

## United States Department of the Interior



BUREAU OF LAND MANAGEMENT Winnemucca District Office Humboldt River Field Office 5100 East Winnemucca Boulevard Winnemucca, Nevada 89445 Phone: (775) 623-1500 Fax: (775) 623-1503

Email: wfoweb@blm.gov www.blm.gov/nv/st/en/fo/wfo.html

In Reply Refer To: 3201 NVW010.41

To: Lorenzo Trimble, Geothermal Lead, Nevada State Office

From: David Kampwerth, Field Manager, Humboldt River Field Office

Subject: October 2016 Geothermal Lease Parcels in the Humboldt River Field Office

In the end of April 2016, the Humboldt River Field Office (HFRO) received a Competitive Geothermal Lease Sale Memorandum from the Nevada State Office (NSO) containing a list of four geothermal lease parcels proposed for competitive sale on October 24, 2016. The HRFO staff has completed an initial review of the proposed geothermal lease parcels located within our jurisdiction.

Based upon our review, the HRFO recommends that the four parcels identified as Parcel 1 (NV-16-10-004), Parcel 2 (NV-16-10-005), Parcel 3 (NV-16-10-006), and Parcel 4 (NV-16-10-009) are eligible sites and should be made available for the upcoming geothermal lease sale. All four parcels were addressed in the attached Determination of National Environmental Policy Act Adequacy (DNA) and associated Decision Record (DR). All parcels are subject to the General Lease Stipulations. In addition, attachments to the DNA and DR detail site specific lease stipulations for each parcel.

The following resources were used in the evaluation of the nominated parcels: Programmatic Environmental Impact Statement for Geothermal Leasing in the Western United States, Record of Decision and Resource Management Plan Amendments for Geothermal Leasing in the Western United States, December 2008; BLM Final EIS Record of Decision and Resource Management Plan for the Winnemucca District Planning Area, May 21, 2015; BLM Record of Decision and Approved Resource Management Plan Amendments for the Great Basin Region, Including the Greater Sage-grouse Sub-Regions of Idaho and Southwestern Montana, Nevada and Northeastern California, Oregon, Utah, September 2015.

A good faith effort has been made to consult with Tribes and incorporate their concerns, as we know them, into our recommendations. The future location of a proposed Traditional Cultural Property (TCP) in the vicinity of Black Warrior Peak was indicated to potentially overlap with portions of Parcels 1-3. In accordance with the 2015 Winnemucca District Resource Management Plan, Fluid Mineral Lease Sale Stipulations, HRFO will not permit surface occupancies in areas intersecting the proposed TCP. Native American Consultation continues and future concerns may arise. Should future concerns become evident prior to the time of sale, HRFO will promptly notify the NSO.

If you have any questions, please contact me at (775) 623-1501.

Sincerely,

David Kampwerth Field Manager Humboldt River Field Office

Dat. KD

Attachments:

-Decision Record

-DNA

## **Decision Record**

## Determination of NEPA Adequacy (DNA) DOI-BLM-NV-010-2016-0014-DNA

## 2016 Geothermal Lease Parcels Subject to the Resource Management Plan for the Winnemucca District Planning Area

I have reviewed the Determination of National Environmental Policy Act Adequacy (DNA), DOI-BLM-NV-010-2016-0014-DNA, evaluating four (4) geothermal lease parcels proposed for sale on October 26, 2016. I have determined that the proposed action is in conformance with the BLM Final EIS Record of Decision and Resource Management Plan for the Winnemucca District Planning Area, approved May 21, 2015.

On the basis of the information contained in the DNA Worksheet, it has been determined that the lands nominated for geothermal leasing, which are identified on the attached parcel maps, are open for geothermal leasing, subject to the attached stipulations, and will not have environmental impacts beyond those already addressed in: Programmatic Environmental Impact Statement for Geothermal Leasing in the Western United States, Record of Decision and Resource Management Plan Amendments for Geothermal Leasing in the Western United States, December 2008; BLM Final EIS Record of Decision and Resource Management Plan for the Winnemucca District Planning Area, May 21, 2015; BLM Record of Decision and Approved Resource Management Plan Amendments for the Great Basin Region, Including the Greater Sage-grouse Sub-Regions of Idaho and Southwestern Montana, Nevada and Northeastern California, Oregon, Utah, September 2015.

It is my decision to recommend that the parcels identified in the DNA, be offered subject to the attached stipulations, for a tentatively scheduled October 26, 2016, competitive geothermal lease sale. All parcels or parts thereof, are subject to the attached site specific lease stipulations and the general lease stipulations. Parcel maps have been attached for spatial reference. Recognize that a good faith effort has been made to consult with Tribes and incorporate their concerns, as we know them, into our recommendations. Native American Consultation continues and future concerns may arise. Should future concerns become evident prior to the time of sale, HRFO will promptly notify the NSO.

#### **AUTHORITY**

- The Geothermal Steam Act of 1970, Title 30, United States Code (USC), Chapter 23, Sections 1001 et seq. (30 USC 1001 et seq.).
- 43 CFR 3200, Geothermal Resources Leasing and Operations; Final Rule, May 2, 2007.
- Energy Independence and Security Act 2007 (Public Law 110-140)
- The 2005 Energy Policy Act; The National Energy Policy, Executive Order 13212

### APPEAL PROVISIONS

A person who wishes to appeal to the Interior Board of Land Appeals must do so under 43 CFR 4.411 and must file in the office of the officer who made the decision (not the board), in writing to David Kampwerth, Field Manager, Humboldt River Field Office, 5100 East Winnemucca Blvd, Winnemucca, Nevada 89445. A person served with the decision being appealed must transmit the notice of appeal in time to be filed in the office where it is required to be filed within thirty (30) days after the date of service.

The notice of appeal must give the serial number or other identification of the case and may include a statement of reasons for the appeal, a statement of standing if required by §4.412(b), and any arguments the appellant wishes to make. Attached Form 1842-1 provides additional information regarding filing an appeal.

No extension of time will be granted for filling a notice of appeal. If a notice of appeal is filed after the grace period provided in §4.401(a), the notice of appeal will not be considered and the case will be closed by the officer from whose decision the appeal is taken. If the appeal is filed during the grace period provided in §4.401(a) and the delay in filing is not waived, as provided in that section, the notice of appeal will not be considered and the appeal will be dismissed by the Board.

The appellant shall serve a copy of the notice of appeal and any statements of reason, written arguments, or briefs under §4.413 on each adverse party named in the decision from which the appeal is taken and on the Office of the Solicitor, Pacific Southwest Regional Solicitor, U.S. Department of the Interior, 2800 Cottage Way, Room E-2753, Sacramento, California 95825-1890.

Service must be accompanied by personally serving a copy to the party or by sending the document by registered or certified mail, return receipt requested, to the address of record in the bureau, no later than 15 days after filing the document.

In addition, within thirty (30) days of receipt of this decision you have the right to file a petition for a stay together with your appeal in accordance with the regulations at 43 CFR 4.21. The petition must be served upon the same parties specified above.

Pursuant to 43 CFR 4.47I(c), a petition for a stay, if filed, must show sufficient justification based on the following standards:

- 1) The relative harm to the parties if the stay is granted or denied;
- 2) The likelihood of the appellant's success on the merits;
- 3) The likelihood of immediate and irreparable harm if the stay is not granted; and,
- 4) Whether the public interest favors granting the stay.

43 CFR 4.471(d) provides that the appellant requesting a stay bears the burden of proof to demonstrate that a stay should be granted.

At the conclusion of any document that a party must serve, the party or its representative must sign a written statement certifying that service has been or will made in accordance with the applicable rules and specifying the date and manner of such service (43 CFR 4.422(c)(2)).

## Signature Page for **Decision Record** DOI-BLM-NV-W010-2016-0014-DNA

Authorized Official: Deft. Date: July 27 2016
Field Manager, Humboldt River Field Office

## Attachments:

- -Form 1842-1
- -DNA
- -Parcel Worksheets
- -Parcel Maps
- -Parcel Information and Legal Descriptions

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

## INFORMATION ON TAKING APPEALS TO THE INTERIOR BOARD OF LAND APPEALS

## DO NOT APPEAL UNLESS

1. This decision is adverse to you,

AND

2. You believe it is incorrect

## IF YOU APPEAL, THE FOLLOWING PROCEDURES MUST BE FOLLOWED

#### 1. NOTICE OF APPEAL.....

A person who wishes to appeal to the Interior Board of Land Appeals must file in the office of the officer who made the decision (not the Interior Board of Land Appeals) a notice that he wishes to appeal. A person served with the decision being appealed must transmit the *Notice of Appeal* in time for it to be filed in the office where it is required to be filed within 30 days after the date of service. If a decision is published in the FEDERAL REGISTER, a person not served with the decision must transmit a *Notice of Appeal* in time for it to be filed within 30 days after the date of publication (43 CFR 4.411 and 4.413).

#### 2. WHERE TO FILE

Bureau of Land Management, Nevada State Office

NOTICE OF APPEAL.....

1340 Financial Blvd. Reno, NV 89502-7147

WITH COPY TO SOLICITOR

Regional Solicitor Pacific Southwest Region, United States Dept. of the Interior 2800 Cottage Way, Room E-1712, Sacramento, CA 95825

#### 3. STATEMENT OF REASONS

Within 30 days after filing the *Notice of Appeal*, file a complete statement of the reasons why you are appealing. This must be filed with the United States Department of the Interior, Office of Hearings and Appeals, Interior Board of Land Appeals, 801 N. Quincy Street, MS 300-QC, Arlington, Virginia 22203. If you fully stated your reasons for appealing when filing the *Notice of Appeal*, no additional statement is necessary (43 CFR 4.412 and 4.413).

WITH COPY TO SOLICITOR.....

Regional Solicitor Pacific Southwest Region, United States Dept. of the Interior 2800 Cottage Way, Room E-1712, Sacramento, CA 95825

#### 4. ADVERSE PARTIES.....

Within 15 days after each document is filed, each adverse party named in the decision and the Regional Solicitor or Field Solicitor having jurisdiction over the State in which the appeal arose must be served with a copy of: (a) the *Notice of Appeal*, (b) the Statement of Reasons, and (c) any other documents filed (43 CFR 4.413).

#### 5. PROOF OF SERVICE.....

Within 15 days after any document is served on an adverse party, file proof of that service with the United States Department of the Interior, Office of Hearings and Appeals, Interior Board of Land Appeals, 801 N. Quincy Street, MS 300-QC, Arlington, Virginia 22203. This may consist of a certified or registered mail "Return Receipt Card" signed by the adverse party (43 CFR 4.401(c)).

### 6. REQUEST FOR STAY.....

Except where program-specific regulations place this decision in full force and effect or provide for an automatic stay, the decision becomes effective upon the expiration of the time allowed for filing an appeal unless a petition for a stay is timely filed together with a *Notice of Appeal* (43 CFR 4.21). If you wish to file a petition for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the Interior Board of Land Appeals, the petition for a stay must accompany your *Notice of Appeal* (43 CFR 4.21 or 43 CFR 2801.10 or 43 CFR 2881.10). A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the *Notice of Appeal* and Petition for a Stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

Standards for Obtaining a Stay. Except as otherwise provided by law or other pertinent regulations, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards: (1) the relative harm to the parties if the stay is granted or denied, (2) the likelihood of the appellant's success on the merits, (3) the likelihood of immediate and irreparable harm if the stay is not granted, and (4) whether the public interest favors granting the stay.

Unless these procedures are followed, your appeal will be subject to dismissal (43 CFR 4.402). Be certain that all communications are identified by serial number of the case being appealed.

NOTE: A document is not filed until it is actually received in the proper office (43 CFR 4.401(a)). See 43 CFR Part 4, Subpart B for general rules relating to procedures and practice involving appeals.

## 43 CFR SUBPART 1821-GENERAL INFORMATION

Sec. 1821.10 Where are BLM offices located? (a) In addition to the Headquarters Office in Washington, D.C. and seven national level support and service centers, BLM operates 12 State Offices each having several subsidiary offices called Field Offices. The addresses of the State Offices can be found in the most recent edition of 43 CFR 1821.10. The State Office geographical areas of jurisdiction are as follows:

## STATE OFFICES AND AREAS OF JURISDICTION:

Alaska State Office ------ Alaska
Arizona State Office ----- Arizona
California State Office ----- California
Colorado State Office ----- Colorado
Eastern States Office ------ Arkansas, Iowa, Louisiana, Minnesota, Missouri
and, all States east of the Mississippi River
Idaho State Office ---- Idaho
Montana State Office ---- Montana, North Dakota and South Dakota
Nevada State Office ---- Nevada
New Mexico State Office --- New Mexico, Kansas, Oklahoma and Texas
Oregon State Office ---- Oregon and Washington
Utah State Office ---- Utah
Wyoming State Office ---- Wyoming and Nebraska

(b) A list of the names, addresses, and geographical areas of jurisdiction of all Field Offices of the Bureau of Land Management can be obtained at the above addresses or any office of the Bureau of Land Management, including the Washington Office, Bureau of Land Management, 1849 C Street, NW, Washington, DC 20240.

(Form 1842-1, September 2006)

## Worksheet Determination of NEPA Adequacy (DNA)

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

OFFICE: Humboldt River Field Office (HRFO) Winnemucca District (WD).

TRACKING NUMBER: DOI-BLM-NV-W010-2016-0014-DNA

<u>CASEFILE/PROJECT NUMBER:</u> Refer to parcel numbers listed on the attached list of legal descriptions

<u>PROPOSED ACTION TITLE/TYPE:</u> Geothermal Lease Parcel Nominations for October 2016 sale

<u>LOCATION/LEGAL DESCRIPTION:</u> See attached general and site vicinity maps and list of legal descriptions

APPLICANT (if any): Nevada BLM

## A. Description of the Proposed Action with attached map(s) and any applicable mitigation measures.

Who: BLM Nevada State Office (NSO)

What: The NSO is proposing to include in the 2016 geothermal lease sale four (4) nominated geothermal parcels that are located within the area administered by the Humboldt River Field Office (HRFO).

When: October 2016 geothermal lease sale

**Where:** Three of the parcels are located in the Truckee Range 6.5 miles east of the southern shoreline of Pyramid Lake. One parcel is located on the I-80 corridor 5.5 miles northeast of Lovelock. See attached maps and parcel legal descriptions.

**Why:** The NSO is requesting HRFO to review nominated parcels for conformance with the WDRMP, recommend appropriate lease stipulations, and advise on any parcels that may need to be deferred.

**How:** The 4 geothermal parcels are being reviewed against the existing National Environmental Policy Act (NEPA) documents as identified in part C of this worksheet to determine if these parcels are open for leasing in the WD and under what conditions. This review includes identifying the appropriate geothermal lease stipulations and any

Rel.1710

01/30/2008

BLM MANUAL Supersedes Rel. 1-1547 necessary Notice to Leasee (NTL) that would be made a part of any subsequent Offer to Lease for Geothermal Resources.

Lease issuance alone does not authorize any ground-disturbing activities to explore for or develop geothermal resources without site-specific approval for the intended operation. Such approval could include additional environmental reviews and permits.

## B. Land Use Plan (LUP) Conformance

The Winnemucca District Resource Management Plan (WDRMP) and Final Environmental Impact Statement, May 2015, as amended by the Record of Decision and Approved Resource Management Plan Amendments for the Great Basin Region Including the Greater Sage-Grouse Sub-Regions of Idaho and Southwestern Montana, Nevada and Northeastern California, Oregon, and Utah, September 21, 2015 (GRSG Plan Amendment).

The proposed action is in conformance with the applicable WDRMP as amended because it is specifically provided for in the following WDRMP as amended decisions:

## **WDRMP**

## Objective MR 4:

Lands within the WD will be open to geothermal and oil and gas leasing and development except where incompatible with important resource values. Protect, manage, and conserve lands acquired in a manner consistent with the goals of the acquisition and the resource values present, in accordance with those Actions described below, and considering the management applied to adjacent public lands.

Action MR 4.1: Maintain 5,492,707 acres as open to leasing. Offer fluid mineral leases in those areas identified as open to leasing (Figure 2-13, Appendix A of the WDRMP). Protect, manage, and conserve important resource values in otherwise open areas by applying stipulations determined to be necessary to reasonably protect other resources as depicted on Figure 2-13, Appendix A and described in the text.

Action MR 4.1.1: 2,851,895 acres will be open with only standard lease terms and stipulations (Figure 2-13, Appendix A of the WDRMP). (Note: Survey for and mitigation of impacts on cultural resources, sensitive species, and migratory birds are considered standard stipulations [see Actions CR 1.1, CR 1.2, SSS 3.2, SSS 6.1.1, SSS 7.1.1, and FW 4.1, see WDRMP Appendix L, Winnemucca Fluid Mineral Lease Sale Stipulations]).

