

November 30, 2021

Board of County Commissioners
Sublette County
PO Box 250
21 S. Tyler
Pinedale, WY 82941



Re: Jackson Fork Ranch Rezoning Application

VIA Email: Commissioners@sublettewyo.com , carrie.long@sublettewyo.com ,
doug.vickrey@sublettewyo.com , joel.bousman@sublettewyo.com , sam.white@sublettewyo.com
dave.stevens@sublettewyo.com tom.noble@sublettewyo.com

Dear Commissioners:

I reside in the Bondurant area. My family and I have been acquiring land parcels here to place in a conservation easement for long term protection of wildlife habitat. A principal reason for investing here was the familiarity we have with the area from decades of exploring the mountains, its important wildlife values, and the vision of Sublette County to preserve open space and wildlife values. **We are submitting these comments in opposition to the requested zoning change for the Jackson Fork Resort. Approval of this application adversely affects our interests in wildlife and quiet environments.**

Our Background

I am an engineer and ecologist that worked as an environmental consultant to industry and government for a living. My family and I have established a wildlife preserve in SE Idaho, [Kiesha's Preserve](#). We have worked since 1993 to acquire this land, restore and protect it for the many species that need the habitat including deer, elk, moose, sage grouse, cutthroat trout, and others. Soon, a 20-year effort to restore the native cutthroat trout fishery there will be accomplished. We have protected most of that land in a conservation easement. In our efforts to protect and restore habitat and provide security for wildlife, we have directly experienced the adverse effects of the noise, dust, air pollution generated by vehicles, both on and off-road speeding through the area. We suffer trespassers, poachers and vandals as traffic has increased over the years. This traffic is a burden on the county road maintenance and law enforcement. Long term residents can no longer enjoy the mountains and valleys. The roads are unsafe due to speeding vehicles, including atvs, utvs, and dirt bikes.

In 2019, following the Roosevelt Fire, my family and I surveyed possible areas to expand Kiesha's Preserve into Wyoming. We settled on parcels in the Hoback Ranches area. We are engaged in restoring habitat and plan to place these parcels into a conservation easement to protect the habitat.

The Applicant

Being familiar with the Upper Hoback River Valley, the scenic beauty and wildlife values there, we investigated the ownership and current management of the proposed development. We learned that most of the private land is under ownership of the Jackson Fork Ranch which is an LLC with an address at 1395 S Platte River Drive, Denver. It is described as General Farms, Primarily Animals.¹ The land is classified as agricultural and appears to be used for raising bison.

We learned Mr. Joe Ricketts owned this property, so we looked up his [Rickett's Conservation Foundation](#). The Rickett's Conservation Foundation works to protect wildlife species, including in our area here. Given the high value wildlife habitat occurring in the project area, it would seem the proposed Resort conflicts with the values of the Rickett's Conservation Foundation. Mr. Ricketts & Family are listed as [No. 273](#) of Forbes 400 wealthiest Americans at \$4.6 billion in assets. We would urge the Rickett's to place the Jackson Fork Ranch in a conservation easement as many ranchers in our area have done, receiving compensation for doing so. This can be done through various entities such as the [Conservation Fund](#), [The Nature Conservancy](#), [The Jackson Hole Land Trust](#), [Natural Resources Conservation Service](#), [Wyoming Stockgrowers Land Trust](#) and others.

Intent of County Values and Regulations Not Met

We have reviewed the Sublette County Regulations and Vision statements. This change in zoning of 56 acres of the Jackson Fork Ranch property from A-1 (Agricultural) to RS-1 (Recreational Service) would result in impacts that are incompatible with the values contained in the County Vision and regulatory intent. **Below we summarize those values that the application does not adequately address and that the Resort, if allowed, cannot meet.**

- Preventing development which is incompatible with existing and historic land uses
- Our environment shall reflect the high value Sublette County residents place on clear air and water; the wide open, rural landscape
- Plan and locate new developments carefully to avoid excessive costs in providing public services
- Encourage conservation of agricultural and ranch lands
- Locate commercial properties in or near existing towns and/or near other commercial property
- Consider site-specific environmental features such as wildlife habitat and migration routes
- Encourage migratory routes be kept open or established/reestablished where possible, to assist in maintaining game populations

¹ <https://www.buzzfile.com/property/1395-S-Platte-River-Dr-Denver-CO/7FF17F98F3>

- Manage recreational growth in a manner sensitive to and consistent with community values and character of the area
- Evaluate private development plans, proposals, and decisions for potential impacts on public lands/resources
- Recognize and value the historical significance of agricultural lands and uses
- Encourage the preservation of working agricultural/ranching landscapes
- Manage recreational growth in a manner sensitive to and consistent with community values and character of the area
- Consider migration corridors, crucial winter ranges, and other important habitats when evaluating land use proposals. In some cases, the migration corridors that link summer and winter ranges are already tightly constricted. These areas are recognized as being very sensitive and their integrity should be protected.

The Application and Biota Report

As parties interested in preserving open space, quiet environments, and wildlife habitat, we reviewed the Natural Resources Analysis and Wildlife Habitat Assessment (Biota Report) provided by the Applicant.² The analysis contained in the Biota Report understates the many issues with this proposed Resort. Some of these inadequacies are summarized below and are referenced to the related sections of the Biota Report.

- 1. Watercourses and Wetlands.** These sections of the Biota Report describe ephemeral drainages leading from the elevated alluvial terraces and slopes above the Hoback River where the development will take place.
 - a. The Biota Report does not analyze the effects of the development, its roads and disturbed soils on runoff, groundwater, and sediment loading to the Hoback River. Sediment in runoff impacts the ability of native fish to successfully spawn by covering and embedding spawning habitats resulting in lowered oxygen content needed by eggs and larvae.
 - b. There should be an analysis of the species of fish and other aquatic organisms present in the Hoback River, their population and conservation status such as threatened, endangered, sensitive species or species of conservation concern.
 - c. Roads and developed areas will alter surface runoff and groundwater recharge. These changes may affect wetlands associated with the ephemeral drainages or other locations downgradient from the project area. An analysis of the potential changes to groundwater elevations and flows as related to any wetlands present should be completed.
- 2. Vegetation.** This section of the Biota Report describes the vegetation in the project area. Figure 4 of the Biota Report shows the steep slopes leading from the terrace to the Upper

² Werlin, K. 2020. Natural Resources Analysis and Wildlife Habitat Assessment Jackson Fork Lodge Project. Biota Research and Consulting, Jackson, Wyoming.

Hoback River Road as well as the open sagebrush area on top of the terrace where the development will take place.

- a. Roads and construction will occur on the steep slopes leading to the increased sedimentation described above. These will become scars on the landscape breaking up aesthetic qualities of the slopes and valley sides.
 - b. The structures on the terrace will be visible for miles and are not in character with the scenic values of the valley. There was no analysis of the visual impact of the development on the open spaces and "wide open rural landscape" the County envisions.
3. **Wildlife.** The Biota Report describes the project area as being within "one of the largest nearly intact temperate zone ecosystems in the world." "The Jackson Fork Lodge project area and vicinity includes some of the most ecologically important lands in the southern portion of the GYE."
 - a. This description alone should give Board of Commissioners pause in considering this change. The area zoning already meets the intent of the County provisions outlined above. Nearly all the species and their habitats identified in the Biota Report are described to suffer negative impacts from the direct and indirect effects of the Resort, including migration corridors and important or crucial habitats.
 - b. Species and habitat impact descriptions are general and do not consider the wide-ranging effects of increased road density, vehicle traffic, and noise resulting from the Resort. There is a significant network of open and unauthorized roads and trails in the National Forest in the vicinity of the proposed resort. Impacts to wildlife from use of these can occur at significant distances from them. There was no analysis of this road network and the increased use due to the Resort. Impacts to the Bridger-Teton National Forest are not analyzed.
 - c. We address species-specific topics in more detail later. Maps are provided at the end of these comments that illustrate the extent of roads in the area relative to the major wildlife species and their important habitats. The following paragraphs are a synopsis of species status and impacts described in the Biota Report. As can be seen, the Applicants own report describes many negative impacts to wildlife.
4. **Rocky Mountain Elk.** The "entire project area is mapped as elk crucial winter yearlong range, and the southern portion is within a mapped elk parturition (calving) area". Elk sign was observed throughout the project area during spring field investigations.
 - a. Impacts to elk are due to reduced habitat and increased human activity on the project area and Upper Hoback River Road. "Elk movements through and around the project area are likely to be disrupted, and elk are likely to avoid habitat proximate to the development area when the lodge is occupied."
5. **Mule Deer.** A "majority of the project area lies within a WGFD-mapped general mule deer corridor, and the northern boundary of the project area lies within a mapped medium-use

mule deer migration corridor". Mule deer sign was observed in the project area in the spring 2020 field investigation.

