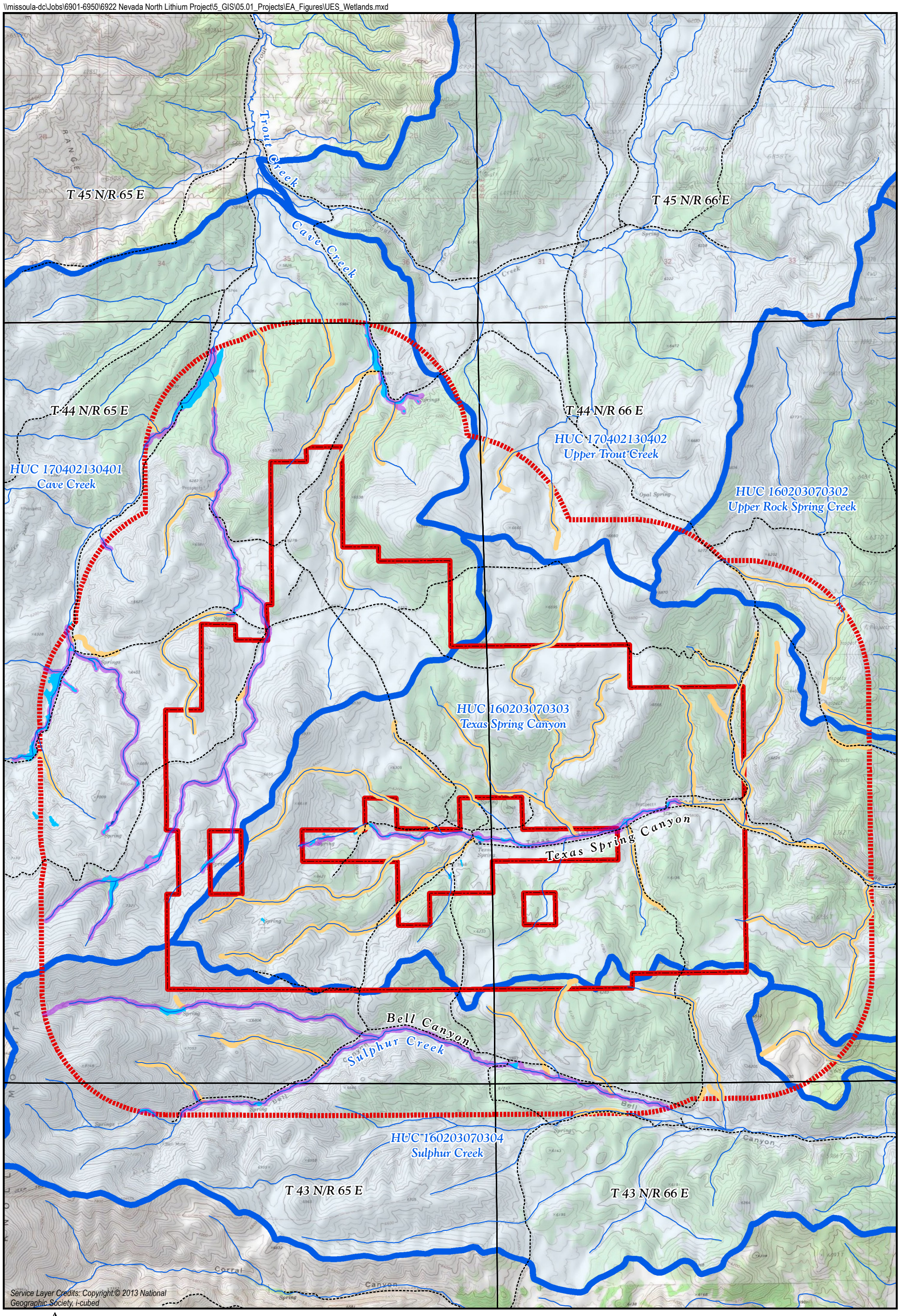
Source: UES, August 2024

NDWR Wells
Nevada North Lithium Exploration Project
Environmental Assessment
Elko County, Nevada
FIGURE 3-8



Water Quality and Quantity, Wetlands and Riparian Areas CESA
Nevada North Lithium Exploration Project
Environmental Assessment
Elko County, Nevada
FIGURE 3-9

\\missoula-dc\Jobs\6901-6950\6922 Nevada North Lithium Project\5_GIS\05.01_Projects\EA_Figures\UES_Wetlands.mxd

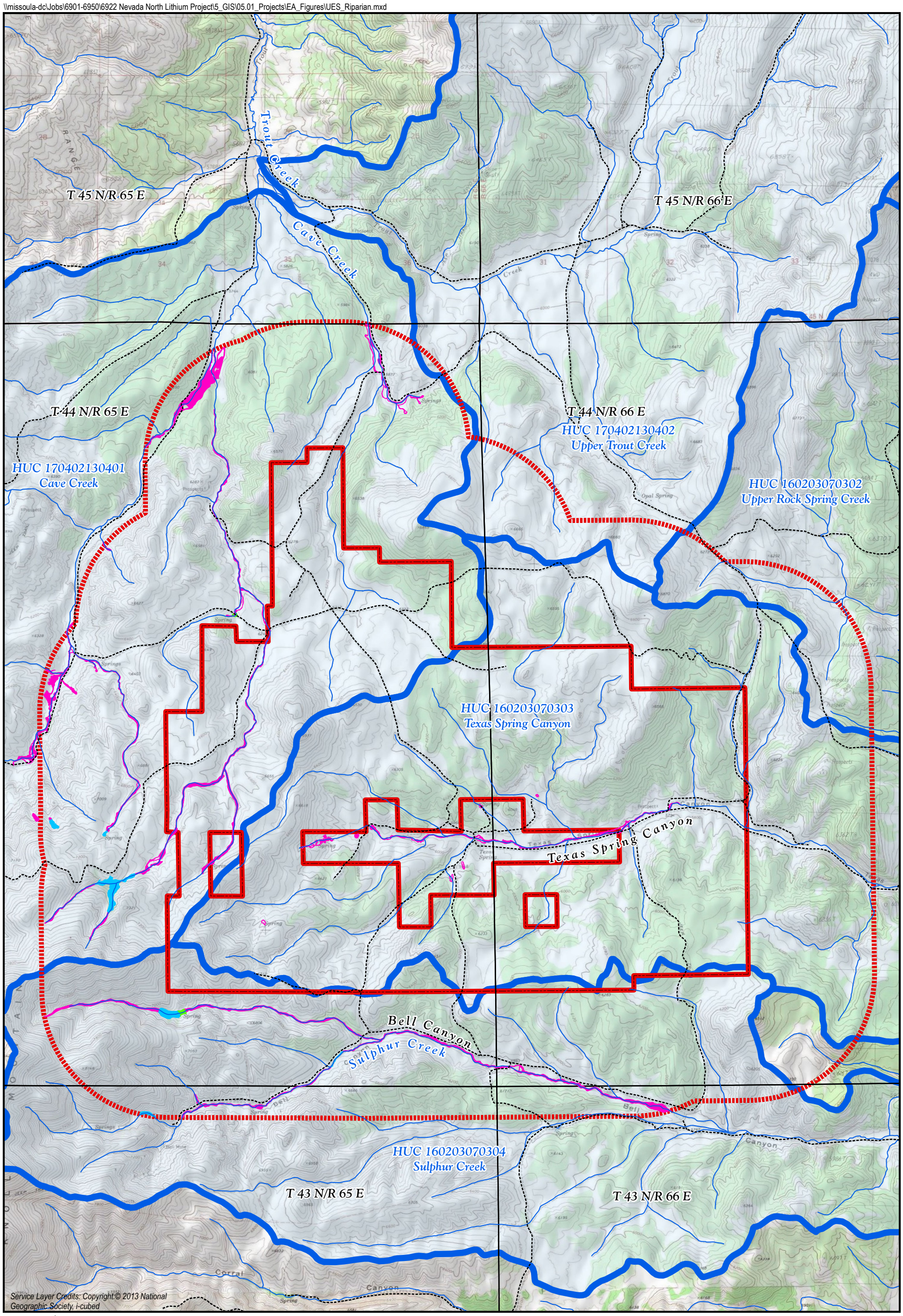


0 Feet 4,000

- Project Area
- Existing Roads
- Wetland Area of Analysis (1 mile)
- Potential Jurisdictional Wetlands (UES 2024)
- Isolated Wetlands (UES 2024)
- Relatively Permanent Water (RPW) (UES 2024)
- Non-Relatively Permanent Waters (NRPW; Ephemeral Streams) (UES 2024)
- HUC 12 Basins

Mapped Wetlands within Wetland Area of Analysis
Nevada North Lithium Exploration Project
Environmental Assessment
Elko County, Nevada
FIGURE 3-10

\\missoula-dc\Jobs\6901-6950\6922 Nevada North Lithium Project\5_GIS\05.01_Projects\EA_Figures\UES_Riparian.mxd



0 Feet 4,000

Project Area

Existing Roads

Wetland Area of Analysis (1 mile)

Riparian Classifications (UES 2024)

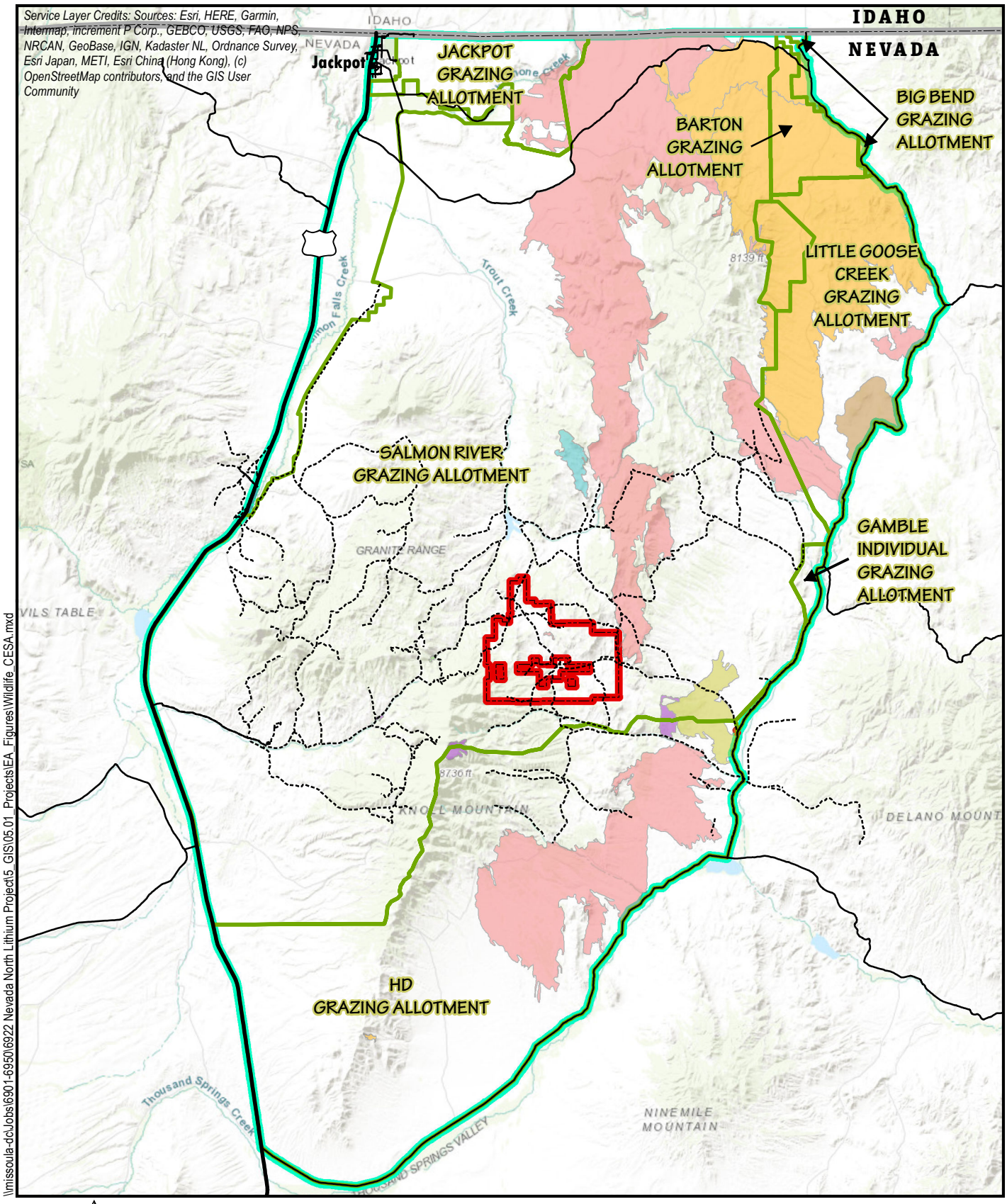
Scrub/Shrub

Emergent

Forested

HUC 12 Basins

Mapped Riparian Areas within Wetland Area of Analysis
Nevada North Lithium Exploration Project
Environmental Assessment
Elko County, Nevada
FIGURE 3-11



\\missoula-dc\Jobs\6901-6950\6922 Nevada North Lithium Project\5_GIS\05.01_Projects\EA_Figures\Wildlife_CESA.mxd

N

0 Miles 5

Project Area

Nevada Game Management Unit 076

Grazing Allotments (BLM)

Fire History (BLM)

2000 2007 2013

2002 2010 2017

2005 2011

2006 2012

Wildlife CESA, Grazing Allotments and Fire History
Nevada North Lithium Exploration Project
Environmental Assessment
Elko County, Nevada
FIGURE 3-12

Appendix B Applicant-Committed Environmental Protection Measures

APPLICANT-COMMITTED ENVIRONMENTAL PROTECTION MEASURES

Surge is committed to developing and implementing the following ACEPMs as described in the Exploration Plan of Operations for the Project (Plan; Surge, 2024a) to prevent unnecessary and undue degradation while conducting exploration and reclamation activities within the Project Area. Surge would perform exploration activities with a focus on reducing or eliminating potential environmental impacts and employing reclamation practices using proven methods which do not require ongoing maintenance. Surge would follow the general requirements established in the BLM's Surface Management Regulations under 43 CFR 3809 and the NDEP BMRR mining reclamation regulations, as well as applicable water, air quality, and other environmental protection regulations.

Air Quality

- Surge would water active roads associated exploration activities within the Project Area with a water truck to control fugitive dust, as needed.
- Surge would minimize fugitive dust generated from vehicular traffic on unpaved roads by maintaining Elko County posted, prudent, and condition-appropriate speed limits to diminish dust emissions, protect wildlife/livestock and maintain operational safety. Vehicle speed on existing roads would not exceed the posted speed limit for Elko County roads of 35 miles per hour.
- Surge would review emissions from vehicles and equipment on first operation and periodically thereafter. Equipment or vehicles with visible emissions after start-up procedures would undergo maintenance to prevent visible emissions.

Cultural and Paleontological Resources and Native American Traditional Values

- Surge would complete exploration activities in a manner that avoids all known cultural resources that are eligible for, or unevaluated relative to, inclusion in the National Register of Historic Places.
- Surge would not knowingly disturb, alter, injure, or destroy any scientifically important paleontological deposits; or any historical or archaeological site, structure, building or object on federal lands.
- Surge would be responsible for ensuring that employees, contractors, or any others associated with the Project do not damage, destroy, or vandalize archaeological or historical sites.
- If Surge discovers any cultural or paleontological resource that might be altered or destroyed by operations, the discovery would be left intact and reported to the BLM Authorized Officer.
- If significant cultural or paleontological resources are found, avoidance, recordation, and/or data recovery would be required as determined by the BLM, and at the expense of Surge.
- Cultural resources discovered by Surge representatives during authorized activities on federal land would be immediately reported to the BLM Authorized Officer by phone and in writing no longer than 48 hours after discovery. Surge would immediately suspend all operations within 330 feet (100 meters) of such discovery and protect it until an evaluation of the discovery can be made by the BLM Authorized Officer. This evaluation would determine the significance of the discovery and what mitigation measures are necessary to allow activities to proceed. Surge representatives would be responsible for the cost of evaluation and mitigation. Operations would resume only upon written authorization to proceed from the BLM Authorized Officer.
- Pursuant to 43 CFR 10.4(g), Surge representatives would notify the Local County Sheriff's Office & BLM Authorized Officer immediately by phone upon the discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony (as defined in 43 CFR 10.2). Further pursuant to 43 CFR 10.4, Surge representatives would **immediately** stop all activities within 330 feet (100 meters) of the discovery and not commence activities within that perimeter again until a notice to proceed is issued by the BLM Authorized Officer. Additionally, Surge would submit a written notification to the BLM Authorized Officer no later than 24 hours after discovery.

- As part of the Project's comprehensive training program, Surge would inform all employees and contractors of their responsibilities under the Archaeological Resources Protection Act of 1979 and the Native American Graves Protection and Repatriation Act (Public Law 101-601) and their associated penalties.
- If it appears that the undertaking would or may adversely affect historic properties, Surge would participate in any consultation activity initiated by BLM and would coordinate with the BLM to develop a Treatment Plan or Memorandum of Agreement to address all cultural resource sites within the Project Area.

Erosion and Sediment Control

- Surge would use BMPs for sediment control as needed during exploration and reclamation activities, to minimize sedimentation of disturbed areas and to prevent unnecessary or undue degradation to the environment. The BMPs would limit erosion and reduce sediment in precipitation runoff from Project facilities and disturbed and reclaimed areas. BMPs may include, but are not limited to, diversion and routing of stormwater using accepted engineering practices and the placement of erosion control devices such as sediment traps, check dams, and rock and gravel cover.
- Surge would construct sumps adjacent to drill sites to settle drill cuttings and prevent uncontrolled release of drill cuttings. In the unlikely event that road/drill site erosion is developing, and drill cuttings are released, Surge would place certified weed-free straw bales and silt fences in drainages to capture sediment, where required.
- Surge would inspect all sediment and erosion control measures periodically, and perform repairs as needed. Surge and/or the drilling contractor would not operate equipment when the ground conditions are such that excessive resource damage of increased sediment transport may occur. Where feasible, Surge would conduct activities on frozen or dry ground conditions; operations would be restricted when saturated and soft soil conditions exist to prevent driving resulting in unnecessary or undue degradation.
- Surge would construct or install any needed drainage structures to prevent or minimize erosion in keeping with sound engineering practices for the class of vehicle or equipment used for the activity. Typical drainage structures may consist of water bars, borrow ditches, contour furrows, and culverts sized to handle maximum seasonal water flows. Surge would construct roads and drill site cut banks with the appropriate slope to minimize erosion and visual effects. Diverted runoff water would be directed away from ephemeral drainages.
- When an access route passes a low water crossing or intermittent/perennial drainage, Surge would ensure that the flow of water is not obstructed.
- Surge would manage surface soils and alluvium as a growth media resource (where suitable) and remove, stockpile, and replace during reclamation. Surge would implement the Reclamation Plan included in the Plan (Surge, 2024a) to address earthwork and recontouring, revegetation and stabilization, detoxification and disposal, and monitoring operations necessary to satisfactorily reclaim proposed disturbance such as roads, drill pads, monitoring wells, bulk sample excavations, and testing sites.
- Surge would seed every fall after exploration activities are completed if the area is no longer required or inactive (other areas still required under an individual Work Plan would be completely reclaimed after 2 years following completion of Work Plan activities).

Fire Prevention and Control

- Surge would comply with applicable agency and state fire laws and regulations.
- Surge would not allow its staff or contractors to have open fires within the Project Area during the Project.

- Smoking would only be permitted in areas that are free of flammable materials and only if allowed by state law or federal regulations. If smoking is allowed, smokers would position themselves in such a manner that burning material would fall within cleared areas. Smoking materials would be extinguished by pressing said materials into mineral soils. When completely extinguished, debris associated with smoking would then be put into containers designed solely for this purpose and properly disposed of.
- Surge would ensure that vehicles and equipment operated on public and private lands and roads meet proper wildfire preparedness requirements including, but not limited to, being equipped with approved spark arrestors, fire suppression tools, and other appropriate supplies. All vehicles would carry a fire extinguisher. Power equipment would be equipped with fire extinguishers, buckets, and shovels during the exploration program.
- Surge would ensure that adequate firefighting equipment (i.e., shovel, Pulaski-type tool, extinguisher[s]), and/or an ample water supply is kept at the drill site(s).
- Surge would establish an effective communications network consisting of radios, cellular telephones and/or satellite phones within the Project Area. Crew vehicles and equipment would be equipped with radios and/or cellular telephones for fire preparedness and prevention, suppression operations, and emergency purposes. Crew vehicles and equipment would also be equipped with an emergency communication list that would include numbers for the administering agency emergency contact.
- Surge would inspect vehicle catalytic converters often and clean all brush and grass debris from them.
- If welding activities are required, Surge would ensure that they are conducted in an area free from or mostly free from vegetation. An ample water supply and shovel would be on hand to extinguish any fires created from the sparks. During welding operations, extra personnel would be on site to watch for fires created by the sparks.
- Surge would immediately report any wildland fires to the Elko Interagency Dispatch Center at (775) 748-4000.

Migratory Birds and Raptors Protection

- To the extent possible, schedule land clearing and surface disturbance to occur outside the avian breeding season to prevent destruction of active bird nests, eggs, hatchlings, etc. (April 1 to July 31 for most migratory bird species; February 15 to May 15 for pinyon jays), and January 1 to August 31 for bald and golden eagles annually (in accordance with BLM policies) to comply with the MBTA and the BGEPA.
    - If surface disturbance associated with Project Activities is unavoidable during the avian breeding and nesting season, Surge would rely on a qualified environmental specialist or biologist to survey areas proposed for disturbance to determine the presence of active nests immediately prior to Project activities. Migratory bird nest surveys would be conducted no more than 5 days ahead of ground-disturbing activities (USFWS, 2015).
    - Should active nests be located, or if other evidence of nesting is observed (e.g., mating pairs, territorial defense, adults carrying nesting material, or transporting of food), Surge would avoid the area to prevent destruction or disturbance of nests until the birds are no longer present. The dimension of the avoidance area (buffer zone) for migratory birds would depend on the proposed activity, habitat type, and species present and should be coordinated with the local or regional USFWS office (USFWS, 2015). For raptor nests, the seasonal “no activity” avoidance area/spatial buffer zone would be listed by species in the Utah Field Guidelines for Raptor Protection from Human and Land use Disturbances (USFWS, 2002; 2023) and the California-Great Basin Region’s Recommended Buffer Zones for Ground-based Human Activities around Nesting Sites of Golden Eagles in California and Nevada (USFWS 2021).

    - The start and end dates of the seasonal restriction along with avoidance areas and buffer requirements would be coordinated with BLM and based on site-specific information, such as elevation and winter weather patterns, which affect breeding chronology.
- Minimize traffic and reduce vehicle speed to diminish dust emissions to protect wildlife and their habitat and reduce disturbance.
- Use existing disturbed land to the extent practicable to reduce areas of new disturbances. Surge would avoid surface disturbing activities within sites designated by BLM as Key Monitoring Areas.
- Conduct reclamation activities concurrent with exploration activities when portions of the disturbed areas are no longer needed. Reclamation would begin within inactive exploration areas at the earliest practicable time. Surge would return disturbed areas to a condition which would support land uses which existed prior to the onset of exploration activities, such as wildlife habitat.
- Surge would conduct early season diurnal raptor nest surveys (January-April) and would postpone exploration activities or relocate disturbance outside of standard USFWS buffer distances if active raptor nests are found.

Noxious Weeds, Invasive and Non-Native Species

- Control the spread of noxious weeds through implementation of the following:
    - Concurrent reclamation efforts
    - Removal of invasive, non-native, and noxious weeds on reclaimed areas
    - Washing vehicles, drill rigs, and heavy equipment prior to entering the Project Area
    - Avoiding areas of known invasive, non-native, and noxious weeds during events which increase likelihood of spread by vehicles (e.g., seed dispersal).
- Use only certified weed-free straw bales to control erosion, where required.
- Reseed disturbed areas consistent with BLM recommendations for seed mix species, application rate, and seeding methods. The seed mix would ensure completion of reclamation per 43 CFR 3809.420 (b)(3)(ii)(d) and provide species that can exist in the Project Area, and/or are native species found in the plant communities prior to disturbance.
- Monitor revegetation success and presence of noxious weeds on an annual basis.
- Control weeds during the appropriate season to eradicate infestations of noxious weeds, if necessary. Any eradication of noxious weed infestations that require the use of herbicide applications would require coordination with the BLM noxious weed specialist.
- Prior to using herbicides on BLM-administered lands, a PUP form would be completed and filed with the BLM Wells Field Office.
- Herbicides would only be applied in a manner consistent with the approved PUP and applied only by a Nevada-certified applicator that holds a B2 license.

Public Safety

- Surge would maintain public safety throughout all exploration activities and would maintain equipment and other facilities in a safe and orderly manner.
- Surge would construct roads to the minimum width needed for safe access to exploration sites.
- Surge would reclaim drill sites, sumps, and excavations after the completion of sampling and logging and upon determination that the disturbance is no longer needed for exploration activities. Surge would backfill the sumps after drilling is complete or once there is no standing water present in the excavation. Surge would not leave sumps open over the seasonal closure (winter) or during a temporary closure period.
- All drill sites, test pits, sumps, and other small excavations that pose a hazard or nuisance to the public, wildlife, or livestock would be built with a sloped end for easy egress and adequately fenced to preclude access.

- Surge would restrict activities to frozen or dry ground conditions where feasible; operations would be restricted when saturated and soft soil conditions exist.
- If any existing roads are degraded because of Surge's exploration activities, Surge would return these disturbances to their original or better condition. Surge is committed to returning disturbed areas to a condition which would support land uses like those which existed prior to the onset of exploration activities.

Solid Waste and Hazardous Materials Management

- Surge would manage regulated wastes according to applicable regulations. Surge would comply with applicable Federal and state standards for the disposal and treatment of solid wastes, including regulations issued pursuant to the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act (RCRA).
- Surge would verify that all waste is properly labeled, stored, and disposed of properly pursuant to 43 CFR 8365.1-1(b)(3). No sewage, petroleum products, or refuse would be dumped from any equipment or vehicle.
- Employee training would outline appropriate disposal practices, which includes the allowable waste that can be placed in a landfill, management of used filters, oily rags, aerosol cans, and other regulated substances. Surge would remove all solid waste from the Project Area and dispose of it in a state, federal, or local designated site on a weekly basis.
- Surge would not dispose of refuse on site.
- Surge would transport, store, and use hazardous materials in accordance with federal, state, and local regulations and would train employees in the proper transportation, use, and disposal of hazardous materials.
- Surge would also ensure that Safety Data Sheets (SDSs) for all materials used onsite are stored and available to all employees.
- Surge would label all hazardous substances containers and would handle the material in accordance with Nevada Department of Transportation and Mining Safety and Health Administration.
- Surge and its contractor would keep spill kits (including leak pans, rags, granular sorbents, and/or blotters) at the staging area and on the fueling truck to clean any leaks, spills, or drips.
- In the event of a spill, Surge would take appropriate measures to control the spill, and would notify the BLM, NDEP, and/or the Emergency Response Hotline, as required. Surge would clean up in a timely manner any oil, hazardous material, or chemicals that spill during exploration activities. After cleaning, the oil, toxic fluids, or chemicals and any contaminated material would be removed from the site and disposed of at an approved disposal facility. Contract drillers would maintain spill kits on site for use in case of a spill.
- Self-contained, portable, chemical toilets would be used for human waste. Similar to current practice under the Notice, Surge would use up to four portable toilets (as needed) and move them close to the drill rigs as drilling progresses. Surge would take the portable toilets off site for service and maintenance, or a contractor may service the facilities on site on a weekly basis. Surge would not bury human waste and toilet chemicals on site. Portable sanitary facilities would be positioned to prevent overturning during high winds and would be inspected on a weekly basis.

