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Division of Policy and Directives Management
U.S. Fish and Wildlife Service
4401 N. Fairfax Drive, MS 2042–PDM
Arlington, VA 22203

RE: Comments of the Society for Conservation Biology on the Proposed “Threatened” Designation for the Lesser Prairie-Chicken

The Society for Conservation Biology¹ (SCB) would like to offer the following comments on the U.S. Fish and Wildlife Service’s (FWS) proposed rule to list the Lesser Prairie-chicken (*Tympanuchus pallidicinctus*) as a “threatened” species under the Endangered Species Act.² Since 1999, the best available science has clearly indicated that the Lesser Prairie-chicken (hereafter “Prairie-chicken”) should be protected under the Endangered Species Act (ESA).³ The only reason that the Prairie-chicken has not been listed sooner was due to lack of funding within the listing division of the FWS, *not* due to any uncertainty as to the species’ conservation status. Due to the lack of funding, the Prairie-chicken was a “candidate” species for listing between 1999 and 2012, with further action to protect the species “warranted but precluded.” The best available science indicates that the species has declined between 84-92% from its historic population levels, and has had a similar decrease in its geographic range. The best available science clearly indicates that the species *currently* warrants protection under the ESA.

SCB is deeply concerned, however, that the FWS’s proposal to list the Prairie-chicken is under-protective. Most critically, the FWS has failed to even consider whether the Prairie-chicken is endangered within any significant portions of its range, a clear violation of the ESA. This omission is inconsistent with the FWS’s past practices and FWS’s own policies. Given the FWS’s decision in the proposal to assess the Prairie-chicken’s range in four “quadrants” based on the species’ distribution in two distinct Bird Conservation Regions (BCRs), and divided north and south by the Canadian River that bisects the species’ range, the failure to consider whether the species’ decline in any of those quadrants merits protection as endangered is not credible. The Prairie-chicken’s 81% decline in Texas (from 236,000 sq km to 12,000 sq km) and 94% in New Mexico (mostly in the mixed-grass prairie BCR), clearly

¹ SCB is an international professional organization whose mission is to advance the science and practice of conserving the Earth’s biological diversity, support dissemination of conservation science, and increase the application of science to management and policy. The Society’s 5,000 members include resource managers, educators, students, government and private conservation workers in over 140 countries.

² *Listing the Lesser Prairie-Chicken as a Threatened Species*, 77 Fed. Reg. 73,828 (Dec. 11, 2012).

³ *Review of Plant and Animal Taxa That Are Candidates or Proposed for Listing as Endangered or Threatened; Annual Notice of Findings on Recycled Petitions; and Annual Description of Progress on Listing Actions*, 64 Fed. Reg. 57,534, 57,538 (Oct. 25, 1999)



qualifies the species for protection as endangered based on threats within a “significant portion of its range.” The FWS could also protect the species as two or more Distinct Population Segments based on the species’ presence in distinct ecological regions. The FWS’s failure to consider these options renders the proposal to only list the species as threatened arbitrary and capricious.

Second, SCB is concerned that the FWS also has failed to propose critical habitat for the Prairie-chicken because it is “not determinable at this time.” For a species that the FWS has monitored for 15 years, has been the subject of hundreds of peer-reviewed studies, and despite a nearly 2000 word description of the Prairie-chicken’s habitat needs in the listing proposal itself, the decision to not designate any critical habitat is not credible. The Prairie-chicken depends on communal leks, where males display to attract breeding females, for the single, most important component of the species’ breeding cycle. The failure to designate the known, currently-active breeding leks (as well as a minimum buffer around those leks) as critical habitat is inconsistent with the best available science.

Third, the FWS appears to be suggesting novel management criteria that may defer the listing of the Prairie-chicken if, as FWS claims, four “strongholds” for the species are established. While unclear in its intent, the listing proposal seems to suggest that the establishment of four Prairie-chicken “strongholds” might alleviate the need for listing. This conservation strategy is not peer-reviewed, does not represent the best available science (in fact the strategy significantly misrepresents the literature upon which the stronghold concept appears to rest), and violates the listing and recovery framework of the ESA itself. Under the ESA, listing is to be based on the best available science *only*. And *after* the listing process is complete, the FWS must develop a recovery plan with delisting criteria that are available for public review, including scientific peer review. This new “de-facto” recovery plan based on this novel stronghold application, which is based only upon a five-page white paper, short-circuits the entire recovery process. This unprecedented language represents a significant departure from the general procedures followed during the listing process, and could undermine the effectiveness of the entire endangered species program. To put this stronghold strategy in context, the FWS has developed conservation goals for the Greater Sage Grouse (*Centrocercus urophasianus*), a species with very similar life-history traits and similar conservation challenges. For the Sage Grouse, the FWS recommends a population of over 20,000 individuals distributed across over 150 million acres of land.⁴ This disparity in management goals cannot be explained by science, as there is no science that supports the FWS’s stronghold proposal for the Lesser Prairie-chicken. SCB is also concerned that this attempt to create weak, de-facto recovery goals in listing documents could become a precedent that will negatively impact future listings for other species as well.

