

Bi-State Distinct Population Segment of Greater Sage-Grouse Proposed Listing Comments – Species (Docket No. FWS-R8-2013-0072)

- 1) *The Bi-State DPS's biology, distribution, population size and trend, including:*
 - a. *Habitat requirements for feeding, breeding, and sheltering;*
 - b. *Genetics and taxonomy;*
 - c. *Historical and current range, including distribution patterns;*
 - d. *Historical and current population levels, and current and projected trends; and*
 - e. *Past and ongoing conservation measures for the DPS, its habitat, or both.*

The Forest is providing additional sage-grouse observations made by students attending Deep Springs College (Attachment 1). The college is a permittee for the Crooked Creek allotment, which is part of the White Mountain Population Management Unit (PMU). The students have recorded sage-grouse observations when they are in the field managing the livestock. These observations are not quantifiable in any way, nor do they provide population data for this PMU, but they do provide a record of the use of the Crooked Creek allotment by sage-grouse. These observations can be used to identify potential capture locations for future population monitoring efforts. Along with the written logs of sage-grouse observations, Janice Hunter, Manager of Deep Springs College, provided this additional information from their records:

"We see sage grouse nearly every day in a few specific places higher in the allotment, especially in Bullfrog and south Fork. Typically, there will be 4-5 in each group, although occasionally there will be as many as 20. Their overall numbers seem to have been constant over the 3 summers. Finally, in 2002 chukar pheasants showed up for the first time higher than Wyman Canyon. They seem to have moved into the areas where the sage grouse are totally absent, especially Lower Crooked and the lower meadow of Wild Horse." Three Summers on the Crooked Creek Allotment, Jacob Hundt, Deep Springs Cowboy 2000-2002.

Janice also noted that during the summer of 2012 grouse were seen nearly every time travelling through the Bullfrog unit of the Crooked Creek allotment, including during the Deep Springs Resource Management Team meeting. Around 20, young and adult, would be seen by the first vehicle to pass through the area. They were regularly seen in South Fork as well. During 2013, grouse were again regularly seen in Bullfrog, South Fork and Cave Fork units, although generally 5-10, and mostly adults (Personal communication with Janice Hunter December 7, 2013).

The Service is aware of the ongoing conservation efforts of the Inyo National Forest as part of the Bi-State Local Working Group, the Bi-State Technical Advisory Committee (TAC), and the Bi-State Executive Oversight Committee (EOC). And the projects that have been completed, proposed, and implemented following the finalization of both the 2004 Greater Sage-Grouse Conservation Plan for the Bi-State Area of Nevada and Eastern California and the 2012 Action Plan. These conservation efforts will continue to be ongoing and will provide a benefit to the Bi-State DPS.

Further conservation measures have been adopted by the Inyo NF with the establishment of Interim Management Policy signed by the Forest Supervisor in 2012. This Interim Policy addresses threats such as livestock grazing, wildfire, vegetation treatments, and mineral and energy development within sage-

grouse habitat. This policy is based on the best available science and provides for consistency in management across the forest. This policy has been implemented for several of our livestock permits and used during the wildfire season. The Forest is currently revising the 1988 Land and Resource Management Plan and will include management direction for the sagebrush ecosystem as well as specific direction for sage-grouse. The Land and Resource Plan Amendments being developed for the Humboldt-Toiyabe National Forest and Bureau of Land Management, Carson Field Office will be integrated as appropriate in the revised Inyo NF plan. The timeline to complete a revised forest plan is December, 2014.

- 2) *The factors that are the basis for making a listing determination for a species under section 4(a) of the Act (16 U.S.C. 1531 et seq.), which are:*
 - 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.*

Livestock and Rangeland Management

As stated in the Proposed Rule in the Executive Summary Section (page 64358) and the Summary of Factors Affecting the Species (page 64364) sections, grazing and rangeland management is listed as a significant threat for the Bi-State DPS. This is in direct contradiction to the conclusions made in the 2004 Greater Sage-Grouse Conservation Plan for the Bi-State Area of Nevada and Eastern California and the 2012 Action Plan, which states that livestock grazing is not a significant threat to the Bi-State DPS. The Species Status Assessment also states “Limited grazing in the Bi-State area may be benign or even beneficial to some seasonal sage-grouse habitats, but when conducted improperly livestock grazing can have negative effects on sage-grouse habitat and individuals” (USDI 2013). The Designated Critical Habitat Proposed Rule states that *improper* [emphasis added] livestock grazing is a significant threat to sage-grouse habitat; we concur with this statement and would like the Proposed Rule for the species to reflect that language.