Special Status Species

- To the extent possible, schedule land clearing, surface disturbance, and reclamation activities to occur outside the avian breeding season to prevent destruction of active bird nests, eggs, hatchlings, etc. (April 1 to July 31 for most migratory birds species; February 15 to May 15 for pinyon jays), and January 1 to August 31 for diurnal raptors including bald and golden eagles annually (in accordance with BLM policies) to comply with the BGEPA and MBTA. EPMs specific to migratory birds and raptors are detailed in the Plan (Surge, 2024).

    - If surface disturbance associated with Project activities is unavoidable during the avian breeding and nesting season, Surge would rely on a qualified environmental specialist or biologist to survey areas proposed for disturbance to determine the presence of active nests immediately prior to Project activities.
    - Should active nests be located, or if other evidence of nesting is observed (e.g., mating pairs, territorial defense, adults carrying nesting material, or transporting of food), Surge would avoid the area to prevent destruction or disturbance of nests until the birds are no longer present. The dimension of the avoidance area (buffer zone) would depend on the proposed activity, habitat type, and species present and should be coordinated with the local or regional USFWS office (USFWS, 2015). For raptor nests, the seasonal "no activity" avoidance area/spatial buffer zone would be listed by species in the Utah Field Guidelines for Raptor Protection from Human and Land use Disturbances (USFWS, 2002; 2023) and the California-Great Basin Region's Recommended Buffer Zones for Ground-based Human Activities around Nesting Sites of Golden Eagles in California and Nevada (USFWS 2021).
    - The start and end dates of the avian breeding season (e.g., seasonal restriction) along with avoidance areas and buffer requirements would be coordinated with BLM and based on site-specific information, such as elevation and winter weather patterns, which affect breeding chronology.
- Continue annual GRSG lek surveys at the Corral Canyon 1 and Texas Springs Lek throughout the duration of the exploration project.
- Minimize traffic and reduce vehicle speed to diminish dust emissions to protect wildlife and their habitat and reduce disturbance.
- Use existing disturbed land to the extent practicable to reduce areas of new disturbances. Surge would avoid surface disturbing activities within sites designated by BLM as Key Monitoring Areas.
- Perform reclamation activities concurrently with exploration activities.
- Surge would return disturbed areas to a condition which would support land uses which existed prior to the onset of exploration activities, such as wildlife habitat. Reseeding disturbance associated with Project activities using BLM recommended seeding rates, methods, and compositions. The seed mix is presented in the Plan (Surge, 2024). The seed mix would ensure completion of reclamation per 43 CFR 3809.420 (b)(3)(ii)(d) and provide species that can exist in the Project Area, and/or are native species found in the plant communities prior to disturbance.
- Surge would monitor revegetation success and the presence of noxious weeds on an annual basis until bond release.
- Earthwork and revegetation activities are limited to the time of year during which they can be effectively implemented. Site conditions and/or yearly climatic variations may require that this schedule be modified to achieve revegetation success. Reclamation can be judged successful when a self-sustaining, vigorous, diverse, native (or otherwise approved) plant community is established on the site, with a density sufficient to control erosion and non-native plant invasion to re-establish wildlife habitat or forage production (NDEP, 2016). Site monitoring for stability and revegetation success would be conducted for a minimum of 3 years until attainment of the revegetation standards established in the Guidelines for Successful Revegetation for the NDEP, BLM, and U.S. Department of Agriculture (USDA) Forest Service (NDEP, 2016) and approval by the BLM (Surge, 2024). Surge would coordinate reclamation activities with the BLM and BMRR, as necessary.
- If exploration activities occur near riparian areas (preferential habitat for many bat species), Surge would implement measures to minimize potential impacts to bat species, including:
    - Shielding drill rig lights and directing the lights at the work areas during night operations to minimize attracting bats and insects or disrupting light patterns near roosting sites.

    - Eliminating open holes in the drill rig area.
- If disturbance within potential pygmy rabbit habitat is proposed in the Project Area, pre-clearance surveys would be conducted prior to disturbance per BLM pygmy rabbit survey protocol to determine occupancy. If pygmy rabbits are determined to be present, the area would be mowed per BLM guidelines, and any activity would be delayed for 7 days to perform activities at that site.
- All sumps and other small excavations would be constructed with a sloped end for egress and fenced to prevent entrapment of wildlife and livestock. Surge would install a fence (standard four-foot-high safety fence) around the perimeter of the sumps at the drill sites and would construct the sump such that there is a slope at one end to allow wildlife egress. Surge would ensure that the slope of the egress would be adequate (i.e., the egress ramp would be long enough) for an animal to escape. In the event wildlife accesses the sump, the animal would be able to exit the sump via the sloped egress.
- Manage surface soils and alluvium as a growth media resource (where suitable) and remove, stockpile, and replace during reclamation per 43 CFR 3809 regulations.
- Shield and redirect drill rig lights and lights at work areas to minimize disrupting light patterns that could negatively influence the behavior of special status species.

Survey Monuments

- During exploration activities, Surge would not tamper with or destroy any existing survey monuments according to 43 CFR 3809.420(b)(9). Surge would protect all survey monuments, witness corners, and reference monuments to the extent economically and technically feasible.
- During exploration activities, if any monuments, corners, or accessories are destroyed, Surge would immediately report the matter to the authorized officer. Prior to obliteration, destruction, or damage during surface disturbing activities, Surge would contact BLM to develop a plan for any necessary restoration or re-establishment activity of the affected monument. Surge would bear the cost for the restoration or re-establishment activities including the fees for a Nevada Professional Land Surveyor.

Vegetation

- Manage surface soils and alluvium as a growth media resource (where suitable) and remove, stockpile, and replace during reclamation (43 CFR 3809.420(b)(3)(i, ii)).
- Earthwork and revegetation activities are limited to the time of year during which they can be effectively implemented. Site conditions and/or yearly climatic variations may require that this schedule be modified to achieve revegetation success. Surge would coordinate reclamation activities with the BLM and BMRR, as necessary.
- Reclamation activities would be conducted concurrently with exploration activities when portions of the disturbed areas are no longer needed. Reclamation would begin within inactive exploration areas at the earliest practicable time (43 CFR 3809.420(b)(3)(i, ii)).
- To the extent possible, schedule land clearing and surface disturbance to occur outside the avian breeding season to prevent destruction of active bird nests, eggs, hatchlings, etc. (April 1 to July 31 for most migratory bird species; February 15 to May 15 for pinyon jays), and January 1 to August 31 for bald and golden eagles annually
- Reseeding would be consistent with BLM recommendations for seed mix species, application rate, and seeding methods as presented in the Plan (Surge, 2024a). Consistent with BLM regulations 43 CFR 3809.420, reclamation would return disturbed areas to a condition which would support land uses which existed prior to the onset of exploration activities including grazing, wildlife habitat, recreation, and mineral exploration and development. The seed mix would ensure completion of reclamation per 43 CFR 3809.420 (b)(3)(ii)(d) and provide native perennial plant species that are adapted to the dominant vegetation community types throughout the Project Area.

- Surge would monitor revegetation success and the presence of noxious weeds on an annual basis until bond release. Reclamation can be judged successful when a self-sustaining, vigorous, diverse, native (or otherwise approved) plant community is established on the site, with a density sufficient to control erosion and non-native plant invasion to re-establish wildlife habitat or forage production (NDEP, 2016). Site monitoring for stability and revegetation success would be conducted for a minimum of 3 years until attainment of the revegetation standards established in the *Guidelines for Successful Revegetation for the NDEP, BLM, and USDA Forest Service* (NDEP, 2016) and approval by the BLM.

Visual Resources

- Surge would manage surface soils and alluvium as a growth media resource (where suitable) and salvage, stockpile, and replace during reclamation. Surge would implement the Reclamation Plan included in the Project's Plan (Surge, 2024a) to address earthwork and recontouring, revegetation.
- Reclamation activities would be conducted concurrently with exploration activities when portions of the disturbed areas are no longer needed. Reclamation would begin within inactive exploration areas at the earliest practicable time; Surge would seed every fall after exploration activities are completed.
- Surge would direct lights for the portable light plants to the active working area only to ensure proper lighting and safety are achieved and away from areas not in use. Lighting fixtures would be hooded and shielded as appropriate.
- Surge would use existing roads to the extent possible to reduce disturbances and modifications to the landscape.
- Surge would minimize vegetation clearing and soil disturbance to the extent possible.

Water Resources

- Surge and the drilling contractor would ensure drill water, fluid products used for drilling and drill holes abandonment activities, and drill cuttings are contained in sumps constructed at each drill site.
- Surge would abandon mineral exploration and development drill holes, monitoring and observation wells, and production wells subject to NAC 534 to prevent potential contamination of water resources. After completion of an exploration drill hole (before moving the drill rig to another location), Surge would survey and plug the drill hole in accordance with NAC 534.4371.
- Surge would control surface water drainage by diverting stormwater, isolating facility runoff, and minimizing erosion.
- Surge would use stormwater industry-wide BMPs at exploration sites such as check dams (e.g., certified weed-free hay bales), filter fences, and drainage structures where necessary to prevent or minimize erosion and sedimentation.
- Surge would follow the Spill Contingency Plan (Surge, 2024b).
- Surge would use BMPs for sediment control as needed during exploration and reclamation activities to minimize sedimentation of disturbed areas and to prevent unnecessary or undue degradation to the environment. The BMPs would limit erosion and reduce sediment in precipitation runoff from Project facilities and disturbed and reclaimed areas. BMPs may include, but are not limited to, diversion and routing of stormwater using accepted engineering practices and the placement of erosion control devices such as sediment traps, check dams, and rock and gravel cover.
- Surge would construct sumps adjacent to drill sites to settle drill cuttings and prevent uncontrolled release of drill cuttings. In the unlikely event that road/drill site erosion is developing, and drill cuttings are released, Surge would place certified weed-free straw bales and silt fences in drainages to capture sediment, where required.

- Surge would inspect all sediment and erosion control measures periodically, and perform repairs as needed. Surge and/or the drilling contractor would not operate equipment when the ground conditions are such that excessive resource damage of increased sediment transport may occur. Where feasible, Surge would conduct activities on frozen or dry ground conditions; operations would be restricted when saturated and soft soil conditions exist to prevent driving resulting in unnecessary or undue degradation.
- Surge would construct or install any needed drainage structures to prevent or minimize erosion in keeping with sound engineering practices for the class of vehicle or equipment used for the activity. Typical drainage structures may consist of water bars, borrow ditches, contour furrows, and culverts sized to handle maximum seasonal water flows. Surge would construct roads and drill site cut banks with the appropriate slope to minimize erosion and visual effects. Diverted runoff water would be directed away from ephemeral drainages.
- When an access route passes a low water crossing or intermittent/perennial drainage, Surge would ensure that the flow of water is not obstructed.
- Surge would avoid disturbing areas where surface water streams, springs, or inundated/saturated soils are present.

Wetlands and Riparian Areas

- Surge would avoid any disturbance that overlaps the mapped wetland and riparian areas.
- Surge would control surface water drainage by diverting stormwater, isolating facility runoff, and minimizing erosion. Surge would construct sumps adjacent to drill sites to settle drill cuttings and prevent uncontrolled release of drill cuttings.
- Surge would use stormwater industry-wide BMPs at exploration sites such as check dams (e.g., certified weed-free hay bales), filter fences, and drainage structures where necessary to prevent or minimize erosion and sedimentation. Surge would inspect all sediment and erosion control measures periodically, and perform repairs as needed.
- Where feasible, Surge would conduct activities on frozen or dry ground conditions; operations would be restricted when saturated and soft soil conditions exist. Surge would avoid disturbing areas where surface water, streams, springs, or inundated/saturated soils are present.
- When an access route passes a low water crossing or intermittent/perennial drainage, Surge would ensure that the flow of water is not obstructed.
- Reclamation activities would be conducted concurrently with exploration activities when portions of the disturbed areas are no longer needed. Reclamation would begin within inactive exploration areas at the earliest practicable time (43 CFR 3809.420(b)(3)(i, ii)).

Wildlife

- If exploration activities occur near riparian areas with potential bat habitat, Surge would implement measures to minimize potential impacts to bat species, including:
    - Shielding drill rig lights and directing the lights at the work areas to minimize attracting bats and insects during night operations.
    - Eliminating open holes in the drill rig area.
- Existing disturbed land would be used to the extent practicable to reduce areas of new disturbances. Surface disturbing activities would be avoided within sites designated by BLM as Key Monitoring Areas.
- All sumps and other small excavations would be constructed with a sloped end for egress and fenced to prevent the entrapment of wildlife and livestock. Surge would install a fence (standard four-foot-high safety fence) around the perimeter of the sumps at the drill sites and would construct the sump such that there is a slope at one end to allow wildlife egress. Surge would ensure that the slope of the egress would be adequate (i.e., the egress ramp would be long enough)

for an animal to escape. In the event wildlife accesses the sump, the animal would be able to exit the sump via the sloped egress.

- Reseeding would be consistent with BLM recommendations for seed mix species, application rate, and seeding methods as presented in the Plan (Surge, 2024a).
- Vehicle speed on existing roads would not exceed the speed limit for Elko County roads of 35 miles per hour.
- Conduct reclamation activities concurrent with exploration activities when portions of the disturbed areas are no longer needed. Reclamation would begin within inactive exploration areas at the earliest practicable time. Surge would return disturbed areas to a condition which would support land uses which existed prior to the onset of exploration activities, such as wildlife habitat.

Appendix C Cumulative Effects Study Areas

CUMULATIVE EFFECTS STUDY AREAS

Major past and present land uses and disturbances within the resource CESAs that are projected to continue into the future include construction of roads and highways, power transmission, communication sites, telecommunications, and irrigation/water Facilities. mineral exploration, and mineral material disposal sites. Dispersed recreation (including primitive camping, hunting, and OHV use) and livestock grazing also occur and are expected to continue in portions of the CESAs.

RFFAs are defined as federal and non-federal activities not yet undertaken, but sufficiently likely to occur that a Responsible Official of ordinary prudence would take such activities into account in reaching a decision (43 CFR § 46.30). These federal and non-federal activities that must be considered in the analysis of cumulative impact include, but are not limited to, activities for which there are existing decisions, funding, or proposals identified by the BLM. For minerals and ROWs, this includes only those projects submitted to the BLM for processing. RFFAs in the CESA include livestock grazing, ROW construction and maintenance, mineral exploration and mining, dispersed recreation, and potential wildland fires.

Acres of disturbance from past, present, and RFFAs within each CESA are in **Table C-1**.

Table C-1 Past, Present, and Reasonably Foreseeable Future Actions Disturbance Acres

Past, Present, and RFFA Disturbances	Migratory Birds and Raptors, Special Status Species CESA	Noxious Weeds, and Non-Native Invasive Species, Paleontological Resources, Vegetation CESA	Greater Sage-Grouse CESA	Water Quality and Quantity, Wetlands and Riparian Zones CESA	Wildlife CESA
CESA Definition and Acres	Hydrologic Unit Code (HUC 10) Watershed Boundary, 197,311 acres	Project Area, 7,819 acres	NDOW GRSG Gollaher Population Management Area, 944,705 acres	5-mile Buffer Area from the Project Area, 109,776 acres	NDOW GMU 76, 447,150 acres
Figure Number	Figure 3-1	Figure 3-2	Figure 3-6	Figure 3-9	Figure 3-12
Past and Present Actions					
Rights-of-Way					
Roads and Highways	660.5	1.0	3,173	494	3,086
Power Transmission	436	0	9,546	8,767	8,767
Communication Sites	0.1	0	26.5	80.0	1.2
Telecommunications	0	0	965	0	24
Irrigation/Water Facilities	0	0	10.5	0	10.4
Total	**1,096.6**	**1.0**	**13,721**	**9,341**	**11,888.6**
Mineral Actions					
Authorized and Expired Notices	10	4.82	13.6	9	10
Authorized Plans of Operations	0	0	0	0	0
Mineral Material Disposal Sites	2	0	66	0	213
Total	**12**	**4.82**	**79.6**	**9**	**223**
Past and Present Actions Total	**1,108.6**	**5.82**	**13,800.6**	**9,350**	**12,111.6**
Percent of CESA	**0.56**	**0.07**	**1.46**	**8.51**	**2.7**
Fires	**54,997**	**20.0**	**450,590**	**15,637**	**122,106**
Reasonably Foreseeable Future Actions					
Rights-of-Way	**0**	**0**	**0**	**0**	**0**
Mineral Actions	**0**	**0**	**0**	**0**	**0**
Total	**0**	**0**	**0**	**0**	**0**

Appendix D Air Emissions Inventory Summary

Air Emissions Inventory Summary

Nevada North Lithium Exploration Project

Criteria Pollutant Emissions

Pollutant	Hourly Emissions (pounds per hour)*	Annual Emissions (US tons/year)	Annual Emissions (metric tons/year)
NOx	5.56	5.08	4.61
CO	49.35	45.75	41.50
SOx	17.00	15.55	14.11
PM_{10}**	0.14	0.13	0.12
$PM_{2.5}$**	0.14	0.13	0.12
VOC	20.49	18.74	17.00

** Hourly emissions are a worst-case scenario, assuming all vehicles/equipment operate simultaneously.*

*** Particulate emissions from operating equipment is assumed to be 50% $PM_{2.5}$ and 50% PM_{10}.*

Hazardous Air Pollutant (HAP) Emissions

Pollutant	Hourly Emissions (pounds per hour)*	Annual Emissions (US tons/year)	Annual Emissions (metric tons/year)
Benzene	0.0175	0.0186	0.0168
Toluene	0.0077	0.0081	0.0074
Xylenes	0.0054	0.0057	0.0051
1,3-Butadiene	0.0007	0.0008	0.0007
Formaldehyde	0.0222	0.0235	0.0213
Acetaldehyde	0.0144	0.0153	0.0138
Acrolein	0.0017	0.0018	0.0017
Naphthalene	0.0016	0.0017	0.0015

** Hourly emissions are a worst-case scenario, assuming all vehicles/equipment operate simultaneously.*

Greenhouse Gas (GHG) Emissions

Pollutant	Hourly Emissions (pounds per hour)*	Annual Emissions (US tons/year)	Annual Emissions (metric tons/year)
CO_2	9,539.14	8,724.38	7,914.63

** Hourly emissions are a worst-case scenario, assuming all vehicles/equipment operate simultaneously.*

Fugitive Dust Emissions - Phase 1, 35 acres

Pollutant	Hourly Emissions (pounds per hour)*	Annual Emissions (US tons/year)	Annual Emissions (metric tons/year)
PM_{10}	40.91	89.59	81.27
$PM_{2.5}$	4.09	8.96	8.13

Acronyms and Abbreviations	
NOx	Nitrogen Oxides
CO	Carbon Monoxide
SOx	Sulfure Dioxide
HAP	Hazardous Air Pollutant
PM_{10}	Particulate Matter less than 10 microns in Diameter
$PM_{2.5}$	Particulate Matter less than 2.5 microns in Diameter
VOC	Volatile Organic Compound
GHG	Greenhouse Gas

Source: GSI, 2024a

Appendix E Responses to Public Comments on the Preliminary Environmental Assessment

APPENDIX E – NEVADA NORTH LITHIUM EXPLORATION PROJECT EA – BLM RESPONSES TO PUBLIC COMMENTS

This appendix provides the Bureau of Land Management (BLM) Wells Field Office responses to public comments on the Nevada North Lithium Exploration Project Preliminary Environmental Assessment (EA). The BLM released the Preliminary EA for public comment from December 20, 2024, to January 19, 2025. Copies of the Preliminary EA were made available on eplanning.blm.gov.

The BLM accepted public comments on the Preliminary EA via email, the U.S. Postal Service, and through the BLM's National NEPA register (eplanning website). All submissions were reviewed by BLM. The letter submissions and statements were then inserted into a matrix and given comment identifier numbers. The individual comments were then reviewed for substantive input and resolutions to comments were developed including whether the comment resulted in a revision or modification to the EA.

Table 1 includes the name of commenter, page number (if applicable), comment number, full comment text, and BLM's response including a determination on whether the comment resulted in a revision to the EA.

Table 1 BLM Responses to Public Comments			
Page No./Range	**Comment No.**	**Public Comment**	**Response**
Comment Letter from Lynne E. Volpi			
N/A	**1**	I appreciate the opportunity to comment on the Environmental Assessment (EA) that the BLM has prepared for Surge's Nevada North Lithium Project (NNLP) in Elko County, Nevada. I am a geologist who has been involved in exploration in the western US for 50 years; I have lived in Elko County, Nevada since 1987.I would like to provide evidence to support BLM's Finding of No Significant Impact (FONSI), as follows: Surge's NNLP is a seasonal lithium mineral exploration project with a small, proposed footprint over a 3-year period. NNLP is focused on the exploration for high grade lithium deposits in northeastern Nevada; the company has spent several years conducting geological exploration as well as biological, cultural, and hydrological baseline studies on the property with extremely encouraging results. In addition, Surge has committed to adequate environmental protection measures including avoidance for some resources. The BLM has conducted a thorough effect analysis for NNLP, following 3809 regulations and the NEPA handbook. I applaud Surge for its continued exploration for lithium in northeastern Nevada, increasing the supply of domestic lithium resources which are needed for the nation's energy future. I encourage the BLM to approve and sign the FONSI.	Thank you for your comment.
Comment Letter from Alan Morris			
N/A	**1**	The Nevada North Lithium Exploration project will have minimal long term impact on the resources in the area. Adequate protections are stipulated in the plan of operation to minimize initial impact and requires full reclamation if the project does not proceed to a mining operation. While the company is new to Nevada, their contractors and field staff are all experienced Nevada-based companies and individuals with experience in conducting exploration operations with minimal impact. While the total proposed disturbance is 250 acres, the vast majority of this will be roads and drill pads which are easily reclaimed. Surge has reclaimed their disturbance under the existing notice of intend immediately on completion of the annual work.	Thank you for your comment.
N/A	**2**	The project in general is not located within the viewshed of any major highways or protected lands and is in an area with previous impact from rockhounding scale prospect pits, recreational two-track trails and improvements for grazing.	Thank you for your comment.
N/A	**3**	Do to the small impact size of the project, adequate protections build into the plan of operation, along with those in state and federal law. I urge the BLM to approve the finding of no significant impact and allow the project to proceed. Lithium is critical development of "green" transportation and development of domestic supplies reduces reliance on production from other countries with little or no regard for the environment.	Thank you for your comment.
Comment Letter from Ted O'Connor, American Lithium Corp.			
N/A	**1**	I am supportive of responsible exploration and development for critical minerals, globally. Surge Battery Metals has been doing just that at the Nevada North Lithium project, engaging with all stakeholders to understand Indigenous, Cattlemen and local perspectives. This project should be approved and supported**.**	Thank you for your comment.
Comment Letter from Jack Hamm			
N/A	**1**	I am in favor of this project being allowed to proceed unhindered. The most important considerations are simply that it is in a remote portion of Nevada, and most importantly, it will provide a source for one of the minerals needed for our society to efficiently function.	Thank you for your comment.
Comment Letter from Jonathan Brown			
N/A	**1**	With a rigorous professional system of environmental review and enforcement at both the State and Federal level Nevada's residents and its flora and fauna are well protected from any adverse environmental effects from this project. Rural employment is important to the overall economic health of the State and the Nation. As a resident of Nevada (2732 High Range Drive, Las Vegas) I respectfully ask that you please approve this project.	Thank you for your comment.
Comment Letter from Jonathan Brown			
N/A	**1**	I concur with the Finding of No Significant Impact.	Thank you for your comment.
Comment Letter from Ken Raabe			
N/A	**1**	I am strongly committed to responsible mineral exploration in Nevada. Lithium is an increasingly critical mineral to technology. Domestic sources are needed. The BLM does a good job of permitting and monitoring exploration disturbance on public lands. Not that many job opportunities are available for this remote area of northeast Nevada. I am strongly in favor of this exploration effort.	Thank you for your comment.
Comment Letter from James Ingraffia			
N/A	**1**	I firmly believe that surges deserves the right to explore for lithiun and assist our state in serving the our need for critical minerals.	Thank you for your comment.