Action MR 4.1.2: 2,435,327 acres will be open, with standard lease terms and stipulations, as well as one or more of the following seasonal or other restrictions listed below (Figure 2-13, Appendix A of the WDRMP):

- a. PMUs that are not within priority wildlife habitat areas (see Action SSS 5.2.2).
- b. Within HMAs, where proposed activities could result in adverse impacts on the health and welfare of WHB (see Action WHB 4.1).
- c. Within defined avoidance areas (See Action LR 5.2).
- d. Within priority watersheds that are not T&E species habitat (see Actions WR 3.2 and WR 3.2.1).
- e. Areas in VRM Class I, II, or III (see Visual Resources Goal, Objective VRM 1, and Action VRM 1.1).

Action MR 4.1.3: 205,485 acres will be open to leasing but subject to a no surface occupancy stipulation, applicable to the following (Figure 2-13, Appendix A of the WDRMP):

- a. No new fluid leasing surface occupancy will be allowed within a mile of the NHT (see Action CR 6.9). To accomplish this, any quarter-quarter-quarter section (10-acre parcel) within or intersected by the trail or the one-mile buffer line will be subject to NSO.
- b. Within an identified TCP listed or considered eligible for the NRHP (see Action TC 2.2.2). To accomplish this, any quarter-quarter section (10-acre parcel) within or intersected by the TCP will be subject to NSO.
- c. Within the location of an identified paleontological resource classified as being of scientific or educational interest (see Action PR 1.6). To accomplish this, any quarter-quarter section (10-acre parcel) within or intersected by the site will be subject to NSO.
- d. Priority water supply areas (see Actions WR 3.4).
- e. Within cultural sites that have been determined to be eligible for listing on the NRHP (see Action CR 2.1.1).

Action MR 4.1.3.1: Based on Native American consultation, modifications to no surface occupancy near TCPs or TCP settings may produce recommendations for larger or smaller areas subject to no surface occupancy.

Action MR 4.2: Maintain 1,740,928 acres as closed to leasing. Areas closed to leasing (Figure 2-13, Appendix A of the WDRMP):

- a. Designated WSA or Wilderness (policy);
- b. George Lund Petrified Forest mineral withdrawal (see Actions PR 1. and PR 1.7);
- c. Lovelock Cave right-of-way and proposed mineral withdrawal (Action LR 10.2);
- d. McDermitt Station Administrative Site right-of-way and proposed mineral withdrawal (Action LR 10.2);

- e. Priority Wildlife Habitat Areas and associated PMUs (see Action SSS 5.2.1);
- f. Designated ACECs (see Action ACEC 1.2):
- 1. Osgood Mountain Milkvetch ACEC (see also Action SSS 3.5),
- 2. Pine Forest,
- 3. Raised Bog, and
- 4. Stillwater (see also Action TC 2.2).
- g. Lands acquired under SNPLMA.
- h. Within priority watersheds that are T&E species habitat (see Action WR 3.2).
- i. Areas closed to OHV use (see Action R 10.1).
- j. Lands acquired under LWCF automatically closed to all mineral location and entry.
- k. Lands acquired by exchange closed to mineral location and entry for 90 days and automatically open if BLM doesn't initiate a withdrawal within that time period.
- 1. Cultural sites listed on the NRHP.

Action MR 4.2.1: Offer fluid mineral leases to within a quarter mile of a WSA or designated wilderness boundary. To accomplish this, any quarter-quarter section (40-acre parcel) intersected by and including a portion of such a boundary will be excluded from the parcel nominated (IM-NV-2004-093).

## Objective MR 5:

Manage fluid mineral operations to provide for the energy needs of the nation, while assuring compatibility with and protection of other resources (per the Energy Policy Act of 2005) (DOI 2005).

Action MR 5.1: In addition to applicable lease stipulations, apply standard conditions of approval as necessary to reasonably protect other resources and meet resource objectives.

Action MR 5.2: Compliance inspections will meet existing policy and be of sufficient frequency and detail to ensure appropriate protection of the public interest in production and resource values.

## GRSG Plan Amendment

## **Excerpt from Table 2-1 Summary of Allocation Decisions by GRSG Habitat**

### **Management Areas**

Resource	PHMA	GHMA	OHMA
Geothermal	Open with major	Open with minor	Open with standard
	stipulations	stipulations	stipulations

2.2.6 Mineral Resources (MR)

Leasable Minerals Objective MR 1: Priority will be given to leasing and development of fluid mineral resources, including geothermal, outside of PHMAs and GHMAs. When analyzing leasing and authorizing development of fluid mineral resources, including geothermal, in PHMAs and GHMAs, that are subject to applicable stipulations for the conservation of GRSG, priority will be given to development in non-habitat areas first and then in the least suitable habitat for GRSG. The implementation of these priorities will be subject to valid existing rights and any applicable law or regulation, including, but not limited to, 30 U.S.C. 226(p) and 43 C.F.R. 3162.3-1(h).

Leased Federal Fluid Mineral Estate Actions

**MD MR 8:** Review Objective SSS 4, and to the extent allowed by law, apply MDs SSS 1 through SSS 4 when reviewing and analyzing projects and activities proposed in GRSG habitat.

**MD MR 9:** Use directional and horizontal drilling to reduce surface disturbance.

**MD MR 10:** On leased federal fluid mineral estate, where no APD or geothermal drilling permit (GDP) has been issued, apply RDFs consistent with applicable law and other conditions of approval (COAs) that conserve GRSG. Manage existing fluid mineral leases through COAs applied at the time APD or GDP is approved.

**MD MR 11:** On leased federal fluid mineral estate in PHMAs, complete master development plans for oil and gas in lieu of APD-by-APD, or operations/utilization plans for geothermal processing for all but exploration wells.

**MD MR 12:** On leased, federal, fluid mineral estate in PHMAs, require a full reclamation bond specific to the site. Ensure bonds are sufficient for reclamation costs for full restoration. Base the reclamation costs on the assumption that BLM contractors will perform the work.

**MD MR 13:** In PHMAs and GHMAs, place infrastructure in already disturbed locations to the extent feasible.

**MD MR 14:** Locate new compressor stations outside PHMAs and GHMAs and design them to reduce noise that may be directed toward PHMAs and GHMAs (see MDs SSS 2 and SSS 3 and Appendix M).

GRSG Plan Amendment: Appendix C- Required Design Features

Fluid Minerals RDFs

- **RDF Lease FM 1:** Co-locate power lines, flow lines, and small pipelines under or immediately adjacent to existing roads (Bui et al. 2010) in order to minimize or avoid disturbance.
- **RDF Lease FM 2:** Cover, create barriers, or implement other effective deterrents (e.g., netting, fencing, birdballs, and sound cannons) for all ponds and tanks containing potentially toxic materials to reduce GRSG mortality.
- **RDF Lease FM 3:** Require installation of noise shields to comply with noise restrictions (see Action SSS 7) when drilling during the breeding, nesting, brood-rearing, and/or wintering season. Require applicable GRSG seasonal timing restrictions when noise restrictions cannot be met (see Action SSS 6).
- **RDF Lease FM 4:** Ensure habitat restoration meets GRSG habitat objectives (Table 2-2) for reclamation and restoration practices/sites (Pyke 2011).
- **RDF Lease FM 5:** Maximize the area of interim reclamation on long-term access roads and well pads, including reshaping, topsoil management, and revegetating cut-and-fill slopes.
- **RDF Lease FM 6:** Restore disturbed areas at final reclamation to the pre-disturbance landforms and meets the GRSG habitat objectives (Table 2-2).
- **RDF Lease FM 7:** Use only closed-loop systems for drilling operations and no reserve pits within GRSG habitat.
- **RDF Lease FM 8:** Place liquid gathering facilities outside of GRSG habitat. Have no tanks at well locations within GRSG habitat to minimize vehicle traffic and perching and nesting sites for aerial predators of GRSG.
- **RDF Lease FM 9:** In GRSG habitat, use remote monitoring techniques for production facilities and develop a plan to reduce vehicular traffic frequency of vehicle use (Lyon and Anderson 2003).
- **RDF Lease FM 10:** Use dust abatement practices on well pads.
- **RDF Lease FM 11:** Cluster disturbances associated with operations and facilities as close as possible, unless site-specific conditions indicate that disturbances to GRSG habitat would be reduced if operations and facilities locations would best fit a unique special arrangement.
- **RDF Lease FM 12:** Apply a phased development approach with concurrent reclamation.
- **RDF Lease FM 13:** Restrict pit and impoundment construction to reduce or eliminate augmenting threats from West Nile virus (Dougherty 2007).

BLM MANUAL Supersedes Rel. 1-1547 **RDF Lease FM 14:** In GRSG habitat, remove or re-inject produced water to reduce habitat for mosquitoes that vector West Nile virus. If surface disposal of produced water continues, use the following steps for reservoir design to limit favorable mosquito habitat (Doherty 2007):

- Overbuild size of ponds for muddy and non-vegetated shorelines
- Build steep shorelines to decrease vegetation and increase wave actions
- Avoid flooding terrestrial vegetation in flat terrain or low lying areas
- Construct dams or impoundments that restrict down slope seepage or overflow
- Line the channel where discharge water flows into the pond with crushed rock
- Construct spillway with steep sides and line it with crushed rock.
- Treat waters with larvicides to reduce mosquito production where water occurs on the surface RDF Lease FM 15: Consider using oak (or other material) mats for drilling activities to reduce vegetation disturbance and for roads between closely spaced wells to reduce soil compaction and maintain soil structure to increase likelihood of vegetation reestablishment following drilling.

Programmatic Environmental Impact Statement for Geothermal Leasing in the Western United States, Record of Decision and Resource Management Plan Amendments for Geothermal Leasing in the Western United States, dated, December 2008.

## C. Identify applicable National Environmental Policy Act (NEPA) documents and other related documents that cover the proposed action.

- 1. Programmatic Environmental Impact Statement for Geothermal Leasing in the Western United States, Record of Decision and Resource Management Plan Amendments for Geothermal Leasing in the Western United States, December 2008.
- 2. BLM Final EIS Record of Decision and Resource Management Plan for the Winnemucca District Planning Area, May 21, 2015.
- BLM Record of Decision and Approved Resource Management Plan Amendments for the Great Basin Region, Including the Greater Sage-grouse Sub-Regions of Idaho and Southwestern Montana, Nevada and Northeastern California, Oregon, Utah, September 2015.

## D. NEPA Adequacy Criteria

1. Is the new proposed action a feature of, or essentially similar to, an alternative analyzed in the existing NEPA documents(s)? Is the project within the same

analysis area, or if the project location is different, are the geographic and resource conditions sufficiently similar to those analyzed in the existing NEPA document(s)? If there are differences, can you explain why they are not substantial?

Geothermal leasing is a land use plan level activity. Geothermal leasing was evaluated and analyzed in the EIS associated with the WDRMP. A Record of Decision (ROD) was reached on the WDRMP in May 2015. Therefore, the resource allocations made are very current. The four parcels proposed by the NSO are located within areas that are open for fluid mineral leasing either with standard stipulations, with standard and special stipulations or open to leasing with no surface occupancy.

Geothermal leasing is also analyzed in the nationwide programmatic geothermal leasing EIS, ROD 2008.

2. Is the range of alternatives analyzed in the existing NEPA documents(s) appropriate with respect to the new proposed action, given current environmental concerns, interests, and resource values?

Yes, the nominated geothermal parcels were reviewed with respect to the range of alternatives analyzed in the existing NEPA documents.

The WDRMP EIS, which analyzed four alternatives in detail, and the EIS associated with the Greater Sage Grouse Plan Amendment (GRSG Plan Amendment) ROD signed September 2015 are very current in light of recent environmental issues, interests, and resources values.

3. Is the existing analysis valid in light of any new information or circumstances (such as, rangeland health standard assessment, recent endangered species listings, updated lists of BLM-sensitive species)? Can you reasonably conclude that new information and new circumstances would not substantially change the analysis of the new proposed action?

Yes, the EIS associated with WDRMP is recent and was a comprehensive analysis with extensive public involvement. The WDRMP Appendix L provides fluid lease stipulations. An Interdisciplinary Team (IDT) reviewed the parcels for resource concerns and recommended the appropriate lease stipulations and NTL (see attached parcel worksheets).

4. Are the direct, indirect, and cumulative effects that would result from implementation of the new proposed action similar (both quantitatively and qualitatively) to those analyzed in the existing NEPA document?

BLM MANUAL Supersedes Rel. 1-1547 Yes, geothermal leasing is a land use plan level activity. The direct, indirect and cumulative effects of geothermal leasing were specifically analyzed in the WDRMP EIS and covered the geographic areas where these parcels are located. This EIS is recent and has a comprehensive analysis that was developed through extensive public involvement.

## 5. Are the public involvement and interagency review associated with existing NEPA document(s) adequate for the current proposed action?

The 2008 Programmatic EIS was made available for a 90-day public comment period and 13 public meetings were held in the 12-western states prior to issuing the Record of Decision.

There was extensive public involvement in the development of the WDRMP 2015. For public involvement information refer to WDRMP Executive Summary Section 1.9 *Public Involvement, Consultation and Coordination*.

In evaluating these four parcels, the HRFO consulted with the Pyramid Lake Paiute Tribe and coordinated with the Nevada Department of Wildlife.

HRFO made a good faith effort to consult with the Pyramid Lake Paiute Tribe and incorporate their concerns into our recommendations. The future location of a proposed Traditional Cultural Property (TCP) in the vicinity of Black Warrior Peak was indicated to potentially overlap with portions of Parcels NV-16-10-004, NV-16-10-005, and NV-16-10-006. In accordance with the 2015 Winnemucca District Resource Management Plan, Fluid Mineral Lease Sale Stipulations, HRFO will not permit surface occupancies in areas intersecting the proposed TCP. Native American Consultation continues and future concerns may arise. Should future concerns become evident prior to the time of sale, HRFO will promptly notify the NSO.

HRFO was able to address suggestions from NDOW by recommending timing limitations, no surface occupancy, and controlled surface use that is subject to exception, modification, or waiver by the BLM authorized officer (see attached parcel worksheets). If a geothermal lease is sold in any NDOW area of concern, the HRFO may, if requested, evaluate site specific activities and issue special stipulations as part of any subsequent Offer to Lease for Geothermal Resources.

## E. Persons/Agencies/BLM Staff Consulted

See previous Section D, Part 5 for agencies consulted. For BLM staff consulted, review signatures, and conclusions, see next page. For stipulations and NTL see attached Parcel Worksheets.

BLM MANUAL Supersedes Rel. 1-1547

## DOI-BLM-NV-W010-2016-0014-DNA

Name /Title	BLM Resource Specialist	\Signature/Date
Steve Sappington	Project Lead; Humboldt River Field Office	7-26-2016
Josef Porter	T & E Species; Special Status Species, General Wildlife Habitat	ATT 7/27/16
Tanner Whetstone	Cultural Resources; Native American Consultation; Historic Trails; Paleontology	1/2/2016
Debbie Dunham	Lands; Realty	Lellie Duntion
Peggy McGukian	Recreation	Corx 11 /1-26-16
Robert Gibson	Riparian; Water	12 7/27/16 For Bol Gib=
Robert Burton	Soils	2 portu
Samantha Gooch	Wild Horse and Burro	27/27/16 for Squarth

N

Conclusion	(If you foun	d that or	ne or more	e of these	criteria	is not met.	vou will not
be able to chec	k this box.)						

Based on the review documented above, I conclude that this proposal conforms to the applicable land/use plan and that the NEPA documentation fully covers the proposed action and constitutes BLM' compliance with the requirements of the NEPA.

Signature of Project Lead

Note: The signed Conclusion on this Worksheet is part of an interim step in the BLM's internal decision process and does not constitute an appealable decision. However, the lease, permit, or other authorization based on this DNA is subject to protest or appeal under 43 CFR Part 4 and the program-specific regulations.

