

APPENDIX G
BLM WINNEMUCCA FIELD OFFICE
GEOHERMAL LEASE STIPULATIONS

CONTINGENCY RIGHTS STIPULATION

The Bureau of Land Management has reviewed existing information and planning documents and, except as noted in other attached stipulations, knows of no reason why normal development—subject to the controls of applicable laws and regulations and the lease terms and conditions—can not proceed on the leased lands. However, specific development activities could not be identified prior to lease issuance since the nature and extent of geothermal resources were not known and specific operations have not been proposed. The lessee is hereby made aware that consistent with 43 CFR §3200.4, all post lease operations will be subject to appropriate environmental review and may be limited or denied by no surface occupancy stipulations.

The following geothermal lease stipulations are specifically identified in the Sonoma-Gerlach and Paradise-Denio Management Framework Plans (MFPs):

Geothermal Lease Stipulations – Sonoma-Gerlach MFP

1. No Surface Occupancy – special stipulations for no surface occupancy will be applied to the following:

- Visible remnants of the Applegate-Lassen Trail from Rye Patch Reservoir to the Western Pacific Railroad track near Trego. In this area the trail is defined as the actual trail itself. Applicable to the following lease:
 - NVN-066271 – T37N, R26E, Sec. 28
- Sage grouse strutting grounds/Leks
- The George Lund Petrified Forest
- The Soldier Meadows desert dace Area of Critical Environmental Concern (ACEC) *
- S-1 Cultural Sites (National Register Eligible)

2. No Leasing

- No leasing will be permitted on community watersheds and the Mahogany Creek Natural Area

* No Leasing – This area is within the boundary of the Black Rock Desert – High Rock Canyon National Conservation Area (NCA).

Geothermal Lease Stipulations – Paradise-Denio MFP

Noncompetitive areas and all KGRAs will be open to geothermal, oil, and gas leasing with the following restrictions:

1. No Leasing – the following areas meet the above criteria and will not be leased:
 - Pine Forest Vehicle Closure Area (Blue Lakes)
2. No Surface Occupancy – no surface occupancy will be allowed on the following:
 - Sage grouse strutting grounds
 - Osgood Mountain milk vetch ACEC
 - Raised bog
 - S-1 Cultural sites (National Register Eligible)
 - The Applegate-Lassen Emigrant trail**
3. Special Stipulations – the following will be leased with special stipulations:
 - Critical wildlife habitat areas
 - Black Rock Desert
4. Incorporation by Reference
 - The geothermal stipulation/mitigation measures section and matrix, Tables 4-1 and 4-2 of the *District Regional Geothermal Oil and Gas Leasing Environmental Assessment, (EA-NV-020-02-38), June 1982*, are hereby incorporated into this analysis and their stipulations apply to PVAs, KGRAs, and pending lease application sites.
5. No Leasing – NCA

In addition to stipulations identified in the MFPs and the *District Regional Geothermal Oil and Gas Leasing Environmental Assessment*, the following stipulations apply:

- In December 2000, the President signed Public Law 106-554, establishing the Black Rock Desert-High Rock Canyon Emigrant Trails NCA. The legislation specifically withdrew geothermal resources from leasing on lands located within the NCA. The NCA boundary incorporates a large portion of the Applegate-Lassen Trail.

** No leasing – In areas located within the Black Rock Desert-High Rock Canyon NCA.

HYDROLOGY AND WATER QUALITY

Water Resources

- As exploration and development activities commence, the operator will institute a hydrologic monitoring program. The details of the monitoring programs will be site-specific and the intensity will be commensurate with the level of exploration. For example, if the proponent will be conducting seismic studies the monitoring would be limited to the identification of water resources to be monitored as activities continue; if a drilling program were to be undertaken the number of aquifers encountered, their properties, their quality, and their saturated thickness will be documented. The information collected will be submitted to the Bureau of Land Management and will be used to support future NEPA documentation as development progresses.
- Adverse impacts to surface expressions of the geothermal reservoir (hot springs), and threatened and endangered species habitat are not acceptable. The lessee will monitor the quality, quantity, and temperature of any hot springs or other water resource within the project area whenever they are conducting activities, which have the potential to impact those resources. If adverse impacts do occur, BLM will require the lessee to take corrective action to mitigate the impact. Corrective action may include shutting down the operation.
- These are in addition to the other stipulations. These are LEASE stipulations, not operational. The information gathered under the monitoring stipulation will be used to identify future impacts at the operational stage.

VEGETATION

1. Controlled or Limited Surface Use (avoidance and/or mitigation measures to be developed).

- All areas of exploration and/or development disturbance will be reclaimed including recontouring disturbed areas to blend with the surrounding topography and using appropriate methods to seed with a diverse perennial seed mix. The seed mix used to reclaim disturbed areas would be “certified” weed free.

Riparian Areas

- Any open body of water, such as a canal, ditch, slough, pond, creek, lake, or stream and riparian areas will be avoided by a buffer zone of 650 feet. This buffer may be greater as determined by the WFO, in order to sufficiently protect riparian areas against adverse impacts such as increased sedimentation, impacts to water quality and quantity and loss of riparian vegetation.

NOXIOUS WEEDS

- Areas to be developed will be inventoried for the presence of noxious weeds before disturbance. During close out operations, sites will be inventoried for the presence of noxious weeds and treated if weeds are present.