Table 1 BLM Responses to Public Comments			
Page No./Range	**Comment No.**	**Public Comment**	**Response**
Comment Letter from Mac Jackson			
N/A	**1**	This project is of high strategic value to the U.S. and our energy future. It is located in an area rich in mineral potential and favorable for mining with minimal environmental impact. We need to secure and control our own resources to be able to determine our future - it is as simple as that, an easy decision.	Thank you for your comment.
Comment Letter from Brion Theriault			
N/A	**1**	LIthium is an important commodity which is essential to the US economy. This project will provide high-paying jobs to an area of Elko County which historically has had linited economic activity and few good jobs. I strongly support this mine development program and strongly encourage the BLM to approve it.	Thank you for your comment.
Women's Mining Coalition			
N/A	**1**	The Women's Mining Coalition (WMC) appreciates the opportunity to comment on the Environmental Assessment (EA) that the BLM has prepared for Surge's Nevada North Lithium Exploration Project (NNLEP) in Elko County, Nevada. WMC's mission is to advocate for today's modern domestic mining industry which is essential to our nation and its security. WMC would like to provide evidence to support BLM's Finding of No Significant Impact (FONSI), as follows: Surge's NNLEP is a seasonal lithium mineral exploration project with a small, proposed footprint over a 3-year period. NNLEP is focused on the exploration for high grade lithium deposits in northeastern Nevada; the company has spent several years conducting geological exploration as well as biological, cultural, and hydrological baseline studies on the property with extremely encouraging results. In addition, Surge has committed to adequate environmental protection measures including avoidance for some resources. The BLM has conducted a thorough effect analysis for NNLEP, following 3809 regulations and the NEPA handbook. WMC applauds Surge for its continued exploration for lithium in northeastern Nevada, increasing the supply of domestic lithium resources which are needed for the nation's energy future. WMC encourages the BLM to approve and sign the FONSI.	Thank you for your comment.
U.S. Environmental Protection Agency, Region 9			
1	**1**	Following our review of the Draft EA, the EPA has identified both additional protection measures and Applicant Committed Environmental Protection Measures to decrease the overall footprint of the proposed action to be included in the Final EA as the BLM is preparing the Finding of No Significant Impact. **Waste Material** The Draft EA does not disclose if the project would result in potential acid generating conditions. To ensure potentially acid generating materials are not present, the EPA recommends the Final EA disclose the acid generating and metal leaching potential of waste rock and describe how it would be managed, including any procedures for segregation or handling of acid generating or metal leaching waste rock.	Thank you for your comment. Typically, initial rock characterization data is collected during exploration activities to collect sufficient core samples. Surge is not proposing to remove and stockpile material for an extended period of time. Additionally, water quality is under the purview of the State of Nevada Division of Environmental Protection (NDEP) Bureau of Mining Regulation and Reclamation (BMRR).
2	**2**	**Tribal Consultation** The EPA notes that the Advisory Council on Historic Preservation (ACHP) considers that "consultation is more than simply notifying an Indian Tribe about a planned undertaking."1 While consultation should begin with a formal letter, the ACHP advises that "face-to-face meetings or on-site visits may be the most practical way to conduct consultation." The Draft EA lists that BLM consulted with six Tribes (p. 57), although it is unclear what consultation approach was taken. If letters were sent as part of consultation with no response, we encourage the BLM to further engage with these Tribes prior to the determination of a FONSI due to regional Tribal concerns about lithium mining that have been expressed to the EPA at Regional Tribal Operations Committee and other EPA events.2 Clearly disclose in the Final EA how the BLM communicated with each Tribe and summarize the results of any Tribal consultation, identify the main concerns expressed by Tribes (if any), and how those concerns were addressed.	Thank you for your comment. As stated in Section 4.1 of the EA:" BLM sent the initial consultation invitation letters of the Proposed Action on August 10, 2023, to the following tribes: • Confederated Tribes of the Goshute Reservation • Ely Shoshone Tribe • Northwestern Band of the Shoshone Nation • Shoshone-Bannock Tribes of the Fort Hall Reservation • Shoshone-Paiute Tribes of the Duck Valley Reservation • Te-Moak Tribe of Western Shoshone Indians of Nevada A second consultation letter was sent to the tribes on October 4, 2024. No comments have been received to date." Although there have been no responses to date from the Tribes, consultation would occur throughout the life of the Project, and any request for additional meetings, site visits, or other communication on the Project would be coordinated with the BLM.
2	**3**	**Cultural Resources** The EPA is concerned that analysis of cultural resources was dismissed for further review in the Draft EA. Although the Draft EA states that the project was "designed to avoid disturbance and associated effects to cultural resource sites" (p. 19), we note that this only applies to the 15 sites eligible for the National Register of Historic Places. While	Thank you for your comment. As presented in Section 3.2.1 of the EA:" Surge has committed to avoiding the NRHP-eligible and unevaluated sites and notifying BLM of such discoveries." Also see Appendix B of the EA for the full list of project-related ACEPMs (Cultural and Paleontological Resources and Native American Traditional Values), including a commitment that … "if it appears that the undertaking would or may adversely affect historic

Table 1 BLM Responses to Public Comments			
Page No./Range	**Comment No.**	**Public Comment**	**Response**
		we appreciate that the NRHP-eligible cultural resource would be avoided, we note that no protections would be in place for the remaining 26 prehistoric sites pending additional investigation, and 299 sites and the three architectural resources that were not eligible for NRHP (p. 19). To fully address impacts to cultural resources, the EPA recommends including a cultural resources section in the Final EA, clearly disclosing the impacts to the 325 non-NRHP sites and considering treating non-evaluated pre-historic cultural resources as if they are NRHP-eligible.	properties, Surge would participate in any consultation activity initiated by BLM and would coordinate with the BLM to develop a Treatment Plan or Memorandum of Agreement to address all cultural resource sites within the Project Area."
2	**4**	**Cultural Resources** The EPA recommends consultation with interested Tribes to develop a Tribal-approved list of formally trained cultural specialists to survey the area and identify any culturally significant sites. We also suggest the BLM consider adding an Applicant Committed Environmental Protection Measures to require hiring cultural specialists to be on-site during new surface disturbance to provide information and/or recommendations to the BLM. Consider requiring Tribal-approved cultural specialists on-site during reclamation activities and audits of water quality testing as well. To best preserve the cultural heritage of Tribes in the proposed project area, include commitments to consider treating non-evaluated pre-historic cultural resources as if they are NRHP-eligible or conduct necessary evaluation to make an accurate determination.	Thank you for your comment. As presented in Section 3.2.1 of the EA:" Surge has committed to avoiding the NRHP-eligible and unevaluated sites and notifying BLM of such discoveries."
2,3	**5**	**Roadway Disturbance** Table 2-1 indicates there would be 18 acres of new road construction and 3.5 additional acres of cross-country road construction in Phase 1 (p. 4). This is a proposed total of 21.5 new acres of roadway, making up the majority of the 34.91 total acres of surface disturbance for Phase 1 of the project. To minimize the long-term effects of this exploration project and lower the footprint associated with the disturbance techniques used to create these roadways, the EPA recommends considering whether reducing the formation of new roads, and instead utilizing overland travel as much as possible would reduce impacts. Methods to increase overland travel instead of establishing roadways include limiting grading to only areas in which it is necessary; utilizing smaller rubber-wheeled vehicles, lightweight excavators, tractors, and rubber-tired forklifts/equipment; limiting roadways to the most direct route possible; and ensuring there are well-trained monitors on site focused on ensuring that vehicle trip impacts are minimized. Employing these methods, while also making an effort to avoid new/undisturbed sites will decrease the acreage of surface disturbance dedicated to roadways and driving, and ultimately encourage quicker and more effective site reclamation once exploration has concluded.	Thank you for your comment. The acreages provided in Table 2-1 (Proposed Phase 1) are estimated, not to exceed. As part of proposed exploration activities, Surge would limit new disturbance associated with road development to the extent feasible. Also, as discussed in Section 3.2.1 (Alternatives Considered but Eliminated from Detailed Analysis), BLM considered an alternative that would be limited to using only existing roads, including cross country/overland tracts. This alternative was dismissed because using existing roads only would restrict access and eliminate a large portion of the Project Area available for lithium mineral exploration, which in turn would not allow Surge to fully evaluate and characterize the mineral potential of the area. As stated in Section 2.1.1.1: *"Surge would use overland travel instead of developing new roads, to the extent feasible, to reduce land disturbance associated with the Project."*
3	**6**	**Fencing** When discussing the protection of exploration facilities such as sumps, the Draft EA noted that "wildlife could enter or jump over the fence around the drill sumps" (p. 55). Although it is noted that there is an Applicant Committed Environmental Protection Measure to build sumps with an incline to allow animals to exit the sump, it is recommended the applicant consider using anti-jump fences to lower the possibility. Fences curved outward at the top make it more difficult for the large mammals mentioned (mule deer, elk, and pronghorn antelope) to enter the site in the first place and would lead to better protection against any animal fatalities in the drill sumps.	Thank you for your comment. As stated in the ACEPMs in Appendix B, under the Special Status Species section, Surge would install a fence (standard four-foot-high safety fence) around the perimeter of the sumps at the drill sites and would construct the sump such that there is a slope at one end to allow wildlife egress. These sumps are short-term features that would be backfilled once drilling on a particular drill pad is complete.
State of Nevada Department of Wildlife			
1	**1**	**Baseline Data Collection** The Department believes the baseline data informing this Environmental Assessment is currently incomplete and insufficient and recommends addressing existing gaps to ensure a thorough and accurate analysis. A primary concern from the Department is the omittance of pinyon jay (*Gymnorhinus cyanocephalus*) biological surveys from the list of baseline data needs. The Department has flagged this in large part due to the fact that pinyon jay have been petitioned for listing under the Endangered Species Act (ESA) and are currently being reviewed by the U.S. Fish and Wildlife Service. This species has already been identified as a Species of Conservation Priority under the State of Nevada Wildlife Action Plan, as well as a BLM-Nevada Special Status Species for all BLM-Nevada districts. Per the BLM Manual 6840.06 "Bureau sensitive species will be managed…to promote their conservation and to minimize the likelihood and need for listing under the ESA." Due to the lack of data collected for pinyon jay and their habitat associated with this project, impacts are unknown, but cannot be assumed to not exist, and therefore the risk of the current project plan contributing to impacts to this species should be addressed more thoroughly. This is in alignment with BLM policy for Special Status Species Management (Manual 6840).	Thank you for your comment. As outlined in Section 3.3.8.1, BLM acknowledges that potential habitat for pinyon jays exist within the Project Area; therefore, presence of pinyon jays is assumed in the analysis. However, there were no recorded observations of pinyon jays within the Project Area during general wildlife and MBTA surveys. Appendix B of the EA describes the migratory birds and raptors protection Applicant-Committed Environmental Protection measures (ACEPMs), including pinyon jays, that would be implemented to prevent unnecessary and undue degradation while conducting exploration and reclamation activities within the Project Area, including scheduling land clearing and surface disturbance to occur outside the avian breeding season to prevent destruction of active bird nests, eggs, hatchlings, etc. (April 1 to July 31 for most migratory bird species; February 15 to May 15 for pinyon jays), pre-disturbance surveys, and implementation of buffers. The start and end dates of the seasonal restriction along with avoidance areas and buffer requirements would be coordinated with BLM and based on site-specific information.
1,2	**2**	Additionally, to adhere to requirements under the Federal Land Policy Management Act (FLPMA), the BLM is required to "take any action necessary to prevent unnecessary or undue degradation [UUD] of the lands" under BLM management, which is done through evaluation of the project activity to determine if it would result in UUD. Based upon the limited analysis contained in the Draft EA, it does not appear any determination could be accurately made	Thank you for your comment. Surge has committed to environmental protection measures, as detailed in Appendix B of the EA to avoid and minimize effects. The BLM has determined that no unnecessary or undue degradation would occur as a result of the Proposed Action consistent with the Federal Land Policy Management Act and the Surface Management regulations at 43 CFR 3809.415. Under 43 CFR 3809.401(c)(1), the BLM retains the

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		as there is no information on pinyon jay or associated habitat to assess. Collecting baseline data would allow a determination to be made, and should impacts be anticipated, the BLM, as described under FLPMA, can require a project proponent to reduce, avoid, rectify, or minimize anticipated impacts.	authority to request baseline environmental information from an operator; however, it is not mandatory for them to do so. As stated in Section 3.3.8.1, the analysis assumes presence of pinyon jay. In accordance with 43 CFR 3809.5, unnecessary or undue degradation (UUD) is defined as "...conditions, activities, or practices that: **(1)** Fail to comply with one or more of the following: the performance standards in § 3809.420, the terms and conditions of an approved plan of operations, operations described in a complete notice, and other Federal and state laws related to environmental protection and protection of cultural resources; **(2)** Are not "reasonably incident" to prospecting, mining, or processing operations as defined in § 3715.0-5 of this chapter; or **(3)** Fail to attain a stated level of protection or reclamation required by specific laws in areas such as the California Desert Conservation Area, Wild and Scenic Rivers, BLM-administered portions of the National Wilderness System, and BLM-administered National Monuments and National Conservation Areas." The performance standards at 43 CFR 3809.420 addressing wildlife state: ***Fisheries, wildlife and plant habitat.*** The operator shall take such action as may be needed to prevent adverse impacts to threatened or endangered species, and their habitat which may be affected by operations. 43 CFR 3809.420(b)(7) Pinyon jay have not been listed as a threatened or endangered species so no UUD would occur.
2	**3**	**Potential impacts to golden eagle:** During eagle and other raptor surveys, nest NNL11 was documented within the project boundary. Photos provided in the baseline report indicate the nest NNL11 has a high probability of being an active golden eagle nest at the time of survey. The Department is concerned that a lack of follow up has led to the dismissal of an impact analysis for golden eagles in association with this project.	Thank you for your comment. Please refer to Appendix B of the EA, where ACEPMs associated with raptor protection, to the extent possible, state that Surge would schedule land clearing and surface disturbance to occur outside the avian breeding season (January 1 to August 31 for bald and golden eagles) to comply with the MBTA and the BGEPA. If surface disturbance associated with Project Activities is unavoidable during the avian breeding and nesting season, Surge would rely on a qualified environmental specialist or biologist to survey areas proposed for disturbance to determine the presence of active nests immediately prior to Project activities. Should active nests be located, Surge would avoid the area to prevent destruction or disturbance of nests until the birds are no longer present. Surge would conduct early season diurnal raptor nest surveys (January-April) and would postpone exploration activities or relocate disturbance outside of standard USFWS buffer distances if active raptor nests are found. For raptor nests, the seasonal "no activity" avoidance area/spatial buffer zone would be listed by species in the Utah Field Guidelines for Raptor Protection from Human and Land use Disturbances (USFWS, 2002; 2023) and the California-Great Basin Region's Recommended Buffer Zones for Ground-based Human Activities around Nesting Sites of Golden Eagles in California and Nevada (USFWS 2021). The start and end dates of the seasonal restriction along with avoidance areas and buffer requirements would be coordinated with BLM and based on site-specific information, such as elevation and winter weather patterns, which affect breeding chronology.
2	**4**	Present lack of information surrounding groundwater impacts and the amount of water to be used during exploration activities: Nevada is the driest state in the United States, therefore changes to groundwater directly impact available surface waters that aquatic and wildlife resources heavily rely on. The EA states that the proponent will use 1.63 million gallons per year for exploration operations. This is concerning because the EA indicates impacts to groundwater quantity would be negligible, short-term and localized, yet groundwater elevation is currently unknown within the project area. The Department questions how such a determination can be founded when baseline information is unknown. Receiving a permit from Nevada Division of Water Resources does not preclude the need for an impact analysis on groundwater and surface water associated with this project.	Thank you for your comment. Water resources in Nevada are managed by the NDWR and the Nevada State Engineer. BLM does not regulate groundwater. Per NRS 534.120, under the waiver granted by NDWR, Surge may pump and use up to 5 acre-feet (1.63 million gallons per year) of water for exploration drilling purposes. Surge would not use more water from the supply well than authorized under the NDWR waiver. Please refer to Section 2.1.6 and Section 3.3.10 of the EA for more information. No hydrologic impacts are anticipated from this exploration project as there would be no dewatering or associated impacts to any of the major aquifers in the area. The amount of water proposed for use is negligible compared to existing uses in the area due to the scope of the project being an exploration project.

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Comment Letter from Thomas Williams Jr.			
N/A	**1**	In response to Fermina Stevens letter to you that we are against this proposed Lithium Mine. I am a member of the Te-Moak Tribe of Western Shoshone. Over the years, I have witnessed how the gold mines in Northern Nevada have reshaped the land and affected the animals that have been here way before us, which some are protected. It seems our underground clean water is at risk as well. Again, I am against this mining operation and will continue to fight against this.	Thank you for your comment. This EA only analyzes the impacts from exploration activities. If the Project moves into production, a separate NEPA analysis will be conducted.
Comment Letter from Katie Fite, Wildlands Defense			
N/A	**1**	Here is an initial comment on the Surge Battery Metals Lithium Exploration EA, Northern Nevada Lithium Project. We request a comment period extension due to the timing of the EA release and the breadth of info required for the public to adequately comment on this poor quality EA. Please let us now what you will do, and please confirm this comment has been received.	Thank you for your comment. BLM conducted the 30-day public comment period on the Preliminary EA consistent with the NEPA regulations at 40 CFR 1501.5(e) and 40 CFR 1501.5(k).
Comment Letter from Katie Fite, WildLands Defense			
1	**1**	This is a destructive project heaped with significant environmental uncertainty. It entails 250 acres of "disturbance" (under BLM's flawed definition) extending across a 7800+ acre project area. The 250 acres of disturbance is what BLM claims – but there's typically always more mining exploration-linked disturbance than BLM accounts for.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.
1	**2**	The region's tiny springs and drainage networks are already stressed by chronic high levels of minimally monitored and controlled livestock grazing use in the notoriously degraded Salmon River allotment. Many springs and stream segments here have incrementally lost perennial surface flows due to grazing-caused desertification, and purposeful rancher/BLM "development" for livestock water. Digging into springs to pipe water for livestock troughs alters clay soil layers and may kill surface flow expression, along with exporting water to pipelines and troughs systems…This makes any additional mining-linked water or flow loss even more significant.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.
2	**3**	Now the area's remaining surface waters face a major new mining threat. Springs and stream segments that currently have flows may be dried up altogether and sustainable surface water flows lost because of the added and cumulative effects of mining companies punching hundreds (or thousands?) of holes into shallow aquifers. There is also a passel of other miners like Peloton hyping claims near the Surge site, with one reporting a potential 40 square mile lithium deposit.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.
2	**4**	The Surge exploration project EA never even bothers to reveal how many boreholes will actually be drilled and punched into shallow aquifers. BLM places no limit on the drill hole number, depth, drilling proximity to water sources and drainages or any other details – limiting only the surface acre "disturbance".	Thank you for your comment. Please see Section 2.1.6 regarding Surge's proposed water management plan that would pertain to both Phase 1 and future phases of exploration. As discussed in Section 2.1, Surge proposes to use a phased approach to minimize environmental effects and to prevent unnecessary and undue degradation of public lands. The proponent would submit Work Plans to BLM for approval. These Work Plans would provide detailed information as to how Surge would perform activities, access road alignments and/or improvement, site locations, the number and type of drill rigs or other equipment expected, construction/drilling schedule and reclamation schedule, any changes to previously approved Work Plans, and any updates to the reclamation cost estimate and financial guarantee as determined necessary. In accordance with 43 CFR 3809.420(6), Surge must conduct all operations (including activities proposed in each Work Plan) in a manner that complies with all pertinent Federal and State laws. All phases of the Project would also be required to follow all ACEPMs in Appendix B of the EA.
2, 3, 20	**5**	**Context: Commenting on Surge photo of drill site** Look at how unstable the drill site is, all the loose eroding soil, and on the lower right – what appears to be a ditch to drain drilling wastewater down into a gully (or stream drainage?). The site appears unstable, and extremely vulnerable to rain-storm runoff events. Further, the photo from the mining company's own promotional materials on-line show what certainly appear to be slipshod drilling methods that Wells BLM has already allowed Surge to conduct. Please review the slipshod drill pad Surge photo as seen in the miner's promotional webpage – showing how poorly and environmentally harmful the existing drilling has been conducted.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.

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3	**6**	How has Wells BLM monitored and tracked the existing drilling, trenching or other Surge explo activity that has taken place? Please provide detailed monitoring reports, photos of BLMN sites visits, etc. as Appendices to a revised NEPA analysis for this project.	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
3	**7**	The project will result in a large amount of sensitive species habitat fragmentation and loss and will pave the way for cheatgrass and other flammable exotic weeds to choke the landscape, as a result of 250 acres of disturbance proposed under the EA. This is a much higher density of disturbance than in several recent proposed exploration projects (Jindalee Hi-Tech lithium in SE OR and Limo Butte gold explo by Cherry Creek in Ely District BLMN lands.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.
3	**8**	BLM's Surge EA letter claims: "This project is site specific, rather than programmatic in scope". That seems deceptive. In reality, the EA lacks critical specific biological, hydrological, and other baseline information necessary to take a hard look at the project impacts, and to develop a reasonable range of alternatives and minimization and mitigation actions.	Thank you for your comment. This Environmental Assessment analyzes the impacts of the proponent's Proposed Action as submitted to the Bureau of Land Management, which is proposed mineral exploration within the Plan boundary. Programmatic NEPA documents are often used to assess environmental impact of agency programs, plans, and policies. Baselines were requested and collected in accordance with 43 CFR 3809.401(c)(1). Section 2.2 of the EA presents the Project alternatives and Appendix B includes ACEPMs to prevent unnecessary and undue degradation while conducting exploration and reclamation activities within the Project Area.
3	**9**	The specific locations and number of miles (50? 100?) of new roads to be ripped in are not revealed. There's no specific information provided, and no limits, on the location of drill pads. Nor on the number of drill holes at each pad. Other vital drilling info absent from the EA is the drilling depth, and borehole proximity to drainages, and springs. The same applies to mining exploration trenches planned to also gash the watershed and species habitats. So in fact, the EA, is programmatic. All of this disturbance (after the first approx. 30 acres) can happen anywhere across 7800+ acres. And the new disturbance beyond 5 acres Notice activity is not specified either – as EA mapping merely shows green blobs where it will occur, with no specifics. This loose and uncertain scheme may be done to cover up how environmentally damaging the locations of the explo bulldozing and drilling will be, and how greatly torn up the landscape will become. This vagueness also helps cover up the fact that the EA relies on extremely shoddy and deficient consultant biological and other environmental information. By claiming all the mining activity after the first 35 acres will take place in Phases BLM allows the miner to slide by with a no-specific rubberstamp EA. This will serve as no legitimate "hard look" analysis basis for signing a FONSI.	Thank you for your comment. Section 2.1 of this EA describes the Proposed Action, including roads (refer to Table 2-1), drill pads, and proposed drilling depth. As outlined in this section of the EA, Surge proposes to use a phased approach to minimize environmental effects and to prevent unnecessary and undue degradation of public lands associated with currently authorized and future Project exploration activities. Surge would submit Work Plans to BLM and BMRR prior to implementing the initial and each subsequent phase associated with mineral exploration, metallurgical sampling and testing, groundwater baseline characterization and supply well installation, geotechnical investigations, and infiltration testing for agency review and approval. These Work Plans would provide detailed information as to how Surge would perform activities, access road alignments and/or improvements, site locations, the number and type of drill rigs or other equipment expected, construction/drilling schedule and reclamation schedule, any changes to previously approved Work Plans, and any updates to the reclamation cost estimate and financial guarantee as determined necessary. Surge would track the acres of disturbed and reclaimed areas between the Work Plans to ensure the cost reclamation estimates and bonding are accurate. Surge would not commence surface disturbing activities in new locations included in the Work Plans until authorization is received from the BLM. The locations of subsequent phased activities would be based on the success of previously completed exploration or baseline data collection activities (see ACEPMs for Special Status Species and Migratory Birds and Raptors) and would also be included in future Work Plan submittals. In accordance with 43 CFR 3809.420(6) Surge must conduct all operations (including activities proposed in each Work Plan) in a manner that complies with all pertinent Federal and State laws. All phases of the Project would also be required to follow all ACEPMs in Appendix B of the EA.
3	**10**	BLM must require concrete site-specific information on roads, trenching, and drill sites to prevent unnecessary and undue degradation resulting from the 250 acres of bulldozing and drilling impacts to important and sensitive native biota, watershed integrity, water sustainability, invasibility of upland vegetation communities by falmmabkle exotic weeds, and many other harms to public lands values. BLM must require public comment and new NEPA processes for each phase. This must also be considered in an alternative.	Thank you for your comment. As outlined in Section 2.1.9 of the EA, Surge would reclaim surface disturbance associated with exploration activities in accordance with BLM regulations 43 CFR 3809.420 and Nevada reclamation regulations listed in NAC 519A. Surge would design reclamation activities to stabilize disturbed areas to a safe condition and protect both disturbed and undisturbed areas from unnecessary and undue degradation. The BLM has determined that no unnecessary or undue degradation would occur as a result of the Proposed Action. Furthermore, the Proposed Action would be in conformance with the Wells Resource Management Plan, the 2015 ARMPA, and other statutes, regulations and policies as described in Section 1.4 and referenced throughout the environmental consequences analysis in Chapter 3. In accordance with 43 CFR 3809.420(6), Surge must conduct all operations (including activities proposed in each Work Plan) in a manner that complies with all pertinent Federal and State laws. All phases of the Project would also be required to follow all ACEPMs in Appendix B of the EA. BLM conducted the 30-day public comment period on the Preliminary EA consistent the NEPA regulations at 40 CFR 1501.5(e) and 40 CFR 1501.5(k).

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3, 4	**11**	BLM only considers a single alternative - not even looking at alternatives such as much more protective impact minimization and mitigation actions. BLM may not define the purpose and need so narrowly that is forecloses a consideration of a reasonable range of alternatives, nor in such a way that only one alternative would accomplish the goals of the agency action.	Thank you for your comment. According to 43 CFR 46.310(b): *"When the Responsible Official determines that there are no unresolved conflicts about the proposed action with respect to alternative uses of available resources, the environmental assessment need only consider the proposed action and does not need to consider additional alternatives, including the no action alternative."* Alternatives that were considered but eliminated from detailed analysis are in section 2.2.2 of the EA. As the project proponent, Surge filed a complete Plan of Operations (Plan) pursuant to the Surface Management Regulations found under 43 CFR 3809.411(a)(1). As discussed in Section 1.2 and 1.3 of the EA, under FLPMA and the 43 CFR 3809 regulations, the BLM has the responsibility to evaluate and respond to Surge's Exploration Plan of Operations and ensure the proposed operations would not cause unnecessary or undue degradation of public lands. BLM's decision, in accordance with the BLM Surface Management Regulations at 43 CFR 3809.411(d), includes the options of 1) approve the Plan as submitted; 2) approve the Plan subject to changes or conditions that are necessary to meet the performance standards of 43 CFR 3809.420 and to prevent unnecessary or undue degradation of public lands; or 3) disapprove or withhold approval of the Plan if it is found that the Plan does not meet the applicable content requirements at 43 CFR 3809.401 or proposes operations that would result in unnecessary or undue degradation of public lands.
4	**12**	The way BLM determines disturbance is deceptive. It's based on outright bulldozed land or destroyed vegetation. This means an immense amount of new habitat fragmentation and rea- world loss takes place. It also means that much of the entire 7800 acre site will be primed for irreversible flammable weed infestation and spread due to the very large amounts of disturbance. This is especially a risk in the severely degraded Salmon River allotment landscape.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.
4	**13**	The indirect and cumulative footprint of this exploration project will be enormous. The "CESA" areas BLM uses in the EA are much too small, and BLM glosses over a host of existing and new development, mining and large-scale PJ forest and sager "treatment" projects that will put even greater stress on the regions' biota - including the local area Gollaher Sage-grouse PMU and Pinyon Jay and other PJ forest-dependent declining wildfire. The project will propel serious sensitive and important species population declines and foreseeable extirpation.	Thank you for your comment. As stated in Section 3.1 of the EA: *"Cumulative effects should be evaluated in terms of the specific resource, ecosystem, and human community being affected. To determine the size of the CESAs, each environmental resource was analyzed to determine the extent to which the environmental effects from the Proposed Action and No Action Alternative may be reasonably detected.* As shown in Table C-1 of Appendix C in the EA, the CESA for resources analyzed in detail in the EA range from 7,819 to 944,705 acres. Cumulative effects are considered from the incremental effects of the Proposed Action (surface disturbance of up to 250 acres) in combination with past, present, and reasonably foreseeable future actions within these various CESA areas.
4	**14**	We request that BLM prepare an EIS to take a hard, science-based look at the full range of ecological, recreational, scenic, cultural, historic, watershed, and ground and surface water values this project is highly likely to destroy and/or greatly impair - especially given the EA's lack of adequate biological and other baseline data, and the minimal and inadequate laundry lists of design features/BMPs that are able to be waived and/or loosened even beyond the non-binding BMP language.	Thank you for your comment. Please refer to Section 1.4 of the EA for a list of statutes and implementing regulations, policies, and procedures that govern BLM's actions regarding the NEPA process. If there is a Finding of No Significant Impact (FONSI), the context and intensity criteria are listed with rationale for the determination, and a Decision Record would be issued providing the rationale for approving the Proposed Action or No Action Alternative. The need for an EIS will be dependent on whether a FONSI can be determined, and Decision Record issued following the analysis in this document. The CEQ regulations at 40 CFR § 1501.5 and § 1501.6 outline the requirements of an EA and when a FONSI can be signed.
4	**15**	An EIS is also required because BLM must fully analyze the impacts of constructing new roads and drill pads and drilling anywhere across the 7800+ acre project site. There must be actual competent ecological surveys conducted in order to understand the severity of impacts, and to effectively minimize project harms.	Thank you for your comment. Baseline data collection (including biological resources) and associated reporting for the Plan boundary have been deemed complete by BLM consistent with 43 CFR 3809.401(c)(1). Please see associated Supplemental Environmental Reports (SERs) prepared for this EA for detailed discussion of baseline information and effects analyses for the range of resources and resource uses considered in this NEPA review. Section 2.2 of the EA presents the Project alternatives and Appendix B includes ACEPMs to prevent unnecessary and undue degradation while conducting exploration and reclamation activities within the Project Area.
4,5	**16**	BLM must clarify if the driller will be allowed to conduct even more acres of disturbance additively than the 250 acres stated in the EA. Will the driller be allowed to claim sites that are drilled then rehabbed, and where some sparse veg grows after a year, are "reclaimed", and thus don't count as disturbance any more – and then go on to drill/bulldoze more than 250 acres total? If so, this project could balloon to what might be many more additive acres of actually disturbed land. BLM often claims "reclamation" has been achieved if sparse exotic or other grasses are present after a year or so. Yet	Thank you for your comment. Section 2.1 of this EA describes the Proposed Action in detail, including the "estimated area not-to-exceed" acreage of surface disturbance displayed in Table 2-1. The total disturbance of the project would not exceed 250 acres. "As outlined in Section 2.1.9 of the EA, Surge would reclaim surface disturbance associated with exploration activities in accordance with BLM regulations 43 CFR 3809.420 and Nevada reclamation regulations listed in NAC 519A. Surge would design reclamation activities to stabilize disturbed areas to a safe condition and protect both disturbed and undisturbed areas from unnecessary and undue degradation.