Cultural, NAC, Historic Trails Reviewer: Tanner Whetstone

Date: June 29, 2016

Source Document	Type	Description	Comments
Record of Decision and Resource Management Plan for the Winnemucca District Planning Area, May 2015	NSO/NTL	NV-WD-CRNA-02 No Surface Occupancy in National Register of Historic Places sites. No surface occupancy (NSO) in areas containing NRHP eligible, listed and unevaluated sites and TCPs. To accomplish this, any quarter-quarter- quarter section (10-acre parcel) within or intersected by the site would be subject to NSO. For development and production phases, surface occupancy may be limited to a specific distance or precluded at hot springs, pending conclusion of the National Historic Preservation Act (NHPA) requirements and Native American consultation process. Additional lands outside the designated boundaries of sites may be added to the NSO restriction to the extent necessary to protect values where the setting and integrity is critical to their designation or eligibility.	NSO: A sacred site and traditional cultural property has been identified within T24N R24E Sec. 35 and 36. The no surface occupancy stipulation applies to the following lands in this parcel:  T.0240N, R.0240E, 21 MDM, NV Sec. 036 NW  NTL: No fluid or solid mineral surface occupancy will be allowed within an identified TCP listed, or considered eligible for the NRHP (RMP Action TC 2.2.2). Notice to lessee applies to entire parcel.  NTL: Based on Native American consultation, modifications to no surface occupancy near TCPs or TCP settings may produce recommendations for larger or smaller areas subject to no surface occupancy (RMP Action MR 4.1.3.1). Notice to lessee applies to entire parcel.  NTL: For development and production phases, surface occupancy may be limited to a specific distance or precluded at hot springs, pending conclusion of the Native American consultation process. Notice to lessee applies to entire parcel.

Source	Type	Description	Comments
Document			
		NV-WD-CRNA-02 (CONTINUED)	NTL: The Winnemucca District Resource
			Management Plan allows for the development of
			stipulations, use restrictions, mitigation measures
			and other management actions to protect traditional
			use areas and practices (RMP Action TC 2.4).
			Notice to lessee applies to entire parcel.
			NTL: Most of the parcel has not been inventoried
			for cultural resources. Potential NRHP eligible sites
			may exist in the parcel and would be subject to this
			stipulation. Notice to lessee applies to entire parcel.
Record of	NTL	NV-WD-CRNA-01	Notice to lessee applies to entire parcel.
Decision		<b>Protection of Cultural Sites Resources</b>	
and		and Consultation with Native	
Resource		American Tribes and the State	
Management		Historic Preservation Office	
Plan for the		The authorized officer of the BLM will	
Winnemucca		consult with the appropriate Native	
District		American Tribes and State Historic	
Planning		Preservation Officers regarding cultural	
Area, May		resources per Section 106 of the	
2015		National Historical Preservation Act and	
		its implementation through the protocol	
		between the BLM Nevada State	
		Director and the Nevada State Historic	
		Preservation Office. The presence of	
		National Register eligible, listed, and	
		NV-WD-CRNA-01 (CONTINUED)	

Source Document	Type	Description	Comments
		unevaluated sites will be determined on the basis of a literature review of recorded sites and properties in the proposed lease area. A protective buffer around a site within the lease area, if appropriate, may be applied. Additional cultural or ethnographic research, consultation and/or inventories may be required to identify resources, determine effects, mitigate adverse effects and complete the Section 106 process.	

Realty & Lands

Reviewer: Debbie Dunham

Date: July 5, 2016

Source Document	Туре	Description	Comments
LR 2000 (Geo Report with Customer)	NTL	This parcel contains linear Right(s)-of-Way. Contact ROW holder prior to any geothermal activities. No drilling, including exploration or development activities, within linear rights-of-way. Maintain a safe distance from electric conductors as recommended by the National Electric Safety Code.	Nev-001018 LA Dept of Water and Power – Transmission Line N-89488 Ormat Nevada- Road N-65524 – WAPA – Transmission Line (Irrigation Project)

Paleontology

Reviewer: Tanner Whetstone

Date: June 29, 2016

Source	Type	Description	Comments
Document			
Record of	NTL	NV-WD-PALEO-03	Notice to lessee applies to the following lands:
Decision		<b>Protection of Potential Fossil Yield</b>	
and		Classification (PFYC) 4 and 5:	T.0240N, R.0240E, 21 MDM, NV
Resource		High/Very High Potential	Sec. 035 SWSE
Management		This area has high and very high	
Plan for the		potential for paleontological resources.	T.0230N, R.0240E, 21 MDM, NV
Winnemucca		This land is underlain by geologic units	Sec. 006 NW, NWNE
District		that have been documented to contain a	,
Planning		high occurrence of fossils, which may	
Area, May		consist of scientifically significant	
2015		vertebrate fossils. A field survey by a	
		qualified paleontologist, and at the	
		lessee's expense, will be required prior	
		to surface disturbing activities. If	
		significant fossils of scientific	
		importance are discovered they will	
		require avoidance or data recovery prior	
		to their disturbance. On site monitoring	
		may be necessary during construction	
		activities.	
Decord of	NTL		Notice to lesses applies to the following lands:
Record of	NIL	NV-WD-PALEO-02	Notice to lessee applies to the following lands:
Decision		Protection of Potential Fossil Yield	T 0220N, D 0240E 21 MDM, NV
and		Classification (PFYC) 3: Moderate	T.0230N, R.0240E, 21 MDM, NV
Resource		<b>Potential</b> This area has moderate	Sec. 002 SW, SWNW, SENW;

Source Document	Type	Description	Comments
Document			
Management		potential for vertebrate paleontological	Sec. 010 ALL;
Plan for the		resources. Inventory and/or on-site	Sec. 012 NE, SE, SWSW, SESW
Winnemucca		monitoring during disturbance or spot	
District		checking may be required. If fossils are	T.0230N, R.0250E, 21 MDM, NV
Planning		discovered, avoidance or data recovery	Sec. 006 Lots 9-11, NESW, SESW
Area, May		will be required prior to their	
2015		disturbance if they are deemed to be of	
		scientific importance.	

Riparian

Reviewer: Robert Gibson Date: July 11, 2016

NOTE When applying these stipulations we need to identify the habitat(s) being protected, and the specific lands within the parcel to which the stipulation is relevant, to the nearest quarter-quarterquarter section (10 acres) Comments Source **Type Description Document** WDRMP CSU NV-WD-RIPAR-01 No riparian or wetland vegetation on this lease 2015 based on inspection of aerial photographs. Controlled surface use will be applied within 500 feet of riparian or wetland vegetation to protect the values and functions of these areas. Specific measures required will be based on the

NOTE		When applying these stipulations we need to identify the habitat(s) being protected, and the specific lands within the parcel to which the stipulation is relevant, to the nearest quarter-quarter-quarter section (10 acres)	
Source Document	Type	Description	Comments
		nature, extent, and value of the area potentially affected.	

Water

Reviewer: Robert Gibson Date: July 11, 2016

Source Document	Туре	Description	Comments
WDRMP	NSO	NV-WD-WATER-04	No recognized well head protection zones located on
2015			the lease.
		Protection of Municipal Well Head	
		<b>Protection Zones.</b> Some, or all, of this	
		lease parcel is within a recognized	
		municipal well head protection zone. No	
		surface occupancy within recognized	
		well head protection zones or within	
		1,000 feet of a municipal well head.	

Wild Horse & Burro

Reviewer: Samantha Gooch

Date: July 5, 2016

NO	TE		
Source Document	Type	Description	Comments
WDRMP 2015	NTL	NV-WD-WH&B-01 (WD RMP, Actions D- 4.1) Wild horse or burro populations are known to use some or all of the proposed lease area. If proposed fluid mineral activities are to occur in horse management areas (HMA) it may be necessary to avoid or develop mitigation measures to reduce adverse impacts to horses and/or burros. These measures would be designed in a manner that does not hinder the wild and free-roaming behavior of the horses and burros and may include, but are not limited to, providing alternative water sources for horses of equal quality and quantity. Additional specific measures to protect horses and burros may be developed during review of proposals.	

T&E, SSS, Wildlife Reviewer: Josef Porter Date: June 30, 2016

Source Document	Туре	Description	Comments
WD RMP	Lease	Appendix L, NV-WD-SSS-01,	
2015	Notice	(WD RMP CA-SSS 1.1, CA-1.2)	
		The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. All plants and any member of the animal kingdom, including without limitation any mammal, fish, bird, amphibian, reptile, mollusk, crustacean, arthropod, or other invertebrates, (BLM Manual Rel. 6840, IM 2009-039 [), designated as endangered, threatened, or other special status will be considered in each project proposal. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed, threatened, endangered, or other special status species or result in the destruction or adverse modifications of a designated or proposed critical habitat. No surface disturbance would be	
		authorized before a special status species	
		inventory of the project area is completed by a qualified biologist or botanist. In the event a	

Source Document	Type	Description	Comments
		special status species inventory cannot be conducted, a determination will be made by a BLM biologist or botanist as to the likelihood of suitable habitat for the special status species in the project area and if such habitat is likely, it will be assumed the special status species is present as well. BLM will not approve any ground disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act, 16 U.S.C. 1531, as amended, including completion of any required procedure for conference or	
WD RMP	CSU	consultation.  Appendix L, NV-WDO-SSS-02	
2015		(WD RMP Action D-SSS 1.1)	
		Controlled surface use of designated or proposed critical habitat for listed species under the Endangered Species Act of 1973 (as amended) would be applied if fluid mineral activities would be likely to adversely modify the habitat for the short term. Controlled surface use will be applied within the designated habitat to protect the values and functions of these areas. Specific measures required will be based on the nature, extent, and value of the area potentially affected.	
WD RMP	NSO	App. L, NV-WD-SSS-03	
2015		(WD RMP, Action D-SSS 1.1)	
		No surface occupancy of designated or proposed critical habitat for listed species under the Endangered Species Act of 1973 (as amended)	

Source Document	Туре	Description	Comments
		would be applied if fluid mineral activities would be likely to adversely modify the habitat for the long term. For listed or proposed species without designated habitat, no surface occupancy would be implemented to the extent necessary to avoid jeopardy.	
WD RMP 2015	CSU	App. L, NV-WDO-SSS-05  For BLM-designated sensitive species (e.g. sage-grouse and others), a lease stipulation for controlled surface use, would be applied to defined avoidance areas where fluid mineral activities would be likely to adversely impact the species or modify the habitat and other existing measures are inadequate to meet agency management objectives. Controlled surface use will be applied within the designated habitat to protect the values and functions of these areas. Specific measures required will be based on the nature, extent, and value of the area potentially affected.	Based on habitat characteristics, the lessee may be required to conduct surveys for sensitive species that may potentially utilize the area.  Western Snowy Plover Sensitive plant surveys will be required.
WD RMP 2015	TL	App. L, NV-WDO-SSS-06 (WD RMP, Action CA-SSS 1.7)  Bald or Golden eagles or other raptors or their habitat may be present in the lease area or within the vicinity of the lease area. These species will be managed in accordance with FLPMA, the Bald and Golden Eagle Protection Act (BGEPA) and the Migratory Bird Treaty Action (MBTA).	

General Wildlife/ GRSG	Prelude to following stipulations		
Source Document	Type	Description	Comments
WD RMP	Lease	App. L, NV-WD-WILD-04	
2015	Notice	(WD RMP Action FW 4.1)  Ground disturbing activities during the migratory bird-nesting season (approximately March 1 through August 31 (as dependent on species) shall not be conducted in order to avoid potential violation of the Migratory Bird Act of 1018. Should ground disturbing	
		Act of 1918. Should ground-disturbing activities be necessary during this period of time, appropriate inventories for migratory birds shall be conducted prior to site development, as described below. This survey would identify either breeding adult birds or nest sites within the areas to be disturbed. If active nests are present, the proponent will coordinate with the BLM to develop appropriate protection measures for these sites, which may include avoidance, construction constraints, and/or establish buffers.	
		The general definition of the migratory bird nesting season may be modified with consideration to the bird species that may potentially (based on habitat analysis) utilize the area. Surveys will be performed no more than ten (10) and no less than one (1) day prior to proposed disturbance activities. The applicant will notify the BLM biologist no less than five (5) work days prior to a survey being	

General Wildlife/ GRSG	Prelude to following stipulations		
Source Document	Type	Description	Comments
		conducted. The surveys will be performed at the applicant's expense by a biologist acceptable to the BLM. Survey methodology will follow scientifically acceptable protocols and approval by the BLM biologist. BLM personnel have the option of accompanying the applicant's surveyor. Surveys will be conducted at an appropriate time (seasonally and hourly) with regard to species specificity. Protective measures will be implemented during all phases of reproductive behavior (i.e.	
WD RMP 2015	NSO	courtship, nest building, nesting & fledging).  NV-WDO-ARMPA (App. B)  NVCA GRSG ARMPA	
		No Surface Occupancy for sage grouse leks. No surface occupancy within 5 km (3.1 miles) of known leks at all times.	
WD RMP 2015	TL	NV- WDO-MD SSS-02(E)  Timing limitations on known or potential sage grouse habitat. Prior to entry on any lease areas which include known or potential habitat, the lessee (operator) shall contact the appropriate BLM Field Office to discuss any proposed activities. Seasonal restrictions will be applied during the period specified below to manage discretionary surface-disturbing activities and uses on public lands to prevent disturbance to GRSG during seasonal life-cycle	Portions of the parcel (T24N R24E Sec36) are located within OHMA, but are not within any known seasonal habitat (i.e. wintering, nesting, summer) or PMU. In OHMAs, authorized or permitted activities are implemented adhering to required design features (RDFs)

General Wildlife/ GRSG	Prelude to following stipulations		
Source Document	Type	Description	Comments
		periods:  1. In breeding habitat within 4 miles of active/pending leks from March 1-June 30  a. Lek-March 1-May 15  b. Lek hourly restrictions 6 pm to 9 am  c. Nesting-April 1-June 30  2. Brood-rearing habitat from May 15 to September 15  a. Early-May 15-June 15  b. Late-June 15-September 15  3. Winter habitat from November 1-February 28	
WD RMP 2015	NSO	NV-WDO-MD-SSS-Action 5.2.1 (RMP Objective SSS 5)  Manage the following PMUs as priority habitat management areas (PHMA) to achieve desired sage-grouse and other sensitive species populations and protect habitat conditions as no surface disturbance or no surface occupancy applicable to the following uses; saleable minerals (Government use subject to the criteria listed below), fluid minerals, solid mineral leasing (energy and non-energy) and rights of way.	

General Wildlife/ GRSG	Prelude to following stipulations		
Source Document	Type	Description	Comments
WD RMP	TL	<ul> <li>North Massacre (adjacent to Black Rock PMU)</li> <li>Black Rock</li> <li>Pine Forest</li> <li>Lone Willow</li> <li>Santa Rosa</li> <li>NV- WDO-MD SSS-02(E)-2</li> <li>CSU (2002)</li> </ul>	
2015		No exploration during nesting/brood rearing period (April 1-September 15) in identified nesting habitat.	
WD RMP 2015	TL	NV-WDO-MD SSS-02(E)-3  No exploration during winter (November 1-February 28) in identified winter habitats.	

	<u>Wildlife</u>			
Big Horn Sh	Big Horn Sheep & Big Game			
Source				
Document				
WD RMP	TL/NSO	App. L, NV-WD-SSS-1.2	Potential Bighorn Sheep range.	
2015		(WD RMP, Objective D-FW-1 and		
		Action FW 1.2)	Upon site specific analysis, controlled surface use, timing	

	<u>Wildlife</u>			
Big Horn Sh	heep & Big Ga	me		
Source Document	Туре	Description	Comments	
		Where standard lease terms and permit- level decisions are deemed insufficient to protect sensitive resources, but where an NSO is deemed overly restrictive, the BLM would apply seasonal or time limited stipulations to leases as appropriate by wildlife species to protect habitat, provide continuity of migration corridors, and protect seasonal use areas.  Bighorn Sheep: Objective: Protect Bighorn Sheep from disturbance during lambing, NSO within a <sup>1</sup> / <sub>4</sub> mile radius of designated lambing habitat	limitations, or mitigation measures may be applied to address areas of crucial deer, antelope, and big horn sheep habitat.	
WD RMP 2015	TL	Appendix L, NV-WDO-WILD-03, Objective D-FW-1, WD-FW 1.2  This stipulation will be applied to protect the continuity of migration corridors and important habitat, as recognized and designated by BLM and NDOW. These timing limitations will be applied within the designated habitat to protect the values and functions of these areas. Specific locations and the times applicable will be based on the nature, extent, and value of the area potentially affected.		