In particular, the FWS “stronghold” proposal states that the “a minimum of four strongholds will be needed...to secure the status of the species.” A “stronghold” is defined as

⁴ See FWS. 2012. Sage-Grouse Conservation Objectives Draft Report, Aug. 1, 2012 available at: <http://www.fws.gov/mountain-prairie/species/birds/sagegrouse/20120803ConservationObjectivesTeamDraftReport.pdf>



a contiguous area that supports 6-10 active leks with 6 male birds displaying at each lek, or 60 adult males.⁵ The language in the listing proposal seems to imply that a species which may have numbered 2 million individuals can be “secured” by the presence of 240 adult male Prairie-chickens, *i.e.* the species could be reduced to less than 500 birds and not need listing under the ESA. Five hundred adult male birds represents less than 0.004% of the species historic abundance, and less than 5% of the species’ *current* abundance. A conservation strategy that permits a 99% decline in current abundance is not adequate to defer listing under the ESA. The stronghold concept does not represent the best available science, and is at best inconsistent with the statutory language of the ESA, and at worst subverts the ESA and its stated purpose of science based conservation.

Finally, SCB would like to note that the presence of existing voluntary conservation measures to protect the Lesser Prairie-chicken does not obviate the need to protect the species under the ESA. At least as far back as 2002, voluntary conservation efforts to protect this species have been in place.⁶ The population estimate for the species has remained relatively unchanged since 2002,⁷ indicating that these efforts have not moved the species towards recovery. At best, these efforts have helped to stabilize populations of the Lesser Prairie-chicken. These voluntary conservation measures may help to accelerate the recovery timeframe for this species, but there are no data (and there is no analysis from the FWS) that indicate that these voluntary conservation efforts have yet to move the species towards recovery (e.g. conservation efforts have not resulted in significantly higher population levels or increases in range occupancy).

I. The Lesser Prairie-Chicken is Endangered in a Significant Portion of its Range. The FWS Must List a Distinct Population Segment Covering the Southern Portion of the Species’ Range as Endangered

The Endangered Species Act (ESA) defines an endangered species as “any species which is in danger of extinction throughout all or a significant portion of its range,”⁸ and defines a threatened species as “any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.”⁹ Accordingly, the FWS is obligated to protect a species at risk of extirpation from a significant portion of its range—well *before* the threats to that species render it at risk of global extinction. Long-standing FWS policy and caselaw both clearly state that the significant portion of its range language provides an *independent* basis for listing a species, thereby *lowering* the threshold for protecting a species under the ESA.¹⁰ Although the exact meaning of “significant portion of its range” has not been resolved, it is clear that a species like the Lesser Prairie-chicken, which has been extirpated from 84% of its historic range, is likely to

⁵ 77 Fed. Reg. at 73,836.

⁶ See, e.g. FWS Candidate and Listing Priority Assignment Form for *Tympanuchus pallidicinctus*, April 2002.

⁷ *Id.*, see also FWS Candidate and Listing Priority Assignment Form for *Tympanuchus pallidicinctus*, April 2010

⁸ 16 U.S.C. § 1532(6).

⁹ 16 U.S.C. § 1532(20).

¹⁰ *Defenders of Wildlife v. Salazar*, 729 F. Supp. 2d 1207 (D. Mont. 2010); *WildEarth Guardians v. Salazar*, 2010 U.S. Dist. LEXIS 105253 (D. Ariz. Sept. 30, 2010).



be in danger of extinction within a significant portion of its range. Moreover, given the loss in range within both the shortgrass prairie Bird Conservation Region (BCR) and the loss in range within the central mixed-grass prairie BCR, the Lesser Prairie-chicken is in danger of extinction within a significant portion of its range.

