



June 11, 2019

Public Comments Processing

Attn: FWS-R8-ES-2018-0106 and FWS-R8-ES-2018-0107

U.S. Fish and Wildlife Service, MS: BPHC

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Comments submitted via [regulations.gov](https://www.regulations.gov)

Re: Bi-State DPS of Greater sage-grouse

Thank you for the opportunity to provide comments on the proposed ruling to list the Bi-State distinct population segment (DPS) of greater sage-grouse (*Centrocercus urophasianus*) as threatened under the Endangered Species Act (Act) and to designate critical habitat for that DPS.

Friends of the Inyo is a public lands advocacy organization working to protect and care for California's Eastern Sierra public lands and wildlife. FOI has approximately 1,000 members primarily residing in Mono, Inyo Counties. The Bodie Hills Conservation Partnership is a coalition of organizations working toward the permanent protection of the Bodie Hills, an area with exceptional scenic, cultural, and recreation values located in northern Mono County. Both our organizations are members of the Local Area Working Group (LAWG) and have extensive on the ground knowledge of the DPS and the conservation initiatives implemented by LAWG partners.

Introduction and Background

The U.S. Fish and Wildlife Service (USFWS) has received several petitions to list the Bi-State DPS of sage-grouse, hereafter referred to as BSSG, beginning in 2001. In March 2010, the USFWS determined that listing the DPS as a threatened or endangered species under the ESA was warranted but precluded by higher priority listing actions, and the species was added to the candidate species list.

In 2015 the USFWS published a determination to withdraw the proposed listing of the BSSG as threatened under the Endangered Species Act. This decision was based on

commitments for funding and conservation actions called out in the Bi-State Action Plan and through coordination with members of the LAWG.

The Service considers five factors in determining whether a species or distinct population segment should be listed: (A) the present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. || 16 U.S.C. § 1533(a)(1). (citation....)

As participating members of the LAWG we would like to recognize the ongoing collaboration and exemplary conservation model, knowing it will continue whether the Bi-State sage-grouse (BSSG) is listed or not. We do not take a position on the listing of the species but we remind USFWS that it must take a hard look and consider new science and threats since the agency last reviewed listing.

Existing Land Management Plans

426,000 acres of BSSG habitat are on land managed by the Forest Service. The Humboldt-Toiyabe National Forest (HTNF) completed a Plan Amendment for BSSG in 2016, and it provides strong conservation measures and strategies for BSSG. It however only applies to the Pine Nuts and a portion of the (northern) Bodie Hills PMUs. The Inyo National Forest (INF) is currently revising its Land Management Plan (LMP) with a Final Record of Decision to be released this summer. As a LAWG partner the INF has committed to including plan components for BSSG, but the draft LMP is not consistent with the HTNF amendment, nor does it adequately provide for recovery of the BSSG. For example, the HTNF included a provision for voluntary retirement of grazing permits, which is an effective conservation measure to address threats from grazing to sage-grouse. The INF plan does not include retirement as a conservation measure. Additionally, current science supports the conclusion that there should be no more than 3% surface disturbance per square mile, averaged across a 4.7-mile radius around sage-grouse leks (SGNTT 2011), yet the INF plan fails to include this important conservation measure to their plan. Finally, the Bishop BLM Resource Management Plan is 26 years old and has not been revised to address current conditions, threats, and on the ground effects such as grazing or travel management.

Funding and Coordination

The 2015 decision not to list the BSSG was based on the Bi-State Action Plan (BSAP), which represented a collaborative effort between State and Federal resource agencies and private stakeholders and NGOs, and identified threats to the persistence of the BSSG for the multiple Population Management Units (PMU) that comprise the BSSG. The BSAP outlined conservation strategies and potential management actions designed to mitigate those threats.