Recreation

Reviewer: Peggy McGukian Date: July 25, 2016

Source Document	Type	Description	Comments
WDRMP 2015	NSO	NV-WDO-REC-01  No surface occupancy on developed	There are no developed recreational facilities on the parcel.
		1 2	

Soils

Reviewer: Rob Burton Date: July 6, 2016

NOTE		When applying these stipulations we need to identify the habitat(s) being protected, and the specific lands within the parcel to which the stipulation is relevant, to the nearest quarter-quarter-quarter section (10 acres)	
Source Document	Туре	Description	Comments
WDRMP 2015 EIS, Appendix L:	NSO	No Surface Occupancy  No surface occupancy will be applied to slopes greater than 50% (as mapped by the USGS 1:24,000 scale topographic maps or as determined by a BLM evaluations of the area).  Exception  The BLM authorized officer may grant an exception if a staff review determines that the proposed action is of a scale (pipeline, vs. road, vs. well pad) or sited in a location or a site specific evaluation determines that the slope would not result in mass slope failure or accelerated erosion and the operator would be able to me BLM's reclamation standards.  Modification	

NOTE		When applying these stipulations we need to identify the habitat(s) being protected, and the specific lands within the parcel to which the stipulation is relevant, to the nearest quarter-quarter-quarter section (10 acres)	
Source Document	Туре	Description	Comments
		The authorized officer may modify the area subject to the stipulation based upon a BLM evaluation of the area. The stipulation and performance standards identified above may also be modified based on negative or positive monitoring results from similar proposed actions on similar sites or increased national or state performance standards. Waiver  The restriction may be waived if it is determined that the described lands do no do not include lands with slopes greater than 50%. This determination shall be based upon USGS mapping and a BLM evaluation of the area.	
WDRMP 2015 EIS, Appendix L:	CSU	Stipulation Controlled Surface Use (CSU)  Controlled Surface Use will be applied to lands with a severe soil wind or water erosion hazard rating (as designed by	*Areas identified as having high potential for wind erosion can be evaluated by the BLM on a case-by-case basis for establishing possible mitigation measures.

NOTE		When applying these stipulations we need to identify the habitat(s) being protected, and the specific lands within the parcel to which the stipulation is relevant, to the nearest quarter-quarter-quarter section (10 acres)	
Source Document	Type	Description	Comments
		NRCS soil survey data when available). Prior to surface disturbance on soils with a severe erosion hazard rating, a site-specific construction, stabilization, and reclamation plan (Plan) must be submitted to the BLM by the applicant as a component of the Geothermal Drilling/Application for Permit to Drill – Plan of Operations. The operator may not initiate surface disturbing activities unless the BLM Authorized Officer has approved the Plan or approved it with conditions. The plan must demonstrate to the Authorized Officer's satisfaction how the operator will meet the following performance standards:  • Soil stability is maintained preventing slope failure and wind or water erosion.  • The site will be stable with no evidence of accelerated erosion features.  • The rate of soil erosion will be controlled to maintain or improve soil quality and sustainability. The disturbed soils shall	

NOTE		When applying these stipulations we need to identify the habitat(s) being protected, and the specific lands within the parcel to which the stipulation is relevant, to the nearest quarter-quarter-quarter section (10 acres)	
Source Document	Туре	Description	Comments
		have characteristics that approximate the reference site with regard to quantitative and qualitative soil erosion indicators described in H-7100-1 Soil Inventory, Monitoring, and Management Handbook.  • Sufficient topsoil is maintained for ensuring successful final reclamation. At locations where interim reclamation will be completed, this will be accomplished by re-spreading the topsoil over the areas of interim reclamation.  • The original landform and site productivity will be partially restored during interim reclamation and fully restored as a result of final reclamation. The authorized officer may modify the size and shape of the restricted area subject to the stipulation based upon a NRCS soil survey or BLM evaluation. The stipulation and performance standards identified above may also be modified based on negative or positive monitoring results from similar proposed actions on similar	

NOTE		When applying these stipulations we need to identify the habitat(s) being protected, and the specific lands within the parcel to which the stipulation is relevant, to the nearest quarter-quarter-quarter section (10 acres)	
Source Document	Туре	Description	Comments
		sites or increased national or state performance standards.  Exception  The BLM authorized officer may grant an exception if a staff review determines that the proposed action is of a scale (pipeline, vs. road, vs. well pad) or sited in a location, or a soil survey determines that the soil properties do not meet the severe erosion hazard criteria so that the proposed action would not result in a failure to meet the performance standards above.  Modification  The authorized officer may modify the size and shape of the restricted area subject to the stipulation based upon a NRCS soil survey or BLM evaluation. The stipulation and performance standards identified above may also be modified based on negative or positive monitoring results from similar proposed actions on similar sites or increased national or state performance standards.	

NOTE		When applying these stipulations we need to identify the habitat(s) being protected, and the specific lands within the parcel to which the stipulation is relevant, to the nearest quarter-quarter-quarter section (10 acres)	
Source Document	Туре	Description	Comments
		Waiver The restriction may be waived if it is determined that the described lands do not include soils with severe erosion hazard. This determination shall be based upon NRCS mapping and BLM evaluation of the area.	

Cultural, NAC, Historic Trails Reviewer: Tanner Whetstone

Source	Type	Description	Comments
Record of Decision and Resource Management Plan for the Winnemucca District Planning Area, May 2015	NSO/NTL	NV-WD-CRNA-02 No Surface Occupancy in National Register of Historic Places sites. No surface occupancy (NSO) in areas containing NRHP eligible, listed and unevaluated sites and TCPs. To accomplish this, any quarter-quarter- quarter section (10-acre parcel) within or intersected by the site would be subject to NSO. For development and production phases, surface occupancy may be limited to a specific distance or precluded at hot springs, pending conclusion of the National Historic Preservation Act (NHPA) requirements and Native American consultation process. Additional lands outside the designated boundaries of sites may be added to the NSO restriction to the extent necessary to protect values where the setting and integrity is critical to their designation or eligibility.	NTL: Most of the parcel has not been inventoried for cultural resources. Potential NRHP eligible sites may exist in the parcel and would be subject to this stipulation. Notice to lessee applies to entire parcel.  NTL: For development and production phases, surface occupancy may be limited to a specific distance or precluded at hot springs, pending conclusion of the Native American consultation process. Notice to lessee applies to entire parcel.  NTL: The Winnemucca District Resource Management Plan allows for the development of stipulations, use restrictions, mitigation measures and other management actions to protect traditional use areas and practices (RMP Action TC 2.4). Notice to lessee applies to entire parcel.

Source	Type	Description	Comments
Document			
Record of	NTL	NV-WD-CRNA-01	Notice to lessee applies to entire parcel.
Decision		<b>Protection of Cultural Sites Resources</b>	
and		and Consultation with Native	
Resource		American Tribes and the State	
Management		<b>Historic Preservation Office</b>	
Plan for the		The authorized officer of the BLM will	
Winnemucca		consult with the appropriate Native	
District		American Tribes and State Historic	
Planning		Preservation Officers regarding cultural	
Area, May		resources per Section 106 of the	
2015		National Historical Preservation Act and	
		its implementation through the protocol	
		between the BLM Nevada State Director	
		and the Nevada State Historic	
		Preservation Office. The presence of	
		National Register eligible, listed, and	
		unevaluated sites will be determined on	
		the basis of a literature review of	
		recorded sites and properties in the	
		proposed lease area. A protective buffer	
		around a site within the lease area, if	
		appropriate, may be applied. Additional	
		cultural or ethnographic research,	
		consultation and/or inventories may be	
		required to identify resources, determine	
		effects, mitigate adverse effects and	
		complete the Section 106 process.	

Source Document	Type	Description	Comments
		Authority/Supporting Documentation:	
		Description of Lands Entire Parcel	

Lands & Realty

Reviewer: Debbie Dunham

Date: July 5, 2016

Source Document	Type	Description	Comments
LR 2000 (Geo Report with Customer)	NTL	Contact ROW holder prior to any	N-65524 – WAPA – Transmission Line (Irrigation Project)

Paleontology

Reviewer: Tanner Whetstone

Source Document	Type	Description	Comments
Record of	NTL	NV-WD-PALEO-02	Notice to lessee applies to the following lands:
Decision		<b>Protection of Potential Fossil Yield</b>	
and		Classification (PFYC) 3: Moderate	T.0230N, R.0240E, 21 MDM, NV
Resource		Potential	Sec. 014 SENW, NENW, NWNW, NE, SW, SE;
Management			Sec. 024 NW, NE, SW, NWSE, SWSE, SESE
Plan for the		This area has moderate potential for	
Winnemucca		vertebrate paleontological resources.	T.0230N, R.0250E, 21 MDM, NV
District		Inventory and/or on-site monitoring	Sec. 018 NW, NWSW, SWSW
Planning		during disturbance or spot checking may	
Area, May		be required. If fossils are discovered,	
2015		avoidance or data recovery will be	
		required prior to their disturbance if they	
		are deemed to be of scientific	
		importance.	

Riparian

Reviewer: Robert Gibson Date: July 11, 2016

NOTE		When applying these stipulations we need to identify the habitat(s) being protected, and the specific lands within the parcel to which the stipulation is relevant, to the nearest quarter-quarter-quarter section (10 acres)	
Source Document	Туре	Description	Comments
WDRMP 2015	CSU	NV-WD-RIPAR-01  Controlled surface use will be applied within 500 feet of riparian or wetland vegetation to protect the values and functions of these areas. Specific measures required will be based on the nature, extent, and value of the area potentially affected.	No riparian or wetland vegetation on this lease based on inspection of aerial photographs.

Water

Reviewer: Robert Gibson Date: July 11, 2016

Source Document	Type	Description	Comments
WDRMP	NSO	NV-WD-WATER-04	No recognized well head protection zones located on
2015			the lease.
		Protection of Municipal Well Head	
		<b>Protection Zones.</b> Some, or all, of this	
		lease parcel is within a recognized	
		municipal well head protection zone. No	
		surface occupancy within recognized	
		well head protection zones or within	
		1,000 feet of a municipal well head.	

Wild Horse & Burro

Reviewer: Samantha Gooch

Date: July 5, 2016

NOTE			
Source Document	Туре	Description	Comments
WDRMP 2015	NTL	NV-WD-WH&B-01 (WD RMP, Actions D- 4.1) Wild horse or burro populations are known to use some or all of the proposed lease area. If proposed fluid mineral activities are to occur in horse management areas (HMA) it may be	

NOTE			
Source Document	Туре	Description	Comments
		necessary to avoid or develop mitigation measures to reduce adverse impacts to horses and/or burros. These measures would be designed in a manner that does not hinder the wild and free-roaming behavior of the horses and burros and may include, but are not limited to, providing alternative water sources for horses of equal quality and quantity. Additional specific measures to protect horses and burros may be developed during review of proposals.	

T&E, SSS, Wildlife Reviewer: Josef Porter Date: June 30, 2016

Source	Type	Description	Comments
Document			
WD RMP	Lease	Appendix L, NV-WD-SSS-01,	
2015	Notice	(WD RMP CA-SSS 1.1, CA-1.2)	
		The lease area may now or hereafter contain	
		plants, animals, or their habitats determined to	
		be threatened, endangered, or other special status	
		species. All plants and any member of the	
		animal kingdom, including without limitation	

Source	Type	Description	Comments
Document			
		any mammal, fish, bird, amphibian, reptile,	
		mollusk, crustacean, arthropod, or other	
		invertebrates, (BLM Manual Rel. 6840, IM	
		2009-039 [), designated as endangered,	
		threatened, or other special status will be	
		considered in each project proposal. BLM may	
		recommend modifications to exploration and	
		development proposals to further its	
		conservation and management objective to avoid	
		BLM-approved activity that will contribute to a	
		need to list a species or their habitat. BLM may	
		require modifications to or disapprove proposed	
		activity that is likely to result in jeopardy to the	
		continued existence of a proposed or listed,	
		threatened, endangered, or other special status	
		species or result in the destruction or adverse	
		modifications of a designated or proposed	
		critical habitat. No surface disturbance would be	
		authorized before a special status species	
		inventory of the project area is completed by a	
		qualified biologist or botanist. In the event a	
		special status species inventory cannot be	
		conducted, a determination will be made by a	
		BLM biologist or botanist as to the likelihood of	
		suitable habitat for the special status species in	
		the project area and if such habitat is likely, it	
		will be assumed the special status species	
		is present as well. BLM will not approve any	
		ground disturbing activity that may affect any	
		such species or critical habitat until it completes	
		its obligations under applicable requirements of	
		the Endangered Species Act, 16 U.S.C.	
		1531, as amended, including completion of any	
		required procedure for conference or	

Source Document	Type	Description	Comments
		consultation.	
WD RMP	CSU	Appendix L, NV-WDO-SSS-02	
2015		(WD RMP Action D-SSS 1.1)	
		Controlled surface use of designated or proposed	
		critical habitat for listed species under the	
		Endangered Species Act of 1973 (as amended)	
		would be applied if fluid mineral activities	
		would be likely to adversely modify the habitat for the short term. Controlled surface use will be	
		applied within the designated habitat to protect	
		the values and functions of these areas. Specific	
		measures required will be based on the nature,	
		extent, and value of the area potentially affected.	
WD RMP	NSO	App. L, NV-WD-SSS-03	
2015		(WD RMP, Action D-SSS 1.1)	
		No surface occupancy of designated or proposed	
		critical habitat for listed species under the	
		Endangered Species Act of 1973 (as amended)	
		would be applied if fluid mineral activities would be likely to adversely modify the habitat	
		for the long term. For listed or proposed species	
		without designated habitat, no surface	
		occupancy would be implemented to the extent	
		necessary to avoid jeopardy.	
WD RMP	CSU	App. L, NV-WDO-SSS-05	Based on habitat characteristics, the lessee may be
2015			required to conduct surveys for sensitive species that may
		For BLM-designated sensitive species (e.g.	potentially utilize the area.
		sage-grouse and others), a lease stipulation for	
		controlled surface use, would be applied to defined avoidance areas where fluid mineral	Western Snowy Plover
		activities would be likely to adversely impact the	Sensitive plant surveys will be required.

Source Document	Type	Description	Comments
		species or modify the habitat and other existing measures are inadequate to meet agency management objectives. Controlled surface use will be applied within the designated habitat to protect the values and functions of these areas. Specific measures required will be based on the nature, extent, and value of the area potentially affected.	
WD RMP 2015	TL	App. L, NV-WDO-SSS-06 (WD RMP, Action CA-SSS 1.7)  Bald or Golden eagles or other raptors or their habitat may be present in the lease area or within the vicinity of the lease area. These species will be managed in accordance with FLPMA, the Bald and Golden Eagle Protection Act (BGEPA) and the Migratory Bird Treaty Action (MBTA).	

General Wildlife/ GRSG	Prelude to following stipulations		
Source Document	Туре	Description	Comments
WD RMP	Lease	App. L, NV-WD-WILD-04	
2015	Notice	(WD RMP Action FW 4.1)	
		Ground disturbing activities during the	
		migratory bird-nesting season (approximately	
		March 1 through August 31 (as dependent on	
		species) shall not be conducted in order to avoid potential violation of the Migratory Bird	

General Wildlife/ GRSG	Prelude to following stipulations		
Source Document	Туре	Description	Comments
		Act of 1918. Should ground-disturbing activities be necessary during this period of time, appropriate inventories for migratory birds shall be conducted prior to site development, as described below. This survey would identify either breeding adult birds or nest sites within the areas to be disturbed. If active nests are present, the proponent will coordinate with the BLM to develop appropriate protection measures for these sites, which may include avoidance, construction constraints, and/or establish buffers.  The general definition of the migratory bird nesting season may be modified with consideration to the bird species that may potentially (based on habitat analysis) utilize the area. Surveys will be performed no more than ten (10) and no less than one (1) day prior to proposed disturbance activities. The applicant will notify the BLM biologist no less than five (5) work days prior to a survey being conducted. The surveys will be performed at the applicant's expense by a biologist acceptable to the BLM. Survey methodology will follow scientifically acceptable protocols and approval by the BLM biologist. BLM personnel have the option of accompanying the applicant's surveyor. Surveys will be conducted at an appropriate time (seasonally	

General Wildlife/ GRSG	Prelude to following stipulations		
Source Document	Туре	Description	Comments
		and hourly) with regard to species specificity.	
		Protective measures will be implemented during all phases of reproductive behavior (i.e.	
		courtship, nest building, nesting & fledging).	
WD RMP	NSO	NV-WDO-ARMPA (App. B)	
2015		NVCA GRSG ARMPA	
		No Surface Occupancy for sage grouse	
		leks. No surface occupancy within 5 km	
TUD DI (D	TDY.	(3.1 miles) of known leks at all times.	
WD RMP 2015	TL	NV- WDO-MD SSS-02(E)	
		Timing limitations on known or potential	
		sage grouse habitat. Prior to entry on any	
		lease areas which include known or potential habitat, the lessee (operator) shall contact the	
		appropriate BLM Field Office to discuss any	
		proposed activities. Seasonal restrictions will	
		be applied during the period specified below to	
		manage discretionary surface-disturbing activities and uses on public lands to prevent	
		disturbance to GRSG during seasonal life-cycle	
		periods:	
		1. In breeding habitat within 4 miles of	
		active/pending leks from March 1- June 30	
		a. Lek-March 1-May 15	
		b. Lek hourly restrictions 6 pm to 9	
		am	
		c. Nesting-April 1-June 30	

General Wildlife/ GRSG	Prelude to following stipulations		
Source Document	Type	Description	Comments
		<ul> <li>2. Brood-rearing habitat from May 15 to September 15 <ul> <li>a. Early-May 15-June 15</li> <li>b. Late-June 15-September 15</li> </ul> </li> <li>3. Winter habitat from November 1-February 28</li> </ul>	
WD RMP 2015	NSO	NV-WDO-MD-SSS-Action 5.2.1 (RMP Objective SSS 5)  Manage the following PMUs as priority habitat management areas (PHMA) to achieve desired sage-grouse and other sensitive species populations and protect habitat conditions as no surface disturbance or no surface occupancy applicable to the following uses; saleable minerals (Government use subject to the criteria listed below), fluid minerals, solid mineral leasing (energy and non-energy) and rights of way.  North Massacre (adjacent to Black Rock PMU) Black Rock Pine Forest Lone Willow Santa Rosa	

General Wildlife/ GRSG	Prelude to following stipulations		
Source Document	Type	Description	Comments
WD RMP 2015	TL	NV- WDO-MD SSS-02(E)-2 CSU (2002)  No exploration during nesting/brood rearing period (April 1-September 15) in identified nesting habitat.	
WD RMP 2015	TL	NV-WDO-MD SSS-02(E)-3  No exploration during winter (November 1-February 28) in identified winter habitats.	