In December of 2011, the FWS together with the National Marine Fisheries Service published a draft policy interpreting the meaning of the phrase “significant portion of its range” under the ESA.¹¹ The Draft Policy proposed that a portion of a species’ range is significant only when “its contribution to the viability of the species is so important that without that portion the species would be in danger of extinction.” SCB offered detailed comments explaining why the FWS’s approach effectively rendered the term “significant portion of its range” (hereafter SPR) superfluous because listing a species as “threatened” under the ESA throughout its range already covers the scenario where the loss of a portion of the range would leave the species in danger of extinction. The narrow definition of “significant portion of its range” offered by the Services ignored the clear fact that Congress intended the ESA’s concept of endangerment to be broader than merely the biological concept of extinction risk. The ESA’s stated purpose is to “provide a means whereby the *ecosystems* upon which endangered species and threatened species depend may be conserved.”¹² This broader ecological goal is furthered by the presence of listed species across their historic ranges. SCB offered an alternative approach wherein significance focused primarily on a species’ representation within a unique ecoregion or ecosystem unit.¹³ Under SCB’s alternative approach to defining SPR, a portion of the range is significant when its loss would mean that a species is no longer extant within an ecoregion or ecosystem unit (e.g., ecoprovince). This definition would provide the flexibility to consider threats at a much finer scale both spatially, using for example, threat criteria similar to those used by NatureServe¹⁴ to specifically evaluate extirpation risk within a portion of a species’ range. This definition would also allow the Services to address the risks of a species being extirpated from a portion of its range, *independent* of whether this loss in range would lead to the extinction of a species as a whole. If a vertebrate species was threatened or endangered in a significant portion of its range, under SCB’s approach, that portion of the range could be protected as a Distinct Population Segment (DPS) under the Act. Under SCB’s alternative approach, the presence or absence of a species from a Bird Conservation Region would also clearly meet the legal requirement for finding that a species is threatened or endangered within a significant portion of its range.

Regardless of the difference in opinion between the FWS and SCB regarding the exact meaning of the phrase “significant portion of its range,” SCB is deeply concerned that the FWS has failed to follow the clear language of the ESA and its own draft policy on

¹¹ *Draft Policy on Interpretation of the Phrase “Significant Portion of Its Range” in the Endangered Species Act’s Definitions of “Endangered Species” and “Threatened Species.”* 76 Fed. Reg. 76,987 (Dec. 9, 2011).

¹² 16 U.S.C. § 1531(b) (emphasis added).

¹³ A full copy of SCB’s comments can be found at:

http://www.conbio.org/activities/policy/docs/SCB_Comments_on_SPR_Policy_3_8_2012.pdf

¹⁴ Faber-Langendoen, D. et al. 2009. NatureServe conservation status assessments: methodology for assigning ranks. NatureServe, Arlington, Virginia.



analyzing SPR, as explained below, by not conducting any analysis or discussing in the listing proposal whether the Lesser Prairie-chicken is threatened or endangered within a significant portion of its range. The failure to conduct such an analysis renders the listing proposal arbitrary and capricious, and a violation of the ESA because the clear language of the ESA requires FWS to analyze whether a species is endangered or threatened “throughout all *or* a significant portion of its range.”¹⁵ The listing proposal for the Lesser Prairie-chicken fails to conduct an independent assessment of each of the four possible listing options contemplated by the ESA (endangered throughout its range, endangered in a significant portion of its range, threatened throughout its range, and threatened in a significant portion of its range), and instead merely states:

After a review of the best available scientific information as it relates to the status of the species and the five listing factors described above, we have determined that the lesser Prairie-chicken meets the definition of a threatened species (*i.e.*, is likely to become in danger of extinction in the foreseeable future throughout all or a significant portion of its range).¹⁶

FWS’s conclusory statement does not represent an analysis based on the best available science, and thus fails to meet the requirements of the ESA. FWS also fails to follow its own draft policy on SPR, which makes expressly clear the process for conducting an SPR analysis:

If we [the FWS] determined that...the species was threatened throughout all of its range, *we would limit our SPR analysis to the question of whether the species is in danger of extinction in a significant portion of its range*; if so, we would list the species as endangered; if not, we would list the species as threatened.¹⁷

Nothing in the listing proposal or its supporting documents suggests that the FWS ever conducted such an analysis for the Lesser Prairie-chicken by determining if the species is in danger of extinction in a significant portion of its range. As mentioned above, the FWS has divided the Prairie-chicken’s range into four geographic quadrants. These quadrants are divided east and west based on the species’ distribution in the Shortgrass Prairie Bird Conservation Regions (BCR) and the Mixed-grass prairie BCR, and divided north and south by the Canadian River which bisects the species’ range into two roughly similar portions. It appears, therefore, that the FWS has identified portions of the range that are significant for this species—each of the four quadrants. And a review of the Prairie-chicken suggests that in two of these quadrants, the southeast quadrant (Mixed-grass Prairie BCR south of the Canadian River) and the southwest quadrant (Shortgrass Prairie BCR south of the Canadian River); the species is in danger of extinction. In the southeast quadrant, most of the species’ historic range in Texas, the species has declined by approximately 81% in Texas (from 236,000 sq km to 12,000 sq km). In the southwest quadrant, the historic range in New