The BSAP relies heavily on coordination and cooperation of the LAWG and key private property owners in the implementation of BSSG conservation measures and to utilize

committed funding (\$45 million) as described in the plan. While this is an admirable goal/objective, there are many factors that are outside the control of the agencies and LAWG, and thus after many years we are not seeing recovery of populations. The success of the BSAP and LAWG also depends heavily on funding commitments and cooperation of all partners, including but not limited to land management agencies, private landowners, (especially large landowners such as Los Angeles Department of Water and Power), conservation non-profits, grazing allotment leasees in BSSG habitat, regional governments, and scientists. Unfortunately these commitments are not guaranteed, and some participants have not upheld those commitments. Furthermore, many of the threats to the BSSG remain significant, and new threats have arisen in recent years.

The Action Plan requires significant funding to implement conservation measures. While the agencies have signed new commitment letters of funding, federal land management budgets remain severely underfunded, and line items related to conservation measures and implementation are not guaranteed since the species is not federally listed. There is concern that the most beneficial projects and measures, including in-depth monitoring of on the ground projects are not being adequately funded. For example, it is concerning the agencies are considering discontinuing in depth monitoring of the Pine Nuts PMU because of low lek occupancy. Even if they continue monitoring the Pine Nuts PMU on a rotational basis of every three years, with the crash in this PMU, monitoring should continue indefinitely.

Population Data and Monitoring

Monitoring data from bird surveys over the past 7-10 years still show that almost all of the Population Management Units (PMUs) are still in decline despite the efforts of the LAWG and BSAP. Of the six PMUs the Bodie Hills is the only one consistently considered in “stable” status and not in decline, likely due to the PMUs high elevation and thus buffered from drought conditions. The following is from BSSG LAWG annual reports and the descriptions and reporting info differs slightly from year to year.

“In 2015, population performance, as measured by average male sage-grouse lek attendance within designated Population Management Units (PMUs), decreased by 17.5% from the previous year’s average of 25.1 males per lek in 2014 to 20.7 males per lek in 2015.

“Sage-grouse lek counts conducted in 2016 exhibited a decreasing population trend within the BiState planning area, ... and represented the third year in a row of declines, which is likely attributable to extreme drought conditions experienced since the winter of 2011. In Nevada, the average male attendance rate for comparable leks declined 2.8% from 2015 and was down 17.8% from the 15-year average. The number of strutting males decreased 18.3% from 745 males to 595 males in Mono County, California, in 2016. The decrease was attributed to declines in the core populations of Bodie Hills and Long Valley, which were down 19.0% and 17.5% respectively from 2015.

“In 2017, Mono County, which contains the core of the Bi-State sage-grouse population (within the Bodie Hills and Long Valley portion of the South Mono PMU) total

sage-grouse male attendance declined by 21.7% from 2016. The decrease was most likely attributed to declines in males counted in the Bodie Hills (down approximately 31 percent from 2016) where personnel had limited access due to heavy snow accumulation during the 2016-2017 winter. An approximate 2% decline was exhibited in the Nevada portion of the Bi-State population from a subset of leks consistently counted.” (citations from BSSG LAWG reports 2015-2017).

The below comments are based on review of previous reports and the recent LAWG meeting presentations, but it should be noted that much of this data was presented orally or with handouts and different time scales and formats were used for the six PMUs. This makes it difficult to view and understand the exact data and trends. Also, this data was provided by various agencies and is based on male lek count surveys during the field seasons which does not represent total bird counts or population data. It should also be noted that population modeling appears to have been set up on different schedules for some PMUs, where there are three years of monitoring and three years of “resting” without monitoring. This does not seem to be consistent and is a confusing schedule, especially given population declines and listing consideration. Lastly, since lek survey protocols have changed over the decades, our comments will focus on trends from the recent decade.

Bodie Hills:

The Bodie Hills (BHs) PMU is the only PMU that all agencies describe as stable over time and in recent years, considering various weather events that affected all PMUs. The data show relative stability of the BH lek counts from 2000's with a spike and decline from a wet year cycle around 2010 followed by a drought in 2013 that caused two years of decline. The average mean for Bodie Hills is around 150 males at lek counts as populations have spiked and declined for the aforementioned events. 2010-2013 show upward trends and counts of over 500 birds with a sharp decline following that has been attributed to the 2012-2013 drought year that took a couple years to show up in lek counts. While this population is considered stable, it has also been considered the “source population” for translocations. While the pilot program translocation for Parker Meadows (discussed below) is a worthy endeavor, we are concerned that this could become a trend as other populations continue to significantly decline or crash such as Long Valley. Also, there is well-documented connectivity between the Bodie Hills and Mount Grant PMU's as collared birds have been shown flying between the units.