	<u>Wildlife</u>				
Big Horn Sh	neep & Big Gan	ne			
Source Document	Type	Description	Comments		
WD RMP 2015	TL/NSO	App. L, NV-WD-SSS-1.2 (WD RMP, Objective D-FW-1 and Action FW 1.2)	Potential Bighorn Sheep range.  Upon site specific analysis, controlled surface use, timing limitations, or mitigation measures may be applied to		
		Where standard lease terms and permit- level decisions are deemed insufficient to protect sensitive resources, but where an	address areas of crucial deer, antelope, and big horn sheep habitat.		

	<u>Wildlife</u>			
Big Horn Sh	neep & Big Gar	ne		
Source Document	Туре	Description	Comments	
		NSO is deemed overly restrictive, the BLM would apply seasonal or time limited stipulations to leases as appropriate by wildlife species to protect habitat, provide continuity of migration corridors, and protect seasonal use areas.		
		Bighorn Sheep: Objective: Protect Bighorn Sheep from disturbance during lambing, NSO within a 1/4 mile radius of designated lambing habitat		
WD RMP 2015	TL	Appendix L, NV-WDO-WILD-03, Objective D-FW-1, WD-FW 1.2  This stipulation will be applied to protect the continuity of migration corridors and important habitat, as recognized and designated by BLM and NDOW. These timing limitations will be applied within the designated habitat to protect the values and functions of these areas. Specific locations and the times applicable will be based on the nature, extent, and value of the area potentially affected.		

Recreation

Reviewer: Peggy McGukian Date: July 25, 2016

Source Document	Type	Description	Comments
WDRMP 2015	NSO	NV-WDO-REC-01  No surface occupancy on developed	There are no developed recreational facilities on the parcel.
		recreational facilities, special-use permit recreation sites (e.g., ski resorts and camps), and areas with significant recreational use with which geothermal development is deemed incompatible, excluding direct use applications.	the parcel. However there has not been a special

Soils

Reviewer: Rob Burton Date: July 6, 2016

NOTE		When applying these stipulations we need to identify the habitat(s) being protected, and the specific lands within the parcel to which the stipulation is relevant, to the nearest quarter-quarter-quarter section (10 acres)	
Source Document	Туре	Description	Comments
WDRMP 2015 EIS, Appendix L:	NSO	No Surface Occupancy  No surface occupancy will be applied to slopes greater than 50% (as mapped by the USGS 1:24,000 scale topographic maps or as determined by a BLM evaluations of the area).  Exception  The BLM authorized officer may grant an exception if a staff review determines that the proposed action is of a scale (pipeline, vs. road, vs. well pad) or sited in a location or a site specific evaluation determines that the slope would not result in mass slope failure or accelerated erosion and the operator would be able to me BLM's reclamation standards.  Modification	

NOTE		When applying these stipulations we need to identify the habitat(s) being protected, and the specific lands within the parcel to which the stipulation is relevant, to the nearest quarter-quarter-quarter section (10 acres)	
Source Document	Туре	Description	Comments
		The authorized officer may modify the area subject to the stipulation based upon a BLM evaluation of the area. The stipulation and performance standards identified above may also be modified based on negative or positive monitoring results from similar proposed actions on similar sites or increased national or state performance standards. Waiver  The restriction may be waived if it is determined that the described lands do no do not include lands with slopes greater than 50%. This determination shall be based upon USGS mapping and a BLM evaluation of the area.	
WDRMP 2015 EIS, Appendix L:	CSU	Stipulation Controlled Surface Use (CSU)  Controlled Surface Use will be applied to lands with a severe soil wind or water erosion hazard rating (as designed by	*Areas identified as having high potential for wind erosion can be evaluated by the BLM on a case-by-case basis for establishing possible mitigation measures.

NOTE		When applying these stipulations we need to identify the habitat(s) being protected, and the specific lands within the parcel to which the stipulation is relevant, to the nearest quarter-quarter-quarter section (10 acres)	
Source Document	Type	Description	Comments
		NRCS soil survey data when available). Prior to surface disturbance on soils with a severe erosion hazard rating, a site-specific construction, stabilization, and reclamation plan (Plan) must be submitted to the BLM by the applicant as a component of the Geothermal Drilling/Application for Permit to Drill – Plan of Operations. The operator may not initiate surface disturbing activities unless the BLM Authorized Officer has approved the Plan or approved it with conditions. The plan must demonstrate to the Authorized Officer's satisfaction how the operator will meet the following performance standards:  • Soil stability is maintained preventing slope failure and wind or water erosion.  • The site will be stable with no evidence of accelerated erosion features.  • The rate of soil erosion will be controlled to maintain or improve soil quality and sustainability. The disturbed soils shall	

NOTE		When applying these stipulations we need to identify the habitat(s) being protected, and the specific lands within the parcel to which the stipulation is relevant, to the nearest quarter-quarter-quarter section (10 acres)	
Source Document	Type	Description	Comments
		have characteristics that approximate the reference site with regard to quantitative and qualitative soil erosion indicators described in H-7100-1 Soil Inventory, Monitoring, and Management Handbook.  • Sufficient topsoil is maintained for ensuring successful final reclamation. At locations where interim reclamation will be completed, this will be accomplished by re-spreading the topsoil over the areas of interim reclamation.  • The original landform and site productivity will be partially restored during interim reclamation and fully restored as a result of final reclamation. The authorized officer may modify the size and shape of the restricted area subject to the stipulation based upon a NRCS soil survey or BLM evaluation. The stipulation and performance standards identified above may also be modified based on negative or positive monitoring results from similar proposed actions on similar	

NOTE		When applying these stipulations we need to identify the habitat(s) being protected, and the specific lands within the parcel to which the stipulation is relevant, to the nearest quarter-quarter-quarter section (10 acres)	
Source Document	Type	Description	Comments
		sites or increased national or state performance standards.  Exception  The BLM authorized officer may grant an exception if a staff review determines that the proposed action is of a scale (pipeline, vs. road, vs. well pad) or sited in a location, or a soil survey determines that the soil properties do not meet the severe erosion hazard criteria so that the proposed action would not result in a failure to meet the performance standards above.  Modification  The authorized officer may modify the size and shape of the restricted area subject to the stipulation based upon a NRCS soil survey or BLM evaluation. The stipulation and performance standards identified above may also be modified based on negative or positive monitoring results from similar proposed actions on similar sites or increased national or state performance standards.	

NOTE		When applying these stipulations we need to identify the habitat(s) being protected, and the specific lands within the parcel to which the stipulation is relevant, to the nearest quarter-quarter-quarter section (10 acres)	
Source Type Document		Description	Comments
		Waiver The restriction may be waived if it is determined that the described lands do not include soils with severe erosion hazard. This determination shall be based upon NRCS mapping and BLM evaluation of the area.	

Cultural, NAC, Historic Trails Reviewer: Tanner Whetstone

Source Document	Type	Description	Comments
Record of Decision and Resource Management Plan for the Winnemucca District Planning Area, May 2015	NTL	NV-WD-CRNA-02 No Surface Occupancy in National Register of Historic Places sites. No surface occupancy (NSO) in areas containing NRHP eligible, listed and unevaluated sites and TCPs. To accomplish this, any quarter-quarter-quarter section (10-acre parcel) within or intersected by the site would be subject to NSO. For development and production phases, surface occupancy may be limited to a specific distance or precluded at hot springs, pending conclusion of the National Historic Preservation Act (NHPA) requirements and Native American consultation process. Additional lands outside the designated boundaries of sites may be added to the NSO restriction to the extent necessary to protect values where the setting and integrity is critical to their designation or eligibility.	NTL: Most of the parcel has not been inventoried for cultural resources. Potential NRHP eligible sites may exist in the parcel and would be subject to this stipulation. Notice to lessee applies to entire parcel.  NTL: For development and production phases, surface occupancy may be limited to a specific distance or precluded at hot springs, pending conclusion of the Native American consultation process. Notice to lessee applies to entire parcel.  NTL: The Winnemucca District Resource Management Plan allows for the development of stipulations, use restrictions, mitigation measures and other management actions to protect traditional use areas and practices (RMP Action TC 2.4). Notice to lessee applies to entire parcel.

Source	Type	Description	Comments
Document	-J P -	<b>.</b>	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Record of	NTL	NV-WD-CRNA-01	Notice to lessee applies to entire parcel.
Decision		<b>Protection of Cultural Sites Resources</b>	
and		and Consultation with Native	
Resource		American Tribes and the State	
Management		<b>Historic Preservation Office</b>	
Plan for the		The authorized officer of the BLM will	
Winnemucca		consult with the appropriate Native	
District		American Tribes and State Historic	
Planning		Preservation Officers regarding cultural	
Area, May		resources per Section 106 of the	
2015		National Historical Preservation Act and	
		its implementation through the protocol	
		between the BLM Nevada State Director	
		and the Nevada State Historic	
		Preservation Office. The presence of	
		National Register eligible, listed, and	
		unevaluated sites will be determined on	
		the basis of a literature review of	
		recorded sites and properties in the	
		proposed lease area. A protective buffer	
		around a site within the lease area, if	
		appropriate, may be applied. Additional	
		cultural or ethnographic research,	
		consultation and/or inventories may be	
		required to identify resources, determine	
		effects, mitigate adverse effects and	
		complete the Section 106 process.	

Lands & Realty

Reviewer: Debbie Dunham

Date: July 5, 2016

Source Document	Туре	Description	Comments
LR 2000 (Geo Report with Customer)	NTL	This parcel contains linear Right(s)-of-Way. Contact ROW holder prior to any geothermal activities. No drilling, including exploration or development activities, within linear rights-of-way. Maintain a safe distance from electric conductors as recommended by the National Electric Safety Code.	

Paleontology

Reviewer: Tanner Whetstone

Source Document	Туре	Description	Comments
Record of	NTL	NV-WD-PALEO-01	Notice to lessee applies to the following lands:
Decision		Protection of Potential Fossil Yield	
and		Classification (PFYC) 1 and 2: Very	T.0240N, R.0240E, 21 MDM, NV
Resource		Low/Low Potential	Sec. 035 SENW
Management			
Plan for the		This area has low potential for vertebrate	T.0240N, R.0250E, 21 MDM, NV
Winnemucca		paleontological resources. This area may	Sec. 032 ALL
District		contain vertebrate paleontological	
Planning		resources. In the event that previously	
Area, May		undiscovered paleontological resources	

Source Document	Type	Description	Comments
2015		are discovered in the performance of any surface disturbing activities, the item(s) or condition(s) will be left intact and immediately brought to the attention of the authorized officer of the BLM. If fossils are discovered, avoidance or data recovery will be required prior to their disturbance if they are deemed to be of scientific importance. Surface restrictions may be applied to surface	
		disturbing activities.	

Riparian

Reviewer: Robert Gibson Date: July 11, 2016

NOTE		When applying these stipulations we need to identify the habitat(s) being protected, and the specific lands within the parcel to which the stipulation is relevant, to the nearest quarter-quarter-quarter section (10 acres)	
Source Document	Type	Description	Comments
WDRMP 2015	CSU	NV-WD-RIPAR-01  Controlled surface use will be applied within 500 feet of riparian or wetland	No riparian or wetland vegetation on this lease based on inspection of aerial photographs.

NOTE		When applying these stipulations we need to identify the habitat(s) being protected, and the specific lands within the parcel to which the stipulation is relevant, to the nearest quarter-quarter-quarter section (10 acres)	
Source	Type	Description	Comments
Document			
Document		vegetation to protect the values and	
Document		vegetation to protect the values and functions of these areas. Specific	
Document		1	
Document		functions of these areas. Specific	

Water

Reviewer: Robert Gibson Date: July 11, 2016

Source Document	Type	Description	Comments
WDRMP	NSO	NV-WD-WATER-04	No recognized well head protection zones located on
2015			the lease.
		Protection of Municipal Well Head	
		<b>Protection Zones.</b> Some, or all, of this	
		lease parcel is within a recognized	
		municipal well head protection zone. No	
		surface occupancy within recognized	
		well head protection zones or within	
		1,000 feet of a municipal well head.	

Wild Horse and Burro Reviewer: Samantha Gooch

Date: July 5, 2016

NO	TE		
Source Document	Туре	Description	Comments
WDRMP 2015	NTL	NV-WD-WH&B-01 (WD RMP, Actions D- 4.1) Wild horse or burro populations are known to use some or all of the proposed lease area. If proposed fluid mineral activities are to occur in horse management areas (HMA) it may be necessary to avoid or develop mitigation measures to reduce adverse impacts to horses and/or burros. These measures would be designed in a manner that does not hinder the wild and free-roaming behavior of the horses and burros and may include, but are not limited to, providing alternative water sources for horses of equal quality and quantity. Additional specific measures to protect horses and burros may be developed during review of proposals.	

T&E, SSS, Wildlife Reviewer: Josef Porter Date: 30 June, 2016

Source Document	Туре	Description	Comments
WD RMP	Lease	Appendix L, NV-WD-SSS-01,	
2015	Notice	(WD RMP CA-SSS 1.1, CA-1.2)	
		The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. All plants and any member of the animal kingdom, including without limitation any mammal, fish, bird, amphibian, reptile, mollusk, crustacean, arthropod, or other invertebrates, (BLM Manual Rel. 6840, IM 2009-039 [), designated as endangered, threatened, or other special status will be considered in each project proposal. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed, threatened, endangered, or other special status species or result in the destruction or adverse modifications of a designated or proposed critical habitat. No surface disturbance would be	
		authorized before a special status species	
		inventory of the project area is completed by a qualified biologist or botanist. In the event a	

Source Document	Туре	Description	Comments
		special status species inventory cannot be conducted, a determination will be made by a BLM biologist or botanist as to the likelihood of suitable habitat for the special status species in the project area and if such habitat is likely, it will be assumed the special status species is present as well. BLM will not approve any ground disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act, 16 U.S.C. 1531, as amended, including completion of any required procedure for conference or	
WD RMP 2015	CSU	consultation.  Appendix L, NV-WDO-SSS-02  (WD RMP Action D-SSS 1.1)  Controlled surface use of designated or proposed critical habitat for listed species under the Endangered Species Act of 1973 (as amended) would be applied if fluid mineral activities would be likely to adversely modify the habitat for the short term. Controlled surface use will be applied within the designated habitat to protect the values and functions of these areas. Specific measures required will be based on the nature, extent, and value of the area potentially affected.	
WD RMP 2015	NSO	App. L, NV-WD-SSS-03 (WD RMP, Action D-SSS 1.1)  No surface occupancy of designated or proposed critical habitat for listed species under the Endangered Species Act of 1973 (as amended)	

Source Document	Туре	Description	Comments
		would be applied if fluid mineral activities would be likely to adversely modify the habitat for the long term. For listed or proposed species without designated habitat, no surface occupancy would be implemented to the extent necessary to avoid jeopardy.	
WD RMP 2015	CSU	App. L, NV-WDO-SSS-05  For BLM-designated sensitive species (e.g. sage-grouse and others), a lease stipulation for controlled surface use, would be applied to defined avoidance areas where fluid mineral activities would be likely to adversely impact the species or modify the habitat and other existing measures are inadequate to meet agency management objectives. Controlled surface use will be applied within the designated habitat to protect the values and functions of these areas. Specific measures required will be based on the nature, extent, and value of the area potentially affected.	Based on habitat characteristics, the lessee may be required to conduct surveys for sensitive species that may potentially utilize the area.  Western Snowy Plover Sensitive plant surveys will be required.
WD RMP 2015	TL	App. L, NV-WDO-SSS-06 (WD RMP, Action CA-SSS 1.7)  Bald or Golden eagles or other raptors or their habitat may be present in the lease area or within the vicinity of the lease area. These species will be managed in accordance with FLPMA, the Bald and Golden Eagle Protection Act (BGEPA) and the Migratory Bird Treaty Action (MBTA).	