¹⁵ 16 U.S.C. 1532(6) & (20)

¹⁶ 77 Fed. Reg. at 73,851

¹⁷ 76 Fed. Reg. at 77,002



Mexico, the species may have declined 94% (from 52,500 sq km to 8,500 sq km) (see Figure One).¹⁸

In general, the Lesser Prairie-chicken's decline has been particularly severe in the portion of its range south of the Canadian River. In these areas, the species' range is fragmented and there is little connectivity among existing populations.¹⁹ For these reasons, the Lesser Prairie-chicken is endangered in a significant portion of its range. **Accordingly, SCB recommends that the FWS revise its listing proposal to establish several Distinct Population Segments of the Lesser Prairie-chicken in the final rule and protect each DPS as either endangered or threatened depending on the best available science.** There are several configurations of DPS units that the FWS could protect under the ESA. The FWS could establish a DPS unit for the Shortgrass Prairie BCR and a DPS unit for the Mixed-grass Prairie BCR for the species. Such an approach would be consistent with several other recent listings where multiple DPS units for a species were protected based on ecoregional considerations. For example, with the recent listing of the Atlantic sturgeon (*Acipenser oxyrinchus*), the National Marine Fisheries Service divided the Atlantic sturgeon into five distinct population segments, based largely on terrestrial and marine ecoregion boundaries rather than listing the entire species as one unit under the ESA.²⁰ Such an approach would provide the FWS with the management flexibility needed to provide the greatest degree of protection to the Prairie-chicken where necessary, and provide additional flexibility on take in areas where Prairie-chicken are slightly more abundant (i.e. the northeast quadrant). The FWS could also divide the Lesser Prairie-chicken into two DPS units by the Canadian River: a northern Lesser Prairie-chicken DPS and a southern Lesser Prairie-chicken DPS. Given the fragmented range of the species, this configuration would also allow for the FWS to find that the two units are distinct and significant consistent with the DPS policy.

If the FWS cannot alter its proposal to establish multiple DPS units to protect the Lesser Prairie-chicken at this time, then **SCB recommends that FWS use its emergency authority under Section 4(b)(7) to protect the Lesser Prairie-chicken as endangered pending a later listing of separate DPS units.** Such an approach would provide the Prairie-chicken with the benefit of the doubt during the period of time needed to revise the original listing proposal.²¹

¹⁸ 77 Fed. Reg. at 73,846

¹⁹ *Id.* at 73,861

²⁰ *Final Listing Determination for Two Distinct Population Segments of Atlantic Sturgeon (Acipenser oxyrinchus oxyrinchus) in the Southeast*, 77 Fed. Reg. 5,914 (Feb. 6, 2012)

²¹ See House Conference Report 96-697, 1979 U.S.C.C.A.N. 2576 (emphasis added); see also *Conner v. Burford*, 848 F.2d 1441, 1454 (9th Cir.1988).