The Inyo National Forest has implemented many design features to reduce impacts from livestock grazing within sage-grouse habitat. These include: 1) adjusting on-dates to avoid the breeding and nesting season, 2) lowering utilization standards within brood-rearing meadows and upland habitats, and 3) implementing deferred and rest-rotation grazing systems which allow for rest during and in-between grazing seasons. The current grazing standard in these areas falls within the appropriate grazing standards (defined as light and moderate) which allow for the continuation of understory cover as presented by Crawford et al 2004. We will continue to work with our livestock permittees in implementing these design features to allow for both livestock and sage-grouse use. Given these adjustments in livestock management, we feel that livestock grazing is not a significant threat to sage-grouse for the Bi-State DPS on the Inyo NF.

The Forest has conducted NEPA analysis for several groups of livestock allotments, many of which occur within sage-grouse habitat. An Amendment to our 1988 Land and Resource Management Plan (Attachment 2 - Amendment #6- Rangeland Management) provided a framework for the Forest to use current vegetation and watershed conditions to determine the grazing utilization standard and grazing strategies for allotments. These conditions were determined at key areas within each allotment and focus on those vegetation communities that receive the most use by livestock (cattle or sheep). Key

areas for the 21 allotments that the Forest has most recently evaluated were upland and meadow sites. A summary of what the vegetation and watershed conditions were for these key areas are found in Tables 1 and 2.

These findings show that for vegetation condition (based on presence of desirable species for uplands and meadow systems) 39% of the key areas for meadows are in Excellent condition; 18% are in Good condition; 25% in Fair; and 18% are Poor. For upland sites the ratings showed that 59% of the key areas are in Excellent condition; 22% in Good condition, 17% in Fair, and 2% in Poor condition. These ratings helped determine the utilization standard for each allotment being analyzed and are based on a utilization matrix provided in Amendment #6 for each condition rating. These changes to utilization standards were established at light (15-20%) and moderate (30-45%) levels, which as stated by Crawford et al (2004) allow for understory cover to be maintained for sage-grouse.

The watershed condition ratings are based on the proper functioning condition of hydrologic process in upland and meadow systems and are rated as Fully functional, Functioning at risk, Degraded, and Non-Functional. The condition ratings for upland sites showed that 40% are Fully functional; 45% are Functioning at risk; 9% are Degraded, and 5% are Non-functional. In meadow systems, 40% are Functioning; 30% are Functioning at risk; 27% are Degraded, and 3% are Non-functional. Watershed condition ratings are used to help determine which grazing strategy would be used to improve watershed and vegetation conditions. Grazing strategies implemented include rest-rotation and deferred rotation which allows for rest on entire allotments or portions of allotments and reduces impacts to sage-grouse.

Table 1 Ratings for vegetation types across the Inyo National Forest

Type of Key Areas and Vegetation Ratings	PMU		
	White Mountain	South Mono	South Mono/Bodie
	White Mountain Group (4 allotments)	Crowley Lake Group (13 allotments)	Mono Lake Area Group (4 allotments)
Upland Sites –			
Excellent	1	25	8
Good	3	10	0
Fair	1	5	4
Poor	0	1	0
Meadow Sites –			
Excellent	9	2	0
Good	2	3	0
Fair	0	6	1
Poor	0	5	0

Table 2 Ratings for Watershed Conditions within Key Areas across the Inyo National Forest