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		it takes well over a century to recover a PJ forests and takes scores of years – or longer to achieve recovery of a fully functioning sagebrush community. If some scattered herbaceous plants manage to grow on a drill pad, and the site gets considered to be reclaimed, will it be magically subtracted from the 250 acres disturbance – clearing the way for additional acres to be incrementally destroyed for drilling, drill roads, etc.	
5	**17**	We note mapping in an Elko Daily article appears to show a different Surge project configuration than the EA project area outlines. A previous Elko paper map shows surge with more claims to the NW, and Surge appears to have acquired some other company's claims for the current project? Please clarify what is going on here.	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
6	**18**	Will Surge be carrying out "Notice" drilling in areas not included in the 250-acre drilling disturbance EA?	Thank you for your comment. As outlined in Section 2.1, the proposed disturbance under Phase 1 is expected to create approximately 30 acres of new surface disturbance in addition to the authorized 4.91 acres of Notice-level surface disturbance under the Texas Spring Notice NVN-101347 for a total of 34.91 acres (i.e., current notice level disturbance would be incorporated into the proposed Plan).
6	**19**	This project will cause an expansion of cheatgrass and other highly flammable weeds in a landscape that has suffered high levels of cattle and sheep grazing degradation for decades. Concerned citizens and environmental groups have been submitting information on the degradation across the Salmon River allotment for over 30 years to BLM - trying to spur greatly needed livestock management changes. Yet Wells BLM has steadfastly refused to conduct a current integrated land health assessment/Fundamentals of Rangeland Health and grazing decision process to address the degradation and harms being caused to Sage-grouse, migratory birds, Pygmy Rabbits, water quality and quantity, watershed processes. Also there may be significant erosion harms and soil loss, coupled with damage to erosion preventing and carbon fixing biotic crusts, and a host of other public lands values. The more degraded by livestock lands are pre-disturbance-the harder it is to effectively "rehab" them, and prevent weed expansion This greater vulnerability to erosion, weeds, degradation– is all exacerbated by climate change stress that is making arid western lands LESS resistant to weeds and grazing degradation, and LESS able to recover from significant disturbances – such as mine exploration road bulldozing/pad bulldozing and continuing chronic high levels of livestock grazing disturbance stress under Wells BLM's current minimal and out-dated grazing system and use standards.	Thank you for your comment. The subject of this comment regarding livestock grazing is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
6	**20**	Where across this landscape are cheatgrass, bulbous bluegrass and other exotic flammable weeds present, and how much cover do they represent? Which lands in the project area and surroundings are "at risk" of cheatgrass takeover?	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
6	**21**	The EA weed report is limited and vague… There is no data on the thoroughness and methods used for conducting weed inventories	Thank you for your comment. Refer to the Noxious Weeds, Invasive and Non-Native Species SER for more information. Detailed methodology and mapped occurrences of noxious weeds are included in the Biological Baseline Report. Baseline Reports were reviewed and deemed complete by BLM.
6	**22**	The EA Weed Report Table 3-1 ignores that expanded cheatgrass and other weed infestation caused by the project in this heavily grazed landscape is highly likely to be irreversible. There is no adequate landscape-level and project-level mapping and analysis of current cheatgrass and other weed infestations.	Thank you for your comment. Please see response to comment 21 above.
6	**23**	There is no baseline mapping of where cheatgrass, bulbous bluegrass and other flammable exotic grasses are currently present; the densities and amounts that are present; no info on where chemical herbicides have been sprayed up to this point in the project area and monitoring on how effective (or ineffective) they may have been.	Thank you for your comment. Please see response to comment 21 above. The portion of this comment regarding where herbicides have been sprayed, and effective monitoring is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
6,7	**24**	There's nothing to protect the torn-up landscape from cows/sheep disturbing rehabbed sites and spreading mining-caused weeds all over the place, and creates ideal soil disturbed sites for weed infestation and spread irreversibly.	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
8	**25**	There's also no mapping and analysis of the location and impacts (including deleterious weed-causing impacts) of livestock facilities across this landscape, both within and adjacent to the project area including impacts to the springs within 5 miles of the project area. These facilities – along with salt/supplement feeding and water hauling sites. These areas of livestock concentration serve as epicenters of livestock-facility facilitated irreversible weed infestation and spread outward across the surrounding landscape.	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
9	**26**	**Context: surface water resources, stream type (intermittent, ephemeral)** Please provide detailed mapping and analysis of all the current areas of perennial flow in the affected drainage network, and flow amounts/volumes and rares over all periods of the year. Are there historical records of flows? If so, what have these shown?	Thank you for your comment. Section 3.3.10.1 and Figure 3-7 of the EA and the Water Resources SER for the Nevada North Lithium Exploration Project describe the surface water features within the Water Resources Study Area in detail, including a discussion of stream classifications (e.g., perennial, intermittent, ephemeral) and location. The subject of this comment regarding historical flow records is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.

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10	**27**	**Context: Figure 3-11 (Water Resources Study Area)** Please provide this spring mapping of the stream segments with a color that makes it possible to tell perennial vs. non-perennial stream segments, the pale blue is hard to discern. Please provide site photos and current PFC and ecological assessment photos of spring/meadow/drainage conditions.	Thank you for your comment. See response to comment 26. Please also refer to Figure 3-10 of the EA and Figure 1-2 of the Water Resources SER for another depiction of the different stream types within the Water Resources Study Area. Site photographs were included in the Hydrologic Baseline Report that was deemed complete by BLM.
10	**28**	Please provide detailed current ecological and aquatic habitat assessment inventories and water flow data for potentially impacted riparian and mesic sites over all periods of the year, water quality (bacteria, temperature, sediment etc.) and other critical information (including spring type, human alteration impacts, photos etc. for each spring on this map. See Sada et al. 200, BLM Tech. report on springs Sada and Lutz 2016. This info should include the conditions and extent of mesic and meadow areas that produce food plants and habitat for Sage-grouse late brood rearing.	Thank you for your comment. Please see Section 3.3.11 and the Wetlands and Riparian Zones SER for additional information on the existing conditions and the associated effects analysis from the Project. Vegetation communities are described in the Vegetation SER (Section 2.3).
10	**29**	Have current PFC and other more rigorous riparian areas assessments been conducted on the springs and streams? If so, please provide all that are available.	Thank you for your comment. Section 3.3.10 of the EA and the Water Resources SER describe the existing conditions and effects analysis from the Project, including seeps and springs. Similarly see Section 3.3.11 of the EA and the Wetlands and Riparian Zones SER for additional information.
10	**30**	Many of the SRA springs are severely depleted and irreversibly damaged by livestock water developments – gouged out stock ponds and/or spring-gutting projects that pipe water away from springs. These are constructed by digging into the heart f springs, placing perforated pipe to collect water, and exporting it. The excavation damages and punctures, underlying clay soil layers that support spring surface flows. Please provide detailed mapping and analysis of the lengths and flow rates and water volumes present at all springs and springbrooks.	Thank you for your comment. Please see Section 3.3.10 of the EA and the Water Resources SER describe the existing conditions and effect analysis from the Project, including springs. The subject of this comment regarding livestock water development information is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
10	**31**	Have springs in this region been surveyed for springsnails and other aquatic biota? If so, please provide current springsnail analyses. How much are current wetted areas reduced from the historical extent of meadows and floodplains - based on presence of hydrically-derived soils and other site characteristics.	Thank you for your comment. As stated in the Water Resources ACEPMs in Appendix B of the EA, "*Surge would avoid disturbing areas where surface water streams, springs, or inundated/saturated soils are present."* Baseline data collection and associated reporting for the entire Project area have been deemed complete by BLM consistent with 43 CFR 3809.401(c)(1). Please see the Water Resources, Wetland and Riparian Areas, and Special Status Species SERs prepared for this EA for detailed discussion of baseline information and effects analyses for the range of resources and resource uses considered in this NEPA review. The portion of this comment regarding current wetted areas and their reduction from the historical extent of meadows and floodplains is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
10	**32**	What have the impacts of existing livestock water developments on these waters and watersheds been?	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
10	**33**	How many of the springs referenced in the EA in these basins are dependent on perched water tables? Or flows from shallow aquifer lenses?	Thank you for your comment. See response to comment 29, 30, and 35. Additionally, Section 2.3.4 of the Water Resources SER describes groundwater resources, including aquifers and springs within the Project Area.
11	**34**	What are all the ways that the Surge projects' drilling, road building, trenching etc. may alter snow deposition areas, hydrological processes in watersheds, infiltration, and sustainability of spring flow and perennial stream segment flow? How may winter snowplowing to access sites for explo drilling and other mining activity – including the live-in workers camp, impact snow deposition (and also wintering wildlife?).	Thank you for your comment. Please see Section 2.1.4 of the EA, which describes the proposed Project Schedule: *" Surge does not anticipate drilling during the winter months (generally from November to March, depending on snow cover and access) and would schedule activities to avoid damaging access roads due to soft ground conditions (i.e., avoid rutting). "* The Project does not include a live-in workers camp.
11	**35**	Please provided detailed baseline current data on spring and stream flow volumes over all periods of the year, developed vs. undeveloped conditions, visible existence of the past extent of spring and meadow complexes vs. their 2024 extent; impacts of livestock facilities and developments including stock ponds, aquatic habitat characteristics and species present. We request that full aquatic species inventories for crenophiles, and aquatic species habitat quality be conducted - and not by the same consultants who did such a poor job on avian species and other terrestrial info in the EA.	Thank you for your comment. Section 3.3.10 of the EA and the Water Resources SER describe the existing conditions and effect analysis from the Project, including seeps and springs. Biological baseline data collection and associated reporting for the entire Project area have been deemed complete by BLM consistent with 43 CFR 3809.401(c)(1). Please see associated SERs prepared for this this EA for detailed discussion of baseline information and effects analyses for the range of resources and resource uses considered in this NEPA review. The portion of this comment regarding livestock facilities and developments are beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.

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11	**36**	BLM must assess and identify the type of springs that are present in this landscape. Are they snow-melt dependent, groundwater dependent? Note that blading roads will intercept snow and may alter amount of waterflows to springs.	Thank you for your comment. See response to comments 29, 30, and 35 above. Additionally, Section 2.3.5 of the Water Resources SER describes groundwater resources in detail, including a discussion of the source, recharge, and flow distribution of springs within the Project Area.
11	**37**	How will climate change stress impact sustainability of water flows at surface waters, and impact potential aquifer recharge?	Thank you for your comment. As stated in Section 3.3.10.2, there would be no direct or indirect effects to surface water… "*During planning of drill pad locations, new road construction alignment, and other disturbances associated with exploration activities (as part of the phased approach), Surge would avoid disturbing areas where surface water streams, springs, or inundated/saturated soils are present. There would be no indirect effects to riparian/wetlands areas and associated vegetation since Surge would avoid disturbance within these areas."* Also, as stated in Section 3.3.1.2 of the EA: "No significant effects are expected due to the short duration of the Proposed Action in consideration of climate change. "
11	**38**	The EA claims: "There are no historical records of publicly available data on discharge from surface water, springs, or groundwater levels within the Project's WRSA." Why hasn't anyone (BLM or Surge) obtained data on at least the current flows and water quality over all periods of the year?	Thank you for your comment. Pursuant to the regulations found under Title 40 of the Code of Federal Regulations (CFR) Subpart 1502.21(a), *"when an agency is evaluating reasonably foreseeable significant effects on the human environment in an environmental impact statement, and there is incomplete or unavailable information, the agency shall make clear that such information is lacking".* Section 2.3.7 of the Water Resources SER: *"To provide preliminary data to characterize water quality at the WRSA, 11 spring sites and one stream site were sampled for general water chemistry analyses during the September 2023 field inspections and an additional 5 spring sites within a one-mile radius of the Project Area were sampled in May 2024*". As stated in Section 2.1.2.2 of the EA: *"Surge proposes installation of up to three baseline characterization monitoring wells to obtain preliminary groundwater chemistry in the Project Area."*
12	**39**	The gaping lack of solid baseline water and riparian information adds to the uncertainty of the project. BLM must conduct solid baseline data gathering at the outset and provide it to the public in a NEPA document for comment. How else can miners in their closed-door meetings with BLM add on "phases" of the drill scheme – without a proper baseline, and be able to understand potential aquifer and flow loss impacts that may already be occurring from earlier drilling phases?	Thank you for your comment. Baseline data collection and associated reporting for the entire Project area have been deemed complete by BLM consistent with 43 CFR 3809.401(c)(1). Please see associated SERs prepared for this this EA for detailed discussion of baseline information and effects analyses for the range of resources and resource uses considered in this NEPA review.
12	**40**	BLM states: "… the stockwells were drilled in 1958 and 1965 and the domestic well was drilled in 1981. No data since then". And BLM couldn't be bothered to get current information? This illustrates significant uncertainty about the current status of ground water aquifers. BLM must provide current baseline records of well flows, depths to water, and if any of these wells have gone dry.	Thank you for your comment. Refer to Figure 3-8 of the EA for the location of the three NDWR wells, located within the Water Resources' 5-mile buffer of the facility boundary. As stated in the Water Resources SER for the Nevada North Lithium Exploration Project, "*three wells exist within five miles of the Project. Two are stock water wells to the south and southeast of the Project and one is a domestic well to the west of the Project. Upon completion of the well installations, the stock water wells had a static water level of 212 and 235 feet below land surface (bls) and the domestic well had a static water level of 90 feet bls.".*
12	**41**	**Context: Section 2.1.1.2 of EA (Proposed Phase I Activities - Install Water Supply)** How close will this water well be to drainages and/or springs, and what are the current flows at these natural water sources? This will require a significant "all-weather" road too – as the drilling is proposed throughout the year. This also raises the question of how much graveling or other road base improvement may take be required to withstand hauling in all types of weather? What will the road improvement material source be? In reality, there's likely to be major road upgrades over many miles, including well outside the project area itself for this major drilling scheme. The EA fails to provide basic info necessary to understand the scale of the project impacts to be provided by Surge.	Thank you for our comment. Section 2.1.1.2 of the EA states that *"up to three grouted VWPs would be constructed in mineral exploration drill holes at locations adjacent to the water supply well (within approximately 150 feet) and completed to a comparable depth to serve as observation wells. The VWPs would provide water level drawdown data to quantify the aquifer transmissivity and storage coefficient at that water supply well location".* Section 2.1.2.2 of the EA states that *"the monitoring wells would be constructed pursuant to State of Nevada NAC 534 regulations".* Figure 2-1 of the EA shows the proposed location of the exploration water supply well (within existing disturbance by the existing main road (north-south) within the Project Area. Section 2.1.4 of the EA describes the proposed Project Schedule: *" Surge does not anticipate drilling during the winter months (generally from November to March, depending on snow cover and access) and would schedule activities to avoid damaging access roads due to soft ground conditions (i.e., avoid rutting). "*
12	**42**	BLM should require gathering data from designated monitoring points throughout the project area throughout the course of this drilling, and conduct stable isotope, radiocarbon, and tritium analyses to trace groundwater flowpaths and provide age estimates for spring discharge. This data should be displayed on-line for public review.	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
12,13	**43**	Wells BLM has no current travel plan that we are aware of, under its crazily out-dated 1983 MFP. Yet existing routes over a large area are likely to undergo major upgrades, and this will in turn result in extensive new pressures on the region's wildlife (Pronghorn, Mule Deer, Elk) and a loss of habitat security for big game, Sage-grouse and other wildlife. The loss of protective security cover will be further magnified by the large-scale deforestation and near-elimination of PJ forest in many areas under the Wells BLM's massive O'Neil PPA project discussed below. And	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.

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		given the plethora of lithium boomers who have staked claims and/or are drilling in this landscape (discussed below in these comments) - the area is likely to seen explosion of road upgrades.	
13	**44**	The miners haven't provided specific sound plans for drilling or anything else related to this project. BLM must require much more site-specific solid current baselines related to water sustainability, perennial flows etc. – including data on ground and surface water, potential shallow aquifer areas and lenses, actual competent surveys for current occurrence and population levels. of a broad range of important and sensitive plant and animal species. We are dismayed that BLM cared so little about the public lands that it failed to require comprehensive baseline inventories for impacted biota, including potentially a dozen or more sensitive species.	Thank you for your comment. As discussed in Section 2.1, Surge proposes to use a phased approach to minimize environmental effects and to prevent unnecessary and undue degradation of public lands. The proponent would submit Work Plans to BLM for approval. These Work Plans would provide detailed information as to how Surge would perform activities, access road alignments and/or improvement, site locations, the number and type of drill rigs or other equipment expected, construction/drilling schedule and reclamation schedule, any changes to previously approved Work Plans, and any updates to the reclamation cost estimate and financial guarantee as determined necessary. In accordance with 43 CFR 3809.420(6), Surge must conduct all operations (including activities proposed in each Work Plan) in a manner that complies with all pertinent Federal and State laws. All phases of the Project would also be required to follow all ACEPMs in Appendix B of the EA. Baseline data collection and associated reporting for the Plan boundary have been deemed complete by BLM consistent with 43 CFR 3809.401(c)(1). Please see associated SERs prepared for this this EA for detailed discussion of baseline information and effects analyses for the range of resources and resource uses considered in this NEPA review.
13,17	**45**	Current Livestock Impacts to Area's Springs and Uplands Must Be Fully Assessed We stress how inadequate BLMs "reclamation" criteria area for actually effectively stabilizing lands. There is no adequate analysis of how heavy to severe livestock impacts under Wells BLM Management will impact watersheds, riparian areas, water flows, and weed-vulnerable uplands disturbed and impacted by Surge and other drillers.	Thank you for your comment. Past and present actions that have impacted and are currently impacting resources from livestock grazing are included in a detailed cumulative effects analysis in the Vegetation, Water Resources, Wetland and Riparian Areas, Wildlife, Noxious Weeds, Special Status Species, and Migratory Birds Supplemental Environmental Reports (SERs).
19,21	**46**	Highly Erodible Unstable Soil of Project Area Increases Irreversible Watershed Erosion and UUD Risks Both the pervasive SRA livestock degradation and the highly erodible soils increases Surge project risks. BLM must resolve the large-scale uncertainty in the project NEPA analysis with solid baseline ecological inventories, consideration of a full range of alternatives, and by providing specific details on road, well pad, borehole numbers proximity to waters, etc. in a greatly revised NEPA process. Full and thorough pre-drilling baseline current mapping of route networks across this landscape must be provided, including detailed inventories of current route type and conditions.	Thank you for your comment. Baseline data collection and associated reporting for the Plan boundary have been deemed complete by BLM consistent with 43 CFR 3809.401(c)(1). The Surface Management regulations at 43 CFR 3809.401 provide the requirements of what must be included in a Plan of Operations. Regarding erosion concerns, Surge would use BMPs for sediment control as needed during construction, operation, and reclamation of exploration activities to minimize sedimentation of disturbed areas and to prevent unnecessary or undue degradation to the environment. Also see Appendix B of the EA for specific ACEPMs (Erosion and Sediment Control). Figures 1-2, 3-2, 3-4, 3-5, 3-9, 3-10, and 3-11 of the EA depict existing roads within and encompassing the Project Area and areas of analysis. As stated throughout the EA, Surge would use and maintain existing roads in the Project Area.
20	**47**	Please conduct a hard look at the potential impacts of combination of summer thunderstorms and/or winter runoff events in the soil types and grazing-degraded drainage networks present in the project area and surrounding lands.	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
20	**48**	**Context: Regarding quote from EA *"there would be no indirect impacts to riparian/wetlands areas and associated vegetation since Surge would avoid disturbance within these area …".*** How much area would be avoided? How close will underground drilling come to the areas? How close to potential shallow groundwater aquifers of lenses that support the flows?	Thank you for your comment. See Appendix B of the EA for ACEPMs related to water resources. Surge would avoid disturbing areas where surface water streams, springs, or inundated/saturated soils are present.
20	**49**	A common ploy of mining companies is to tear up a land area and fragment wildlife habitat with "exploration". Then when it comes time for a mining EIS, they claim the lands are poor quality and poor habitat for wildlife. Then the mining company claims there's no need to worry about the impacts of the full blown mine project – even though it's all the preceding mining exploration drilling that caused the serious new habitat loss and degradation that the company uses as an excuse to minimize environmental protections and mitigation for a full-blown mine project. BLM must assess foreseeable large-scale habitat losses - starting with a proper baseline now with the Surge project. For example, the PJ vegetation component destroyed in the exploration may take much longer than 100 years to re-establish a functional forest,	Thank you for your comment. While statements of opinion (including agreement or opposition) do not require specific responses or text revisions under NEPA regulations, they have been considered by the Wells Field Office and documented in the administrative record associated with the Nevada North Lithium Exploration Project EA. The EA analyzes the impacts of the proponent's Proposed Action as submitted to the Bureau of Land Management, which is proposed mineral exploration within the Plan boundary. Any additional actions outside the scope of the Proposed Action would require the proponent to submit a new or revised Plan of Operations, and there would be subsequent future National Environmental Policy Act analysis.
20,21	**50**	WildLands Defense observed this sequential exploration habitat disruption taking place at Thacker Pass. This same pattern is being repeated at the Jindalee lithium Notice drilling exploration site in the Oregon McDermitt Caldera. At Thacker Pass, multiple drilling bouts took place from around 2010 to 2020. The supposedly "reclaimed" sites were invaded by cheatgrass in many areas. At the Jindalee sites, the "reclaimed" drill sites are being overrun by halogeton	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis.

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		and it is spreading along road verges, too. Previously faint 2-tracks by fencelines were bulldozed, but the mining company denied this, and claimed a road had always existed.	Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.
21	**51**	(1) A large amount of additional information is needed to understand how drilling will take place, and to apply sufficient limits, projects sideboards, and specific triggers to halt the project if extensive degradation and/or violations occur. BLM must provide specific triggers to require new NEPA analysis, completely avoid certain areas entirely, etc. All of this is needed to prevent Unnecessary and Undue Degradation (UUD) that BLM must require for the project. Some of the needed information includes: (2) How deep will project drilling penetrate? We request that BLM limit and cap drilling depths, and prepare new NEPA analysis if the limit is to be exceeded. We have reviewed drilling EAs in Nevada that estimate depths of drilling. (3)Will horizontal drilling take place? If so, how might this impact underground strata? How might this impact plugging/capping of wells? (4) How many drill holes will be drilled at each site? How close together can a miner place drill holes and not risk collapse and/or seepage between the holes in the underground strata? Does this depend on the strata? (5) We request that BLM require cameras and/or sensors at each drill site as drill holes are being plugged to ensure that the holes are properly and effectively closed. What may happen if they are not? How might improper plugging drain shallow aquifers or lenses? (6) What is the porosity of the various soil layers /strata and soil types affecting aquifer and underground layers and stratigraphy? (7) What distance will all drill holes and drilling (including any horizontal drilling) be located from streams - including both perennial and intermittent areas of the drainage network?? For example, Oregon BLM claimed all Jindalee Notice-level mining exploration drilling was to be located 300 ft. from streams. A recent cow water well project EA from Winnemucca BLM in the Washburn allotment references water well drilling avoiding stream and spring waters by 500 ft.	Thank you for your comment. The Surface Management Regulations at 43 CFR 3809.401 outline the information that is required to be submitted under a Plan of Operations. In accordance with 43 CFR 3809.5, unnecessary or undue degradation (UUD) is defined as "means conditions, activities, or practices that: **(1)** Fail to comply with one or more of the following: the performance standards in § 3809.420, the terms and conditions of an approved plan of operations, operations described in a complete notice, and other Federal and state laws related to environmental protection and protection of cultural resources; **(2)** Are not "reasonably incident" to prospecting, mining, or processing operations as defined in § 3715.0-5 of this chapter; or **(3)** Fail to attain a stated level of protection or reclamation required by specific laws in areas such as the California Desert Conservation Area, Wild and Scenic Rivers, BLM-administered portions of the National Wilderness System, and BLM-administered National Monuments and National Conservation Areas." As stated in Section 3.3.10.2, there would be no direct or indirect effects to surface water… "*During planning of drill pad locations, new road construction alignment, and other disturbances associated with exploration activities (as part of the phased approach), Surge would avoid disturbing areas where surface water streams, springs, or inundated/saturated soils are present. There would be no indirect effects to riparian/wetlands areas and associated vegetation since Surge would avoid disturbance within these areas."*
22	**52**	BLM must apply a conservative protective limit on drilling proximity to streams, springs, drainage networks, and provide a hard look scientific analysis of its effectiveness. A conservative required distance for avoiding drilling that may deplete and dewater shallow ground aquifers must be established and must be mandatory. + What bonding will actually be required? What will the costs to restore lands and waters be if Surge drilling depletion dries up a spring, or drill sites and sumps blow out in rain or snowmelt events? How can drilling be adequately bonded based on an EA with so much uncertainty?	Thank you for your comment. See response to comment 48.
22	**53**	The Surge EA appears to have greater uncertainty than in the recent Limo Butte EA in Cherry Creek NV (Ely BLM). The Limo Butte EA states: "No more than eight exploration bore holes open at one time unless bonded for in advance". vs. The Surge EA states: "Surge would conduct reclamation concurrent with exploration activities when portions of the disturbed areas are no longer needed. Reclamation would be completed no later than 2 years after the completion of activities under the Proposed Action, with monitoring for revegetation success continuing until revegetated areas are reestablished and bond is released". Surge EA: "Surge would track the acres of disturbed and reclaimed areas between the Work Plans to ensure the cost reclamation estimates and bonding are accurate". Why isn't this BLM's responsibility, too? How will BLM "vet" this?	Thank you for your comment. Section 2.1.1.1 of the EA was revised to specifically state the maximum of boreholes open: Surge would not have more exploration drill holes open than the maximum number of drill rigs (i.e., 4) at any one time unless they are converted into baseline characterization wells. The Work Plans would be submitted to BLM (and NDEP) for approval before any associated disturbance. In accordance with 43 CFR 3809.420(6), Surge must conduct all operations (including activities proposed in each Work Plan) in a manner that complies with all pertinent Federal and State laws. All phases of the Project would also be required to follow all ACEPMs in Appendix B of the EA. In accordance with 43 CFR 3809.552, the BLM would ensure that all aspects of the operation were covered under the financial guarantee for the project. A partial financial guarantee may be provided as long as the operations do not go beyond what is specifically covered by the financial guarantee (43 CFR 3809.553). The BLM would conduct inspections and enforcement in accordance with 43 CFR 3809.600-3809.605.
22	**54**	+How will the miner effectively mitigate more loss of surface water flows here in the SRA landscape? It has already suffered significant livestock grazing caused desertification, erosional gullying and downcutting of streams as a result, and very significant spring flow reductions or flow loss– - from chronic grazing impacts and/or livestock water developments. Great care must be taken to protect remaining surface water flows. How will the miner effectively mitigate if a spring/remnant perennial stream segment is dried up or suffers a significant flow reduction due to the project drilling? How will BLM effectively determine that any flow loss was from drilling? Note that Salmon River allotment livestock grazing-caused degradation, erosion, and other harms are now also exacerbated by climate stress. This further threatens perennial flows and the areal extent of riparian zones. Given the extent of	Thank you for your comment. Appendix B of the EA describes the water resources and erosion and sediment control Applicant-Committed Environmental Protection measures (ACEPMs) that would be implemented to prevent unnecessary and undue degradation while conducting exploration and reclamation activities within the Project Area.