Figure One – Current & Historic Range of the Prairie-chicken²³

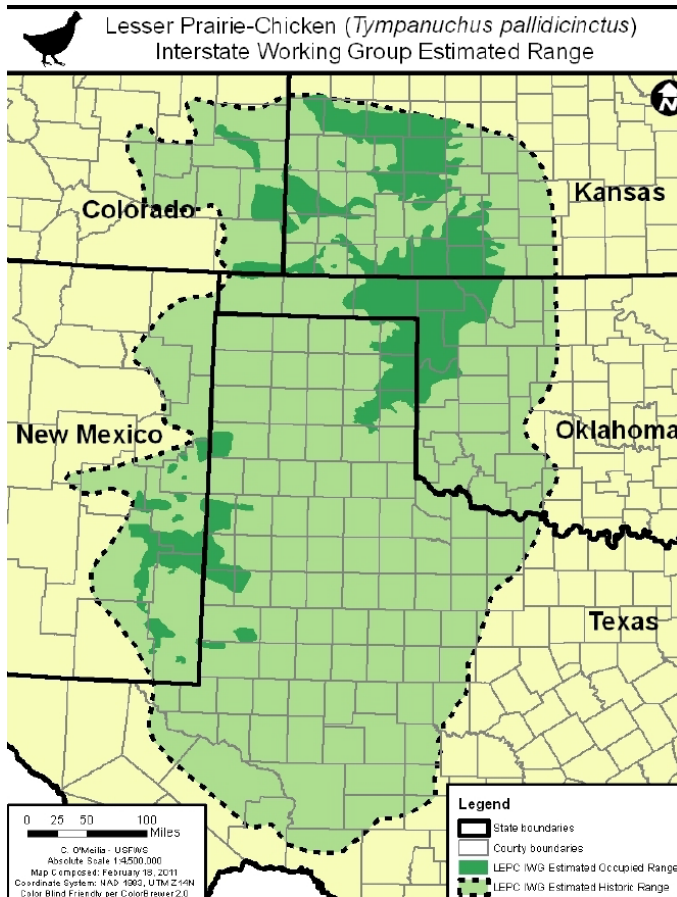


Figure Two – Shortgrass prairie BCR²²



II. SCB Recommends that the FWS Use its Emergency Authority to Protect All Known Current Breeding Leks as Critical Habitat.

In its draft listing proposal for the Lesser Prairie-chicken, the FWS stated that it would not designate critical habitat at that time because “critical habitat is not determinable for the lesser prairie-chicken at this time.”²⁴ SCB has substantive concerns about the FWS’s determination that critical habitat is not determinable at this time given the extensive information that the FWS appears to possess regarding the habitat needs of the Prairie-chicken at different life stages for this species. The ESA and the regulations that implement the critical habitat provisions make clear that the designation of critical habitat should be an iterative process, wherein the FWS updates and revises critical habitat designations as

²² Bird Conservation Region 18: Shortgrass prairie. Available at: <http://www.nabci-us.org/aboutnabci/PLJV-AFWA06.pdf>

²³ Lesser Prairie-Chicken Interstate Group Estimated Range. Available at: <http://www.regulations.gov> under Docket: FWS-R2-ES-2012-0071

²⁴ 77 Fed. Reg. at 73,887



additional information about a species is gathered.²⁵ Nowhere in the ESA does it state that critical habitat should be deferred until such time that the FWS is able to exhaustively determine every last area of critical habitat for a species. Such an approach would be under-protective of a species, and against the Congressional intent underlying the ESA.

With respect to the Lesser Prairie-chicken, the habitat needs of the species are very well understood,²⁶ and the FWS has been monitoring this species for almost 15 years as a candidate species. The FWS provided 30 pages of citations to scientific literature regarding the Lesser Prairie-chicken, which includes over 40 articles that directly reference habitat needs of the Prairie-chicken in their titles. It is neither plausible nor credible for the FWS to claim that it cannot determine any critical habitat for the Lesser Prairie-chicken at this time. As discussed above, one of the most important aspects of the life history of the Lesser Prairie-chicken involves the displays of breeding male birds at communal leks to attract female birds.²⁷ Without the presence of suitable display leks that are secure from human disturbance, Prairie-chicken populations tend to decline.²⁸ Therefore, the FWS should take every step possible to protect active breeding leks, including designating known leks as critical habitat. The FWS should have access to data regarding the locations of active leks given that the States of New Mexico, Oklahoma, Kansas, and Texas all have been conducted within the last few years.²⁹ Therefore, based on current information, **SCB recommends that all known, active Lesser Prairie-chicken leks be designated as critical habitat using the emergency rulemaking authority under the ESA.**

In addition, SCB recommends that a buffer zone around each known, active lek also be protected as critical habitat. Over a decade ago, the FWS recommended a 5-mile buffer around any known prairie grouse species lek (including Lesser Prairie-chicken, Greater Prairie-chicken, and Sage Grouse) within which wind turbines would not be sited.³⁰ Similarly, the Sage Grouse Conservation Report generally recommends the protection of active lek sites

²⁵ See 16 U.S.C. § 1533(b)(3)(A)(ii) (The FWS “may, from time-to-time thereafter as appropriate, revise such designation.”); see also 50 C.F.R. § 424.12(g) (“Existing critical habitat may be revised according to the procedures in this section as new data become available to the Secretary.”)

²⁶ See, e.g., Jones, R.E. 1963 Identification and Analysis of Lesser and Greater Prairie-chicken Habitat, *The Journal of Wildlife Management*, Vol. 27: 757-778 (Oct., 1963). Crawford, J.A. and E.G. Bolen. 1975. Spring lek activity of the lesser Prairie-chicken in west Texas. *Auk* 92(4):808-810.

²⁷ *Id.*

²⁸ Crawford, J.A. and E.G. Bolen. 1976b. Effects of lek disturbances on lesser Prairie-chickens. *Southwest. Nat.* 21(2):238-240.