General Wildlife/ GRSG	Prelude to following stipulations		
Source Document	Type	Description	Comments
WD RMP	Lease	App. L, NV-WD-WILD-04	
2015	Notice	(WD RMP Action FW 4.1)  Ground disturbing activities during the migratory bird-nesting season (approximately March 1 through August 31 (as dependent on species) shall not be conducted in order to avoid potential violation of the Migratory Bird Act of 1918. Should ground-disturbing	
		activities be necessary during this period of time, appropriate inventories for migratory birds shall be conducted prior to site development, as described below. This survey would identify either breeding adult birds or nest sites within the areas to be disturbed. If active nests are present, the proponent will coordinate with the BLM to develop appropriate protection measures for these sites, which may include avoidance, construction constraints, and/or establish buffers.	
		The general definition of the migratory bird nesting season may be modified with consideration to the bird species that may potentially (based on habitat analysis) utilize the area. Surveys will be performed no more than ten (10) and no less than one (1) day prior to proposed disturbance activities. The applicant will notify the BLM biologist no less than five (5) work days prior to a survey being	

General Wildlife/ GRSG	Prelude to following stipulations		
Source Document	Type	Description	Comments
		conducted. The surveys will be performed at the applicant's expense by a biologist acceptable to the BLM. Survey methodology will follow scientifically acceptable protocols and approval by the BLM biologist. BLM personnel have the option of accompanying the applicant's surveyor. Surveys will be conducted at an appropriate time (seasonally and hourly) with regard to species specificity. Protective measures will be implemented during all phases of reproductive behavior (i.e.	
WD RMP 2015	NSO	courtship, nest building, nesting & fledging).  NV-WDO-ARMPA (App. B)  NVCA GRSG ARMPA  No Surface Occupancy for sage grouse leks. No surface occupancy within 5 km (3.1 miles) of known leks at all times.	
WD RMP 2015	TL	NV- WDO-MD SSS-02(E)  Timing limitations on known or potential sage grouse habitat. Prior to entry on any lease areas which include known or potential habitat, the lessee (operator) shall contact the appropriate BLM Field Office to discuss any proposed activities. Seasonal restrictions will be applied during the period specified below to manage discretionary surface-disturbing activities and uses on public lands to prevent disturbance to GRSG during seasonal life-cycle	Portions of the parcel (T24N R24E Sec35 and T24N R25E Sec32) are located within OHMA, but are not within any known seasonal habitat (i.e. wintering, nesting, summer) or PMU. In OHMAs, authorized or permitted activities are implemented adhering to required design features (RDFs)

General Wildlife/ GRSG	Prelude to following stipulations		
Source Document	Type	Description	Comments
WD RMP 2015	NSO	periods:  1. In breeding habitat within 4 miles of active/pending leks from March 1-June 30  a. Lek-March 1-May 15  b. Lek hourly restrictions 6 pm to 9 am  c. Nesting-April 1-June 30  2. Brood-rearing habitat from May 15 to September 15  a. Early-May 15-June 15  b. Late-June 15-September 15  3. Winter habitat from November 1-February 28  NV-WDO-MD-SSS-Action 5.2.1  (RMP Objective SSS 5)  Manage the following PMUs as priority habitat management areas (PHMA) to achieve desired sage-grouse and other sensitive species populations and protect habitat conditions as no surface disturbance or no surface occupancy applicable to the following uses; saleable minerals (Government use subject to the criteria listed below), fluid minerals, solid mineral leasing (energy and non-energy) and rights of way.	

General Wildlife/ GRSG	Prelude to following stipulations		
Source Document	Type	Description	Comments
WD RMP	TL	<ul> <li>North Massacre (adjacent to Black Rock PMU)</li> <li>Black Rock</li> <li>Pine Forest</li> <li>Lone Willow</li> <li>Santa Rosa</li> <li>NV- WDO-MD SSS-02(E)-2</li> <li>CSU (2002)</li> </ul>	
2015		No exploration during nesting/brood rearing period (April 1-September 15) in identified nesting habitat.	
WD RMP 2015	TL	NV-WDO-MD SSS-02(E)-3  No exploration during winter (November 1-February 28) in identified winter habitats.	

	<u>Wildlife</u>						
Big Horn Sh	Big Horn Sheep & Big Game						
Source Document	Type	Description	Yes/No	Comments			
WD RMP 2015	TL/NSO	App. L, NV-WD-SSS-1.2 (WD RMP, Objective D-FW-1 and	Yes	Potential Bighorn Sheep range.			

	<u>Wildlife</u>						
Big Horn Sh	Big Horn Sheep & Big Game						
Source Document	Type	Description	Yes/No	Comments			
		Action FW 1.2)  Where standard lease terms and permitlevel decisions are deemed insufficient to protect sensitive resources, but where an NSO is deemed overly restrictive, the BLM would apply seasonal or time limited stipulations to leases as appropriate by wildlife species to protect habitat, provide continuity of migration corridors, and protect seasonal use areas.  Bighorn Sheep: Objective: Protect Bighorn Sheep from disturbance during lambing, NSO within a 1/4 mile radius of designated lambing habitat		Upon site specific analysis, controlled surface use, timing limitations, or mitigation measures may be applied to address areas of crucial deer, antelope, and big horn sheep habitat.			
WD RMP 2015	TL	Appendix L, NV-WDO-WILD-03, Objective D-FW-1, WD-FW 1.2  This stipulation will be applied to protect the continuity of migration corridors and important habitat, as recognized and designated by BLM and NDOW. These timing limitations will be applied within the designated habitat to protect the values and functions of these areas. Specific locations and the times applicable will be based on the nature, extent, and value of the area potentially affected.	No				

Recreation

Reviewer: Peggy McGukian Date: July 25, 2016

Source Document	Type	Description	Comments
WDRMP 2015	NSO	NV-WDO-REC-01  No surface occupancy on developed	There are no developed recreational facilities on the parcel.
		recreational facilities, special-use permit recreation sites (e.g., ski resorts and camps), and areas with significant recreational use with which geothermal development is deemed incompatible, excluding direct use applications.	the parcel. However there has not been a special

Soils

Reviewer: Rob Burton Date: July 6, 2016

NOTE		When applying these stipulations we need to identify the habitat(s) being protected, and the specific lands within the parcel to which the stipulation is relevant, to the nearest quarter-quarter-quarter section (10 acres)	
Source Document	Туре	Description	Comments
WDRMP 2015 EIS, Appendix L:	NSO	No Surface Occupancy  No surface occupancy will be applied to slopes greater than 50% (as mapped by the USGS 1:24,000 scale topographic maps or as determined by a BLM evaluations of the area).  Exception  The BLM authorized officer may grant an exception if a staff review determines that the proposed action is of a scale (pipeline, vs. road, vs. well pad) or sited in a location or a site specific evaluation determines that the slope would not result in mass slope failure or accelerated erosion and the operator would be able to me BLM's reclamation standards.  Modification	

NOTE		When applying these stipulations we need to identify the habitat(s) being protected, and the specific lands within the parcel to which the stipulation is relevant, to the nearest quarter-quarter-quarter section (10 acres)	
Source Document	Туре	Description	Comments
		The authorized officer may modify the area subject to the stipulation based upon a BLM evaluation of the area. The stipulation and performance standards identified above may also be modified based on negative or positive monitoring results from similar proposed actions on similar sites or increased national or state performance standards. Waiver  The restriction may be waived if it is determined that the described lands do no do not include lands with slopes greater than 50%. This determination shall be based upon USGS mapping and a BLM evaluation of the area.	
WDRMP 2015 EIS, Appendix L:	CSU	Stipulation Controlled Surface Use (CSU)  Controlled Surface Use will be applied to lands with a severe soil wind or water erosion hazard rating (as designed by	*Areas identified as having high potential for wind erosion can be evaluated by the BLM on a case-by-case basis for establishing possible mitigation measures.

NOTE		When applying these stipulations we need to identify the habitat(s) being protected, and the specific lands within the parcel to which the stipulation is relevant, to the nearest quarter-quarter-quarter section (10 acres)	
Source Document	Туре	Description	Comments
		NRCS soil survey data when available). Prior to surface disturbance on soils with a severe erosion hazard rating, a site-specific construction, stabilization, and reclamation plan (Plan) must be submitted to the BLM by the applicant as a component of the Geothermal Drilling/Application for Permit to Drill – Plan of Operations. The operator may not initiate surface disturbing activities unless the BLM Authorized Officer has approved the Plan or approved it with conditions. The plan must demonstrate to the Authorized Officer's satisfaction how the operator will meet the following performance standards:  • Soil stability is maintained preventing slope failure and wind or water erosion.  • The site will be stable with no evidence of accelerated erosion features.  • The rate of soil erosion will be controlled to maintain or improve soil quality and sustainability. The disturbed soils shall	

NOTE		When applying these stipulations we need to identify the habitat(s) being protected, and the specific lands within the parcel to which the stipulation is relevant, to the nearest quarter-quarter-quarter section (10 acres)	
Source Document	Type	Description	Comments
		have characteristics that approximate the reference site with regard to quantitative and qualitative soil erosion indicators described in H-7100-1 Soil Inventory, Monitoring, and Management Handbook.  • Sufficient topsoil is maintained for ensuring successful final reclamation. At locations where interim reclamation will be completed, this will be accomplished by re-spreading the topsoil over the areas of interim reclamation.  • The original landform and site productivity will be partially restored during interim reclamation and fully restored as a result of final reclamation.  The authorized officer may modify the size and shape of the restricted area subject to the stipulation based upon a NRCS soil survey or BLM evaluation. The stipulation and performance standards identified above may also be modified based on negative or positive monitoring results from similar proposed actions on similar	

NOTE		When applying these stipulations we need to identify the habitat(s) being protected, and the specific lands within the parcel to which the stipulation is relevant, to the nearest quarter-quarter-quarter section (10 acres)	
Source Document	Type	Description	Comments
		sites or increased national or state performance standards.  Exception  The BLM authorized officer may grant an exception if a staff review determines that the proposed action is of a scale (pipeline, vs. road, vs. well pad) or sited in a location, or a soil survey determines that the soil properties do not meet the severe erosion hazard criteria so that the proposed action would not result in a failure to meet the performance standards above.  Modification  The authorized officer may modify the size and shape of the restricted area subject to the stipulation based upon a NRCS soil survey or BLM evaluation. The stipulation and performance standards identified above may also be modified based on negative or positive monitoring results from similar proposed actions on similar sites or increased national or state performance standards.	

NOTE		When applying these stipulations we need to identify the habitat(s) being protected, and the specific lands within the parcel to which the stipulation is relevant, to the nearest quarter-quarter-quarter section (10 acres)	
Source Document	Type	Description	Comments
		Waiver The restriction may be waived if it is determined that the described lands do not include soils with severe erosion hazard. This determination shall be based upon NRCS mapping and BLM evaluation of the area.	

Cultural, NAC, & Historic Trails Reviewer: Tanner Whetstone

Date: June 29, 2016

Source Document	Туре	Description	Comments
Record of	NSO	NV-WD-CRNA-03	NSO: The California Trail goes through part of two
Decision		No Surface Occupancy (NSO) for	sections (T28N R32E Sec. 14 and 22) and the other
and		National Historic Trails (NHT)	sections within the lease parcel are within a mile of
Resource		No surface occupancy (NSO) will be	the California Trail.
Management		applied on congressionally designated	
Plan for the		historic trails and additional lands	<b>NSO:</b> No new fluid or solid leasable mineral surface
Winnemucca		bordering the trails to the extent	occupancy will be allowed within a mile of the
District		necessary to protect values where the	National Historic Trail (RMP Action CR6.9). This
Planning		integrity of setting is critical to their	area includes T28N R32E Sec. 14 (entire section),
Area, May		designation or eligibility. This applies	22 (entire section), 24 (NWNW), 26 (NWNW,
2015		specifically within a mile of the NHT.	NENW, SWNW, SENW, SWSW), 34 (NW 1/4,
		To accomplish this, any quarter quarter-	NWSW, NWNE) as well as T27N R32E Sec 04
		quarter section (10-acre parcel) within	(NW 1/4, SW 1/4, NE 1/4, NWSE, SWSE).
		or intersected by the NHT or the one-	
		mile buffer line would be subject to	NSO: No Surface Occupancy will be applied on
		NSO.	congressionally designated historic trails and
			additional lands bordering the trails to the extent
			necessary to protect values where the setting and
			integrity is critical to their designation or eligibility.
Record of	NSO/NTL	NV-WD-CRNA-02	<b>NSO:</b> Potential NRHP eligible sites exist in T28N
Decision		No Surface Occupancy in National	R32E Sec. 14(entire section), 22 (entire section) and
and		Register of Historic Places sites	26 (SENW and SWSW).
Resource		No surface occupancy (NSO) in areas	
Management		containing NRHP eligible, listed and	<b>NTL</b> : For development and production phases,

Туре	Description	Comments
	unevaluated sites and TCPs. To accomplish this, any quarter-quarter-quarter section (10-acre parcel) within or intersected by the site would be subject to NSO. For development and production phases, surface occupancy may be limited to a specific distance or precluded at hot springs, pending conclusion of the National Historic Preservation Act (NHPA) requirements and Native American consultation process. Additional lands outside the designated boundaries of sites may be added to the NSO restriction to the extent necessary to protect values where the setting and integrity is critical to their designation or eligibility.	surface occupancy may be limited to a specific distance or precluded at hot springs, pending conclusion of the Native American consultation process. Notice to lessee applies to entire parcel.  NTL: The Winnemucca District Resource Management Plan allows for the development of stipulations, use restrictions, mitigation measures and other management actions to protect traditional use areas and practices (RMP Action TC 2.4). Notice to lessee applies to entire parcel.
	Type	unevaluated sites and TCPs. To accomplish this, any quarter-quarter-quarter quarter section (10-acre parcel) within or intersected by the site would be subject to NSO. For development and production phases, surface occupancy may be limited to a specific distance or precluded at hot springs, pending conclusion of the National Historic Preservation Act (NHPA) requirements and Native American consultation process. Additional lands outside the designated boundaries of sites may be added to the NSO restriction to the extent necessary to protect values where

	<u>Historic Trails</u>			
Source Document	Type	Description	Comments	
Record of	NTL	NV-WD-CRNA-01	Notice to lessee applies to entire parcel.	
Decision		<b>Protection of Cultural Sites Resources</b>		
and		and Consultation with Native		
Resource		American Tribes and the State		
Management		Historic Preservation Office		
Plan for the		The authorized officer of the BLM will		
Winnemucca		consult with the appropriate Native		

		<u>Historic Trails</u>	
Source Document	Type	Description	Comments
District		American Tribes and State Historic	
Planning		Preservation Officers regarding cultural	
Area, May		resources per Section 106 of the	
2015		National Historical Preservation Act and	
		its implementation through the protocol	
		between the BLM Nevada State Director	
		and the Nevada State Historic	
		Preservation Office. The presence of	
		National Register eligible, listed, and	
		unevaluated sites will be determined on	
		the basis of a literature review of	
		recorded sites and properties in the	
		proposed lease area. A protective buffer	
		around a site within the lease area, if	
		appropriate, may be applied. Additional	
		cultural or ethnographic research,	
		consultation and/or inventories may be	
		required to identify resources, determine	
		effects, mitigate adverse effects and	
		complete the Section 106 process.	
Record of	NTL	NV-WD-CRNA-04	<b>NTL</b> : The California Trail goes through part of two
Decision		Protection of National Historic Trails	sections (T28N R32E Sec. 14 and 22) and the
and		This parcel includes lands within the	remainder of the lease parcel is within six miles of
Resource		viewshed of congressionally designated	the California Trail. Notice to lessee applies to entire
Management		historic trails. As described in the	parcel.
Plan for the		Winnemucca District RMP, Action D-	
Winnemucca		CR 6.2 unless otherwise cited, new	<b>NTL</b> : This parcel includes lands within the viewshed

<u>Historic Trails</u>			
Source Document	Туре	Description	Comments
District Planning Area, May 2015		development within six miles of the NHT will be managed to Visual Resource Management Class II objectives. These objectives would be met through conditions of approval applied during the permit approval process.	of a congressionally designated historic trail. Fluid mineral operational activities may be subject to VRM Class II objectives in order to protect the historical and scenic values of the trails. Notice to lessee applies to entire parcel.

