

Political Interference in Endangered Species Science

A Systemic Problem at the U.S. Fish and Wildlife Service

U.S. Department of the Interior Deputy Assistant Secretary Julie MacDonald and other Interior Department officials have systematically distorted scientific findings to prevent the protection of a number of highly imperiled species under the Endangered Species Act (ESA). The ESA requires species listing decisions to be based only on the best available science. This is one of several case studies of political interference by the current Administration in scientific decisionmaking available at www.ucsusa.org/scientific_integrity.

Case: Gunnison Sage-grouse

After exhaustive scientific study, U.S. Fish and Wildlife Service (FWS) biologists and regional and field staff were prepared to publish a draft rule to list Gunnison sage-grouse as “endangered” under the ESA and recommend designation of critical habitat for the species in September 2005. The agency even drafted media releases to announce the proposed listing rule. However, the listing decision for Gunnison sage-grouse was delayed and then reversed by Julie MacDonald and other Department of the Interior (DOI) officials in Washington, DC.

1. MacDonald delayed listing for Gunnison sage-grouse by challenging its designation as a unique species

MacDonald first delayed the proposed listing by questioning the science used to designate Gunnison sage-grouse as a separate species from greater sage-grouse. At her prompting, DOI ordered a FWS expert to review the data that distinguishes the Gunnison sage-grouse as a unique species.

To: Dale Hall
From: Renne Lohoeffner
Re: Gunnison sage-grouse

Taxonomy

In response to Julie MacDonald’s concerns about whether the AOU taxonomy for Gunnison sage-grouse is correct, we asked Dr. Steve Chambers to look at the question of whether the paper published in the *Wilson Bulletin* (Young, Braun, Oyler-McCance, Hupp, Quinn 2000. A New Species of Sage-Grouse from Southwestern Colorado, *Wilson Bulletin* 112(4): 445-453) was based on good science.

The FWS expert reported that “the Gunnison sage-grouse is a listable entity in the sense that it meets the definition of ‘species’ under the Endangered Species Act.”

MacDonald was not satisfied with the expert’s review and continued to question the species’ validity throughout the listing decisionmaking process.

(Schroeder et al. 2004).

Gunnison sage-grouse and greater sage-grouse [have similar](#) life histories

Deleted: are different genetically, morphologically, and behaviorally, their

Comment [JM4]: I think this document makes a good case for the Gunnison not being threatened, but I also think it is important to highlight the serious flaws in the designation of the Gunnison as a separate species. That can be done at the end of the finding, and is not essential, but I do think it’s important.

A FWS staffer opposed MacDonald's questioning of Gunnison sage-grouse taxonomy.

1. The species designation issue is one that should NOT be questioned. We have not been provided any science that disputes GUSG species designation.

However, MacDonald ensured that the final "not warranted" listing determination for Gunnison sage-grouse stated that "there are questions regarding the validity of this taxon" (71 Fed. Reg. 19955), a statement that one FWS official called "disturbing."

with the petition under review here. We acknowledge that there are questions regarding the validity of this taxon,



Bridget Fahey/R6/FWS/DOI

04/12/2006 06:48 AM

To Pat Mehlhop/R6/FWS/DOI@FWS, Robert Dach/R6/FWS/DOI@FWS
cc Julie Lyke/R6/FWS/DOI@FWS, Chuck Davis/R6/FWS/DOI@FWS
Subject final GUSG pkg

Here is the GUSG rule that went to the FR. Changes to the last version you saw were worked out between Dale and Julie MacD over the last 2 days. There is a disturbing sentence on P7 regarding the validity of the taxon. When I find out publication date, I will let you know.

2. MacDonald and other DOI officials reversed FWS's decision to protect Gunnison sage-grouse under the ESA

After delaying the proposed listing decision, MacDonald and other DOI officials in Washington, DC proceeded to reverse the recommendation by agency biologists and field staff to list Gunnison sage-grouse as "endangered" under the ESA. FWS headquarters required Region 6 (which submitted the listing proposal) to reduce the substantial draft listing rule to a mere outline of information concerning Gunnison sage-grouse—resulting in the removal of much of the information that supported listing the species.



Kurt Johnson/ARL/R9/FWS/DOI

11/22/2005 09:49 AM

To Julie Lyke/R6/FWS/DOI@FWS
Al Pfister/R6/FWS/DOI@FWS, Chris
cc Nolin/ARL/R9/FWS/DOI@FWS, Marjorie Nelson/ARL/R9/FWS/DOI@FWS, Mary_Henry@fws.gov,
bcc
Subject Re: Fw: Gunnison sage-grouse listing outline

Julie,

I haven't read the outline in detail, only skimmed it, but on first look I can see that it needs substantial revision and shortening before it warrants discussion. These should be "outlines," not findings recast in a different format. This outline should be half the 14 pages it now is. Most of the introductory material is

Based on the outline, and contrary to the recommendations of FWS biologists, sage grouse experts, and field staff (and after the agency invested eight months of work preparing to list the grouse), FWS headquarters decided not to list the species.

