

***TOIYABE CHAPTER OF THE SIERRA CLUB***

***PO BOX 8096***

***RENO, NV 89507***

November 1, 2017

Susan Elliot, Project Lead

U.S. Forest Service District Office

660 S. 12th St., Suite 108

Elko, NV 89801

Dear Ms. Elliot:

This letter contains scoping comments on the planned EA relating to proposed oil and gas leasing in the Ruby Mountains area as shown in your mailed notice of September 29, 2017. These comments are from the Toiyabe Chapter of the Sierra Club, representing about 6,500 members in Nevada and the Eastern Sierra, including some in Elko County. Many of our members have visited the Ruby Mountains and hiked its trails, including backpacking the spectacular Ruby Crest Trail. It is no wonder that national Sierra Club Outings is planning a trip to the Ruby Mountains in the summer of 2018.

We find multiple problems with proposed oil and gas exploration and development in the Ruby Mountains. Exploration and/or production on these parcels seriously threatens Nevada's natural, cultural, and scenic heritage, and its ecological integrity which is difficult to maintain in the nation’s most arid state. We wish the Forest Service to consider our scoping comments as only an early form of engagement on this project should it go forward. Although the national office of the Sierra Club is also submitting comments, we are specifically representing our local chapter’s concerns.

**Several USFWS threatened Lahontan Cutthroat Trout (LCT) streams**

Populations of the threatened Lahontan Cutthroat Trout are known to exist in streams of the Ruby Mountains. Modern oil and gas production rely heavily on fracking processes which require large quantities of water. Where would that water be withdrawn from? What would its effect be on springs and surface streams? What would be the impacts on LCT and other fish populations by oil and gas exploration and/or production?

**Other high-quality fisheries, such as the Ruby Marshes and Ruby Lake National Wildlife Refuge**

Although lying on the opposite side of the Ruby Mountains, there may be impacts on these unique desert wildlife viewing areas. Would there be additional vehicle trips on the east side of the Ruby Mountains, possibly for water hauls?

**Greater sage-grouse protection**

The parcels in this project area overlap significantly with Greater Sage Grouse habitats mapped by the USFS **(**“Greater Sage-grouse Habitat On and In the Vicinity of the Ruby Mountains Ranger District”, https://www.fs.usda.gov/Internet/FSE\_DOCUMENTS/stelprd3856023.pdf**).** The habitats consist of Priority, General, and Other Habitat Management Areas (PHMA, GHMA, OHMA). What will be the likely impacts of proposed oil and gas leasing on these habitats? What are the known leks within these habitats and how can they be impacted by the proposed leasing?

**Game species habitat (deer, antelope, elk, mountain goat, bighorn, Himalayan snowcock)**

The impacts on habitat for game species in particular must be assessed because the Ruby Mountains are a large, intact, ecological area for the preservation of our game species. Healthy habitats for these species support thriving populations. What will be the impact of oil and gas exploration and production on these now largely pristine habitats?

**Inventoried Roadless Areas (IRAs)**

The proposed 54,000 acres of parcels overlap with ~17,000 acres of inventoried roadless areas (~11,000 Pearl Peak area; ~7,000 acres north of Harrison Pass). These areas were classified as having high wilderness value by the Forest Service in 2005 and are strong candidates as additions to the Ruby Mountains Wilderness. These 17,000 acres should be removed from consideration.

**Recreation**

The Ruby Mountains, specifically the proposed leasing parcels, are the site of considerable recreation activities of various sorts. What are the impacts on the use of these lands for traditional recreational activities? People travel to the Ruby Mountains from all over Nevada, and indeed from all over the country, to enjoy the many recreation opportunities that they afford. Not only are they very popular for hikers and tourists, but they are also famous for their excellent hunting, fishing, and back-country skiing. South Fork reservoir, which is near some of the proposed exploration acreage, is famous for its trophy-sized trout as well as bass and catfish.

What will be the impact of oil and gas activities on the quality of their habitat? What are the effects of erosion from increased traffic and movement of equipment, trucks, etc., on both the aesthetics and water quality of the area in regard to recreation?

**Scenic impacts from valleys and ridge-tops**

Possible oil and gas field development could have considerable impact on the visual resources of the Ruby Mountains. As one of Nevada’s highest ranges, the Ruby Mountains afford the sight of many elevation regimes, from desert hills to alpine ridges and peaks, typically snow-capped for over half the year. Looking down from high trails, the hiker or backpacker may see the effects of exploration and/or development: roads, drilling pads and equipment, holding ponds, etc.

**Fugitive dust**

It is well known that all land development projects in the West are exacerbating the levels of airborne dust across the region. What will this project add to the cumulative impacts across the West? The prevention of fugitive dust is treated in *Emission Reduction Techniques for Oil and Gas Activities* (U.S. Forest Service, 2011).

**Air pollution**

Obviously, the incremental increase of diesel and gasoline powered engines’ usage to carry out the energy-intensive work of oil and gas exploration and/or production raises the air pollution levels in the surrounding area. Northeast Nevada has some of the nation’s cleanest air. What will be the effect of robust oil and gas development in the Ruby Mountains on air quality? These types of emissions are also treated in the above document named under **Fugitive Dust**.

**Cultural areas of Native Americans**

We respect and support the traditional cultural use areas and associated activities of the Te-Moak Tribe of Western Shoshone within or near the proposed lands. How will these be impacted by oil and gas exploration and/or development?