- a. Impacts to mule deer are by "increasing human activity in the area and increasing traffic on Upper Hoback River Road, but it is not expected to have a measurable effect on the mule deer population."
6. **Shiras Moose.** "The Hoback River Basin provides habitat for the largest population of Shiras moose in the continental U.S." A WGFD study found that "habitat proximate to the Jackson Fork Lodge project area was primarily utilized by moose in the spring and summer months, and they moved to areas north and east of Highway 189/191 to winter." "The project area is mapped within crucial winter yearlong range for moose...it appears that moose in the project area primarily utilize the adjacent Hoback River riparian habitat...in the spring and summer months."
 - a. Impacts to moose are indirect due to the apparent minimal use of the project area. "Indirect impacts to moose from increased human presence within and around the project area and increased vehicular traffic on Upper Hoback River Road are expected to be adverse, minor and long-term."
7. **Pronghorn Antelope.** "The northern portion of the project area has been mapped by WGFD as spring-summer-fall habitat for pronghorn antelope." "WGFD is in the process of designating a pronghorn migration corridor in the vicinity of the project area."
 - a. Impacts to pronghorn are expected to be minor adverse and long-term in nature. "The proposed development will likely negatively impact an unknown number of pronghorn by reducing the availability of spring-summer-fall foraging and cover habitat, increasing traffic on Upper Hoback River Road, but it is not expected to have a measurable effect on the local pronghorn population. Pronghorn movement in the vicinity of the proposed development is currently dispersed. Pronghorn movements through and around the project area may be temporarily disrupted, but they are expected to adapt to the proposed development and adjust their movement and use patterns accordingly."
8. **Greater Sage-Grouse.** "Although there are sage-grouse leks in the vicinity of the Jackson Fork Ranch, the property is not located within a Sage-Grouse Core Area. The project area is approximately 10 miles northwest of the Daniel Core Area." No sage grouse scat was observed during field investigations.
 - a. Impacts to sage grouse are expected to be negligible adverse, long-term impacts due to a "direct loss of 15.5 acres of habitat."
9. **Grizzly Bear.** Grizzly bears are listed as threatened under the Endangered Species Act (ESA) and inhabit the Greater Yellowstone Ecosystem as one of the few grizzly populations in the contiguous US. "The most suitable habitat for grizzly bears occurs in areas with large tracts of undisturbed habitat and minimal human presence." They have been observed in the Upper Hoback Basin.

a. Cumulative impacts to grizzly bears and their habitat were not analyzed.

10. Canada Lynx. Canada lynx are also listed as threatened under the ESA. "The project area falls within designated Critical Habitat for the Canada lynx". "The elevation of the project area and lack of extensive late-seral coniferous forest precludes regular use of the project area by lynx." "...any use would principally occur during dispersal or travel between areas of higher quality habitat".

a. Cumulative impacts to Canada lynx and their habitat were not described.

The Biota Report Omits Consideration of Impacts

The Biota Report describes the 45-room destination resort with a lodge and housing for 23 employees and a likelihood of 100 people on site. While the Biota Report does note adverse impacts will occur, there is not a detailed consideration of the full range of impacts to wildlife, to the County, the National Forest, and current residents. There is a high likelihood of numerous ATVs, UTVs, snowmobiles and other vehicles using the Resort as a base to spread out across the landscape on the Upper Hoback River Road, in Bondurant, and the open and unauthorized roads and trails in the adjacent Bridger-Teton National Forest. As one reads the negative consequences for species after species described in the Biota Report, it becomes clear that this proposed Resort will have major cumulative impacts on wildlife and residents. There will be increased demand for Sublette County services.

Increased traffic, noise, and air pollution. Our wildlife preserve in SE Idaho is a model for what to expect if this rezoning is approved. The Preserve is on a county road that accesses the Caribou NF. We experience heavy air pollution from traffic dust in the summer and snowmobile exhausts in winter. Noise levels from ATVs, UTVs, dirt bikes, and snowmobiles exceed 100 decibels. We have experienced a growth in the number of vehicles to over 400/day in summers. Speeding vehicles are commonplace as campers race up and down the road daily to visit nearby towns and Bear Lake. The road has become unsafe as a result. A graph of noise levels from data we collected in 2013 is shown in Figure 1.

Valleys or canyons are susceptible to air pollution that is trapped along valley bottoms. The Upper Hoback River area and its valley is susceptible to air pollution. An example (Figure 2) from Kiesha's Preserve in SE Idaho where the gravel road is not treated for dust shows the plume trapped in the canyon from a single truck coming up the canyon in the morning. Imagine hundreds of vehicles per day. Superimpose this on the Hoback River Valley.

Particulate pollution from engine exhausts, wildfires, road generated dust and other sources are a major health risk. Figure 3 is a map of the Air Quality Index in the Northwest for this past August 15.³ It reflects the wildfires as well as other sources combined that degrade our air and visual quality. We all experienced the heavy smoke this past summer. Do we want to increase

³<https://wildfiretoday.com/2021/08/15/smoke-forecast-and-air-quality-august-15-2021/>

this with added road generated dust and pollution from engine exhausts in the Hoback River Valley?

EPA describes the health effects of particulate pollution including premature death, cardiac arrhythmias, heart attacks, and respiratory effects such as asthma and bronchitis. Effects can be serious for those with heart or lung disease, older people, and children.⁴ A recent study published in the Journal of the American Medical Association found that current regulatory levels for particulates are not protective for adults aged 65 and over.⁵ For every 10 ug/m³ increase in PM_{2.5} over the course of a summer, mortality in this age group increased 1%. When you consider that today, these summer fires are generating many times this exposure, it is important to do all we can to control particulates. This includes treating gravel roads with chemicals to suppress dust. This costs several thousand dollars per mile and does not control noise. What about the miles of dirt roads in the Forest that would not be treated?

EPA also recognizes that noise pollution affects our lives. Noise increases stress, high blood pressure, speech interference, hearing loss, sleep disruption and lost productivity.⁶ There has been a growing problem in protected areas in recent years. Human generated noise was found to be double background levels in 63% of U.S. protected areas and has caused a ten-fold increase in 21% of protected areas. Protected areas include National Forests such as the Bridger Teton. This results in a reduced ability to hear natural sounds and thereby this reduces the restorative properties of spending time in nature such as in parks or national forests. It also negatively impacts wildlife and can result in changes in species composition.⁷ Federal regulations for highways dictate that if a new or expanded road will yield noise levels of 67 decibels or higher, efforts must be made to bring about a substantial reduction in noise levels. Generally, this involves construction of sound barriers and other mitigation measures⁸.