LANDS & REALTY

- No drilling, including exploration or development activities within linear rights-of-way

WILDLIFE, MIGRATORY BIRDS, AND FISHERIES

Sage grouse

1. No Surface Occupancy

- No surface occupancy within 3.3 km (2 miles) of sage grouse strutting grounds/leks because they are a critical habitat

2. Controlled or Limited Surface Use (avoidance and/or required mitigation measures to be developed)

These additional stipulations are based on the Interim Sage Grouse Management Guidelines for Nevada:

- Avoid all activity within 1.0 km (.6 miles) of known habitat as determined by the WFO
- Avoid permanent occupancy of potential habitat where possible; where not possible, consider off-site mitigation
- Nesting and brooding habitat – avoid all activity within 1.0 km (.6 miles) of known nesting and brooding habitat as determined by the WFO
- Known winter habitat – avoid all activity within 1.0 km (.6 miles) of known winter habitat as determined by the WFO
- Known summer habitat – avoid all activity within 1.0 km (.6 miles) of known summer habitat as determined by the WFO
- All surface disturbance occurring in potential or know habitat areas shall be reclaimed as soon as possible in such a way as to result in conditions suitable for sage grouse habitat

3. Controlled or Limited Surface Use (avoidance and/or required mitigation measures to be developed) – applicable for all leases proposed in areas of crucial deer, antelope, and big horn sheep habitat during migration and critical fawning and kidding areas.

Migratory Birds

- Ground disturbing activities during the migratory bird-nesting season (March to July) 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, appropriate inventories for migratory birds shall be conducted prior to site development. This survey would identify either breeding adult birds or nest sites within the areas to be disturbed. If active nests are present, the proponent would coordinate with the BLM to develop appropriate protection measures for these sites, which may include avoidance, construction constraints, and/or establish buffers.

Other Biota

- Prior to site development, a survey for invertebrates will be conducted on areas where geothermal surface expressions occur

THREATENED, ENDANGERED, AND SPECIAL STATUS SPECIES

1. No surface occupancy

- No surface occupancy within 1 mile of occupied or identified potential Lahontan Cutthroat Trout (LCT) habitat. This stipulation is applicable to the following leases; however, other leases may apply pending their location with respect to LCT habitat:
 - NVN-066403 – T34N, R23E – Secs 25, 34, & 36
 - NVN-074580 – T34N, R23E – Secs 2 & 3

2. Controlled or Limited Surface Use (avoidance and/or mitigation measures to be developed)

- Appropriate inventories for sensitive species of vegetation and wildlife shall be conducted prior to site development. If sensitive species are located on sites proposed for development, it may be necessary to exclude disturbance, develop mitigation measures, and/or avoid the species.

WILD HORSES AND BURROS

1. Controlled or Limited Surface Use (avoidance and/or mitigation measures to be developed)

- If wild horse or burro populations are located on sites proposed for development, it may be necessary to avoid and/or develop mitigation measures to reduce adverse impacts to horses and/or burros. These measures may include providing alternative water sources for horses and/or burros of equal quality and quantity.

CULTURAL RESOURCES

1. No Surface Occupancy

- No surface occupancy within the setting of National Register-eligible sites where integrity of setting is critical to their eligibility

2. Controlled or Limited Surface Use (avoidance and/or mitigation measures to be developed).

- All surface disturbing activities proposed after issuance of the lease are subject to compliance with Section 106 of the National Historic Protection Act (NHPA) and its implementation through the protocol between the BLM Nevada State Director and the Nevada State Historic Preservation Officer.

NATIVE AMERICAN CONSULTATION

1. No Surface Occupancy

- No surface occupancy within the setting of National Register-eligible Traditional Cultural Properties where integrity of the setting is critical to their eligibility. Applicable to the following leases:
 - NVN-066742 – T25N, R35E – Secs. 13 & 35
 - NVN-974854 – T25N, R36E – Secs. 07 & 18
- 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. Applicable to the following leases:
 - NVN-066270 – T34N, R26E – Sec. 31
 - NVN-073698 – T29N, R36E – Secs 1, 2, 11, 12
 - NVN-074300 – T40N, R28E – Secs 16 & 21
 - NVN-074306 - T46N, R28E – Sec. 13
 - NVN-074881 – T27N, R40E – Secs 28 & 29

- NVN-074881 – T27N, R40 E – Secs 32 & 33
 - NVN-074656 – T41N, R41E – Secs 19 & 20
 - NVN-074276 – T32N, R38E – Secs 25 & 36
 - NVN-074276 – T32N, R39E – Sec 30
 - NVN-074304 – T32N, R28E – Sec. 13
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- All development activities proposed under the authority of this lease are subject to the requirement for Native American consultation prior to BLM authorizing the activity. Depending on the nature of the lease developments proposed and the resources potentially affected, Native American consultation and mitigation measures to avoid significant impacts could significantly extend time frames for processing authorizations for development activities and change the ways in which developments are implemented.

HAZARDOUS MATERIALS/WASTE AND SOLID WASTE

- Prior to exploration and development, an emergency response plan will developed that includes contingencies for hazardous material spills and disposal.

PALEONTOLOGY

- Where significant paleontological resources are identified, mitigating measures such as data recovery, restrictions on development, and deletion of some areas from development may be required on a case-by-case basis.