Type of Landform and Watershed Rating	PMU		
	White Mountain	South Mono	South Mono/Bodie
	White Mountain Group	Crowley Lake Group	Mono Lake Area Group
Upland Sites –			
Fully Functional	2	9	11
Functioning at Risk	0	25	0
Degraded	0	5	0
Non-functional	0	3	0
Meadow Sites –			
Fully Functional	7	4	1
Functioning at Risk	3	6	0
Degraded	2	6	0
Non-functional	1	0	0

The decision to allow grazing on these allotments included adjustments based on Amendment #6 standards for the current vegetation and watershed condition ratings. Further adjustments were also implemented to reduce impacts to sage-grouse. These include a change in the grazing season, livestock are not permitted to enter the allotment until after breeding and nesting season; a key area was established in an upland site to address potential sage-grouse use in area; and utilization standards were implemented for some meadow systems not included as key areas in some allotments.

The Inyo NF along with Deep Spring College, the California Department of Fish and Wildlife, NRCS, and the Bureau of Land Management Bishop Field Office work collaboratively as part of the Deep Springs Resource Management Team. This team meets twice a year to discuss livestock operations and resource conditions on the allotments used by the college, including Crooked Creek. Management of these allotments to provide for sage-grouse has been one of the top priorities for this team. This team is currently looking at opportunities for sage-grouse habitat improvement projects and ways to increase sage-grouse monitoring in the Crooked Creek area.

The Forest does recognize that improper grazing does have negative effects on sage-grouse and sage-grouse habitats. Some areas in which grazing has reduced suitable habitat or sage-grouse use can include watering areas or other concentrated use areas which lead to removal of suitable sage-grouse habitat. These areas do occur on the Forest, but they are site-specific and the Forest has implemented measures that would reduce some impacts to sage-grouse. West Nile virus can have an impact on sage-grouse populations. The vector for this virus is mosquitos which can thrive at watering areas on allotments. When livestock do not occur on the allotment these watering areas are drained of water and remain dry to help reduce mosquito breeding areas.

The Forest would like to clarify information provided in the Species Status Assessment in the Grazing and Rangeland Management section. There is a discussion about chemical control and mechanical rangeland treatments that we feel are misleading in that it states that these types of projects are being currently conducted in the Bi-State area to an unknown extent. The Inyo NF has not conducted any chemical or mechanical rangeland treatments in the past 50 years. These types of treatments were conducted in the 1950s and 1960s on the Forest, for example in the White Mountains PMU; however, since the implementation of these treatments sagebrush has returned and the area is occupied by sage-

grouse. Treatments within sagebrush communities are being conducted in order to improve sage-grouse habitat. These treatments include mowing and prescribed burning.

Nonnative and Native, Invasive Plants

The Forest is in agreement that pinyon and Jeffery pine expansion has been occurring at a substantial rate throughout the Bi-State area and that this expansion has reduced corridors between populations. This expansion has been the result of many factors including wildfire suppression, historic livestock grazing, and changing climate. The Forest has conducted an assessment of this expansion as part of Forest Plan revision. Our modeling effort looked at the site potential for sagebrush and pine species and the Potential Natural Vegetation (PNV) in order to determine where pine expansion had occurred and in what expansion phase it was occurring (Phases I, II, and III as defined by Miller 2000 and Tausch et al 2009). Our results showed a substantial loss of sagebrush habitat to pine expansion within the proposed critical habitat boundary on the Inyo NF; 41,300 acres (or 9%) out of 435,310 acres of proposed critical habitat on the Forest. We have included an appendix which explains our methods in this modeling effort (Attachment 3).

We would like to continue working with you and the U.S. Geological Survey in the development of any models determining pine expansion in the Bi-State area. We feel that there are many data sources that should be reviewed and potentially used in this modeling effort in order to give a true perspective on the amount of expansion that is occurring and where potential habitat improvement projects could then occur.

Infrastructure

The Inyo NF addressed roads in the 2009 Travel Management Decision, in which the Forest authorized 248 miles of roads within sage-grouse habitat, out of 375 miles of existing routes. Roads that were not authorized have been closed by installing barriers or signs and some will be restored using native vegetation. The potential for new, or secondary, routes especially within sage-grouse habitat is low. There may be an increase in vehicle use on these roads, but the Forest will continue to monitor this use and implement measures to address any issues when they arise.