²⁹ Beauprez, G.M. 2011. Survey for active lesser Prairie-chicken leks: Spring 2011. New Mexico Dept. of Game and Fish Fed. Aid in Wildlife Restor. Proj. W-138-R-6. Sante Fe.; Schoeling, D. 2010. E-mail communication dated February 8, 2010, providing 2009 lek attendance and density estimates for Oklahoma. Oklahoma Dept. of Wildlife Conservation, unpublished data. 5pp.; Pitman, J.C. 2011. Prairie-chicken Lek Survey – 2011. June 2011 Performance Report, Kansas Dept. Wildl. and Parks, 16 pp.; McRoberts, J.T. 2009. Aerial surveys for lesser prairie-chicken leks: detectability and disturbance response. M.S. thesis, Texas Tech University, Lubbock, Texas. 138 pp.

³⁰ Manville A.M., II. 2004. Prairie grouse leks and wind turbines: U.S. Fish and Wildlife Service justification for a 5-mile buffer from leks; additional grassland songbird recommendations. Division of Migratory Bird Management, US Fish and Wildlife Service, Arlington, VA, peer-reviewed briefing paper. 17 pp.



as priority areas for conservation across the range of the Greater Sage Grouse.³¹ SCB believes that the size of a buffer around each lek should be determined by the best available science, however to protect leks from disturbance, there should be a buffer area designated as critical habitat around each lek. Designating these area as critical habitat would help to protect high-priority conservation areas for the Prairie-chicken, but not preclude all development within the buffer zone; it would merely ensure that land-management activities are carried out in a more-careful manner than might otherwise occur.

III. SCB Recommends that the Discussion of Prairie-Chicken “Strongholds” be Removed from the Listing Proposal Because the Concept Does Not Represent the Best Available Science. Recovery Planning Should Occur as an Independent Process that is Subject to Peer Review After the Species is Listed

The draft listing proposal for the Lesser Prairie-chicken introduces a novel management concept for the conservation of the species, which the FWS describes as a Lesser Prairie-chicken “stronghold.” The FWS proposal states that “It is expected that a minimum of four strongholds will be needed, distributed across the ecological diversity of the species, in order to secure the status of the species.”³² While the establishment of a stronghold may appear at first glance to be a reasonable conservation strategy, once the actual strategy is explained, it becomes abundantly clear that **the FWS stronghold proposal is not supported by science for this species.** The FWS appears to have constructed a poorly supported justification to accomplish an unexplained policy objective. SCB is deeply concerned that the FWS has misrepresented the scientific literature that it bases its “stronghold” concept upon in a very disingenuous manner. As explained below, the adoption of this “management” objective in recovery planning or as a justification to avoid listing the species would almost certainly devastate the Lesser Prairie-chicken, greatly increasing the species risk of global extinction. **Because the “stronghold” proposal does not have an adequate scientific foundation in this case, and creates significant uncertainties regarding the listing and recovery of the Prairie-chicken, SCB requests that all language referencing the stronghold proposal be stripped from the species’ final listing decision.**

First, it is important to make clear what the FWS considers to be a Prairie-chicken “stronghold.” The FWS defines a stronghold as “core areas of high quality of habitat that are at least...25,000 acres in size.”³³ A stronghold should contain 6-10 active leks with 6 male birds displaying at each lek, or 60 adult males.³⁴ If the FWS is correct that four strongholds, one in each of the four quadrants of the Prairie-chicken’s range, will be sufficient to “secure the status of the species,” this would mean that the Prairie-chicken’s population could be secured at a level of approximately 240 male birds (and SCB can only assume an equal number of female birds) and 100,000 acres of habitat. In context, 500 Lesser Prairie-chickens represents less than 5% of the species’ *current* abundance and less than 0.004% of the

³¹ See FWS. 2012. Sage-Grouse Conservation Objectives Draft Report at pages 46-72.

³² 77 Fed. Reg. at 73,836

³³ *Id.*

³⁴ *Id.*



species' *historic* abundance. Similarly, 100,000 acres represents less than one percent of the species' current occupied range of 17 million acres (27,000 sq. miles) and 0.17 percent of its historic range of 115 million acres (180,000 sq. miles).

The language in the draft listing proposal suggests that the presence of these four strongholds would be sufficient to preclude listing under the Endangered Species Act. SCB is not aware of any scientific literature that suggests that a 99% reduction in range and population represents a legitimate conservation strategy that will ensure against the extinction of a species. The FWS does not cite to any scientific literature to support this proposal. To put this stronghold strategy in context, the FWS has developed conservation goals for the Greater Sage Grouse (*Centrocercus urophasianus*), a species with very similar life-history traits and similar conservation challenges. For the Sage Grouse, the FWS recommends a population of over 20,000 individuals distributed across over 150 million acres of land.³⁵ This disparity in management goals cannot be explained by science, as there appears to be virtually no science that supports the FWS's management proposal for the Lesser Prairie-chicken.