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		existing loss, increasing climate stresses, and watershed erosion vulnerability to gullying, intermittent drainages and portions of ephemeral drainage, too, should be similarly avoided and receive much greater protections.	
22	**55**	What are the depths the livestock wells BLM failed to monitor that are mentioned in the EA drilled to? Will drilling encountering shallow groundwater depend on the season the drilling takes place? How much will water tables fluctuate seasonally?	Thank you for your comment. See response to comment 38 and 40.
22,23	**56**	While the Surge water report says it will do some things to limit runoff into springs, there doesn't seem to be any specified mandatory avoidance "no drill" avoidance area for floodplains, for riparian areas, for springs and for proximity to these water sources. See photo of existing drilling from Surge promo material. There's not even a little 6-inch diameter straw erosion tube. (Not that those would be effective at all in any significant erosional events. What would the potential erosional severity be of a 100-year runoff erosional event?	Thank you for your comment. See comment 48. The portion of this comment regarding a 100-year runoff erosional event is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
23	**57**	The EA Water Report at 206 states: *"Soils in the Project Area consist primarily of well-drained, gravelly sandy loam with high to very high runoff potential. Soil salinity ranges from non-saline to very slightly saline. Most soils are derived from residuum and/or colluvium and depth to bedrock is typically less than 60 inches. As part of a mountainous a of the claim block. The exact nature of the body is not well known but it appears to pre-date the mineralized claystone".* So how shallow is the soil in various areas – just saying "bedrock is less than 60" leaves a lot up in the air. erosion down to bedrock?	Thank you for your comment. Table 2-1 of the Water Resources SER provides the depth to restrictive feature (i.e., bedrock) for the mapped soil types within the Project Area. Refer to Figure 3-4 of the EA to see the distribution of the mapped soil types throughout the Project Area. Refer to Table 3-5 of the EA for the acreage and percentage of mapped soil types within the Project Area.
23	**58**	Please provide an estimate of the amount of topsoil that has already eroded away over the past 170 years of livestock grazing in the project area uplands.	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
23,25	**59**	BLM must also consider the cumulative impacts of Peloton, CAT, New Sky, Red Mountain, Sienna Resources and any other lithium or other mining companies discussed below in water flow sustainability, riparian habitat for Sage-grouse brood rearing as well as other terrestrial and aquatic species critical habitats. Plethora of Foreseeable Drilling by Many Lithium Boom Speculators in Lands Near Granite Range Would Have Major Adverse Impacts All the companies listed above in the CAP mining promotional info may be conducting "Notice" level exploration soon right in this same landscape. Peloton or others may already be drilling. Please provide detailed current mapping of all claims in this region, and info on the Notice and drilling/trenching status of all mining company preparations for Notice or other drilling activity of which BLM is aware	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
26,32	**60**	Surge Project Land Area Was Designated Sage-grouse Focal Habitat and Proposed by BLM for the Greater Sage-grouse Mineral Withdrawal in 2016 Due to Land's Importance to Sage-grouse How much have the claims increased in the period from 2016 up to late 2024? Please provide detailed mapping of all current mining claims in the region (Gollaher PMU) as well as lands leased for oil and gas or other energy development.	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
32	**61**	Surge EA Relies on Deficient Biological and Ecological Information. EA Has Major Site-Specific Biological Data Voids. We are dismayed that BLM arbitrarily and negligently failed to require bat, insect, reptile, and small mammal inventories, as well as thorough and systematic rare plant inventories,. The mine consultants spent minimal time in the area and their specific methods are not revealed in the EA. Vast areas of Elko District lands have never undergone site-specific intensive inventories for important, sensitive and rare species. Across BLM lands, intensive inventories typically only happen if lands face a serious development threat. BLM typically ignores collecting site-specific species occurrence data in its grazing analyses. Thus, there's a large species site occupancy, occurrence and population data void in the region.	Thank you for your comment. Baseline field surveys for special status plant and wildlife species, butterfly and milkweed, and general wildlife surveys (including reptiles and small mammals) were conducted as part of the Biological Baseline Report for the Project. As stated in Section 2.3 of the Special Status Species SER, *"while the BLM did not request that bat surveys be included in the baseline survey for the Project, bat habitat assessments were completed on behalf of a voluntary request by Surge."* Baseline Reports were reviewed and deemed complete by BLM consistent with 43 CFR 3809.401(c)(1). The results of the baseline field surveys are included in the applicable SER.
32	**62**	The Surge EA states there are 2 Sage-grouse leks within a 4 mile buffer, but never reveals where these are located.	Thank you for your comment. Section 3.3.8.2 of the EA states: "Two leks are located within a 4-mile buffer from the Project Area: the Corral Canyon 1 lek is located 2.1 miles south of the Project Area and the Texas Spring lek is located 3.6 miles from the Project Area. "

Table 1 BLM Responses to Public Comments			
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33,39,40, 41	**63**	**Context: Pages 34-39 include screenshot images of figures (i.e., maps) of the O'Neil Project** Below are maps from the 2024 O'Neil PJ eradication and sage "restoration" and fuelbreak and herbicide EA The O'Neil PPA EA fails to provide detailed on vegetation outside its "treatment" zones. The fuelbreaks will create new substantial habitat fragmentation in Sage-grouse and other sensitive species habitats. The O'Neil EA plans: "Proposed vegetation treatment units include 12 restoration units totaling 96,329 acres, 15 conifer removal units totaling 87,133 acres, and 413 miles of linear fuel breaks (totaling 25,000 acres). Total area proposed for treatment is 208,462 acres, which is less than 9% of the total project area". It attacks nearly all the remaining PJ forest in a vast landscape of over 2 million acres.	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
40,41	**64**	Pinyon Jay Habitat in Tis Landscape is Gravely Threatened There is now grave concern for the plight of the Pinyon Jay, petitioned for listing by Defenders of Wildlife and. USFWS found PJ may warrant ESA listing in its 90-day Finding. FWS has now slow-walked listing action. Meanwhile, the bird's plummeting population and habitat loss is being greatly driven by BLM and USFS deforestation projects just like the Wells O'Neil PPA mega-deforestation project decision issued only a month prior to the Surge Draft EA release.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.
40	**65**	See further discussion of Surge EA and Pinyon Jay in Attached Fite O'Neil Declaration .	Thank you for your comment. The attachment referenced was not provided.
41	**66**	Wells BLM O'Neil PPA Vegetation Treatments EA Project Greatly Threatens Same Sensitive and Important Species and Migratory Birds As Surge and other Drilling Does	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
42	**67**	**Context: Screenshot image of O'Neil Project displaying conifer and restoration treatment units** Map of "conifer treatments" from O)'Neil EA. WLD incorporates the attached Fite declaration submitted with WLD's O'Neil Appeal and the WLD O'Neil Appeal in support of these Surge comments. BLM treatments around the area will further doom Pinyon Jay persistence.	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
43	**68**	In the few areas where BLM maps Phase III which the EA seems to claim are the only persistence PJ sites, he islands and pockets of trees BLM claims will be left for wildlife, and the further fragmentation and "feathering" destruction of Pinyon Jay habitat is planned by BLM. This ignores that "feathering" will result in more "edge" and more collateral damage to remaining "forest "leave trees" and patches. This is because all the tree injury and copious release of sap in cutting and masticating trees in the O'Neil PPA will lure in beetles that kill and infest adjacent trees - wipe out Pinyon Pine trees BLM left - and even more habitat essential for the survival of the Pinyon Jay. In fact, "treating" the blocks of already greatly reduced PJ forest in this region by "feathering" edges, will result in more irreversible loss of old growth forests and BLM's artificial category of "Phase III" trees that are several hundred years old. Even if trees start to recover, it will be 300-400 years or more until there is a functioning old and mature forest. See Bauer and Weisberg research looking at actual fire return intervals in Nevada PJ forest. They found a fire return interval of over 400 years. This must be compared with the various models and range papers BLM uses to claim trees should not be present on nearly all the arid land sites in the O'Neil project area, is shown in the project's deeply flawed modeled "sagebrush" mapping that classifies large areas of persistent PJ forest as "sage". Further, as BLM's O'Neil EA Table shows that the 2 general areas (Murdock/Toano and North Pequops) where BLM admits there are still blocks of mature and old growth forest, are greatly threatened by the EA enabling "Phase I" and "Phase II" PJ deforestation "treatment" and "feathering" disturbance plus pile burning all around and amid older patches. This threatens the remaining forest with: 1) Death from insect and diseases due to injured trees and sap release; 2) Heavy equipment cross-country travel soil disturbance expanding flammable weeds; 3) Pile burning creating great spots for new weed infestations in hundreds or thousands of sites,	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.

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		O'Neil EA "treatments" include: Hand thinning, mastication, broadcast and drill seeding, pile burning, greenwood fire cutting, herbicide, temporary fencing, extensive use of drift-prone herbicides that may cause collateral damage to non-target herb native species including sagebrush and any young trees. The pile burning is a disastrous way to create thousands of new infestation sites for cheatgrass/medusahead and other weeds, Pile burning scalds the soil surface, and creates areas where cheat/medusahead/bulbous bluegrass, etc., gaining a foothold on previously un-infested sites. EA removal of cooling protective forest cover, and the destruction and disturbance of biocrusts and soils and native understory vegetation (grasses, wildflowers) by tractors or other heavy equipment seeding further promotes weed expansion and spread. BLM also plans major use of toxic herbicides – which will prevent both sagebrush and PJ from regenerating established. BLM will destroy beautiful vibrant biodiverse successional and mature native forests - and permanently and irreversibly expand irreversible flammable weed takeover of disturbed sites and surrounding lands. These weeds are the greatest threat to both sage and PJ sensitive species and a large-scale cause of wildlands fire across the region.	
44	**69**	In fact, BLM's O'Neil PPA EA at 32 states: *"Shrub Steppe and PJ Woodland communities in the Great Basin were little influenced by humans before Anglo-American settlement in the mid-1800s. Since then, a variety of interacting factors, including excessive livestock grazing, conversion to agriculture, urban and exurban development, recreation activities, mining and energy development, invasive plant species, altered fire regimes, and climate change, have caused widespread changes in the structure and function of Shrub Steppe communities. Of these factors, the greatest threats to the persistence of historical Shrub Steppe communities in the O'Neil* *PPA (Figure 8) are the invasion of non-native annual grasses, primarily cheatgrass (Bromus tectorum), into low- and mid-elevation sagebrush ...".* BLM also claims the PJ are a threat but the large-scale treatment disturbance of the O'Neil PPA will result in irreversible cheatgrass spreading permanently in the areas previously occupied by PJ. BLM's radical and extensive deforestation disturbance and destruction of cooling site moderating soil stabilizing biodiverse native forests, as well as forest and sage destruction across 413 miles of fuelbreaks where sagebrush and native shrubs as well as trees will be destroyed - and will be highly vulnerable to cheatgrass – pose serious harm to both my own and WLD's members interests. BLM fails to provide specific mapping of Phase I. II, II areas across the landscape, and the complex interspersion of both different age forests growing in what are in reality persistent PJ sites, and successional forest attempting to recover from past disturbance. There is also no info on the presence of diverse species such as mountain mahogany or mountain shrubs (including both young and old growth mountain mahogany) that will be destroyed as "collateral damage:" by BLM In its aggressive use of heavy equipment and herbicides, and other deforestation "tools" in the forests. Data, mapping or other information delineating these so-called leave areas. BLM claims to care about Pronghorn, Mule Deer and Elk winter range, yet PJ forest and mountain mahogany provide thermal cover, and food for big game species in hard winters. Forest cover also protects animals from poaching and human disturbance and harassment by providing security cover. This is increasingly of great importance as recent studies on both roading and recreational disturbances such as snowmobile use and mountain biking show significant displacement of big game animals due to human recreational disturbance. Forests and dense old growth sagebrush help minimize disturbances.	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
44	**70**	Photos of the surge project site show very important mature and old growth sage communities and also forest cover. All of this will now be greatly fragmented and made vulnerable to extensive weed infestation due to the Surge project. The loose and uncertain "Phases" of drilling do not even allow analysis of how much sage and how much forest cover will be fragmented and destroyed.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.
44,45	**71**	The WLD Declaration observes: "My observations of past Elko Wells BLM and Ely BLM projects have found BLM leaves scraggly isolated patches, and trees within them die from insects attracted to the injured and destroyed trees oozing sap. The insects then spread into adjacent forest. BLM never provides a single reference or information of any	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.

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		kind the delineates the area actually required to sustain (nesting, winter food, etc.) viable populations of all of the sensitive and important wildlife species and migratory birds it refers to. BLM fails to conduct an actual on the ground site- specific hard look and analysis to identify specific sites where trees would remain, and it never conducted the necessary surveys to determine the habitats and specific areas occupied by these wildlife species to begin with. We stress that all of this O'Neil PPA disturbance is slated to take place with no pre-decisional and/or integrated baseline inventories for Pinyon Jay or any other sensitive and important species. And since the EA lacks any current data on occupied habitats, areas of Jay nesting colonies, how much old mature and growth sage is present that supports nesting Brewer's Sparrow, Sagebrush Sparrow, Sage Thrasher, Loggerhead Shrike, etc. BLM is flying blind in the O'Neil EA – and now the public is faced with a worthless and deeply flawed biological baseline in the Surge EA	
45	**72**	**Context: Screenshot image of O'Neil Project figure** It just so happens that forested areas right by the 7800 Surge EA site are targeted by BLM in the O'Neil EA. O'Neil project fuelbreaks are located right by the Surge site too. O'Neil EA map – with a bit of white private land and fuzzily labeled "Texas Spring" with a bit of white - the Surge project surrounds that. Dark lines are "fuelbreaks" where O'Neil project where sagebrush will be mowed to the ground, trees destroyed and herbicides used. The circles are the "restoration" treatments where all trees (purple) will be killed and sage (blue) "re-rehabbed" after BLM post-wildfire efforts just like what is being repeated in the EA flopped. The fire rehab seeding, spraying and re-seeding.	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
45,46,47	**73**	There is also no analysis of the critical importance of the remaining forest habitat in the O'Neil EA (and that runs through the Surge site) for connectivity with the scattered and tattered remnants of PJ forests in Idaho. The greatly reduced Idaho PJ forests, like the Wells BLM O'Neil PPA forests, have suffered large-scale historical and ongoing BLM and USFS deforestation "treatments" to generate livestock forage, vast areas have been lost in wildfires, and now face a hist of looming new mining and energy development threats BLM has not revealed just how it plans to adequately detect Black-throated Gray Warbler, Juniper Titmouse, Pinyon Jay or other nest sites. For some of the impacted birds, this would take weeks diligent of surveys by very knowledgeable biologists over months within the same area. BLM never even provides a mandatory period of time for any avoidance if a nest is detected BLM ignores that Pinyon Jay may start nests in February, Golden Eagles and Owls may begin breeding in January, and any treatment from early March through early July will be certain to "take" – kill, harass, injure, destroy --nests, eggs and/or young birds. This lax uncertain scheme, and BLM design feature loose "weasel words" make any claimed protections highly uncertain to be effective. It also violates the MBTA. There is no urgency to killing trees (or sagebrush as collateral damage) – as this project languished from 2016 to 2024. Much of the info it is based on is stale and the "science" of PJ destruction is woefully out-dated, and not grounded in the realities of the tremendous loss of PJ habitat that has already taken pace in the region and this locale's key role in providing habitat connectivity with Idaho. Nor is it grounded in the grim realities of climate change stress effects on arid western sagebrush and forests. "Active raptor nests would be avoided with the appropriate buffer during treatment" – so the prey habitat right outside the little buffers could be destroyed by O'Neil PPA treatments when raptors have several chicks to feed – and the area right by the nest may b e destroyed too after the nesting season. BLM fails to provide info on effectiveness of its raptor site buffers, and the necessary areas to provide habitat security, to prevent human disturbance, etc. I have seen typical agency "buffers" and they are greatly insufficient to protect species. Plus, the expensive mastication and clear- cutting contractors BLM/USFS hire to conduct projects often disregard supposed "leave areas" and buffers. BLM's O'Neil PPA EA states: "Although it is likely that several causes have contributed to the decline of pinyon jay populations (e.g., historic large-scale clearing of habitat to support the mining industry, habitat enhancement for other species or to create better livestock grazing, fuels reduction efforts and climate change), Somershoe et al. (2020) identified sage-grouse habitat improvement projects as one potential cause of habitat loss. These projects most often involve complete removal of pinyon and juniper trees, most often at their lower elevation limits which are areas	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.

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		favored by jays, within sagebrush communities. Between 2010-2017, over 1.1 million acres of conifers were treated through the Natural Resource Conservation Service' Sage- Grouse Initiative and Utah's Watershed Restoration Initiative (unpublished data cited in Somershoe et al., 2020)". These sites are exactly the same type of sites that BLM's O'Neil project proposes to wipe out nearly all trees in – the lower elevation.! (Along with seriously fragmenting mature and old growth forest in the Pequops and Murdock landscape). The Phase I and Phase II artificial BLM category areas often contain cone- producing trees that are vital to provide sufficient food and habitat and total forest cover for Pinyon Jay and also for the Titmouse. ALL the PJ species here are already facing large-scale existing reductions in available habitat because of past fires and BLN treatments – both within the project area and across the broader landscape. BLM's O'Neil EA falsely claims that impacts to sensitive and important forest species like Juniper Titmouse habitat would be small – as it the EA deforests vast areas of the remaining trees across the landscape, and fragments sites where trees still cling on. The O'Neil EA PJ killing is not only around leks – witness the North Pequops and Murdock/Toana and other sites not specifically named in the EA. And, as previously discussed deforestation of Phase I and Phase II will result in injury and death from insects or pile burns causing rampant cheatgrass that dooms remaining Juniper Titmouse and other forest species habitats. BLM's sensitive species policy doesn't elevate Sage-grouse above Pinyon Jay and significant tree killing in the EA has nothing to do with Sage-grouse leks – yet the O'Neil EA treats the PJ habitat as disposable. BLM never identifies specifically where the "other" and ample habitat for all the species whose habitat is harmed, fragmented, and/or destroyed is supposed to be – or if it even exists in the project area and landscape. The ever-shrinking occurrence of Pinyon Pine in immediately adjacent Idaho – like at City of Rocks where there is serious Pinyon die-off - is ignored for these species. BLM never conducted the pre-decisional baseline inventories needed to determine PJ forest and shrub sites occupied by Virginia Warbler or Black-throated Gray Warbler and the size of the population or that of any other migratory bird occupancy – not even conducting pre-decisional current Pinyon Jay or Ferruginous nest hawk searches. The O'Neil EA repeatedly tries to portray the relative impacts as "small" - without providing any information on how much PJ habitat has already been lost and/or will foreseeably be lost due to a huge number of Ely and other BLM offices and USFS pending and already authorized deforestation "treatment" projects. When one views how little PJ actually exists in the real world, on the ground, in 2024 and not "modeled" in BLM's deeply flawed Landfire and other vegetation mapping endeavors, it's alarming. The maps below of Pinyon Jay range show how important the NE corner of Nevada is – for linkage with the tiny bit of remnant habitat by City of the Rocks (where Pinyon Pine is dying out) and other areas to the north, where some pinyon still persist but are in serious decline and in crisis. To the north in SE Idaho, Burley BLM Has destroyed vast areas of Utah Juniper and at times mixed juniper and Pinyon pine, and large-scale wildfires have also destroyed forests. Basically, the forest tree cover is radically shrinking. And Burley BLM and the Minidoka RD of the Sawtooth Forest and other Sawtooth lands in the scattered Albion, Sublett, Raft River (Utah) lands, and are a primary cause of this.	
48	**74**	**Context: Screenshot of image from O'Neil Project** This map shows continuous pink (forest cover) in Idaho – and that is simply not the case – there is minimal to no tree cover over vast areas and huge treatment zones – as in the Jim Sage Mountains and Oakley region. The viability of Pinyon Jay and connectivity over a vast area is already in great jeopardy.	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
48	**75**	The O'Neil project will sever habitat connectivity, and cause significant long-term and often permanent habitat loss, fragmentation and range perforation for this greatly declining species. The Surge EA (and all the other brewing mining activity in the region) will punch more holes or contractions in the species range.	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
50	**76**	Pinyon pine die-off is a major ecological concern across the West. Now, increasingly, juniper trees are also exhibiting various signs of partial or whole tree die-off. Yet BLM's O'Neil EA with its deeply flawed single-sided analysis and rubber-stamp FONSI ignores it. BLM claims there will be all kinds of habitat left for Pinyon Jays and forest-dependent species – while its deforestation "treatment" actively destroys vast areas of maturing trees and	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.

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		fragments and degrades pockets of remaining forest and sets in motion insect-caused Pinyon Pine mortality all around the trees it kills and cuts. The minimal and flawed baseline species and habitat information, as well as extraordinarily vague exploration details in the Surge EA is another example of BLM ignoring the significance of both PJ and sagebrush communities. Unpredictable Pinyon Pine die-off is occurring across the region- as at City of Rocks. This touches the northern O'Neil project area. Wells BLM appears to be doing all it can to push Pinyon Jay (and other pine species) towards extinction in violation of its sensitive species policy and FLPMA. Juniper is also increasingly dying. The O'Neil EA is silent on the current status of Pinyon pine mortality in the O'Neil project area, as well as the current status of the health and mortality of Utah junipers. This species too is now facing various forms of die-off and die-back. BLM is flying blind, with no basis for signing FONSIs to understand the significance of the O'Neil project imposing radical cutting, masticating, pile burning disturbance, seeding - plus rampant and unlimited amounts of herbicide use - on already declining native forests.	
50	**77**	The Surge project will further expand habitat fragmentation of currently intact forest critical for providing habitat connectivity and restoration of Pinyon Jay and other forest species populations to levels that would no longer warrant listing. It is impossible to tell how much forest will be destroyed and/or fragmented under the surge EA, as BLM fails to provide any specific info at all for where in the 7800 acres project site Phase II and Phase III (not to be confused with the artificial PJ canopy cover Phase I, II, III categories that BLM uses in the O'Neil PPA EA to try to legitimize its massive deforestation scheme.	Thank you for your comment. As stated throughout the EA, *"up to 250 acres of vegetation would be disturbed in phases over the approximate 3-year Project life due to implementation of the Proposed Action"*. Refer to Table 3-7 of the EA that lists the maximum acreage (and percent) by vegetation community (e.g., Great Basin Pinyon-Juniper Woodland) that could occur due to implementation of the Proposed Action. Refer to Figure 2-1 of the EA for a depiction of the proposed general disturbance area.
50,51	**78**	Pinyon Jay populations Are crashing across the West. Pinyon Jays are a sensitive species petitioned for ESA Listing. USFWS has issued a Positive 90-day Findin.: USFWS Breeding Bird Survey (BBS) Records reveal alarming losses in Pinyon Jay populations. The Cornell Lab of Ornithology records that pinyon jay population numbers have declined by 85% since 1979, largely as a result of the conversion of pinyon and juniper woodlands to grazing lands. Populations fell by 3.7% per year between 1966 and 2015, resulting in a cumulative decline of 85%, according to the North American Breeding Bird Survey (Boone et al. 2018). Partners in Flight estimates a global breeding population of 770,000, with 99% living in the U.S., and 1% in Mexico. The species rates a 14 out of 20 on the Continental Concern Score, and is both a Tri-National Concern Species, and a U.S.-Canada Stewardship species. The Pinyon Jay is on the 2016 State of North America's Birds' Watch List, which includes bird species that are most at risk of extinction without significant conservation actions to reverse declines and reduce threats. Destruction of pinyon-juniper habitat to create grazing land for cattle has caused the loss of many jays. Given that the proposed project will destroy vast areas of pinyon-juniper forest, and the fact that Pinyon Jays are a BLM sensitive species in Nevada, its effect on Pinyon Jays must receive a serious science-based hard look NEPA analysis. We stress that the O'Neil EA fails to bother to even map and assess the potential threat and adverse cumulative impacts from the Surge and other foreseeable lithium boom projects occurring or foreseeable in this landscape, and vice versa. As WLD commented on the O'Neil EA: "The EA's minimal, lax and often unscientific avoidance and mitigation measures will result in substantial migratory bird "take" direct loss of nests, eggs, and chicks that will result from mowing, chaining, cutting, and other activities. See Cornell Lab of Ornithology, Pinyon Jay. https://www.allaboutbirds.org/guide/Pinyon_Jay/ lifehistory#conservation (Accessed 8/4/19). (Artemisiospiza nevadensis), common nighthawk (Chordeiles minor), gray flycatcher (Empidonax wrightii), and green-tailed towhee (Pipilo chlorurus). Pinyon-juniper habitat bird species that will be seriously impacted include: Pinyon Jay (Gymnorhinus cyanocephalus), Juniper Titmouse (Baeolophus ridgwayi), Mountain Chickadee (Poecile gambeli), Bushtit (Psaltriparus minimus), Black-throated Gray Warbler (Setophaga nigrescens), Northern Goshawk, Ferruginous Hawk (Buteo regalis), and others".	Thank you for your comment. Comments on the O'Neil EA are beyond the scope of the Nevada North Lithium Exploration Project EA and do not require further agency response.