For any pole replacement or maintenance on existing transmission lines, the permittee is required to install anti-predator perches. Not every transmission line includes these improvements, but the Forest is committed to working with the permittee in installing them, particularly in sage-grouse habitat.

Renewable Energy Development

In this section it is stated that, "Minimal direct habitat loss has occurred in the Bi-State DPS due to renewable energy development, specifically from the only operational geothermal facility in the Bi-State area, which is within the South Mono PMU." Later on in this section it states that "Overall, renewable energy development has impacted one location in the South Mono PMU to date..." These statements seem misleading or in conflict with one another. This geothermal facility is located on the Inyo NF and it is found on the periphery of suitable sage-grouse habitat (within the sagebrush Jeffery pine intermix zone). Expansion of the geothermal operation in this area is being evaluated by the BLM and Inyo NF and the determination was made that this expansion would not further reduce suitable sage-grouse habitat.

Regulatory Mechanisms

The Forest would like clarification on how regulatory mechanisms were evaluated. The Species Status Assessment only lists the current regulatory mechanisms, but does not show how the conclusion was reached that these mechanisms are not suitable for protecting sage-grouse. We feel the language used to describe the management used by land management agencies is overstated.

As a federal land management agency, we are mandated to follow law, regulation, and policy. The Forest Land Management Act directs us to develop land and resource management plans which direct the management of our Forest. Our current Land and Resource Management Plan (LRMP) is, we agree, an older document. However, it does provide management direction for sage-grouse:

1. Maintain a shrub canopy cover of at least 20 percent on at least 30 percent of vegetation treatment areas within six miles of known strutting grounds (leks).
2. Allow no vegetation treatment in sage-grouse habitat that would have a significant negative impact on this species.
3. Recognize the sensitivity of sage-grouse leks during the period from March 1 and April 30. Resolve conflicts in favor of sage-grouse.
4. Cooperate with the California Department of Fish and Wildlife (formally Game) in reintroduction efforts.

The Forest has recognized that this management direction does not fully provide for all the threats listed for the Bi-State DPS and therefore developed Interim Management Policy (Attachments 4a and 4b) to extend the management direction for sage-grouse across and provides for consistency across the forest when addressing management of livestock grazing, wildfire suppression, recreation, and mining.

The Forest is currently working on revising the LRMP and direction provided in this document will include the most recent and best available scientific information on sage-grouse and management direction will not only include sagebrush ecosystems, but specific direction for sage-grouse. A final plan is expected in December, 2015.

The National Environmental Policy Act (NEPA) provides further regulation in how we analyze effects for projects occurring on National Forest System lands. There is further policy direction that ties to NEPA in regards to Forest Service Sensitive Species, which includes the Bi-State DPS. Policy direction for sensitive species includes (FSM 2670.22 and 2670.32):

- Develop and implement management practices to ensure that species do not become threatened or endangered because of Forest Service actions.
- Maintain viable populations of all native and desired nonnative wildlife, fish, and plant species in habitats distributed throughout their geographic range on National Forest System lands.
- Develop and implement management objectives for populations and/or habitat of sensitive species.
- Assist States in achieving their goals for conservation of endemic species.
- Review programs and activities as part of the NEPA process through a biological evaluation, to determine their potential effects on sensitive species.
- Avoid or minimize impacts to species whose viability has been identified as a concern.
- Analyze, if impacts cannot be avoided, the significance of potential adverse effects on the population or its habitat within the area of concern and on the species as a whole. The line officer, with project approval authority, makes the decision to allow or disallow impact, *but the decision **must not** result in loss of species viability or create significant trends toward federal listing* [emphasis added].