At the recent County Planning and Zoning meeting, the Biota representative said they would use Best Management Practices (BMPs) to control erosion and sedimentation. The reliance on BMPs is a flawed approach that assumes they work. Ziemer and Lisle (1993)⁹ indicated that there are no reliable data showing that BMP's are cumulatively effective in protecting aquatic

⁴ <https://www3.epa.gov/region1/airquality/pm-human-health.html>

⁵ Lavigne, E., Burnett, R.T. & Weichenthal, S. Association of short-term exposure to fine particulate air pollution and mortality: effect modification by oxidant gases. Sci Rep 8, 16097 (2018). <https://doi.org/10.1038/s41598-018-34599-x>

⁶ <https://www.epa.gov/clean-air-act-overview/clean-air-act-title-iv-noise-pollution>

⁷ Rachel T. Buxton, Megan F. McKenna, Daniel Mennitt, Kurt Fristrup, Kevin Crooks, Lisa Angeloni, George Wittemyer. Noise pollution is pervasive in U.S. protected areas. Science, 2017; 356 (6337): 531 DOI: 10.1126/science.aah4783. <https://www.sciencedaily.com/releases/2017/05/170504161513.htm>

⁸ www.fhwa.dot.gov/environment/htnoise.htm

⁹ Ziemer, R.R., and T.E. Lisle. 1993. Evaluating sediment production by activities related to forest uses--A Northwest Perspective. Proceedings: Technical Workshop on Sediments, Feb. 1992, Corvallis, Oregon. pp. 71-74.

resources. Espinosa et al. (1997)¹⁰ provided evidence from case histories in Idaho that BMP's thoroughly failed to cumulatively protect salmonid habitats and streams from severe damage from roads and logging. In analyses of case histories of resource degradation by stereotypical land management (logging, grazing, mining, roads) several researchers have concluded that BMP's increased watershed and stream damage because they encourage heavy levels of resource extraction under the false premise that resources can be protected by BMP's (Stanford and Ward, 1993¹¹, Rhodes et al., 1994¹² Espinosa et al., 1997). Stanford and Ward (1992) termed this phenomenon the "*illusion of technique*."

Roads and Wildlife. Roads, human activity, and noise fragment habitats by breaking large areas into smaller areas. These smaller areas no longer retain their original functions and begin losing the ability to support many species, especially those that are wide-ranging.^{13, 14, 15} Roads have been shown to have thresholds of density above which species begin to decline or be eliminated. This has been reported to generally be 1 mile per square mile, with effects to some large mammals such as bears at a road density of 0.5 miles/square mile.^{16, 17} Gilbert¹⁸, Noss¹⁹ and Wisdom et al²⁰ describe the detrimental effects of road density and human activity on large mammals causing large displacements away from roads and mechanized activity.

¹⁰ Espinosa, F.A., Rhodes, J.J. and D.A. McCullough. 1997. The failure of existing plans to protect salmon habitat on the Clearwater National Forest in Idaho. J. Env. Management 49(2):205-230.

¹¹ Stanford, J.A., and J.V. Ward., 1992. Management of aquatic resources in large catchments: Recognizing interactions between ecosystem connectivity and environmental disturbance. Watershed Management: Balancing Sustainability and Environmental Change, pp. 91-124, Springer Verlag, New York.

¹² Rhodes, J.J., Espinosa, F.A., and C. Huntington. 1994. Watershed and Aquatic Habitat Response to the 95-96 Storm and Flood in the Tucannon Basin, Washington and the Lochsa Basin, Idaho. Final Report to Bonneville Power Administration, Portland, Or.

¹³ D. A. Saunders, R. J. Hobbs, and C. R. Margules. 1991. "Biological Consequences of Ecosystem Fragmentation: A Review," Conservation Biology 5 (1991): 18-32.

¹⁴ J. R. Strittholt and D. A. DellaSala, Importance of Roadless Areas in Biodiversity Conservation in Forested Ecosystems: A Case Study-Klamath-Siskiyou Ecoregion, U.S.A. 2001. Conservation Biology 15 (6): 1742-1754.

¹⁵ G. E. Heilman, Jr., J. R. Strittholt, N. C. Slosser, and D. A. DellaSala. 2002. Forest Fragmentation of the Conterminous United States: Assessing Forest Intactness Through Road Density and Spatial Characteristics. Bioscience 52 (5): 411-422.

¹⁶ R. P. Thiel. 1985. Relationship Between Road Densities and Wolf Habitat Suitability in Wisconsin. American Midland Naturalist 113: 404-407.

¹⁷ L. D. Mech, S. H. Fritts, G. L. Radde, and W. J. Paul. 1988. Wolf Distribution and Road Density in Minnesota. Wildlife Society Bulletin 16: 85-87.

¹⁸ Gilbert, Barrie K. 2003. Motorized Access on Montana's Rocky Mountain Front. A Synthesis of Scientific Literature and Recommendations for use in Revision of the Travel Plan for the Rocky Mountain Division.

¹⁹ <http://www.wildlandscpr.org/resourcelibrary/reports/ecoleffectsroads.html>

²⁰ Wisdom, M. J., H. K. Preisler, N. J. Cimon, B. K. Johnson. 2004. Effects of Off-Road Recreation on Mule Deer and Elk. Transactions of the North American Wildlife and Natural Resource Conference 69.

The County regulations recognize a duty to consider effects on public lands and resources when considering development plans. This proposed Resort borders the Bridger Teton NF. One of the issues that escapes notice is the occurrence of illegal or unauthorized motorized trails on the National Forests. In our work to protect wildlife migration and security habitat this has been a focus as these roads and trails fragment habitat for all species of wildlife. We obtained geospatial data from the Bridger Teton National Forest showing the extent of these unauthorized routes in the proposed Resort area. Not all roads are included as some are considered closed but remain as corridors of disturbance as people continue to use them. These include temporary, or logging roads which have not been reclaimed. Figures (4 - 9) below show these unauthorized roads and their relation to important habitats and migration corridors for deer, elk, moose, and pronghorn. The maps of wildlife habitat and migration corridors were derived from geospatial data downloaded from the Wyoming Game and Fish website.²¹ The habitats for these animals are already fragmented with these roads. The Resort will result in increased traffic, noise, and disturbance by accessing these roads, thus further degrading the habitat function for these species.

The Bridger Teton NF in its recent Environmental Impact Statement for the Upper Green River grazing allotments describes the Management Indicator Species occurring on the Forest.²² "Twenty-three management indicator species occur on the Forest: seven mammals, four birds, three fish (Colorado River cutthroat trout, Yellowstone/ Snake River fine-spotted cutthroat, rainbow trout), two amphibians, and seven plant species." There was no analysis in the Biota Report for the impacts of the proposed Resort and its visitors' activities, summer and winter use on these species and their habitats. While Canada lynx were described as having critical habitat in the area, there was no analysis of the effects of increased winter snowmobile use in fragmenting habitat for lynx, or for that matter the effects of road density and the Resort on habitat for female lynx home ranges.

The Biota Report did not analyze impacts on grizzly bears while describing them as being present during dispersal or travel between areas of higher quality habitat. There was no analysis of the effects of human use in the area affected by the proposed Resort, particularly off-road vehicle use of the numerous Forest and County roads in the area. The many unauthorized roads and trails will be used by ATVs, UTVs, dirt bikes and other off-road vehicles, destroying security habitat for bears and other wildlife. In winter, denning areas could be impacted by increased snowmobile use by visitors and employees at the Resort. Research has shown that road density negatively affects grizzly bears. A 1993 study concluded that a density of 0.4 km/km² was the highest density compatible with long term bear residency.²³ A more recent

²¹ <https://wgfd.wyo.gov/Wildlife-in-Wyoming/Geospatial-Data>

²² USDA Forest Service. 2017. Upper Green River Area Rangeland Project Final Environmental Statement.

²³ Mattson, D.J. 1993. Background and Proposed Standards for Managing Grizzly Bear Habitat Security in the Yellowstone Ecosystem. College of Forestry, Wildlife and Range Science, Univ. Idaho, Moscow, ID.

study found grizzly bear densities to be much higher in areas below 0.6 km/km².²⁴ A "landscape of fear" exists for bears, with human settlements and human activity having a stress effect on them which raises heart rates and increases energy costs.²⁵ The effects of encounters with humans were evident for 24 - 72 hours while female bears with cubs were displaced by over 2 km.²⁶

The Biota Report describes sage grouse habitat as occurring in the vicinity of the proposed Resort and that several leks also occur in the vicinity. There was no mapping or analysis of the location of those leks, nesting or brood rearing areas related to those leks or possible movement corridors. The Biota Report references the Daniel Core area but omits some critical information relating to the definition of Core Areas and the omission of sage grouse habitat in determination of Management Areas.