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51	**79**	**Context: Species listed in comment number 78.** These same species are also threatened by the Surge EA, the BLM Solar FEIS allocations, and other development schemes on both BLM and private lands	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.
51	**80**	Also, BLM's O'Neil PPA EA never assesses the collateral damage to mature and old growth sage in and near its PJ and sage "restoration" sites – including destruction of Pygmy Rabbit habitat as collateral damage – or from the unexplained "mowing" in the O'Neil PPA EA sage "restoration" treatments, as well as the fuelbreak-caused habitat destruction, fragmentation and weed expansion. This is made even worse as roads are often located in deeper soil less rocky sites – which are the sites where rabbit burrows are located. BLM relies on a general model for Pygmy Rabbit habitat, and never bothers to actually systematically look at where the species still hangs on in the O'Neil project area. BLM ignores new threats like RHD to this species, and this disease threatens all native rabbits – which are a primary prey species of raptors and native carnivores.	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
51,52	**81**	Maser and Gashwiler Juniper Studies Show Great Values of Native Juniper Trees for Avian and Other Species BLM plans to tear apart important, scenic and biodiverse public wild lands with a management scheme based on massive deforestation of protective western juniper native tree cover that provides wildlife species habitat for over 80 species of native animals. (See Maser and Gashwiler 1978). Much of the landscape, and nearly every acre targeted for deforestation in the O'Neil EA is in fact a persistent juniper woodland forest site -based on elevation, precipitation, soils, and tree persistence. See Intermountain Forester Position statement defining persistent woodland, and Romme et al. 2009. BLM ignores all forestry values of the allotment and treats the trees like weeds. The deforestation scheme takes place in the context of a broader landscape where there has already been many treatments, and many more are planned. Recent wildfires have burned large areas of both junipers and sagebrush, coupled with BLM "treatment" denuding watersheds and resulting in loss and destruction of PJ forests, forest species habitats (see Rosenberg et al. 2019 describing large-scale losses in migratory birds that are dependent on forest) and BBS Pinyon Jay decline statistics. After it cuts down trees, BLM often drives bulldozers cross-country killing piling the down trees, pile burning and ignores the piles in conflagrations that scorch the soil. BLM then very foreseeably plans to douse vast areas of the project area with toxic chemical herbicides. BLM claims this radical and expensive disturbance scheme is to benefit sage-grouse and reduce fire. BLM has not taken a hard look at how likely this hoped for outcome really is. WLD's site visits have found that much of the landscape is rugged and unsuitable for sage-grouse to any appreciable extent – no matter if BLM destroys every tree. Plus there is already serious highly invasive flammable annual grass infestations in many areas (current baseline data is absent from the EA – so there will be no way to gauge how much the O'Neil project increases cheatgrass in these project sites, especially the forests and fuelbreaks). The treatments and intensive grazing heighten the risk of expansion (this also provides unpalatable livestock and big game forage). The importance of western juniper to host of native animals has long been known. Here are excerpts from Maser and Gashwiler (1978) Proceedings of Western Juniper Ecology Workshop (many western juniper species also occupy PJ in Nevada):	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
54	**82**	Maser and Gashwiler Table 1 summary shows there are 8 bird and 8 mammal species that rely on Young WJ; 58 birds and 22 mammals that rely on Mature juniper; 56 birds and 21 mammals that rely on "Old and Decadent" juniper; and 1 bird and 9 mammals that rely on downed logs. I stress that BLM's artificial "Phase II in particular includes large amounts of Mature PJ forest. BLM even plans to virtually eliminate any habitat values of downed/destroyed trees and wood, as it plans to masticate, pile burn and otherwise destroy carbon sequestering wood, and instead inexplicably pollute the atmosphere and increase climate change gases. The downed log habitat will be variously destroyed in mastication/bullhogging and especially the pile burn part of the project destruction.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.
54	**83**	In the deficient Surge EA biological analysis, BLM never even required the mining industry consultants to survey for Pinyon Jays during Pinyon Jay nesting season. Pinyon Jays may move over considerable areas in the non-breeding season. The Surge EA lacks any assessment of the forest stand composition affected by the Surge and surrounding lithium boomer potential mining projects.	Thank you for your comment. As outlined in Section 3.3.8.1, BLM acknowledges that while there are no recorded observations in the Project Area (based on surveys to date), that potential habitat for pinyon jays does exist. To minimize potential effects to special status species, Appendix B of the EA lists a range of ACEPMs to protect a range of migratory birds and raptors (including pinyon jays), including to the extent possible, to schedule land

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			clearing and surface disturbance to occur outside the avian breeding season to prevent destruction of active bird nests, eggs, hatchlings, etc. (April 1 to July 31 for most migratory bird species; February 15 to May 15 for pinyon jays), and January 1 to August 31 for bald and golden eagles annually (in accordance with BLM policies) to comply with the MBTA and the BGEPA.
54	**84**	Major BLM Solar FEIS Allocation Sagebrush and other Habitat Fragmentation and Foreseeable Sensitive Species Biodiversity Loss BLM's Solar EIS treats vast areas of the Interior West, often lower elevation lands most critical to wintering wildlife and that are already under great threat from cheatgrass and other flammable weed expansion- as sacrifice zones to the solar industry. BLM claims the development will be far less than 31 million acres – but the Solar EIS allocation essentially puts the affected lands in a sacrifice zone category. BLM Solar EIS mapping is found here: https://experience.arcgis.com/experience/269187273bc743c5a4d21c75b44d0f2f	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
54,55	**85**	Lands by and within the Surge project zone are mapped as avoidance areas for Solar development. BUT as with everything BLM does, voidance doesn't really mean you can't build solar there. It just means BLM will twist and turn reality on its head, and find a way to justify development actually taking place. **Context: Screenshot image, presumably from 'solar EIS ROD'** This paler green patterned color on BLM Solar maps means "Avoidance", but this just means that developers may have to jump through some more hoops so a BLM manager will be able to claim the development can take place. As with so many BLM terms, "avoidance" doesn't mean a site actually has to be "avoided" by the solar industry	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
57	**86**	Visual Impacts and Scars must be Systematically Assessed We understand that BLM is re-evaluating Visual standards for the Greenlink North transmission line where there is an ancient 1980s Land Use Plan (like the Wells RMP here). Wells BLM simply cannot rely on the woefully out-dated Wells BLM Land Use Plan, and must prepare an EIS with RMP amendments updating the visual and many other allocations to be compatible with public use and enjoyment of public lands, n sustainability of public resource values in the Wells landscape, in 2024. The old RMP never considered climate change stress – which magnifies and exacerbates the harms to wildlife/sensitive species, watersheds, water sustainability after 40 years of ever hotter temperatures the prolonged mega-drought, and chronic and ever-worsening cumulative impacts of high levels of livestock grazing while from climate stress bears down.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.
57	**87**	Looking at this EA species list, it appears to us that skilled field biologists would have to try really, really hard to not detect and find many bird species in order to compile a list this sparse. Either that, or the consultants weren't familiar with Great Basin avifauna, or perhaps they did the surveys at high noon? What is the reason is for this skimpy species list. Basic thorough multi-year baseline surveys must be conducted over all seasons over the span of multiple years.	Thank you for your comment. Baseline data collection (including biological resources) and associated reporting for the Project Area have been deemed complete by BLM consistent with 43 CFR 3809.401(c)(1). Please see associated SERs prepared for this this EA for detailed discussion of baseline information and effects analyses for the range of resources and resource uses considered in this NEPA review. Section 2.2 of the EA presents the Project alternatives and Appendix B includes Applicant-Committed Environmental Protection Measures (ACEPMs) to prevent unnecessary and undue degradation while conducting exploration and reclamation activities within the Project Area.
57	**88**	And was there really a Lincoln's Sparrow, as listed? We suspect it may have been a Vesper Sparrow. Also, Vesper Sparrow, one of many species likely present, is absent from the list.	Thank you for your comment. See response to comment 87.
57,58	**89**	No Burrowing Owl, no Bushtit, no Mountain Bluebird, no Western Meadowlark, no Common Poor-Will, no Song Sparrow, no Mountain Chickadee, no Woodhouse Scrub Jay, No accipiters, no Loggerhead Shrike, no Brown-headed Cowbird, no Brewer's Blackbird, no Ferruginous Hawk, no Gray Flycatcher, no Virginia's Warbler, no Townsend's Solitaire eating juniper berries in winter, etc.	Thank you for your comment. See response to comment 87.
58	**90**	The EA doesn't even say what specific methodology was used, if point counts were conducted, and what hours the avian surveys were conducted, and where they were done. This shows the very limited information: **Context: screenshot of Section 3.3.3.1 (Affected Environment) of Surge EA**	Thank you for your comment. Specific methodology for wildlife surveys (including migratory birds and raptors) is described in detail in the Biological Baseline Report (2023), Special Status Species SER, and Migratory Birds and Raptors SER. For example, Section 2.3 of the Migratory Birds and Raptors SER states that "*raptor and eagle survey protocols were provided by the BLM and USFWS".*
58	**91**	There are no systematic reptile,or small mammal – other than some claims of Pygmy Rabbit surveys - with no specific areas surveyed identified, no rare bat surveys, no information on how rare plant surveys were conducted, and where, etc. There's pretty much nothing, and certainly no adequate basic biological surveys.	Thank you for your comment. See response to comment 61.

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58	**92**	BLM has no basis for gauging the significance of impacts until it actually has established the on the ground occurrence of species through competent and timely baseline biological inventories conducted correctly-and not the incredibly slipshod surveys the GSI consultants conducted.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.
58	**93**	The EA mentions Golden Eagle nests in the "general vicinity", but provides no info on distance to nests – despite the birds potentially be disturbed and disrupted by mining activity – noise, lights, vehicles, loss of prey habitat, live-in drillers for 3 years, etc. Golden Eagles are in decline in Nevada and much of the West, and face a host of new threats – from BLM's industrial Solar EIS sprawl of 32 million acres – with 11 million acres allocated for industrial solar in Nevada alone, and acres allocated within the Surge project site itself.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.
59	**94**	**Context: Screenshot of paragraph mentioning Applicant Committed Environmental Protection Measures (ACEPMs) for migratory birds** The "ASCEPMs" are greatly inadequate, contain loose uncertain language and many can be waived. There is no certainty. There is also no way to conduct an integrated hard lookNEPA analysis until much more detailed biological, watershed and other info is collected and specific drill plans provided. This slipshod biological analysis, and cannot serve as the basis for allowing exploration under it to go forward.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.
59	**95**	These lithium explo surveys and biological analyses are woefully deficient. No surveys occurred before June 4 – meaning no surveys were conducted during the period when Pinyon Jays would be nesting	Thank you for your comment. As outlined in Section 3.3.8.1, BLM acknowledges that while there are no recorded observations in the Project Area (based on surveys to date), that potential habitat for pinyon jays does exist. To minimize potential effects to special status species, Appendix B of the EA lists a range of ACEPMs to protect a range of migratory birds and raptors (including pinyon jays), including to the extent possible, to schedule land clearing and surface disturbance to occur outside the avian breeding season to prevent destruction of active bird nests, eggs, hatchlings, etc. (April 1 to July 31 for most migratory bird species; February 15 to May 15 for pinyon jays), and January 1 to August 31 for bald and golden eagles annually (in accordance with BLM policies) to comply with the MBTA and the BGEPA.
59	**96**	Did the consultants just use the "Merlin" App to identify the Lincoln's Sparrow or other birds? If so, there's room for error. They surveyed for minimal dates and too late in the migratory bird nesting season. What the specific dates and day times surveyed? Were surveys conducted along access routes leading into the project area starting at Highway 93?	Thank you for your comment. As stated in Section 2.3 of the Migratory Birds and Raptors SER, *"migratory bird surveys were conducted concurrent with pedestrian general wildlife surveys conducted June 4-9, July 25, and September 22-24, 2023, as part of the baseline report prepared for the Project (WB, 2024). Twenty-six migratory birds were recorded within the Project Area by auditory clues and/or direct observation."* Refer to Table 2-1 of the Migratory Birds and Raptors SER for observation type by species. Survey methodology was discussed in detail in the Biological Baseline Report and deemed complete by BLM. Figures illustrating the GPS tracks for terrestrial wildlife surveys (including migratory birds) and avian raptor surveys were included in the Biological Baseline Report and deemed complete by BLM. See response to comment 93.
59	**97**	Were any on-the-ground biological surveys conducted prior to the Surge Notice-level drilling? If so, please provide detailed info and analysis on what was found. How were those drill sites selected? How might the Surge Notice-level drilling have impacted and disturbed habitats for sensitive and important migratory bird species and other wildlife?	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
59	**98**	There will be significant avian species, and big game mortality, behavior disruption, and habitat loss can be expected along these routes from traffic hauling samples back to town and other activity – we observed this driving frenzy with SE Oregon McDermitt Creek Jindalee drilling exploration. Note that the solar EIS shows big game seasonal migration paths in this area.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.
60	**99**	Surge EA p. 25 is indicative of how little time and care was spent in biological inventories. The slipshod consultant info refers to seeing a nest with a downy chick, but there wasn't an adult at the nest. So they couldn't say what species it was. They didn't even care enough about the quality of their work enough to get out on the ground, walk to the nest area, and find out, as anyone who was a competent field biologist would do. Instead, whoever did these surveys appeared to be doing their very best to NOT detect species – lest they be an impediment to mining	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.
62	**100**	We request a comment period extension – as this EA was released over the holidays when many of the public have numerous family and other obligations, and also few BLM staff are in the office to respond to questions	Thank you for your comment. BLM conducted the 30-day public comment period on the Preliminary EA consistent with the NEPA regulations at 40 CFR 1501.5(e), 40 CFR 1501.5(k) and 43 CFR 46.305.

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62	**101**	There was also no scoping period, which is a major concern as the public was not provided an opportunity to submit alternatives. Further, this EA was released in the dead of winter when ground-truthing assertions made in the obviously flawed document is difficult and may even damage roads and disturb wintering wildlife. Alternatives must be fully considered in a hard look analysis. For example, requiring helicopter drilling instead of road building, requiring directional drilling, prohibiting night drilling to limit wildlife disturbance, preventing real world 4000-6000 ft. elevation avian nesting disturbance from Feb-July 1 at a minimum.	Thank you for your comment. There is no requirement under the regulations at 40 CFR 1501.5 for external scoping on an EA. BLM conducted the 30-day public comment period on the Preliminary EA consistent with the NEPA regulations at 40 CFR 1501.5(e), 40 CFR 1501.5(k) and 43 CFR 46.305. Please note that according to 43 CFR 46.310(b): *"When the Responsible Official determines that there are no unresolved conflicts about the proposed action with respect to alternative uses of available resources, the environmental assessment need only consider the proposed action and does not need to consider additional alternatives, including the no action alternative."* As the project proponent, Surge determined where (and how) to propose mining the resource on its unpatented mining claims and subsequently filed a complete Plan pursuant to the regulations found under 43 CFR 3809.411(a)(1). As outlined in Section 1.2 (Purpose and Need) of the EA, under FLPMA and the BLM's Surface Management Regulations (43 CFR 3809), the BLM has a responsibility to evaluate and respond to Surge's Exploration Plan of Operations and ensure the proposed operations would not cause unnecessary or undue degradation of public lands. As outlined in Section 1.3, BLM has the option of 1) approve the Plan as submitted; 2) approve the Plan subject to changes or conditions that are necessary to meet the performance standards of 43 CFR 3809.420 and to prevent unnecessary or undue degradation of public lands; or 3) disapprove or withhold approval of the Plan if it is found that the Plan does not meet the applicable content requirements at 43 CFR 3809.401 or proposes operations that would result in unnecessary or undue degradation of public lands. See response to comment 122 below for definition of UUD. Helicopter drilling is not a reasonable alternative.
63	**102**	This EA is grossly deficient, and fails to reveal and provide specific information on the total miles of roads, drill holes, drill sites, drill hole depths (including maximum depths) steepness of slopes to have roads bulldozed into highly erodible unstable soils, etc.	Thank you for your comment. As described in Section 2.1, the proponent would submit Work Plans to BLM for approval. These Work Plans would provide detailed information as to how Surge would perform activities, access road alignments and/or improvement, site locations, the number and type of drill rigs or other equipment expected, construction/drilling schedule and reclamation schedule, any changes to previously approved Work Plans, and any updates to the reclamation cost estimate and financial guarantee as determined necessary.
63	**103**	WLD notes that Wells BLM released this EA just after this same office issued a final decision for the O'Neil PPA project – a. massive and highly destructive Pinyon-Juniper deforestation, herbicide spraying, and "fuels" project that spans the O'Neil region and Gollaher Sage-grouse PMU – encompassing the lithium exploration area.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.
63	**104**	Gollaher PMU Faces a Host of Other Ongoing and/or Foreseeable Looming Disturbance, Fragmentation, Loss and Potential for Unnecessary and Undue Degradation (UUD) from Minimal Deficient Analysis Migratory birds, sensitive species, functioning watersheds, perennial surface water flow sustainability, and health of native vegetation communities are in danger from both Surge activity and the vast BLM proposed "treatments", other party mining exploration and activity disturbance SWIP North, and the large swath of lands allocated for industrial solar in the BLM Solar FEIS. Public lands are greatly threatened be overrun by weeds from this activity, and critical seasonal habitats for Sage-grouse, big game and other wildlife face major new disruption, fragmentation and loss.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.
63	**105**	WLD incorporates by reference our recent Appeal of the Wells BLM "O'Neil PPA" EA that would inflict radical deforestation, copious aerial and other spraying, sagebrush-destroying fuelbreaks, etc. on this landscape. BLM's O'Neil PPA scorched Earth treatments include extensive "collateral" damage to sagebrush – with tree killing involving heavy equipment traveling cross-country disturbing soils providing sites for flammable weeds to take hold, spreading weeds seeds all over the landscape, crushing and killing sagebrush, and smothering lands with wood chips. The project also involves an unrevealed number and siting of burn piles. BLM contractors heap cut up trees in large piles, and then ignite the piles after the wood dries out. This scalds the soils, kills surrounding sage and trees, as well as provides ideal sites for cheatgrass invasion.	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.

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		As a result of the O'Neil project, there are likely to be hundreds or thousands of these piles and new weed infestation sites in close proximity to the Surge exploration site.	
63	**106**	SEC Sage-grouse "Mitigation" Is Likely to Be Woefully Inadequate The Surge EA refers to the Nevada state SEC (Sagebrush Ecosystem Council) mitigation for Sage-grouse. The SEC mitigation is likely to be greatly deficient. BLM determine upfront what spei9cfic mitigation actions will be undertaken for Sage-grouse, and must require certainty and ensure effective mitigation as part of this EA process.	Thank you for your comment. In the context of BLM's mining regulations 43 CFR 3809, BLM can only require mitigation measures to prevent unnecessary and undue degradation (UUD) on public lands and ensure compliance with performance standards under 43 CFR 3809.420. Any other mitigation must be voluntarily committed by the operator. As stated in Section 3.3.8.2 in the EA, Surge would mitigate impacts using the Nevada Conservation Credit System, as stipulated by Nevada State Regulation NAC 232.400-232.480. Refer to Appendix B for ACEPMs that Surge has committed to while conducting exploration and reclamation activities within the Project Area.
64	**107**	Merely having a mining company purchase "conservation credits" from SEC certainly does not do that. WLD learned from experience with Thacker Pass. When WLD inquired with Winnemucca BLM about what specific Sage-grouse compensatory mitigation had occurred through the SEC at Thacker Pass, BLM directed us to the SEC. We learned that a meadow grazing range project 80 miles away at an Estill Ranch property near Vya had been the mitigation to date, and more range projects were planned. Yet the major direct habitat loss at Thacker Pass that was admitted to in the BLM EIS was Wyoming big sagebrush habitat loss. Basically, the SEC Sage-grouse mitigation, based on the Thacker situation, is pretty much biologically meaningless for the local population actually impacted.	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
64	**108**	**Context: Screenshot of Surge EA table of total disturbance acreage by phase** How can BLM even call this an analysis, when there is no mapping and zero information on the specific locations of any non-Notice drill sites, roads, sumps and much else? How can BLM calculate exactly 34.91 acres when there's no mapping of the great majority of Phase I disturbance	Thank you for your comment. The proponent would submit Work Plans to BLM for approval. These Work Plans would provide detailed information as to how Surge would perform activities, access road alignments and/or improvement, site locations, the number and type of drill rigs or other equipment expected, construction/drilling schedule and reclamation schedule, any changes to previously approved Work Plans, and any updates to the reclamation cost estimate and financial guarantee as determined necessary. See response to comment 46 and 77 above.
65	**109**	BLM states: "Surge proposes to use a phased approach to minimize environmental effects and to prevent unnecessary and undue degradation of public lands associated with currently authorized and future Project exploration activities (Surge, 2024a). Surge would submit Work Plans to BLM and BMRR prior to implementing the initial and each subsequent phase associated with mineral exploration, metallurgical sampling and testing, groundwater baseline characterization and supply well installation, geotechnical investigations, and infiltration testing for agency review and approval". We request that BLM make mandatory a new EA (at a minimum and we believe an EIS maybe required) for each of the next drilling "phases". This is critical, as over the period the Surge drilling is taking place, there may be NEW Peloton, CAT, New Sky, etc. drilling taking place cumulatively impacting ground and surface waters, fragmenting and displacing wildlife into suboptimal habitats, and generally creating a huge disturbance zone.	Thank you for your comment. With the EPMs in Section 2.1.8 and Appendix B of the EA along with the proposed reclamation methods, the BLM has determined that potential impacts would be minimized to a level appropriate for a Finding of No Significant Impact; therefore, an EIS is not warranted as this Project is a mineral exploration project that would be permitted for up to 250 acres of surface disturbance.
65	**110**	It is also essential that BLM get in front of the potential decimation of vital sensitive species habitats now, and require all the neighboring lithium boom miners and speculators to conduct much more intensive baseline resource surveys of all kinds.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.
65	**111**	Will the "Phased" approach referenced in the POO include the claimed "reclamation" resulting in additively more than 250 acres of disturbance? The EA states: *"2.1.2 Proposed Subsequent Phases The actual locations of the proposed subsequent phased disturbance and timeframe would be determined by the results of the Phase I activities. Under subsequent phases, Surge would continue with the same types of surface disturbance described above, as well as potential bulk sampling, geotechnical investigation, and infiltration testing".* This leaves the miner free to tear up ANY area, any species habitat, any slope with bulldozing, drill rigs, etc. – including putting drill sites right on top of tiny already threatened and often greatly diminished springs).	Thank you for your comment. Total authorized disturbance would not exceed 250 acres.
66	**112**	**Context: Screenshot image from 'Jindalee Hi-Tech Lithium Drilling'** The Map above is from Jindalee EPO p. 210 gives a preview of the even worse mince-meating of public lands that	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis.

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		will occur with Suge's 250 acres of disturbance (vs. Hi-Tech 99 acres). Here's how "specific" the Surge EA is – even the Phase 30-35 acres in Phase I is just shown as a green blob. EA Figure 2-4, screen page 75.	Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.
68	**113**	The Limo Butte EA describes drilling per rig day per day using "10,000 to 15,000 gallons per day per rig depending on subsurface conditions encountered". Yet the surge EA only refers to 10,000 gallons. It seems in every possible way the Surge EA lowballs the actual real-world impacts of the project. This also is pertinent to sump capacity. We request that BLM consider requiring the drilling waste-water substance be hauled off-site to a disposal facility. That reduces drill site soil disturbance, and potential pollution including from PFAS substances (Forever Chemicals) that could be contaminants in various drilling compounds.	Thank you for your comment. BLM's mining regulations 43 CFR 3809, BLM can only require mitigation measures to prevent UUD on public lands and ensure compliance with performance standards under 43 CFR 3809.420. Any additional mitigation must be voluntarily committed by the operator.
68	**114**	BLM Must Have an Inspector Present When Drill Holes Are Plugged We are very concerned that drill holes may not be adequately plugged, and this will further result in wrecking the water table and the surface expression of perennial flows at the tiny springs and streams in the area.	Thank you for your comment. Plugging of drill holes is under the jurisdiction of the State of Nevada. As stated in Section 2.1.1.1 of the EA: *"Surge would plug and abandon all exploration drill holes according to specifications NAC 534.4369 and NAC 534.4371. Exploration drill holes would be plugged before the drill rig moves from the drill site. Surge would not leave mineral exploration drill holes open during the life of the Project, including between Work Plans."* As stated in Section 2.1.2.3 of the EA: *"Surge would plug the geotechnical soil borings in the manner prescribed for plugging a well in NAC 534.420 or authorized pursuant to NAC 534.422. Surge would ensure that a geotechnical soil boring is plugged once the boring is completed in line with the requirements under NAC 534.4371."*
68	**115**	There's significant concern that at Thacker Pass, in the years of drilling that preceded full-blown development, the contractor for the series of exploration drilling programs didn't properly plug drill holes – and this is part of what caused springs, including springs inhabited by an imperiled Desert Pyrg, to dry up. That may be a reason that so many of the springsnail springs at Thacker have dried up	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
68	**116**	Have any of the springs in the Salmon River allotment and this region been surveyed for springsnails and other aquatic biota? How deep will all forms of drilling conducted under the EA go down into the earth? We are concerned the drilling may intercept groundwater water. BLM must specify how close to any springs and streams the drilling will be allowed to be done. BLM must require large buffers as part of alternative actions, too. What native fish species remain in the landscape's streams? Are there any Redband Trout left? Leatherside chub? What stream segments in the affected waters in Nevada have been surveyed, and when?	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response. Please see response to comment 4, 9, 51, and 121 regarding drilling methods. See response to comments 29, 30, 36, and 38 above, regarding groundwater resources. As discussed in the Biological Baseline Survey, according to a desktop habitat assessment, sensitive fish species were not included in the baseline due to a lack of habitat. Refer to the Water Resources SER and Wetland and Riparian Areas SER for more information on streams within the areas of analysis. Baseline Reports were reviewed and deemed complete by BLM consistent with 43 CFR 3809.401(c)(1).
69	**117**	Has historic mining disturbance taken place in the project area? Please provide detailed analysis, mapping of past sites. Also, are any of the National register sites referenced historic sites, and not cultural sites? We are dismayed at the lack of information on extent of both cultural sites and lakc of info on what they represent, as wel las the EA claim that they can somehow all be avoided- and not harmed when the EA is so greatly deficient in site-specific details. We are also very concerned about erosional harm to sites.	Thank you for your comment. Mineral exploration (i.e., historic mining disturbance) is included as a past and present action and reasonably foreseeable future action (RFFA) in the cumulative effects analysis for various resources in the EA. Refer to Section 3.2.1 of the EA for survey results of cultural resources within the Project Area (including sites eligible for the National Register of Historic Places); Section 3.3.3. of the EA for Native American Traditional Values; Section 3.3.5 of the EA for paleontological resources; and to Appendix E of the EA (Applicant-Committed Environmental Protection Measures). In addition, refer to each of the relevant Supplemental Environmental Reports (SERs) for more details.
69	**118**	How many drill holes were drilled at each site in the Notice-level activity? What depth were Notice exploration holes drilled to? Did any of the drill holes hit the water table/intercept groundwater? What type of drilling was used? How close to riparian areas with surface water were they?	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
69	**119**	What pre-Notice drilling spring and stream flow info was collected? Please provide it. The baseline appears to have been altered already without any hard, systematic look	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
69	**120**	We note there's inherent uncertainty in drilling.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.

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69	**121**	How many Surge boreholes are expected to intercept groundwater? How will BLM effectively minim ze, and mitigate, impacts to shallow aquifers potentially intercepted?	Thank you for your comment. See response to comment 4, 9, 51, and 116.
69	**122**	BLM must provide certainty that EA damage control actions will prevent unnecessary and undue degradation" to public lands and resources resources—including the springs, fish, wildlife and habitats that depend upon these waters—from impacts to groundwater hydrology and/or spring flows, as required by FLPMA. 43 U.S.C. §1732(b).	Thank you for your comment. BLM's mining regulations 43 CFR 3809, BLM can only require mitigation measures to prevent UUD on public lands and ensure compliance with performance standards under 43 CFR 3809.420. Any additional mitigation must be voluntarily committed by the operator. In accordance with 43 CFR 3809.5, unnecessary or undue degradation (UUD) is defined as "means conditions, activities, or practices that: **(1)** Fail to comply with one or more of the following: the performance standards in § 3809.420, the terms and conditions of an approved plan of operations, operations described in a complete notice, and other Federal and state laws related to environmental protection and protection of cultural resources; **(2)** Are not "reasonably incident" to prospecting, mining, or processing operations as defined in § 3715.0-5 of this chapter; or **(3)** Fail to attain a stated level of protection or reclamation required by specific laws in areas such as the California Desert Conservation Area, Wild and Scenic Rivers, BLM-administered portions of the National Wilderness System, and BLM-administered National Monuments and National Conservation Areas." Appendix B of the EA describes the Applicant-Committed Environmental Protection measures (ACEPMs) that would be implemented to prevent unnecessary and undue degradation while conducting exploration and reclamation activities within the Project Area.
69	**123**	The Project will also disturb previously undisturbed upland habitats with heavy equipment, drilling rigs, and creation of new access routes in unknown and unassessed locations – and this may further disrupt watershed and hydrological processes.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.
69	**124**	Exotic Species Should Not Be Seeded While an EA Table shows seeding native species, the footnote shows this is not required - and can be changed by BLM. This is very similar the loose and waivable lists of EA BMPs and claimed mitigation measures – nothing is really certain. Promises made in the EA can melt away behind closed doors in the BLM office in meetings between and the Canadian mining company - BLM where the public is excluded. This is not a post-wildfire emergency situation, and there is lots of time to plan ahead, and collect seed for from local native ecotypes – rather than coarse cultivars often very dissimilar to the local native ecotypes, and/or exotic species like harmful crested wheatgrass.	Thank you for your comment. As stated in Section 2.1.9 of the EA, Surge would reclaim surface disturbance associated with exploration activities in accordance with BLM regulations 43 CFR 3809.420 and Nevada reclamation regulations listed in NAC 519A.
70	**125**	The EA dismissed one of many reasonable alternatives – including for the early stages of the uncertain project. We request that this alternative be fully assessed coupled with potential helicopter drilling for sites away from roads. Also, aren't there increasingly sophisticated technological methods that could be used to reduce the huge disturbance footprint? BLM could require helicopter drilling if drill sites are near cultural locales or intact sagebrush habitats or critical forest patches. *"2.2.2 Alternative Considered but Eliminated from Detailed Analysis 2.2.2.1 Use Only Existing Roads Alternative Under this alternative, Surge would only use existing roads, including cross country/overland tracks, in the Project Area to conduct exploration activities and would not construct new roads to access drill targets. Using existing roads only would restrict access and eliminate a large portion of the Project Area available for lithium mineral exploration, denying Surge the opportunity to fully evaluate and characterize the mineral potential".* Wouldn't that then provide a basis for providing much better specific information about road locations, drill sites, drill site depth, trenching sites, etc.? This is highly reasonable alternative. Drill by roads first under an EA. Then greatly refine any further drilling.	Thank you for your comment. The requirements for what must be included in a Plan of Operations are listed under 43 CFR 3809.401. See response to comment 122 for definition of UUD. BLM can only require mitigation measures to prevent UUD on public lands and ensure compliance with performance standards under 43 CFR 3809.420. Requiring helicopter drilling is not a reasonable alternative to consider and cannot be required.
70	**126**	We also request an alternative of "Conduct A New EA" for each "phase" of this highly uncertain scheme and fully present data and analysis including drill depths spring flows and any changes, declines in local and regional populations of migratory birds and sensitive biota, weed infestations and flammable annual grass site occurrence and expansion areas, etc.	Thank you for your comment. See response to comment 109.