Fales/ Desert Creek:

The Fales area of the Fales/ Desert Creek PMU appears to have gone from relatively stable to sharp declines in recent years (205 counted in 1963, down to 33 in 2016, 27 in 2017, and down to 5 in 2019). The Desert Creek half of the unit (north eastern half) shows declines since about 2012, presumably because of the drought cycle about that time. There is not enough data and information to understand all of the factors with these trends, but elevation and access to high elevation habitat and potentially less disturbance and development may be part of the differences between the 2 units.

Mount Grant:

The Mount Grant PMU has been doing better than most areas since 2010. Lek counts show that whereas the Mount Grant population declined by 19% from 2016. The effects of drought that occurred from 2011-2015 along with a record-setting winter during 2016-2017 have likely affected annual survival, nest survival and brood survival rates that are ultimately reflected in lek counts.

Pine Nuts:

The Pine Nuts PMU has been in decline and also has not been monitored since 2017. When making choices about which PMUs to monitor, ones with declines should be prioritized. Ideally to help inform a listing review and understand population health as a whole, all PMUs should be monitored on a yearly basis.

The Pine Nuts PMU has shown steep declines: in 2000-2011 the average was 14.1 males. (In 2003 22 males were recorded, in 2008 only 6, in 2009 it was 20, then in 2011 it had 16 males.) Then in 2016 and 2017 there were 10 and 7 males respectively. In 2018 and 2019, it appears no ground surveys were done, but it sounded like an aerial survey in 2019 showed no males, but 12 females. These numbers indicate a strong decline or crashing of this PMU and therefore monitoring and conservation measures should be a priority.

Long Valley (Part of the South Mono PMU):

Recent lek surveys are showing the Long Valley population in steep decline. After the spring irrigation reductions from LADWP in 2018 on their lands in Long Valley, there was a 31% decline in the BSSG male population this year in 2019 lek surveys. The previous three years male count was 152, 158, and 159. This year's male count is 105.

Parker Meadows (Part of the South Mono PMU):

Parker Meadows has been crashing and in sharp decline with a dangerously low number of birds since the 2000s. The population has a 70% chance of extirpation in the next five years based on population viability models. A pilot program to do a 3-year translocation project from the Bodie Hills began implementation in 2017. Birds were captured, collared, and monitored during the translocation to track results since this was the first BSSG translocation project. To date 15 males and 33 females have been translocated from the Bodie Hills.

In the first year (2017), 25 sage-grouse (18 females and 7 males) were translocated from Bodie Hills in the Spring. A high percentage of birds flew back to the Bodie Hills, and a few were lost resulting in improvements in translocation protocols for 2018 and 2019. Only eight (five females, three males) remained at Parker Meadow at the end of the field season. The five females that remained at the site produced three nests which were all successful, yielding two successful broods. Along with the translocation of adults prior to nesting, three hens with broods were also released into Parker Meadows, only one of which was successful to the 50-day post hatch date.

In 2018 and 2019, females were moved with broods in a new release protocol that was a slower “soft” release, allowing the females and chicks to become comfortable with inside a small pen for several hours before all enclosures were removed. This resulted in higher success of females and broods staying together and surviving to the 40 and 50 day monitoring periods. This is the first time brood translocations have ever been attempted in sage-grouse. Overall the brood translocation technique shows some promise for success but is essentially a triage strategy for desperate conditions. It would be useful for the USFWS to consider the future of this program and its capacity through the lens of species listing status.