12/1/05 - GUSG Conf Call - Julie, Susan, Jerry, Chris, Nancy Green

- discussed w/drewal

- ? - do we have info to support that paper

- don't have enough evidence that is T or E \Rightarrow remove from candidate

- WD doesn't see where threats add up; litigation risk on equal side

- WD will re-craft outline to support removal

Documents show that the Washington office was extensively involved in drafting the new "not warranted" listing determination, demanding extensive edits to the former listing proposal. In the final days before FWS published the not warranted listing determination on April 18, 2006, FWS biologists refuted significant comments and edits by MacDonald and Tom Graf (DOI attorney, Denver) to the draft "not warranted" determination that were intended to build the case against listing. A FWS sage grouse expert opposed MacDonald's removal of the species description from the draft determination (1); MacDonald's editing and removal of text describing the historic range of Gunnison sage-grouse (2); MacDonald's challenges to the veracity and accuracy of certain literature cited; and MacDonald's removal of text describing habitat loss and threats to Gunnison sage-grouse (3). Most of the text questioned by MacDonald was removed from the final not warranted listing determination.

MacDonald Edits (1)

Comment [JM3]: Moved IT WAS MOVED TO THE END OF THE DOC. SO RO DELETED IT.

Deleted: Gunnison

Deleted: sage-grouse are smaller than greater sage-grouse (*C. urophasianus*), weighing approximately 1/3 less (Hupp and Braun 1991; Young *et al.* 2000). Their filoplumes (specialized feathers on the neck) are longer and give the appearance of a "ponytail" during the courtship display, unlike the filoplumes on greater sage-grouse. Gunnison sage-grouse retrices (tail feathers) have distinctive barring, unlike the mottled pattern on greater sage-grouse retrices (Young *et al.* 2000). Gunnison sage-grouse mating displays are slower than greater sage-grouse (Young *et al.* 2000). Mating calls also are distinct. Gunnison sage-grouse "pop" their apteria nine times instead of twice like greater sage-grouse (Young *et al.* 2000). Young (1994) found that female Gunnison sage-grouse avoided playbacks of male greater sage-grouse mating calls. She concluded that differences in courtship vocalizations were likely a barrier to mating between Gunnison and greater sage-grouse. The DNA sequence information from mitochondrial and nuclear genomes indicate there is no gene flow between Gunnison and greater sage-grouse (Oyler-McCance *et al.* 1999; Young *et al.* 2000).

Expert's Response

Page 6 - JM moving the species description - I didn't find where she moved it to. I think this section should be re-inserted. Also, the only person who thinks the species designation is flawed is Rob Ramey, and his work on other species is under question now (also, he has never done any analysis on Gunnison, except for his speculative review). I would simply state that the scientific data, and community, has accepted the separation of the two species, and we do not have any data to reverse that decision.



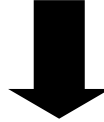
MacDonald Edits (2)

Based on historical records, museum specimens, Gunnison sage-grouse historically occurred in southwestern Colorado, southeastern Utah and possibly northwestern New Mexico. Accounts of Gunnison sage-grouse in Kansas and

Deleted: and potential sage-grouse habitat, Schroeder et al. (2004) concluded that

Comment [ES9]: RO REJECTED EDITS BECAUSE WE ARE LEFT WITH NO CITATION AND WOULD BE MISREPRESENTING WHAT IS IN THE PEER REVIEWED LITERATURE.

Deleted: northeastern Arizona, and southeastern Utah



Expert's Response

Page 15 - deletions regarding historic distribution - these deletions need to be re-inserted as removing them misrepresents the original literature (Schroeder et al. 2004, page 370).

MacDonald Edits (3)

Page 34: [4] Deleted

Julie MacDonald

3/23/2006 10:49:00 AM

-McCance et al. (2005) concluded that gene flow among populations of Gunnison sage-grouse is limited. The loss of genetic diversity in the Piñon Mesa and Monticello-Dove Creek populations suggests that habitat fragmentation has resulted in cessation or near cessation of emigration and immigration from and to other populations because genetic differences between populations of Gunnison sage-grouse increase as the geographical separation of the populations increases (Oyler-McCance et al. 2005). This is supported by the documented loss and fragmentation of sagebrush vegetation in southwestern Colorado (Oyler-McCance et al. 2001). It suggests that habitat fragmentation is precluding movements among populations. Occasional migration among some populations may still occur (Oyler-McCance et al. 2005). Gunnison sage-grouse are known to migrate several miles between areas within the San Miguel Basin population (Apa 2004), crossing unsuitable habitat such as the San Miguel River valley and roads. Each of the six groups in the San Miguel Basin population are separated by 1-4 air miles (GSRSC 2005).