We do recognize that there can be inconsistencies between decision makers on the District and Forest-level. This is another reason we have implemented the Interim Forest Policy direction for sage-grouse which allows consistency across the Forest in regards to management direction for sage-grouse. Through the Plan Revision process we will be adjusting our management for sage-grouse to help not only provide consistency across our Forest, but we will be looking at the Plan Amendments being conducted by the Humboldt-Toiyabe National Forest and Carson Field Office of the BLM. This will then allow for consistency across jurisdictions in the Bi-State area.

Under the Wilderness Act 206,760 acres of the White Mountain PMU were recently (2009) designated as wilderness. This now provides additional regulations on development, installation of transmission lines, and other impacts to sage-grouse, particularly in the Crooked Creek area.

The Inyo NF has been involved in the Bi-State Local Working Group since its inception in 2001 and has worked with other agencies, particularly the California Department of Fish and Wildlife, when developing projects that improve sage-grouse habitat. The Forest has implemented many of the projects recommended in the 2004 Greater Sage-Grouse Conservation Plan for the Bi-State Area of Nevada and Eastern California and the 2012 Action Plan. These include Jeffery pine removal, fence-marking, sage-grouse monitoring, and reducing impacts from noxious weeds and the presence of roads. The conservation of sage-grouse and sage-grouse habitat remains a high priority of the Inyo NF.

- 3) *Biological, commercial trade, or other relevant data concerning any threats (or lack thereof) to this DPS and existing regulations that may be addressing those threats.*

See previous section regarding existing regulations.

- 4) *Additional information concerning the historical and current status, range, distribution, and population size of this species, including the locations of any additional leks or populations of this DPS.*

In regards to the White Mountain PMU description in the Proposed Rule, it states that no recent population estimates are available and overall the information on population status and impacts is limited. We agree that there is a lack of population data for this PMU, but there are records of observations from the State agencies and Deep Springs College. This information does not allow for population status to be determined, but from the amount of birds seen over the last several decades in this PMU, this area does seem to provide habitat for a larger number of birds (see the description in the Species Status Report and attached observations from Deep Springs College). The Proposed Rule concludes that the White Mountain PMU population is small and therefore vulnerable to extirpation if future impacts increase. We are unclear how the Service made the conclusion that this population is small. Would it not be a better representation to state that due to a lack of information on population status and threats occurring in the PMU that the population may be vulnerable to extirpation?

- 5) *Any information on the biological or ecological requirements of the DPS and ongoing conservation measures for the DPS and its habitat.*

Ongoing conservation measures have been incorporated at the project-level for livestock grazing, recreation, and mining activities and measures have also been implemented for wildfire suppression efforts in sage-grouse habitat. These measures are directed by the Interim Management Policy for the Inyo NF finalized in 2012. The Forest has implemented many conservation actions to improve or maintain sage-grouse habitat including, but not limited to Jeffery pine removal (~400 acres), road closures (~125 miles), and noxious weed treatments (~5 acres).

- 6) *Application of the Bi-State Action Plan of March 15, 2012, to our determination of status under section 4(a)(1) of the Act, particularly comments or information to help us assess the certainty that the plan will be effective in conserving the Bi-State DPS of greater sage-grouse and will be implemented.*

The Inyo NF has been active in sage-grouse management since 1966 with the completion of the Sage-Grouse Management Plan. Since then, the Forest has worked with partners, including the States and local BLM office in monitoring sage-grouse populations and conducting habitat improvement projects, while also mitigated impacts. The Forest is a member of the Bi-State Local Area Working Group and not only took part in developing the 2004 Greater Sage-Grouse Conservation Plan for the Bi-State Area of Nevada and Eastern California, but has started implementing the conservation projects. In recent years the Inyo NF has participated in the EOC and signed the Memorandum of Understanding with our partnering agencies which provides for interagency cooperation to ensure a coordinated multi-jurisdictional effort to conserve the Bi-State DPS.

