Data Submitted (UTC 11): 11/3/2017 7:00:00 AM First name: Shawna Last name: Theisen Organization: USFWS Title: Comments: Sensitive and listed species:

Plants- The Service performed a preliminary GIS review for state listed and T,E,&C plants in all proposed parcels. Only whitebark pine (a candidate species), is likely to occur in about 15-20 parcels. However, some rare plant species occur in proposed parcels. Parcel 5 has Astragalus robbinsii var. occidentalis (Lamoille Canyon milkvetch). Also, there are some species on the edges of parcels, but not inside them. Eriogonum kingii (Ruby Mtn buckwheat) occurs outside of parcel 69. Silene nachlingerae (Nachlinger catchfly) and Botrychium crenulatum (dainty moonwort) occur just outside parcels 88 & amp; 90. The Forest likely has other rare plant occurrences based on some endemics found in that area.

Lahontan cutthroat trout (ESA-listed as threatened) - Known and potential occupied streams occur in or in close proximity to Parcel numbers 92, 97, 102, 108, 105, 113, 116, 38, 35, 51, 53, 78, 77, 87, 89, 91, 85, 43, 88, 93, 98, 45.

Columbia spotted frog - Know sites occur in or in close proximity to Parcel numbers 91, 96, 101, 5, 49.

Sage-grouse - All parcels occur in delineated sage-grouse habitat (i.e., PHMA, GHMA, or OHMA). The majority of the parcels (3/4) are designated PHMA with remaining parcels approximately split between GHMA and OHMA. A number of Parcels (~ 1/3-1/2) are within 3.1 miles of know lek sites.

This federal action will occur on National Forest-managed lands and requires that leases and permits comply with the Forest's Sage-grouse Plan Amendment (FS 2015). However, the BLM has the authority to issue the leasing and applications for permit to drill. Will any leasing authorized through the BLM comply with the BLM's Sage-grouse Plan Amendment (BLM 2015). In other words, will the permits require both FS and BLM requirements?

The letter from the USDA, HTNF, sent on Sept 29, 2017, indicates a subset of stipulations are being considered. Does this mean that not all stipulations listed in the Plan Amendments are included in the environmental assessment and therefore will not be included as part of the permit requirements?

Global direction outlined in Plan Amendments (pertaining to fluid minerals)

The following direction was obtained from the Humboldt National Forest Plan and BLM Resource Management Plan documents, as amended:

FS Plan

GRSG-GEN-DC-002-Desired Condition - Anthropogenic disturbance is focused in non-habitat areas outside of priority and general habitat management areas and sagebrush focal areas. Disturbance in general habitat management areas is limited, and there is little to no disturbance in priority habitat management areas and sagebrush focal areas except for valid existing rights and authorized uses.

BLM Plan

Objective SSS 4: In PHMAs and GHMAs, apply the concept of "avoid, minimize, and compensatory mitigation" for all human disturbance in areas not already excluded or closed, so as to avoid adverse effects on GRSG and its habitat. The first priority will be to avoid new disturbance; where this is not feasible, the second priority will be to minimize and mitigate any new disturbance (Appendices F and I).

MD SSS-1: In PHMAs and GHMAs, work with the proponent/applicant, whether in accordance with a valid existing right or not, and use the following screening criteria to avoid effects of the proposed human activity on GRSG habitat:

A. First priority[mdash]locate project/activity outside PHMAs and GHMAs.

B. Second priority[mdash]if the project/activity cannot be placed outside PHMAs and GHMAs, locate the surfacedisturbing activities in non-habitat areas first, then in the least suitable habitat for GRSG.

In non-habitat, ensure the project/activity will not create a barrier to movement or connectivity between seasonal habitats and populations.

C. Third priority[mdash]co-locate the project/activity next to or in the footprint of existing infrastructure

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.

Select Specific Stipulations:

Will all appropriate stipulations identified in the Plan Amendments be included? Below is the short list:

FS Plan:

GRSG-M-FMUL-ST-089-Standard - In priority habitat management areas, any new oil and gas leases must include a no surface occupancy stipulation. There will be no waivers or modifications. An exception could be granted by the authorized officer with unanimous concurrence from a team of agency greater sage-grouse experts from the Fish and Wildlife Service, Forest Service, and State wildlife agency if:

[bull] There would be no direct, indirect, or cumulative effects to greater sage-grouse or their habitats or

[bull] Granting the exception provides an alternative to a similar action occurring on a nearby parcel and

[bull] The exception provides a clear net conservation gain to greater sage-grouse.

GRSG-M-FMUL-ST-090-Standard - In general habitat management areas, any new leases must include appropriate controlled surface use and timing limitation stipulations to protect sage-grouse and their habitat.

GRSG-M-FMUL-ST-091-Standard - In sagebrush focal areas, there will be no surface occupancy and no waivers, exceptions, or modifications for fluid mineral leasing.