A report issued by the US Fish and Wildlife Service in 2013 defined and mapped the historic range of sage grouse that included Wyoming.²⁷ (Figure 10). It also mapped management zones and priority areas for sage grouse conservation. (Figure 11). Through a land use planning process both BLM and the Forest Service amended their land use plans to then define and map Priority, Important and General management areas for sage grouse. These, in turn, relied on mapping analysis by Doherty et al (2010).²⁸ This, in turn, relied upon a memo from the Director of the BLM and Chief of the Forest Service providing recommendations for refining land use allocations for sage grouse.²⁹ Many sage grouse leks and large areas of sage grouse habitat were omitted because of definitions used to describe lek attendance. It is important to note that Doherty based their analysis on maximum lek attendance data collected during the years 2000 - 2009. In some land use plan amendments, occupied leks were defined as only being occupied in years immediately prior to these land use plan amendments.³⁰ This is of concern because many of the impacts to sage grouse had occurred prior to these periods and populations had declined below thresholds for consideration, leks were abandoned, or leks were not consistently monitored. The point of this is that many areas of occupied and suitable habitat for sage grouse are not included in these defined management areas or core habitat. These areas are important

²⁴ Lamb, C.T., Mowat, G., McLellan, B.N., Nielsen, S.E. and S. Boutin. 2016. Forbidden Fruit: Human Settlement and Abundant Fruit Create an Ecological Trap for an Apex Omnivore. *J. Animal Ecology*.

²⁵ Stoen, O., Ordiz, A., Evans, A.L., Laske, T.G., Kindberg, J., Frobert, O., Swenson, J.D., and J.M. Arnemao. 2015. Physiological evidence for a human-induced landscape of fear in brown bear (*Ursus arctos*). *Physiology and behavior* 152: 244-248.

²⁶ Haroldsen, M. and Mattson, D. 1985. Response of Grizzly Bears to Backcountry Human Use in Yellowstone National Park. Interagency Grizzly Bear Study Team, Forestry Sciences Lab, Montana State University.

²⁷ U.S. Fish and Wildlife Service. 2013. Greater Sage-grouse (*Centrocercus urophasianus*) Conservation Objectives: Final Report. U.S. Fish and Wildlife Service, Denver, CO. February 2013.

²⁸ K Doherty et al. 2010. Mapping breeding densities of greater sage-grouse: a tool for range wide conservation planning.

²⁹ BLM and Forest Service. 2014. Memorandum Greater Sage-Grouse: Additional Recommendations to Refine Land Use Allocations in Highly Important Landscapes.

³⁰ Idaho and Southwestern Montana Subregional Greater Sage-grouse RMP Amendments Final EIS

for connectivity and factors such as human activity and road density need to be evaluated. Important references defining the factors such as distance from leks at which impact can occur include the National Technical Team Report (NTT) which notes that impacts to leks can occur up to 11 miles from the lek.³¹ The NTT provide recommendations for monitoring and restoration. These factors should be analyzed for this project, including an analysis of road density in the affected area.

We obtained current sage grouse lek data from Wyoming Fish and Game. Figure 12 is a map we generated showing two occupied leks in the vicinity of the Jackson Fork Ranch and proposed Resort. These may also be connected to the Daniel Core area as the map shows additional leks further southeast in Sublette County. Note the effect of unauthorized roads fragmenting the 2-mile buffers around each lek. Consider that impacts will increase from increased use of these unauthorized roads by Resort visitors and staff. Also consider that the NTT report recommends analysis over a 4-mile radius from leks and that impacts can occur at greater distances.

Conclusion. This proposed Resort, its staff and visitors will displace wildlife who rely on the migration corridors and security habitat that currently exist in the Upper Hoback River Valley and surrounding National Forest. It is likely they will bring ATVs, UTVs, dirt bikes or Snowmobiles with them. Based on our experience at our Idaho wildlife preserve, they will spread out across the landscape, race up and down the Upper Hoback River Road, in the Bondurant area and the Bridger-Teton National Forest. Their noise will destroy the quiet environment that residents have relied upon for decades. There will be impacts on air quality that will exacerbate that which already is occurring.

We sincerely hope the Sublette County Board of Commissioners will deny this rezone request.

Sincerely,



John Carter
Jason Christensen
Kandis Christensen
KM Ranch, LLC
20 Forest Drive
Bondurant, WY 82922

³¹ Sage-grouse National Technical Team. 2011. A Report on National Greater Sage-Grouse Conservation Measures. 74p.

