Challenges to Federal Agency Science on Greater Sage Grouse Executive Summary

Western Energy Alliance et al. (Petitioners) submitted three Challenges for Correction of Information against the Bureau of Land Management's (BLM) *Report on National Greater Sage-Grouse Conservation Measures* (NTT Report); the U.S. Fish and Wildlife Service's (FWS) *Greater Sage-grouse (Centrocercus urophasianus) Conservation Objectives Final Report* (COT Report), and the U.S. Geological Survey's (USGS) *Comprehensive Review of Ecology and Conservation of the Greater Sage Grouse: A Landscape Species and its Habitats* (Monograph, collectively Reports) pursuant to the Federal Information Quality Act (Data Quality Act or DQA), various federal guidelines, and presidential and secretarial orders on scientific integrity and transparency.

The COT Report was prepared to develop range-wide conservation objectives for the Greater Sage Grouse (GRSG) and to inform FWS in its upcoming listing decision. The Monograph was heavily relied upon by FWS in its 2010 listing decision and will be just as influential in the upcoming listing decision. BLM developed the NTT Report and is using it along with the COT Report and Monograph to amend, along with the U.S. Forest Service (USFS), some 98 land use plans across approximately 50 million acres of BLM managed land and nine million acres of National Forests in eleven western states. Prescriptions from the three Reports are heavily influencing policies not just for federal lands but the full 186 million acres of GRSG habitat, yet the Reports fail to meet basic standards of science, resulting in misinformed policy that will harm GRSG and the West.

These Reports are highly influential, but they advance a one-sided narrative that is simply not supported by the full body of scientific literature and data. The agencies are relying on an insular group of scientist-advocates who deviate from providing credible, accurate scientific data to advancing policies they personally support.[1] This small group of scientists have interlocking relationships as authors of the Reports, authors of the studies used in the Reports, peer reviewers, editors, and policy advocates. Their conflicts of interest include receiving multi-millions of dollars from the agencies while supposedly developing independent studies. When faced with conflicting science, they simply ignore studies that don't fit their bias. The Petitioners have extensively documented the vast body of scientific literature and data ignored in the Reports. More diverse expertise and viewpoints are clearly needed for these highly influential documents that will have far-reaching and long-lasting negative impacts to western economies and livelihoods.

The DQA requires federal agencies to ensure and maximize the quality, objectivity, utility, and integrity of information disseminated. The Reports were developed with

[1] A recent example is a letter advocating policies that are "supported" by their own work but refuted by many other scientists. See letter from Baker et al. to Secretary of the Interior Sally Jewell and Secretary of Agriculture Tom Vilsack dated March 11, 2015.

unsound research methods resulting in a partial and biased presentation of information, and peer reviewers have found them to be inaccurate, unreliable, and biased. They contain substantial technical errors, including misleading use of authority and failure to address studies that do not support a federal, one-size-fits all narrative.

As a result, the Reports impetuously reach conjectural conclusions that are not scientifically supported, especially the frequently repeated but flawed assumption that a temporary decrease in lek counts equates to a population decline. Driven by policy considerations rather than defensible biological criteria, the Reports do not address specific cause and effect threats to GRSG. Rather, they selectively present biased information while ignoring contrary information and the scientific method. Furthermore, the agencies fail transparency requirements, only releasing data that should have been publicly available after multiple Freedom of Information Act (FOIA) lawsuits or claiming that they do not have data.

The Reports fundamentally and erroneously ignore accurate population data and adopt modeling approaches that have consistently failed to accurately predict populations. This selective use of science creates a narrative that assumes GRSG populations are in decline despite contrary evidence. The Reports ignore natural population fluctuations; blame human activities such as energy development, mining and ranching for alleged declines; ignore actual threats to GRSG such as predation; and then seek to impose unfounded regulatory restrictions on human activities.

The errors contained in the Reports are improperly influencing agency decision-making. The management restrictions, regulatory measures, and closures recommended in the Reports will negatively impact the economy and future viability of countless communities, local governments, small businesses, and family farms and ranches as well as efforts to conserve GRSG. Reliance on this biased and faulty information has and will continue to harm Petitioners and their members. In addition, the public, GRSG and western economies will be negatively impacted by these errors.

Petitioners respectfully request the agencies to retract the Reports and their use in land use plan amendments and the upcoming listing decision. Alternatively, the agencies could issue amended reports that use sound analytical methods and the best data available while ensuring transparency and objectivity, and adjust their policies accordingly.

Additional Key Issues

State, Local and Private Conservation Efforts

The Reports fail to recognize that states have undertaken significant efforts to conserve GRSG. Rather, the agencies should incorporate and adopt state GRSG conservation plans and local and private conservation efforts as the primary means by which to address threats to GRSG. As Utah Governor Gary Herbert has pointed out, state plans better balance future economic activities with robust protections for GRSG, and were developed using a bottom-up process with input from diverse stakeholders, rather than the top-down approach taken by the federal agencies.

Contrary to some assertions, federal regulation of private land is not conducive to continued conservation. Rather, it has a significant chilling effect on local, state and private conservation efforts. For example the Natural Resources Conservation Service (NRCS) found that private conservation efforts declined by 95% when the FWS proposed listing the bi-state population of GRSG.