Lands & Realty

Reviewer: Debbie Dunham

Date: July 5, 2016

Source Document	Type	Description	Comments
LR 2000 (Geo Report with Customer)	NTL	Contact ROW holder prior to any geothermal activities. No drilling, including exploration or development activities, within linear rights-of-way. Maintain a safe distance from electric conductors as	N-3854- Samualla Pry and Samual L. Pry - Water Plant N-4495 - NV Dept of Transportation -

Source Document	Type	Description	Comments
Document			
			N-65550 - Wiltel Communications -
			Telephone Line
			N-86763 - Gradient Resources Inc Geo
			Geophysical Exploration
			N-88369 - SPPC - Transmission Line
			N-90076 - R T Vanderbilt Co. Inc
			Road
			N-90733 - Lovelock Meadows Water
			District - Water Facility
			N-93931 - Rye Patch Gold US Inc
			Pendng- Surface Mgmt Plan
			N-26487 - NV Dept of Transportation -
			Federal Hwy
			N-43236 - Southern Pacific Railroad
			NVCC-8790 - Nevada Bell - Telephone
			Line
			NVCC-18252- Nevada Bell - Telephone
			Line
			NVCC - 20903 - NV Dept of
			Transportation- Federal Hwy
			NVCC - 20968 - NV Dept of
			Transportation- Material Site
			N-6984 -NV Dept of Transportation-
			Federal Hwy
			N-33054 - Nevada Bell - Road
			N-43011 - Pershing County Road
			N-46307 - NV Division of State Lands -
			Road
			N-46651 - Lovelock Meadows - Water
			Facility
			N-65550 - Wiltel Communications -
			Telephone Line

Source Document	Туре	Description	Comments
			N-86763 - Gradient Resources Inc. Geo
			Geophysical Exploration
			N-88369 - SPPC - Transmission Line
			N-90074 - Nevada Iron LLC - pending
			Transmission Line
			N-90428 - Tahoe Mining Co Inc.; John
			Moore; Newmont Mining Corp; and Rye
			Patch Gold US Inc Surface Mgmt
			Notice
			N-93831 - Rye Patch Gold US Inc -
			Pending - Surface Mgmt Plan
			N-43236 - Southern Pacific Railroad
			N-46114 - Eagle Picher Co Water
			Plant
			N-51027 - NV Dept of Transportation-
			Federal Hwy

Paleontology

Reviewer: Tanner Whetstone

Date: June 29, 2016

Source	Type	Description	Comments
Document			
Record of	NTL	NV-WD-PALEO-02	Notice to lessee applies to the following lands:
Decision		Protection of Potential Fossil Yield	
and		Classification (PFYC) 3: Moderate	T.0280N, R.0320E, 21 MDM, NV
Resource		<b>Potential</b> This area has moderate	Sec. 014 ALL;
Management		potential for vertebrate paleontological	Sec. 022 ALL;
Plan for the		resources. Inventory and/or on-site	Sec. 034 ALL
Winnemucca		monitoring during disturbance or spot	
District		checking may be required. If fossils are	T.0270N, R.0320E, 21 MDM, NV
Planning		discovered, avoidance or data recovery	Sec. 002 NW;
Area, May		will be required prior to their	Sec. 004 ALL
2015		disturbance if they are deemed to be of	
		scientific importance.	
Record of	NTL	NV-WD-PALEO-03	Notice to lessee applies to the following lands:
Decision		Protection of Potential Fossil Yield	
and		Classification (PFYC) 4 and 5:	T.0280N, R.0320E, 21 MDM, NV
Resource		High/Very High Potential	Sec. 024 ALL;
Management		This area has high and very high	Sec. 026 NE, SE, SENW
Plan for the		potential for paleontological resources.	
Winnemucca		This land is underlain by geologic units	T.0270N, R.0320E, 21 MDM, NV
District		that have been documented to contain a	Sec. 002 NE, SE, SENW, NESW
Planning		high occurrence of fossils, which may	
Area, May		consist of scientifically significant	
2015		vertebrate fossils. A field survey by a	

Source Document	Type	Description	Comments
		qualified paleontologist, and at the lessee's expense, will be required prior to surface disturbing activities. If significant fossils of scientific importance are discovered they will require avoidance or data recovery prior to their disturbance. On site monitoring may be necessary during construction activities.	

Riparian

Reviewer: Robert Gibson Date: July 11, 2016

NOTE		When applying these stipulations we need to identify the habitat(s) being protected, and the specific lands within the parcel to which the stipulation is relevant, to the nearest quarter-quarter-quarter section (10 acres)	
Source Document	Type	Description	Comments
WDRMP 2015	CSU	NV-WD-RIPAR-01  Controlled surface use will be applied within 500 feet of riparian or wetland vegetation to protect the values and	T28N, R32E, Sec. 022, MDB&M: NVNWNENE, N2SWNE, NESWNW, N2SENW.

NOTE		When applying these stipulations we need to identify the habitat(s) being protected, and the specific lands within the parcel to which the stipulation is relevant, to the nearest quarter-quarter-quarter section (10 acres)	
Source Document	Type	Description	Comments
		measures required will be based on the nature, extent, and value of the area potentially affected.	

Water

Reviewer: Robert Gibson

Date: July 11, 2016

Source Document	Type	Description	Comments
WDRMP	NSO	NV-WD-WATER-04	No recognized well head protection zones located on
2015			the lease.
		Protection of Municipal Well Head	
		<b>Protection Zones.</b> Some, or all, of this	
		lease parcel is within a recognized	
		municipal well head protection zone. No	
		surface occupancy within recognized	
		well head protection zones or within	
		1,000 feet of a municipal well head.	

Wild Horse & Burro

Reviewer: Samantha Gooch

Date: July 5, 2016

NOTE			
Source Document	Type	Description	Comments
WDRMP 2015	NTL	NV-WD-WH&B-01 (WD RMP, Actions D- 4.1) Wild horse or burro populations are known to use some or all of the proposed lease area. If proposed fluid mineral activities are to occur in horse management areas (HMA) it may be necessary to avoid or develop mitigation measures to reduce adverse impacts to horses and/or burros. These measures would be designed in a manner that does not hinder the wild and free-roaming behavior of the horses and burros and may include, but are not limited to, providing alternative water sources for horses of equal quality and quantity. Additional specific measures to protect horses and burros may be developed during review of proposals.	

T&E, SSS, Wildlife Reviewer: Josef Porter Date: June 30, 2016

Type	Description	Comments
-J <b>F</b> -	<b>.</b>	0.0000000000000000000000000000000000000
Lease	Appendix L, NV-WD-SSS-01,	
Notice	(WD RMP CA-SSS 1.1, CA-1.2)	
	The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. All plants and any member of the animal kingdom, including without limitation any mammal, fish, bird, amphibian, reptile, mollusk, crustacean, arthropod, or other invertebrates, (BLM Manual Rel. 6840, IM 2009-039 [), designated as endangered, threatened, or other special status will be considered in each project proposal. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed, threatened, endangered, or other special status species or result in the destruction or adverse modifications of a designated or proposed critical habitat. No surface disturbance would be authorized before a special status species inventory of the project area is completed by a	
		Lease Notice  Appendix L, NV-WD-SSS-01, (WD RMP CA-SSS 1.1, CA-1.2)  The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. All plants and any member of the animal kingdom, including without limitation any mammal, fish, bird, amphibian, reptile, mollusk, crustacean, arthropod, or other invertebrates, (BLM Manual Rel. 6840, IM 2009-039 [), designated as endangered, threatened, or other special status will be considered in each project proposal. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed, threatened, endangered, or other special status species or result in the destruction or adverse modifications of a designated or proposed critical habitat. No surface disturbance would be authorized before a special status species

Source Document	Туре	Description	Comments
		special status species inventory cannot be conducted, a determination will be made by a BLM biologist or botanist as to the likelihood of suitable habitat for the special status species in the project area and if such habitat is likely, it will be assumed the special status species is present as well. BLM will not approve any ground disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act, 16 U.S.C. 1531, as amended, including completion of any required procedure for conference or	
WD RMP 2015	CSU	consultation.  Appendix L, NV-WDO-SSS-02  (WD RMP Action D-SSS 1.1)  Controlled surface use of designated or proposed critical habitat for listed species under the Endangered Species Act of 1973 (as amended) would be applied if fluid mineral activities would be likely to adversely modify the habitat for the short term. Controlled surface use will be applied within the designated habitat to protect the values and functions of these areas. Specific measures required will be based on the nature, extent, and value of the area potentially affected.	
WD RMP 2015	NSO	App. L, NV-WD-SSS-03 (WD RMP, Action D-SSS 1.1)  No surface occupancy of designated or proposed critical habitat for listed species under the Endangered Species Act of 1973 (as amended)	

Source Document	Туре	Description	Comments
		would be applied if fluid mineral activities would be likely to adversely modify the habitat for the long term. For listed or proposed species without designated habitat, no surface occupancy would be implemented to the extent necessary to avoid jeopardy.	
WD RMP 2015	CSU	App. L, NV-WDO-SSS-05  For BLM-designated sensitive species (e.g. sage-grouse and others), a lease stipulation for controlled surface use, would be applied to defined avoidance areas where fluid mineral activities would be likely to adversely impact the species or modify the habitat and other existing measures are inadequate to meet agency management objectives. Controlled surface use will be applied within the designated habitat to protect the values and functions of these areas. Specific measures required will be based on the nature, extent, and value of the area potentially affected.	Based on habitat characteristics, the lessee may be required to conduct surveys for sensitive species that may potentially utilize the area.  Sensitive plant surveys will be required.
WD RMP 2015	TL	App. L, NV-WDO-SSS-06 (WD RMP, Action CA-SSS 1.7)  Bald or Golden eagles or other raptors or their habitat may be present in the lease area or within the vicinity of the lease area. These species will be managed in accordance with FLPMA, the Bald and Golden Eagle Protection Act (BGEPA) and the Migratory Bird Treaty Action (MBTA).	

General Wildlife/ GRSG	Prelude to following stipulations		
Source Document	Type	Description	Comments
WD RMP	Lease	App. L, NV-WD-WILD-04	
2015	Notice	(WD RMP Action FW 4.1)	
		Ground disturbing activities during the	
		migratory bird-nesting season (approximately	
		March 1 through August 31 (as dependent on	
		species) shall not be conducted in order to avoid potential violation of the Migratory Bird	
		Act of 1918. Should ground-disturbing	
		activities be necessary during this period of	
		time, appropriate inventories for migratory	
		birds shall be conducted prior to site	
		development, as described below. This survey	
		would identify either breeding adult birds or	
		nest sites within the areas to be disturbed. If	
		active nests are present, the proponent will coordinate with the BLM to develop	
		appropriate protection measures for these sites,	
		which may include avoidance, construction	
		constraints, and/or establish buffers.	
		The general definition of the migratory bird	
		nesting season may be modified with	
		consideration to the bird species that may	
		potentially (based on habitat analysis) utilize	
		the area. Surveys will be performed no more	
		than ten (10) and no less than one (1) day prior	
		to proposed disturbance activities. The	
		applicant will notify the BLM biologist no less	
		than five (5) work days prior to a survey being	

General Wildlife/ GRSG	Prelude to following stipulations		
Source Document	Type	Description	Comments
		conducted. The surveys will be performed at the applicant's expense by a biologist acceptable to the BLM. Survey methodology will follow scientifically acceptable protocols and approval by the BLM biologist. BLM personnel have the option of accompanying the applicant's surveyor. Surveys will be conducted at an appropriate time (seasonally and hourly) with regard to species specificity. Protective measures will be implemented during all phases of reproductive behavior (i.e.	
WD RMP 2015	NSO	courtship, nest building, nesting & fledging).  NV-WDO-ARMPA (App. B)  NVCA GRSG ARMPA	
		No Surface Occupancy for sage grouse leks. No surface occupancy within 5 km (3.1 miles) of known leks at all times.	
WD RMP 2015	TL	NV- WDO-MD SSS-02(E)  Timing limitations on known or potential sage grouse habitat. Prior to entry on any lease areas which include known or potential habitat, the lessee (operator) shall contact the appropriate BLM Field Office to discuss any proposed activities. Seasonal restrictions will be applied during the period specified below to manage discretionary surface-disturbing activities and uses on public lands to prevent disturbance to GRSG during seasonal life-cycle	Portions of the parcel (T28N R32E Sec24) are located within OHMA, but are not within any known seasonal habitat (i.e. wintering, nesting, summer) or PMU. In OHMAs, authorized or permitted activities are implemented adhering to required design features (RDFs)

General Wildlife/ GRSG	Prelude to following stipulations		
Source Document	Type	Description	Comments
WD RMP 2015	NSO	1. In breeding habitat within 4 miles of active/pending leks from March 1-June 30  a. Lek-March 1-May 15  b. Lek hourly restrictions 6 pm to 9 am  c. Nesting-April 1-June 30  2. Brood-rearing habitat from May 15 to September 15  a. Early-May 15-June 15  b. Late-June 15-September 15  3. Winter habitat from November 1-February 28  NV-WDO-MD-SSS-Action 5.2.1  (RMP Objective SSS 5)  Manage the following PMUs as priority habitat management areas (PHMA) to achieve desired sage-grouse and other sensitive species populations and protect habitat conditions as no surface disturbance or no surface occupancy applicable to the following uses; saleable minerals (Government use subject to the criteria listed below), fluid minerals, solid mineral leasing (energy and non-energy) and rights of way.	

General Wildlife/ GRSG	Prelude to following stipulations		
Source Document	Туре	Description	Comments
WD RMP 2015	TL	<ul> <li>North Massacre (adjacent to Black Rock PMU)</li> <li>Black Rock</li> <li>Pine Forest</li> <li>Lone Willow</li> <li>Santa Rosa</li> <li>NV- WDO-MD SSS-02(E)-2</li> <li>CSU (2002)</li> </ul>	
		No exploration during nesting/brood rearing period (April 1-September 15) in identified nesting habitat.	
WD RMP 2015	TL	NV-WDO-MD SSS-02(E)-3  No exploration during winter (November 1-February 28) in identified winter habitats.	

	<u>Wildlife</u>			
Big Horn Sh	neep & Big Gan	ne		
Source Document	Type	Description	Comments	
WD RMP 2015	TL/NSO/CS U	App. L, NV-WD-SSS-1.2 (WD RMP, Objective D-FW-1 and Action FW 1.2)  Controlled surface use or timing limitation for critical big game habitat. Where standard lease terms and permitlevel decisions are deemed insufficient to protect sensitive resources, but where an NSO is deemed overly restrictive, the BLM would apply seasonal or time limited stipulations to leases as appropriate by wildlife species to protect habitat, provide continuity of migration corridors, and protect seasonal use areas.  Mule Deer: Objective: Protect crucial winter habitat (areas), NSO within crucial mule deer winter habitat- November 15-April 30  Bighorn Sheep: Objective: Protect Bighorn Sheep from disturbance during lambing, NSO within a 1/4 mile radius of designated lambing habitat	Crucial Winter Mule Deer Potential Bighorn Sheep range.  Upon site specific analysis, controlled surface use, timing limitations, or mitigation measures may be applied to address areas of crucial deer, antelope, and big horn sheep habitat.	

	<u>Wildlife</u>			
Big Horn Sh	neep & Big Gan	ne		
Source Document	Type	Description	Comments	
WD RMP 2015	TL	Appendix L, NV-WDO-WILD-03, Objective D-FW-1, WD-FW 1.2  This stipulation will be applied to protect the continuity of migration corridors and important habitat, as recognized and designated by BLM and NDOW. These timing limitations will be applied within the designated habitat to protect the values and functions of these areas. Specific locations and the times applicable will be based on the nature, extent, and value of the area potentially affected.		

Recreation

Reviewer: Peggy McGukian Date: July 25, 2016

Source Document	Type	Description	Comments
WDRMP	NSO	NV-WDO-REC-01	There are no developed recreational facilities or
2015			special use permits issued on the parcel.
		No surface occupancy on developed	
		recreational facilities, special-use permit	
		recreation sites (e.g., ski resorts and	
		camps), and areas with significant	
		recreational use with which geothermal	
		development is deemed incompatible,	

Source Document	Type	Description	Comments
		excluding direct use applications.	