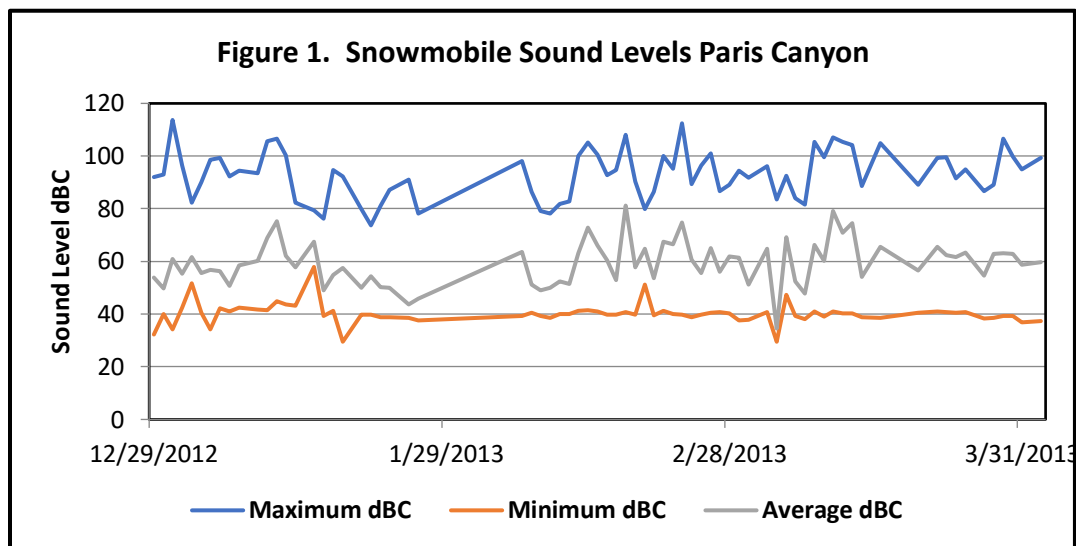


Figure 2. Dust Plume Captured in Valley, Paris Canyon

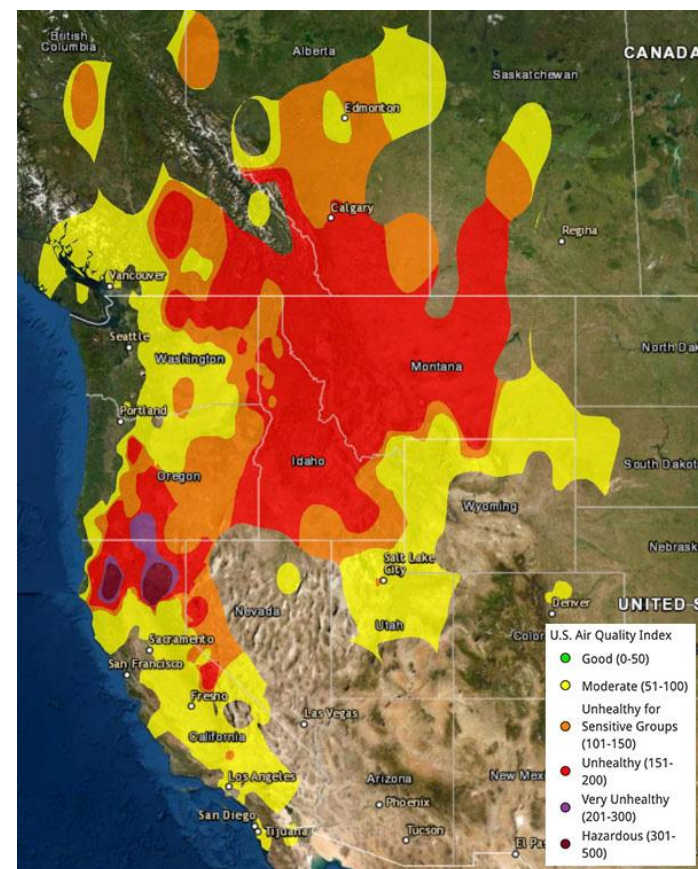


Figure 3. AQI for Northwest August 15, 2021

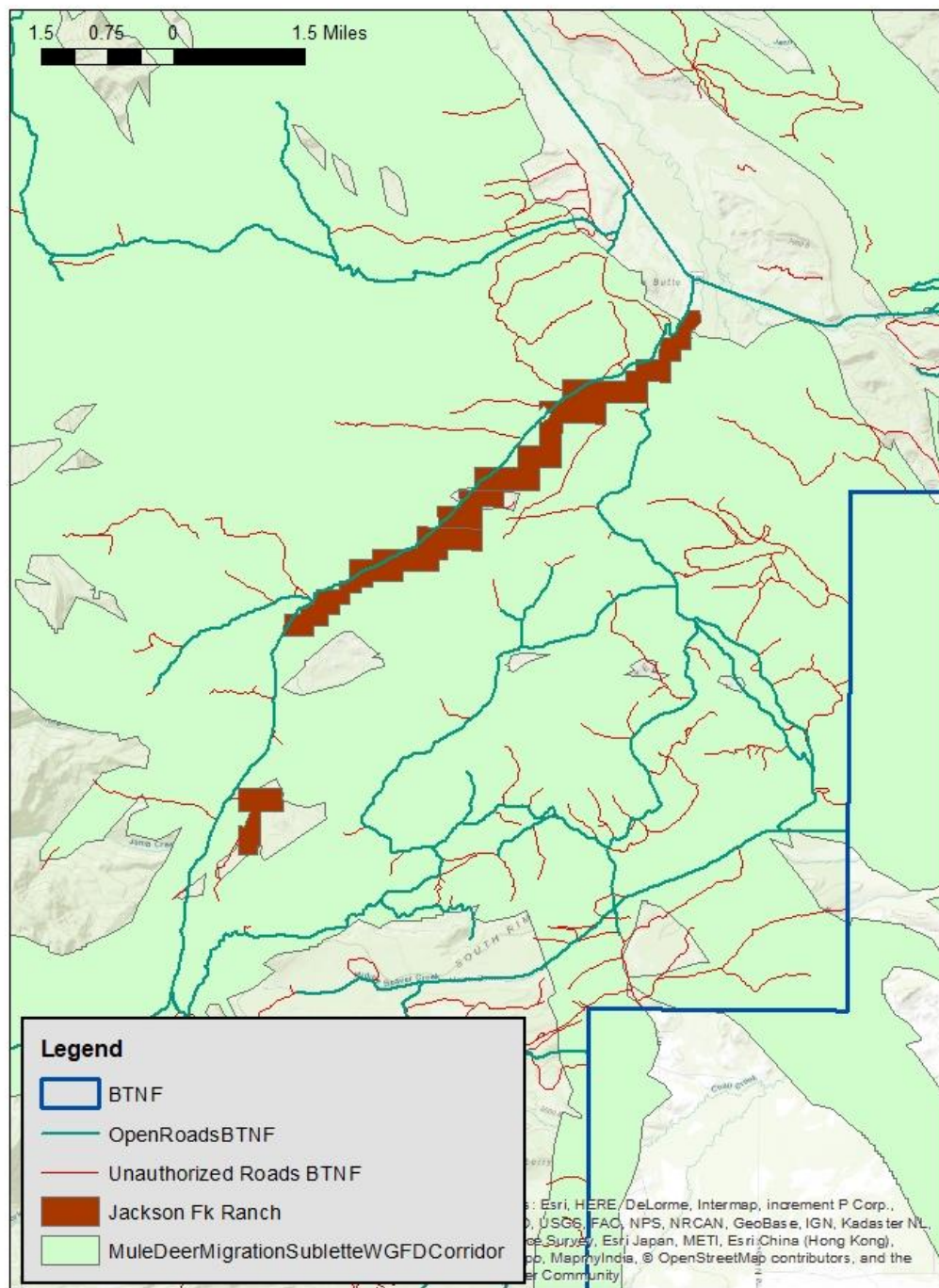
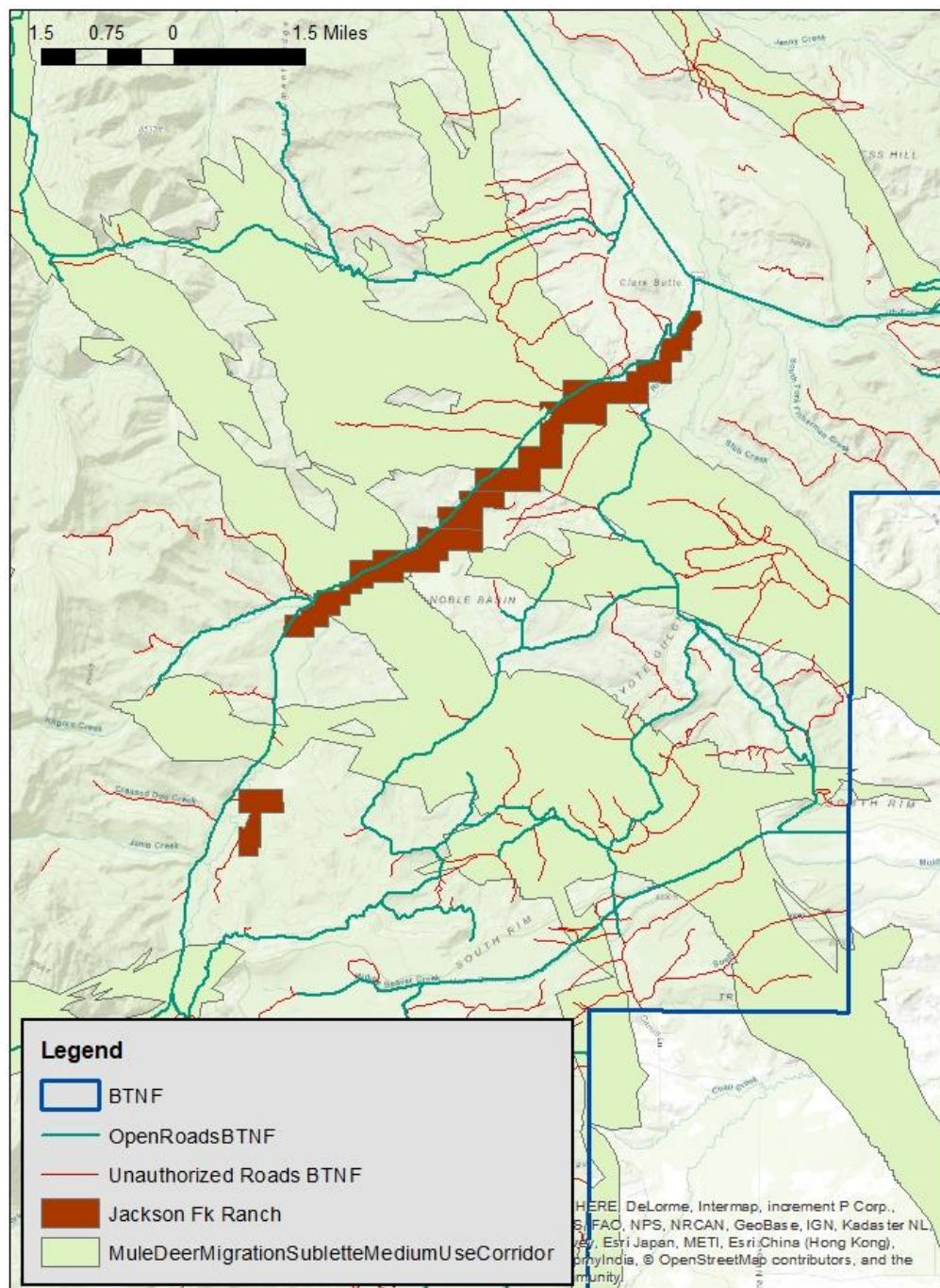