The Bi-State Action Plan was developed as a collection of conservation actions that should be implemented to help conserve sage-grouse. The sideboards when developing this action plan were very broad in that each PMU developed an all-inclusive list of actions that addressed specific threats within the PMU. The Action Plan also addressed threats or management direction that was needed across the Bi-State area, such as interagency cooperation in regards to wildfire suppression. Although this plan includes everything that could be done to conserve sage-grouse, some projects did not have enough information on whether they should be implemented. This included many projects that wanted to remove pinyon pine. There are some areas in the Forest where we have enough information to determine that removal of pinyon or Jeffrey pine would help conserve sage-grouse, but there are large areas, such as the White Mountains PMU, where this information is extremely limited. The Conservation Planning Tool (CPT) being developed by the USGS will certainly help in these situations, but it may be many years before any pinyon treatments are conducted on the Inyo NF.

The Forest would like to caution the Service in that the Action Plan was not written to be a Recovery Plan and the list of conservation activities was all inclusive, disregarding budgets and project costs. The Forest is committed to completing as many of these actions as possible, but to implement 100 percent of the Action Plan activities, we feel, is not attainable.

As with other federal agencies, our budget for our wildlife, fish and rare plant program has declined and we anticipate this decline to continue in the foreseeable future. Over the past several years sage-grouse projects have been included as part of the program of work, even in these budget declines. The Forest is committed to conserving the Bi-State DPS and this commitment is evident in our record of participating in conservation efforts and implementing conservation projects even in being short-staffed and underfunded. The Forest will continue to propose conservation actions recommended in the Bi-State Action Plan and with further direction from the CPT being developed by the USGS. This tool will be especially helpful in determining where the best project location would give us the most benefit for sage-grouse.

- 7) *Information concerning whether it would be appropriate to include in the 4(d) special rule a provision for take of the Bi-State DPS of greater sage-grouse in accordance with applicable State law for educational or scientific purposes, the enhancement of propagation or survival of the DPS, zoological exhibition, and other conservation purposes consistent with the Act.*

The Forest is in support of any 4(d) rule that allow a provision for take for the purposes of scientific study, education, propagation, zoological exhibition, and other conservation purposes. The ability to

conduct additional scientific studies on habitat use and populations, especially in those areas where this information is lacking, such as the White Mountain PMU, will further the ability of the Forest to conduct conservation efforts that will allow for the conservation of sage-grouse.

- 8) *Whether the Service should include in the scope of the proposed 4(d) special rule the incidental take of sage-grouse within the Bi-State DPS if the take results from other agricultural activities not subject to the SGI or the Bi-State Action Plan, if those activities are compatible with the conservation of the DPS.*

The Forest is in support of any 4(d) rule that allows for a provision of take for any activities that are compatible with the conservation of the DPS.

- 9) *Whether the Service should expand the scope of this 4(d) special rule to allow incidental take of sage-grouse within the Bi-State DPS if the take results from implementation of the SGI or Bi-State Action Plan by a person or entity other than a State agency or their agent(s).*

The Forest requests that the Forest be included in this 4(d) special rule for the provision of take when implementing conservation actions under the Bi-State Action Plan. The Forest conducts many conservation projects, that although mitigate direct and indirect effects as much as possible, still may lead to take. For example: The Forest needs to maintain fuel breaks along existing roads through mowing of brush in order to help suppress the spread of wildfires into sage-grouse habitat. Although Limiting Operating Periods (LOPs) may be implemented to reduce the impacts to sage-grouse during critical seasons, such as breeding and nesting, given that these areas offer suitable sage-grouse habitat, sage-grouse can be found in these areas throughout the year. Disturbance that leads to the flushing of sage-grouse from an area, even in the short-term, would be considered take and the Forest would have to formally consult on such activities. Take may also occur if the Forest is marking fence lines to prevent collisions. Although LOPs may be implemented, again sage-grouse could still be found in the area and crews marking fences may disturb a bird. Both these actions would conserve sage-grouse and are listed in the Bi-State Action Plan. In order to reduce the time and workload for both agencies, having a 4(d) special rule that allows for take for conservation projects would be useful and would allow for these projects to be implemented as soon as possible.

We understand that the obligations under Section 7 of the Endangered Species Act may limit the ability to extend the 4(d) rule to Federal land management agencies, and therefore we highly recommend continuing to work together to determine a way to continue these conservation activities in a timely manner.