Furthermore, the Reports regard voluntary conservation efforts on private land as inferior to federal land acquisition and management. This view is contrary to the "new paradigm" of cooperative conservation. There are numerous published papers on the success of private land conservation versus a federal "command and control" approach.

Predation and Predator Control

The Reports ignore substantive threats to GRSG in favor of pre-conceived notions of human impacts. Predation is the most common cause of direct mortalities of the GRSG. The common raven is the most abundant and greatest threat to the species. Raven populations have increased an estimated 300% in the past 27 years in the United States with reports of 1,500% increases within a 25-year period in some areas of the West. Management of some predator populations, especially ravens, is needed to ensure that GRSG populations are not depressed. Yet the Reports ignored the body of literature relevant to raven predation on GRSG, including its deleterious effect on survival and consideration of integrated management strategies to reduce GRSG losses.

GRSG Populations Naturally Fluctuate

The Reports fail to recognize that populations of any given species naturally fluctuate. The amount and timing of spring and summer rainfall affects annual plant production and influences population dynamics of GRSG, causing short term fluctuations in GRSG abundance. While the effects of both annual and long-term fluctuations in weather patterns on the nest success and survival of GRSG have been well-documented, the Reports ignore these important factors.

Interior's Science Arm

The Monograph purports to "produce new scientific information about GRSG populations, sagebrush habitats, and relationships among GRSG, sagebrush habitats, and land use," yet it lacks the scientific quality, integrity, objectivity, and utility required by the DQA. It is ironic that the agency which claims to be the Department of the Interior's (DOI) "science arm" is the most secretive when it comes to disclosure of scientific data and peer reviews. USGS guidelines conflict with the DQA as well as DOI and Office of Management and Budget guidelines with respect to transparency of peer review and disclosure of underlying data.

USGS withholds information related to underlying data and peer reviews as "deliberative and predecisional" and exempt from disclosure under FOIA or the DQA. USGS actually directs peer reviewers not to disclose their results or conclusions. The agency's reasoning is equally as arrogant, as it believes public disclosure could be construed as incomplete, incorrect or taken out-of-context. Apparently only USGS employees and certain government, academic, and non-profit allies can be entrusted with access to such information.

USGS seems to indicate the public will be better off if it does not know the process of agency decision-making or the science behind it. After all, such transparency, "could cause foreseeable and serious harm to the USGS, the DOI, and the public." The USGS purports to have such a rigorous process for scientific integrity that the public is virtually instructed to accept USGS work without question or reproach.

The Importance of Livestock Grazing

The Reports fail to recognize the best available science on grazing. Instead of focusing on the negative impacts of historic grazing (some citations are decades old), the agencies should evaluate modern grazing management. A 1990 BLM report shows that good condition rangeland increased by 100% and poor condition rangeland decreased by 50% between 1936 and 1989. In the years since, there has been extensive progress in the implementation of proper grazing management on federal, state and private lands. Without grazing, GRSG habitat would suffer greatly in the West and many contributions of grazing and ranching would be lost such as:

- Preservation of open space
- Noxious weed and invasive species eradication and containment
- Production of forb growth that is preferred by GRSG to non-grazed areas
- Wildfire prevention and controlled burn efforts
- Development of wildlife watering sources, including placement of bird ladders in troughs
- Predator management.

The Reports largely ignore or understate these benefits.

Misrepresenting the Impact of Oil and Natural Gas Operations

The Reports present a biased view of oil and natural gas operations by conveying that *"impacts are universally negative and typically severe."* They selectively present information in support of that preconceived conclusion, while ignoring contrary information. Key assertions in the Reports are both biased and in error, especially the frequently repeated, but erroneous assumption, that a temporary decrease in lek counts immediately adjacent to active wells is equivalent to a population decline.

Recommendations rely on older research in areas like the Jonah gas field in Wyoming which was developed before current improved technologies. Technical innovations such as horizontal drilling combined with sophisticated mitigation and reclamation are dramatically reducing impacts to habitat. The Reports fail to represent the current reality of oil and natural gas development.

Mining

The Reports claim, with neither citations nor support, that mining facilities within GRSG habitat result in the direct loss of habitat, habitat fragmentation, and indirect impacts from disturbance. The Reports claim that current reclamation activities do not always consider GRSG habitat needs and might take decades to restore. No support is provided for this assertion.

Guide to the DQA Challenge Documents

The elements of our DQA Challenge are as follows:

- The DQA Challenges specify how each Report fails to meet required standards for scientific integrity and transparency
- Exhibit A details scientific flaws with each Report
- Exhibit B critiques the studies relied on in each Report as well as inappropriate and selective use of citations
- Exhibit C to the NTT and COT Reports is a comprehensive review of the scientific literature on GRSG that includes studies ignored by or published subsequent to the reports that need to be considered by the agencies before making policy decisions
- The final Exhibit for all three Reports is a critique detailing significant issues and errors with one of the most influential papers cited in the Reports, Garton et al. 2011.