Figure 4. Jackson Fork Ranch, Roads and Mule Deer Migration Corridor



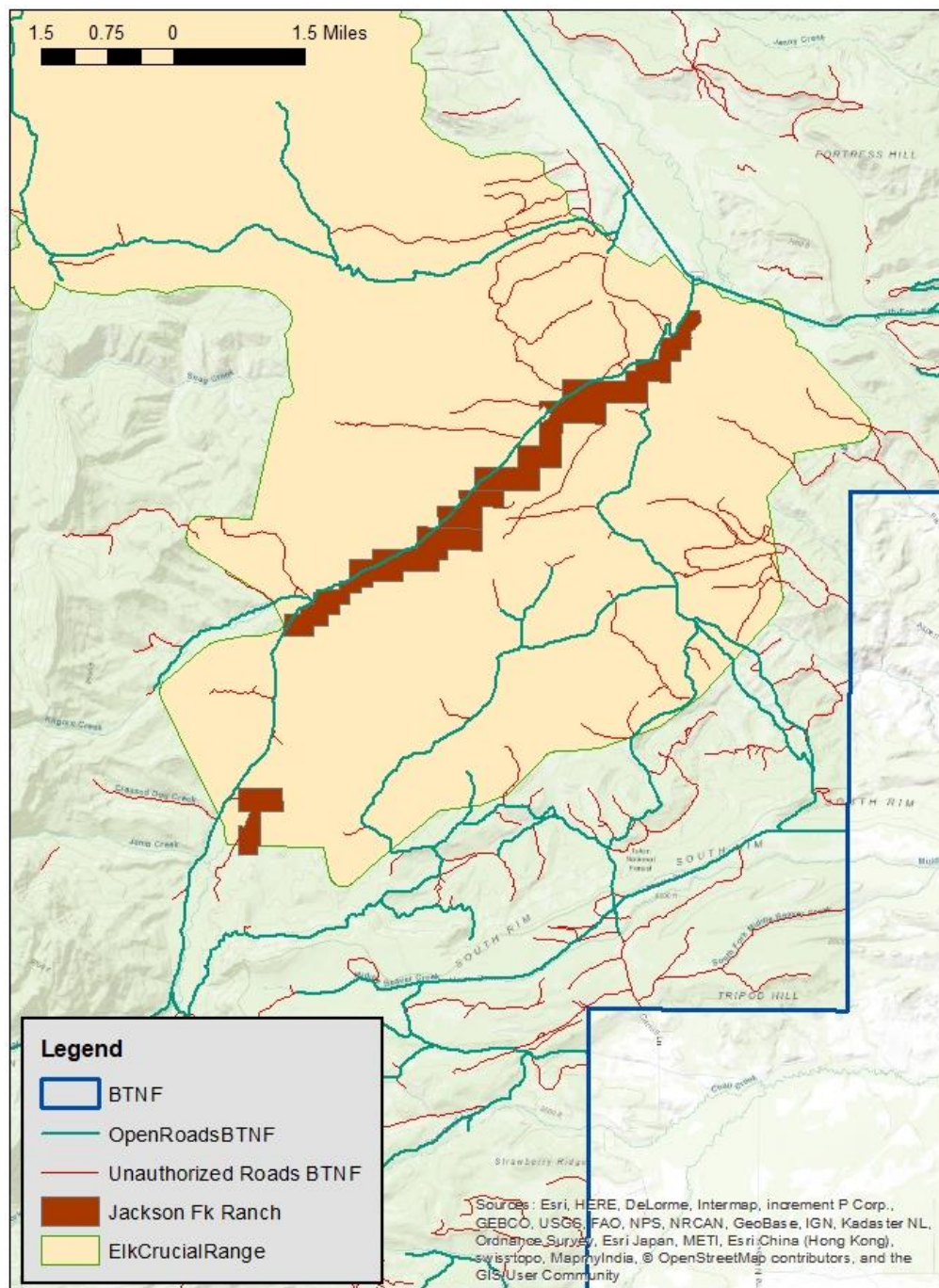


Figure 6. Jackson Fork Ranch, Roads and Elk Crucial Range

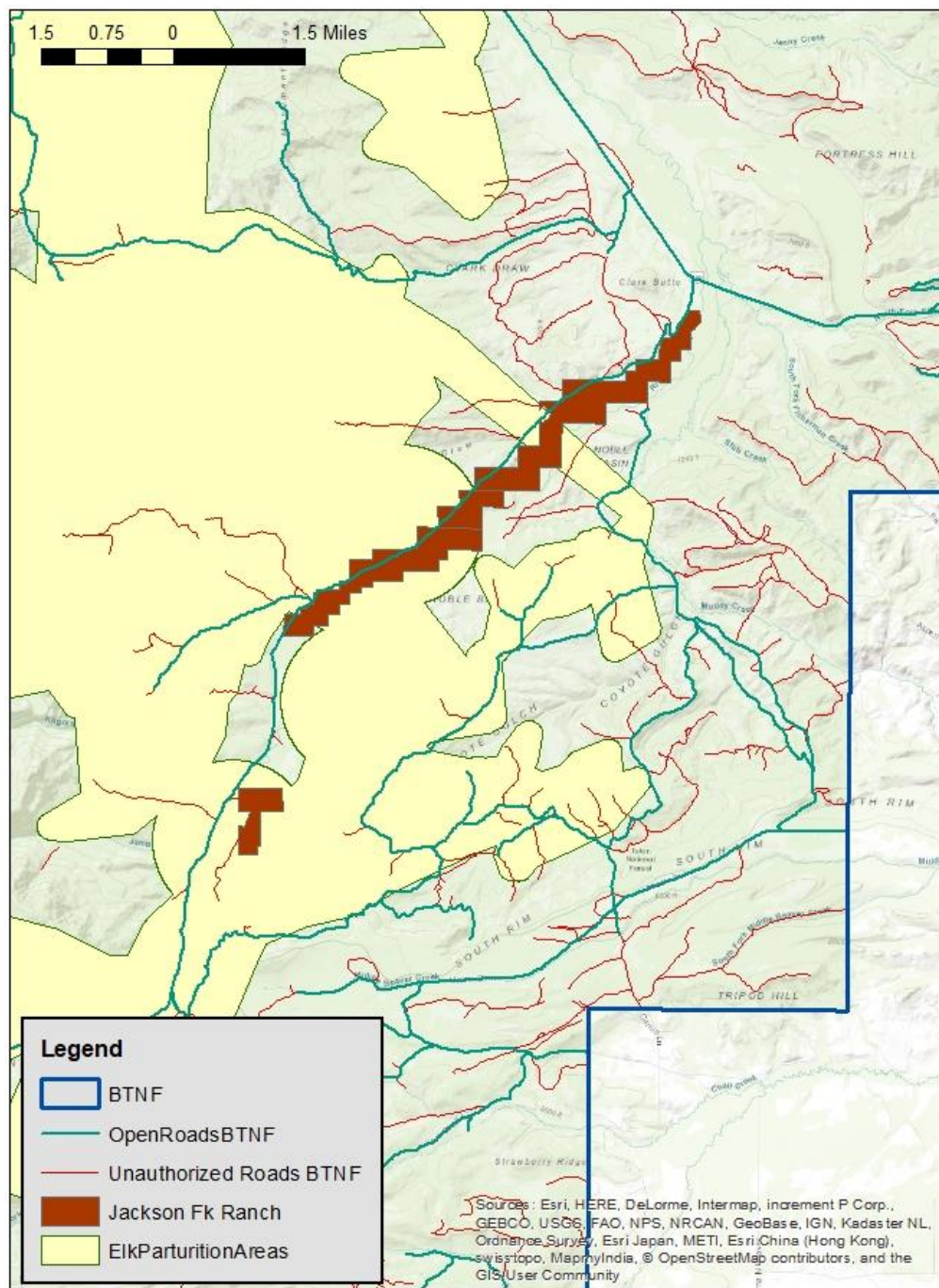


Figure 7. Jackson Fork Ranch, Roads and Elk Parturition Range

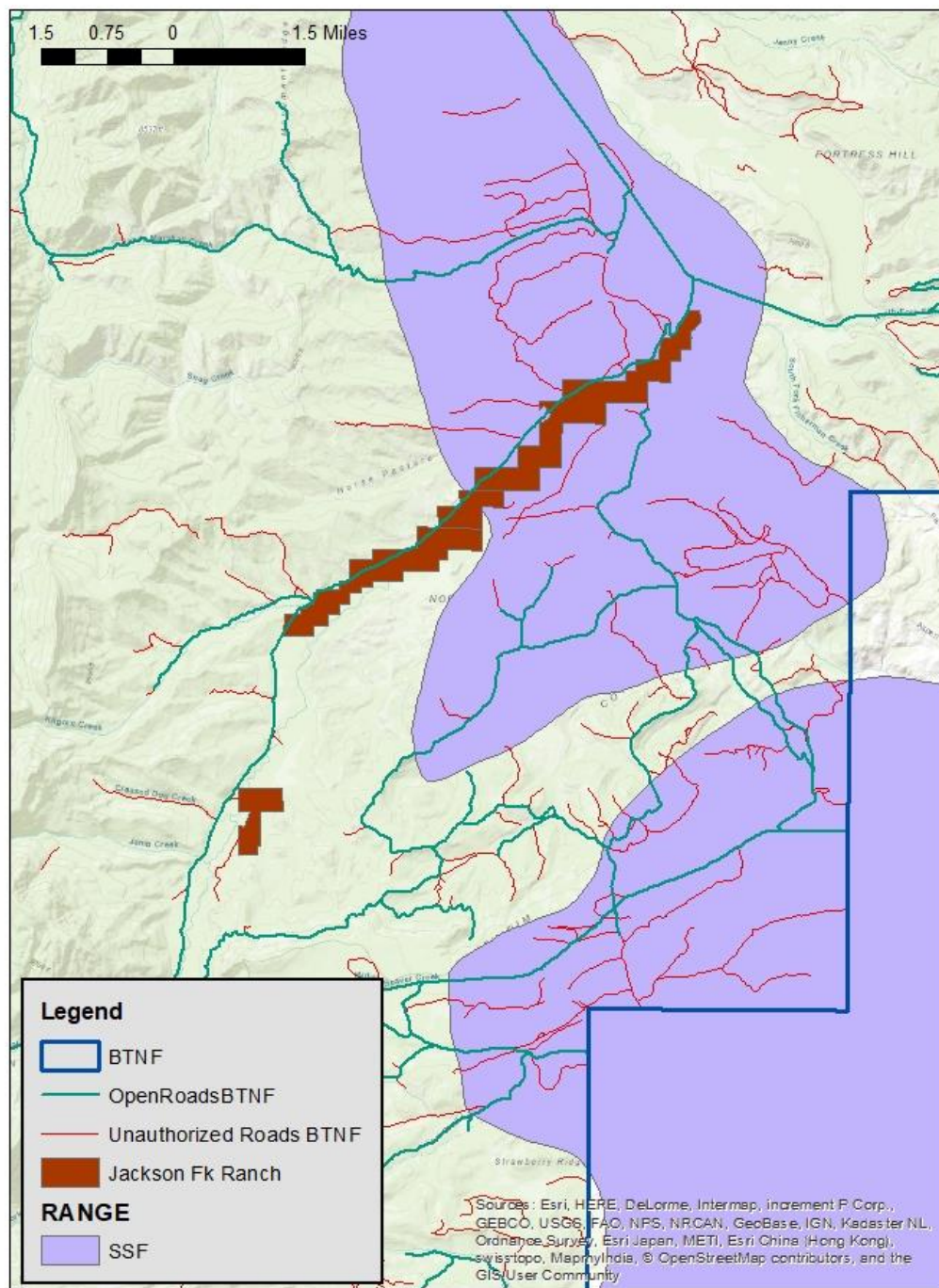


Figure 8. Jackson Fork Ranch, Roads and Pronghorn Spring, Summer, and Fall Habitat