GRSG-M-FMUL-ST-092-Standard - In priority habitat management areas outside of sagebrush focal areas, proposed geothermal projects may be considered if:

[bull] A team of agency greater sage-grouse experts from the Fish and Wildlife Service, Forest Service, BLM, and State wildlife agency advises on project-mitigation measures, including lek buffer distances, using the best available science;

[bull] Mitigation actions are consistent with the Mitigation Strategy; and

[bull] The footprint of the project is consistent with the disturbance protocols identified in GRSG-GEN-ST-004.

GRSG-M-FMUL-ST-093-Standard - In priority and general habitat management areas and sagebrush focal areas, only allow geophysical exploration or similar type of exploratory operations that are consistent with vegetation objectives in table 1a or 1b, as appropriate, and include applicable seasonal restrictions.

GRSG-M-FMO-GL-107-Guideline - In priority and general habitat management areas and sagebrush focal areas to keep habitat disturbance at a minimum, a phased development approach should be applied to fluid mineral operations, wherever possible, consistent with the rights granted under the lease. Disturbed areas should be reclaimed as soon as they are no longer needed for mineral operations.

Lek Buffers

The Forest Service will assess and address impacts from activities using the lek buffer-distances as identified in the USGS Report Conservation Buffer Distance Estimates for GRSG - A Review (Open File Report 2014-1239) http://pubs.usgs.gov/of/2014/1239/pdf/ofr2014-1239.pdf). The lek buffer-distances specified as the lower end of the interpreted range will be applied in the report unless justifiable departures are determined to be appropriate (as subject to applicable laws and regulations, such as the General Mining Act of 1872, as amended, valid existing rights, etc.). The Forest Service will use the most recent active or occupied lek data available from the applicable State wildlife agency to determine lek locations. The lek buffers are incorporated as guidelines in the LMP amendments

Disturbance Cap

A 3% disturbance cap in PHMA was established in accordance with the recommendations contained in the NTT Report. Disturbance will be calculated at two scales: first, at a BSU scale, determined in coordination with the applicable State, and second, for the proposed project area. BSUs are geographic units of PHMA that contain relevant and important GRSG habitat. BSUs are used solely for the calculation of anthropogenic disturbance cap and in some LMP amendments, the adaptive management habitat triggers.

If the 3% anthropogenic disturbance cap is exceeded on lands (regardless of land ownership) within PHMA in any given BSU, no further discrete anthropogenic disturbances (subject to applicable laws and regulations, such as the General Mining Act of 1872, as amended, and valid existing rights) will be permitted on NFS lands within PHMAs in that BSU until the BSU is below the cap.

Discretionary activities that might result in disturbance above 3% at the Biologically Significant Unit and proposed project area would be prohibited unless approved by the forest supervisor with concurrence from the regional forester after review of new or site-specific information that indicates the project would result in a net conservation gain at the Biologically Significant Unit and proposed project area scale.

BLM Plan:

MD MR 1: Review Objective SSS 4 and apply MDs SSS 1 through SSS 4 when reviewing and analyzing projects and activities proposed in GRSG habitat.

MD MR 3: In PHMAs outside of SFA, no waivers or modifications to an oil and gas lease no-surface occupancy stipulation will be granted. In PHMAs, the Authorized Officer may grant an exception to an oil and gas lease no-surface-occupancy stipulation only where the proposed action:

i. Will not have direct, indirect, or cumulative effects on GRSG or its habitat; or,

ii. Is proposed to be undertaken as an alternative to a similar action occurring on a nearby

parcel, and will provide a clear conservation gain to GRSG.

Exceptions based on conservation gain (ii) may only be considered in (a) PHMAs of mixed ownership where federal minerals underlie less than fifty percent of the total surface, or (b) Areas of the public lands where the proposed exception is an alternative to an action occurring on a nearby parcel subject to a valid federal oil and gas lease existing as of the date of this RMP amendment. Exceptions based on conservation gain must also include measures, such as enforceable institutional controls and buffers, sufficient to allow the BLM to conclude that such benefits will endure for the duration of the proposed action's impacts (see Appendix G).

MD MR 5: In GHMAs, manage oil and gas and geothermal fluid minerals with moderate constraints,

timing limitations, and controlled surface use stipulations (see Appendix A; Figure 2-4).

MD MR 6: In PHMAs and GHMAs, allow only geophysical exploration that does not crush sagebrush or create new or additional surface disturbance. Examples of technologies that may meet this requirement are drilling methods using helicopters, articulated rubber-tired vehicles that leave no trace, and vibroseis geophysical operations on roads and bladed shoulders.

MD MR 7: Prohibit surface shot methods in PHMAs.

Other thoughts:

Parcel 100 is adjacent to Fish and Wildlife Service land at Ruby Lake National Wildlife Refuge (NWR). Has the NWR been informed of this potential O&G development?