**Some parcels are directly adjacent to South Fork Reservation**

The South Fork Reservation of the Te-Moak Tribe of Western Shoshone lies adjacent to some of the parcels of this project area. They would be disproportionately impacted by activities associated with oil and gas development, specifically dust, noise, water pollution, air pollution, all of which will go beyond the boundaries of the parcels. Any analysis of the project must include environmental justice factors in relation to the socioeconomic status of this tribe.

**Economic impact**

Given that many exploration and testing activities for oil and gas have occurred in Nevada in the past 50-75 years without any significant reported success, except perhaps in Railroad Valley, is any proposed gain in economic benefit really plausible? Thousands of acres in Nevada have already been impacted by fruitless oil and gas exploration and testing. What are the economic drawbacks of these failures in relation the economic benefits of keeping the Ruby Mountains pristine? Are the Ruby Mountains likely to be more valuable in their present state than marred by oil and gas activities?

**The case for an EIS**

We do not believe that an EA is adequate for this important assessment. In a previous assessment of oil and gas leasing on USFS land in White Pine, Nye, and Lincoln Counties (*White Pine & Grant-Quinn Oil and Gas Leasing Project FEIS, 2007*), the EIS was applied. Regardless of the disparity in sizes of the project areas (54,000 acres for the Ruby Mountains versus 519,000 acres for the White Pine, Nye, and Lincoln Counties), the overlap of environmental concerns is nearly total. Nearly every issue in the former EIS has a corresponding issue in this new proposed project area.

At the time of the 2007 White Pine and Grant-Quinn EIS, not nearly enough was known of adverse effects of fracking in oil and gas development. These adverse effects mainly take the form of induced seismicity and water contamination. The case for induced seismicity has been adequately made across the eastern and central United States (https://www.scientificamerican.com/article/drilling-for-earthquakes/) and more recently in California (https://eos.org/articles/how-to-trigger-a-massive-earthquake?utm\_source=eos&utm\_medium=email&utm\_campaign=EosBuzz102017). The case for water pollution has been documented in the EPA report on fracking and water (https://cfpub.epa.gov/ncea/hfstudy/recordisplay.cfm?deid=332990). Both of these are very real threats that were not considered in the 2007 EIS. The uncovering of these threats since that time supports the need for an EIS in the present case. What is the earthquake risk? What are the aquifer contamination risks? Only the deep dive of an EIS can answer these questions.

Moreover, USFS must consider a no-leasing alternative, and should fully explore the impacts of all alternatives allowing leasing to move forward in whole or in part. We do not believe that fossil-fuel developments in Nevada are necessary or cost-competitive as a whole when all the externalities are assessed. This is in the context of a broad national energy policy as well as the narrower Nevada framework. The futility of the fossil fuel development in Nevada is shown by the status of that industry in Nevada today. In all its history, Nevada has only had about 100 producing oil wells and only a few gas wells. There are currently no producing gas wells in Nevada and only a few oil wells. Together, these Nevada oil wells accounted for only 0.008% of the total nation’s oil production in 2016, a minuscule amount, the latest full year for which the US Energy Information Administration had data (https://www.eia.gov/dnav/pet/pet\_crd\_crpdn\_adc\_mbbl\_a.htm) at the time of this writing. The Nevada oil production amounted to 1.7 \* 106 gigajoules in 2016 (see Appendix). During the same year in Nevada, solar power farms produced 7.4 \* 106 gigajoules and geothermal power plants produced 10.9 \* 106 gigajoules. It is patently erroneous to think that Nevada fossil-fuel production is needed for this state or for the nation as a whole. Solar generation in particular is ramping up fast to make fossil fuel production look even less consequential in this state.

The USFS must take a hard look at alternatives to fossil-fuel development, and an EIS is the correct medium to support that process. These alternatives (solar and geothermal) are already working in Nevada to produce quantities of energy that dwarf fossil-fuel production in the state.

**Status of the Forest Management Plan**

In addition, the Forest Service has not updated their Forest Management Plan for this forest (Humboldt-Toiyabe National Forest) since 1986—before sage grouse protection assessments, before our greater awareness of climate change, before growing recreation activities, before increasing wildfire risk, before awareness of the adverse effects of fracking, etc. Any Environmental Assessment performed would be flawed and subject to legal redress unless the Management Plan were updated. At minimum, the Forest Service must produce a full EIS to evaluate the impacts of the proposed leasing.

Respectfully yours,signature.tiff

David von Seggern, Chair

Toiyabe Chapter, Sierra Club

**Appendix**

**Conversion of barrels of oil to energy equivalent:**

277, 000 barrels of oil produced in 2016 in Nevada

\* 6.032 \* 106 BTU/barrel

\* 1.055 \* 103 joules/BTU

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1.76 \* 1015 joule = 1.76 \* 106 gigajoule

**Computation of solar and geothermal inputs to the NVEnergy power grid:**

From NVEnergy filing with PUCN in 2017 (http://pucweb1.state.nv.us/PDF/AxImages/DOCKETS\_2015\_THRU\_PRESENT/2017-3/19712.pdf)

sum of Sierra Pacific and Nevada Power solar energy generation = 2,049,475 MWh = 7.4 \* 106 gigajoule

sum of Sierra Pacific and Nevada Power geothermal energy generation = 3,034,809 MWh = 10.9 \* 106 gigajoule

total (solar + geothermal) = 18.3 \* 106 gigajoule