

Laurence (“Laird”) J. Lucas (ISB # 4733)

[llucas@advocateswest.org](mailto:llucas@advocateswest.org)

Todd C. Tucci (ISB # 6526)

[ttucci@advocateswest.org](mailto:ttucci@advocateswest.org)

Sarah Stellberg (ISB #10538)

[sstellberg@advocateswest.org](mailto:sstellberg@advocateswest.org)

*Advocates for the West*

P.O. Box 1612

Boise, ID 83701

(208) 342-7024

(208) 342-8286 (fax)

Attorneys for Plaintiffs

**UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF IDAHO**

WESTERN WATERSHEDS PROJECT,  
WILDEARTH GUARDIANS, CENTER  
FOR BIOLOGICAL DIVERSITY, and  
PRAIRIE HILLS AUDUBON SOCIETY,

*Plaintiffs,*

v.

DAVID BERNHARDT, Secretary of  
Interior; JOSEPH R. BALASH\*, Assistant  
Secretary of Interior; BUREAU OF LAND  
MANAGEMENT; and U.S. FOREST  
SERVICE,

*Defendants.*

Case No. 1:16-cv-00083-BLW

**FIRST SUPPLEMENTAL  
DECLARATION OF DR. CLAIT E.  
BRAUN IN SUPPORT OF  
PLAINTIFFS' MOTION FOR  
PRELIMINARY INJUNCTION [ECF  
NO. 124]**

---

\* *Official Defendant automatically substituted  
per Fed. R. Civ. P. 25(d)*

I, Dr. Clait E. Braun, hereby declare as follows:

1. The purpose of this declaration is to provide a summary and analysis of recently-released greater sage-grouse lek count data. This data confirms that sage-grouse populations across the West have experienced continual declines since the fall of 2015, when the U.S. Fish and Wildlife Service determined the greater sage-grouse did not warrant ESA protection.

2. "Lek Counts" reflect the number of male sage-grouse that are observed on leks (mating areas used by sage-grouse) each spring. The number of males counted on leks in spring, along with the ratio of females to males, can be used to estimate the number of sage-grouse in specific areas.

3. The statements and professional judgments below are based on my scientific training, knowledge, and experience, including my 40+ years of professional research, studying, and managing greater sage-grouse, as outlined in my prior declaration (ECF No. 124-3). In preparing this declaration, I have relied on data obtained from state wildlife agencies, and news reports [Wyofile: Sage-grouse expert: Dark clouds loom over population. May 15, 2019; Wyofile New Story: Greater Sage-Grouse counts show 3-year downward trend. August 6, 2019; East Idaho News: Idaho sage-grouse numbers have dropped 52% since 2016. Will management changes help them? August 11, 2019; Great Falls Tribune: Sage-Grouse numbers continue to drop in the west. August 13, 2019], my personal knowledge of greater sage-grouse populations (I personally conducted counts of males on leks from 1973 to 1999, and trained and supervised others) and their habitats, as well as the extensive body of other sage-grouse research and studies with which I am familiar.

#### **SAGE-GROUSE POPULATIONS ARE DECLINING**

4. Lek counts are the most widely used and reliable index for evaluating sage-grouse population sizes and trends. Every spring, biologists visit known sage-grouse leks—the center of breeding activity for sage-grouse—to count the number of males present. These counts of males attending leks in the spring are then used by wildlife agencies to monitor changes in sage-grouse breeding populations. Biologists also look for and count newly formed leks each spring.

5. Lek counts from this spring (2019) indicate that Greater sage-grouse populations in Idaho, Nevada, Oregon, Colorado, and Wyoming have markedly decreased for a third consecutive year. Together, these five states account for over 80% of the species' population.

6. Idaho statewide lek counts were down 52% from 2016 and decreased 25% in 2019 alone. Population declines in the majority (5 of 8) of Idaho's sage-grouse habitat management areas exceed the "hard-trigger" population thresholds established under BLM's Sage-Grouse Plan Amendments for Idaho—a threshold the plan describes as requiring "immediate action."

7. Oregon's population estimates also experienced three consecutive years of declines: a 24.9% decrease from 2018 to 2019, a 10.2% decrease between 2017 and 2018, and a 7.7% decrease between 2016 and 2017.

8. Nevada lek counts in 2019 decreased 33% from 2016 (28.2 males/lek in 2016 versus 18.8 males/lek in 2019).

9. Colorado lek counts have also decreased for three consecutive years. Lek counts for all populations decreased 27% from 2016 to 2017. Data for 2018 and 2019 are not complete, but the Colorado populations for which complete data is available (5 of 6 populations) experienced a 69% decline from 2016 to 2019.