MacDonald Edits (3)

Page 34: [8] Deleted Julie MacDonald 3/23/2006 11:34:00 AM
increased predation and reduced nest success due to predators associated with
agriculture (Connelly et al. 2004). Past

Page 34: [9] Deleted Julie MacDonald 3/23/2006 11:09:00 AM
development of irrigation projects to support agricultural production has resulted
in additional sage-grouse habitat loss (Braun 1998).



Expert's Response

Page 34 - uncertain why all the deletions - they are accurate and well-supported.

MacDonald Edits (3)

Page 37: [15] Deleted Julie MacDonald 3/23/2006 12:08:00 PM
and corvid predation (Connelly et al. 2000b; Aldridge and Brigham 2003;

Connelly et al. 2004)

Page 37: [16] Comment [JM56] Julie MacDonald 4/5/2006 8:44:00 AM
Forman and Alexander 1998 state specifically that roads are not an important conduit for plans (pp 211)
SEE P.210 FOR SPECIFIC LANGUAGE.

Page 37: [17] Comment [JM57] Julie MacDonald 4/5/2006
Forman 2000 does not address plants at all, but primarily focuses on noise. SEE P.33 FOR PLANT
DISCUSSION

Page 37: [18] Comment [JM58] Julie MacDonald 4/5/2006
Does not support, correlates wires and corvid predation, not roads. DELETED CITE

Page 37: [19] Comment [JM59] Julie MacDonald 4/5/2006
Does not support other than uses a model that includes roads as a component. THE MODEL HAS WITHSTOOD PEER REVIEW AND IS SUBMITTED FOR PUBLICATION.

Page 37: [20] Comment [JM60] Julie MacDonald 4/5/2006
They looked at mining noise, and how it might affect lek use, and got not results. THE STUDY WAS AT NOISE FROM ROADS. THE RESULTS WERE INCONSISTENT, NOT NONEXISTENT

Page 37: [21] Comment [JM61] Julie MacDonald 4/5/2006 11:37:00 AM
Lyon and Anderson made no such suggestion. They examined nesting effects of roads and found no
significant difference between disturbed and undisturbed hens. Although they do go on to justify their
difference as biologically significant, I'm not sure what that means when you are trying to distinguish
between a real difference and random noise in the system. ADDED ALTERNATE CITATION

Page 37: [22] Deleted Julie MacDonald 3/23/2006 12:24:00 PM

Lyon and Anderson (2003) suggested that roads may be the primary impact of oil
and gas development to greater sage-grouse, due to their persistence and continued use
even after drilling and production have ceased [JM2].

Deleted: Additional habitat loss has resulted from reservoir development in some of the population areas. Past

Deleted: reservoir development in the Gunnison Basin flooded 3,700 ha (9,200 ac or 1.5 percent) of likely sage-grouse habitat. Three other reservoirs inundated approximately 11 percent of habitat in the San Miguel Basin population area. We are unaware of any plans for additional reservoir construction in the foreseeable future.¶

Page 37: [23] Comment [JM62] Julie MacDonald 4/3/2006 3:59:00 PM
Page 344 of the cite. JM EDIT MAKES SENTENCE MISLEADING. REWORDED ORIGINAL SENTENCE TO CLARIFY.



Expert's Response

Page 37 (where to begin....)

Not sure why the reservoir section was deleted. It was habitat loss.

Roads - the first paragraph was correct until someone added the words sage-grouse to the first sentence. The citations also supported the paragraph until sage-grouse added. The deletions from the first paragraph are not necessary if the word sage-grouse is taken out of the first sentence.

Aldridge and Brigham (2003, page 31) talk about a network of roads, trails and powerlines in their discussion of powerlines. I do not know why this portion of the sentence, and the citation were deleted, as they were accurate.

JM comment 50 - Forman and Alexander does discuss exotic species as spread by roads on page 210. I believe her comment was generated by their statement that there are few documented cases.

JM comment 51 - Forman 200 does discuss plants, and invasives, on page 33

JM comment 52 - not sure what this comment reeres too. Connelly et al. 2004 does discuss wires and corvid predation

JM comment 53 - the model is very strong, has withstood peer review, and is currently in review for publishing (and was produced and fully supported by USGS).

The deletion of the citations weakens the paragraph

JM comment 54 - the study did look at noise from roads. The results were inconsistent, not nonexistent.

JM comment 55 - it was implied, but a better suggestion is Lyon 2000, page 7

JM comment 56 - not sure what the comment was meant to be here, but the citation is correct.

The Gunnison sage-grouse is a distinct species from Greater sage-grouse and occurs in eight isolated populations in southwestern Colorado and southeastern Utah. Gunnison sage-grouse have experienced significant population declines from historic numbers and only about 4,000 breeding individuals remain.

Additional information on Gunnison sage-grouse and Deputy Assistant Secretary MacDonald and other DOI officials' manipulation of the species listing is available on the Sagebrush Sea Campaign website at www.sagebrushsea.org/sp_gunnison_grouse.htm and www.sagebrushsea.org/sp_gunn_grouse_interference.htm, respectively.