SCB is also disturbed by the deliberate sleight-of-hand that the FWS appears to be attempting in this listing proposal. In the listing proposal, the FWS states that "A more complete explanation of this preliminary conservation strategy can be found in the Service's (2012) technical white paper titled '*Conservation Needs of the Lesser Prairie-chicken*.'³⁶ However, this white paper provides *no additional explanation* as to why the stronghold strategy represents the best available science. In fact, this technical white paper is only four and a half pages long. The most recent peer reviewed paper that is cited in the white paper is from 2002, and the only two citations more recent than 2002 are from other government documents, neither of which appears to have been peer reviewed.³⁷ Most egregiously, the peer-reviewed article (itself only three pages long), which the FWS cites for its stronghold conservation strategy, does not even use the term "stronghold." Nor does that article put forward a comprehensive conservation strategy for the Lesser Prairie-chicken.

In reality, the article which the FWS cites, *Lesser prairie-chicken management* by Roger Applegate and Terry Riley,³⁸ was published in a journal on range-management for the purpose of developing habitat-based conservation techniques for the species, *not* for developing population targets or habitat acreage targets to manage the species range-wide. The Applegate article states:

Leks need to be clustered so that interchange among different leks can occur; generally inter-lek distance should not be greater than 1.2 miles,

³⁵ See FWS. 2012. Sage-Grouse Conservation Objectives Draft Report, Aug. 1, 2012 available at: <http://www.fws.gov/mountain-prairie/species/birds/sagegrouse/20120803ConservationObjectivesTeamDraftReport.pdf>

³⁶ FWS. 2012. *Conservation Needs of the Lesser Prairie-chicken*, available at: http://www.tpwd.state.tx.us/huntwild/lesserprairiechicken/media/fws_lpc_paper.pdf

³⁷ *Id.*

³⁸ Applegate, R.D., T.Z. Riley. 1998. *Lesser Prairie-chicken Management*. *Rangelands* 20:13-15.



however Prairie-chickens will move over 5 miles between leks. Complexes should consist of at least 6 leks; ten or more would be better. A higher density of leks reduces interbreeding problems on an individual lek, since dominate males and their male offspring often do most of the breeding.³⁹

This passage appears to be the only scientific support that the FWS is able to cite to for its stronghold concept. But a reading of this article makes perfectly clear that the discussion of lek complexes was made simply in passing, regarding proper range management. The Applegate paper does not discuss minimum population size, population viability analysis, or more broadly the conservation of the Lesser Prairie-chicken across the species' geographic range. The Applegate paper instead focuses primarily on habitat based management techniques for the Prairie-chicken, including changes to grazing practices, prescribed burns, cultivation practices on grainfields, herbicide/pesticide use, exotic species, and actions on Conservation Reserve Program lands.⁴⁰ Thus it is exceedingly clear that the FWS has completely misread the focus and purpose of the Applegate article. The stronghold concept, apparently drawn from a single sentence discussing Prairie-chicken "complexes" is simply not credible.

The "technical white paper" the FWS developed in 2012 to conserve the Lesser Prairie-chicken also lacks credibility as a scientific document. Regarding strongholds, the white paper states: "The Service suggests that a minimum of four strongholds be established initially across the landscape in order to ameliorate effects from current and future fragmentation and to increase the chances for long-term survival of the lesser prairie-chicken."⁴¹ In the very same paragraph, the FWS states:

[An] *undetermined number* of additional strongholds will be necessary across the species' range in order to expand, connect, and/or reconnect local populations to ensure survival and long-term population viability, as informed by current and future spatial habitat modeling efforts. The *distribution, location, and number of strongholds necessary for lesser prairie-chicken conservation must be informed by population goals.*

Nowhere in the white paper does the FWS appear to consider the distribution, location and number of strongholds needed to ensure the long-term survival or recovery of the Prairie-chicken. There is nothing to suggest that any analysis has been done to determine what population goals are required to stabilize and then recovery the Prairie-chicken. It is not credible for this white paper to simultaneously suggest that four strongholds will "ameliorate" the effects that are the driving the decline of the Prairie-chicken, while not providing any

³⁹ *Id.*

⁴⁰ *Id.*

⁴¹ FWS. 2012. *Conservation Needs of the Lesser Prairie-chicken*, available at: http://www.tpwd.state.tx.us/huntwild/lesserprairiechicken/media/fws_lpc_paper.pdf



quantitative analysis regarding how these strongholds would impact population trends. What is troubling, however, is the fact that the draft listing proposal for the Prairie-chicken glosses over all of the uncertainties, as well as all of the areas where the FWS appears to lack information regarding population goals for the species, and instead categorically asserts that four strongholds will “secure the status of the species.” Given the lack of data and literature to support its application, this claim appears to be without any foundation and should be removed from the final listing decision.