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70	**127**	The EA fails to take NEPA's required hard look, including based on thorough, probing, hard look NEPA analysis and actual baseline and site-specific biological, hydrological, visual, and other values. BLM cannot determine magnitude scale and significance of adverse impacts - nor determine intensity duration and context until it does so, and cannot sign a rubberstamp FONSI – as Wells BLM just did with the massive O'Neil PPA, because it hasn't collected even the most basic information on many sensitive and important species and other attributes and values here in the Surge EA "Effects" Table. **Context: Effects Definitions table in Surge EA**	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.
72	**128**	BLM can't cut off taking a harder look and consideration of harm to cultural values. BLM never even bothered to scope this project – foreclosing on potential cultural knowledge information held by those not directly consulted. BLM never analyzes impacts to indigenous food plants, the high risk of these highly erodible soils in livestock-degraded watershed exposing artifacts to both looting and surface breakage from all the heavy equipment operating, and also cattle.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.
72	**129**	Since BLM fails to reveal where more than 200 acres of Surge project disturbance will be actually be located, it's impossible to estimate upfront whether it is even feasible to avoid National Register and other important sites. Will BLM move forward and actually nominate the sites and get them included in the National Register? We request that BLM do so as part of the NEPA process here.	Thank you for your comment. As outlined in Section 3.2.1 of the EA, Class III cultural resources surveys were conducted for an APE of 7,956 acres including the Project Area and associated access routes. The Proposed Action has been designed to avoid disturbance and associated effects to cultural resource sites. As part of the Project ACEPMs (See Appendix B of the EA), Surge has committed to avoiding the NRHP-eligible and unevaluated sites and notifying BLM of such discoveries.
72	**130**	The soil types and level of livestock disturbance and degradation impacts the erosion and potential livestock breakage of cultural materials and trampling churning strata ruining the scientific value of sites. The EA states: *"The Proposed Action has been designed to avoid disturbance and associated effects to cultural resource sites. As part of the Project ACEPMs included in the Plan (Surge, 2024a), Surge has committed to avoiding the NRHP-eligible and unevaluated sites and notifying BLM of such discoveries (Appendix B). No further (or additional) analysis of this element/resource is provided in this NEPA analysis".* This is greatly inadequate, and it shows a great number of important cultural sites that may be impaired directly, indirectly and cumulatively by the project and the minimal environmental data and greatly inadequate environmental protections. For example, see the drill pad photo from Surge publicity info. Such unstable soils are prone to large-scale erosion during runoff events – with the erosion triggered by Surge's heavy equipment denuding them– and they may wipe out significant cultural sites, including sites eligible for the National Register.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.
72	**131**	Noise Inadequately Assessed and Minimized The EA refers to human noise receptors – but what about wildlife noise receptors, and disturbance to species in critical seasonal habitats and use areas? BLM must assess noise from vehicles on access routes impacting Sage-grouse leks in the vicinity of the routes. Where are all leks in relation to access routes once one leaves Highway 93? What levels of noise will there be at specific distances extending outwards from the drill sites?	Thank you for your comment. Section 3.3.8.1 of the EA: *"There are two known leks within 4 miles of the Project Area: Corral Canyon 1 lek and Texas Springs lek. In consultation with NDOW, acoustic monitoring took place in June 2023 at the nearest GRSG lek to the Project Area (Corral Canyon 1 lek) to establish ambient noise levels at three representative locations to analyze project-related exploration drilling noise levels at the nearest GRSG lek to the Project Area (Corral Canyon 1 lek) (Saxelby Acoustics, 2024). Saxelby Acoustics (2024) determined L90 baseline noise levels for a 24-hour period at the Corral Canyon 1 lek were 13.6 dBA. The L90 represents the sound level exceeded 90 percent of the time for each hour during the monitoring period."* Section 3.3.8.2 of the EA: *The Project is considered non-discretionary under 43 CFR 3809 regulations; therefore, a noise management objective is not required. A Project objective for noise, including noise assessments, is considered voluntary. The environmental noise assessment conducted at the Corral Canyon 1 lek in June 2023, calculated drilling setback distances that would be required stay below the 10 dBA over ambient noise levels using modeled project noise (drilling). Based on the modeled conditions, the proposed Project is not predicted to cause noise levels to exceed the 10 dBA over ambient noise level at any lek based on the operational assumptions and drilling setbacks used at the Corral Canyon 1 lek location (Saxelby Acoustics, 2024).*
73	**132**	The entire project area was considered Focal habitat under the 2015 Sage-grouse plans. Sage-grouse are a landscape bird, and we are very concerned that NDOW whittled down the habitat (and the category of Priority habitat) in response to political pressures.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.

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73	**133**	The full footprint of O'Neil PPA forest and other native vegetation community and both sage and PJ species biodiversity harms must be thoroughly assessed in a hard-look NEPA analysis. Populations of both PJ and sagebrush species in areas of NE Nevada are already at lower levels – and this highly uncertain mining disturbance project isa way to make populations decline even further – including of springs and mesic brood habitat dries up. Why have there been no baseline studies of how Sage-grouse use this landscape as a baseline?	Thank you for your comment. Refer to the Special Status Species SER for more details.
73	**134**	BLM often claims Sage-grouse are an "umbrella" species. Just because there aren't leks right inside the project area doesn't mean that there aren't many noise-sensitive species whose habitat will be harmed and disturbed by the project.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.
73	**135**	What is the status and location of the "CAT" lithium claims, New Sky, Peloton and all others circling like vultures around this landscape. How much notice level drilling road blading. Etc. has taken place or is being planned, or is foreseeable? Please provide detailed mapping and analysis.	Thank you for your comment. The subject of this comment is beyond the scope of the Nevada North Lithium Exploration Project EA and does not require further agency response.
74	**136**	Surge's own PR photo on its drilling here shows how very slipshod the Notice level drilling has been. Look at the completely unstable eroding soils in the drilling situation pictured. We assume this Notice level drilling has been occurring under many o fthe same Wells BLM BMPs that the deeply flawed December 2024 EA is based on:	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.
77	**137**	We request a comment period extension- as this was released over holidays - along with a huge number of other BLM and USFS projects at the end of the Biden administration. This is a complex landscape facing grave threats, and the great lack of solid baseline info in the EA Places a high burden on the public in trying to understand the magnitude and significance of the environmental disturbance to public lands.	Thank you for your comment. BLM conducted the 30-day public comment period on the Preliminary EA consistent with the NEPA regulations at 40 CFR 1501.5(e), 40 CFR 1501.5(k) and 43 CFR 46.305.
Comment Letter from Emeral			
N/A	**1**	I do not agree with lithium or the mines. It is not good for our beautiful land.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations
Comment Letter from Robert Loranger (on Preliminary EA)			
N/A	**1**	The preliminary EA for Surge Battery Metals' Nevada North Lithium Exploration Project clearly indicates there will be no significant impacts to the area of interest during and after execution of the proposed exploration plan of operations. I see no reason to modify the preliminary EA or withdraw the signed FONSI document. The plan of operations should be approved without delay. There is world-wide competition to find commercial quantities of lithium which is a critical element for the storage and use of energy produced by traditional and renewable means. The U.S. must reduce dependance on foreign sources of lithium minerals and other critical materials required to manufacture energy storage and distribution products. It truly is a matter of national security. Our main competitor is China and their leadership has two goals, world domination in all global markets and expanding sovereign rule. Approval of the EA is essential for Surge Battery Metals to receive timely approval of their proposed plan of operations. Expanded exploration drilling of prospective areas within the project boundary is necessary to evaluate the growth potential of lithium mineralization. Drilling is the standard method used to collect representative rock samples for analysis. There is no reliable alternative to generate analytical results for the estimation of potential lithium resources and to provide new data for ongoing environmental studies. Road and drill pad construction is necessary to provide access to exploration targets beyond existing disturbance. Some proposed roads will also provide access and pads for monitoring wells for the ongoing environmental studies and an on-site water supply well. Surge's commitment and compliance with the ACEMP's via best management practices are noted and essential for the successful execution of the proposed plan.	Thank you for your comment.
Comment Letter from Robert Loranger (on FONSI)			

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N/A	**1**	I strongly concur with the BLM determination of the finding of no significant impacts will occur during the execution of Surge Battery Metals lithium project in the Texas Springs area of Elko County, Nevada. The Exploration Plan of Operations should be approved without delay.	Thank you for your comment.
Comment Letter from Therese Stix, Schroeder Law Offices on behalf of Salmon River Cattlemen's Association Inc.			
1	**1**	SRCA owns private land and water rights in the vicinity of Project as well as being a permittee of grazing permits that will be affected by the Project. SRCA is concerned about the effect this Project will have on its ability to access, manage, and use its private lands, graze cattle and provide stockwater in its operations. In addition, SRCA is specifically concerned about its prior existing water rights, and ensuring steps are taking in the NEPA review process to carefully consider all impacts to water sources and water rights.	Thank you for your comment. Section 3.2.4 of the EA states:" *Although surface disturbance would result in a loss to forage available for grazing there would be no changes to grazing permit animal unit months. Project activities would use and maintain roads but would not block access or otherwise conflict with grazing authorizations.* " Water rights within the basins are administered by NDWR. Section 3.3.10 of the EA presented the effects of the Project on water resources. Additional information is included in the Water Resources SER.
2	**2**	Surge should not be allowed to drill water supply wells until all water rights are obtained and properly permitted with Nevada Division of Water Resources. Further, any Project exploration work must be conditioned upon approved "Work Plans" submitted to BLM.	Thank you for your comment. See Section 2.1.6 and Section 3.3.10 of the EA. Water resources in Nevada are managed by the NDWR and the Nevada State Engineer. BLM does not regulate groundwater. Per NRS 534.120, under the waiver granted by NDWR, Surge may pump and use up to 5 acre-feet (1.63 million gallons per year) of water for exploration drilling purposes. Surge would not use more water from the supply well than authorized under the NDWR waiver. As discussed in Section 2.1, Surge proposes to use a phased approach to minimize environmental effects and to prevent unnecessary and undue degradation of public lands. the proponent would submit Work Plans to BLM for approval. These Work Plans would provide detailed information as to how Surge would perform activities, any changes to previously approved Work Plans, and any updates to the reclamation cost estimate and financial guarantee as determined necessary. In accordance with 43 CFR 3809.420(6), Surge must conduct all operations (including activities proposed in each Work Plan) in a manner that complies with all pertinent Federal and State laws. All phases of the Project would also be required to follow all ACEPMs in Appendix B of the EA.
2	**3**	Surge's proposed water supply well that pumps (a total of) up to 5 acre-feet (PEA 2.1.1.2) is inconsistent with performing a one-time pump test to determine if sufficient water exists to supply the Project when the rate of withdrawal is unknown, and Surge has applied for water rights far in excess of 5 acre-feet. SRCA has concerns that the pump test, as well as Project use will create a draw down on the surface water sources that are in connection with the groundwater thereby capturing surface water that supports wildlife and livestock. This is especially concerning when the water supply well is drilled to 700 feet deep and may come into connection with multiple aquifers. Furthermore, any water pumped and dumped on the ground as a result of a pumping test, is a waste and contrary to Nevada water law. BLM should require that any water discharged as a result of a pump test be put to beneficial use in a stream or other channel where it can be otherwise used.	Thank you for your comment. See Section 2.1.6 and Section 3.3.10 of the EA. Water resources in Nevada are managed by the NDWR and the Nevada State Engineer. BLM does not regulate groundwater. Per NRS 534.120, under the waiver granted by NDWR, Surge may pump and use up to 5 acre-feet (1.63 million gallons per year) of water for exploration drilling purposes. Surge would not use more water from the supply well than authorized under the NDWR waiver. No hydrologic impacts are anticipated from this exploration project as there would be no dewatering or associated impacts to any of the major aquifers in the area. The amount of water proposed for use is negligible compared to existing uses in the area due to the scope of the project being an exploration project. Section 3.3.10.2 of the EA states: "*Drilling would likely be conducted below the water table and could affect groundwater by intersecting aquifers and causing contamination. Surge would install a casing and cement drill holes to prevent the vertical movement of groundwater down the hole. As outlined in Section 2.1.9.2, Surge would plug all drill holes prior to the drill rig moving from the drill site in accordance with NRS 534, NAC 534.4369, and NAC 534.4371 to reduce potential effects. Should the drill holes encounter groundwater, the holes would be plugged in accordance with NAC 534.4369 and 534.4371*." Section 2.1.1.2 of the EA states: *"up to three grouted VWPs would be constructed in mineral exploration drill holes at locations adjacent to the water supply well (within approximately 150 feet) and completed to a comparable depth to serve as observation wells. The VWPs would provide water level drawdown data to quantify the aquifer transmissivity and storage coefficient at that water supply well location".* Section 2.1.2.2 of the EA states that *"the monitoring wells would be constructed pursuant to State of Nevada NAC 534 regulations".*
2	**4**	Surge states that exploration daily water requirements may reach as much as 24,000 gallons per day if all four proposed rigs are operational and dust suppression is required. PEA 2.1.6. This amount of water may cause a "cone of depression" thereby drying up SRCA stockwater sources. It is important that the amount of water taken from the aquifer is done without further over-appropriation and injury to existing water users.	Thank you for your comment. See Section 2.1.6 and Section 3.3.10 of the EA. Water resources in Nevada are managed by the NDWR and the Nevada State Engineer. BLM does not regulate groundwater. Per NRS 534.120, under the waiver granted by NDWR, Surge may pump and use up to 5 acre-feet (1.63 million gallons per year) of water for exploration drilling purposes. Surge would not use more water from the supply well than authorized under the NDWR waiver. No hydrologic impacts are anticipated from this exploration project as there would be no dewatering or associated impacts to any of the major aquifers in the area. The amount of water proposed for use is negligible compared to existing uses in the area due to the scope of the project being an exploration project.
2	**5**	SRCA requests further investigation into total water use and recommends the Project limit its groundwater use. Surge notes it has the option of purchasing water from Salmon Falls Ranch, the town of Jackpot, and other water sources. PEA 2.1.6. Without further analyzing the water rights that Surge is apparently "optioned", it is impossible to	Thank you for your comment. Please see response to comment #4.

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		determine the transferability to the Project, the priority date analysis as related to the safe perennial yield, and the long term effects on the basin and SRCA senior sources. A note of an "option" is great but is not something that a reasoned analysis can be made upon given conflicts cannot be analyzed. Before proceeding, BLM should require Surge to specifically identify the water rights it has optioned to purchase.	
2,3	**6**	BLM should require Surge to install "at least" three baseline monitoring wells as opposed to "up to". See PEA 2.1.2.2. Three monitoring wells may not be enough to ascertain a reliable baseline to make water decisions in the future. Placement of the wells, and conditions at each site, including the hydrology and geology in the area will determine if data are useful.	Thank you for your comment. The BLM's Surface Management regulations at 43 CFR 3809.401 include the requirements for a Plan of Operations. BLM can only require mitigation measures to prevent UUD on public lands and ensure compliance with performance standards under 43 CFR 3809.420. Any additional mitigation must be voluntarily committed by the operator. In accordance with 43 CFR 3809.5, unnecessary or undue degradation (UUD) is defined as "means conditions, activities, or practices that: **(1)** Fail to comply with one or more of the following: the performance standards in § 3809.420, the terms and conditions of an approved plan of operations, operations described in a complete notice, and other Federal and state laws related to environmental protection and protection of cultural resources; **(2)** Are not "reasonably incident" to prospecting, mining, or processing operations as defined in § 3715.0-5 of this chapter; or **(3)** Fail to attain a stated level of protection or reclamation required by specific laws in areas such as the California Desert Conservation Area, Wild and Scenic Rivers, BLM-administered portions of the National Wilderness System, and BLM-administered National Monuments and National Conservation Areas."
3	**7**	SRCA regularly works with BLM on water and range projects and ensures that species habitats are protected. Analysis and careful monitoring must be undertaken to ensure the disturbances and degradation caused by the Project proponent, Surge, is not misplaced upon SRCA to correct or otherwise mitigate.	Thank you for your comment. Compliance with provisions of the Exploration Plan of Operations would be conducted under BLM's inspection and enforcement regulations (43 CFR 3809.600-3809.605).
3	**8**	SRCA is concerned about road construction, overland travel, and cross-country road construction. Constructing new roads on public lands will only cause more recreational OHV use that further cause disturbances to cattle and other wildlife species utilizing the public lands. The creation and use of new roads should be limited.	Thank you for your comment. The acreages provided in Table 2-1 (Proposed Phase 1) are estimated, not to exceed. As part of proposed exploration activities, Surge would limit new disturbance associated with road development to the extent feasible. Also see response to #9 below. As stated in Section 2.1.1.1: *"Surge would use overland travel instead of developing new roads, to the extent feasible, to reduce land disturbance associated with the Project."*
3	**9**	Surge proposes revegetating any disturbed land with native flora after the Project is finished. However, the proposed Project, while "short term", will have effects that reverberate for years to come. While the exploration phase of the Project is expected to occur over a three-year term, the Project could last for many years and in the dry climate of Northern Nevada it often takes more than one season to establish native vegetation. This is true especially when the 250 acres of soil are being disturbed by heavy machinery. Based on the PEA, it appears that the 250 acres of soil may remain bare and disturbed for the full three years, and thereafter. While revegetation is welcome, the extensive period of time without vegetation may significantly reduce the amount of forage for cattle in the SRCA grazing areas, and the ability to reclaim successfully. SRCA requests further investigation into the environmental impact of removing vegetation from the land for up to three years and whether such area may revert to its previous state.	Thank you for your comment. As outlined in Section 2.1.9 of the EA, Surge would reclaim surface disturbance associated with exploration activities in accordance with BLM regulations 43 CFR 3809.420 and Nevada reclamation regulations listed in NAC 519A. Surge would design reclamation activities to stabilize disturbed areas to a safe condition and protect both disturbed and undisturbed areas from unnecessary and undue degradation. Section 2.1.9 of the EA also describes how Surge would conduct reclamation concurrently with exploration activities when that exploration disturbance and access is no longer needed. Surge would begin reclamation in exploration areas considered inactive, without potential, or completed at the earliest practicable time. Surge would complete the reclamation of exploration disturbances no longer required or inactive under individual Work Plans within 1 year.
3	**10**	SRCA relies on a healthy environment to raise cattle in an ethical and safe manner. Surge will transport, store, and use hazardous materials throughout the Project. More specifically, exploration drilling utilizes highly dangerous materials such as diesel fuel, gasoline, and lubricating grease. Surge has stated it would clean up any spill in a "timely manner" which is an intentionally vague statement. SRCA requests clarity on the timeline for any toxic, hazardous, or other "spill" to be remediated by Surge. Furthermore, analysis must be considered on the effect of the increased machinery, traffic and new roads and cross-country roads, will have on cattle grazing, the movement of cattle between grazing areas and pastures and the ability of the cattle to safely move and access water sources during the Project.	Thank you for your comment. Section 2.1.3 of the EA: *"Surge would transport, store, and use hazardous materials in accordance with federal, state, and local regulations and would train employees in the proper transportation, use, and disposal of hazardous materials… In the event hazardous or regulated materials, such as diesel fuel, were spilled, Surge would take appropriate measures to control the spill, and would notify the BLM, NDEP, and/or the Emergency Response Hotline, as required… Surge would follow measures described in the Spill Contingency Plan for the Project (Surge, 2024b)."* Refer to Appendix B for a list of Applicant-Committed Environmental Protection Measures for solid waste and hazardous materials management. Section 3.2.4 of the EA states:" *Although surface disturbance would result in a loss to forage available for grazing there would be no changes to grazing permit animal unit months. Project activities would use and maintain roads but would not block access or otherwise conflict with grazing authorizations.* "
4	**11**	SRCA depends on large swaths (or "pastures") of grazable land for cattle. Cattle are notoriously sensitive to unpredictable disruptions. The Project relies on exploring the land with large machinery that would easily upset grazing cattle. Proposed exploration equipment includes: 1 CAT D8 Dozer, 1 Komatsu PC228 excavator, a backhoe, 8 four-wheel drive vehicles, 4 pipe trucks or trailers, a geotechnical drill rig, 4 mud mixing tank and pump, 4	Thank you for your comment. Section 3.2.4 of the EA states:" *Although surface disturbance would result in a loss to forage available for grazing there would be no changes to grazing permit animal unit months. Project activities would use and maintain roads but would not block access or otherwise conflict with grazing authorizations.* "

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		circulation tanks, 4 water trucks, 4 portable lights with generators, a grader, a forklift, a water well generator, and a back-up generator. Surge frequently refers to the Project as "small scale" exploratory work and yet the amount of machinery proposed for use is substantial as compared to the current conditions and status quo. The effect of increasing the amount of vehicles and machinery on grazing land needs to be further inspected for possible effect on cattle.	
4	**12**	Surge has not made a commitment to hiring local residents and may elect to only hire employees from outside the community. SRCA has a vested interest in the community and, in the interest of environmental justice, wishes to see local resources result in local jobs. The PEA states that up to 35 workers, potentially none from the community, may be hired. SRCA recognizes the economic benefits of the Project. These 35 workers will stay at local hotels, eat at neighborhood restaurants, and visit community stores, however, SRCA requests Surge commit to hiring locally thereby ensuring exploited local resources benefit the community beyond the short-term benefits of one-time purchases of goods and services.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations
4	**13**	SRCA previously entered into a short-term access agreement with Surge to allow Surge onto its private property for a limited purpose. SRCA was not pleased with Surge as it went beyond the scope of the agreement with SRCA in drilling deeper test holes than it agreed upon. Furthermore, upon information and belief, at the locations of the prior test holes, Surge did not reclaim or reseed the area, and in fact left several sacks of dirt or other debris (perhaps core samples) that were just left in the area near the hole. This lack of environmental stewardship was disheartening. Given this track record, BLM should backstop Surge's Project and ensure that Surge complies will all terms and conditions or is otherwise fined or stopped.	Thank you for your comment. Compliance with provisions of the Exploration Plan of Operations would be conducted under BLM's inspection and enforcement regulations (43 CFR 3809.600-3809.605). See response to comment #6 for definition of UUD.
Comment Letter from Buster Hunsaker (on the Preliminary EA)			
N/A	**1**	I support the Nevada North Lithium Exploration Project proposal. This project has the potential to make a positive contribution to the social-economic well-being of the regional area and the United States as a whole. The project has reached this current point in the NEPA process using thoughtful, efficient, successful exploration work. The operators have demonstrated the skill and ability to competently manage the natural resources contained on the United States Federal Lands. I strongly urge that the proposal be approved as proposed.	Thank you for your comment.
Comment Letter from Buster Hunsaker (on the FONSI)			
N/A	**1**	**Context: FONSI** I support the Nevada North Lithium Exploration Project proposal. This project has the potential to make a positive contribution to the social-economic well-being of the regional area and the United States as a whole. The project has reached this current point in the NEPA process using thoughtful, efficient, successful exploration work. The operators have demonstrated the skill and ability to competently manage the natural resources contained on the United States Federal Lands. I strongly urge that the proposal be approved as proposed.	Thank you for your comment.
Comment Letter from John Hadder, Great Basin Resource Watch			
1	**1**	**Water Resources** The project covers an area in hydrographic basins 040 (Salmon Falls Creek Area) and 189B (Thousand Springs Valley-Toano-Rock Spring Area). The operator Surge Battery Metals has already applied for two water rights, one in each of these basins, which have both been timefully protested by other local water rights holders. Permit 92745, applied for in 2023 in basin 189B, proposes a duty balance of 1000 AFA, which exceeds the groundwater available for appropriation in the basin (NDWR 2025a). Permit 92746, applied for in 2023 in basin 040, proposes a duty balance of 600 AFA, which also exceeds the groundwater available for appropriation in this basin (NDWR 2025b). The operator now proposes using a special waiver from NDWR with a still substantial duty of 5 AFA (BLM 2024a). Considering groundwater elevations within the Project Area are unknown, are there any plans for analysis on the location and drill depth of this temporary exploratory well, or any potential later operational wells?	Thank you for your comment. Figure 2-1 of the EA shows the location of the proposed water supply well for the exploration project. Installation of the water supply well would be included as part of Work Plan 1 for agency approval. Section 2.2.1.2 of the EA states: *"Once the well is constructed, Surge would perform a one-time pumping test to confirm sufficient well yield for water supply purposes. The pumping test would consist of an approximately 8-hour step drawdown test, and an approximately 24-hour constant rate test. Up to three grouted VWPs would be constructed in mineral exploration drill holes at locations adjacent to the water supply well (within approximately 150 feet) and completed to a comparable depth to serve as observation wells. The VWPs would provide water level drawdown data to quantify the aquifer transmissivity and storage coefficient at that water supply well location*". Surge proposes installing up to 12 VWPs within mineral exploration drill holes as part of Phase 1. The conversion of exploration holes would be included in the Work Plan for Phase 1 and approved prior to the conversion taking place so that the reclamation cost estimate and financial guarantee are accurate.