Soils

Reviewer: Rob Burton Date: July 6, 2016

NOTE		When applying these stipulations we need to identify the habitat(s) being protected, and the specific lands within the parcel to which the stipulation is relevant, to the nearest quarter-quarter-quarter section (10 acres)	
Source Document	Type	Description	Comments
WDRMP 2015 EIS, Appendix L:	NSO	Stipulation No Surface Occupancy  No surface occupancy will be applied to slopes greater than 50% (as mapped by the USGS 1:24,000 scale topographic maps or as determined by a BLM evaluations of the area).  Exception	

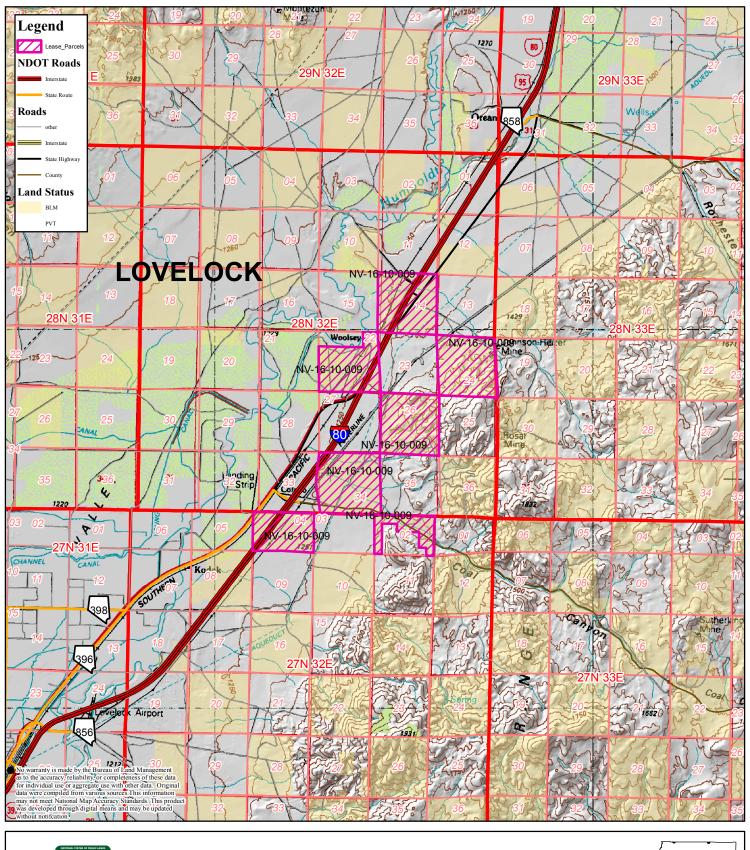
NOTE		When applying these stipulations we need to identify the habitat(s) being protected, and the specific lands within the parcel to which the stipulation is relevant, to the nearest quarter-quarter-quarter section (10 acres)	
Source Document	Type	Description	Comments
		The BLM authorized officer may grant an exception if a staff review determines that the proposed action is of a scale (pipeline, vs. road, vs. well pad) or sited in a location or a site specific evaluation determines that the slope would not result in mass slope failure or accelerated erosion and the operator would be able to me BLM's reclamation standards.  Modification The authorized officer may modify the area subject to the stipulation based upon a BLM evaluation of the area. The stipulation and performance standards identified above may also be modified based on negative or positive monitoring results from similar proposed actions on similar sites or increased national or state performance standards.  Waiver The restriction may be waived if it is determined that the described lands do no do not include lands with slopes greater	

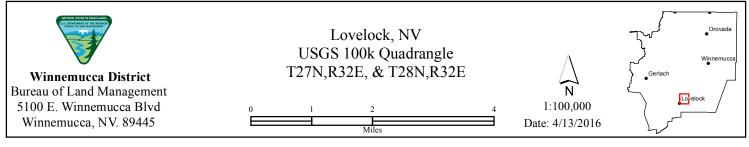
NOTE		When applying these stipulations we need to identify the habitat(s) being protected, and the specific lands within the parcel to which the stipulation is relevant, to the nearest quarter-quarter-quarter section (10 acres)	
Source Document	Type	Description	Comments
WDRMP 2015 EIS, Appendix L:	CSU	than 50%. This determination shall be based upon USGS mapping and a BLM evaluation of the area.  Stipulation Controlled Surface Use (CSU)  Controlled Surface Use will be applied to lands with a severe soil wind or water erosion hazard rating (as designed by NRCS soil survey data when available). Prior to surface disturbance on soils with a severe erosion hazard rating, a site-specific construction, stabilization, and reclamation plan (Plan) must be submitted to the BLM by the applicant as a component of the Geothermal Drilling/Application for Permit to Drill – Plan of Operations. The operator may not initiate surface disturbing activities unless the BLM Authorized Officer has approved the Plan or approved it with conditions. The plan must demonstrate to the Authorized Officer's	*Areas identified as having high potential for wind erosion can be evaluated by the BLM on a case-by-case basis for establishing possible mitigation measures.

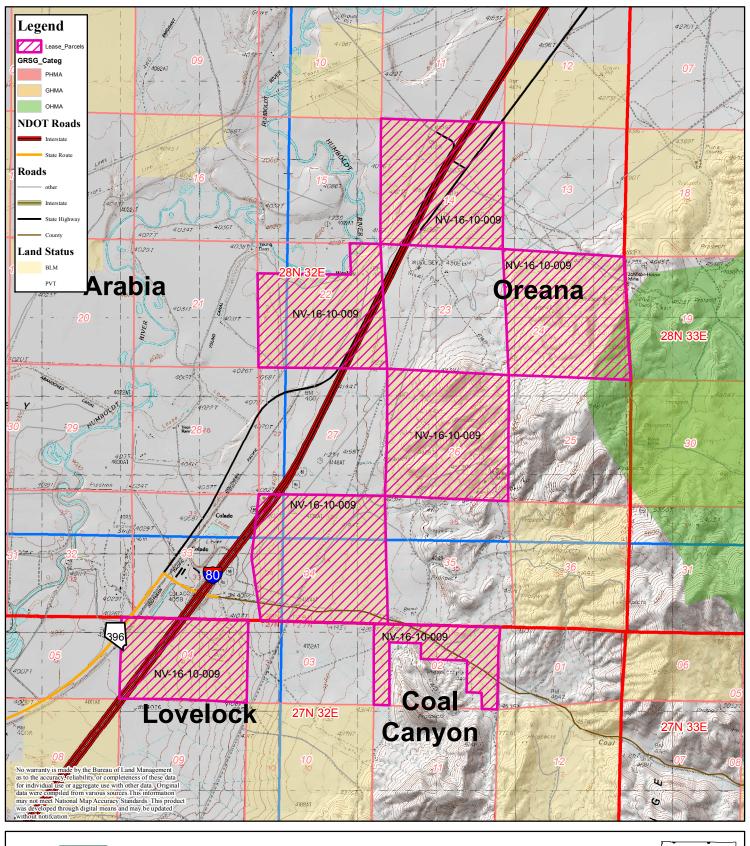
NOTE		When applying these stipulations we need to identify the habitat(s) being protected, and the specific lands within the parcel to which the stipulation is relevant, to the nearest quarter-quarter-quarter section (10 acres)	
Source Document	Type	Description	Comments
		satisfaction how the operator will meet the following performance standards:	
		<ul> <li>Soil stability is maintained preventing slope failure and wind or water erosion.</li> <li>The site will be stable with no evidence of accelerated erosion features.</li> <li>The rate of soil erosion will be controlled to maintain or improve soil quality and sustainability. The disturbed soils shall have characteristics that approximate the reference site with regard to quantitative and qualitative soil erosion indicators described in H-7100-1 Soil Inventory, Monitoring, and Management Handbook.</li> <li>Sufficient topsoil is maintained for ensuring successful final reclamation. At locations where interim reclamation will be completed, this will be accomplished by re-spreading the topsoil over the areas of interim reclamation.</li> <li>The original landform and site productivity will be partially restored</li> </ul>	

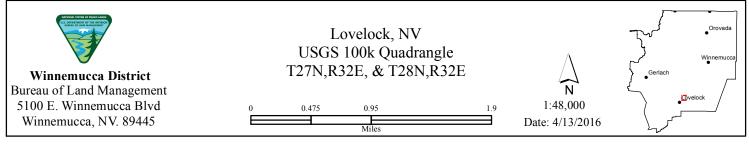
NOTE		When applying these stipulations we need to identify the habitat(s) being protected, and the specific lands within the parcel to which the stipulation is relevant, to the nearest quarter-quarter-quarter section (10 acres)	
Source Document	Type	Description	Comments
		during interim reclamation and fully restored as a result of final reclamation. The authorized officer may modify the size and shape of the restricted area subject to the stipulation based upon a NRCS soil survey or BLM evaluation. The stipulation and performance standards identified above may also be modified based on negative or positive monitoring results from similar proposed actions on similar sites or increased national or state performance standards. Exception  The BLM authorized officer may grant an exception if a staff review determines that the proposed action is of a scale (pipeline, vs. road, vs. well pad) or sited in a location, or a soil survey determines that the soil properties do not meet the severe erosion hazard criteria so that the proposed action would not result in a failure to meet the performance standards above. Modification	

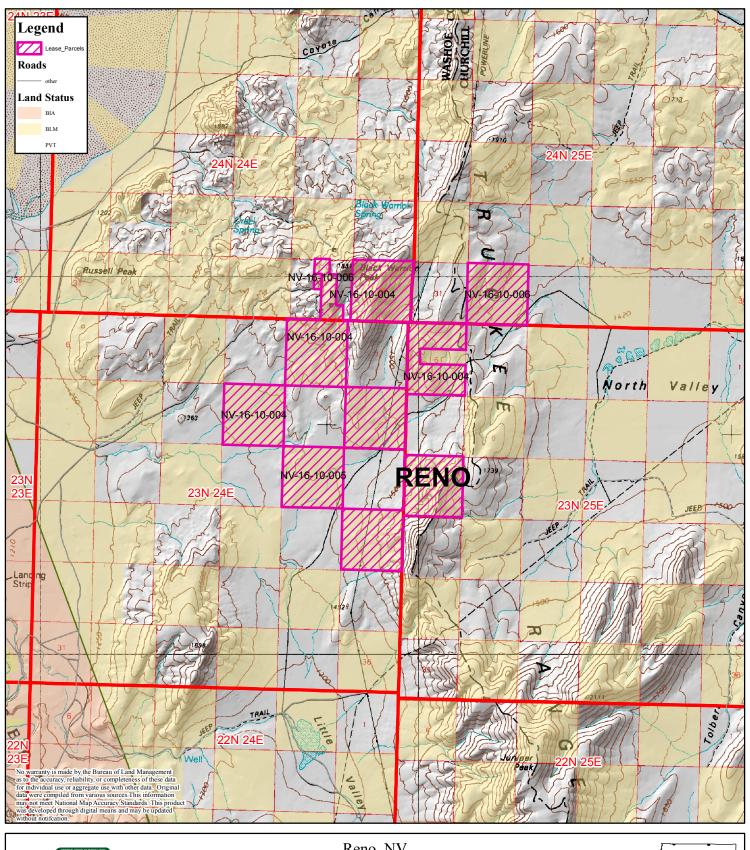
NOTE		When applying these stipulations we need to identify the habitat(s) being protected, and the specific lands within the parcel to which the stipulation is relevant, to the nearest quarter-quarter-quarter section (10 acres)	
Source Document	Туре	Description	Comments
		The authorized officer may modify the size and shape of the restricted area subject to the stipulation based upon a NRCS soil survey or BLM evaluation. The stipulation and performance standards identified above may also be modified based on negative or positive monitoring results from similar proposed actions on similar sites or increased national or state performance standards.  Waiver  The restriction may be waived if it is determined that the described lands do not include soils with severe erosion hazard. This determination shall be based upon NRCS mapping and BLM evaluation of the area.	

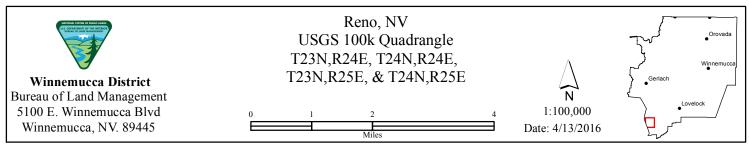


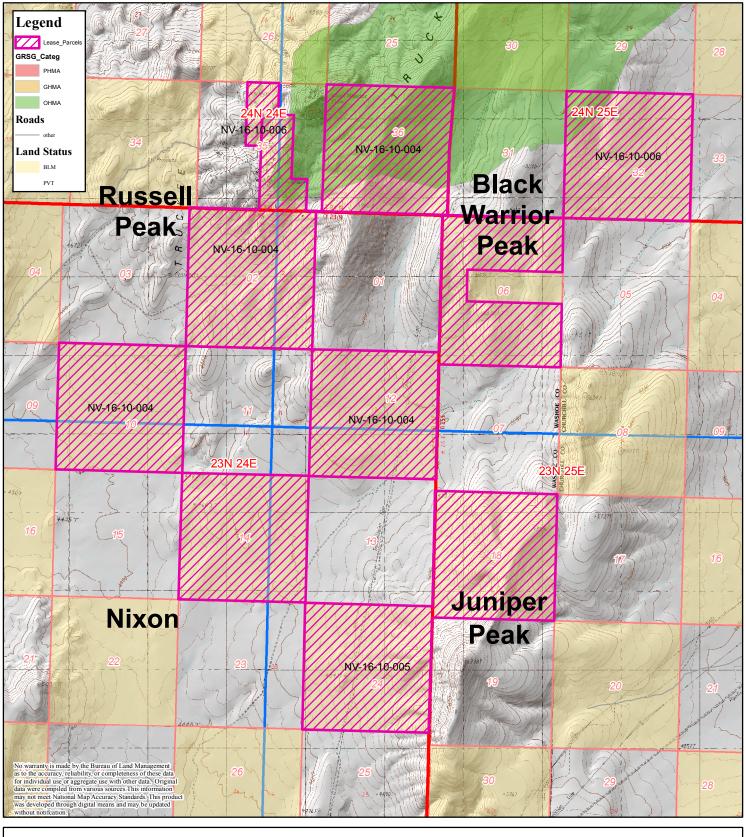


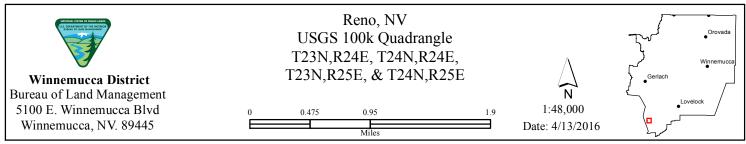












#### October 26, 2016 Geothermal Lease Sale Parcel Information and Legal Descriptions

#### NV-16-10-004 3401.860 Acres T.0230N, R.0240E, 21 MDM, NV Sec. 002 LOTS 1-4; 002 S2N2,S2; 010 ALL; 012 ALL; T.0240N, R.0240E, 21 MDM, NV Sec. 035 W2NWNE, SWNE, E2NENW, NWSE; 035 SWSE, W2SESE; 036 ALL; T.0230N, R.0250E, 21 MDM, NV Sec. 006 LOTS 1-11; 006 E2SW, SE; Washoe County Winnemucca DO PENDING NOMINATION NVN093438 LANDS LIE WITHIN OHMA Formerly Lease No.

### NV-16-10-005 1895.920 Acres T.0230N, R.0240E, 21 MDM, NV Sec. 014 ALL; 024 ALL; T.0230N, R.0250E, 21 MDM, NV Sec. 018 LOTS 1-4; 018 E2, E2W2; Washoe and Churchill Counties

Winnemucca DO PENDING NOMINATION NVN093684 Formerly Lease No.

# NV-16-10-006 660.000 Acres T.0240N, R.0240E, 21 MDM, NV

Sec. 035 E2SENW; T.0240N, R.0250E, 21 MDM, NV Sec. 032 ALL; Churchill and Washoe Counties Winnemucca DO PENDING NOMINATION NVN093680 LANDS LIE WITHIN OHMA Formerly Lease No.

NV-16-10-009 3720.830 Acres T.0270N, R.0320E, 21 MDM, NV Sec. 002 LOTS 1-4; 002 W2W2SW;

#### October 26, 2016 Geothermal Lease Sale Parcel Information and Legal Descriptions

```
E2E2SE, NWNESE, N2NWSE;
        002
              SWNESE, NWSESE, NENESW;
        002
        004
             LOTS 1-4;
        004
              S2;
 T.0280N, R.0320E, 21 MDM, NV
   Sec. 014 ALL;
        022 NENE, S2N2, S2;
        024 ALL;
        026 ALL;
        034 ALL;
Pershing County
Winnemucca DO
PENDING NOMINATION NVN093687
MAT SITE N-4495
MAT SITE CC 20968
LANDS LIE WITHIN OHMA
Formerly Lease No.
```