But what is most troubling is the fact that the FWS is using this “stronghold” strategy as a means to potentially avert listing, to short-circuit the recovery planning process, and to avoid designating critical habitat. Simply put, rather than following the ESA and using the legal mechanisms at its disposal to conserve a species, the FWS appears to be inventing novel, linguistic tricks to avoid listing, and in the case that listing cannot be averted, to avoid the recovery planning process. First, designating a particular parcel of land a Prairie-chicken stronghold does not make it so and cannot avert the listing of a species (this is especially true in this instance since the FWS has not identified the locations of any potential stronghold for the species). The ESA requires the Services to make decisions regarding the listing of threatened and endangered species based on the *current* status of the species, based solely on the best available science.⁴² Whether or not a complex of 10 active prairie-chicken leks *might be* of sufficient size to ensure a robust population locally does not answer the question as to whether a species is threatened or endangered right now. Now would the hypothesized existence of four Prairie-chicken complexes provide a sufficient basis for deciding whether or not to protect a species under the ESA. Since the stronghold concept is unproven and untested for this species, it does not represent the best available science it must have no place in a decision regarding the protection of the Lesser Prairie-chicken under the ESA.

Once the Lesser Prairie-chicken is listed, the Service must develop a recovery plan for that species which contains “a description of such site-specific management actions as may be necessary to achieve the plan’s goals” as well as “objective, measurable criteria,” which when achieved would result in a determination that the species is no longer threatened or endangered. After the Lesser Prairie-chicken is listed, the FWS may continue down the path of developing site-specific management actions for the species based around the concept of a Prairie-chicken stronghold. But in doing so, the ESA requires that the FWS provide the public with an opportunity to review and comment on that recovery plan.⁴³ In fact, the FWS’s own guidance for developing recovery plans requires a period of scientific peer-review of a draft recovery plan.⁴⁴ In time, the stronghold concept may become scientifically robust (include population goals based on scientific modeling) to the extent that it may become a central strategy for the recovery of the Prairie-chicken. And if sufficient effort is eventually made by the FWS, then that strategy might survive the rigor of an external peer review.

⁴² 16 U.S.C. § 1533(b)(1)(A)

⁴³ 16 U.S.C. § 1533(f)(4)

⁴⁴ USFWS & NMFS. 2004. *Endangered and Threatened Species Recovery Planning Guidance* at 5.2-2 Available at: <http://www.fws.gov/endangered/esa-library/pdf/NMFS->



Finally, if scientific research and data demonstrate that the Prairie-chicken stronghold is an appropriate conservation strategy, that strategy should be implemented through the existing statutory tools that the ESA provides by designating those strongholds as critical habitat under Section 4 of the ESA and by developing Habitat Conservation Plans under Section 10 of the ESA. As explained above, areas such as leks must be designated as critical habitat. Where additional conservation protections are required, the FWS should use the suite of existing tools, especially those under Section 10 that facilitates the protection of habitat used by endangered species on private lands, to protect the Prairie-chicken. But, in order to utilize those tools, the FWS must first list the Prairie-chicken if the scientific data currently available demonstrate that listing is warranted. Voluntary conservation strategies may provide additional support towards the delisting of the Prairie-chicken in the future, at such time as when the species is no longer threatened. But hypothetical and unproven voluntary conservation actions are not sufficient to preclude listing at the present.

CONCLUSION

Since 1999, the best available science has clearly indicated that the Lesser Prairie-chicken should be protected under the ESA, and SCB supports a listing of the species as endangered based on threats within a significant portion of its range. The FWS should reconsider protecting the species as two or more Distinct Population Segments based on the species' presence in distinct ecological regions. The failure to protect the known, currently-active breeding leks (as well as a minimum buffer) must be remedied by designating those areas as critical habitat using the emergency rulemaking authority in Section 4 of the Act. Finally, SCB recommends that the FWS remove all language discussing the recovery of the Prairie-chicken through the protection of strongholds until a science-based, peer reviewed recovery plan is developed. Thank you for your consideration.

Sincerely,

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