10. Greater sage-grouse have also experienced serious declines in supposed strongholds like Wyoming—a state which holds almost 39% of the species' population. The Wyoming Department of Game and Fish has confirmed 2019 spring lek counts decreased 28% over the prior year. This is the third consecutive year of decline for the Wyoming sage-grouse population. Sage-grouse production in Wyoming, as measured by analysis of wings obtained from hunters, has been on a downward trend for the past few years, dropping from 1.8 chicks per

hen in 2014 to just 0.83 in 2018. The average needed to maintain the current population is 1.2 chicks per hen, and a growing population should have at least 1.5 chicks per hen.

11. Montana (11.6% of the total habitat used by sage-grouse) did not provide data through 2019 but reported a 25% decrease in males counted from 2016 through 2018.

12. Sage-Grouse populations have also continued to decline in California, where they are no longer hunted. Utah still has limited hunting of sage-grouse but this state is reluctant to share data they may collect.

13. Sage-grouse populations in the Dakotas and Washington are in worse shape and they are no longer hunted in these states. North Dakota is now capturing sage-grouse in Wyoming in an attempt to re-establish birds in historic habitats. South Dakota still has sage-grouse but numbers are considered to be too low to allow hunting. Washington has only two small unhunted populations (Douglas County and Yakima Training Center) as numbers of sage-grouse in Washington are in a 30-year decline. The decline in calculated total population has been 46% from 2010 to 2019.

### **CONCLUSIONS**

14. Assessing trends in sage-grouse populations is complicated by numerous factors, including changes in how monitoring is conducted and types of monitoring, which may vary between states. Sage-grouse populations also naturally fluctuate in cycles, with a peak in populations every eight to ten years (Garton et al. 2011). Studies also indicate there is typically a time lag, of perhaps 2-10 years, in sage-grouse response to infrastructure development or other habitat changes. This time lag occurs because sage-grouse are relatively long-lived birds that will continue to return to altered breeding areas (i.e., leks, nesting, and early brood-rearing habitats), due to strong site fidelity, even despite nesting or productivity failures (lack of

recruitment) caused by habitat disturbance or fragmentation associated with energy development activities (USFWS 2010 at 13928; Garton et al. 2011).

15. It is also difficult to obtain data from States or the USFWS which could be used to demonstrate recent patterns in sage-grouse abundance. It appears to be clear that no State or Federal agency wants to confirm the magnitude of presumed declines.

16. Some variation in population size between years is to be expected, due to weather-related factors. However, the large declines in recent years over multiple states are of a magnitude that cannot be attributed to natural cycles or weather. Climatic conditions are not uniform across the range of greater sage-grouse as this species occupies sagebrush habitats at elevations ranging from 1,000 ft. to as high as 9,000 ft.

17. Some states have suggested that a late winter and wet spring prevented biologists from traveling to leks this spring, and artificially skewed population estimates downward. However, this contention is without merit as states, such as Oregon, where sage-grouse initiate breeding activities as early as late March, had similar decreases to those in Wyoming, where peak mating occurs in mid-April or later in heavy snow years. Further, state wildlife agencies are not poorly equipped in terms of vehicles (4 x 4s, over the snow machines, drones, piloted aircraft, etc.) to access areas known to have occupied active leks.

18. My professional analysis, based on 40+ years of research, data analysis, and scientific writing, is that continued habitat loss, fragmentation, and degradation—caused by improper livestock grazing (especially early spring grazing), oil and gas development, road and powerline developments, and other human disturbances—are contributing to sage-grouse population declines. These issues are mostly created by a failure of land management

decisions—mostly on public lands—to consider what sage-grouse need to survive, and to protect and improve its remaining habitat.

19. **This continued downward population trend adds urgency, in my professional view, to ensuring that remaining sage-grouse populations and their habitats are protected from further degradation and fragmentation, to the maximum extent possible.**

20. As I explained in my prior declaration, the 2019 Plan Amendments are deeply concerning because they eliminate or substantially weaken important aspects of the 2015 Plans in contradiction of the best available science. The 2019 Plan Amendments will allow greater habitat destruction, thus threatening to put sage-grouse on a spiral toward extinction. I reiterate my recommendation that the Court prohibit BLM from implementing the 2019 Plan Amendments and require BLM to continue adhering to the 2015 Plans while this case proceeds.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge. Executed this 19th day of August 2019 in Tucson, Arizona.

/s/ Clait E. Braun  
Clait E. Braun

#### **Important References Reviewed**

Fedy, B. C. and K. E. Doherty. 2010. Population cycles are highly correlated over long time series and large spatial scales in two unrelated species: greater sage-grouse and cottontail rabbits. *Oecologia*; DOI 10.1007/s00442-010-1768-0.

Taylor, R. L., B. L. Walker, D. E. Naugle, and L. S. Mills. 2011. Managing multiple vital rates to

maximize greater sage-grouse population growth. Journal of Wildlife Management; DOI: 10.1002/jwmg.267.

McCaffrey, R., J. J. Nowak, and P. M. Lukacs. 2016. Improved analysis of lek count data using N-Mixture models. Journal of Wildlife Management; DOI: 10.1002/jwmg.21094.