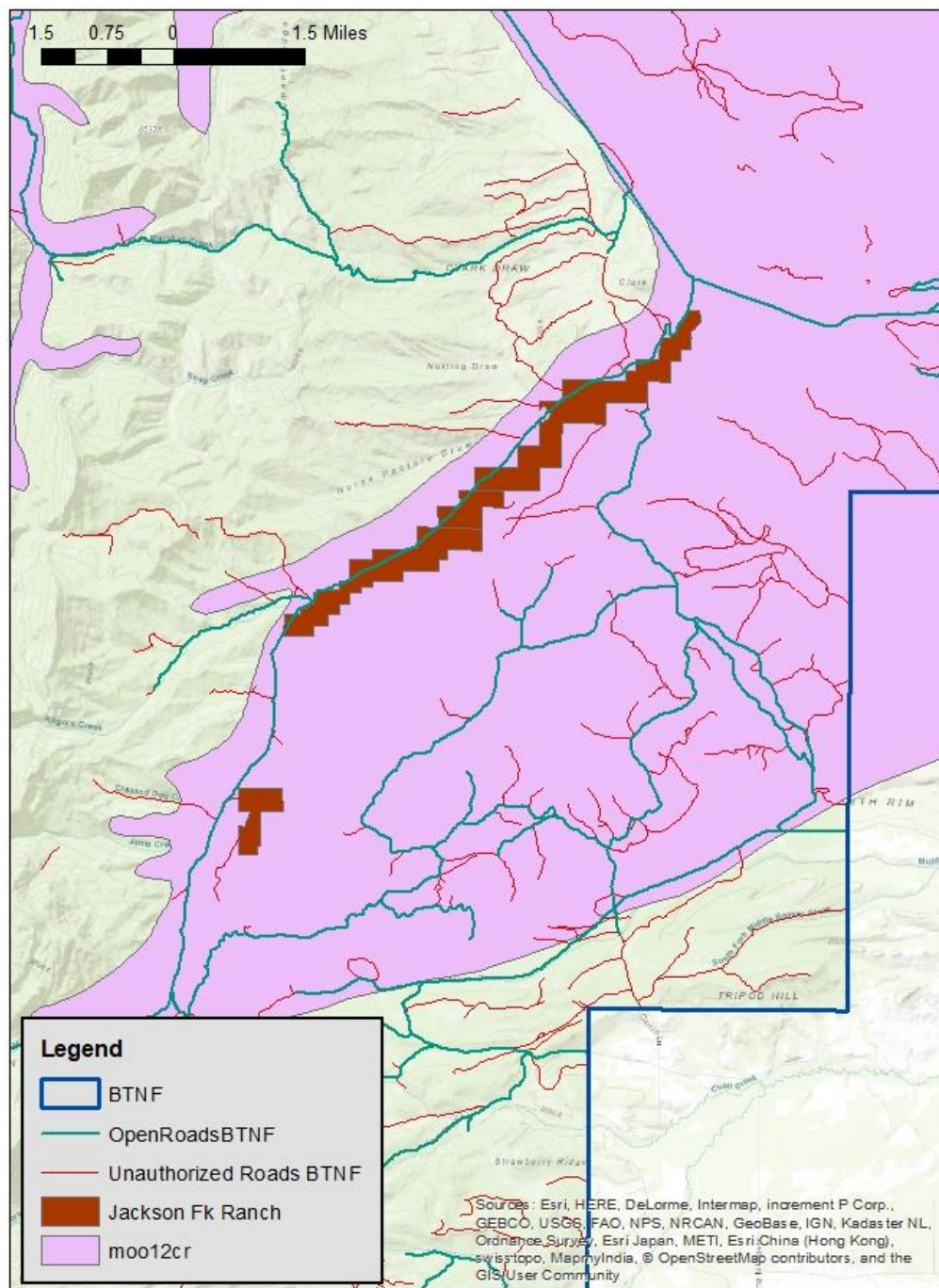


Figure 9. Jackson Fork Ranch, Roads and Moose Crucial Range

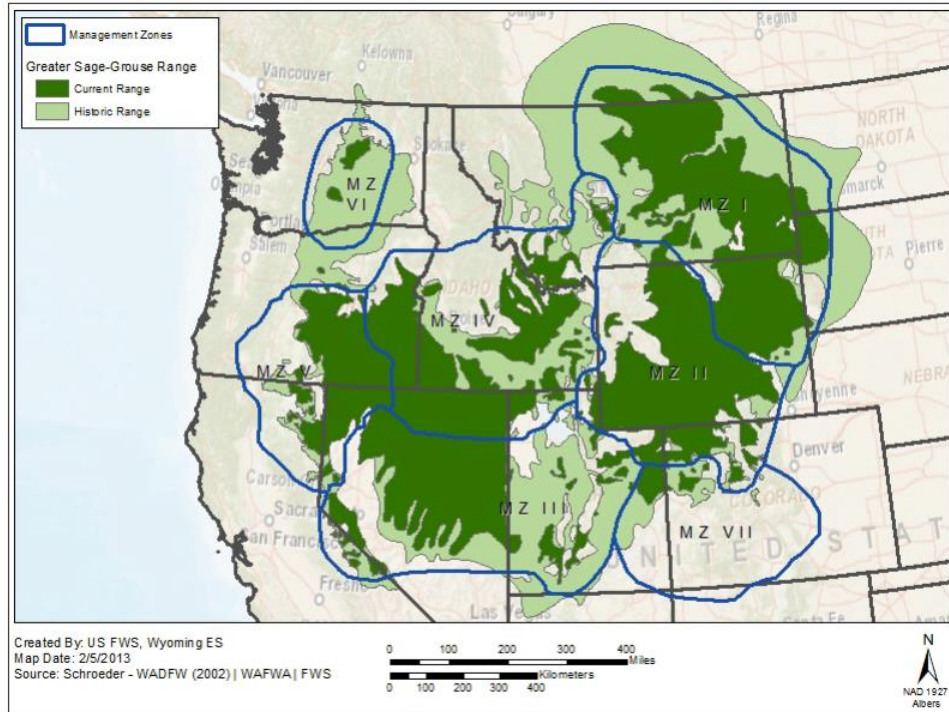


Figure 10. Sage Grouse Current and Historic Distribution from COT Report