White Mountains:

The White Mountains PMU includes both California and Nevada habitat within the Inyo National Forest, but the western side is extremely steep and inaccessible due to its high elevation and late season snowpack. INF monitoring of this PMU has been non-existent and USGS monitoring only began in 2018. In March 2019, the U.S. Geological Survey’s field crew will collect data that will be used to investigate habitat selection and areas of utilization, estimate vital rates (e.g., nest, brood, and individual survival), and relate those vital rates to environmental factors, including the presence of specific predators. This is data that will prove helpful in the future to understanding population trends but currently little data exists to inform the USFWS review.

Ongoing Threats and Conservation Measures

Significant threats remain to the BSSG including those described in the BSAP and new threats have emerged since the USFWS reviewed the listing. The BSAP describes several threats from wildfire, predation, invasive weeds, fragmentation, and loss of habitat (sagebrush, meadows, annual plant communities). Although many conservation actions have been taken to address them, these threats still remain.

Wildfire and habitat loss remain a considerable threat to BSSG, especially given their limited range. Since the writing of the BSAP 180,000 acres have burned in the BSSG PMUs, reducing lekking and wintering habitat. Addressing the threat of wildfire has focused around removing pinyon juniper and jeffrey pine vegetation. Restoration efforts post-fire have focused on reseeding with a mix of natives but this is not a conservation measure to reduce the threat of wildfire. The spread of invasive plants such as cheatgrass contributes significantly to wildfire risk, yet only three actions are outlined in the BSAP to combat invasive and noxious species threats.

Predation from ravens, raptors, and coyotes remain a significant threat to the bird. Only small percentages of infrastructure (i.e. six miles of powerline) have been removed from BSSG habitat and PMUs, leaving significant perches for ravens and raptors to utilize to locate and eat BSSG eggs or chicks. Populations of ravens are increasing, especially in PMUs closer to highways, communities and landfills and actions to mitigate these increases have been deferred or remain unaddressed.

The bulk of time and resources have focused on Pinyon Juniper removal (46,000 acres) with no followup of protocolled monitoring by project area to analyze the results of the treatments over the past 10 years. Since this has been one of the main investments and strategies, monitoring should have been initiated during the first pilot treatments and should be a coordinated USFWS requirement. Pinyon-juniper treatments are not scientifically measured as to their effectiveness for stabilizing and increasing sage-grouse populations.

Another strategy was to convert current grazing allotment fencing (which is significant and causes habitat fragmentation and restricts movement) to what is termed “Let down fence conversions”. This is an important issue to address but requires a commitment from private land owners and lessees to let the fences down when cattle are not present. While projects have been completed there is no assessment of the amount of fence that has been converted to date relative to the mileage of fencing on the landscape. A map of completed fence conversions and fence removal projects with mileage is needed to adequately understand if this conservation measure is contributing to BSSG survival and recovery.

New Threats

The following threats are new or have recently increased since the writing of the 2015 BSAP and thus have not been addressed or mitigated:

Private Land

The BSAP calls upon the LAWG and partnerships with large landowners, such as LADWP for BSSG conservation measures. LADWP has not upheld those conservation management goals and outcomes as demonstrated by their actions in 2018. While this may not have been considered foreseeable in 2015, it shows the limitations of the LAWG partnership and handshake agreements. In 2018 LADWP drastically, and without notice, reduced its water management and allocation in the Spring and Summer of 2018 on their lands, significantly impacting most of the BSSG habitat in the Long Valley area (South Mono PMU). The Long Valley subpopulation is the second largest and represents about one third of the California population of BSSG. The well established irrigation practices of the ranchers leases those lands, maintain wetlands that keep this BSSG subpopulation from varying significantly between drought and wet years, providing forage, insects, and cover. Without LADWP’s guarantee to maintain habitat for the BSSG in Long Valley this PMU will likely continue to decline.

In August 2018 LADWP issued a Notice of Preparation of a Draft Environmental Impact Report (NOP of DEIR) for leases on its land with almost no water allocation. During its data collection, a LADWP drone started a wildfire at one of the largest known leks. Furthermore, LADWP announced in April 2019 plans to install 40 groundwater monitoring wells (piezometers) with work scheduled to begin in June during the end of BSSG nesting and brooding season. LADWP then decided to delay the project due to unknown reasons but likely not the BSSG.