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2	**2**	BLM should require a hydrographic analysis before any exploration drilling including a hydrology baseline. At other sites in the Great Basin including Thacker Pass and Rhyolite Ridge there have been observed decreases in spring flow and aquifer levels following exploration drilling. An understanding of the existing aquifers and the potential for unintended connection between aquifers must be assessed in advance. The effect on aquifers from exploratory drilling could be significant and permanent in terms of water levels and geochemical profiles.	Thank you for your comment. See Section 2.1.6 and Section 3.3.10 of the EA. Water resources in Nevada are managed by the NDWR and the Nevada State Engineer. BLM does not regulate groundwater. Per NRS 534.120, under the waiver granted by NDWR, Surge may pump and use up to 5 acre-feet (1.63 million gallons per year) of water for exploration drilling purposes. Surge would not use more water from the supply well than authorized under the NDWR waiver. Under 43 CFR 3809.401(c)(1), the BLM retains the authority to request baseline environmental information from an operator; however, it is not mandatory for them to do so. Baseline Reports were reviewed and deemed complete by BLM consistent with 43 CFR 3809.401(c)(1).
2	**3**	**Sensitive Habitat** There is a significant-sized wetland system to the north of the project area at the confluence of Cave Creek and Trout Creek, within the 5-mile buffer Water Resource Study Area (WRSA). This wetland system directly abuts the proposed project access road which runs from the north near Jackpot. BLM states that Surge's committed practices such as engineering designs and placement of control devices (BLM 2024b) will reduce the likelihood of indirect impact to this and other wetland areas within the WRSA. However, considering the heavy impact on these wetlands from historic ranching activities and other anthropogenic uses, and the proximity of many wetland and riparian areas to proposed access roads for the project, a substantial "reduction in likelihood" will seemingly be difficult for the operator to achieve with these measures alone.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations
2	**4**	**Wildlife** Per aerial and field surveys conducted during 2023 and 2024, three raptor nests were visually surveyed; one nest was confirmed as in-use by the presence of a downy chick, but the species was not confirmed due to lack of observation of adults (WB, 2024). Are there any plans by the operator or by BLM to follow up on these studies to confirm presence of any special-status species or otherwise? Should this prove to be a species protected from "taking" under the Migratory Bird Treaty Act (MBTA), what will be the BLM's and operator's procedure for a take permit after the project has already begun? Project activities will likely include disturbances that would require such a permit.	Thank you for your comment. As presented in Appendix B under ACEPMs associated with raptors protection, to the extent possible, Surge would schedule land clearing and surface disturbance to occur outside the avian breeding season (January 1 to August 31 for bald and golden eagles) to comply with the MBTA and the BGEPA. If surface disturbance associated with Project Activities is unavoidable during the avian breeding and nesting season, Surge would rely on a qualified environmental specialist or biologist to survey areas proposed for disturbance to determine the presence of active nests immediately prior to Project activities. Should active nests be located, Surge would avoid the area to prevent destruction or disturbance of nests until the birds are no longer present. For raptor nests, the seasonal "no activity" avoidance area/spatial buffer zone would be listed by species in the Utah Field Guidelines for Raptor Protection from Human and Land use Disturbances (USFWS, 2002; 2023) and the California-Great Basin Region's Recommended Buffer Zones for Ground-based Human Activities around Nesting Sites of Golden Eagles in California and Nevada (USFWS 2021). The start and end dates of the seasonal restriction along with avoidance areas and buffer requirements would be coordinated with BLM and based on site-specific information, such as elevation and winter weather patterns, which affect breeding chronology. Also, Surge would conduct early season diurnal raptor nest surveys (January-April) and would postpone exploration activities or relocate disturbance outside of standard USFWS buffer distances if active raptor nests are found (See Appendix B of the EA).
2	**5**	Although no Greater Sage-Grouse (GRSG) or sign were recorded during 2023 lek surveys at the Corral Canyon 1 and Texas Springs leks, on April 19 2024, NDOW biologists documented five GRSG on the Corral Canyon 1 lek during regularly scheduled regional lek surveys (NDOW 2024). Although project activities are not currently expected to produce noise levels above the 10 dBa criteria at this or other leks sites, are there plans to resurvey this and other nearby historic lek sites to confirm the presence (or lack thereof) of GRSG?	As stated in the ACEPMs in Appendix B for special status species, Surge would continue annual GRSG lek surveys at the Corral Canyon 1 and Texas Springs Lek throughout the duration of the exploration project.
3	**6**	**Consultation with Indigenous Communities** In the American Indian Religious Freedom Act (AIRFA), Congress stated that "[i]t shall be the policy of the United States to protect and preserve for American Indians their inherent freedom to believe, express, and exercise the traditional religions." 42 USC § 1996 (1982). The BLM must analyze the cumulative impact to the ability of Native Americans to fully practice the traditional religions within the study area. The analysis must include both known sacred and spiritual sites as well as traditional food and medicine gathering, important components of traditional practice.	Thank you for your comment. Section 3.3.3.2 of the EA states:" *TCPs, designated by the Tribes, are not known to exist in or within the vicinity of the Project Area. The BLM continues to solicit input from local tribal entities and coordinates with the Tribes to identify any other sites or artifacts, or cultural, traditional, and spiritual use resources and activities that might be affected as a result of the Proposed Action. If any TCPs, tribal resources, and/or sacred sites, are identified within or near the Project Area, a protective "buffer zone" may be acceptable, if doing so satisfies the needs of the BLM, the proponent, and the affected Tribe. The size of any "buffer zone" would be determined through coordination and communication between all participating entities. Specific spiritual and*

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			religious use locations within the Project Area have not been identified or disclosed. If previously undisclosed places of spiritual and religious use become known within the Project Area, the BLM would consult with the Tribes to determine potential effects. Surge would implement ACEPMs (Appendix B) in the event any cultural properties, items, or artifacts are encountered, including inadvertently discovering Native American gravesites. *At this time, no concerns related to Native American traditional values have been identified by the Tribes and no measurable effects are anticipated from the Project. However, Tribal consultation would continue throughout the life of the Project*." Appendix B of the EA list the ACEPMs associated with Cultural and Paleontological Resources and Native American Traditional Values. Also see response to comment #8 below.
3,4	**7**	Federal courts have expressly recognized the need to protect sacred sites under the Executive Order ("E.O.") as a component of the government's public land management responsibilities: "Executive Order no. 13007 signed by President Clinton, May 24, 1996, orders Federal agencies to accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and avoid adversely affecting the physical integrity of such sacred sites." Wyoming Sawmills, Inc. v. U.S. Forest Service, 383 F.3d 1241, 1245 (10th Cir. 2004). The preamble to BLM's mining regulations (43 C.F.R. subpart 3809) specifically recognizes the binding nature of E.O. 13007 as applied to BLM under FLMPA's UUD standard: "In these regulations, BLM has decided that it will approve plans of operations ... if the requirements of subpart 3809 are satisfied and other considerations that attach to a Federal decision, such as Executive Order 13007 on Indian Sacred Sites, are also met." 65 Fed. Reg. 69998, 70032 (Nov. 21, 2000). FLPMA protects all critical cultural resources, not just those covered by the procedural mechanism of the NHPA. "Those [sites/properties] that do not meet the eligibility standard are not subject to compliance with Section 106 of the National Historic Preservation Act. This does not mean that they are without protection, only that the NHPA is not the correct legal tool for protecting them." BLM Handbook H-8120-1, "Guidelines for Conducting Tribal Consultation" at II-2 (replaced by H-1780-1 in 2016). More recently, the Department of Interior issued additional directives on protecting Tribal sacred sites. In addition to E.O. 13007, this new policy is directly applicable to the Project and must be considered by BLM in its NEPA process. Violation of binding direction renders an agency decision arbitrary and capricious. See Ecology Ctr., Inc. v. Austin, 430 F.3d 1057, 1069-70 (9th Cir. 2005) (arbitrary and capricious to ignore a standard when final EIS discusses it as if it is binding), overruled on other grounds by Lands Council v. McNair, 537 F.3d 981, 990 (9th Cir. 2008). Where internal direction is non-binding, the agency may deviate under appropriate circumstances so long as it provides an adequate explanation for doing so. However, deviation from applicable guidance "without a reasoned explanation" constitutes arbitrary and capricious action. W. Watersheds Project v. Kraayenbrink, 620 F.3d 1187, 1208 (9th Cir.2010); see also Davis v. Mineta, 302 F.3d 1104, 1117 (10th Cir. 2002) ("If [the agency] arbitrarily and capriciously failed to follow its own [non mandatory] regulation, its decision must be reversed."). The new directive at issue here is the most recent and applicable internal agency direction on how to evaluate the Project's impacts on Tribal values under NEPA and other applicable statutes. The November 9, 2021, memorandum of understanding ("MOU") concerning the protection of indigenous sacred sites among the Department of the Interior and several other federal agencies. MEMORANDUM OF UNDERSTANDING REGARDING INTERAGENCY COORDINATION AND COLLABORATION FOR THE PROTECTION OF INDIGENOUS SACRED SITES. The MOU recognizes that "[t]he connection to place is essential to the spiritual practice and existence of Indian Tribes" and notes that indigenous peoples "share an essential truth of the interconnectedness to nature and all life." MOU at 1. One consequence of this "essential truth" is that "[d]esecration of sacred places" has had "enduring" and "traumatic" impacts on the "social, cultural, spiritual, mental, and physical wellbeing of Indian Tribes." Id. The MOU further acknowledges that "sites sacred to Indian tribes . . . often occur within a larger landform or are connected through physical features or ceremonies to other sites or a larger sacred landscape." MOU at 2. It directs the signatory federal agencies to "consider these broader areas and connections to better understand the context and significance of sacred sites." Id. A copy of the MOU is attached for consideration and inclusion in the administrative record.	Thank you for your comment. BLM did conduct government-to-government consultation through attendance at tribal council meetings to present and discuss the NNLEP proposed action, address any concerns, and offer opportunity to visit the area if the tribes so choose. However, no concerns, issues, or other comments were provided through these in-person meetings. Please refer to comment #6 above.

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4	**8**	Executive Order 13175 of November 6, 2000 requires that, “Each agency shall have an accountable process to ensure meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications.” (Section 5 (a)). Key to this executive order is “meaningful” consultation. A simple letter as sent by BLM is not meaningful to the tribes as they have stated repeatedly over the years. Even as contained in “Department of the Interior Policy on Consultation with Indian Tribes” requires as a “Guiding Principle,” “This Policy requires a government-to-government consultation between appropriate Tribal Officials and Departmental officials.” (emphasis added) Given that the process needs to “meaningful” between “appropriate Tribal Officials and Departmental officials” consultation should be an in person meeting. The policy document goes on to state, “Communication will be open and transparent without compromising the rights of Indian Tribes or the government-to-government consultation process,” (emphasis added) and further discusses “Innovative and Effective Consultation Practices” which include, “ Host regular meetings between the Secretary and Indian Tribes.”	Thank you for your comment. As stated in Section 4.1 of the EA:” BLM sent the initial consultation invitation letters of the Proposed Action on August 10, 2023, to the following tribes: • Confederated Tribes of the Goshute Reservation • Ely Shoshone Tribe • Northwestern Band of the Shoshone Nation • Shoshone-Bannock Tribes of the Fort Hall Reservation • Shoshone-Paiute Tribes of the Duck Valley Reservation • Te-Moak Tribe of Western Shoshone Indians of Nevada A second consultation letter was sent to the tribes on October 4, 2024. No comments have been received to date.” BLM did conduct government-to-government consultation through attendance at tribal council meetings to present and discuss the proposed action, address any concerns, and offer opportunity to visit the area if the tribes so choose. However, no concerns, issues, or other comments were provided through these in-person meetings. Although there have been no responses to date from the Tribes, consultation would occur throughout the life of the Project, and any request for additional meetings, site visits, or other communication on the Project would be coordinated with the BLM.
4,5	**9**	The directive from November 15, 2021, Joint Secretarial Order from Interior Secretary Debra Haaland andAgriculture Secretary Tom Vilsack (“Order”), which seeks to “ensure that the Department of Agriculture and the Department of the Interior . . . and their component Bureaus and Offices are managing Federal lands and waters in a manner” that protects “the treaty, religious, subsistence, and cultural interest of federally recognized Indian Tribes.” Joint Secretarial Order (“JSO”) 3403 (attached for inclusion in the administrative record). The Order directs each Department to “[e]nsure that all decisions . . . relating to Federal stewardship of Federal lands, waters, and wildlife under their jurisdiction include consideration of how to safeguard the interests of any Indian Tribes such decisions may affect.” Id. § 2. Through the Order, the Agriculture and Interior Departments commit to consultation and collaboration with Indian Tribes “to ensure that Tribal governments play an integral role in decision making related to the management of federal lands and waters,” and to give “due consideration” to “Tribal recommendations on public lands management.” Id. § 3. The Order sets forth principles of implementation which apply “[w]hen making management decisions for Federal lands and waters, or for wildlife and their habitat that impacts the treaty or religious rights of Indian Tribes.” See id. § 4. These include: b. The Departments will collaborate with Indian Tribes to ensure that Tribal governments play an integral role in decision making related to the management of Federal lands and waters through consultation, capacity building, and other means consistent with applicable authority. c. The Departments will engage affected Indian Tribes in meaningful consultation at the earliest phases of planning and decision-making relating to the management of Federal lands to ensure that Tribes can shape the direction of management. This will include agencies giving due consideration to Tribal recommendations on public lands management. … f. The Departments will consider Tribal expertise and/or Indigenous knowledge as part of Federal decision making relating to Federal lands, particularly concerning management of resources subject to reserved Tribal treaty rights and subsistence uses. BLM needs to meet in person with all of the tribes for a meaningful consultation that does not “compromise the rights of Indian Tribes.” Sending merely a letter to the tribes generally disrespects the tribes and their desire for in person meetings.	Thank you for your comment. Please see response to comment #8 above.
5	**10**	**NEPA Compliance** The Preliminary Environmental Assessment as structured proposes several Phases with associated discrete disturbance acreages. The current Phase I proposes 30 acres of disturbance in addition to the existing 4.91 acres of Notice-level disturbance under the Texas Springs Notice NVN-101347. The remaining 215.09 acres of proposed disturbance “identified under subsequent phases would be conducted over approximately 3 years” (BLM 2024a).	Thank you for your comment. As discussed in Section 2.1, Surge proposes to use a phased approach to minimize environmental effects and to prevent unnecessary and undue degradation of public lands. The proponent would submit Work Plans to BLM for approval. These Work Plans would provide detailed information as to how Surge would perform activities, access road alignments and/or improvement, site locations, the number and type of drill rigs or other equipment expected, construction/drilling schedule and reclamation schedule, any changes to previously approved Work Plans, and any updates to the reclamation cost estimate and financial guarantee as determined necessary. In accordance with 43 CFR 3809.420(6) Surge must conduct all operations (including

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		Will subsequent phases and associated surface disturbances have to be publicly noticed or have assessments done for cumulative impacts?	activities proposed in each Work Plan) in a manner that complies with all pertinent Federal and State laws. All phases of the Project would also be required to follow all ACEPMs in Appendix B of the EA. Cumulative effects are the sum of all past, present, and Reasonably Foreseeable Future Actions (RFFAs) resulting primarily from mineral exploration, mining, commercial activities, and public uses. The Proposed Action includes up to 250 acres of disturbance within the Project Area. This EA has evaluated the direct and indirect effects of the Proposed Action. The cumulative effects analysis already considers the Proposed Action's incremental contributions (including up to 250 acres of disturbance) in conjunction with past, present and RRFAs within the Cumulative Effects Study Area (CESA) identified for each resource. The BLM has determined that no unnecessary or undue degradation would occur as a result of the Proposed Action. Furthermore, the Proposed Action would be in conformance with the Wells Resource Management Plan, the 2015 ARMPA, and other statutes, regulations and policies as described Section 1.4 and referenced throughout the environmental consequences analysis in Chapter 3. BLM conducted the 30-day public comment period on the Preliminary EA consistent with the NEPA regulations at 40 CFR 1501.5(e), 40 CFR 1501.5(k) and 43 CFR 46.305.
5,6	**11**	Presently, this plan leaves out specifics of impacts for the majority of surface disturbance that will be related to the project. The operator will instead be using "Work Plans" to detail subsequent phase activities and would receive "authorization from the BLM" to proceed; however, the criteria for such authorization is unclear. The location of subsequent phased activities will also be contingent on the success of previously completed exploration or baseline data collection activities - the lack of clarity as to siting of surface disturbance is problematic.	Thank you for your comment. Please see response to comment #10.
6	**12**	BLM Failed to Fully Analyze All Reasonably Foreseeable Future Actions As noted above it is determined that 215.09 acres will also be disturbed within the next three years. It is clear that this disturbance is foreseeable, and must be analyzed under NEPA. The EA claims that the specific locations of the additional disturbance are yet to be determined and therefore cannot yet be analyzed is merely an indication that the EA is premature. Given that the number of additional acres is very specific BLM must have enough information to analyze potential impact from the foreseeable explorations. In any event the actions are reasonably foreseeable and cannot be ignored in the EA as is done here.	Thank you for your comment. Please see response to comment #10.
Comment Letter from Western Shoshone Defense Project			
1	**1**	The project document titled "Finding of No Significant Impact Statement" states in part, (viii) "the degree to which the action may adversely affect rights of Tribal Nations that have been reserved through treaties, statutes, or Executive Orders." "There are no known adverse effects to Tribal Nations". We disagree. The United States (US) and the Bureau of Land Management (BLM.) are both aware that two United Nations (UN) committees performed a I0-year study of the Western Shoshone land dispute and concluded the United States violated our human rights. The right to due process, right to property, and the right to equality before the law.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.
1	**2**	As a traditional treaty organization, we have concerns regarding the continued destruction of our unceded treaty territory. We also have concerns regarding the continued human rights violations committed by the United States government in the so-called taking of our land through "gradual encroachment". The theory of "gradual encroachment" is not found in the law and has never been used before or since the Western Shoshone case. In actuality, the issue of title extinguishment has never been litigated in a court of law. As we see it, the US governments' actions of deceit and underhandedness does not constitute lawfulness therefore; morally speaking, this land is still ours.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.
2	**3**	The United States often refers to the distribution of certain monies to "qualifying" individuals. These monies referenced are the same monies that came about from the discriminatory process by a quasi-judicial entity - the Indian Claims Commission. There is no mention with respect to the underlying discriminatory legal foundations giving rise to the ongoing violations and concerns expressed by both CERD (Committee on the Elimination of Racial Discrimination) and the IACHR (Inter-American Commission on Human Rights). This response - or "smoke screen" -further evidences the United States' ongoing violations and abject failure to address the concerns of ongoing human rights violations. Decisions of the committees specifically instruct the U.S. to stop any further actions on Western	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.

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		Shoshone lands and calls for the opening of immediate dialogue. This dialogue should be held with federally recognized tribes and should also include traditional Newe peoples and organizations.	
2	**4**	**Public Process:** The timing of the public notice for the Preliminary Environmental Assessment process just before Christmas was poorly thought out, or maybe it's part of the strategy. Either way it was a great disservice to the general public. People are distracted with holiday plans that proceed though the beginning of January and then it takes additional time to get back to their normal routine. This notice could have waited until after the new year giving people ample time to research and comment and participate in NEPA in a meaningful way	Thank you for your comment. BLM conducted the 30-day public comment period on the Preliminary EA consistent with the NEPA regulations at 40 CFR 1501.5(e), 40 CFR 1501.5(k) and 43 CFR 46.305.
2	**5**	The Scoping process and meetings, is a collective public process and a means for community members to come together to better understand a proposed action, and to create an awareness for others. This important part of the process was withheld for unknown reasons. The value of scoping comes not only as a means for community members to hear and engage with sources of knowledge from public agencies and the mining operator, but to share knowledge and concerns, and related lived experience with others in their community. Also, as indicated in the EA documents, there will not be an Environmental Impact Statement to analyze long-term impacts of this project which we find irresponsible if the BLM is adhering to its vision of sustaining the health of public lands for future generations.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.
2	**6**	The Bureau of Land Management continues to disregard its mission with the ongoing and continuous mismanagement of Western Shoshone land as we have witnessed incessant destruction of biodiversity and water with the increased speed that these projects are approved. If the BLM is going to properly do its job it needs to slow down, think, converse with stakeholders and develop a plan that includes Indigenous Traditional Ecological Knowledge, because it is apparent that status quo is not working for the betterment of so-called public lands in Nevada.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.

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2,3	**7**	Over the past 200-years the Western Shoshone have witnessed continued degradation of our homelands with the disappearance and extinction of plants and animals due to the mismanagement of our homelands by the United States, Bureau of Land Management. Moreover, the culture and religion of the Western Shoshone is being trampled on by the BLM as it continues to operate in a manner that aligns more with corporations and special interests than the original occupiers. The continued authorization of extraction projects damages the environment, in turn, it extinguishes our ability, right, and freedom to practice our culture and religion. We have come to the conclusion that this continued action is on purpose intended to erase and remove our existence from our homelands. This is seen throughout history since the coming of Europeans to Western Shoshone territory and to this continent of Turtle Island. The 1863 Ruby Valley Treaty of Peace and Friendship between the United States government and the Western Shoshone Nation is an agreement between two nations. This agreement between Nations, is recognized within the US Constitution as the "supreme law of the land". The treaty recognized Western Shoshone territory and allowed the US and European settlers safe passage and made certain allowances for US citizens. The Treaty of Ruby Valley did not cede land. And like all treaties, it was not about granting rights to the Western Shoshone; however, it did grant certain privileges and right to the US, reserving all sovereign rights and responsibilities possessed by the Western Shoshone Nation unless specifically waived. The proposed mine is located within treaty and traditional boundaries of several Tribal Nations, surely more cultural sites and artifacts will be found in the area. Moreover, there are Shoshone anthropologists that need to be considered in interpreting our culture and history not only for this project but all future projects as well. Take note that the Supreme Court's "canons of treaty interpretation" require that treaties be interpreted as the Indians understood them at the time of signing and that any ambiguities be interpreted as the Indians would have understood at the time and in their favor. Traditional Western Shoshone say that mining in 1863 was entirely different, it represented shafts, "glory holes" and individual prospects with picks and shovels, which is a far cry from the open pit cyanide, water guzzling, heap leach mining of today. To the Western Shoshone and for other Indigenous peoples, the four sacred elements, Land, Air, Water, Sun/Spirit (LAWS) are the real and inherited laws which form the basis for all life. Newe do not have a dominating relationship to the land, but rather sacred responsibilities to protect and care for these areas. The 1863 Treaty of Ruby Valley is the only tangible document we have to protect who we are as a people. Another area of vital importance to Indigenous Peoples is the protection and preservation of spiritual practices and sites. The administrative processes and the judicial courts of the United States provide little practical protection to spiritual sites and, therefore, to the protection of traditional spiritual practices. For example, in Lyng vs. Northwest Cemetery Association, the Supreme Court held that a federal agency could permit road-building and timber-harvesting throughout a pristine wilderness area that was also a traditional spiritual area for three distinct tribes. 485 U.S. 439 (1988). By providing little practical protection to spiritual sites and traditional spiritual practices, the United States is undermining Indigenous Peoples rights to culture under article 27 of the International Covenant on Civil and Political Rights (ICCPR). We have witnessed the lack of respect and protection for spiritual areas with the approval of Cortez Hills expansion in Crescent Valley, Nevada which destroyed the White Cliffs, rendering it useless for spiritual practices.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.

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3,4,5	**13**	**United Nations:** In December 2002, the Inter-American Commission on Human Rights ("IACHR") rendered a Final Report finding the United States in violation of rights to property, due process and equality under the law. The United Nations Committee on the Elimination of Racial Discrimination ("CERD") separately reviewed the case of the Western Shoshone. CERD publicly issued a full decision against the United States. In the decision, the U.S. was urged to "freeze", "desist" and "stop" actions being taken or threatened to be taken against the Western Shoshone People. In its decision, the Committee on the Elimination of Racial Discrimination ("CERD") issued on March 10, 2006 under its early warning and urgent action procedure, the Committee expressed concern over the United States' treatment of the Western Shoshone and their ancestral lands. Specifically, the Committee found the United States' "obligation to guarantee the right of everyone to equality before the law" was "not respected" and urged the United States to "pay particular attention to the right to health and cultural rights of the Western Shoshone peoples". The Committee called on the United States to "take immediate action to initiate a dialogue" with the Western Shoshone until a final decision or settlement was reached. To this day the United States refuses to have that dialogue leaving us with no choice but to oppose any and all projects in our territory. The United States continues to rely on an illegitimate process and questionable distribution of monetary compensation. The monies referenced are the same monies that came about from the discriminatory process by a quasi-judicial entity - the Indian Claims Commission. There is no mention, let alone response by the United States, with respect to the underlying discriminatory legal foundations giving rise to the ongoing violations and concerns expressed by both CERD and the Inter-American Commission on Human Rights ("IACHR"). The Committee's General Recommendation states that monetary restitution may suffice in certain circumstances, however a State Party is required to "take steps to return those lands" and "compensation should as far as possible take the form of lands and territories." Even in its "distribution" of monies, the United States further violated Western Shoshone rights by adding insult to injury with an intentional run around both the traditional and tribal governments and those individuals who specifically rejected any form of monetary compensation on what they say is systemic racism and abuse by the United States. To consider individualized taking of monies that many saw as "damages" rather than land payments as acceptance by an entire people is illegal according to Shoshone custom, religion and traditional laws that do not permit individuals to "sell" the Nation's lands and territories which belong to the past, present and future generations of Shoshone. To many, this amounts to nothing less than an attempt by the United States to commit cultural genocide through discriminatory laws created to dispose Western Shoshone of their religion, beliefs, lands and resources. The United States continues to avoid true dialogue and review of underlying discriminatory bases for its treatment of the Western Shoshone by continued reliance upon antiquated colonial concepts as the foundation of their laws, policies and regulations. The United States attempted to refute the legal determinations of CERD as well as the determination of the IACHR decisions. The arguments were reviewed and rejected by the Committee in its periodic review of the United States. It is well known by all that industrialization and capitalism combined have had detrimental effects on the environment and biodiversity and is a contributor to the climate change the world finds itself in today. Due to this dire effect, we now find ourselves in the era of an "energy transition" and the exploration of "critical and/or precious" metals.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.

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5	**19**	**Decolonization and a Just Transition:** For Indigenous Peoples, a just transition means exercising our own customary institution and governance systems, based on our traditional ways of life. It is a restoration of what we were, a return to wholeness, from the womb of our mother to the stars above us. It is our cultural right to be who we are and our physical right to be healthy and have a good life, to be safe. A just transition must include and reflect the input and effective participation of Indigenous Peoples, including youth, women, elders, knowledge-holders, persons with disabilities, and active practitioners of our traditional ways of life. This includes the opportunity for active and effective negotiations, based on Free, Prior and Informed Consent (FPIC) regarding all projects; from the design to implementation, monitoring, and evaluation of our lands, territories, resources, and waters. A just transition cannot rely on false solutions such as carbon trading or offsets. It must ensure full transparency in funding sources and accountability, and ensure direct engagement with Indigenous Peoples. Accountability shall be established based on evidence and the effective participation of the Western Shoshone people. A Just transition must be based on recognition of our role and responsibility as the original caretakers, stewards, and guardians of our traditional lands. This includes rangelands, forests, deserts, waters, air, and resources, our Indigenous laws and protocols, and the spiritual, cultural, historic and ongoing relationships we have with the land and all living creatures of the environment. Without full participation of the Indigenous Peoples to determine what is "just", no mineral extraction project in the energy transition will be just. We affirm that the activities carried out on Indigenous territories without Free, Prior, and Informed Consent violate our inherent and recognized rights and do not constitute a just transition, but rather a form of modem genocide against our worldviews, ways of life and territorial governance systems. This transition must also be based on a radical transformation of the current economic systems, which are based on extraction and exploitation of nature, moving towards an Indigenous Peoples' world view of economic, social, educational, and cultural development. A just energy transition would be to analyze and study the entire state of its resources including our most precious resource, water. If the BLM is going to protect and preserve the environment for future generation it needs to be more transparent and robust in conversations with the Indigenous communities in the state. We are the original caretakers and know best what it will take to ensure the seventh generation is able to live healthy and prosperous lives in our country.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.
5,6	**22**	**Conclusion:** The energy transition and critical mineral extraction is happening around the world and Indigenous Peoples are the most negatively affected by this transition. Being dubbed "ground zero", we anticipate that many more extraction projects will be coming to our traditional territory and most likely will target sensitive cultural or spiritual areas. Despite the fact Indigenous peoples make up around 15 percent of the world's extreme poor and just five percent of the global population, we are protecting 80 percent of the world's remaining biodiversity, according to data cited in Australia's released 2021 State of the Environment report.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations
6	**23**	We, as Indigenous Peoples, understand the intent of the Creator is supreme law, superseding man-made law. The U.S. has a long history of breaking and bending their laws, committing deceitful acts, and reneging on treaty promises, this is not an action of peace or friendship. We know those involved with extraction corporations see Indigenous Peoples as obstacles and adversaries who stand in the way of their "progress for the greater good." However, as history has shown, we unwillingly have sacrificed everything in the name of progress but have only seen on going acts of genocide and the destruction to our earth mother. We are not the "bad guys" or obstacles, we are only trying to protect what is inherently, rightfully and lawfully ours for future generations. As Newe, it is our inherent responsibility to protect Newe Sogobia, our Earth Mother, as she is the provider of all living things. The Creator placed us here and we rightfully maintain our belonging to our homelands. We are resolute in our inherent rights to know all that is contemplated for our lands; we retain our authority to determine all that should occur to, with, on, and in our lands and territories. Nothing about us, without us.	Thank you for your comment regarding the Nevada North Lithium Exploration Project. While we appreciate your feedback, this comment does not raise any specific concerns regarding the potential environmental impacts of the proposed project as outlined in the Preliminary EA. As such, it will not be addressed further in the analysis. Response to comments was done in accordance with the NEPA regulations at 40 CFR 1503.4. Please review the relevant sections of the document for detailed information on the environmental considerations.