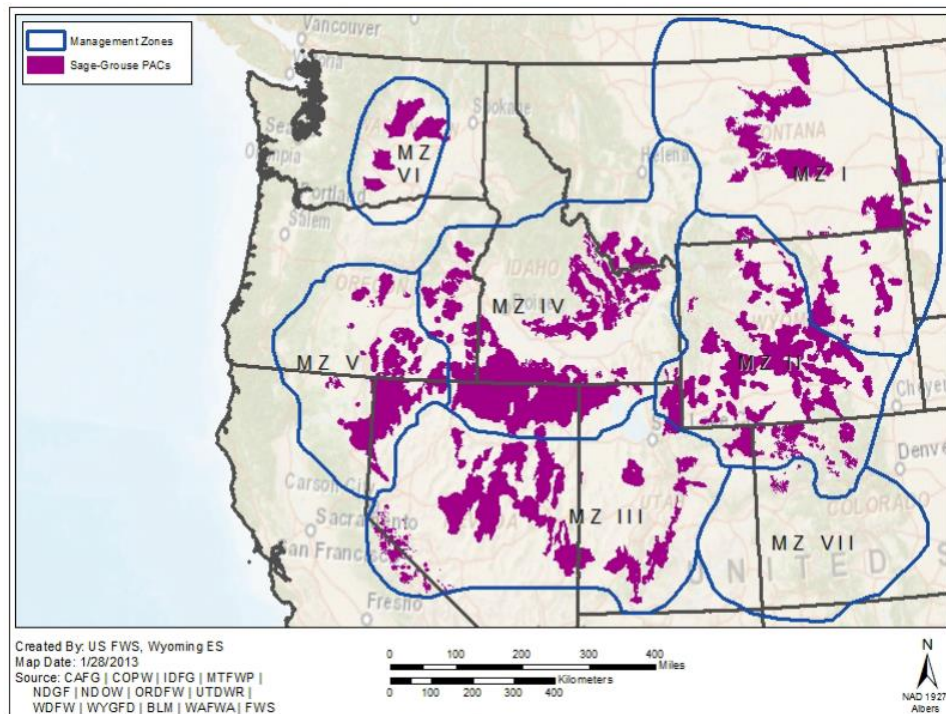


Figure 11. Sage Grouse Management Zones and Priority Areas for Conservation from COT Report

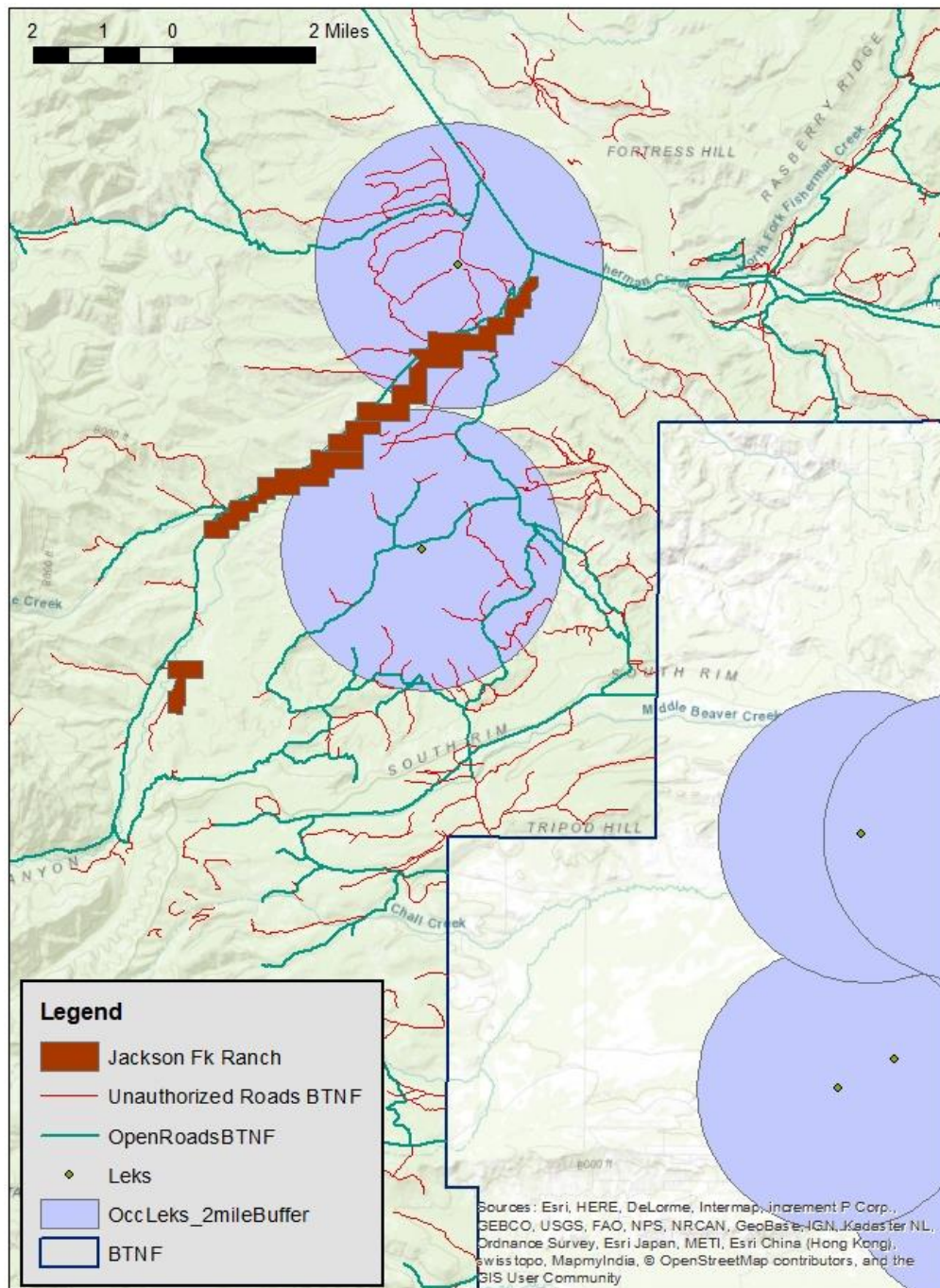


Figure 12. Sage Grouse Leks and 2 Mile Buffer