Predation

Predation from ravens, raptors, and coyotes remain a significant threat to the bird. Only small percentages of infrastructure (powerlines, fence lines, and other towers such as windmills) have been removed from BSSG habitat and PMUs, leaving significant perches for ravens and raptors to utilize to locate and eat BSSG eggs or chicks. Populations of ravens are increasing, especially in PMUs closer to highways, communities and landfills and actions to mitigate these increases have been deferred or remain unaddressed. For example, the Long Valley dump has been scheduled for closure and restoration, but several proposals exist for implementation and a firm date is not set for the closure. In addition to existing threats from predators such as ravens or hawks, there are new threats from proposed projects (see below) that could augment raven populations. Disease and predation are threats identified in the BSAP, but to our understanding, are not addressed in current conservation measures or in the most recent draft report.

Grazing

A significant portion of the BSSG range overlaps with active grazing allotments. Livestock grazing is a form of disturbance affecting sage-grouse. Grazing degrades habitat critical to the sage-grouse life cycle. Livestock also promote the spread of cheatgrass and conifer encroachment into sage-grouse habitat. Domestic cattle and sheep can directly compete with sage-grouse for forage, depriving the birds of essential nutrients, especially during the later brood-rearing period. Since these allotments are managed by various jurisdictions (USFS and BLM and CA vs NV field offices) and permittees/ lessees, there are consistency concerns with how conservation measures are communicated and enforced. Vegetative cover is essential for BSSG hens with broods to survive attacks from predators, and hiding in dense and tall grasses and sedges/rushes, as well as sagebrush cover is critical. It does not appear that minimum vegetative cover is being monitored or mandated in all grazing allotments. We recommend that the minimal 7" vegetative height be implemented to maintain cover. Furthermore, since there are no monitoring projects within each PMU that include controls and exclosures where no grazing is allowed, there is no data to inform this wide-spread impact. As soon as feasible, these monitoring projects should be added to the ongoing monitoring schedules to inform pilot projects and BSAP implementation. As noted above, is also vital that the land management plans for the agencies contain plan components to retain necessary vegetation cover for BSSG.

Transmission and Energy Development

The West Wide Energy Corridors (WWEC), a regional energy corridor process, designated a new preferred corridor through critical BSSG habitat that poses a threat to the species. Energy corridor 18-23 would pass through the Bi-State sage-grouse habitat in the Mount Grant PMU on the east side of the Bodie Hills and would significantly impact the connectivity of the Mount Grant and Bodie Hills PMUs. This corridor would allow transmission lines to be built extremely close to/in two lekking/high use areas in 9-mile Flat. Also, the construction of roads and installation of a transmission line would be disruptive, bring more people and stressors, and the transmission lines would provide permanent perches for ravens and raptors.


Climate Change

Another threat is the notable changes in weather from year to year within the BSSG, representing both extreme drought and heavy snowfall. While there has always been variation, recent data shows several extreme years from severe droughts to heavy concentrated snowfalls that have known impacts on mortality of BSSG. For example, the recent drought resulted in lek count declines in subsequent years, The winters of 2017 and 2019 had significant mortalities were discovered during lek counts that were contributed to heavy snow. It may take several years, if not decades for the science to show how birds are responding to shifting weather extremes due to climate change.

Conclusion

We appreciate the opportunity to comment on the review of the BSSG listing. We understand the USFWS final species report has already been prepared and sent to USFWS leadership, but we hope the deciding officials will consider our comments. It would have facilitated our ability to provide meaningful comments if the data and reports for the 2018 field season were made available before the close of the comment period. The most recent LAWG meeting took place on June 5, 2019 and was the only meeting that overlapped with the comment period. While oral presentations were made of 2018 and 2019 findings as well as a BSAP 2012-2018 summary report, these documents are not yet publicly available. We ask the agency to carefully examine the new and Best Available Science and data gaps, as well as ongoing and emerging threats to the species in their review and consideration of listing BSSG as threatened under the Endangered Species Act.

Sincerely,



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